

Water Infrastructure

FINANCING PROGRAMS

DRINKING WATER STATE REVOLVING FUND (DWSRF)

Construction Loan Program

Eligible Organizations

- ◆ Publicly owned community water systems
- ◆ Privately owned community water systems
- ◆ Non-profit, Non-community water systems

Eligible Projects

Nearly all water system improvement projects are eligible, as long as they facilitate compliance with federal primary drinking water regulations or otherwise significantly further health protection objectives of the Safe Drinking Water Act.

Examples of eligible projects include:

- ◆ Costs for planning and engineering design associated with an eligible project
- ◆ Replacement of contaminated sources with new sources
- ◆ Construction, upgrade, or refurbishment of treatment facilities
- ◆ Replacement of aging infrastructure, including distribution and transmission lines, storage tanks, and pumping facilities
- ◆ System consolidation or interconnection to address capacity issues
- ◆ Land acquisition integral to an eligible project
- ◆ Energy efficiency, water efficiency, green infrastructure, and environmentally innovative projects
- ◆ Installation of service meters and back flow prevention devices

Program Eligibility Guidelines

- ◆ Project must achieve or maintain compliance with the Safe Drinking Water Act
- ◆ Projects must apply to be on the annual project priority list. Applications are typically due April of each year
- ◆ Projects are prioritized based on public health risk and other factors such as population and affordability

Construction Loan Program

AT-A-GLANCE

LOCAL APPROVAL

Required: Voter authorization on the total project cost

TERMS AND RATES

Term: 20 years

Admin Fee/Interest Rate: 2%/1%

Qualifying disadvantaged systems

Term: up to 30 years

Interest Rate: as low as 0%, plus principal forgiveness

Interest rate and terms are adjusted to target a water user rate equivalent to 1% of the median household income.

MAXIMUM LOAN AMOUNT

Funding Cap: none

REPAYMENT SCHEDULE

Repayment begins one year following final project completion.

For additional information on the Drinking Water State Revolving Fund (DWSRF) Construction Loan Program, please contact:

ASHLEY LUCHT
(802) 585-4904
ashley.lucht@vermont.gov

 VERMONT
AGENCY OF NATURAL RESOURCES
Department of Environmental Conservation

Water Infrastructure

FINANCING PROGRAMS

	WHAT CAN BE FUNDED?	WHO IS ELIGIBLE?	TERMS	CONTACT
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Water Planning Loan Program (WPL)	Feasibility studies, preliminary engineering and final design services related to drinking water systems	Municipalities and privately-owned non-profit community water systems	5 years/0%	Ashley Lucht 802 585 4904 ashley.lucht@vermont.gov
Water Source Protection Loan Program (WSP)	Purchase of land or conservation easements to protect public water sources	Municipalities	20 years/3%	Ashley Lucht 802 585 4904 ashley.lucht@vermont.gov
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Vermont Pollution Control Grants	Based on a grant formula in EPR Chapter 2 using priority points from technical and affordability categories	Municipalities, funding is subject to legislative appropriations	Grant ranges from 10% to 35% of total project cost	Tom Brown 802 622 4205 thomas.brown@vermont.gov
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Clean Water & Drinking Water Federal Grant and State Match Schedule - Projected Need (7/1/19 - 6/30/21)

Last Updated 2/13/2019

DEC - Eric Blatt, Facilities Engineering Division

1	2	3	4	5	6	7	8
Annual Federal CW & DW SRF Grants Award Schedule	Federal Grant	State Match Required 20%	State Match Previously Appropriated	Requested State Match Appropriation		State Match Total Appropriation FY20 & FY21	Balance of State Match Needed
				FY20	FY21		
Drinking Water Loan Funds							
FFY18 EPA DWSRF Grant (awarded 7/26/2018)	11,107,000	2,221,400	1,134,292	1,087,108	0	1,087,108	0
FFY19 EPA DWSRF Grant (available 10/1/18 - 9/30/20)	11,107,000	2,221,400	0	760,000	1,461,400	2,221,400	0
FFY20 EPA DWSRF Grant (available 10/1/19 - 9/30/21)	11,107,000	2,221,400	0	0	2,221,400	2,221,400	0
Subtotal DWSRF FFY18 - FFY20	33,321,000	6,664,200	1,134,292	1,847,108	3,682,800	5,529,908	0
Pollution Control Loan Funds							
FFY18 EPA CWSRF Grant (awarded 7/26/18)	7,859,000	1,571,800	609,903	961,897	0	961,897	0
FFY19 EPA CWSRF Grant (available 10/1/18 - 9/30/20)	7,859,000	1,571,800	0	1,538,103	See note below	See note below	33,697
FFY20 EPA CWSRF Grant (available 10/1/19 - 9/30/21)	7,859,000	1,571,800	0	0	See note below	See note below	1,571,800
Subtotal CWSRF FFY18 - FFY20	23,577,000	4,715,400	609,903	2,500,000	See note below	See note below	1,605,497

Sec.10 Line 105 of the budget proposal requests \$13.9M for FY21 for Clean Water funding, which may include state match for the FFY19 & FFY20 federal CWSRF grants. Allocation of the \$13.9M is subject to Clean Water Board review - see also page 35 Sec.5.

State FY20/21 Capital Request – Vermont/EPA CW & DW SRF Programs

Annual Funding Cycle

Last updated 2-13-2019

Eric Blatt, Facilities Engineering Division, DEC

Date	Milestone
October 1, 2018	Federal FY19 Funds Appropriated (EPA Announces State Allotments following 10/1/18) (the FFY19 funds have not been appropriated due to the delay in passing the Federal budget)
Fall '18	ANR FY20/21 Capital Budget Developed
Jan '19	State FY20/21 State Capital Budget Proposal Submitted to Legislature
Jan - February '19	State FY20/21 State Capital Bill Drafted
March - April '19	Federal FY19 CW & DW IUPs & Projects Priority Lists Drafted
May '19	Federal FY19 IUPs & Priority Lists Public Meeting
May-June '19	State FY20/21 State Capital Bill Enacted
June '19	Application to EPA for federal FY19 CW & DW SRF Capitalization Grants
June '19	Adoption of FFY19 IUPs and State FY20 Project Priority Lists
August '19	Federal FY19 CW & DW SRF Grants Awarded
October 1, 2019	Start of Next Funding Cycle - Adjustment Year for Capital Budget

IUP: Intended Use Plan - Identifies the intended use of the federal capitalization grant and 20% state match, loan repayments and fund interest.

CWSRF: Clean Water State Revolving Fund - \$1 state match to \$5 federal grant

DWSRF: Drinking Water State Revolving Fund - \$1 state match to \$5 federal grant

Dam Safety

DEC-Owned Dams Repairs and Major Maintenance – Page 31 of Capital Budget Proposal

The requested funds will be used for repair, major maintenance, and specialized engineering assessments of state-owned dams. The following is a summary of the dams and brief description of the work we are proposing to accomplish with SFY20 and SFY21 capital funds.

Waterbury Dam, Waterbury (HIGH Hazard)

FY20 \$135,000

Removal of formerly used UST that stored fuel for emergency generator. Project includes design, permitting, and tank removal with environmental monitoring, contaminated soil disposal, and backfill/compaction. Installation of a modern and up to code worker fall protection system at the principal spillway to allow for safe monitoring, maintenance, and repair of the radial arm flood gates.

FY21 \$80,000

Design and installation of a new boat and debris barrier in the approach of principal spillway. Security improvements at dam to include alarm systems in the gatehouse and pump house and a system of cameras for remote surveillance.

FY21 \$240,000

Seepage control system cleaning and new dewatering pumps and instrumentation.

Wrightsville Dam, Montpelier (HIGH Hazard)

FY20 \$15,000

Repair of a hole in the dividing wall tunnel between the flood tunnel and power tunnel within the dam.

FY21 \$180,000

Design and installation of a new boat and debris barrier around the principal spillway. Maintenance to the auxiliary spillway channel, including removal of rock falls, removal of trees and brush, and maintenance to the rock cut face that comprises the left side of the spillway.

Miles Pond Dam, Concord (SIGNIFICANT Hazard) – FY21 \$100,000

Various repair work including: stoplog replacement, concrete repairs, fencing repairs, riprap replacement, and installation of a new boat barrier

Little Hosmer Dam, Craftsbury (LOW Hazard) - FY21 \$245,000

Assessment, design, permitting, and rehabilitation construction of the dam. Assessment work to include topographic survey, H&H analyses, and seepage analysis. Rehabilitation design to include filter/drainage, downstream channel armoring, stoplog replacement, concrete/crack repair, and a new boat barrier.

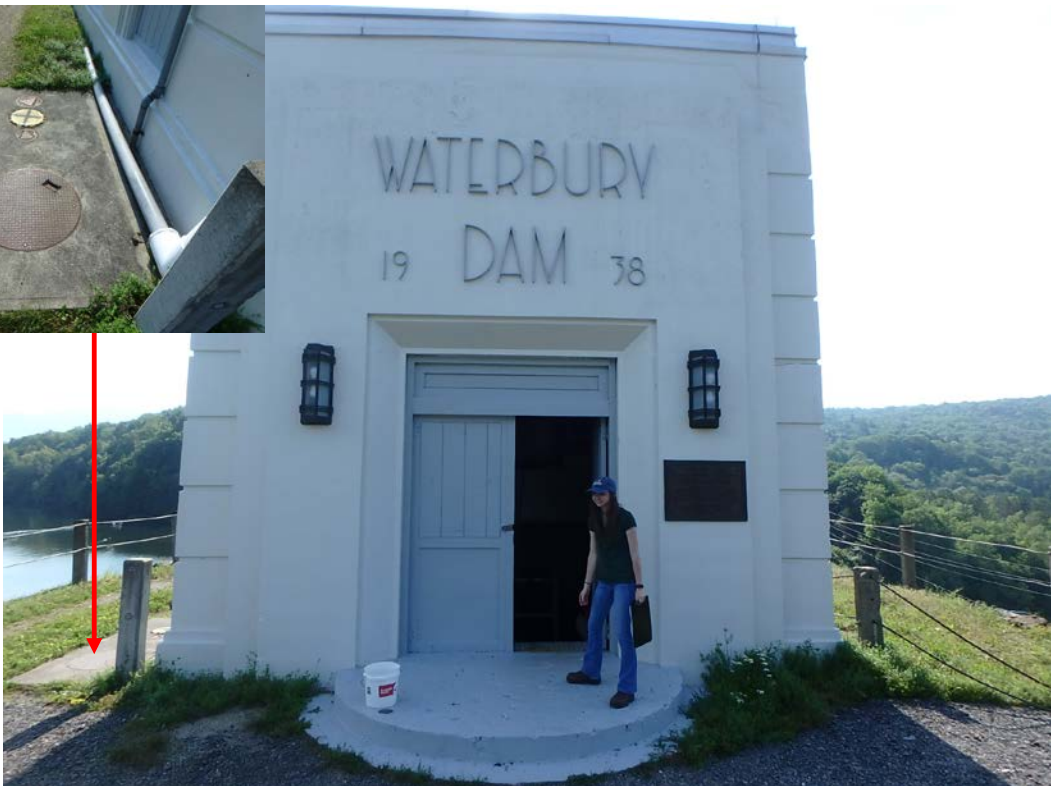
Lake Bomoseen Dam, Castleton (LOW Hazard) - FY21 \$50,000

Various minor repair work including electrical, fencing, a new boat barrier, and other miscellaneous repairs.

TOTAL **\$1,045,000**



Waterbury Dam Spillway Replacement, Risk Assessment, \$215k from previous years. The approach channel in need of a new boat barrier can be seen.



Waterbury Dam Gatehouse. The UST to be removed can be seen. A security and surveillance system for the dam and gatehouse are needed.



Waterbury Dam Spillway, the access ladders requiring a fall protection system can be seen.



Waterbury Dam Seepage Collection System



Wrightsville Dam, principal spillway intake structure and leak in spillway tunnel



Wrightsville Dam, aux. spillway, note overgrown and aging rock cut at left side of image



Miles Pond Dam, various minor repairs needed.



Little Hosmer Dam, assessment, design, rehabilitation construction



Lake Bomoseen Dam, minor repairs

**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
 - HIGH Hazard Dams = \$1,000
 - SIGNIFICANT Hazard Dams = \$350
 - 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

Water Infrastructure

FINANCING PROGRAMS

CLEAN WATER STATE REVOLVING FUND (CWSRF)

Loan Program

- ◆ Planning and Final Design Loans
- ◆ Construction Loans

Eligible Organizations

- ◆ Municipalities
- ◆ Privately owned wastewater or stormwater systems

Eligible Projects

Nearly all clean water (wastewater and stormwater) projects in identified growth areas are eligible which will further health and environmental protection objectives of the Clean Water Act (CWA). Examples of eligible projects include, but not limited to:

- ◆ Wastewater collection system and treatment facility construction, upgrade, or refurbishment projects including septage receiving and sludge handling projects and phosphorus removal projects
- ◆ Water and energy efficiency or environmentally innovative projects
- ◆ Combined sewer overflow elimination
- ◆ Stormwater treatment and green infrastructure
- ◆ Community decentralized wastewater disposal systems
- ◆ Non-point source pollution Prevention
- ◆ Sewer extensions (including dry weather flow projects to abate pollution)

Program Eligibility Guidelines

- ◆ Project must address public health or environmental risk
- ◆ Projects must apply to be on the annual project priority list. Applications are due Winter of each year

Planning and Final Design Loans

AT-A-GLANCE

LOCAL APPROVAL

Required: Governing board authorization

TERMS AND RATES

Term: 5 to 15 years
(depending on loan value)

Interest Rate: 0.00%

Funding Cap: None

REPAYMENT SCHEDULE

Planning loans are rolled into the construction loan, or begin repayment five years following completion of the relevant engineering documents or the last loan disbursement, whichever occurs first.

Construction Loan

AT-A-GLANCE

LOCAL APPROVAL

Required: Positive bond vote on the total project cost

TERMS AND RATES

Term: up to 30 years

Admin Fee: 2.00%

Funding Cap: Possible, depending on the number and value of projects seeking funding

REPAYMENT SCHEDULE

Repayment begins one year following final project completion.

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What is the CWSRF?



20% State Match

Federal Grant



Clean Water
State Revolving Fund

CWSRF Loans

Loan Repayments



State FY20-FY21 Capital Budget Proposal - Municipal Pollution Control Grants

October 2018

Eric Blatt, Facilities Engineering Division

Municipal Pollution Control Grants - Capital Needs 7/1/2019 - 6/30/2021			
	FY20	FY21	Total
FY20 Projects			
St Johnsbury - Pleasant Street/Gilman Ave CSO	320,000		320,000
Hartford - WRJ Stormwater Improvements	70,000		70,000
S Burlington Kennedy Drive SW Improvements	65,000		65,000
Fair Haven - River Street Sewers & SW	81,000		81,000
Hartford - S Main Street, Gates SW Improvements	100,000		100,000
Hartford - S Main, Gates & North Main WW Improvements	92,000		92,000
Middlebury - WWTF	162,000		162,000
Bridgewater - WWTF	10,000		10,000
Montpelier - WWTF Upgrade	2,400,000		2,400,000
FY21 Projects - Allocation of \$s subject to CW Board Recommendation			
Total	3,300,000	-	3,300,000

Note: The list above is a projection for FY20, and is subject to change as the state FY20 Priority List is developed and adopted spring 2019