



TOWN OF HENNIKER, NEW HAMPSHIRE

Town Hall
18 Depot Hill Road
Henniker, NH 03242
Tel: (603) 428-3221

Wastewater Commissioners STAFF REPORT

DATE: 11/21/2023
TITLE: Wastewater Facility Upgrade
INITIATED BY: Diane Kendall, Town Administrator; Rich Slager, WWTP Superintendent
PREPARED BY: Diane Kendall, Town Administrator
PRESENTED BY:

AGENDA DESCRIPTION: Authorize proposed 2024 warrant article for 2023 Clean Water State Revolving Funds supplemental funding (CWSRF) and authorize TA Kendall to sign CWSRF 2023 Project Priority List.

LEGAL AUTHORITY: [RSA 32:3, VI, special warrant articles](#); [NH RSA 33:1](#); RSA 32:5, 33:3, 33:8-a, [RSA 486:14](#)

FINANCIAL DETAILS: \$1,500,000 (\$425,000 estimated principal forgiveness)

BACKGROUND: The town applied for supplemental funding for the 2022 Wastewater upgrade project. Each year New Hampshire's CWSRF Program Staff perform ongoing outreach to obtain updates on the status of projects offered funding on the current project priority list. If a project allocated funding is not moving forward, the monies will be offered to those who are ready to move forward but ranked lower on the list.

Signature will indicate the town's intent to move forward with the project pending authority to borrow is granted by legislative body at the March 2024 town meeting.

TOWN ADMINISTRATOR COMMENTS: supports

WASTEWATER SUPERINTENDENT: supports

SUGGESTED ACTIONS / MOTIONS:

#1 Motion to support 2024 Special Warrant Article:

Article T-X Issuance of \$1.5M Bonds for the Purpose of Supplemental Upgrades to the Wastewater Treatment Facility.

To see if the Town will vote to raise and appropriate the sum of \$1,500,000 for the purpose of supplemental upgrades to the wastewater treatment facility, that will qualify the Town for federal and state funds, such sum to be raised by the issuance of serial bonds and notes not to exceed \$1,500,000 under, and in compliance with, the provisions of the Municipal Finance Act (NH RSA 33:1 et seq., as amended) and to authorize the Town officials to issue and negotiate such bonds or notes and determine the rate of interest thereon, and to take such actions as may be necessary to affect the issuance, negotiation, sale and delivery of such bonds or notes as shall be in the best interest of the Town. Additionally, to authorize the Town to apply for and accept grants or other funds that may reduce the amount to be repaid and participate in the State Revolving Fund (SRF) RSA 486:14 established for this purpose, and to allow the Town to expend such monies as become available from the federal and state governments and pass any vote relating thereto. It is anticipated that the Town will receive up to \$425,000 in principal forgiveness from the State Revolving Fund loan program. The remaining bond for this project will be funded by general taxation.

Recommended by the Wastewater Commissioners, Board of Selectmen, X-X. Recommended by the Budget Committee, X-X. (3/5 majority vote required).

#2 Motion to authorize the Town Administrator to sign the CWSRF WW & SW Infrastructure update.



**CWSRF 2023 Project Priority List (PPL)
WW & SW Infrastructure Update
Due November 20, 2023**

Loan Applicant Name (City/Town): Town of Henniker		
Primary Contact Name: Diane Kendall		
Mailing Address: 18 Depot Hill Rd		
Henniker, NH 03242		
Email: diane.kendall@hennikernh.gov		Phone (603) 428-3221
CWSRF 2023 WW Infrastructure PPL No. _____		CWSRF 2023 SW Infrastructure PPL No. _____
CWSRF 2023 EAMI PPL No. _____		CWSRF 2023 Emerging Contaminants PPL No. _____
Project Name: WWTF Upgrade Supplemental		
Project Location: Henniker, NH		
UPDATED PROJECT SCHEDULE:		
Funding Type	Start Date	Completion Date
Design Engineering	4/20/2024	5/30/2025
Construction Engineering	8/1/2025	12/31/2026
Construction	8/1/2026	12/31/2026
City/Town Signature:		
DATE AUTHORITY TO BORROW HAS BEEN OR WILL BE OBTAINED: <u>March 2024</u>		
If the date entered above is after June 28, 2024, be sure to submit a new pre-application for the project by June 1, 2024, to be considered for 2024 PPL and financial incentives.		
LOAN AMOUNT (Including Principal Forgiveness) <u>\$1,500,000.00</u>		
If Applicable, the loan amount requested above reflects an <input type="checkbox"/> Increase <input type="checkbox"/> Decrease from the amount submitted on the 2023 Pre-Application for this project.		
If this in an increase or decrease in the original amount, please provide an explanation in the comments section below.		
Comments:		



2023 NHDES CLEAN WATER SRF PRIORITY LIST
WASTEWATER INFRASTRUCTURE PROJECTS



No.	APPLICANT	PROJECT NAME	TOTAL COST	2023 CWSRF Amount ^{1, 2, 3, 4, 5, 6}	EAMI	PLAN	(1) Protection of Water Quality & Public Health	(2) Green Project Reserve	(3) Aging Infrastructure	Ranking Points Total	PF % Based on Affordability	PF Based on Affordability	PF EAMI ⁷	2023 Est. Principal Forgiveness ^{8, 9}
1	New Castle	Sewer Manhole Remediation Phase 1	\$77,000	\$77,000			0	60.00	10	70.00	25%	\$19,250		\$19,250
2	Rochester	Sewer System Master Plan I/I Construction	\$1,006,000	\$1,006,000			20	30.00	10	60.00	20%	\$201,200		\$201,200
3	Antrim	WWTF Upgrades Phase 1	\$2,200,000	\$2,200,000			20	30.00	0	50.00	20%	\$440,000		\$440,000
4	Nashua	Class A Biosolids Upgrade and Maintenance Building	\$32,080,000	\$2,500,000			0	30.00	10	40.00	20%	\$500,000		\$500,000
5	Newmarket	I/I Rehabilitation	\$1,750,000	\$1,750,000			0	30.00	10	40.00	35%	\$612,500		\$612,500
6	Boscawen	Sewer Projects #3 and #4	\$6,500,000	\$6,500,000			0	6.00	30	36.00	25%	\$1,625,000		\$1,625,000
7	Henniker	WWTF Upgrade Supplemental	\$1,500,000	\$1,500,000	X		0	6.00	30	36.00	25%	\$325,000	\$100,000	\$425,000
8	Troy	WWTF Upgrade	\$5,000,000	\$5,000,000			20	3.84	10	33.84	35%	\$1,750,000		\$1,750,000
9	Portsmouth	Fleet Street Roadway Reconstruction	\$6,000,000	\$6,000,000			20	3.00	10	33.00	25%	\$1,500,000		\$1,500,000
10	Epping	WWTF Nitrogen Removal Upgrade	\$25,000,000	\$4,500,000		X	20	2.40	10	32.40	20%	\$900,000		\$900,000
11	Bennington	Starret Road Pump Station Upgrade	\$1,025,000	\$1,025,000	X		0	2.09	30	32.09	20%	\$203,000	\$5,000	\$208,000
12	Exeter	School Street Area Reconstruction	\$2,614,050	\$2,614,050			0	0.64	30	30.64	35%	\$914,918		\$914,918
13	Allenstown	New Secondary Clarifiers Phase 1	\$11,200,000				0	0.00	30	30.00	20%			
14	Claremont	Headworks and Solids Handling Upgrade	\$15,890,000				0	0.00	30	30.00	35%			
15	Dover	Charles Street Force Main and Drainage Upgrade	\$1,737,000				0	0.00	30	30.00	25%			
16	Dover	Mill Street Pump Station and Force Main Upgrade	\$3,547,000				0	0.00	30	30.00	25%			
17	Durham	WWTP Sludge Drying System Evaluation and Design	\$1,000,000			X	0	30.00	0	30.00	25%			
18	Exeter	High Street and Cross Country Sewer Upgrades-Phase 1	\$3,800,000				0	0.00	30	30.00	35%			
19	Hillsborough	Church Street Sewer Improvements	\$1,500,000				0	0.00	30	30.00	20%			
20	Hillsborough	Park and Whittemore Streets Sewer Replacement	\$1,700,000				0	0.00	30	30.00	20%			
21	Lancaster	WWTF Upgrades	\$500,000				0	0.00	30	30.00	20%			
22	Lebanon	Sewer Interceptor Project #2	\$251,856				0	0.00	30	30.00	35%			
23	Manchester	Cemetery Brook Drain Tunnel	\$132,000,000				20	0.00	10	30.00	20%			
24	Manchester	Christian Brook C2	\$27,000,000				20	0.00	10	30.00	20%			
25	Newport	WWTP Upgrade	\$9,999,000				20	0.00	10	30.00	25%			
26	North Conway WP	WWTF Sludge Dryer	\$9,900,000			X	0	30.00	0	30.00	20%			
27	Salem	Brookdale Road Pump Station Improvements	\$600,000				0	0.00	30	30.00	20%			
28	Village District of Eastman	West Cove A & B Pump Stations Wet Well Upgrade	\$418,500				0	0.00	30	30.00	10%			
29	Winnepesaukee R. Basin Program	Bar Screen and Grinder/Debris Management Systems	\$865,000			X	0	0.00	30	30.00	25%			
30	Winnepesaukee R. Basin Program	Roof Replacements	\$1,566,700			X	0	0.00	30	30.00	25%			
31	Winnepesaukee R. Basin Program	Septage Receiving and Solids Upgrade	\$400,000				0	0.00	30	30.00	25%			
32	Winnepesaukee R. Basin Program	Belmont Force Main Rehabilitation	\$9,532,100			X	0	0.00	30	30.00	10%			
33	Wolfeboro	I/I Remediation	\$1,500,000				0	0.00	30	30.00	35%			
34	Dover	Court and Union Street Utility Replacement	\$5,885,000				0	3.00	25	28.00	25%			
35	Dover	Fifth and Grove Streets Utility Replacement	\$1,100,000				0	3.00	25	28.00	25%			
36	Salem	Butler Street Pump Station Improvements	\$600,000				0	0.00	25	25.00	20%			
37	Newfields Village W&S District	Lagoon Sludge Removal and Aeration System Replacement	\$1,579,000			X	10	0.00	10	20.00	20%			
38	Seabrook	WWTF Upgrades Phase 2	\$6,014,000		X	X	0	9.00	10	19.00	20%			
39	Portsmouth	Pease WWTF Rehabilitation	\$28,370,000			X	0	8.40	10	18.40	25%			

Clean Water State Revolving Fund (CWSRF) Pre-Application

version 2.1

(Submission #: HPT-X40N-17HFP, version 1)

Details

Originally Started By Catherine M Laliberte

Alternate Identifier Town of HennikerHenniker Wastewater Treatment Facility Upgrade Supplemental

Submission ID HPT-X40N-17HFP

Status Draft

Form Input

Applicant Contact Information

Loan Applicant
Town of Henniker

Loan Applicant Mailing Address

18 Depot Hill Rd
Henniker, NH 03242

Contact Information**Primary Contact****Prefix***Mr.***First Name**

David

Middle Name*J***Last Name***Mercier, P.E. (NH, VT)***Title***Vice President***Organization Name***Underwood Engineers, Inc.***Phone Type**

Business

Number

603-230-9898

Extension**Email**

dmercier@underwoodengineers.com

Business Mailing Address

99 North State Street

Concord, NH 03301

Is the primary contact listed above the owner?

No

Please note when the owner is not listed as the primary contact the owner must be listed as the secondary contact.

Secondary Contact Information**Secondary Contact Information****Prefix***Ms.***First Name**

Diane

Middle Name*NONE PROVIDED***Last Name***Kendall***Title***Town Administrator***Organization Name***Town of Henniker***Phone Type**

Business

Number

603-428-3221

Extension

105

Email

diane.kendall@henniker.org

General Project Information

Project Name

Henniker Wastewater Treatment Facility Upgrade Supplemental

Project Location

Henniker, NH

Is the pre-application for development of an Asset Management Program?

No

Please select your project category. Ranking criteria will be displayed based on your selection.

Wastewater

You have selected a Wastewater pre-application. Please note pre-applications for the wastewater projects cannot be combined with emerging contaminant projects.

Please select the option below that describes your project.

b. The project only includes infrastructure components.

Please select the type(s) of wastewater infrastructure project(s) you are proposing. Check all that apply to this project.

Advanced WWTF Upgrade

Pump Station (PS) Upgrade/Replacement

Brief description of the proposed project and need:

\$1.5 million dollar supplemental project to address screening and screening handling, install new plant water system and address energy efficiencies. The project will include a new fine screen, compaction and conveyance system at an estimated cost of \$650k. It will be located either at the headworks to replace the existing manual bar rack or at the influent pumping station to replace existing grinder. The new screening system will require washwater and the project will also include a new plant water system to eliminate use of potable Town water at an estimated cost of \$100k. The project will include a new SCADA system for improved operational control, new nitrate recycle system to save/regain oxygen and alkalinity, effluent flow metering system, VFDs for optimized control to replace existing 15-20 year old equipment and new site-wide lighting to replace existing 47 year old lighting. The estimated cost for these energy efficiency components is \$400k. Many of these are items that cannot be completed under the current \$3.2M upgrade due to project inflation since the original 2018 estimate.

Project Description Attachment, Optional

NONE PROVIDED

Comment

NONE PROVIDED

Please provide the date (or future date) when the authority to borrow was, or is expected to be, obtained (i.e., date of town meeting/city council approval to borrow funds).

03/31/2024

Estimated Timeline and Cost Information Table

Funding Type	Start Date	Completion Date	Cost (\$)
Scope, *Report Phase Engineering	4/20/2024	9/30/2024	0
Design Engineering*	10/1/2024	5/30/2025	100,000
Construction Engineering*	8/1/2025	12/31/2026	100,000
Construction	8/1/2025	12/31/2026	1,300,000
			Sum: 1,500,000

Are the cost estimates for the project supported by a document (e.g., facility plan, preliminary design, report, etc.) that is signed by an engineer?

Yes

Please identify the engineer (and firm) responsible for the document that includes the cost estimates.

David J. Mercier, P.E., Underwood Engineers, Inc.

Please provide a citation for the report/document that includes the cost estimates.

Preliminary Design Report by Underwood Engineers dated 03/31/2023

Is the amount of money you wish to borrow less than the cost estimate above?

No

Project Attributes

1. Does your project include the implementation of comprehensive energy audit measures?

Yes

Has a comprehensive energy audit been conducted at the facility?

Yes

Please provide the date the energy audit was completed or is estimated to be completed.

12/31/2021

What is the dollar value of the estimated project cost directly related to the implementation of comprehensive energy audit measures?

200,000.00

Please provide a description of the specific measure(s), including the measure ID (i.e. OM#2, ECM#2, ESM#1) from the audit report, that will be implemented as part of this project.

Unknown

Population Receiving Collection

Population Description	Current Population Value	Projected Design Population
Current Resident Population served by the facility.	1,850	1,850
Current Non-Resident Population served by the facility.	0	0
	Sum: 1,850	Sum: 1,850

Is your project within an impaired waterbody assessment unit?

No

Is there additional information regarding the project attributes that you would like to provide?

NONE PROVIDED

Ranking Criteria for Wastewater Planning/Infrastructure and Emerging Contaminants Projects

Please include the National Pollutant Discharge Elimination System (NPDES) permit number that will be affected by the proposed project.

NHG580018

Please include the GWD permit number that will be affected by the proposed project.

N/A

Category 1: Protection of Water Quality and Public Health

NONE PROVIDED

What Green Project Reserve Project Types do you have?

Water Efficiency

Energy Efficiency

GPR Certification

GPR points will not be awarded if adequate information, including reasonable estimated costs for GPR-related items, is not included in the pre-application. It is expected that any GPR-related items claimed in this pre-application will be incorporated into the design of the project.

I have read and understand the statement above.

Yes

GPR Eligibility – Water Efficiency

Eligible Projects	Costs (\$) for this GPR	% Project Costs
Recycling and water reuse projects that replace potable sources with non-potable sources such as gray water, condensate and wastewater effluent reuse systems where local codes allow the practice.	100,000	6.666666666666667
	Sum: 100,000	Sum: 6.666667

GPR Eligibility – Energy Efficiency

Eligible Projects	Costs (\$) for this GPR	% Project Costs
Upgrade of POTW lighting to energy efficient sources such as LEDs.	60,000	4
SCADA systems.	10,000	0.6666666666666667
Variable Frequency Drives.	130,000	8.666666666666668
NONE PROVIDED	NONE PROVIDED	0
	Sum: 200,000	Sum: 13.333333

Category 3: Aging Infrastructure

- a. Replacement or upgrade of aging infrastructure.
- b. Implementation of project identified through criticality analysis in an asset management program.

3a. Please describe what assets in the project are identified as aging infrastructure as well as how these assets were identified.

Aeration tank blower and RAS pump VFDs, effluent flow metering, aeration tank mixers and site lighting identified from the Asset Management Program.

3b. Please provide a narrative describing the asset management program and the general asset groups included in the program.

The Town has a well functioning data collection system for the wastewater treatment and collection system. This is used to update inventory with condition assessment and criticality based on inspection findings to determine repair, replacement or upgrades. This information is then used to schedule and budget for repairs, replacement or upgrades.

3b. Please describe the steps taken for identifying the project through a criticality analysis process.

The AMP program is used to identify the condition assessment and criticality with a priority list generated by the wastewater staff. This is then communicated between the Town Management and Select Board.

3b. Asset Management Program Documentation

Henniker Sewer AMP FINAL.pdf - 05/25/2023 09:57 AM

Comment

Wastewater System Asset Management Program
Henniker, NH by Underwood Engineers dated 09/20/2019

Category 4: Sewer Extensions

NONE PROVIDED

Is there additional information specific to the wastewater ranking questions above you would like to provide?

We believe this project should receive 20 points for Category 1b for nitrate recycle, 16 points for GPR, and 30 points for Category 3b for a total of 66 points.

Final Comments for NHDES

Did you find the electronic format helpful?

Yes

Please describe the ease of filling out this form.

Generally easy but with some confusing sections.

Do you have any suggested improvements for the form?

NONE PROVIDED

Attachments

Date	Attachment Name	Context	Confidential?	User
5/25/2023 9:57 AM	Henniker Sewer AMP FINAL.pdf	Attachment	No	Catherine Laliberte