# Chapter 6 – Public Facilities **DRAFT**

A thorough understanding of a town's public services is necessary to determine any current constraints to growth and identify any growth-related challenges that the town is likely to face in the future. A plan should also identify likely future capital improvements. Specifically, this section will:

- a) identify and describe South Berwick's public facilities and services; and
- b) assess the adequacy of these services to handle current and projected demands.

Town expenditures are discussed in detail in the Fiscal Analysis Chapter. The complete Capital Investment Plan (CIP) is included in the Fiscal Capacity Section.

# Inventory of Facilities

Municipal Facilities & Services

#### **Police**

Police services in South Berwick are provided on a 24-hour a day basis, with dispatch services provided by Sanford Regional Communications Center. The Police Department currently employs eleven full-time officers including the Chief of Police. The command structure includes a Lieutenant, Sergeant, Detective Sergeant and seven full time officers. Over the past twenty plus years, the Department has provided one officer of the seven to serve as a liaison with Marshwood High School. This School Resource Officer (SRO) is primarily assigned to the high school while school is in session. The SRO also assists the primary duty officer during emergency situations or when priority calls for service are pending. Each full-time officer is tasked with the responsibility to be the primary investigator in all criminal matters prior to the Detective Sergeant investigating the case. The Department does maintain a part-time staff of six officers and an Animal Control Officer, which is used to augment and assist the full-time staff.

Based on national, state, county, and local standards the South Berwick Police Department has been operating below the minimum recommended staffing levels. The following table depicts the average Police to Citizen ratio. These figures do not include part-time personnel, which comprise a substantial number of the staff hours for the department. These recommended ratios are solely based on police to citizen and do not consider the low crime statistics for this area. The current staffing ratio is 1.46 officers per 1000 people.

Police Staffing Levels vs Population						
Officers/1000 2022 Population # Of Officers (Incl Chiefs)						
Nationally	2.4	332,403,650	~665,380			
State-wide	2.2	1,372,247	~2,921			
South Berwick	1.46	~7500	11			

The Department currently has five fully marked patrol cruisers. There are currently three unmarked vehicles which are primarily assigned to the Chief of Police, Lieutenant, and Detective Sergeant. The Detective Sergeant's unmarked vehicle is also used for investigations, surveillance or during special events such as parades or Strawberry Festival. Over the past ten years, with some exceptions, the Town has typically purchased one new police vehicle annually.

Since 2002, the Department has utilized IMC Records Management and Dispatch computer software. This equipment allows for more efficient collection of data and the ability to analyze trends and patterns. The integrated software allows Dispatch to transfer valuable data such as complainants' information, times, and responding personnel to the Records Management portion. Therefore, when an officer signs in to complete a written report much of the information can be backfilled and duplicate work is eliminated. A new record-keeping system will have to be purchased in the next few years as the vendor no longer provides support for the IMC record-keeping system.

In 2022, each officer has been assigned a Body Worn Camera to assist in documentation for officers' reports. The Body Worn Camera is also complemented with a patrol vehicle video recording system that records video and audio of vehicular movements and the rear passenger compartment.

In the fall of 2018, the South Berwick Communication Center was closed, and services were moved to Sanford Communication Center. In July 2019, the police department moved to a new 9,832 sq ft facility located at 1 Farmgate Road, after being in the basement of the Town Hall for 30 years. The new police department consists of two floors. The top floors houses patrol, booking room, sally ports and offices. The bottom floor is for administration, locker rooms and a gym. The new police department has been a much-needed asset and houses the Town Council meetings, State of Maine Probation and Parole and Juvenile Probation. Other agencies are also utilizing the booking room for arrests at times.

## **Fire and Rescue**

The South Berwick Fire Department provides 24 hour per day coverage for the town from one station which is located on Norton Street in the downtown area. There are 36 members who are paid-per-call firefighters. All members are paid an hourly wage for training, meetings, and calls. Pay ranges from \$13.50/hr for new firefighters to \$26/hr for the Assistant Chief. The Chief is currently a part-time salaried employee, who works 20 hours per week.

In the last ten years, the fire department has gotten busier, both in emergency responses, but also the administrative and training requirements of modern fire departments. Increased training requirements lead to increased time commitments for our firefighters. Fire and Rescue call volume has also increased over 40% since 2012 with EMS and rescue calls making up a larger percentage of these calls over time. In that time, the roster of firefighters has remained consistent in the 32-36 member range. In 2021, an average of 12 members responded to every call. The busiest time period for calls is between 7am and 9pm, Monday through Friday.

The firefighting fleet consists of the following vehicles:

- Engine 1 1996 Pierce Pumper It's replacement is on order, expected delivery 2/2024
- Ladder 2 2003 Ferrara 77' Quint, meaning it also has a pump and water tank
- Tank 3 2013 Fouts/Kenworth 3000 gallon tanker
- Engine 4 2013 Spartan/Marion Pumper

- Forestry 5 1997 Ford F250
- Utility 6 2001 Chevrolet Suburban
- Car 1 2017 Ford Interceptor Utility, Chief's Car

The National Fire Protection Association (NFPA) recommends fire apparatus serve 15 years of frontline duty, then five as reserve apparatus. This schedule is cost prohibitive for most communities the size of South Berwick. We have been operating on a 25-year replacement plan for apparatus for quite some time now, which has worked well considering the size of the town and call volume.

The department has made consistent investments in apparatus and equipment over the last decade, with an emphasis on standardizing and modernizing equipment and tools.

#### York Ambulance

Rescue and EMS services are contracted out to York Ambulance, a 911 crew staffed with a Paramedic and an EMT 24 hours a day, 7 days a week at stations in York and South Berwick. A third crew also staffed with a Paramedic and an EMT works out of the York Station ready to provide medically necessary inter-facility transfers and provide back-up 911 response if the primary 911 crew is already out on a call.

The fire department's role in providing EMS services in town continues to expand. This mission may continue to evolve and expand in the next decade. It is possible it could transition from a contracted service to a municipal based Fire & EMS agency- a trend that is gaining momentum nationwide as rural and private EMS providers struggle to survive.

#### Fire & Rescue Facilities

The Fire Department and Rescue Squad moved into the Community Center building in 1996. The building was previously the warehouse for the shoe factory next door, and was renovated for municipal use.

The building is configured for shared use;

- There is a single kitchen for fire, rescue and the community center.
- There is a single, unisex bunkroom on the Rescue side, and none in the fire station.
- There are no locker rooms, only a shower in the men's and women's bathrooms on the Fire/Rescue side of the building
- Most corridors are unsecured and have multiple points of access from the public community center side of the building and the fire/rescue side of the building

The Fire Station and Rescue section of the building has been largely untouched since opening 26 years ago, with only minor upgrades and revisions, and no structural improvements or expansion since then.

Over time, the shared kitchen and dining room of the building have been absorbed by the Community Center, which regularly hosts events for the community, limiting availability to Fire

and EMS staff. Rescue services have evolved from on-call staffing to 24/7 staffing. The Fire Department is still largely on-call based; however firefighters spend more time in the station than previous generations due to increased demands in mandatory training, maintenance, and administrative work.

Over the last decade the fire station has become extremely cramped. Fire Apparatus are larger, and carry more equipment now than ever before as the mission has evolved beyond fighting fires, to providing all-hazards response requiring various types of specialized equipment.

In South Berwick, firefighter turnout gear is stored in the apparatus bay, exposed to environmental hazards from the vehicles, and, as a carrier of carcinogens, off gassing toxins into the station. With very little office, administrative, or private space, firefighters congregate in the apparatus bay, prolonging their exposure to all of these health hazards.

The department relies on recruitment of citizens to join the team to provide firefighting services. New firefighters must complete over 120 hours of initial training to become fully functional firefighters. Firefighters are also required to complete more than 60 hours of training per year. An increased demand for training and administrative work, in addition to increased call volume has made the recruiting of new firefighters a challenge. Even though there are healthy staff levels today, it is anticipated that the department would consider transitioning to some level of paid, scheduled coverage within the next ten years.

There are a few main challenges facing the town's fire department facilities.

- The current station needs renovation & addition to bring the facility up to modern standards, and to provide adequate space and amenities for firefighters to meet the ever-growing needs of the community.
- 2. Development in the southern end of town, namely the industrial zone, may require fire protection local to that area by adding a fire station and apparatus. This is the second busiest of the four fire districts in town, with downtown being the busiest.
- 3. A few major milestones on the apparatus age and replacement schedule are poised for the next 10 years. First, the ladder truck will reach 25 and 30 years of age in this timeframe and is by far the most expensive piece of fire apparatus to purchase. Second, Engine 4 and Tank 3 are the same age, meaning both will hit their years of service milestones concurrently. These are capital planning issues that must be addressed early on so that there are no surprises when the time comes.

# Library

The South Berwick Public Library is located at 27 Young St. In March of 2012, the library was moved from the Jewett Eastman House to the building that was formerly Saint Michael's Catholic Church, where it operates today. The Friends of the South Berwick Public Library committed to raising over one million dollars in a capital campaign that was key to finishing the interior renovation and furnishing the library with furniture and equipment. 143 solar panels were added to power the building in 2014.

The new Library is a major addition to downtown South Berwick. Centrally located, easily accessible, and with ample parking, the library is a gathering place for all of South Berwick's citizen's. More than just a

collection of books, a library serves many roles in the education, entertainment and advancement of a community and its citizens.

#### **Parks and Recreation**

South Berwick's Recreation Department operates a number of recreation programs for the youth, adults, and seniors in the community. Active programs include: enrichment programs (such as music, art, science), special events (such as community days with minor league sports teams and at ski mountains, family dances, scavenger hunts, and many seasonal events), exercise programs (such as walking, line dancing, Zumba, yoga), athletic programs (such as soccer, tennis, a road race), daily games (such as cards, cribbage, whist, bridge, bingo), as well as a summer day camp. Most of the recreation department programming sustains itself. The Department employs a recreation director, senior center director, and programming coordinator who work with a Recreation Commission appointed by the Town Council.

#### Parks and Recreation Facilities

The Town owns 2 tidal boat launch ramps and picnic rest area facilities on the Salmon Falls River, as well as a Town Forest, a ski area, sledding hill and a number of vacant parcels of land. Other recreational facilities are located at Central School, Marshwood Great Works School, Marshwood Middle School, Marshwood High School, and Berwick Academy. Vaughn Woods State Park is a 165 acre area located on the banks of the Salmon Falls River. Private facilities include 4 historic structures, a Rod and Gun Club, a church-owned gymnasium and Berwick Academy. Recreation facilities are summarized by ownership in Table E.7 and by type in Table E.8.

#### **Public Works**

- Highway has grown in miles of roads, and calls for service
- Built a new PW facility / new storage garage which is still not enough, but will do for now
- Roads / highway bond at \$4 million which brough roads up to a manageable state

(need to follow up with PW for more information)

#### **Solid Waste**

- Recycling was strong in the early 2000's, about 3-5 years ago, seems to have fallen out of the recycling market
- Need to update transfer station flow for ease of getting rid of trash and recyclable

(need to follow up with PW for more information, old plan section below)

In the 1970's, Maine enacted legislation aimed at phasing out open burning dumps and land fills that contaminate ground water. As a result, South Berwick closed its open burning dump in 1977. The Town Transfer Station was built on the town dump site. The Town then entered into a contract with the Maine Energy Recovery Company (MERC) facility in Biddeford for the incineration of household wastes. The MERC plant is an electric co—generating station that incinerates municipal waste from communities in Southern Maine to produce steam energy which is converted into electricity. South Berwick's contract with MERC includes an obligation to provide the facility with a minimum of 1,500 tons and a maximum

of 2,250 tons per year of solid waste over the life of the contract. In the Town's 1990 Comprehensive Plan the tonnage reported trucked to MERC was 1600 tons.

Trash is collected privately or is brought to the Town's transfer station by individuals. Waste is compacted and hauled, recycled or otherwise disposed of by the Town. In the 2001-2002 fiscal year, the town hauled, by truck, about 1,980 tons of solid waste to the MERC facility. A Transfer Station fee is charged for a variety of waste items that are not accepted by MERC. The schedule of fees is set to cover the town's cost for disposing of the items. For the 2001-2002 fiscal year those fees totaled around \$15,000. In the 2001 – 2002 fiscal year, an estimated 12 tons of reuse items were deposited in the Salvation Army bins and another 12 tons of reuse item were passed through the Swap Shop. The Town has a mandatory separation and recycling program for glass, paper, aluminum, plastics and other metals which generated around \$25,000 for the 2001- 2002 fiscal year. Leaves, wood chips and other composting waste are ground and made available, with a delivery fee, as mulch. Items that may need consideration in the next ten years include improved lighting, traffic patterns and volume, methods of solid waste pickup, increasing population, site modifications that would allow a vehicle capable of hauling larger compacted loads and the limited size of the current site.

# Other Municipal Property (need to follow up with town staff for more information, old plan sections in red below)

#### Town Hall

The current Town Hall, built in the 1920s and formerly the St. Michael's School, was purchased by the Town in 1975. The building is located at 180 Main Street and has two stories and a basement. The basement houses the Police Station as well as office space. The first floor contains municipal offices and the second floor contains a meeting hall and additional office space. The Capital Improvements Plan called for improvements to the municipal building in 1990 and 1994. The 1990 improvements included repairs to the roof, windows (including the addition of storm windows) and chimney; the addition of an elevator and renovations to the second floor auditorium. Interior renovations to the Town Offices, including the basement were made in 1994.

## South Berwick Community Center

The Town Community Center, located on Norton Street, was completed in 1995. It houses the Fire Department, Rescue Squad, and Recreation Department. It includes a shared training room, bathrooms, showers, a commercial grade kitchen, dining room, activity, and meeting rooms, as well as offices. The Community Center is used for Recreation Department activities, houses the South Berwick Senior Center and is also a meeting place for non-profit community organizations. Community members are also able to rent space for a small fee to hold private events.

# Town Garage

The Town Garage is located on Front Street. The 1989 Capital Improvements resulted in the purchase of adjacent land and the construction of a new Town Garage in 1990. The facility also has an enclosed salt storage building.

## **Transfer Station**

The 1989 Capital Improvements Plan led to improvements including ash pile removal, transfer station expansion in 1993 and lot redesign and pavement in 1994. The facility is currently servicing the town's waste disposal needs with three days of operation per week. The town has obtained a small adjacent property to facilitate expansion. Water quality is still being tested at the landfill area of the Transfer Station.

#### **Red Barn**

Previously the Town's Teen Center, the "Red Barn" is located on Agamenticus Road. The cinder block building with metal roof is used for tractor storage. The building is serviced with town water and sewer. (true?)

# Former Rescue Building

The Town owns a 2-bay concrete building at the intersection of Spring, Goodwin and Dawson Streets. This building, built in 1958 formerly housed the South Berwick Rescue Squad. In addition to the bays the building has a small office and a bathroom. The Town assumed ownership of the building upon the completion of the Community Center in 1995. Currently it houses the Food Pantry.

# Powder House Ski Hill Buildings

Following the Town's purchase of the parcel of land including the Powder House Ski Area in the 1980s, the town took ownership of four small wooden buildings associated with the operation of the Ski Hill. A storage shed and ski lodge are located at the base of the hill. A shed to protect the lift engine and a small building for a lift attendant are located at the top of the hill. Powderhouse Ski Hill operates under the Recreation Department and is run by about a dozen of part-time seasonal employees and a large group of community volunteers.

#### MSAD 35

Maine School Administrative District 35 (MSAD 35) is comprised of the towns of South Berwick and Eliot. Total enrollment for the district is currently 2140 students. The District manages five campuses, three properties in South Berwick and two properties in Eliot. These campuses encompass approximately one hundred twenty-four acres, all maintained by the District.

On these five campuses, the District operates six buildings totaling 447,337 square feet. The overall appraised value of these facilities is approximately \$80,000,000. The maintenance and operation of these facilities is costly. Each year the District purchases approximately 125,000 gallons of propane, 12,000 Dth of natural gas and 2.6 million kWh of electricity.

The District also leases a bus maintenance facility, where it stores, operates and repairs 29 buses, and 8 vans. These vehicles travel approximately 450,000 miles per year using 55,000 gallons of diesel fuel and 8,000 gallons of gasoline. These vehicles allow the District to transport over 2,100 students to and from school, to athletic contests, and on field trips. The District also operates 5 cafeterias at its schools, which serve approximately 160,000 meals per year to its students.

The School District is the largest employer in both South Berwick and Eliot with over 380 full or part-time employees (exclusive of the District's 100+ substitutes).

**Central School** is located on Main Street in downtown South Berwick. The school serves pre-k through grade three students from South Berwick. The main building was built in 1925. Later additions include the annex and gymnasium built in 1952 and finally the primary wing built in 1973. The school is situated on 7+ acres of land. Outside there is a large playground for students and a basketball court. A parking lot is located at the rear of the building. Inside, the building has twenty-five classrooms, a cafeteria, gymnasium with a stage, library, staff room, nurse's office and various small rooms for special education services.

Marshwood Great Works School, located in South Berwick, serves children from Eliot and South Berwick in grades four and five. MGWS has thirty classrooms, cafeteria, library, and gymnasium with a stage, home economics room, computer lab, soccer field and a baseball/softball diamond.

Marshwood Middle School, located in Eliot, serves children from South Berwick and Eliot in grade 6 through 8. MMS has 30 classrooms, 2 art rooms, a band room, vocal instruction room, home economics room, library, computer lab, a cafeteria and gymnasium with a shared stage. All students have laptop computers for their use provided in part by MLTI (Maine Learning Technology Initiative) funding and in part by local budget. The outdoor facilities include a football field, soccer field, baseball diamond, softball diamond and several practice areas. There is a dirt track and a concession stand. MMS also shares its site and parking lot with the Superintendent's office building.

Marshwood High School (MHS), located in South Berwick, provides service to students from Eliot and South Berwick in 9th through 12th grade. All students are provided with a laptop computer. MHS has an auditorium for school and community use with a seating capacity of 605. Although MHS is expected to meet the needs of the district in the future, the building was designed with expansion possible to 1500 students. The athletic facilities include the following:

- Stadium Field (used for Football, Soccer, and Lacrosse) encircled with a surface 400m, six-lane track. Stadium bleachers include a heated press box and PA system. The stadium is lighted for night events.
- Secondary Field (used for Soccer and Lacrosse) located behind the stadium. Also behind/underneath the stadium is a concession stand, with electricity and gas appliances; restrooms; team rooms; a storage room and a grounds storage room.
- Softball and field hockey fields located next to the stadium area. All fields have electricallypowered score boards.
- A practice field area is next to the softball and field hockey fields and includes throwing areas for track and field (discus, javelin, and shot put).
- The baseball field is located on the opposite side of the school campus, with fully enclosed dugouts. The outfield is used as an additional soccer field in the fall season.
- Tennis courts (5) located next to the baseball field.
- Gymnasium seating approximately 1000 1200, with retractable basketball hoops (6).
- Wrestling room used for wrestling and small exercise activities.
- Wellness center Includes weights and cardiovascular equipment.

MSAD 35 Facilities							
School	Grades	Capacity	Current Enrollment	Current Enrollment % of Capacity	10-Year Average Enrollment		
Eliot Elementary School	PreK-3	550	311	57%	313		
Central School	PreK-3	550	371	67%	388		
Marshwood Great Works School	4 and 5	750	300	40%	304		
Marshwood Middle School	6 and 8	825	473	57%	523		
Marshwood High School	9 to 12	1100	685	62%	757		
Source: MSAD 35 & Maine Department of Edu	cation						

The district enrollment has declined since an enrollment of 2389 students in 2010, to the current enrollment of 2140 students. In addition, the local real estate market has escalated over the past 4 years, with an increase in the cost of homes across both communities. The district intends to monitor how this increase in home costs impacts the ability of younger families with children to purchase homes in both Eliot and South Berwick.

One of the biggest changes to operations in the last 10 years was the agreement with the Town of Rollinsford to educate their students from grades 7 through high school. The original contract was signed in December of 2013 and the students began to attend in the fall of 2015. Rollinsford is billed monthly on a per student basis and additionally for Special Education Services.

A number of challenges present themselves when looking at the future of MSAD 35 schools. Three of those challenges are:

- 1. Navigating the transition back from the COVID 19 pandemic and addressing the learning needs of all students.
- 2. Finding and retaining professional staff. There are several areas in which we are currently struggling with staffing that can potentially impact the learning experience of our students. Most noticeable are the hiring of Bus Drivers and Educational Technicians to work with our Special Needs population.
- 3. Balancing the needs of our students, the impact of taxes on our community, and the current rate of inflation. For example, we were recently notified the rate we are paying for electricity has increased from \$0.06 cents per kilowatt hour to \$0.16 cents per kilowatt hour. This is an increase of \$100,000.00 to the district budget for the second half of the fiscal year for electricity alone. This same theme carries across many other cost centers including the cost of propane, diesel fuel, and potentially health insurance.

# Water District

The South Berwick Water District (SBWD) provides drinking water to approximately 1,452 customers in South Berwick and a small portion of Berwick in York County, Maine. The South Berwick Water District was incorporated in 1959. The primary service area includes South Berwick Village and the Hooper

Sands area as well as a small area in Berwick in the vicinity of the Blackmore well field and the Route 4 area. Map E.2. shows the service area of the SBWD.

The initial operating property of the District was acquired from the South Berwick Water Company in 1960. The original water system has been modified and upgraded over the years to meet modern water works standards and in response to increasing population growth. These improvements have included development of a new supply, a new storage reservoir and various distribution system improvements.

The demands in the water system have historically been residential with some light commercial water use in the South Berwick Village area. The District currently serves no industrial customers.

# **Water Supply**

The South Berwick system presently has adequate capacity to meet projected demands within the system under current conditions. The SBWD has developed all the cost-effective aquifer sites closest to the water distribution system. However, the population growth pressures in the community and surrounding area will continue to stress the water supply in South Berwick into the future. In anticipation, several potential well sites have been identified for future development which could be incorporated into the water system as growth occurs. In general, a water system is considered to have adequate supply if it can meet the following system standards:

- The *safe yield* of the source of supply should exceed the average-day demand overthe projected planning period.
- The *safe pumping capacity* of the system, with the largest unit out of service, should be greater than or equal to the maximum day demand.

The *safe yield* of the SBWD well supply meets the current average-day demands in the system. Though the recent droughts and increased demand in the summer continue to stress the water supplies. The District continues to explore for more water to have adequate supply to meet projected demands that may occur.

The *safe pumping capacity* is defined as the pumped capacity with the largest pump out of service. In addition, hydraulic capacity of the well system should not exceed an average pumping rate of 16-18 hours per day. This operating scheme allows for a 6 – 8-hour recovery period every 24 hours.

The total pumping capacity of the South Berwick well supply is about 610 gpm. (828,000 gallons per day (gpd), if pumped for a 24-hour period, in the case of an emergency. This is short term in the event of a fire or other emergency requiring large volumes of water. The safe pumping capacity is summarized in the table below.

Summary of Well Capacity and Performance Data SBWD						
Parameter	Well Construction	Well Depth (feet)	Well Diameter (inches)	Pumping Capacity (gpm)		
Agamenticus Wells - To	tal Agamenticus Supp	oly Capacity — 1	10 gpm			
Bedrock Well	Drilled Bedrock	705	6	60		
Gravel Well	Gravel – Packed	55	12	20		
Vacuum Well field	Vacuum	23 -28	2.5	30		
Blackmore Wells - Tota	l Blackmore Supply C	apacity – 80 gpi	m			
Blackmore Well #1	Drilled Bedrock	250	6	50		
Blackmore Well #2	Drilled Bedrock	250	6	30		
Willow Drive Wells - To	otal Willow Drive Supp	oly Capacity – 30	00 gpm			
Willow Drive #3	Drilled Bedrock	518	12	300		
Junction Road Well - Total Junction Road Supply Capacity — 150 gpm						
Junction Road Well #1	Drilled Bedrock	537	12	150		
Junction Road Well #2	Drilled Bedrock	500	6	70		
Total Supply Capacity in	n South Berwick – 64	0 gpm (.5 MGD	<u> </u>			

# **Water Quality and Treatment**

SBWD operates two filtration plants. The Willow Dive site is filtered for the removal of iron and manganese to help improve the aesthetics of the water and the Junction Road source water is filtered to remove arsenic. All four sources are disinfected, with chlorine, to ensure the water remains safe in our vast distribution system.

Acquisition of land around the wells should continue to avoid having to comply with anticipated enhanced disinfection requirements under the Groundwater Rule. SBWD should continue its proactive program of land control around all well supplies and seek to purchase all land within the prescribed well head protection areas.

# **Distribution Storage**

SBWD is projected to have adequate distribution storage volume to meet fire suppression needs in the service area, to provide peak flows and to provide for the emergency needs of the District. The Powder House Hill Reservoir provides adequate storage volume to meet peak-hour and fire flow needs.

The need for additional storage in the Hooper Sands Road area has been identified in the most recent system master plan.

## **System Reliability**

SBWD has back-up power at two of its facilities in the event of an emergency. The generators at Willow Drive and Junction Road will provide emergency pumping capabilities of 600,000 GPD, short term. This flow rate will be sufficient to meet projected normal conditions in the event of a power outage.

# **Fire Protection**

Available fire flows meet or exceed all ISO requirements at specific location in the distribution system as determined using the computer simulation model developed for this study. Hydrant spacing also meets ISO requirements.

# **Distribution System Improvements**

Various distribution system improvements have been identified to replace aging pipe, to improve pipe looping, to reduce peak-hour velocities and to remove restrictions in the distribution system. Similarly, these piping improvements have been scheduled and prioritized to take maximum advantage of the District's annual capital improvement budget. SBWD's existing debt structure was considered when scheduling all improvements.

# **Interconnection Opportunities with Surrounding Water Utilities**

An interconnection with the North Berwick Water District is planned for 2023. This interconnection will provide system redundancy for both Utilities in the event of an emergency. The interconnection is the first step in the possibility of shared infrastructure to serve out lying areas of our water systems.

Also, the South Berwick Water District is one of the charter members of the Southern Maine Regional Water Council SMRWC). The SMRWC was formed in 2005 as a voluntary organization to P4romote regional cooperation among the water utilities serving this fast growing region. The member utilities include the Portland Water District, the Biddeford- Saco Water Company, Kennebunk-Kennebunkport-Wells Water District, Sanford Water District, York Water District, the Kittery Water District and the South Berwick Water District.

The Council has begun many cost-sharing initiatives such as shared purchasing programs, bulk chemical agreements and mutual cooperation of man-power resources and operations staff, to reduce operating costs for participating members. These initial cooperative steps have resulted in cost savings to the regions water customers.

The member utilities recognize that the southern Maine coastal region is limited in available water supplies and that the supplies are not necessarily located where population growth is occurring or projected to occur. This realization has led the council to consider the long-term necessity of one day having to share water resources in order to sustain service through the region.

The Council is advancing engineering aspects required to develop a potential future regional water system. If proven viable, a regional system is envisioned to occur through interconnections and regional supply balancing with the overall goal of improving service, reliability and cost of water to the region's customer base.

# **Regulatory Compliance**

The South Berwick Water District is a fully regulated water utility in the State of Maine. As such, the SBWD is required to meet the regulatory requirements of the Department of Human Services regarding public health matters and the Maine Public Utilities Commission regarding water rates and other financial and managerial matters. In addition, the District is also required to be in compliance with all regulations administered directly by the U.S. Environmental Protection Agency.

A review of the District's standing indicates that the SBWD is in compliance with all regulatory requirements of these agencies and with other applicable state and federal laws governing water utilities.

#### **Source Water Protection and Well Head Protection**

The Town of South Berwick, in conjunction with the Water District, has implemented several planning measures to protect the groundwater resources within the community. These measures include landuse zoning for all property around existing public wells and a restrictive site plan review process for planned development around existing wells. The District has also established land management practices which include timber harvesting or selective cutting as determined by State certified foresters within itssource water protection areas.

SBWD allows controlled public access within these protected areas. This includes public use of land for recreational purposes such as hiking and cross-country skiing. To facilitate public access and use within these protection areas, the access roads to each site are well signed and gated to increase public awareness of the area as a public water supply. Public awareness signs are also posted along all the District's established protection areas. Other security measures have been put in place but can not be revealed for that reason.

#### **Expansion Potential**

Potential expansion areas include, but are not limited to, the Route 236 corridor, the Route 4 corridor, Route 91, Emery's Bridge Road, Brattle and Pine Street areas.

#### **Water District Facilities**

The SBWD owns and operates the following facilities & staff:

- 4 full time staff people
- 5 member elected Board of Trustees
- 1 office building
- 4 pump stations/well fields
- 1 million gallons of storage at an elevation of 297' above sea level
- 2 treatment facilities
- 35 miles of pipe
- 167 fire hydrants
- 121 acres of land
- Generally 3 utility vehicles
- 1 back-hoe

The Water District and Town have a mutual aid understanding of sharing equipment and personnel and are now beginning to discuss the potential benefits of further jointand separate equipment purchases that would enhance both entities.

# Sewer District

South Berwick has a sewage collection and treatment system consisting of gravity sewers and force mains, five pump stations, and a treatment plant constructed as a primary facility in 1965 and upgraded to a tertiary plant in 1995. The collection system runs throughout the urban portion of the community. Through a force main, with a combination of District and private pump stations, service is provided to

the regional high school, two commercial centers and one residential development along a two mile stretch of Route 236, south of the town center. There are presently no plans to expand the service area. The system currently serves approximately 50 percent of the population. Map E.1. shows the service area of the South Berwick Sewer District.

The system is owned, operated and maintained by the South Berwick Sewer District (SBSD), a quasi-municipal authority formed under the provisions of Chapter 226 of the Private and Special Laws of 1964. A five-member Board of Trustees, elected by District members, manages SBSD. The District has four full-time employees at the treatment plant, a 40-hour per week office manager, and an engineer who acts as a part-time administrative assistant. SBSD maintains an office at 293 Main Street.

Currently, there are approximately 1670 residential and commercial billed units. The District's annual budget for these units was over \$1.12 million for 2023 with long-term debt of \$345,000 outstanding at the end of 2022. The sewer rate is composed of a debt service rate and a variable service rate (which are both set annually with the variable rate based on water use). The debt service rate is \$200 per unit and the variable service rate is \$.012 per gallon for 2022.

SBSD has been accepting and treating septic system waste from septic haulers for the past twenty-five years. The rate for septage treatment has generated significant additional revenue for the District. This revenue has been used to fund a capital reserve account, and allow required system expansions, upgrades, and repairs without significantly impacting annual user rates.

The collection system consists of 18 to 20 miles of pipe ranging in size from 8 to 15 inches in diameter. All pump stations are equipped with an electronic surveillance system that allows remote monitoring of each station from the treatment plant. The District added approximately 165 new connections to the system from 2006 to present. Ground water infiltration has been and continues to be addressed through the upgrading of old sewer lines, and replacement of ancient private common lines.

The South Berwick Sewer District operates a tertiary treatment plant, which discharges treated wastewater to the Salmon Falls River off Liberty Street. The plant, and its operators, have received national recognition and awards for operating efficiency. Increased regulatory requirements, including the U.S. Clean Water Act and its amendments, emphasized biological (secondary) treatment of wastewater. District voters passed a bonding referendum in 1993. The current plant construction started in 1994 and went online in February 1995. The plant now provides tertiary treatment of wastewater through chemical treatment and process controls in response to further regulatory demands. Tertiary treatment removes/reduces certain harmful chemicals and metals from the wastewater before it can be discharged into the environment.

The plant is currently undergoing review by an engineering firm to assess its current operating systems, necessary upgrades, and ability to meet anticipated future regulatory requirements. In addition, with federal funding, the plant is being assessed for climate change impacts. The plant is designed and licensed to handle an average daily flow of 567,000 gallons per day (gpd) and a peak flow of 2.45 million gpd. The current domestic flow averages 295,000 gpd and it is estimated that the plant is currently operating at 52 percent of its capacity. The current capacity is sufficient to handle an average growth of 30 households per year for the next 20 to 25 years. Once the plant reaches 80 percent of its design capacity, federal mandate requires the District to upgrade the facility.

# **APPENDIX ITEMS**

# Recreation Facilities By Ownership

		STATE O	WNED	
Area	Tax Map/Lot	Acres	Facilities	Comment
Buildings/Storage	1-13 Route 236	7.38	State Highway Dept. property	
Vacant	2-1	18.5	Vacant	Inland Fisheries & Wildlife (IF&W) – York Pond Cons. Area
Vacant	2-3	68.5	Vacant	IF&W – York Pond Cons. Area
Vacant	2-31	28.9	Vacant	IF&W – York Pond Cons. Area
Vacant	2-63	58	Vacant	IF&W – York Pond Cons. Area
Vacant	4-6	9	Vacant	IF&W – Mt.Agamenticus (Mt. A.)
Vacant	4-39	14	Vacant	IF&W – Mt. A.
Vacant	4-41	20	Vacant	IF&W – Mt. A.
Vacant	4-43	136	Vacant	IF&W – Mt. A.
Vacant	4-45	20	Vacant	IF&W – Mt. A.
Vacant	4-46	48	Vacant	IF&W – Mt. A.
Vacant	4-73C	5.3	Vacant	IF&W – Mt. A.
Vacant	4-74	26.3	Vacant	IF&W – Mt. A.
Vacant	4-76	449.4	Vacant	IF&W – Mt. A.
Vacant	4-79A	19.5	Vacant	IF&W – Mt. A.
Vacant	4-85	13	Vacant	IF&W – Mt. A.
Vacant	2-50	30	Cons. Comm.	Mt. A Cons. Area
Vacant	2-51	16	Cons. Comm.	Mt. A Cons. Area
Vacant	2-57	40	Cons. Comm.	Mt. A Cons. Area
Vacant	2-61	7.4	Cons. Comm.	Mt. A Cons. Area
Vacant	3-17	4.5	Cons. Comm.	Mt. A Cons. Area
Vacant	3-36A	10	Cons. Comm.	Mt. A Cons. Area
Vacant	3-39	3.9	Cons. Comm.	Mt. A Cons. Area
Vacant	3-46	16	Cons. Comm.	Mt. A Cons. Area
Vacant	3-49	20	Cons. Comm.	Mt. A Cons. Area
Vacant	3-52	22	Cons. Comm.	Mt. A Cons. Area
Vacant	3-62	38	Cons. Comm.	Mt. A Cons. Area
Vacant	3-63	24	Cons. Comm.	Mt. A Cons. Area
Vacant	4-64	4	Cons. Comm.	Mt. A Cons. Area

Vacant	4-73	17.2	Cons. Comm.	Mt. A Cons. Area
Vacant	5-40	4.2	Cons. Comm.	Mt. A Cons. Area
Vacant	7-65 (16)	2.38	Open space	subdivision
Vacant	8-91		Open space connector to ET Town Forest	Aggie estates-cons. comm. developing management plan
Vacant	9-28	21.6	Well heads	Hooper Sands contamination
Demolished building	9-52	0.9	Flood plain	
Buildings/Park	11-1	38.9	Sports fields/open space	Little League, soccer fields, etc.
Buildings	11-364	3.2	Transfer Station	
Buildings	11-37	1	Dwelling	
Vacant	12-68	88.5	trail	Town Forest – Cons. Comm.
Vacant	12-77	11	trail	Cons. Comm.
Vacant	12-78	3.9	Vacant	Cons. Comm.
Vacant	15-16 Route 101	2.4	Town landing, waterfront rest area	Boat ramp/picnic area/scenic
Vacant	25-5		Counting House Park	Boat portage, picnic, fishing, scenic
Vacant	25-31	0.2	Counting House Park	annex
Vacant	28-56	2.1	Vacant	
Vacant	28-70	0.9	Parking area and pong	Opposite to Community Center
Vacant	28-75	0.4	Parking area	Post Office
Building	28-105A	12.7	Powderhouse Ski Hill	Ski Lodge/Hut
Parking	28-143	0.2	Parking	On Paul Street
Municipal Building	28-170 Main Street	1.9	Town offices and meeting rooms	Benches/rest area in front of building
Buildings/Storage	31-102	4.4	Highway Dept.	
Building	31-121	0.2	Former EMT building	
Building	31-132	0.7	Community Center/Public Safety Center	Fire Dept/EMT/offices/C ommunity kitchen/meeting rooms
Building	31-132A	3	Apartments and open space	Formerly Cummings Mill Building
Building	33-140	9.3	Soccer fields/parking/skate board park	Location for Teen Center ** VACANT**

34-41	0.4	Vacant	
34-59	0.4	Vacant	
34-62	9.3	Open Space	Subdivision
35-106	0.8	Open Space	Subdivision
35-107	1.1	Open Space	Subdivision

MSAD 35 SCHOOL RECREATION FACILITIES					
Area	Tax Map/Lot	Acres	Facilities	Comment	
Central School	27-83	8.4	Multipurpose field, playground, 1 gymnasium		
Marshwood Great Works School	Unknown		1 ballfield, 1 multipurpose field, 1 gymnasium, 1 jogging course/trail.	Recreation Department Summer Camp location.	
Marshwood High School	24-9	51	Athletic fields for football, baseball, softball, lacrosse, soccer, field hockey, track and field facilities, tennis courts, outdoor basketball areas, gymnasium, auditorium.		
Marshwood Middle School	24-9	13	2 ballfields, 1 football field, 1 multipurpose field, 1 gymnasium, track and field facility.		

PRIVATELY OWNED FACILITIES					
Area	Tax Map/Lot	Acres	Facilities	Comment	
Rod and Gun Club	1-14 Route 236	46.5	Building and land, target range	Owned by Rod and Gun Club	
Hamilton House	6-2 Vaughn's Lane and Salmon Falls River	35	House tours, garden walk	Owned by Historic New England	
Jewett House	28-78 Portland Street	1.2	House tours	Owned by Historic New England	
Jewett-Eastman Memorial	28-78A Portland Street	0.46	Library	Jewett-Eastman Memorial Committee	

Counting House Meeting Place	25-4 Liberty Street	0.09	Building	Owned by Olde Berwick Historical Society
Berwick Academy	26-14 through 26-17 Academy Street, Wadleigh Lane	73.5	Athletic fields for soccer, lacrosse, field hockey, baseball, softball, cross country trails, 6 tennis courts, 1 gymnasium and field house, 1 banquet hall, 1 outdoor basketball court	Owned by Berwick Academy Trustees
Spring Hill Recreation Area	12-47 Knights Pond Road	81	Banquet rooms, beach/swimming area, picnic tables, bath house	Owned by Spring Hill Corp.
Outlook Golf Course	Nov-32	95 (South Berwick & Berwick)	18 hole golf course with driving range	
Federated Church	28-2	,	Meeting area	

OTHER FACILI TIES					
Area	Tax Map/Lot	Acres	Facilities	Comment	
Vacant	30-19	4	Town of Rollinsford		
Vacant	2-6	100	GWRLT	York Pond Cons. Area	
Vacant	2-35	15	TNC	Mt. A. Cons. Area	
Vacant	2-36	10	GWRLT	Mt. A. Cons. Area	
Vacant	2-43	23	GWRLT	Mt. A. Cons. Area	
Vacant	3-47A	10	GWRLT	Mt. A. Cons. Area	
Vacant	4-44	11	GWRLT	Mt. A. Cons. Area	
Vacant	4-47	10	GWRLT	Mt. A. Cons. Area	
Vacant	5-14	96	GWRLT	Mt. A. Cons. Area	
Vacant	9-33	22	Black Swan	Open space from subdivision	
Vacant	10-26	97	GWRLT	Mt. A. Cons. Area	
Vacant	10-27A	15	GWRLT	Mt. A. Cons. Area	
Vacant	44879	1.6	SB Water District	Watershed protection	
Vacant	44880	41	SB Water District	Watershed protection	
Well site	12-37A	17	SB Water District	Watershed protection	
Vacant	12-37-004	9	SB Water District	Watershed protection	
Vacant	14-42	13	GWRLT	Mt. A Cons. Area	

Vacant	22-1	7.6	Historic New England	Waterfront
Vacant	23-47	2	GWRLT	Waterfront
Vacant	23-7 B-9	12	Portsmouth Housing Foundation	Open space from subdivision
Buildings	25-2	5.6	SB Sewer District	Treatment facilities adjacent to Counting House Park
Building	26-2	3	SB Water District	Water storage
Sport field	32-105	3.4	Old Mill Comm. Assn.	Open space from subdivision
Vacant	32-106	3	Old Mill Comm. Assn.	Open space from subdivision
Pool & tennis	32-107	3.7	Old Mill Comm. Assn.	Recreational land from subdivision
Vacant	32-108	10	Old Mill Comm. Assn.	Open space from subdivision
Vacant	32-109	3.3	Old Mill Comm. Assn.	Open space from subdivision
Vacant	32-110	7	Old Mill Comm. Assn.	Open space from subdivision
Vacant	34-63	9	SB Water District	Watershed protection

# Recreation Facilities By Type

HISTORIC SITES					
Name Acres Ownership Comment					
Hamilton House	35	Private	House tours, garden walk		
Sarah Orne Jewett House	1.2	Private	House tours		
Eastman House/Public Library	0.46	Private	Public library		
Olde Berwick Historical Society County House	0.09	Private	Meeting place, historical exhibits		

BALLFIELDS				
Name	Acres	Ownership	Comment	
Town of South Berwick – Willow Drive	2	Town	2 Little League fields, 1 softball field	
Marshwood Great Works School		MSAD 35	1 ballfield	
Marshwood High School	51	MSAD 35	1 ballfield-regulation size, 1 softball field	
Marshwood Middle School	2	MSAD 35	1 ballfield (minor league, softball size), 1 multi- purpose field (soccer)	

Berwick Academy	73.5	Private	1 ballfield-regulation size
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PLAYGROUNDS				
Name Acres Ownership Comment				
Berwick Academy		Private	Various apparatus	
Central School		MSAD 35	Various apparatus	
Shoetown Playground		Town	Designed for ages 2-5	

TENNIS COURTS				
Name Acres Ownership Comment				
Marshwood High School	50	MSAD 35	5 tennis courts	
Berwick Academy	2	Private	6 tennis courts (leased land) open to town citizens at scheduled times	

GYMNASIUMS					
Name Acres Ownership Comment					
Central School		MSAD 35	1 gymnasium		
Marshwood Great Works School		MSAD 35	1 gymnasium		
Marshwood Middle School		MSAD 35	1 gymnasium		
Marshwood High School		MSAD 35	1 gymnasium		
Berwick Academy		Private	Gymnasium and field house		

BASKETBALL COURTS- OUTDOORS					
Name	Acres	Ownership	Comment		
Berwick Academy		Private	2 hoops		
Marshwood High School		MSAD 35	4 hoops in stadium parking area		
Powder House Hill		Town	2 hoops		
BASK	BASKETBALL COURTS - INDOORS				
Name	Acres	Ownership	Comment		
Berwick Academy		Private	1 court plus 3 potential in Field House		
Central School		MSAD 35	1 court		
Marshwood Great Works School		MSAD 35	1 court		

Marshwood Middle School	MS	AD 35	1 court
Marshwood High School	MS	AD 35	1 court

HIKING/CROSS COUNTRY TRAILS			
Name Acres Ownership Comment			
Town Forest		Town	Several trails for walking/hiking
Vaughn Woods State Park	165	State	12 picnic tables, 5 trails, grills, outhouses

REST AREAS/SCENIC PARKS				
Name Acres Ownership Comment				
Town Landing at William Bray Park	3	Town	Waterfront rest/picnic area	
Chicks Brook Park		Town	Rest Area	
Town Hall		Town	4 benches, rest area	