

2021-2023

Kennebunk Sewer District Strategic Plan



Michael Bolduc

March 2, 2021

PURPOSE

The purpose of the Strategic Plan (Plan) is to establish strategic goals and objectives based on the gap analysis that was conducted in the first quarter of 2019 with the staff and trustees. Based on this analysis and the rankings that were developed by the groups, we have developed six strategic goals with objectives for each.

Each objective is assigned a Staff Lead and with a sequential list of targets or milestones to achieve the objective. These objectives are not necessarily designed to be accomplished solely by the staff lead and components are intended be delegated to various staff members.

Regular feedback and review will be done throughout. This will include formal and informal meetings with staff on the status of the objectives. The Plan is updated with new objectives and status updates periodically but not less than annually.

MISSION STATEMENT

Our mission is to provide reliable and cost-effective sewer related services to our ratepayers while protecting public health and promoting environmental stewardship for the benefit of the community.

KEY ISSUES

ANTICIPATED REGULATIONS AND AGING INFRASTRUCTURE

Wastewater Treatment Plant

The most significant issues facing the District are the lack of capacity for removing nitrogen to meet the anticipated discharge requirements and the aging infrastructure at the treatment plant. To address these issues, the District developed a multiphase strategy. The plan would:

1. Relocate the administrative offices and the maintenance garage to the adjacent properties at 44 Water Street. This was completed in 2018.
2. Repurpose the vacated administrative space in the Control Building into a new laboratory and operator work area. This was completed in 2018.
3. Design and construct a new Headworks Facility that that will be capable of handling the peak flows into the plant. The project will include new influent pumps, screening, and grit removal. This phase will also address some deficiencies in disinfection and sludge wasting pumps. This phase is currently under construction and is expected to be completed in the first quarter of 2022.
4. Design and construct the new Biological Treatment units. This phase will be done once the nitrogen limits are known. Staff anticipates that the Maine Department of Environmental Protection (MEDEP) will have nitrogen limits in new discharge license expected in 2021. At that time, a design will be initiated to construct the biological units and systems capable of achieving those limits. This is expected to be completed in 2025-2027.

An important consideration for the District is investing the right amount of financial resources into the existing systems to keep them functional until all of the upgrades are in place at the least cost to the rate payer. Since much of the equipment and building components are reaching their life expectancies, the district staff will need to closely monitor and maintain the equipment until the new systems come on line. The most critical component is to maintain the Rotating Biological Contactors (RBC) in an operational condition until the new biological processes are completed.

Collection Systems

The collection system and pumping stations are also showing some signs of age. Staff has collectively completed condition assessments and criticality analysis to determine our most immediate needs. The District has made significant progress over in 2019 and 2020 in station maintenance by upgrading controls, pumps and valving. There are 28 District owned stations and we have been retrofitting or reconditioning one or two stations a year. Our strategy has been to use the Impact and Equity Buy-In fees to fund these projects. This may or may not be sufficient in the future and is dependent on the growth in the District.

HUMAN RESOURCES

At the end of 2020, the District employees 13 full time employees. The District has seen a good deal of personnel transitions, with retirements, promotions out of District, and employees moving on to other occupations. Three quarters of the crew have less than 5 years with the District. Fortunately, we have been able to find and train competent replacements. All of the employees with greater than 5 years of service with the district will or have reached the age of typical retirement within the next 5 years, so there will be additional transitions in the near future.

KSD will need to invest more in in house and formal training in the near term and provide a workplace that meets the needs of the employee to ensure employee retention.

IMPACT ON THE RATE PAYERS

Our mission is to provide cost effective treatment while protecting the environment. To meet that mission with regards to the plant improvements, we have to:

1. Determine what needs to be built to meet the regulatory discharge requirements that ensure a safe and healthy Mousam River and,
2. Determine the least impactful way to pay for those improvements.

What limits will we be required to meet and what treatment facilities need to be built to meet them?

The District has been working with regulators determine what those requirements will be and develop plans to upgrade the treatment facility to meet those limits. We are anticipating some very low nitrogen limits that will require a different biological treatment system than the one we currently employ. The size and type of treatment will be contingent on the limits. The lower the limits are, the more complex and costly the new systems will be. The District hopes we will have a clearer picture of what those limits are as we approach our renewal of the Discharge Permit in October of 2021.

How will we pay for it?

The District developed a ten-year Capital Investment Plan (CIP) that identifies infrastructure, equipment, or treatment processes that are at the end of their life expectancies or that no longer provide the needed level of service. This plan includes completed improvement, projects under construction, and future replacement of the biological treatment units. Included in the plan are funding sources and the reason for the asset's failure. Based on this CIP, we have developed a financial plan that has been setting aside funds to attenuate future increases to the lowest possible increase needed to fund future projects.

STRATEGIC GOALS

1. Develop a Responsible and Innovative Workforce
2. Provide a Plan for Growth and Stability
3. Provide Dependable and Reliable Service to the Customer
4. Provide Adequate Financial Resources
5. Maintain a Functional and Reliable Infrastructure
6. Protecting Water Quality Resources

1. DEVELOP A RESPONSIBLE AND INNOVATIVE WORKFORCE

- a. Develop and implement a new Strategic Plan for the next three years (2021- 2023)
- b. Transition from Factory Talk SCADA to Ignition SCADA
- c. Develop a training protocol for achieving core competencies for staff
- d. Improve safety in the workplace
- e. Improve employee retention
- f. Provide instruction and documentation for new management in 2022

2. PROVIDE A PLAN FOR GROWTH AND STABILITY

- a. Continue a systematic phased upgrade to meet the needs of the community and the regulatory agencies
- b. Establish better communications with the Town, citizens, and local boards
- c. Improve reliability in collection systems and a plan for potential development
- d. Construct new headworks, and upgrades to waste pumps, disinfection, telemetry
- e. Renew MEPDES wastewater discharge license
- f. Develop strategies for the replacement of the biological treatment systems

3. PROVIDE DEPENDABLE AND RELIABLE SERVICE TO THE CUSTOMER

- a. Complete scanning of KSD and development plans linked to the GIS
- b. Research and recommend enhancements for customer payments and billing options
- c. Improve content and interactive functionality to the website
- d. Revise and develop standard policies for implementation of sewer user fees

4. PROVIDE ADEQUATE FINANCIAL RESOURCES

- a. Review and develop short-and long-term financial projections to meet the strategic goals for the District
- b. Draft a Financial Stability Plan for the Wastewater Treatment Facility
- c. Investigate and recommend energy efficiency improvements
- d. Rebid or renegotiate the multi-jurisdictional sludge disposal contract

5. MAINTAIN A SUSTAINABLE INFRASTRUCTURE

- a. Continue to develop and implement the asset management plan
- b. Digitize and organize District easements and tie them to Global Information System
- c. Review and revise collection systems specifications
- d. Work with the property owners adjacent to the Doanes Wharf Pumping Station to relocate the station and gravity lines

6. PROTECT WATER QUALITY RESOURCES

- a. Develop conceptual collection system and pump station layouts for 20-year growth zones
- b. Standardize data analysis and process control

STRATEGIC GOAL WORKPLAN 2021-2023

1. GOAL AREA: DEVELOP A RESPONSIBLE AND INNOVATIVE WORKFORCE

A. STRATEGIC OBJECTIVE: DEVELOP AND IMPLEMENT A NEW STRATEGIC PLAN FOR THE NEXT THREE YEARS (2021 - 2023)

Staff Lead: **Mike Bolduc**, Chris Gallant, Susan Richards

- a. Delete completed objectives and add new objectives (1st quarter 2021)
- b. Revise and update the Plan (1st quarter 2021)
- c. Review with Trustees and revise (2nd quarter 2021)

B. STRATEGIC OBJECTIVE: TRANSITION FROM THE FACTORY TALK SCADA TO IGNITION SCADA

Staff Lead: **Chris Gallant**, Steve Anderson

1. Begin with Pumping Stations - complete
2. Move into WWTF in phases - complete
3. Integrate Headworks (4th quarter of 2021)
4. Decommission Factory Talk - complete
5. Add new equipment to the Ignition System
 - a. All pump stations will be on Ignition (4th quarter 2021)

C. STRATEGIC OBJECTIVE: DEVELOP A TRAINING PROTOCOL FOR ACHIEVING CORE COMPETENCIES FOR STAFF

Staff Lead: **Ty Morin**, Chris Gallant

1. Develop a list of core competencies for each staff person based on position - 25% complete
 - a. Lab tests
 - b. Inspection
 - c. Calibrations
 - d. Technology
 - e. Safety
2. Develop specialized areas i.e., equipment calibration, electrical, instrumentation, process control (2nd quarter 2021)
3. Identify training requirements for each person annually (2nd quarter 2021)
4. Train and educate staff on activated sludge formally through training and informal OJT (2nd quarter 2021)
5. Perform demonstrated Certifications i.e., lab testing, calibrations, SCADA (4th quarter 2021)
6. Recommend licensing requirements for specific positions (4th quarter 2021)

D. STRATEGIC OBJECTIVE: IMPROVE SAFETY IN THE WORKPLACE

Staff Lead: **Chris Gallant**

1. Improve safety tracking (2nd quarter 2019) -complete
2. Develop quarterly safety checks of the plant - complete
3. Update policies and combine into one document (begin 1st quarter and provide quarterly updates) 50%
4. Schedule an inspection with the Department of Labor (4th quarter 2021)

E. STRATEGIC OBJECTIVE: IMPROVE EMPLOYEE RETENTION

Staff Lead: **Michal Bolduc**, Chris Gallant

1. Endeavor to provide an enjoyable work environment
 - a. Meet with each employee - completed
 - b. Employees completed a 360 review of the Manager - complete
 - c. Employees completed assessments of other employees including themselves (1st quarter 2021) - complete
 - d. Review results with employees - complete
 - e. Conduct 360 reviews on Manager and Assistant Manager (4th quarter 2021)

F. STRATEGIC OBJECTIVE: PROVIDE INSTRUCTION AND DOCUMENTATION FOR NEW MANAGEMENT IN 2022

Staff Lead: **Chris Gallant**, Michal Bolduc

1. Update policies and Regulations
 - a. Personnel – complete
 - b. Accounting (1st quarter 2021)
 - c. Reorganize and reformat Rules and Regulations - complete
2. Review budget preparation and rate setting
 - a. Capital Budgets (3rd quarter 2021)
 - b. Operation and Maintenance budget (4th quarter 2021)
 - c. Equity Buy in and impact fee calculations (1st quarter 2021) - complete
 - d. Rate Setting (1st quarter 2021) - complete
3. Review Charter and Bonding requirements (4th quarter 2021)
4. Prepare for MEPES renewal (4th quarter 2021)
5. Prepare 2020 Annual Report (2nd quarter 2021)

2. GOAL AREA: PROVIDE A PLAN FOR GROWTH AND STABILITY

A. STRATEGIC OBJECTIVE: CONTINUE A SYSTEMATIC PHASED UPGRADE TO MEET THE NEEDS OF THE COMMUNITY AND THE REGULATORY AGENCIES

Staff Lead: **Michael Bolduc**, Chris Gallant

1. Prepare a plan to replace the RBC treatment unit that is failing due to Mortality and Level of Service (it is beyond its life expectancy and cannot meet nutrient removal). - complete
2. Meet with regulators to discuss future permit levels to begin design. (1st quarter 2021)
3. Work with engineers to develop preliminary engineering and cost estimates (2nd quarter 2021)

4. Select consultant for this phase (4th quarter 2021)

B. STRATEGIC OBJECTIVE: ESTABLISH BETTER COMMUNICATIONS WITH THE TOWN, CITIZENS, AND LOCAL BOARDS

Staff Lead: **Michael Bolduc**

1. Meet annually with Economic Development Committee (3rd quarter 2019) (nothing in 2020 due to Covid)
2. Meet with the Town manager and the utility managers on a regular basis (not less than twice per year) ongoing
3. Work with town on finalization of Comprehensive plan (1st quarter 2019) – completed
 - a. Met with the Town regarding West Kennebunk. As a result of those meetings the District had UEI develop a scope of work to develop a strategic plan for sewerage of West Kennebunk that was delivered to the Town in 3rd quarter of 2020. There was no response from the Town on this proposal.

C. STRATEGIC OBJECTIVE: IMPROVE RELIABILITY IN COLLECTION SYSTEMS AND A PLAN FOR POTENTIAL DEVELOPMENT

Staff Lead: **Michael Bolduc**, Chris Gallant

1. Work with the town to identify likely growth areas and develop conceptual plans for the development of sewer system
 - a. West Kennebunk (work force housing) – we have met a couple of times formally with the Town and Developers this objective is contingent on 3rd parties – no significant activity in 1st quarter of 2020
 - b. Route One North (Arundel) no recent contact since 1st quarter 2019 this objective is contingent on 3rd parties – no significant activity in 1st quarter of 2020
2. Implement Capital Improvement Plans for the replacement of failing sewer lines
 - a. Maine Turnpike plaza (Capacity). This was an opportunistic upsizing of 185 feet of AC line from 8 to 10 inches
 - b. Repair and replace of the first 1000 feet of force main from the Wells Road Pumping Station
 - c. Replacement of 200 feet of gravity on Port Road (Mortality and Capacity)
 - d. Replacement of 230 feet of gravity on Shape Drive (Level of Service)
3. Implement Pump station renovations
 - a. Replace Cedar Woods pumps (3rd quarter 2021)
 - b. Grounds and building maintenance (3rd quarter 2021)
 - c. Lakebrook pump replacement (3rd quarter 2021)
 - d. Valve replacements (3rd quarter 2021)

D. STRATEGIC OBJECTIVE: CONSTRUCT NEW HEADWORKS, AND UPGRADES TO WASTE PUMPS, DISINFECTION, AND TELEMETRY SYSTEMS

Staff Lead: **Chris Gallant**, Mike Bolduc,

1. Sign contract with Apex - complete
 - a. Bid for the project was \$6,364,424.00
2. Execute Notice to Proceed (September 2020) - complete
 - a. Apex will proceed with winter construction, as of 12.15, they have relocated the electrical and begun to excavate the site for the new headworks
 - b. Base slab was completed in January of 2021
3. Complete Project (1st quarter 2022)

E. STRATEGIC OBJECTIVE: RENEW THE MEPDES WASTEWATER DISCHARGE LICENSE

Staff Lead: **Mike Bolduc**, Chris Gallant

1. Begin discussions on development of new Maine Pollution Discharge Elimination System (MEPDES) permit January 2021
2. Schedule meeting with Maine Department of Environmental Protection and various other affected state agencies and the public (1st through 3rd quarters of 2021)
3. Finalize the permit (4th quarter 2021) *completion contingent on MEDEP*

F. STRATEGIC OBJECTIVE: DEVELOP STRATEGIES FOR THE REPLACEMENT OF THE BIOLOGICAL TREATMENT SYSTEMS

Staff Lead: **Mike Bolduc**, Chris Gallant

1. Project the year that the Rotating Biological Contactors will likely fail
 - a. The estimated life for the RBC's is 30 years. Our RBC's will be 36 years old in 2021. – Equipment will likely need to continue in service for 40 years before a replacement is in place. This is a moderate risk in 2021, and will be a significant risk in 2025.
2. Estimate the duration for design and construction
 - a. 4 years for design and construction
3. Begin the process of selecting consultant (4th quarter 2021)
 - a. on hold per direction of Board until licensing renewal becomes clearer
4. Hire a consultant (4th quarter of 2021)
5. Begin negotiations with the MEDEP concurrent with the NPDES relicensing (1st quarter of 2021)

3. GOAL AREA: PROVIDE DEPENDABLE AND RELIABLE SERVICE TO THE CUSTOMER

A. STRATEGIC OBJECTIVE: COMPLETE SCANNING OF KSD AND DEVELOPMENT PLANS LINKED TO THE GIS

Staff Lead: **Heidi Souliere**, Chris Gallant

1. Develop enhancements to the GIS / database integration
 - a. Consumption data (after Billz is online) (4th quarter 2021)
 - b. Service ties (4th quarter 2021)
 - c. Link customer easement deeds with accounts (4th quarter 2021)
 - d. Scan development files and link on GIS (3rd quarter 2022)

B. STRATEGIC OBJECTIVE: RESEARCH AND RECOMMEND ENHANCEMENTS FOR CUSTOMER PAYMENTS AND BILLING OPTIONS

Staff Lead: **Susan Richards**, Michael Bolduc, Heidi Souliere

1. Prepare and implement the online billing and payment
 - a. Zoom meeting with Invoice Cloud schedule on December 16, 2020 to discuss the implementation of the online billing. Inquire the following:

- i. Steps to be undertaken for the implementation of the online billing and payment.
 - ii. Time needed to complete the process of the implementation.
 - iii. Cost to be incurred
 - iv. Procedures how to undergo to put the online payment and billing into our KSD website.
 - v. For payment that are above \$200, how much would be the cost?
2. Complete the Implementation of the online billing and payment (3rd quarter of 2021).

C. STRATEGIC OBJECTIVE: IMPROVE CONTENT AND INTERACTIVE FUNCTIONALITY TO THE WEBSITE

Staff Lead: Heidi Souliere **Susan Richards**

1. Prepare executable forms as follows and put them into the KSD website.
2. Research how to create executable forms. (2nd quarter 2021).
3. Meter Reading 2nd quarter
4. Sewer Permits 2nd quarter
5. Equity Buy in fee Forms 2nd (Quarter 2021)
6. ACH Automatic Withdrawal - Direct Debit 4th quarter

D. STRATEGIC OBJECTIVE: REVISE AND DEVELOP STANDARD POLICIES FOR IMPLEMENTATION OF SEWER USER FEES

Staff Lead: **Susan Richards**, Heidi Souliere

1. Establish new accounts (3rd quarter 2021)
 - a. Review and revise as needed categories for commercial, residential, and mixed use
 - b. Ensure consistency with Equity buy-in Fees and Impact Fees
 - c. Document how the account is to be billed
 - d. Coordinate town records for user categories with the Town of Kennebunk
2. Review and modify application of adjustments for water that does not enter the system (4th quarter 2021)
 - a. Document how to apply manual adjustments for outside watering
 - b. Determine who is eligible for manual adjustment by category
 - c. Document how to apply irrigation meter adjustments
3. Develop guidelines for unusual or uncommon circumstances such as: (2nd quarter 2021)
 - a. Building removal
 - b. Bankruptcies
 - c. Payment plans

4. GOAL AREA: PROVIDE ADEQUATE FINANCIAL RESOURCES

A. STRATEGIC OBJECTIVE: REVIEW AND DEVELOP SHORT-AND LONG-TERM FINANCIAL PROJECTIONS TO MEET THE STRATEGIC GOALS FOR THE DISTRICT

Staff Lead: **Michael Bolduc**, Chris Gallant

1. Conduct condition assessments on all CIP projects (4th quarter 2020) – Staff is working on this we are probably 70% complete

2. Review major collections systems projects with town and KKWWD for joint planning if possible (i.e., Port Road) (2nd quarter 2019) – *Reviewed with KKWWD, town is not prepared to do this at this time*

B. STRATEGIC OBJECTIVE: DRAFT A FINANCIAL STABILITY PLAN FOR THE WASTEWATER TREATMENT FACILITY

Staff Lead: **Chris Gallant**

1. Draft and submit to the MEDEP as required for the SRF loan by 2021 (4th quarter of 2021) not started, will be part of the asset management program development.

C. STRATEGIC OBJECTIVE: INVESTIGATE AND RECOMMEND ENERGY EFFICIENCY IMPROVEMENTS

Staff Lead: **Chris Gallant**, Steve Anderson

1. Automate dissolved oxygen control for the RBC blowers (2nd quarter 2019) Cable installed 25% complete
2. Improve control of the HVAC through SCADA (3rd quarter 2019) completed in 2nd quarter of 2020

D. STRATEGIC OBJECTIVE: REBID OR RE-NEGOTIATE THE MULTI-JURSTICTIONAL SLUDGE DISPOSAL CONTRACT

Staff Lead **Michael Bolduc**, Chris Gallant

1. Meet with the Sludge Cartel to develop new bid documents
2. Prepare and solicit proposals or renegotiate the contract with Casella
3. Execute new agreements

5. MAINTAIN A FUNCTIONAL AND RELIABLE INFRASTRUCTURE

A. STRATEGIC OBJECTIVE: CONTINUE TO DEVELOP AND IMPLEMENT THE ASSET MANAGEMENT SYSTEM

Staff Lead: **Chris Gallant**, Mike Bolduc, Heidi Souliere

1. Work with Corson GIS to migrate database to Worx – 20% done, delays related to COVID
2. Perform a total inventory of equipment (4th quarter 2021)
3. Develop a list of recommended spare parts and order points 20% done (4th quarter 2021)
4. Continue with condition assessments on all equipment 40% done (4th quarter 2021)

B. STRATEGIC OBJECTIVE: DIGITIZE AND ORGANIZE DISTRICT EASEMENTS AND ADD THEM TO THE GLOBAL INFORMATION SYSTEM

Staff Lead: **Michael Bolduc**, Dan Boissonneault, Heidi Souliere

1. Develop a plan with Corson GIS to add a layer for easements – 60% done (4th quarter 2021)
2. Attach a copy of the digitized easements to each property - (4th quarter 2021)
3. Mark and number Manhole structures on all easements for location (in the field) (2022)

4. Inventory easements and develop a list of maintenance items such as fence removal, obstructions, trees, woody growth (2022)

C. STRATEGIC OBJECTIVE: REVIEW AND REVISE COLLECTION SYSTEMS SPECIFICATIONS

Staff Lead: **Michael Bolduc**, Dan Boissonneault

1. Review and draft changes to the collection systems specifications (4th quarter 2020)
2. Post them to the District website (2th quarter 2021)
3. Mail or email copies to all District authorized drain layers (2th quarter 2021)
4. Implementations phase (3rd quarter 2021)

D. STRATEGIC OBJECTIVE: WORK WITH PROPERTY OWNERS ADJACENT TO THE DOANES WHARF PUMPING STATION TO RELOCATE THE STATION AND GRAVITY LINES

Staff Lead: **Michael Bolduc**, Chris Gallant

1. Explore utility relocation and pump station moving to an adjacent property
 - a. Develop preliminary plans and agreements for mutual relocations (1st quarter of 2021)
 - b. Negotiate agreements (1st quarter of 2021)
 - c. Permitting (2nd quarter of 2021)
 - d. Design station (2nd quarter of 2021)
 - e. Obtain financing (2nd quarter of 2021)
 - f. Begin construction of station (4th quarter of 2021)

6. GOAL AREA: PROTECT WATER QUALITY RESOURCES

A. STRATEGIC OBJECTIVE: DEVELOP CONCEPTUAL COLLECTION SYSTEM AND PUMP STATION LAYOUTS FOR 20-YEAR GROWTH ZONES

Staff Lead: **Michael Bolduc**, Dan Boissonneault

1. Identify growth areas and develop conceptual collection systems to service the area
 - a. Work with the town to identify and map know hot spots of environmental concern and map them on GIS (3rd quarter 2020)
 - b. Work with the town to facilitate service in growth areas including commercial, industrial, and residential (2020)

B. STRATEGIC OBJECTIVE: STANDARDIZE DATA ANALYSIS AND PROCESS CONTROL

Staff Lead: **Ty Morin**, Chris Gallant

1. Lab Technician and Chief Operator to meet formally each Friday and informally as needed access the state of the biomass (Immediately) - In progress but still needs lots of work
2. Weekly Targets should be established and an agreed upon (what is the target pounds under aeration) - complete
3. Develop implementation strategy – (how much to waste, how to set the return sludge rates) - complete

4. Develop correlation graphs to assess key performance indicators based on historical data (what were the pounds under aeration for a given time of year compared looking at indicators such as water temp, effluent quality and SVI) – not started

D. REPLACE 1,000 FEET OF FAILING FORCE MAIN FROM THE WELLS ROAD PUMPING STATION

Staff Lead: **Chris Gallant**, Danny Boissonneault

1. Initiate design on the to add a redundant 10-inch force main from the Wells Road Pumping Station 1,000 and reconnect into the existing force main (1st quarter 2021)
2. Meet with the town to schedule timing for the project and obtain temporary easements (1st quarter 2021)
3. Bid project (2nd quarter 2021)
4. Start construction (TBD)
5. Complete project (3rd quarter 2021)

SUBSTANTIALLY COMPLETED OBJECTIVES FOR 2020

COLLECTION SYSTEMS

WELLS ROAD PS

- Installed new roof and siding on the building. Replacement of fencing is pending
- Replaced shut off and check valves

ROSEWOOD PS

- Replaced pump #1

RIVER LOCKS 2

- Replaced Pump 2
- Installed new electrical panel and telemetry

BOOTHBY ROAD PS

- Replaced roof

MAINE TURNPIKE PLAZA

- Replaced 185 feet of 8-inch AC gravity line with 12-inch PE. This was part of a project done in conjunction with the MTA.

LAKE BROOK PS

- Rebuilt Pump 1
- Replaced shut off and check valves

CAT MOUSAM PS

- Installed new roof and siding on the building

MOUSAM RIDGE PS

- Installed new wet well top and fencing

QUAIL RUN PS

- Installed new controls and pumps

WATERFORD GREENE

- Replaced both check valves

FORCE MAINS

- Repaired Wells Road PS force main in December and March
- Installed new air release valves on all force mains

GRAVITY SEWER

- Completed spot repairs
- Completed 3 manhole restorations
- Cleaned 46,779 feet of gravity sewer

WASTEWATER TREATMENT PLANT

HEADWORKS

- Began construction of \$6.36M headworks upgrade (construction cost not including engineering)

BERM

- Contracted with Woodard and Curran to complete the application
- Completed work to prepare the berm for certification application including vegetation removal and storm drain repairs

BUILDINGS

- Conducted building condition assessment on building and roof components and added them to the CIP

WWTP

- Replaced or rebuilt
 - Effluent pump
 - Blower
 - RAS Pump
 - Stormwater Pump (2)
 - Process Water Pump
 - Scum Pump

PERSONNEL

PERSONNEL CHANGES

Leaving in 2020

- Shelby Carver

Arriving

- Jack Carter
- Brice Bond

TRAINING

- John Whitten and Alex King have enrolled and started Management Candidate School
- Add Training

ADMINISTRATIVE

- Revamped the Personnel Policy
- Refreshed the look and content the Website
- Finished a new Wet Weather Plan
- Added new monitoring and equipment to the new SCADA System with staff
- Developed and implemented digital payroll records with staff
- Updated the Accounting Systems Operations Manual
- Published 2 newsletters
- Bid and signed contract for the Headworks project within budget
- Developed a new Sewer Connection manual
- Bid and secured new insurance for property and flood

COMPLETED OBJECTIVES FOR 2019

COLLECTION SYSTEMS

WATERFORD GREENE

- Replaced pumps, control panel, telemetry, and landscaping (started in 2018)

LARBORD LANE

- Replaced pumps, control panel, check and shut off valves, telemetry, and landscaping

ADMIRAL'S WAY

- Replaced pumps, control panel, telemetry, and landscaping

CEDARWOODS

- Installed new driveway

FIELD CREST CHECK VALVES WERE REPLACED

- Installed check valves at Field Crest.

DANE STREET

- Worked with the Town to replace the 850 feet of 1912 clay sewer in Dane Street from Main to Park Streets

JET RODDER

- Purchased a new Jet Rodder and traded in the existing unit

SIPHON CLEANING AND INSPECTION

- Cleaned and inspected the twin Brown Street siphons under the Mousam River (Ted Barry). The condition of those was very good.

WATER STREET INTERCEPTOR

- Added a manhole and replace section of line that had an uphill slope.

TECHNOLOGY

- Installed and programed a new Ignition SCADA system for the pumping stations

WASTEWATER FACILITY

HEADWORKS

- Designed the new Headwork Building was 95% completed in 2019

REBUILT THE STEP SCREEN

Staff replaced step blades and gear reduction units on the step screen

DEWATERING

- Installed a second polymer blending unit and rebuilt the existing unit
- Installed new brushes and bearings on the Huber sludge presses

TECHNOLOGY

- Installed the same Ignition software at the Treatment Plant and have about 90% of the plant on the new system
- Developed a new Jet Rodding application for tracking annual cleaning
- Continued development of tablet software inputs for operators
- Installed new SCADA controls on the Control Building HVAC
- Developed new process control dashboard with tablet to dashboard processes
- New GIS Layers
 - Subdivision plans 70%
 - Easements 0%

PERSONNEL

PERSONNEL CHANGES

Leaving in 2019

- Dan LaFlamme

Arriving

- Ty Morin

TRAINING

- John Whitten and Alex King have enrolled and started Management Candidate School
- John Whitten, Alex King, and Danny Boissonneault attend a 1-day training class on Confined Space

- Shelby Carver received an award for Young Professional

CUSTOMER

- Finalized work on the Comprehensive Plan
- Met with the Town and the Economic Development Council
- Worked with the Town on a joint road reconstruction on Dane Street

ADMINISTRATIVE

- Updated the Personnel Policy
- Completed new Strategic Plan through 2021
- Updated the Accounting Systems Operations Manual
- Updated the Rules and Regulations for Sewer Extensions
- Published 2 newsletters
- Implemented a new Sewer Billing System (Billz)
- Prepared and approved Bylaws for the District
- Researched flood insurance
- Prepared documents and FOIA files for litigation

SUBSTANTIALLY COMPLETED OBJECTIVES FOR 2018

COLLECTION SYSTEMS

BOOTHBY ROAD

- Electrical panel and chemical controls at Boothby were as redone

STORER STREET

- Coordinate Storer Street Project with Town and KKWWD project replacing approximately 440 feet 8-inch sewer with 12-inch
- Project is completed at approximately \$ 155,000, budget was \$180,00

WATERFORD GREENS

- New panel and pumps were installed – 95% complete

BROWN STREET

- New building, pumps, wet well modifications and controls were installed

CAT MOUSAM STATION

- New stationary generator installed at the station

GLOBAL COLLECTIONS SYSTEMS

- Alewife Road – completed replacement of 220 feet of undersized line serving the Turnpike and west of the Turnpike
- Develop plans to correct high scoring critical deficiencies through O&M or refurbished stations or lines
 - Staff worked on rescoring the stations
- Work on solving or mitigating corrosion problems due to long detention times in the Beach area sewers with chemical additions and concrete repairs
- Continuous Hydrogen Sulfide monitors were added to the force main terminuses at Wells Road, Boothby, Lakebrook, and Admiral's Way
- Chemical odor control systems were installed at Lakebrook and Boothby Road Pump Stations

WASTEWATER FACILITY

ASSET MANAGEMENT

- Condition assessments and criticality analysis completed on the fleet and pumping stations
- Repaired the RBC roof

TECHNOLOGY

- Expanding the GIS system
 - Topographic layer - done
 - Ability to add labels - done
 - Direction of flow - done
 - Initiated linking inspection footage
 - Manhole inspections – partial progress
- Digitizing data collection with applications -
 - Pumping station inspections
 - Manhole inspections application
 - Jet rodding layer
- Laboratory
 - Tablet integration for data imputed and automatic population of process control spreadsheets
- Adding plotter and scanner with the new building
 - Scanner in place in April 2018
 - Scanning plans -50% done
- New telecommunications
 - Training and implementation complete
- Installed security cameras at the plant and the administration building

PROCESS CONTROL

- Fecal Coliform violation in November
- We had a BOD violation due to QA/QC testing failures in October

PERSONNEL

- Staff has been involved in safety inspections at the WWTF
- Training
 - Shelby Carver is participating in Operator Challenge team
 - Dan Boissonneault completed the Management Course
 - Alex King and Jeff Hanscom have completed a 3-day course on Collection Systems and achieved certification
 - Dan Boissonneault and Chris Gallant are members of the MWEA Collection Systems Committee
 - Alex King is now certified as a flagger
 - Alex King is enrolled in the Sacramento course
 - Shelby Carver and Dan Laflamme achieved certification as lab technicians
 - Alex King and Jeff Hanscom completed Introduction to Instrumentation and Control Systems
- Personnel Changes
- Leaving in 2018
 - Pat Wiley resigned for the Portsmouth NH Superintendent position – 2 years
 - Bruce Hilton retired – 43 years
 - Maurice Bedard retired – 38 years
 - Cathy Reim retired – 28 years
- Arriving
 - Susan Richards was hired to fill the Office Manager’s Position
 - Alex King was hired as Maintenance Technician
 - Dan Laflamme was hired as Chief Operator
 - Chris Gallant was hired as Assistant Manager
 - John Whitten was hired as Maintenance Technician
- Promotions
 - Shelby Carver was promoted to the Lab Tech position
 - Dan Boissonneault was promoted to Collection Systems foreman
 - Jeff Hanscom was promoted to Mechanic

CUSTOMER

- Worked with the Town to develop the District’s portion of the of the Town’s Comprehensive Plan
- Worked with the Town and KKWWD on the utility work on Storer Street
- Developed a GIS Mapping browser for all town and utility infrastructure within security limitations
- Published two newsletters