Water, water, everywhere…

Water Infrastructure Funding – Water, Water Everywhere, but How do I pay for it – May 17, 2022

“We never know the worth of water till the well is dry.”

- Thomas Fuller

(England, 1608-1661)

Good morning!

Erin Holmes, P.E.
DWGTF Administrator
You can find me at
erin.l.holmes@des.nh.gov
603.271.8321

Overview of Infrastructure Funding Sources in NH

Supporting a large variety of water system infrastructure projects, source water protection and unique initiatives

$1,006,822,691

Over $1 Billion in Applications Received in 2021

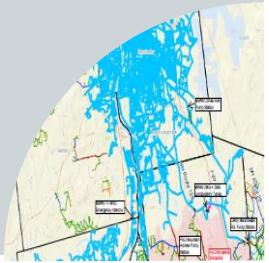
Focus

Funding Source	Funding Priorities
Drinking Water SRF	Prioritizes projects that address most serious risk to human health; are necessary for compliance; and assist most in need.
Drinking Water and Groundwater Trust Fund	Prioritizes projects that address source contamination and considers leveraging, community need, and stakeholder involvement
Clean Water SRF	Prioritizes projects based on protection of water quality and public health and considers green projects, climate change vulnerability, etc.
PFAS Remediation Loan Fund & Grant Program	Focused priority to address PFAS contamination of drinking water supply with concentrations that exceed the applicable MCLs
American Rescue Plan Act of 2021	Ability to direct funding to disadvantaged systems, critical flood-risk projects, and long-term system sustainability
Bi-Partisan Infrastructure Law (BIL)	Provides focused funding on lead service lines, emerging contaminants, increased subsidy for disadvantaged systems

ARPA Funding Categories

PROJECT PLANNING

- Improves project development & readiness
- Assists communities applying to other funding programs



INFRASTRUCTURE & CRITICAL FLOOD RISK PROJECTS

- Distribution of ARPA grant funds across the state
- Incentivizes communities to move projects forward

- Propels communities forward
- Supports existing programs (i.e., asset management)
- New programs such as cybersecurity implementation

LONG-TERM SYSTEM SUSTAINABILITY

DISADVANTAGED GRANT PROGRAM

- Comprehensive program to enhance quality and reliability of drinking water and wastewater infrastructure

Assistance for COOPs

"although the pandemic impacts have been widespread, both the public health and economic impacts of the pandemic have fallen most severely on communities and populations disadvantaged before it began."

US Dept. of the Treasury - Interim Final Guidance

For more information contact: Sarah Ridyard (Sarah.B.Ridyard@des.nh.gov)

DWGTF Source Water Protection – By the Numbers

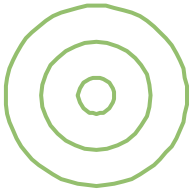
	2017	2018	2019	2020	2021
DWGTF Eligible Land Conserved	**72**	**4,744**	**685**	**129**	**628**
Total Land Conserved	**72**	**7,701**	**2,169**	**187**	**1,599**

Total Land Conserved and Value – 11,728 acres for $30.4 M

DWGTF SWP Grant Program – 6,258 acres water supply lands for $5.92 M (approx. 19%)

The cost of protecting land from development far outweighs the costs for upgrading treatment systems and managing degraded surface water quality after forested land cover is lost to development.

Albert Pratt, Water Resource Manager for the Portsmouth Department of Public Works
https://seltnh.org/stories/h20express/



Focused

Programs support critical needs

Prioritization

Solutions for contamination

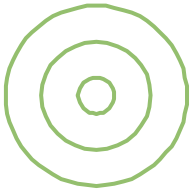
	PFAS Treatment Design Services Reimbursement	PFAS Consolidation Study Program	PFAS Remediation Loan Fund & Grant Program
Eligibility	- All schools & childcare centers - Transient PWS - Non-Transient PWS	- Community PWS - Non-profit, Non-Transient PWS - Municipality	- Community PWS - Non-profit, Non-Transient PWS - Municipality
What can be Funded?	Design of a PFAS point of use or point of entry treatment solution to address PFAS AGQS/MCL exceedances	Engineering feasibility evaluation comparing interconnection to a larger community water system versus treating, maintaining, and operating a system's own water supply	Drinking water infrastructure projects to address AGQS/MCL exceedances
Terms	Up to 26% of the total cost of the project	100% Reimbursement program	- Low interest loan rates; Up to 30-year term for disadvantaged applicants; Up to 50% contingent reimbursement - Grants at $1.5M or 30% of the total cost of the project, whichever is greater
Application	Anytime – reviewed in order received		
For More Information Contact	Amy Rousseau- (603) 271-8801 or Amy.E.Rousseau@des.nh.gov		

Future Emerging Contaminant Funding

- Bipartisan Infrastructure Bill (BIL) - DWSRF Emerging Contaminants Funding
- Water Infrastructure Improvements for the Nation (WIIN)
- Small and Underserved Communities Emerging Contaminants Grant Program

Other Available Funding

- Drinking Water State Revolving Loan Fund (SRF)
- Drinking Water & Groundwater Trust Fund
- ARPA of 2021 (funds grant portion of the PFAS RLF)



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Programs support critical needs

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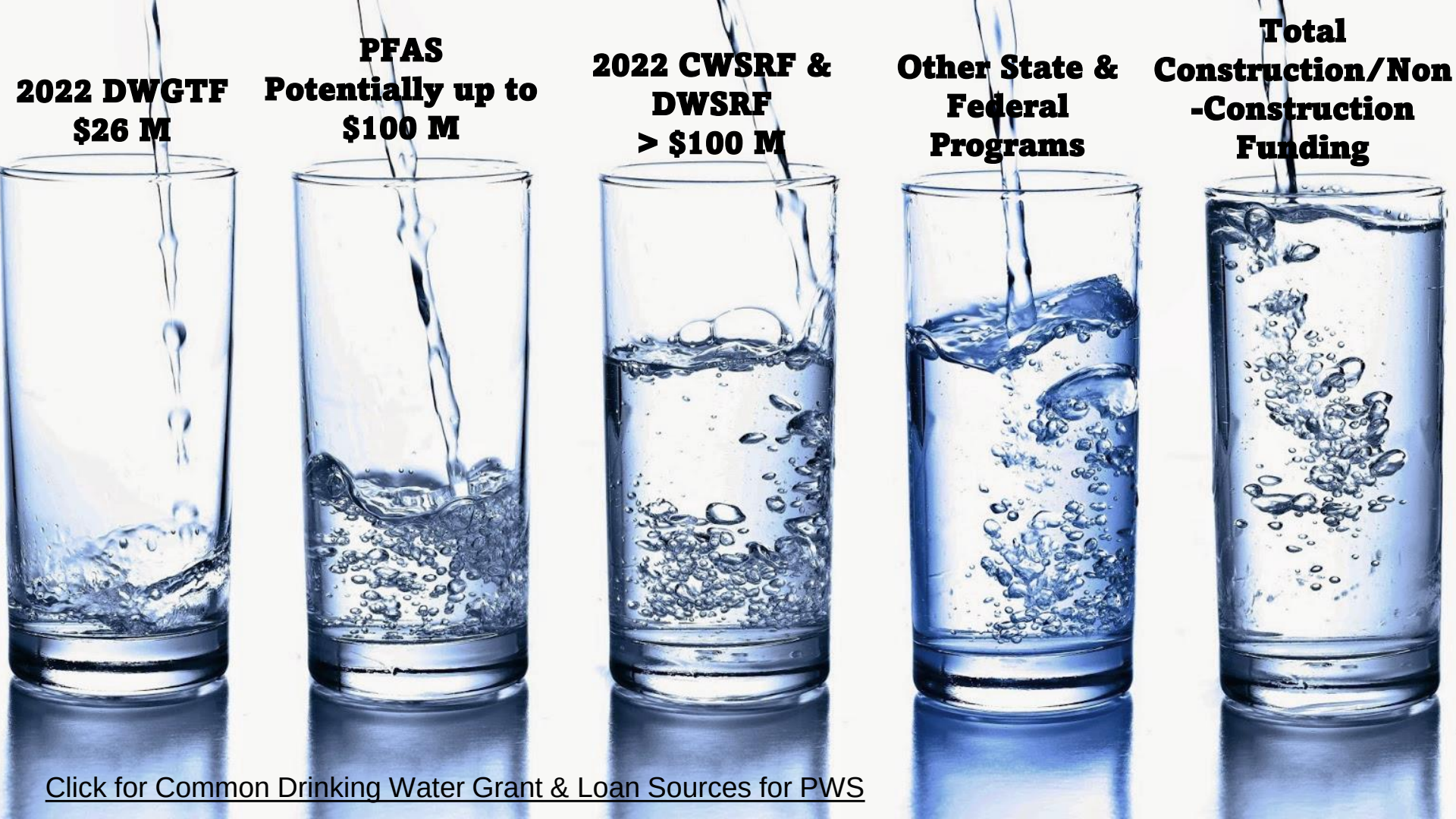
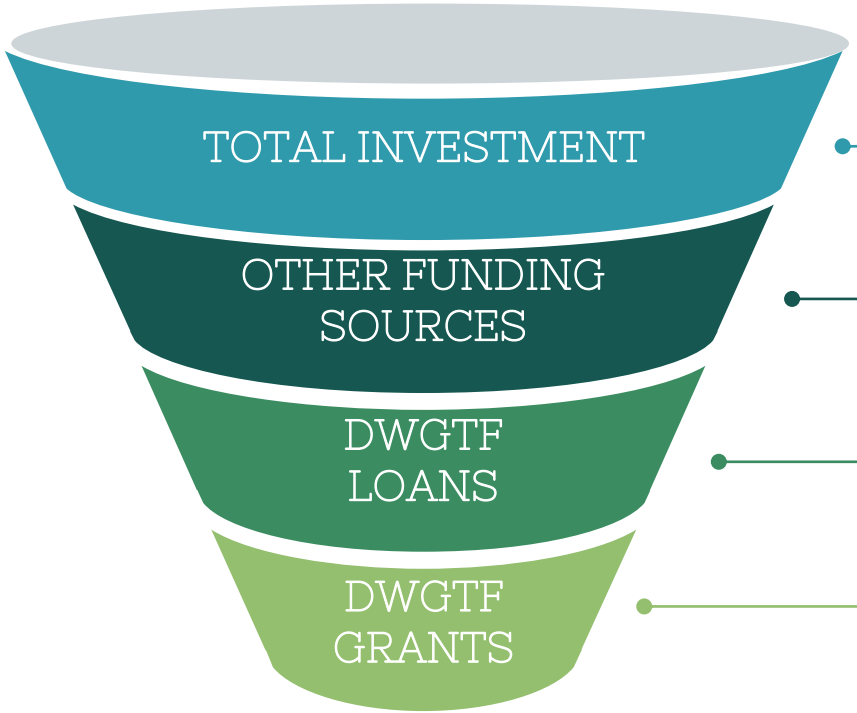
100% Awesome

Expanding ability to leverage multiple funding programs and target communities throughout NH



Click for Common Drinking Water Grant & Loan Sources for PWS

DWGTF Project Drinking Water Investment 2017-2021



$304 M Total Investment

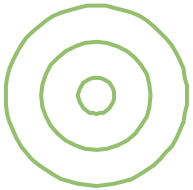
$148 M from Other Funding Sources

$60 M in DWGTF loans

$96 M in DWGTF Grants

Londonderry Lancaster Drive Water Main Extension Special Project

- Project extends public water to serve residents with private wells impacted with PFAS.
- Funding plan includes contribution from the Potentially Responsible Party and the residents.
- Funding approved in 2021 and construction is in progress.



Focused

Programs support critical needs

Prioritization

Solutions for contamination

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Expanding ability to leverage multiple funding programs and target communities throughout NH

Questions?

Drinking Water Infrastructure Funding Sources in New Hampshire

Brandon Kernen, Administrator
Drinking Water and Groundwater Bureau
Direct – (603) 271-1168
Brandon.Kernen@des.nh.gov

SUMMARY OF NHDES FUNDING PROGRAMS FOR DRINKING WATER				
TRADITIONAL FUNDING				
DWSRF	Annual (26% loan forgiveness)	$20	M	Per Year
Drinking Water and Groundwater Trust Fund	Annual (grants and loans)	$20	M	Per Year
TOTAL TRADITIONAL ANNUAL FUNDING		**$40**	**M**	
NEW FUNDING				
ARPA	One-time (grant)	$75	M	One-time
PFAS Remediation Grant	One-time (grant)	$50	M	One-time
PFAS Remediation Loan	One-time (10%-50%?? Loan forgiveness)	$50	M	One-time
2022 Emerging Contaminant	100% Loan Forgiveness	$8	M	
2023 Emerging Contaminant	100% Loan Forgiveness	$8	M	
2024 Emerging Contaminant	100% Loan Forgiveness	$8	M	
2025 Emerging Contaminant	100% Loan Forgiveness	$8	M	
2026 Emerging Contaminant	100% Loan Forgiveness	$8	M	
2022 Lead Service Line	49% Loan Forgiveness	$28	M	
2023 Lead Service Line	49% Loan Forgiveness	$28	M	
2024 Lead Service Line	49% Loan Forgiveness	$28	M	
2025 Lead Service Line	49% Loan Forgiveness	$28	M	
2026 Lead Service Line	49% Loan Forgiveness	$28	M	
2022 Supplemental SRF	49% Loan Forgiveness	$18	M	
2023 Supplemental SRF	49% Loan Forgiveness	$21	M	
2024 Supplemental SRF	49% Loan Forgiveness	$23	M	
2025 Supplemental SRF	49% Loan Forgiveness	$25	M	
2026 Supplemental SRF	49% Loan Forgiveness	$25	M	
2022 Disadvantaged PFAS Grant	100% grant	$10	M	
2023 Disadvantaged PFAS Grant	100% grant	$10	M	
2024 Disadvantaged PFAS Grant	100% grant	$10	M	
2025 Disadvantaged PFAS Grant	100% grant	$10	M	
2026 Disadvantaged PFAS Grant	100% grant	$10	M	
TOTAL INCREASE IN FUNDING(2022-2026) >>>>>		**$517**	**M**	

DEMAND FOR DRINKING WATER INFRASTRUCTURE FUNDING								
Aging Infrastructure			$2,000	M	(probably higher)			
Lead Service Line Replacement			$100	M				
PFAS Mitigation			$200	M	(probably much higher)			
Manganese Treatment			$60	M				
New Development			??					
TOTAL			**$2,360**	**M**				

PFAS Impacts are Present Throughout New Hampshire

Updated: April 11, 2022

PFAS SAMPLES

Data in NHDES' Environmental Monitoring Database (EMD) ~ 18,651 samples

- PFOA+PFOS > 70 ppt
- PFAS > AGQS / MCL
- PFAS ≤ AGQS / MCL

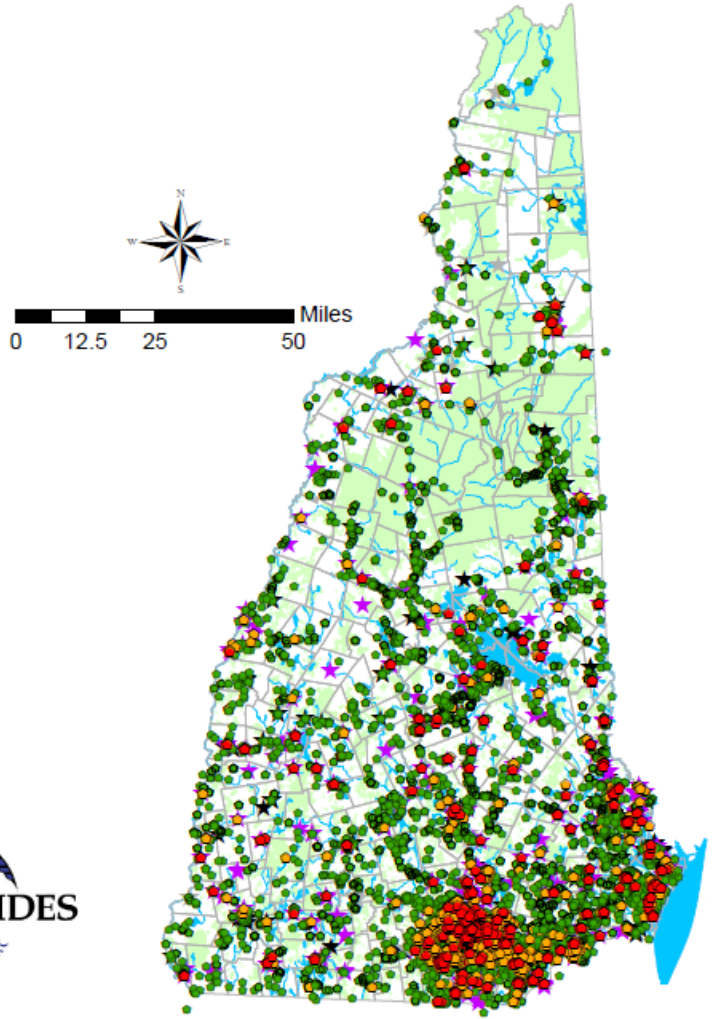
PFAS SITES

Data in NHDES' Onestop Database ~ 484 sites

- Site with PFAS > AGQS
- Site with PFAS Detections
- Site with PFAS Screening No Detections

- Political Boundary
- Major Waterbody
- Conservation Land

NHDES



Inflation/Supply Chain Issues – Price Increases Impacting the Water Supply Sector

- Concrete pipe 16.2%
- Copper pipe 20.8%
- fabricated steel 39.8%
- PVC pipe 35.6%
- In general price increase of10-50% are typical right now

AGC
THE CONSTRUCTION ASSOCIATION

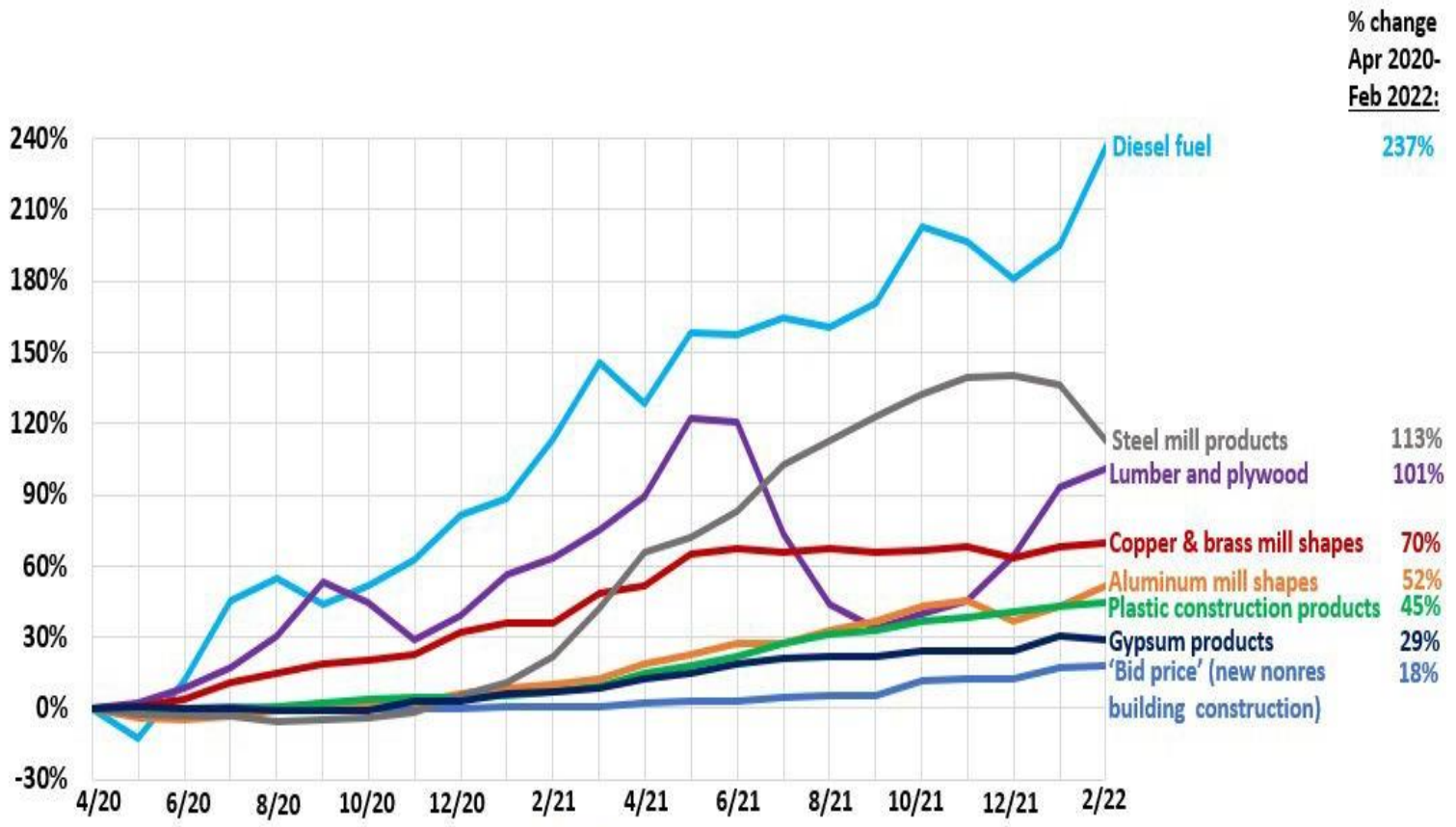
APR

2022

CONSTRUCTION INFLATION ALERT

PPIs for construction bid prices and selected inputs

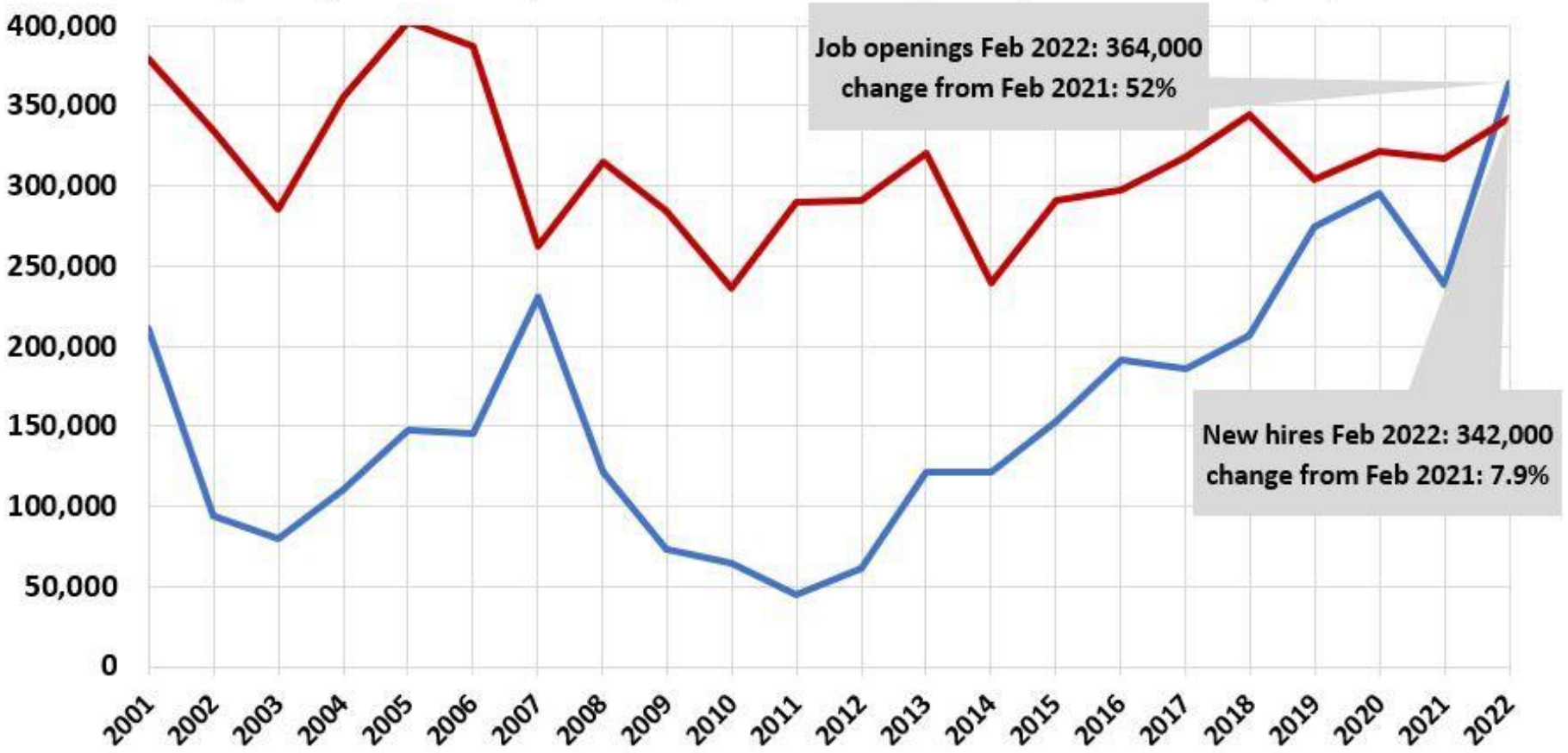
cumulative change in PPIs, April 2020-February 2022, not seasonally adjusted



Source: Bureau of Labor Statistics, producer price indexes, www.bls.gov/ppi

Construction job openings exceed hires, set record high for February

Job openings and hires, February 2001-February 2022, not seasonally adjusted



Source: Source: Bureau of Labor Statistics, www.bls.gov/jlt, JOLTS

Additional Challenges

- New federal funding contains Buy America Build America provisions
- Supply will continue to be low and demand will continue to increase (ARPA and Infrastructure $$ have yet to hit the markets)
- Interest rates for loans will likely increase
- Lack of for water system staff
- Lack of government workers
- Lack of contractors
- Lack of engineers
- High interest rates, high inflation, high labor costs, product scarcity, labor scarcity and global conflicts will complicate projects for the foreseeable future
- PFAS – shortage in treatment system components and media already exists and nationally very few states have enforceable standards. USPEA will be releasing a draft national standard soon. Demand for PFAS treatment will skyrocket.

Drinking Water Financial Assistance Programs Administered by NHDES

Water System Consolidation Grant
Planning Grant
Source Water Protection Grants
Drinking Water Groundwater Trust Fund Grants
Drinking Water Groundwater Trust Fund Loan
Energy Audit
Energy Audit Implementation
Water Audit
Cyber Security
PFAS Treatment Design for Schools and Childcare Facilities
PFAS Remediation Loan Program
PFAS Remediation Grant Program
Source Water Protection Land Conservation Grant
Lead Sampling/Mitigation in Schools/ Child Care Facilities
Cyanotoxin Monitoring
PFAS WIIN
WIIN Disadvantage Program
ARPA Disadvantage COOP
DWSRF Traditional
DWSRF Supplemental
DWSRF Emerging Contaminant
DWSRF Lead Service Line
Asset Management
Storage Tank Inspection Grant
Climate Change Vulnerability Assessments
Private Well PFAS Rebate Program
Water Assistance for Natural Disaster Impacts to Low-Income Residential Well Owners

https://www.des.nh.gov/sites/g/files/ehbemt341/files/documents/2020-01/pws-funding-resources.pdf

EBC NH Program: Water Infrastructure Funding - Water, water everywhere, but how do I pay for it? Road Map for Wastewater and Stormwater Funding Sources in New Hampshire

NEW HAMPSHIRE DEPARTMENT OF Environmental Services

May 17, 2022

Tracy L. Wood, P.E.
Administrator, Wastewater Engineering Bureau, NHDES

Clean Water State Revolving Fund (CWSRF)

- $1.02B Below Market Cost Loans
  - $534M Capitalization Grant & State Match
  - $481M Loan Repayment Account
  - $38M ARRA
- 409 Financial Assistance Agreements
- 112 Entities
- $54.6M Total Forgiveness
- +$36M Forgiveness ARRA

2022 IUP/PPL CWSRF Schedule

- Pre-applications due: **June 1, 2022**

- Ranked 2022 Project Priority List: **July 28, 2022**
  (beginning of 2-week public comment period)

- Public Hearing, CWSRF & DWSRF: **August 4, 2022**

- End of Public Comment Period: **August 11, 2022**

- 2022 Loan Applications: **September 1, 2022 - June 30, 2023**

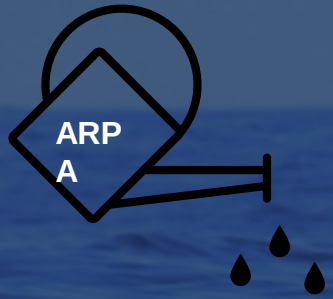

Or do you want a
seat at the table?
Do you want to be watching
from the side chair?

CWSRF 2021 PPL Summary

Project Type	# Pre-Apps	Total $
WW Infrastructure	154	$533,402,990
SW Infrastructure	18	$20,994,003
WW Planning	54	$2,022,000
SW Planning	10	$820,000
Asset Management	17	$815,000
Energy Audit Measures	5	$1,152,350

Principal Forgiveness for Affordability Factors: 2%, 10%, 15% & 20%

2022 CWSRF Funding



“Earmarks”
$6.5M

20% Match Required

NEW!

Base
$11.6M Cap Grant
$2.3M State Match (20%)

10-40% Subsidy

Repayment
$36.5M
No State Match

0% Subsidy

Supplemental
$17.9M Cap Grant
$1.79M State Match (10%)

49% Subsidy

NEW!

Emerging Contaminants
$935,000

100% Subsidy

FUNDING SUMMARY

- $50.4M

Base & Repayment

- $20.625M

BIL (Supplemental & Emerging Contaminants)

- $6.5M

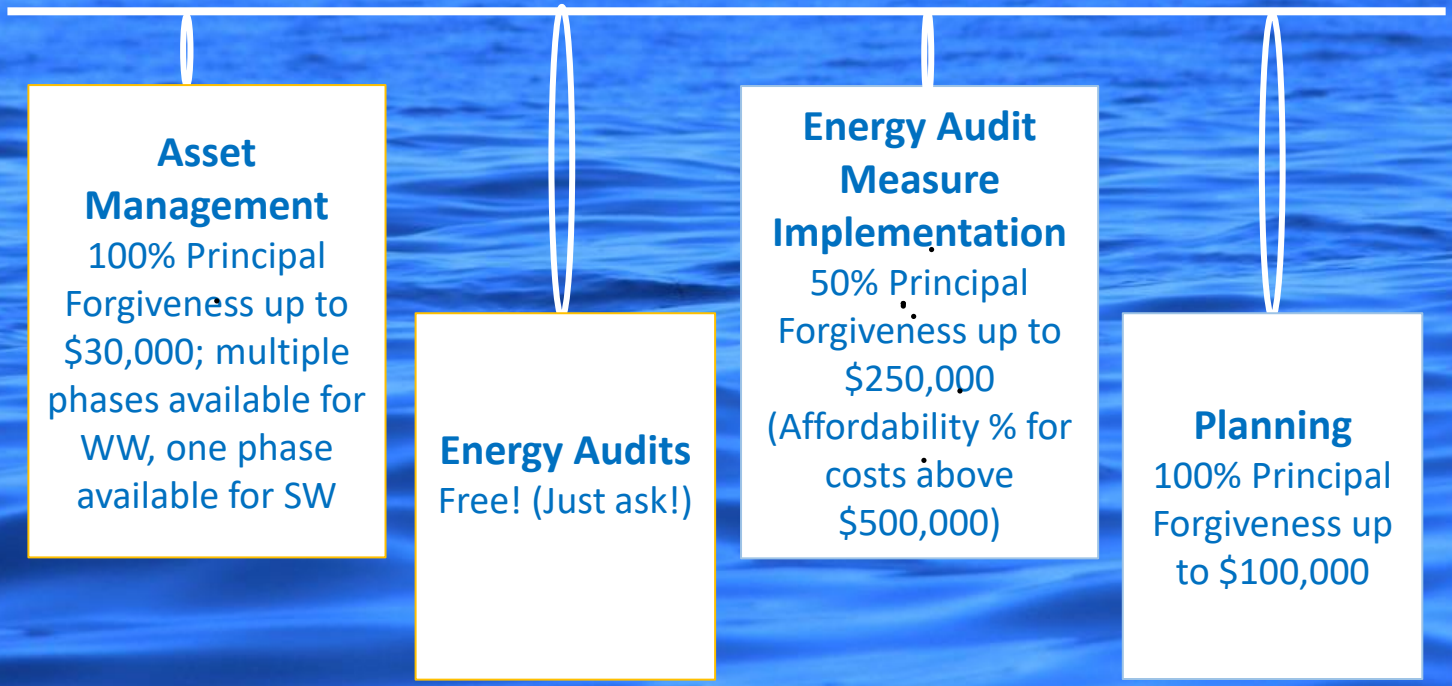
Earmarks

- TOTAL $77.525

MAXIMUM AVAILABLE SUBSIDY

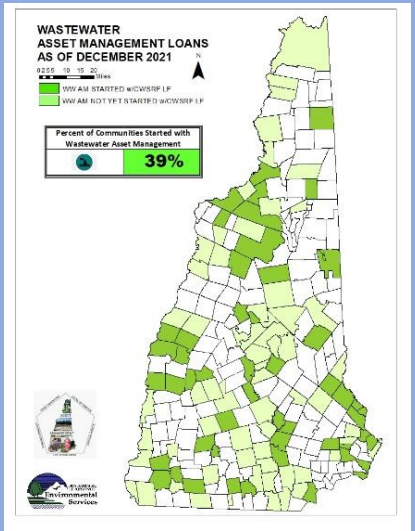
- $15.3M

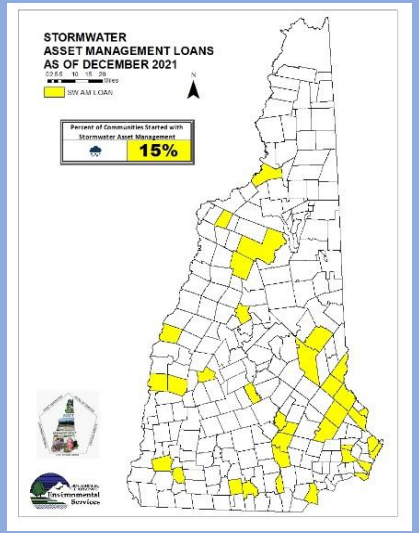
CWSRF Incentive Programs



Asset Management – Where are we?

- Wastewater
  - 135 Eligible Systems
  - 52 AMPs to Date
- Stormwater
  - 234 Eligible Systems
  - 35 AMPs to Date
- Drinking Water
  - 280 Eligible Systems
  - 76 AMPs to Date



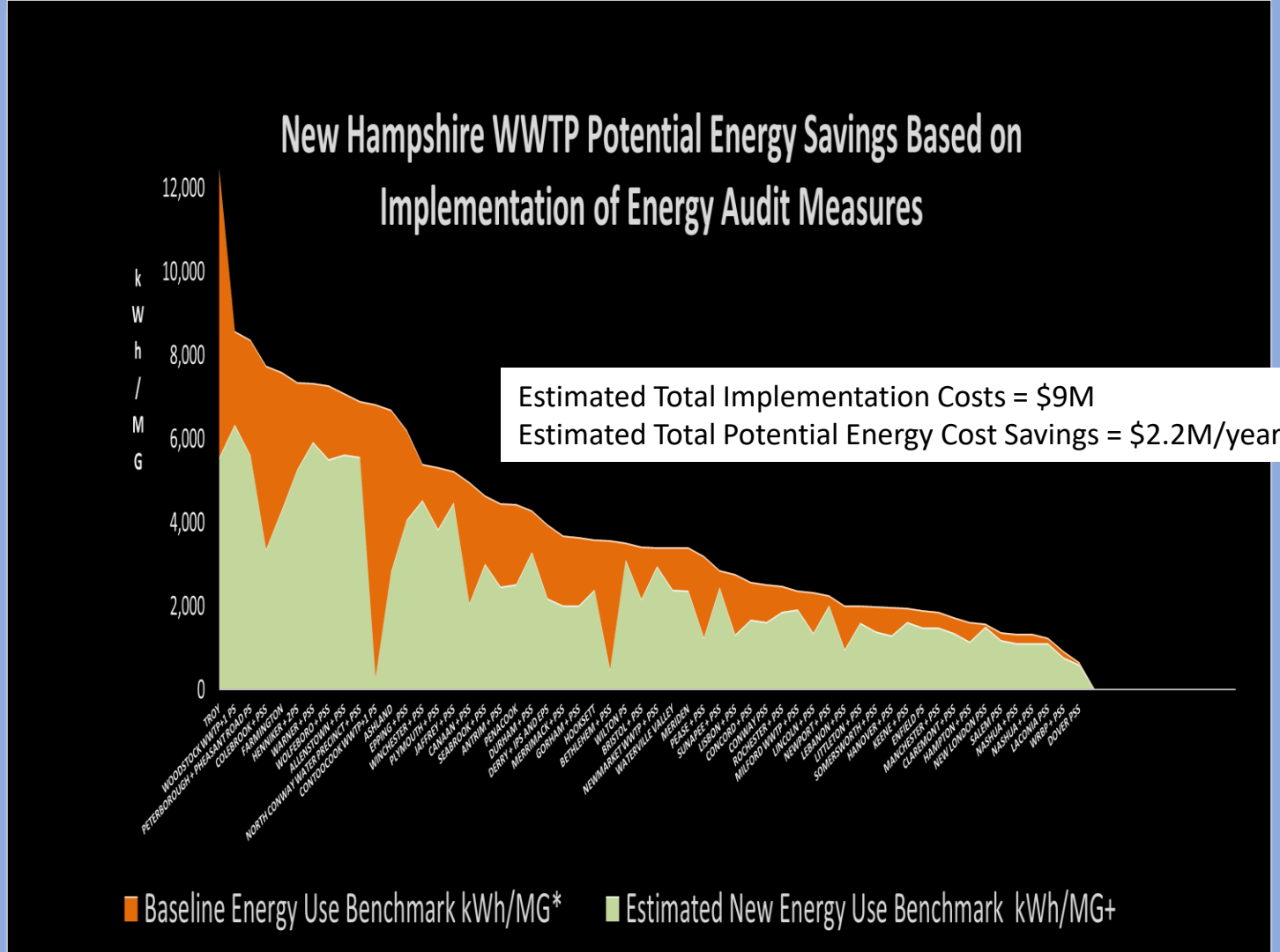


Energy Audit Findings

Wastewater

Potential Savings

- 29% Overall Energy Use (average)
- 3.3 year average simple payback
  - Before incentives
- 49 WWTP audits
- 7 Pump systems


New Hampshire WWTP Potential Energy Savings Based on Implementation of Energy Audit Measures
kWh/MG
12,000
10,000
8,000
6,000
4,000
2,000
0
Estimated Total Implementation Costs = $9M
Estimated Total Potential Energy Cost Savings = $2.2M/year
TROY
WOODSTOCK WWTP+1 PS
PETERBOROUGH + PHEASANT ROAD PS
COLEBROOK + PS
FARMINGTON
HENNIKER + 2PS
WARNER + PS
WOLFEBORO + PS
ALLENSTOWN + PS
NORTH CONWAY WATER PRECINCT + PS
CONTOOCOOK WWTP+1 PS
ASHLAND
EPPING + PS
WINCHESTER + PS
PLYMOUTH + PS
JAFFREY + PS
CANAAN + PS
SEABROOK + PS
ANTRIM + PS
PENACOOK
DURHAM + PS
DERRY + IPS AND EPS
MERRIMACK + PS
GORHAM + PS
HOOKSETT
BETHLEHEM + PS
WILTON PS
BRISTOL + PS
NEWMARKET WWTP + PS
WATERVILLE VALLEY
MERIDEN
PEASE + PS
SUNAPEE + PS
LISBON + PS
CONCORD + PS
CONWAY PS
ROCHESTER + PS
MILFORD WWTP + PS
LINCOLN + PS
NEWPORT + PS
LEBANON + PS
LITTLETON + PS
SOMERSWORTH + PS
HANOVER + PS
KEENE + PS
ENFIELD PS
MANCHESTER + PS
CLAREMONT + PS
HAMPTON + PS
NEW LONDON PS
SALEM PS
NASHUA + PS
NASHUA + PS
LACONIA PS
WIBB + PS
DOVER PS
Baseline Energy Use Benchmark kWh/MG*
Estimated New Energy Use Benchmark kWh/MG+

PROJECT PLANNING

- Improves project development & readiness
- Assists communities applying to other funding programs
- Propels communities forward

- Failing to plan, is planning to fail
- A good plan is like a road map: it shows the final destination and usually the best way to get there.

CWSRF Emerging Contaminants

- Focus on PFAS
- $935,000 in 2022
- $2.1M each FY 23-26
- Project Types:
  - PFAS Source Identification and Elimination/Reduction
  - Treatment of Landfill Leachate (Municipally Owned Landfills to Municipal WWTFs)

CWSRF Benefits

- No Closing Costs
- No Pre-payment Penalties
- Loan Principal Forgiveness to support Affordability
- Reimbursement as costs are incurred
- 1% Interest on disbursements until substantial or scheduled completion date
- Repayments begin within one year of completion at lowest available rate
- CWSRF Staff Assistance throughout each phase

CWSRF Requirements

Qualifications Based Selection

Required for Project Management

Design Review & Environmental Review

Required for Public Bid Advertisement

Additional Federal Provisions apply, i.e.

Build America Buy American (BABA)

Davis Bacon Wage Rates

Authorization to Award Construction Contract

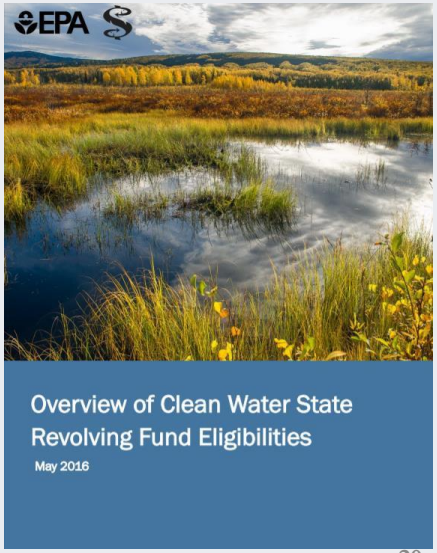
And Construction Oversight

Repayments within One Year of Substantial Completion

CWSRF Eligibilities

- A federal-state partnership that provides communities low-cost financing for a wide range of water quality infrastructure projects
- Eligibilities include:

1. POTWs (section 212)
2. 319 management programs
3. 320 conservation and management plans
4. Decentralized wastewater treatment systems
5. Stormwater or subsurface drainage water
6. Reduce demand to POTWs through water conservation, efficiency, or reuse
7. Watershed projects (section 122)
8. Energy conservation at POTWs
9. Wastewater, stormwater, or subsurface drainage water reuse (private + nonprofit)
10. Increased security of POTWs
11. Planning, developing, and financing projects



ARPA Clean Water Infrastructure

- 2021 CWSRF PPL was used to make ARPA offers
  - All funds must be obligated by 12/31/2024
  - All funds must be expended by 12/31/2026
- Clean Water - Wastewater and Stormwater Infrastructure
  - Tiered Approach
  - All ARPA offers also had CWSRF offer.
  - ARPA grant application deadline for those that received ARPA offers is June 30th (to match the CWSRF loan application deadline).
  - All ARPA offers have been made and no additional offers will be made in this category.

ARPA Clean Water Incentives

Asset Management, Planning and EAMI

- ARPA application deadlines:
  - EAMI 1/31
  - AM 3/31
  - Planning 6/30
- Additional offers may be made in these categories using 2022 CWSRF PPL.

Energy Audits

- Available upon request – just contact us!

NEW Cybersecurity Grants

- Available on a rolling basis until all available funds have been exhausted.

NEW Disadvantaged Program

- 8 projects funded to date
- Next pre-application solicitation coming soon!

Cybersecurity (ARPA)

- $2mil available for Cybersecurity Improvements
- $50,000 per Drinking Water or Wastewater system
- Goal: Develop & implement programs to mitigate or eliminate risk of cyberattacks
- Implement cybersecurity measures identified in a cybersecurity assessment such as EPA Cybersecurity Assessment, Cybersecurity and Infrastructure Security Agency (CISA) Assessment, CSET, AWWA Cybersecurity Tool.
- Who's Eligible?
  - Community Public Drinking Water Systems serving (min 500 people), excluding privately owned redistribution systems
  - Municipal Wastewater Systems regulated w/NPDES permit or GW discharge permit

Up to $100,000

Combined Drinking Water / Wastewater System

Disadvantaged Program (ARPA)

- $26.5M available for Disadvantaged Program
- Goal: Comprehensive program to enhance quality and reliability of drinking water and wastewater infrastructure for the financially distressed
- $1 M CW / $1 M DW / $2 M Max Combined
- Who's Eligible?
  - NH Coops (resident owned communities)

Up to $2,000,000

Combined Drinking Water / Wastewater System

Critical Flood Risk Grants (ARPA)

New

- $6M available for Critical Flood Risk Program
- Critical Flood Risk Infrastructure Grant (CFRING) $4.5M – April 15th Deadline
- Culvert Flood Risk Assistance Grants $1M – July 1st Deadline
- Goal: Promote Planning, Design & Construction

Construction of Stormwater BMPs - Reduce NPS Pollution and Meet Federal Permit Requirements

Undersized Culvert Overtopped Due to Heavy Rain

High Tide Flooding Impacts Require Improvements to Tidal Drainage Systems

Wastewater State Aid Grant (SAG)

- RSA 486
- 20 – 30 % state grant contribution for municipalities towards principal and interest
- Steps for communities seeking funding
    - Follow SAG requirements from concept to completion
    - Submit pre-applications each year
    - Submit application upon project completion