

WINNIPESAUKEE RIVER BASIN PROGRAM

ADVISORY BOARD MEETING AGENDA

April 21, 2022

10:00 am

Belmont Mill 4th Floor -14 Mill Street

Due to the expiration of the Governor's Emergency Order, the WRBP Advisory Board must have a physical quorum at a meeting site that is open to the public.

The public has access to listen to and participate in this meeting by using the following link:

<https://us02web.zoom.us/j/84717605251?pwd=NjVkb1drVmtDamVNVkY3a0J1bnpOZz09>

Meeting ID: : 847 1760 5251

Passcode: 832448

1. March 17, 2022 Meeting Minutes for review and approval
2. WRBP Monthly Summary Report –March 2022
3. Citizen Comments for items on the agenda
4. Responsible party(ies) for maintaining River Road, the road to the wastewater treatment plant
5. CIP Update – ARPA project:
 - Treatment Plant Automated Aeration Vale project – ARPA energy efficiency project; Eversource Approved a \$60,900 incentive
6. Revolving Loan for the Solids Handling Upgrades: Phase 1
 - Basis of Design Report received on April 5, 2022 for Review by CIP Committee; Sent to Board members on April 18, 2022 separately
 - Anticipated impact on debt service
7. Governance Guidelines, MOA and possible By-Laws
8. Rate Assessment Update:
 - Update on the implementation of the approved rate allocation model
8. Review of the escrow account, No change from last month

9. Replacement Fund

- HB 1339 – Senate Finance Committee recommended ought to pass on March 3, 2022

10. Other Business:

- a. Next Advisory Board Meeting – Should be May 19, 2022. Program Administrator is not available from May 18th to an unspecified date. **Proposed Date May 17, 2022**

11. Adjournment

Item # /

Minutes

WINNIPESAUKEE RIVER BASIN PROGRAM

ADVISORY BOARD MEETING MINUTES

March 17, 2022

Members Present: The meeting was called to order by Wes Anderson (Laconia), chair, at 10:05 am. Sharon McMillin (DES), Rene Pelletier (DES), Ron White (DAS), Johanna Ames (Tilton), Glen Brown (Northfield), Jeanne Beaudin (Belmont), Justin Hanscom (Franklin), Alicia Jipson (Belmont), Ray Korber (Bay District), Krista Larson (Laconia), and Meghan Theriault (Gilford) were present at that time either in person or via Zoom. Wes announced that a quorum was present in person.

Minutes: Ray moved, seconded by Meghan, to approve the February 7, 2022 meeting minutes. A roll call vote was taken and the motion carried.

Citizens Comments for Agenda Items: Wes asked if there were any guests from the member communities, and if they had any questions, comments, or concerns regarding the agenda items. As there were none, he moved on to the next agenda item.

Monthly Summary Report: Sharon distributed the *Monthly Summary Report* for February 2022, which was distributed by email prior to the meeting.

- Energy Efficiency Upgrades – The blower was successfully started during the first week of March 2022. The RAS pumps are scheduled for startup in April. The projected date of substantial completion for all equipment is May 2022.
- Solids Handling Process Upgrades (Phase 2) – Inspection and onsite repairs to one dewatering centrifuge indicated that it may have a remaining useful life of 15-20 years, if provided with proper O&M. The second centrifuge will be inspected during the next fiscal year. If it has a similar inspection result, then the Solids Handling Phase 2 project in the CIP that included replacing these units may be deferred accordingly.
- WRBP Infrastructure O&M Responsibilities – See the discussion below.
- Rate Assessment Formula – See the discussion below.
- WRBP CIP Update – Solids Handling Upgrades Phase 1 are eligible for a CWSRF loan with 10 percent capital forgiveness. There were no CIP Sub-Committee meetings in December, January, or February. There will be a CIP Sub-Committee meeting following this meeting.

Responsible Parties for River Street Maintenance— Sharon explained that approximately 40 years ago Manual Farm Road, the planned access to the WWTF, was deemed unsafe by the Franklin Fire Department due to its steep grade and, therefore, unusable. River Street and the Old Dump Road (a dirt road) was extended to provide access to the WWTF and other properties along the roadway which are owned by the City of Franklin, the State of New Hampshire (other agencies), and private parties. River Street and its extension was never turned over to the City. Jeanne asked if it was built to Franklin's town specs at the time. Sharon said that it is her understanding that it was since a State-funded project. The WRBP has been plowing it so that it is passable during the winter months for staff members and haulers. Because of this necessity, WRBP's upkeep has benefited the other property

owners. The WRBP has also contracted for necessary roadwork and paving in the past. The road will continue to need significant repairs and maintenance.

A subdivision of one of the private properties into two lots is currently under review at the City. Sharon wanted to discuss this history with the Advisory Board members and seek consensus as to the best course of action to take at this time, if any. Options included delaying the subdivision process until the ownership of River Street was confirmed or an Association formed to share costs and liability. This option was not supported by the members based on the history and unwillingness to impede a property subdivision at this late date. Other options discussed included approaching the City and the road's other abutters regarding sharing the costs for repairs and road maintenance (plowing, brush/tree cutting). Wes asked whether it was a Class 6 road or a private road. Jeanne posited that it did not matter, as municipalities are not obligated to plow or maintain Class 6 roads. The City has not been interested in accepting all or part of the road. Wes reminded members that the governing body of a municipality (i.e., Franklin City Council) must approve building permits and driveways on a class 6 road. The planning board does not have final approval in those cases. Approval would include a waiver of liability from the property owner regarding the class 6 road. It is unclear if this process was followed during River Street's extension to the WWTF or any previous construction on abutting lots. The consensus was for the WRBP to hire a surveyor to research property and City records and determine the bounds of River Street; perhaps engaging a firm that has worked successfully with the City. Jeanne advised that the turn-around time for a survey may be a minimum of three to six months at present.

Revolving Loan for the Solids Handling Upgrades – Phase 1: Sharon announced that Brown and Caldwell's *Basis of Design Report* should be available in early April for review and will be distributed to the CIP subcommittee prior to next month's meeting

Governance Guidelines, MOA, and By-Laws Update: There are no updates at this time.

Rate Assessment Formula Update: Wes announced that he had an update from Underwood regarding the implementation of the approved rate allocation model. They are asking for member communities to provide any updates and changes so they could test their procedures.

Review of the Escrow Account: There are no changes from last month.

Replacement Fund: Wes announced that HB 1339, sponsored by Dawn Johnson and co-sponsored by Jeb Bradley and Norman Silber, has been placed on the NH House Agenda, after which it will be forwarded to the NH Senate for consideration.

Other Business: The meeting adjourned at 10:50 am. The next meeting will be held on Thursday, April 21st at 10:00 am in Belmont Mill (4th floor) which is located at 14 Mill Street in Belmont.

The minutes were prepared by Pro-Temp Staffing.

Item # 2

March Report

**Summary Report to the WRBP Advisory Board
March 2022**

Projects	Status & Schedule	Budget	Other info
Energy Efficiency Upgrades at WRBP Facilities	In order to qualify for a CWSRF loan and Eversource incentive requirements, the project is proposed to be substantially complete on or about Dec 31, 2020. A task order for engineering support was executed. The aeration blower and 2 RAS pumps were purchased and plans and specifications for WRBP installation have been approved. Blower delivered late December; custom pumps delivery delayed until June. The blower was successfully started the first week in March 2022. The RAS pumps are schedule for start-up in early April so the projected date of substantial completion for all equipment is May 2022.	The estimated project budget is \$400K with 50% principal forgiveness from the CWSRF and a \$100K Eversource incentive making the overall budget \$100K and a <1-year simple payback based on estimated electricity savings.	This equipment upgrade was recommended by the energy audit of all WRBP facilities completed in early 2020. Project includes a smaller aeration blower, 2 RAS pumps and staff-installed facility lighting. The AB expressed support of the project at their August and Sept. 2020 meetings. Programming assistance from W-P through a task order for the new SCADA screens and RAS pumps' flow pacing control is being negotiated. The utility incentive for this project is still available through 2022.
Solids Handling Process Upgrades	Phased projects included in the Solids Handling Master Plan developed for the Franklin WWTP are being identified for completion of the alternative analyses (10% design) to move forward to a 30% design. Kick-off meeting held virtually on 7/29/21. A 3D survey of WWTF solids area performed in September 2021. Alternative analyses are underway for sludge mixing and thickening with another site visit planned for December.	Phase I Project budget estimate in the draft Basis of Design Report is currently estimated at \$7.95M and a CWSRF loan is pending; with 10% principal forgiveness. The WRBP Capital Budget was approved and is sufficient to fund Phase I followed by CWSRF reimbursement to the WRBP. Phase 2: Inspection and on-site repairs to one dewatering centrifuge indicated that it may have a remaining useful life of 15-20 years given proper O&M. The second centrifuge will be inspected next FY. If it has a similar inspection result, the Phase 2 project may be deferred.	The Solids Handling Process Upgrade Project has been forecast in the WRBP CIP since FY18. Phase I includes new primary digester mixers, gas management and heating systems, and an activated sludge thickening system. <i>The Basis of Design Report is expected to be finalized and available for review in early April 2022.</i>

Program Initiatives	Status & Schedule	Budget	Other info
WRBP Infrastructure O&M Responsibilities - Memoranda of Agreement	Belmont, Northfield, DAS, Gilford Tilton, and Franklin Executed MOAs with DES. MOAs for Bay District, Sanbornton, Meredith and Laconia were re-sent in February 2020 and are under review by members.	The AG's office developed language for MOAs to clarify the O&M responsibilities of properties, facilities or components that are indeterminate.	Discussion continues with the remaining 4 members.
Replacement Fund	Replacement fund valuation reset to include pipelines in FY20. The pipeline lining repair and plant water repair funded from the replacement fund were completed. Legislation is required to change the current Replacement Fund reimbursement methodology. DES forwarded the AG's opinion on these proposed statutory changes to the Advisory Board chairman on 1/4/2021. Draft legislation reviewed by the AG's office to be discussed at the August 2021 meeting. LSR #2557 was submitted to the legislature sponsored by D. Johnson (Laconia). HB1339 is now available for review on the legislative website and is sponsored by D Johnson, J. Bradley, and N Silber. HB1339 was forwarded on 2/8/22 from the RR&D committee as OTP. The bill was heard and passed by the Ways and Means Committee on 3/3/22. <i>The NH House Floor approved this bill. It is pending approval in the NH Senate before it becomes effective.</i>	Legislation to modify the Replacement Fund statute was proposed by Gilford at the meeting in July 2020. Discussions continued regarding the current assessment methodology and proposed revisions. The WRBP will prepare a quarterly update of Replacement Fund expenditures or planned expenditures for the Advisory Board. Northfield and Belmont chose to pre-pay their respective expenditures associated with the two recent forcemain breaks in 2021. Members will explore pre-paying reimbursable expenses instead of repaying them over the typical 10-year repayment period and determine the threshold they wish to maintain in their respective replacement fund account balances.	Laconia and Gilford are reimbursing the Replacement Fund for the Pendleton Forcemain repairs. The changes to the replacement fund reimbursement methodology vote that failed on 5/21/2020 was revisited on July 16 to reflect a preference for 50% reimbursement by all members based on the current percent allocation and 50% collected from only those members using the fund for the expenses. Legislation to propose this change in the reimbursement formula is expected in the next session in late 2021. At the October 2021 meeting, the Advisory Board did not support adding additional language in the proposed legislation to create a Capital Reserve Account.

Program Initiatives	Status & Schedule	Budget	Other info
<p>Rate Assessment Formula – O&M</p>	<p>DES' preliminary analysis of the relative contribution of flow, strength and capacity (shared) costs on 5/5/2016. The Advisory Board resolved to have a draft formula by 1/1/2019; workgroup met on 7/25/18 and 8/16/18. Draft Phase I reports were provided to the workgroup and W-P revised the report based on comments. W-P presented Phase I information at the December 2019 meeting. The 4 southern member communities provided the requested information for the proposed hybrid rate assessment model. On 10/27/2019, Franklin's consultant reviewed their draft efforts with WRBP and Franklin staff. Belmont's I/I report under review and Franklin's pending; with discussion at the March, April and the May 2021 meeting that was postponed until June 2nd. The basis of the new rate assessment formula with a 3-year phase in period was approved by the Advisory Board on 7/15/21. The recommended implementation plan was approved at the September 2021 Advisory Board meeting.</p>	<p>The full Advisory Board has expressed interest in participating in this discussion with DES regarding a draft rate formula. Updated flow and capacity information prepared by DES was presented to the rate assessment workgroup on 8/16/18. A Flow Metering Rate Allocation study task order was finalized on 1/22/19 for the four southern members where current measured flow data is not accurate enough for billing. DES provided a draft hybrid model in March 2020; that was discussed at the April 2020 meeting. Franklin and Northfield agreed with the model; Tilton was absent and Belmont is reviewing. At the June 2020 meeting, Laconia presented an alternate model for assessing unmetered flows and allocating I/I to all members equally. A draft scope of work for Underwood Engineering (UE) to assist with development of SOPs and tools to be able to consistently update the O&M rate formula in the future was discussed at the October and Dec 2021 and January and February 2022 meetings with a final scope and schedule under negotiations with the Advisory Board. Costs for this work will be paid from the existing municipal escrow account.</p>	<p>DES presented preliminary flow and capacity findings from the 3rd party flow metering evaluations in March 2017 and WRBP Franklin WWTP Capacity Status in July 2017. W-P gathered GIS and connection data from the southern 4 communities as part of the study. Members chose not to engage W-P in data collection for the hybrid analyses, but to use WRBP and member resources. At the May 2020 meeting, Belmont did not agree with the data or method used for their assessment or I/I contributions from the 4 southern communities. Additional information from the 4 southern members is being evaluated by the WRBP and DES with the assistance of Franklin's and Belmont's consultant. A draft memo documenting the considerations used to develop the modified, hybrid O&M rate assessment was prepared by UE and will be reviewed by members and the WRBP. The CIP subcommittee and the WRBP will work with UE to develop the tools and information requirements to allow the WRBP to complete future rate assessment re-sets. <i>UE is preparing procedures and spreadsheets to allow the WRBP to prepare and update O&M hybrid rate assessments.</i></p>

Program Initiatives	Status & Schedule	Budget	Other info
WRBP Capital Improvements Plan (CIP) Update	The CIP Subcommittee met on 7/29/21 to discuss the update of the WRBP CIP. A draft version prepared by WRBP staff was discussed; with recommended changes to be incorporated for the next CIP subcommittee meeting scheduled for 8/19/21. An updated CIP was sent to the CIP subcommittee on 10/21/2021 with review and approval dates TBD. No CIP meetings in December 2021, January, or February 2022. <i>A CIP meeting was held on 3/8/2022 and an updated version is under review.</i>	Nine (9) CWSRF pre-applications and SAG applications were submitted for WRBP equipment and infrastructure projects. Priority projects will be selected to move forward based on CWSRF funding rankings, principal forgiveness percentage, potential, additional federal funding, and ability to execute within any completion time restrictions. Three CIP projects are eligible for ARPA funding or CWSRF loans. Energy Efficiency Upgrades Phase 2 will receive 100% ARPA funding up to \$250K <i>and a utility incentive of \$60,900.</i> The emergency generator replacements at pump stations is eligible for 10% loan forgiveness and a 30% ARPA grant. Solids Handling Upgrades Phase 1 is eligible for a CWSRF loan with 10% principal forgiveness.	SAG applications were submitted for new projects but availability of this funding for either these new projects or previously submitted applications will require future legislative approval. Recent information regarding ARPA grant funding, potential loss of future utility incentives for energy efficiency projects due to the PUC's ruling on NHSaves, and suggested revisions by the CIP subcommittee will inform the next CIP update.
<i>River Street - WWTF Access Road O&M Responsibilities</i>	<i>Delineating the responsibilities for the maintenance, repair and abutting property relationships/obligations for River Street.</i>	<i>Scope, budget, and schedule to complete property research and survey of River Street is pending.</i>	<i>The Advisory Board consensus on 3-17-2022 was not to impede the pending private property subdivision but to proceed with the survey and research.</i>

Changes from previous report are shown in bold italics.

Dates to Remember:

1. The next Advisory Board meeting will be held on April 21, 2022 at 10am at the Belmont Mill, 14 Mill St., 4th floor, Tioga meeting room with accommodation for virtual attendance once an in-person quorum is met.

Prepared by: Sharon McMillin
Sharon McMillin - DES, WRBP Administrator

Reviewed and in concurrence: Rene Pelletier
Rene Pelletier - DES, Assistant Director, Water Division

Respectfully submitted on: 4/11/2022

Item # 5

CIP update Arpa Project

Wesley Anderson

From: McMillin, Sharon <Sharon.A.McMillin@des.nh.gov>
Sent: Friday, March 25, 2022 2:39 PM
To: Wesley Anderson
Cc: Pelletier, Rene
Subject: Eversource incentive award - Phase 2 Automated Aeration Valves Project
Attachments: Aeration Phase 2 Incentive Offer 3-25-22.pdf

EXTERNAL: This email originated from outside the organization. Do not click links or open attachments unless you recognize the sender and know the content is safe.

We've been working with Eversource and they just approved a \$60,900 incentive for our Franklin WWTF automated aeration valve project that's funded through ARPA as an energy efficiency project (attached). The balance of this project (up to a total of \$250K) will be through an ARPA grant. So – this upgrade should have no impact on member communities costs.

I will update the CIP document to reflect this incentive award but thought I'd pass along the good news. This further validates our energy reduction and reduced GHG goals for this Phase 2 project.

Best regards,

Sharon A. McMillin, PhD, CPM
Environmental Program Administrator, Winnepesaukee River Basin Program
Water Division, NH Dept. of Environmental Services
528 River St.
PO Box 68
Franklin, NH 03235
(603) 934-9930
Email: Sharon.A.McMillin@des.nh.gov



Energy Efficiency Incentive Offer

Customer Name	NH DEPT OF ENV SERV LPB
Project Name	NH22P01318737 - Franklin Waste Water PH 2 DO Valves

Congratulations, your recent incentive application has been approved by Eversource!

Total Incentive Offer	\$60,900.00
Authorization Date	March 24, 2022

Application Summary

Estimated Completion Date	June 1, 2023		
Incentive Expiration Date	July 1, 2023		
Street Address	528 RIVER RD, FRANKLIN NH 03235		
City	FRANKLIN	State	NH
		Zip Code	03235

Eversource Representatives

Energy Efficiency Consultant (EEC) Name	Russell Hunt	Account Executive (AE) Name	
EEC Email	russell.hunt@eversource.com	AE Email	
EEC Phone	(508) 759-4111	AE Phone	

Project Contacts

Primary Customer Contact Name	Sharon Mcmillin	Primary Vendor Contact Name	
Customer Contact E-mail	sharon.mcmillin@des.nh.gov	Vendor Contact E-mail	
Customer Contact Phone	603-934-9930	Vendor Contact Phone	

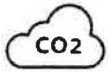
EVERSOURCE

Customer Name: NH DEPT OF ENV SERV LPB
 Project Name: NH22P01318737 - Franklin Waste Water PH 2 DO Valves

Upon completion as verified by Eversource, the incentive will be paid in the form of a check(s) to:

Payee	Amount
Treasurer, State of NH	\$60,900.00
Payee Address: Dept. of Environmental Services	
PO Box 95	
Concord, NH 03302-0095	
Attn: Tony Durso / WRBP Phase 2 Incentive	

Measure Summary by End Use				
End Use	Electric Incentive	Estimated Annual Electric Savings (kWh)	Gas Incentive	Estimated Annual Natural Gas Savings (Therms)
Custom Measures	\$60,900.00	223,693		
Total	\$60,900.00	223,693.00	0	0



CO2 Reduction (Tons)

756.08

Thank you for your participation in Eversource's Energy Efficiency Programs. Please reach out to your Eversource representatives listed if you have any questions.

To learn more about energy efficiency opportunities for your business, visit: <https://www.NHSaves.com>



Customer Name: NH DEPT OF ENV SERV LPB
Project Name: NH22P01318737 - Franklin Waste Water PH 2 DO Valves

Customer Signature

If planning to proceed with this project, please fill out, sign and return this letter to Eversource within 10 business days. If this letter is not returned by then, Eversource retains the option to modify or cancel this Incentive Offer without notification.

To be eligible for the incentive payment, measures must be installed at the Customer site and accepted by both the Customer and Eversource by the Incentive Expiration Date **July 1, 2023**. Failure to install all measures as approved by this date may disqualify or reduce the actual incentive payment.

The Customer may propose changes to the scope of this Incentive Offer via written notice to Eversource. Without review and written approval by Eversource, changes may not be eligible for incentives. If the Customer agrees to the Terms and Conditions (attached) of this Incentive Offer, please sign below and return to:

Russell Hunt

Eversource
780 N Commercial Street
Manchester, NH 03101

russell.hunt@eversource.com
(508) 759-4111

By signing and dating below, customer accepts this incentive offer and agrees to the Utility Terms and Conditions (attached). Pursuant to a Commission order, customers also agree that the utility alone may capture all kW and kWh savings and any ISO-NE capacity payments resulting from this energy efficiency project. This agreement is contingent upon continued approval and authorization by the Commission to recover said amounts from the Systems Benefits Charge. The Incentive, in conjunction with all other sources of funding, cannot exceed the total project cost.

Company Name	NH DEPT OF ENV SERV LPB
Customer Name (Please Print)	Sharon McMillin
Customer Signature	<i>Sharon McMillin</i>
Customer Title	Environmental Program Manager
Date	3/25/2022

EVERSOURCE

Customer Name: NH DEPT OF ENV SERV LPB
Project Name: NH22P01318737 - Franklin Waste Water PH 2 DO Valves

I certify that I have seen the energy efficiency measures that have been installed and I am satisfied with their installation.

Customer Name (Please Print)	
Customer Signature	
Date	

Item # 6

Revolving loan for Solids
Handling

WRBP CAPITAL IMPROVEMENTS PLAN

PROJECT	FUNDING	TOTAL 10-YEAR ESTIMATE	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31-40	PROJECT DESCRIPTION
SCADA System/Cybersecurity/Telemetry Upgrades	CWSRF	\$1,112,400	\$95,000	\$520,000	\$497,400	\$0	\$0	\$0	\$0	\$0	\$0	\$0	SCADA hardware, software and programming upgrades for Windows 10 compatibility; operating system no longer supported and equipment is failing. Needs to be coordinated with the PLC and telemetry upgrades at the pump stations.
Engineering and programming support		\$180,000	\$50,000	\$65,000	\$65,000								Design and specification of upgrades
Equipment including servers and firewalls		\$750,000		\$200,000	\$550,000								Implementation, including hardware deployment and programming.
Pump Stations PLC and Telemetry - Alternative Analyses and Retrofits (to be coordinated with SCADA Upgrades)													PLCs at the 14 WRBP pump stations will need to be retrofit with supported PLCs and radio telemetry will need to be updated and reconfigured to be compatible with new PLCs' communication protocols.
Alternatives evaluation - engineering		\$45,000	\$45,000										Engineering evaluations and preliminary design prior to retrofits.
PLC and Radio Retrofits, design and construction oversight		\$261,000		\$255,000	\$6,000								Design, construction oversight, equipment procurement with contractor installation in order to maintain operations.
<i>CWSRF Principal forgiveness</i>		-\$123,600			-\$123,600								10% SRF Principal forgiveness.
Wastewater Process Optimization	CWSRF	\$91,000	\$91,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	Wastewater process improvements and evaluations are on-going at the Franklin WWTP.
Aeration System Upgrades Phase 1 - Blower (smaller unit) and Return Activated Sludge Pump Upgrade (bundled with aeration upgrade)		\$293,670	\$293,670										Smaller aeration blower to effectively deliver dissolved oxygen when reduced demand; reducing power costs. Energy audit recommendation so SRF principal forgiveness and utility incentives are available.
Utility incentive		-\$109,000	-\$109,000										Utility incentive of \$100K.
<i>CWSRF Principal forgiveness</i>		-\$200,000	-\$200,000										50% SRF Principal forgiveness up to \$200K.
Aeration System Upgrades Phase 2 - Automated valves for aeration bays with DO control	CWSRF/ARPA	\$0	\$40,000	-\$40,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	Automated valves (9) for the aeration system to effectively deliver dissolved oxygen to needed aeration bays; reducing labor and power costs. Energy audit recommendation to address problematic and inefficient air distribution system. Up to \$250K ARPA grant.
Automated valves, sensors, and controls		\$250,000	\$40,000	\$210,000									
<i>ARPA grant funding</i>		-\$250,000		-\$250,000									
Solids Handling Upgrades - Phase 1	CWSRF	\$7,155,000	\$0	\$1,245,000	\$3,175,000	\$2,735,000	\$0	\$0	\$0	\$0	\$0	\$0	Solids Handling Master Plan recommendation to improve thickened sludge solids percentage and consistency. Estimates based Conceptual Level of Projects Viability class 5 estimate for addition of a rotating drum thickener and sludge holding tanks for processing waste activated sludge separately. As design proceeds, the project cost estimate will be refined.
Design, Bidding and Resident Engineering		\$725,000		\$175,000	\$275,000	\$275,000							Bidding assistance and resident engineering services during construction.
Thickening upgrades		\$420,000		\$220,000	\$200,000								Thickened WAS system to increase effective capacity and consistency of sludge to centrifuges.
Primary Digester Mixers (2)		\$1,205,000			\$650,000	\$555,000							Installation of linear motion mixers installed on 2 primary digesters. Mixers can be retrofit onto floating or new fixed covers.
Digester and Building heating and gas management systems retrofit		\$5,600,000		\$850,000	\$2,050,000	\$2,700,000							Replace of deteriorating and leaking gas pipelines to meet current safety codes; new flare gas system installation. Estimate based on heat loop to Admin/Operations building and heat exchanger in existing footprint. No new building. Installation of new sludge heat exchangers and hot water boiler for digester and main building heating. Evaluations for outbuilding and tunnel dehumidification.
<i>CWSRF Principal forgiveness</i>		-\$795,000				-\$795,000							10% SRF Principal forgiveness.
Solids Handling Upgrades - Phase 2	CAP	\$2,400,000	\$0	\$0	\$0	\$0	\$200,000	\$1,100,000	\$1,100,000	\$0	\$0	\$0	Solids Handling Master Plan Conceptual Level of Projects Viability class 5 estimates in 2021.
Dewatering System Replacement		\$2,400,000					\$200,000	\$1,100,000	\$1,100,000				Installation of new dewatering equipment as the centrifuges near the end of their remaining useful life. Centrifuges and viable alternatives will be reviewed.
Solids Handling Upgrades - Phase 3	CAP	Forecast for FY38-40										\$3,900,000	Solids Handling Master Plan Conceptual Level of Projects Viability class 5 estimates.
Primary Digester Fixed Covers - 20 year planning horizon												\$1,650,000	Installation of new fixed covers - contingent on condition and remaining useful life determinations. Fixed covers may not be necessary for mixing upgrades or if deterioration does not warrant immediate retrofit.
Secondary Digester Fixed Covers - 20 year planning horizon												\$1,650,000	Installation of fixed covers on 2 secondary digesters - contingent on condition and remaining useful life determinations.
Secondary Digester Mixers - 20 year planning horizon												\$600,000	Installation of pump mixers installed on 2 secondary digesters. Mixers installed on new fixed covers only. Contingent on operations needs at the time of cover replacement.
Emergency Generator Replacements at 12 Pump Stations	CWSRF/ARPA	\$918,000	\$345,000	\$610,000	\$245,000	-\$282,000	\$0	\$0	\$0	\$0	\$0	\$0	Replace original 40+ year old generators at 11 pump stations, estimated at \$85K each since no day tanks and < 600 gallon fuel tanks. Transfer switch replacement at 6 pump stations estimated at \$25K each and dead front transformer replacement at 8 pump stations. Replacement generator at the Winnisquam pump station includes, pad and fuel storage tank; estimate assumed sized similar to WWTP replacement.
<i>CWSRF principal forgiveness</i>		\$1,530,000	\$345,000	\$610,000	\$245,000	\$330,000							
<i>ARPA grant funding</i>		-\$153,000				-\$153,000							10% SRF Principal forgiveness.
		-\$459,000				-\$459,000							30% ARPA grant funding.
Phased Collection System Pipeline Projects (See Note 5)	CAP	\$15,770,000	\$20,000	\$600,000	\$3,075,000	\$3,075,000	\$1,800,000	\$1,800,000	\$1,800,000	\$1,800,000	\$1,800,000	\$9,720,000	Phased approach to replace, rehabilitate, or line the problematic ductile iron pipelines throughout the WRBP collection system. Initial focus will be on forcemains. Cost estimates are based on the \$600K to line 1,300 linear ft. in Laconia in 2019. Projects will vary based on site conditions and selected option. Debt Service repayment to be assessed to affected members. First priority is the 13,000 linear ft. (@2+/- miles) WRBP Belmont Forcemain with two river crossings due to recent SSOs at an estimated \$6.75M+/- . Additional estimates for FY26-40 are placeholder amounts at \$1.8M/FY. There are approximately 10 miles of ductile iron forcemain in the WRBP collection system to address after the Belmont forcemain is addressed.
Phased Ductile Iron Pipeline Replacement, Rehabilitation, and Lining		\$15,770,000	\$20,000	\$600,000	\$3,075,000	\$3,075,000	\$1,800,000	\$1,800,000	\$1,800,000	\$1,800,000	\$1,800,000	\$9,720,000	
TOTAL ESTIMATED EXPENDITURES:		\$27,446,400	\$591,000	\$2,935,000	\$6,992,400	\$5,528,000	\$2,000,000	\$2,900,000	\$2,900,000	\$1,800,000	\$1,800,000	\$9,720,000	

WRBP CAPITAL IMPROVEMENTS PLAN

PROJECT	FUNDING	TOTAL 10-YEAR ESTIMATE	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31-40	PROJECT DESCRIPTION
FUNDING SUMMARY		TOTAL 10-YEAR COST	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY29	FY31-40	
Funding Allocations													
Clean Water State Revolving Fund (CWSRF) Loan / Requires Available Source of Funds		\$11,366,000	\$880,000	\$2,585,000	\$4,041,000	\$3,850,000	\$0	\$0	\$0	\$0	\$0	\$0	Note that loans will be repaid by members based upon their respective use of the infrastructure involved in the work.
General Obligation Bonds - Capital Budget (CAP) with no guaranteed CWSRF Loan		\$18,170,000	\$20,000	\$600,000	\$3,075,000	\$3,075,000	\$2,000,000	\$2,900,000	\$2,900,000	\$1,800,000	\$1,800,000	\$13,620,000	Note that bonds will be repaid by members based upon their respective use of the infrastructure involved in the work.
WRBP Replacement Fund (RF) - See Note 3		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	Note that the Replacement Fund will be reimbursed from members based upon their respective use of the infrastructure involved in the work unless offset from outside funding sources (ex. ARPA).
Totals:		\$29,536,000	\$900,000	\$3,185,000	\$7,116,000	\$6,935,000	\$2,000,000	\$2,900,000	\$2,900,000	\$1,800,000	\$1,800,000	\$13,620,000	
Other Funding Sources													
Independent Grants		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Insurance/FEMA		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Rebates/Utility Incentives - confirmed		-\$109,000	-\$109,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
CWSRF Principal Forgiveness - confirmed		-\$200,000	-\$200,000	\$0	-\$123,600	-\$948,000	\$0	\$0	\$0	\$0	\$0	\$0	
Other (specify below): Subject to funding availability													
Federal ARPA funding assistance - confirmed		-\$709,000	\$0	-\$250,000	\$0	-\$459,000	\$0	\$0	\$0	\$0	\$0	\$0	
SAG Potential funding - not included since contingent on future legislative approval		\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
Total Offsets:		-\$2,089,600	-\$309,000	-\$250,000	-\$123,600	-\$1,407,000	\$0	\$0	\$0	\$0	\$0	\$0	
TOTAL PROJECT FUNDING:		\$27,446,400	\$591,000	\$2,935,000	\$6,992,400	\$5,528,000	\$2,000,000	\$2,900,000	\$2,900,000	\$1,800,000	\$1,800,000	\$13,620,000	

REVISION DATE: DRAFT 3/9/2022

NOTES:

- The State Fiscal year is from July 1st to June 30th. State budgeting is done biennially.
- All dollar amount entries are presented in current year dollars (reflected by year provided in column #4). The annual rate impact to communities associated with committed debts will be presented to members in a separate document that will be updated when the commitment is formalized.
- The WRBP Replacement Fund (RF) established at RSA 485-A:51 collects funds from members based upon the replacement cost of depreciable WRBP assets. This fund is for projects leading to, or involving, repairs and replacement of major equipment and infrastructure which cannot be absorbed as regular budgetary items. Engineering and consulting contracts typically use Replacement Fund for work (alternatives analyses, preliminary design) conducted prior to capital project funding.
- CIP Program Summary to be updated by the Advisory Board CIP Subcommittee annually and presented to the full board. Previous Summaries shall be archived in order to provide information on completed projects and prior commitments.
- The CIP uses placeholder amounts for certain projects included in the CIP. As such projects are evaluated further or prioritized for actual implementation, a more comprehensive cost estimate will be incorporated into the CIP.

CIP SUBCOMMITTEE MEMBERS: Wesley Anderson (Laconia, Subcommittee Chairman)
 Justin Hanscom (Franklin)
 Ray Korber (KVP, LLC, Consultant for Bay District)
 Meghan Theriault (Gilford)

WRBP REPRESENTATIVE: Sharon McMillin (WRBP Administrator)

ADVISORY BOARD CHAIRPERSON: Wesley Anderson (Laconia)
 ADVISORY BOARD VICE CHAIRPERSON: Ray Korber (Bay District)

CWSRF Loans		FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	FY35
Existing Debt		\$ 702,991.20	\$ 687,331.31	\$ 671,671.40	\$ 656,011.50	\$ 640,351.60	\$ 624,691.70	\$ 609,031.79	\$ 593,371.87	\$ 302,241.76	\$ 296,851.39	\$ 291,461.02	\$ 286,070.65	\$ 280,680.27	\$ 275,289.98
SAG Offsets		\$ (141,718.00)	\$ (141,718.00)	\$ (141,718.00)	\$ (141,718.00)	\$ (141,718.00)	\$ (141,718.00)	\$ (141,718.00)	\$ (141,718.00)	\$ (141,718.00)	\$ (141,718.00)	\$ (141,718.00)	\$ (141,718.00)	\$ (141,718.00)	\$ (141,718.00)
New CIP Debt Schedule		\$ -	\$ 88,000.00	\$ 11,220.00	\$ 107,466.67	\$ 792,433.33	\$ 727,150.00	\$ 716,016.67	\$ 704,883.33	\$ 693,750.00	\$ 682,616.67	\$ 671,483.33	\$ 660,350.00	\$ 649,216.67	\$ 638,083.33
CIP Grand Total - Repayment Schedule (includes principal forgiveness)		\$ 561,273.20	\$ 633,613.31	\$ 541,173.40	\$ 621,760.17	\$ 1,291,066.94	\$ 1,210,123.70	\$ 1,183,330.46	\$ 1,156,537.21	\$ 854,273.76	\$ 837,750.05	\$ 821,226.35	\$ 804,702.65	\$ 929,896.93	\$ 913,373.31
Bonds - assume 3.5% interest		FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30	FY31	FY32	FY33	FY34	FY35
Belmont pipeline replacement (\$6.75M)		\$ 461,250.00	\$ 453,375.00	\$ 445,500.00	\$ 437,625.00	\$ 429,750.00	\$ 421,875.00	\$ 414,000.00	\$ 406,125.00	\$ 398,250.00	\$ 390,375.00				
CIP Grand Total - CWSRF & Bonds		\$ 561,273.20	\$ 633,613.31	\$ 541,173.40	\$ 621,760.17	\$ 1,752,316.94	\$ 1,663,498.70	\$ 1,628,830.46	\$ 1,594,162.21	\$ 1,284,023.76	\$ 1,259,625.05	\$ 1,235,226.35	\$ 1,210,827.65	\$ 1,328,146.93	\$ 1,303,748.31