SOMERS WATER & SEWER DISTRICT, MONTANA
STATEMENT OF CASH FLOWS -
PROPRIETARY FUND TYPES
For the Year Ended June 30, 2021

	Water	Sewer	Total
Cash flows from operating activities			
Cash received from providing services	$ 533,333	$ 276,622	$ 809,955
Cash received from miscellaneous sources	22,050	453	22,503
Cash payment to suppliers	(381,028)	(17,980)	(399,008)
Cash payments for fixed charges	(3,546)	(3,126)	(6,672)
Cash payments for professional services	(38,574)	(97,235)	(135,809)
Cash payments to employees	(58,175)	(58,185)	(116,360)
Net cash provided by operating activities	74,060	100,549	174,609
Cash flows from capital and related financing activities			
Acquisition and construction of capital assets	(1,003,160)	-	(1,003,160)
Principal paid on debt	(29,289)	-	(29,289)
Interest paid on debt	(4,023)	(20)	(4,043)
Proceeds from bonds, loans, and advances	1,640,693	10,289	1,650,982
Net cash provided by capital and related financing activities	604,221	10,269	614,490
Cash flows from non-capital financing activities			
Due from other governments	(615,690)	1,068	(614,622)
Cash flows from investing activities			
Interest on investments	1,107	4,236	5,343
Net increase in cash and cash equivalents	63,698	116,122	179,820
Cash and cash equivalents, beginning of year	138,272	615,227	753,499
Cash and cash equivalents, end of year	$ 201,970	$ 731,349	$ 933,319
Cash and cash equivalents consists of:			
Cash and cash equivalents	$ 181,352	$ 731,349	$ 912,701
Restricted cash and cash equivalents	20,618	-	20,618
Cash and cash equivalents, end of year	$ 201,970	$ 731,349	$ 933,319
Reconciliation of operating income to net cash provided by operating activities			
Operating income	$ 19,024	$ 26,923	$ 45,947
Adjustments to reconcile operating income to net cash provided (used) by operating activities:			
Depreciation	57,969	68,423	126,392
Changes in assets and liabilities:			
Change in accounts receivable	(9,576)	2,176	(7,400)
Change in deferred outflows	(10,132)	(10,132)	(20,264)
Change in pension liability	16,334	16,335	32,669
Change in accrued payables	-	(3,597)	(3,597)
Change in accrued payroll	20	-	20
Change in deferred inflows	421	421	842
Net cash provided by operating activities	$ 74,060	$ 100,549	$ 174,609

See notes to financial statements.

SOMERS WATER & SEWER DISTRICT, MONTANA
STATEMENT OF NET POSITION -
FIDUCIARY FUNDS
June 30, 2021

	Total Custodial Funds
ASSETS	
Cash and short-term investments	$ 23,882
Total assets	$ 23,882
LIABILITIES	
Due to others (unremited)	$ 23,882
Total liabilities	$ 23,882

See notes to financial statements.

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The financial statements have been prepared in accordance with accounting principles generally accepted as applied to governmental units. The Governmental Accounting Standards Board (GASB) is the accepted standard-setting body of governmental accounting and financial reporting principles.

Reporting entity

The District is a political subdivision of the State of Montana, governed by a board of trustees duly elected by the registered voters within the District. The District is considered a primary government because it is a general purpose local government. Further, it meets the following criteria: (a) it has a separately elected governing body, (b) it is legally separate, and (c) it is fiscally independent from the State and other local governments.

Measurement focus, basis of accounting, and financial statement presentation

The District's financial statements are reported using the economic resources measurement focus and the accrual basis of accounting for all financial statements. Revenues are recorded when earned and expenses are recorded when a liability is incurred, regardless of the timing of the related cash flows. Grant and similar items are recognized as revenue as soon as all eligibility requirements are imposed by the provider have been met.

The government reports the following major proprietary funds:

- *Water fund* - An enterprise fund that accounts for the activities of the District's water distribution operations.
- *Sewer fund* - An enterprise fund that accounts for the activities of the District's sewer collection and treatment operations and includes the storm sewer system.

Additionally, the government reports the following fund types:

- *Fiduciary funds* - Used to account for assets held by the District in a trustee capacity or as an agent for individuals, private organizations, other governments, and/or other funds.

The Governmental Accounting Standards Board (GASB) issued Statements No. 62. The Statement codifies the requirement of all pre-November 30, 1989 FASB and AICPA pronouncements that apply to state and local governments. The proprietary fund financial statements follow the guidance of the Governmental Accounting Standards Board. The District can continue to apply, as other accounting literature, post-November 30, 1989 FASB procurements that do not conflict with or contradict GASB pronouncements, including Statement No. 62. The District has adopted the provisions of GASB Statement No. 62.

As a general rule the effect of interfund activity has been eliminated from the financial statements. Exceptions to this general rule are charges between the enterprise functions. Elimination of these charges would distort the direct costs and program revenues reported for the various functions.

Amounts reported as program revenues include: 1) charges to customers for goods, services, or privileges provided, 2) operating grants and contributions, and 3) capital grants and contributions. Internally dedicated resources are reported as general revenues rather than program revenues.

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Measurement focus, basis of accounting, and financial statement presentation (continued)

Proprietary funds distinguish operating revenues and expenses from nonoperating items. Operating revenues and expenses generally result from providing services and producing and delivering goods in connection with a proprietary fund's principal ongoing operations. The principal operating revenues of the enterprise funds and the government's internal service funds are charges to the customer for services provided. Operating expenses for enterprise funds and internal service funds include the cost of providing such services and the depreciation of capital assets. All revenues and expenses not meeting this definition are reported as nonoperating revenues and expenses.

Deposits and investments

Allowable deposits and investments of public funds is governed by Title 7, Chapter 6, part 2 of the Montana Code Annotated (MCA). Deposits and investments may include demand, time, and savings deposits, direct obligations of the Untied States Government, securities issued by agencies of the United States, investments in the Montana Short-Term Investment Program (STIP), repurchase agreements, and registered warrants.

Cash equivalents are short-term, highly liquid investments that are both readily convertible to known amounts of cash, and have maturities at purchase date of three months or less. The cash and cash equivalents (including restricted assets) are considered to be cash on hand, demand, savings and time deposits, STIP and all short-term investments with original maturity dates of three months or less from the date of acquisition.

Investments, with limited exceptions, are reported at fair value. Investments in nonparticipating certificates of deposit are reported at cost. Money market investments, including U.S. Treasury and Agency obligations, that mature within one year of acquisition are reported at amortized cost. Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participation at the measurement date. Fair value is determined annually and requires the use of valuation techniques, a specific method or combination of methods using one or more of three approaches: market, cost, or income approach.

Receivables and payables

Activity between funds that are representative of lending/borrowing arrangements outstanding at fiscal year end are referred to as either "due to/from other funds" (i.e. the current portion of interfund loans) or "advances to/from other funds" (i.e. the non-current portion of interfund loans). Advances between funds are not available for appropriation and are not expendable available financial resources.

Accounts receivable are shown net of allowance for uncollectible.

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Restricted assets

Certain assets of the enterprise funds are restricted for specific use as required by the bond indenture agreement covenants established with the issuance and sale of the revenue bonds representing a liability to the enterprise funds. These restricted assets represent cash and cash equivalents restricted for use to pay current debt, establish a reserve for future debt, and they establish a replacement and depreciation reserve for the purpose of replacing the system in the future.

Capital assets

Capital assets, which include property, plant, equipment, and infrastructure assets, are reported in the applicable business-type activities columns in the government-wide financial statements. The District has not adopted a capitalization policy.

The costs of normal maintenance and repairs that do not add to the value of the asset or materially extend assets lives are not capitalized.

Deferred outflows of resources

Deferred outflows of resources is a financial statement element. A deferred outflow of resources is a consumption of net assets by the government that is applicable to a future reporting period. The proprietary fund statement of net position reports a separate section for deferred outflows of resources. Deferred outflows of resources may be disclosed on the face of the financial statements, in the notes to the financial statements, or a combination of both.

Long-term obligations

In the proprietary fund types in the fund financial statements, long-term debt and other long-term obligations are reported as liabilities in the applicable business-type activities, or proprietary fund type statement of net position. Bond premiums and discounts, as well as issuance costs, are deferred and amortized over the life of the bond issue using the effective interest method. Bonds payable are reported net of the applicable bond premium or discount. Bond issuance costs are reported as deferred charges and amortized over the term of the related debt.

Deferred inflows of resources

Deferred inflows of resources is an acquisition of net assets by the government that is applicable to a future reporting period. The proprietary fund statement of net position reports a separate section for deferred inflows of resources. Deferred inflows of resources may be disclosed on the face of the financial statements, in the notes to the financial statements, or a combination of both.

New accounting pronouncements

The District adopted Governmental Accounting Standard Board (GASB) Statement No. 84, "Fiduciary Activities". Management assessed the impact of this statement and concluded that no restatement was necessary when implementing this standard.

2. CASH, CASH EQUIVALENTS, AND INVESTMENTS

Cash on hand and deposits as of June 30, 2021, are as follows:

	Statement of Net Position	Custodial Funds	Total
Cash on hand and deposits:			
Petty cash	$ 300	$ -	$ 300
Cash in banks:			
Demand deposits	206,325	23,882	230,207
Savings deposits	570,684	-	570,684
Time deposits	156,010	-	156,010
Total	$ 933,319	$ 23,882	$ 957,201

Custodial credit risk

Custodial credit risk for deposits is the risk that, in the event of the failure of a depository financial institution, the District will not be able to recover deposits or will not be able to recover pledged (collateral) securities that are in the possession of an outside party. The District does not have a formal deposit policy that addresses custodial credit risk. As of June 30, 2021, the District's bank balance was exposed to custodial credit risk as follows:

Depository account	Amount
Insured	$ 636,265
Uninsured and uncollateralized	320,936
Total deposits and investments	$ 957,201

State law requires the District obtain securities for the uninsured portion of deposits as follows:

(a) 50% of such deposits if the institution in which the deposit is made has a net worth of total assets ratio of 6% or more; or

(b) 100% if the institution in which the deposit is made has a net worth of total assets ratio of less than 6%.

The amount of collateral held for the District's deposits at June 30, 2021, did not meet the amount required by the State statutes.

3. CAPITAL ASSETS

Changes in business-type capital assets for the year ended June 30, 2021, was as follows:

Business-Type Activities:	Balance 07/01/2020	Additions	Deletions	Transfers In/Out	Balance 06/30/2021
Capital assets not being depreciated:					
Land	$ 146,058	$ -	$ -	$ -	$ 146,058
Construction in progress	9,745	1,620,075	-	(9,745)	1,620,075
Total capital assets not being depreciated	155,803	1,620,075	-	(9,745)	1,766,133
Other capital assets:					
Software	14,895	-	-	-	14,895
Machinery and equipment	311,595	-	-	-	311,595
Infrastructure	8,126	-	-	-	8,126
Source of supply	2,131,981	-	-	9,745	2,141,726
Treatment plant	56,262	-	-	-	56,262
Transmission and distribution	2,412,613	-	-	-	2,412,613
General plant	6,185	-	-	-	6,185
Total other capital assets at historical cost	4,941,657	-	-	9,745	4,951,402
Less: accumulated depreciation	(2,735,940)	(126,392)	-	-	(2,862,332)
Total	$ 2,361,520	$ 1,493,683	$ -	$ -	$ 3,855,203

4. LONG TERM DEBT OBLIGATIONS

During the fiscal year the District issued $1,640,693 of new revenue bonds. $500,000 is expected to be forgiven when the water improvements are completed.

Changes in long-term obligations for the year ended June 30, 2021, was as follows:

Business-Type Activities:	Balance 07/01/2020	Additions	Deletions	Balance 06/30/2021	Due Within One Year
Revenue bonds	$ -	$ 1,640,693	$ (19,000)	$ 1,621,693	$ 540,000
Net pension liability	37,737	-	-	37,737	-
Total	$ 37,737	$ 1,640,693	$ (19,000)	$ 1,659,430	$ 540,000

4. LONG TERM DEBT OBLIGATIONS (Continued)

Business-type activities debts are paid as follows:

- Revenue bonds are paid out of the Water fund.
- The remaining debt is allocated between the Water and Sewer Funds based on salaries paid out of those funds.

Management has assessed that the District is in compliance with the terms of the debt agreements. If the District was not able to meet the debt agreement requirement it is expected that the State would provide management oversite of the District's financial operations.

Revenue bonds - The District issues bonds where the District pledges income derived from the acquired or constructed assets to pay debt service. Revenue bonds outstanding, net of an unamortized premium at year-end, were as follows:

Purpose	Origination Date	Interest Rate	Bond Term	Maturity Date	Bond Amount	Annual Payment	Balance 06/30/2021
Tank bond A (forgivable)	04/21/2021	2.5%	13 yrs	07/01/34	$ 866,000	Varies	$ 500,000
Tank bond B	04/21/2021	2.5%	30 yrs	01/01/51	1,666,000	Varies	1,121,693
Total					$ 2,532,000		$ 1,621,693

Revenue bond resolution includes various restrictive covenants. The more significant covenants include: 1) require that cash be restricted and reserved for operations, construction, debt service, and replacement and depreciation; 2) specify minimum required operating revenue; and 3) specific and timely reporting of financial information to bond holder and the registrar. If found to be out of compliance with loan covenants or payment requirements, a corrective action plan may be required by the lender.

Annual requirement to amortize debt:

For Year Ended June 30,	Principal	Interest	Total
2022	$ 40,000	$ 40,925	$ 80,925
2023	40,000	39,925	79,925
2024	42,000	38,913	80,913
2025	42,000	37,863	79,863
2026	44,000	36,800	80,800
2027-2031	232,000	167,075	399,075
2032-2036	259,000	136,588	395,588
2037-2041	292,000	102,413	394,413
2042-2046	325,000	64,075	389,075
2047-2051	305,693	20,638	326,331
Total	$ 1,621,693	$ 685,215	$ 2,306,908

5. INTERFUND RECEIVABLES AND PAYABLES

There are long-term interfund receivables and payables to cover negative cash balances. During the year ended June 30, 2021, the following changes occurred:

Receivable/Payable	Balance 07/01/2020	Additions	Deletions	Balance 06/30/2021	Due Within One Year
To sewer fund from water fund	$ 213,227	$ -	$ (10,289)	$ 202,938	$ 10,444

Loan to cover operations:

Origination Date	Interest Rate	Terms	Maturity Date	Principal Amount	Annual Payment	Balance 06/30/2021
Unknown	1.56%	20 years	08/01/2038	$ 231,227	$ 13,416	$ 202,938

Annual requirement to amortize debt:

For Year Ended June 30,	Principal	Interest	Total
2022	$ 10,444	$ 2,972	$ 13,416
2023	10,602	2,814	13,416
2024	10,761	2,655	13,416
2025	10,924	2,492	13,416
2026	11,089	2,327	13,416
2027-2031	58,009	9,071	67,080
2032-2036	62,524	4,556	67,080
2037-2038	28,585	1,043	29,628
Total	$ 202,938	$ 27,930	$ 230,868

6. NET PENSION LIABILITY

This disclosure was prepared based on the June 30, 2020, measurement date to prepare the reports for the June 30, 2021, fiscal year.

Plan descriptions

PERS
The PERS-Defined Benefit Retirement Plan (DBRP), administered by the Montana Public Employee Retirement Administration (MPERA), is a multiple-employer, cost-sharing plan established July 1, 1945, and governed by Title 19, chapters 2 & 3, Montana Code Annotated (MCA). The plan covers the State, local governments, certain employees of the Montana University System, and school districts. Benefits are established by state law and can only be amended by the Legislature.

All new members are initially members of the PERS-DBRP and have a 12-month window during which they may chose to remain in the PERS-DBRP or join the PERS-DCRP by filing an irrevocable election. Members may not be participants of both the *defined contribution* and *defined benefit* retirement plans. All new members from the universities also have a third option to join the university system's Montana University System Retirement Program (MUS-RP).

6. NET PENSION LIABILITY (CONTINUED)

Plan descriptions (Continued)

The PERS-DBRP provides retirement, disability, and death benefits to plan members and their beneficiaries. Benefits are based on eligibility, years of services, and highest average compensation (HAC). Member rights are vested after five years of services.

Summary of benefits

Eligibility for Benefits	
Service retirement:	
Hired prior to July 1, 2011:	Age 60, 5 years of membership services; Age 65, regardless of membership service; or Any age, 30 years of membership service.
Hired on or after July 1, 2011:	Age 65, 5 years of membership service; Age 70, regardless of membership services.
Early Retirement	
Early retirement, actuarially reduced:	
Hired prior to July 1, 2011:	Age 50, 5 years of membership service; or Any age, 25 years of membership service.
Hired on or after July 1, 2011:	Age 55, 5 years of membership service.

Second retirement (requires returning to PERS-covered employer or PERS services):

1) Retired before January 1, 2016, and accumulate less then 2 years additional service credit or retire on or after January 1, 2016, and accumulate less than 5 years additional service credit:
   a. A refund of member's contributions plus return interest (currently 2.02% effective July 1, 2018).
   b. No service credit for second employment;
   c. Start the same benefit amount the month following termination; and
   d. Guaranteed Annual Benefit Adjustment (GABA) starts again in the January immediately following the second retirement.
2) Retire before January 1, 2016, and accumulate at least 2 years of additional service credit:
   a. A recalculated retirement benefit based on provisions in effect after the initial retirement; and
   b. GABA starts on the recalculated benefit in the January after receiving and new benefit from 12 months.
3) Retire on or after January 1, 2016, and accumulate 5 or more years of service credit:
   a. The same retirement as prior to the return to services;
   b. A second retirement benefit as prior to the second period of service based on laws in effect upon the rehire date; and
   c. GABA stats on both benefits in the January after receiving the original and the new benefit for 12 months.

6. NET PENSION LIABILITY (CONTINUED)

Summary of benefits (continued)

Vesting

5 years of membership service

Member's highest average compensation (HAC)

Hired prior to July 1, 2011 - highest compensation during any consecutive 36 months;
Hired on or after July 1, 2011 - highest average compensation during any consecutive 60 months.

Compensation cap

Hired on or after July 1, 2013 - 110% annual cap on compensation considered as part of a member's highest average compensation.

Monthly benefit formula

Members hired prior to July 1, 2011:

- Less than 25 years of membership service: 1.785% of HAC per year of service credit;
- 25 years of membership service or more: 2% of HAC per year of service credit.

Members hired on or after July 1, 2011:

- Less than 10 years of membership service: 1.5% of HAC per year of service credit;
- 10 years or more, but less than 30 years of membership service: 1.785% of HAC per year of service credit;
- 30 years or more of membership service: 2% of HAC per year of service credit.

Guaranteed Annual Benefit Adjustment (GABA)

After the member has completed 12 full months of retirement, the member's benefit increases by the applicable percentage (provided below) each January, inclusive of other adjustments to the member's benefits.

- 3% for members hired prior to July 1, 2007
- 1.5% for members hired between July 1, 2007 and June 30, 2013
- Members hired on or after July 1, 2013:
    - 1.5% for each year PERS is funded at or above 90%;
    - 1.5% is reduced by 0.1% for each 2% PERS is funded below 90%; and
    - 0% whenever the amortization period for PERS is 40 years or more.

6. NET PENSION LIABILITY (CONTINUED)

Overview of contributions

Rates are specified by state law for periodic member and employer contributions and are a percentage of the member's compensation. Contributions are deducted from each member's salary and remitted by participating employers. The Montana legislature has the authority to establish and amend contribution rates to the plan. Member and employer contribution rates are shown in the table below:

1. Member contributions to the system of 7.9% are temporary and will be decreased to 6.9% on January 1 following actuary valuation results that show the amortization period has dropped below 25 years and would remain below 25 years following the reduction of both the additional employer and additional members contribution rates.

2. Employer contribution to the system:

    a) Effective July 1, 2014, following the 2013 Legislative Session, PERS-employer contributions increase an additional 0.1% a year and will continue over 10 years through 2024. The additional employer contributions including the 0.27% added in 2007 and 2009, will terminate on January 1 following an actuary valuation that shows the amortization period of the PERS-DBRP has dropped below 25 years and remains below the 25 years following the reduction of both the additional employer and member contributions rates.

    b) Effective July 1, 2013, employers are required to make contributions on working retirees' compensation. Member contributions for working retirees are not required.

    c) The Plan Choice Rate (PCR), that directed a portion of employer contributions for members to the PERS defined benefit plan, are included in the employers reporting. The PCR was paid off effective March 2016, and the contributions previously directed to the PCR are now directed to member accounts.

3. Non-employer contributions:
    a) Special funding

        i) The State contributes 0.10% of members' compensation on behalf of local government entities.

        (ii) The State Contributes 0.37% of members' compensation on behalf of school district entities.

        (iii) The State contributed a Statutory Appropriation from the General Fund of $33,951,150.

    b) Not special funding

        i) The State contributes from the Coal Severance income and earnings from the Coal Trust Permanent Trust fund.

6. NET PENSION LIABILITY (CONTINUED)

Overview of contributions (continued)

Fiscal Year	Member Hired <7/01/11	Member Hired >7/01/11	State & Universities Employer	Local Government Employer	Local Government State	School Districts Employer	School Districts State
2021	7.9%	7.9%	8.870%	8.770%	0.10%	8.50%	0.370%
2020	7.9%	7.9%	8.770%	8.670%	0.10%	8.40%	0.370%
2019	7.9%	7.9%	8.670%	8.570%	0.10%	8.30%	0.370%
2018	7.9%	7.9%	8.570%	8.470%	0.10%	8.20%	0.370%
2017	7.9%	7.9%	8.470%	8.370%	0.10%	8.10%	0.370%
2016	7.9%	7.9%	8.370%	8.270%	0.10%	8.00%	0.370%
2015	7.9%	7.9%	8.270%	8.170%	0.10%	7.90%	0.370%
2014	7.9%	7.9%	8.170%	8.070%	0.10%	7.80%	0.370%
2012-2013	6.9%	7.9%	7.170%	7.070%	0.10%	6.80%	0.370%
2010-2011	6.9%	-%	7.170%	7.070%	0.10%	6.80%	0.370%
2008-2009	6.9%	-%	7.035%	6.935%	0.10%	6.80%	0.235%
2000-2007	6.9%	-%	6.900%	6.800%	0.10%	6.80%	0.100%

Stand-alone statements

The financial statements of the Montana Public Employees' Retirement Board's (PERB) Comprehensive Annual Financial Report (CAFR) and the GASB 68 Report disclose the Plan's fiduciary net position. The reports are available from the PERB at P.O. Box 200131, Helena, Montana 59620-0131 Phone: 1-406-444-3154 or the MPERA website at http://mpera.mt.gov/index.shtml.

Net pension liability

In accordance with GASB Statement 68, *Accounting and Financial Reporting for Pensions*, employers and the non-employer contributing entity are required to recognize and report certain amounts associated with their participation in the Public Employee's Retirement System Defined Benefit Retirement Plan (the Plan). Employers are required to record and report their proportionate share of the collective Net Pension Liability (NPL), Pension Expense, Deferred Inflows and Deferred Outflows of resources associated with pensions.

The Total Pension Liability (TPL) minus the Fiduciary Net Position equals the Net Pension Liability (NPL). As GASB Statement 68 allows, a measurement date of up to 12 months before the employer's fiscal year-end can be utilized to determine the Plan's TPL. The basis for the TPL as of June 30, 2021, was determined by taking the results of the June 30, 2020, actuarial valuation and applying standard roll forward procedures. The roll forward procedure used a calculation that adds the annual normal cost (also called the services cost), subtracts the actual benefit payments and refunds for the plan year, and then applies the expected investment rate of return for the year. The update procedures are in conformity with Actuarial Standards of Practice issued by the Actuarial Standards Board.

Special funding

The State of Montana, as the non-employer contributing entity, paid the Plan additional contributions that qualify as special funding. Those employers who received special funding are all participating employers.

6. NET PENSION LIABILITY (CONTINUED)

Net pension liability (continued)

Not special funding

Per Montana law, state agencies and universities paid their own additional contributions. These employer paid contributions are not accounted for as special funding for state agencies and universities but are reported as employer contributions.

	NPL as of 06/30/2021	NPL as of 06/30/2020	Percent of Collective NPL as of 06/30/2021	Percent of Collective NPL as of 06/30/2020	Change in Percent of Collective NPL
Employer's Proportionate Share	$ 37,737	$ 5,067	0.001430 %	0.000242 %	(0.001188)%
State of Montana Proportionate Share Associated with the Employer	12,852	2,393	0.000487 %	0.000114 %	0.000373 %
Total	$ 50,589	$ 7,460	0.001917 %	0.000356 %	(0.000815)%

The table above displays the employer proportionate share of the NPL and the employer's proportion of NPL for June 30, 2020 and 2021. The employer's proportion of the NPL was passed on the employer's contributions received by PERS during the measurement period July 1, 2019 through June 30, 2020, relative to the total employer contributions received from all PERS' participating employers. As of the employer's reporting date the employer recorded a liability of $37,737 and the employer's proportionate share was 0.001430%.

Changes in actuarial assumptions and methods

The following changes in assumptions or other inputs that affected the measurement of the TPL.

1. The discount rate was lowered from 7.65% to 7.34%
2. The investment rate of return was lowered from 7.65% to 7.34%
3. The inflation rate was reduced from 2.75% to 2.40%

Changes in benefit terms

There have been no changes in the benefit terms since the previous measurement date.

Changes in proportionate share

There were no changes between the measurement date of the collective NPL and the employer's reporting date that are expected to have a significant effect on the employer's proportionate share of the collective NPL.

6. NET PENSION LIABILITY (CONTINUED)

Pension expense PERS

	Pension Expense as of 06/30/2021	Pension Expense as of 06/30/2020
Employer's proportionate share of PERS	$ 15,436	$ 2,251
State of Montana proportionate share associated with the employer	2,102	162
Total	$ 17,538	$ 2,413

At June 30, 2021, the employer recognized its proportionate share of the PERS' Pension Expense of $15,436. The employer also recognized grant revenue of $2,102 for the support provided by the State of Montana for its proportionate share of the pension expense that is associated with the employer.

Deferred inflows and outflows

At June 30, 2021, the employer reported its proportionate share of PERS' deferred outflows of resources and deferred inflows of resources related to PERS from the following sources:

	PERS Deferred Outflows of Resources	PERS Deferred Inflows of Resources	Total Deferred Outflows of Resources	Total Deferred Inflows of Resources
Expected vs. actual experience	$ 609	$ 1,080	$ 609	$ 1,080
Projected investment earnings vs. actual investment earnings	3,268	-	3,268	-
Changes in assumptions	2,613	-	2,613	-
Changes in proportion and differences between employer contributions and proportionate share of contributions	17,087	-	17,087	-
Employer contributions subsequent to the measurement date	7,455	-	7,455	-
Total	$ 31,032	$ 1,080	$ 31,032	$ 1,080

Other amounts reported as deferred outflows and inflows of resources related to pensions will be recognized in pension expense as follows:

PERS: as of June 30,	Amount of deferred outflows and deferred inflows recognized in future years as an increase to Pension Expense
2021	$ 10,647
2022	$ 9,893
2023	$ 1,142
2024	$ 816
Thereafter	$ -

6. NET PENSION LIABILITY (CONTINUED)

Actuarial assumptions

The Total Pension Liability (TPL) used to calculate the Net Pension Liability (NPL) was determined by an actuarial valuation as of June 30, 2019, with updated procedures to roll forward the TPL to June 30, 2020. There were several significant assumptions and other inputs used to measure the TPL. The actuarial assumptions used in the June 30, 2020, valuation were based on the results of the last actuarial experience study, dated June 2010 for the six year period July 1, 2010 to June 30, 2016. Among those assumptions were the following:

General Wage Growth*	3.50%
*Includes Inflation at	2.40%
Merit Increases - PERS	0% to 4.80%
Investment Return (net of admin expense)	7.34%
Admin Expense as % of Payroll	0.30%

Guaranteed Annual Benefit Adjustment (GABA)

After the member has completed 12 full months of retirement, the member's benefit increases by the applicable percentage each January, inclusive of other adjustments to the member's benefit.

- 3% for members hired prior to July 1, 2007
- 1.5% for members hired between July 1, 2007 and June 30, 2013
- Members hired on or after July 1, 2013:

* 1.5% for each year PERS is funded at or above 90%;
* 1.5% is reduced by 0.1% for each 2% PERS is funded blow 90%; and
* 0% whenever the amortization period for PERS is 40 years or more.

Mortality assumptions among contributing members, terminated vested members, service retired members and beneficiaries are based on RP 2000 Combined Employee and Annuitant Mortality Tables projected to 2020 with scale BB, males set back 1 year.

Mortality assumptions among disabled retirees are based on RP 2000 Combined Mortality Tables with no projections.

Discount rate

The discount rate used to measure the Total Pension Liability was 7.34%. The projection of cash flows used to determine the discount rate assumed that contributions from participating plan members, employers, and non-employer contributing entities will be made based on the Board's funding policy, which establishes the contractually required rates under Montana Code Annotated. The State contributes 0.10% of salaries for local government and 0.37% for school districts. Based on those assumptions, the Plan's fiduciary net position was projected to be adequate to make all the projected future benefit payments of current plan members through the year 2123. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the Total Pension Liability. A municipal bond rate was not incorporated in the discount rate.

6. NET PENSION LIABILITY (CONTINUED)

Target allocations

The long-term expected return on pension plan assets is reviewed as part of the regular experience study prepared for the Plan. The experience study, performed for the periods covering fiscal years 2011 through 2016, is outlined in a report dated May 2017 and is located on the MPERA website. The long-term expected rate of return on was calculated using the averages long-term capital market assumptions published in the *Survey of Capital Market Assumptions 2020 Edition by Horizon Actuarial Service, LLC*, yielding a median real rate of return of 4.94%. The assumed inflation is based on the intermediate inflation of 2.4% in the *2020 OASDI Trustees Report* by the Chief Actuary for Social Security to produce 75-year cost projections. Combining these two results yields a nominal return of 7.34%. Best estimates of the arithmetic real rates of return for each major asset class included in the target asset allocation as of June 30, 2020.

Asset Class	Target Asset Allocation	Long-Term Expected Real Rate of Return Arithmetic Basis
Cash equivalents	2.00 %	0.11%
Domestic equity	30.00 %	6.19%
International equity	16.00 %	6.92%
Private investments	14.00 %	10.37%
Natural resources	4.00 %	3.43%
Real estate	9.00 %	5.74%
Core fixed income	20.00 %	1.57%
Non-core fixed income	5.00 %	3.97%
Total	100.00 %	

Sensitivity analysis

	1.0% Decrease (6.34%)	Current Discount Rate	1.0% Increase (8.34%)
Employer's net pension liability	$ 51,943	$ 37,737	$ 25,805

The above table presents the Net Pension Liability calculated using the discount rate of 7.34%, as well as what the Net Pension Liability would be if it were calculated using a discount rate that is 1.00% lower or 1.00% higher than the current rate. This is to show that even small changes in the discount rate can significantly impact the liability.

6. NET PENSION LIABILITY (CONTINUED)

Summary of significant accounting policies

The Montana Public Employee Retirement Administration (MPERA) prepares its financial statements using the accrual basis of accounting. For the purposes of measuring the Net Pension Liability, deferred inflows of resources and deferred outflows of resources related to pensions, pension expense, information about the fiduciary net position and additions to/deductions from fiduciary net position have been determined on the same accrual basis as they are reported by MPERA. For this purpose, member contributions are recognized in the period in which contributions are due. Employer contributions are recognized when due and the employer has made a formal commitment to provide the contributions. Revenues are recognized in the accounting period they are earned and become measurable. Benefit payments and refunds are recognized in the accounting period when due and payable in accordance with the benefit terms. Expenses are recognized in the period incurred. Investments are reported at fair value. MPERA adheres to all applicable Governmental Accounting Standards Board (GASB) statements.

7. INTERLOCAL COOPERATIVE AGREEMENT

The District and Lakeside County Water and Sewer District (Lakeside District) entered into an interlocal cooperative agreement in February 1993 where the Lakeside District will provide sewer treatment service to the District. The agreement was amended in November 2012, effective for fifty years. The District may expand sewer service within its boundaries and may annex additional properties outside its boundaries with the Lakeside District's approval. The amendment includes a rate of $2 per 1000 gallons of effluent for treatment services with an additional base rate of $6.42 for capital investments. The amendment provides the method for adjusting rates.

8. NET POSITION

The proprietary fund financial statements report net position. Net position represents the difference between assets plus deferred outflows of resources and liabilities plus deferred inflows of resources. Components of net position are net investment in capital assets, restricted and unrestricted. Net investment in capital assets consists of capital assets, net of accumulated depreciation, plus capital related deferred outflows of resources, less outstanding balance of any related borrowing used for the acquisition, construction, or improvement of those assets and capital related deferred inflows of resources. Restricted net position is defined as net position that is constrained for specific purposes which are externally imposed. Unrestricted net position is any portion of net position that does not meet the definition of net investment in capital assets and restricted.

9. RISK MANAGEMENT

The District faces a considerable number of risks of loss, including (a) damage to and loss of property and contents, (b) employee torts, (c) professional liability, i.e., errors and omissions, (d) environmental damage, (e) workers' compensation, i.e., employee injuries, and (f) medical insurance costs of employees. Settled claims resulting from these risks have not exceeded commercial insurance coverage in any of the past three fiscal years.

Insurance policies

Commercial policies transferring all risks of loss, except for relatively small deductible amounts are purchased for property and content damage, employees torts, and professional liabilities. Employee medical insurance is provided for by a commercial carrier. And, given the lack of coverage available, the District has no coverage for potential losses from environmental damages.

Insurance pools

The District joined Montana Association of Counties Property & Casualty Trust. These public entity risk pools operate as common risk management and insurance programs for the member governments. The agreements for formation of the pools provide that they will be self-sustaining through member premiums.

10. PRIOR PERIOD ADJUSTMENTS

The District has determined that certain transactions were recorded incorrectly or the application of new accounting standards requires adjustment in a prior year. Below is a description of these changes and the effect on fund balance and net position as applicable.

Proprietary funds

A summary of the changes to the business-type activities are as follows:

Beginning net position business-type activities	$ 3,243,550
Depreciation expense not booked in fiscal year 2020	(126,392)
Close payable that was paid in a prior year	21,582
Retirement liability not booked in prior fiscal years	5,463
Adjusted net position business-type activities	$ 3,144,203

A summary of how the changes effected the beginning fund balances of the proprietary funds are as follows:

- Water fund adjustment increased the net position by $(67,876) from $1,226,478 to $1,158,602.
- Sewer fund adjustment increased the net position by $(31,471) from $2,017,072 to $1,985,601.

11. SUBSEQUENT EVENTS

The District has evaluated subsequent events through May 27, 2022, which is the date the financial statements were available to be issued.

REQUIRED SUPPLEMENTARY INFORMATION

SOMERS WATER & SEWER DISTRICT, MONTANA
SCHEDULE OF PROPORTIONATE SHARE
OF THE NET PENSION LIABILITY
For the Year Ended June 30, 2021

As of measurement date	PERS 2020	PERS 2019	PERS 2018
Employer's proportion of the net pension liability (percentage)	0.001430 %	0.000242 %	0.000000 %
Employer's proportionate share of the net pension liability as an amount	$ 37,737	$ 5,067	$ -
State of Montana's proportionate share of the net pension liability associated with the employer	12,852	2,393	-
Total	$ 50,589	$ 7,460	$ -
Employer's covered payroll	$ 701,066	$ 672,081	$ 734,880
Employer's proportionate share of the net pension liability as a percentage of its covered payroll	157.24 %	126.69 %	0.00 %
Plan fiduciary net position as a percentage of the total pension liability	68.90 %	73.85 %	73.47 %

* *The amounts presented for each fiscal year were determined as of June 30.*

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

SOMERS WATER & SEWER DISTRICT, MONTANA
SCHEDULE OF CONTRIBUTIONS
For the Year Ended June 30, 2021

Report date	PERS 06/30/2021	PERS 06/30/2020	PERS 06/30/2019
Contractually required contributions	$ 7,455	$ 2,103	$ 344
Plan choice rate required contributions	-	-	-
Contributions in relation to the contractually required contributions	$ 7,455	$ 2,103	$ 344
Contributions deficiency (excess)	$ -	$ -	$ -
Employer's covered payroll	$ 83,900	$ 24,000	$ 4,000
Contributions as a percentage of covered payroll	8.886 %	8.763 %	8.600 %

* *The amounts presented for each fiscal year were determined as of June 30.*

Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

1. CHANGES OF BENEFIT TERMS

The following changes to the plan provision were made as identified:

2017 legislative changes:

Working retiree limitations - for PERS

Effective July, 1, 2017, if a PERS retiree returns as an independent contractor to what would otherwise be PERS-covered employment, general contractor overhead costs are excluded from PERS working retiree limitations.

Refunds

- Terminating members eligible to retire may, in lieu of receiving a monthly retirement benefit, refund their accumulated contributions in a lump sum.
- Terminating members with accumulated contributions between $200 and $1,000 who with to rollover their refund must do so within 90 days of termination of service.
- Trusts, estates, and charitable organizations listed as beneficiaries are entitled to receive only a lump-sum payment.

Interest credited to member accounts

Effective July 1, 2017, the interest rate credited to the member accounts increased from 0.25% to 0.77%.

Lump-sum payouts

Effective July 1, 2017, lump-sum payout's in all systems are limited to the member's accumulated contributions rate than the present value of the member's benefit.

Disabled PERS defined contribution (DC) members

PERS members hired after July 1, 2011, have a normal retirement age of 65. PERS DC members hired after July 1, 2011, who became disabled were previously only eligible for a disability benefit until age 65. Effective July 1, 2017, these individuals will be eligible for a disability benefit until they reach 70, thus ensuring the same 5-year time period available to PERS DEC disable members hired prior to July 1, 2011, who have a normal retirement age of 60 and are eligible for a disability benefit unit age 65.

2. CHANGES IN ACTUARIAL ASSUMPTIONS AND METHODS - NET PENSION LIABILITY

Method and assumptions used in calculations of actuarially determined contributions:

The following addition to the Actuarial Assumptions was adopted from the June 30, 2019, actuarial valuation:

General wage growth*	3.50%
Investment rate of return*	7.65%
*Includes inflation at	2.75%
Merit salary increases	0% to 8.47%
Asset valuation method	4-year smoothed market
Actuarial cost method	Entry age normal
Amortization method	Level percentage of pay, open
Remaining amortization period	30 years
Mortality (healthy members)	For males and females: RP 2000 combined employee and annuitant mortality table projected to 2020 using scale BB, males set back 1 year
Mortality (disabled members)	For males and females: RP 2000 combined mortality table, with no projections
Admin expense as % of payroll	0.30%

Administrative expenses are recognized by an additional amount added to the normal cost contribution rate for the System. This amount varies from year to year based on the prior year's actual administrative expenses.

SUPPLEMENTARY INFORMATION

INDEPENDENT AUDITORS' REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH *GOVERNMENT AUDITING STANDARDS*

To the District Trustees
Somers County Water & Sewer District, Montana

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the business-type activities, each major fund, and the aggregate remaining fund information of the Somers County Water & Sewer District, as of and for the year ended June 30, 2021, and the related notes to the financial statements, which collectively comprise the Somers County Water & Sewer District's basic financial statements and have issued our report thereon dated May 27, 2022.

Internal Control over Financial Reporting

In planning and performing our audit of the financial statements, we considered the Somers County Water & Sewer District's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Somers County Water & Sewer District's internal control. Accordingly, we do not express an opinion on the effectiveness of the Somers County Water & Sewer District's internal control.

Our consideration of internal control was for the limited purpose described in the preceding paragraph and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies and therefore, material weaknesses or significant deficiencies may exist that were not identified. However, as described in the accompanying schedule of findings and responses, we did identify certain deficiencies in internal control that we consider to be material weaknesses and significant deficiencies.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. We consider the deficiencies described in the accompanying schedule of findings and questioned costs as items 2021-001 through 2021-003 to be material weaknesses.

A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance. We consider the deficiencies described in the accompanying schedule of findings and responses as items 2021-004 through 2021-008 to be significant deficiencies.

Compliance with Other Matters

As part of obtaining reasonable assurance about whether the Somers County Water & Sewer District's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards* and which are described in the accompanying schedule of findings and responses as findings 2021-007 and 2021-008.

The Somers County Water & Sewer District's Response to Findings

The Somers County Water & Sewer District's response to the findings identified in our audit is described in the accompanying schedule of findings and responses. The Somers County Water & Sewer District's response was not subjected to the auditing procedures applied in the audit of the financial statements and, accordingly, we express no opinion on it.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Junkermier, Clark, Campanella, Stevens, P.C.

Great Falls, Montana
May 27, 2022

SOMERS WATER & SEWER DISTRICT, MONTANA
SCHEDULE OF FINDINGS AND RESPONSES
For the Year Ended June 30, 2021

The following is a schedule of findings and other matters which arose during the audit for the year ended June 30, 2021:

2021-001: PENSION LIABILITY NOT BOOKED (Material Weakness)

CRITERIA

The Government Accounting Standards Board issued statement number 68 Accounting and Financial Reporting for Pensions effective for the District's June 30, 2015, fiscal year. This standard required the pension liability to be reported on the financial statements and certain disclosures to be included with the financial statements.

CONDITION

The District had not evaluated or recorded its pension liability after the retirement plan was adopted.

CAUSE

The District did not appear to be aware of this requirement.

EFFECT

The beginning equity balances were misstated by $5,463. Current year pension liability was understated by $32,670.

RECOMMENDATION

Track and implement guidance provided by the State and consider sending accounting staff to government accounting update classes.

2021-002: DEPRECIATION EXPENSE (Material Weakness)

CRITERIA

Depreciation expense should be booked as part of the year end closing entries.

CONDITION

Depreciation was not booked for fiscal years 2020 and 2021.

CAUSE

The District missed booking this entry as part of their year end closing adjustments.

EFFECT

This resulted in depreciation expense being understated by $126,392 for each year the entry was missed.

RECOMMENDATION

Include depreciation adjustments with the list of year end closing entries.

2021-003: YEAR END ADJUSTMENTS (Material Weakness)

CRITERIA

The accrual basis of accounting requires that expense transactions be recorded when the cost is incurred and reimbursement transactions be recorded when the conditions to receive the reimbursement have been met. This may differ in timing from when the cash is paid and received.

CONDITION

Costs associated with the water system upgrades that were incurred in June were not recorded until paid in July. It also appeared that these expenses met the conditions for reimbursement prior to the June 30 year end and were not recorded as a receivable.

CAUSE

The District did not identify the costs incurred during June 2021 as June 2021 costs.

EFFECT

Construction in progress, receivables, accounts payable, and bonds payable were understated by $616,741. This could result in the fiscal year 2021 progress on the water system upgrades being understated.

RECOMMENDATION

The District should review financial transactions that occur within one month after year end to verify the period the underlying transaction occurred in.

2021-004: OLD LIABILITY ACCOUNTS (Significant Deficiency)

CRITERIA

Each account on the statement of net position should represent an asset owned by the District or a liability owed by the District.

CONDITION

There appeared to be both asset and liability accounts that had been on the books for several years without any changes that are no longer assets or a liabilities of the District.

CAUSE

The District does not appear to be reconciling all of its asset and liability accounts.

EFFECT

This resulted in liabilities being over stated by $21,582.

RECOMMENDATION

The District should evaluate each account on the statement of net position annually to determine if it represents a valid asset or liability of the District. Accounts that no longer meet this criteria should be written off.

2021-005: CUSTOMER ACCOUNTS RECEIVABLE (Significant Deficiency)

CRITERIA

Customer accounts receivable balances should be reconciled to the supporting documentation.

CONDITION

It was found that overall customer accounts receivable matched the supporting documentation. However, further analysis revealed that the water fund was overstated by the same amount that the sewer fund was understated.

CAUSE

It is unknown what caused this difference but it may have occurred when the District changed accounting software.

EFFECT

The water fund customer receivables were overstated by $12,639 and the sewer fund was understated by $12,639.

RECOMMENDATION

Reconcile the utility billing report to the financial records.

2021-006: NEGATIVE FUND BALANCE (Significant Deficiency)

CRITERIA

Funds balances should be a positive number.

CONDITION

Unrestricted fund balance in the water fund had a $7,296 negative balance at the end of the year.

CAUSE

Unknown.

EFFECT

This could result in a delay in the payments of bills.

RECOMMENDATION

Evaluate fund operation periodically to insure that unrestricted funds are available for paying expenditures.

2021-007: RESTRICTED CASH (Significant Deficiency)

CRITERIA

Cash with external restrictions should be accounted for separately from cash that does not have external restrictions.

CONDITION

The District received a distribution of cash associated with the bond taken out to upgrade the water system that is restricted until the bonds mature. The District appropriately recorded the inflow of these fund separately from other funds but did not account for the cash asset in a separate account.

CAUSE

Unknown.

EFFECT

Restricted cash was understated by $20,618. This could result in restricted cash being spent even though the District is required to hold these funds.

RECOMMENDATION

The District should set up a separate account for cash that is externally restricted.

2021-008: MANAGEMENT DISCUSSION AND ANALYSIS (Significant Deficiency)

CRITERIA

Management discussion and analysis is required to be included with the audited financial statements.

CONDITION

Management discussion and analysis was not included with the audited financial statements.

CAUSE

Unknown.

EFFECT

The performance of the the District may be missing context.

RECOMMENDATION

If the District expects to be audited regularly in the future a template for the management discussion and analysis section should be prepared.

SOMERS WATER & SEWER DISTRICT, MONTANA
SCHEDULE OF FINDINGS AND RESPONSES (CONTINUED)
For the Year Ended June 30, 2021

The following is a schedule of findings and the implementation status of those findings which arose during the audit for the years ending June 30, 2020:

Not applicable. Was not required to be audited for the year ended June 30, 2020.

RESOLUTION NO. 051122

A Resolution of the Board of Directors to Acknowledge Receipt of the 2021 Independent Auditor's Report

WHEREAS, the firm of *Junkermier, Clark, Campanella, Stevens, P.C.* has performed a financial audit of the Somers County Water & Sewer District for the year ended in June 30, 2021, and

WHEREAS, a draft report of the audit was presented to the Board of Directors during a regular meeting on March 9, 2022, and

WHEREAS, the Board of Directors and District Manager have reviewed the audit report and recommendations.

NOW THEREFORE, IT IS RESOLVED that the Board of Directors do hereby acknowledge receipt of the audit report and are addressing findings and issues raised in the report.

IN WITNESS WHEREOF, the undersigned, being members of the Board of Directors of the Somers County Water & Sewer District have executed this Resolution of the Board of Directors on this 11th day of May, 2022.

Jonathan Fetter-Vorm, President

Karen Rhodes, Vice-President

Appendix I: 2019 Report

SOMERS WATER & SEWER DISTRICT

WATER SYSTEM MASTER PLAN

SOMERS, MONTANA

2019

DRAFT

Owner/Contacts:

Somers Water & Sewer District
PO Box 117
Somers, MT 59932

Andy Loudermilk, District Manager
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406- 857-2580

Shari Johnson, District Engineer
Shari A Johnson & Associates Engineering, PLLC
Engineering@SAJmontana.com
406-261-3019

SYSTEM OVERVIEW

Existing Water System

The Somers Water & Sewer District (SWSD) operates a water system to serve its residential, commercial, and public users. The District is predominately residential. Non residential users include a middle school, post office, café, bar, fire department, and hardware store/lumber yard. The current number of users is estimated to be 281 EDU's, Equivalent Dwelling Units, of which 94% is residential. Services are metered and billed according to consumption and service size.

The water system is supplied by two wells. There is one 80,000 gallon elevated storage tank in the system that provides pressure and flow to meet residential and fire flow demands. Fire flow demands are limited to 1000 gpm for two hours with both wells pumping to augment the supply. Many of the water system mains were replaced in 1990 with another 2500 lineal feet replaced in 2018.

Areas within the District Boundary and Water Rights Use Area have been brought onto the system as the need arises. There are some users on private wells that are expected to connect to the District as when a water main is available to their property. There are also some vacant infill and large land properties within the District Boundaries that will be served by the District in the future.

Existing Sewer System

Sewer is collected and conveyed by a combination of gravity mains, force mains, and four lift stations. The system was installed in 1995 with numerous grants and loans. Prior to that time residents were on septic fields and or cess pool systems.

All of the sewage reports to a common lift station that is owned and operated by the Lakeside Water & Sewer District. The sewage is treated by the Lakeside Wastewater Lagoon System north of Somers. There is an Interlocal Agreement that was negotiated in 1993. It specifies a 50 year term and a potential service demand of 910 EDU's, Equivalent Dwelling Units.

SOMERS DISTRICT

District Area

Somers, Montana, is located on the north end of Flathead Lake in northwestern Montana. It is approximately ten miles south of Kalispell. The town was established in the 1890's as the location of the Somers Lumber Company with connection to the Great Northern Railroad. The original water system was built by the lumber company to support the mill and the town.

The current Somers Water & Sewer District Boundaries are shown below in Figure 1.

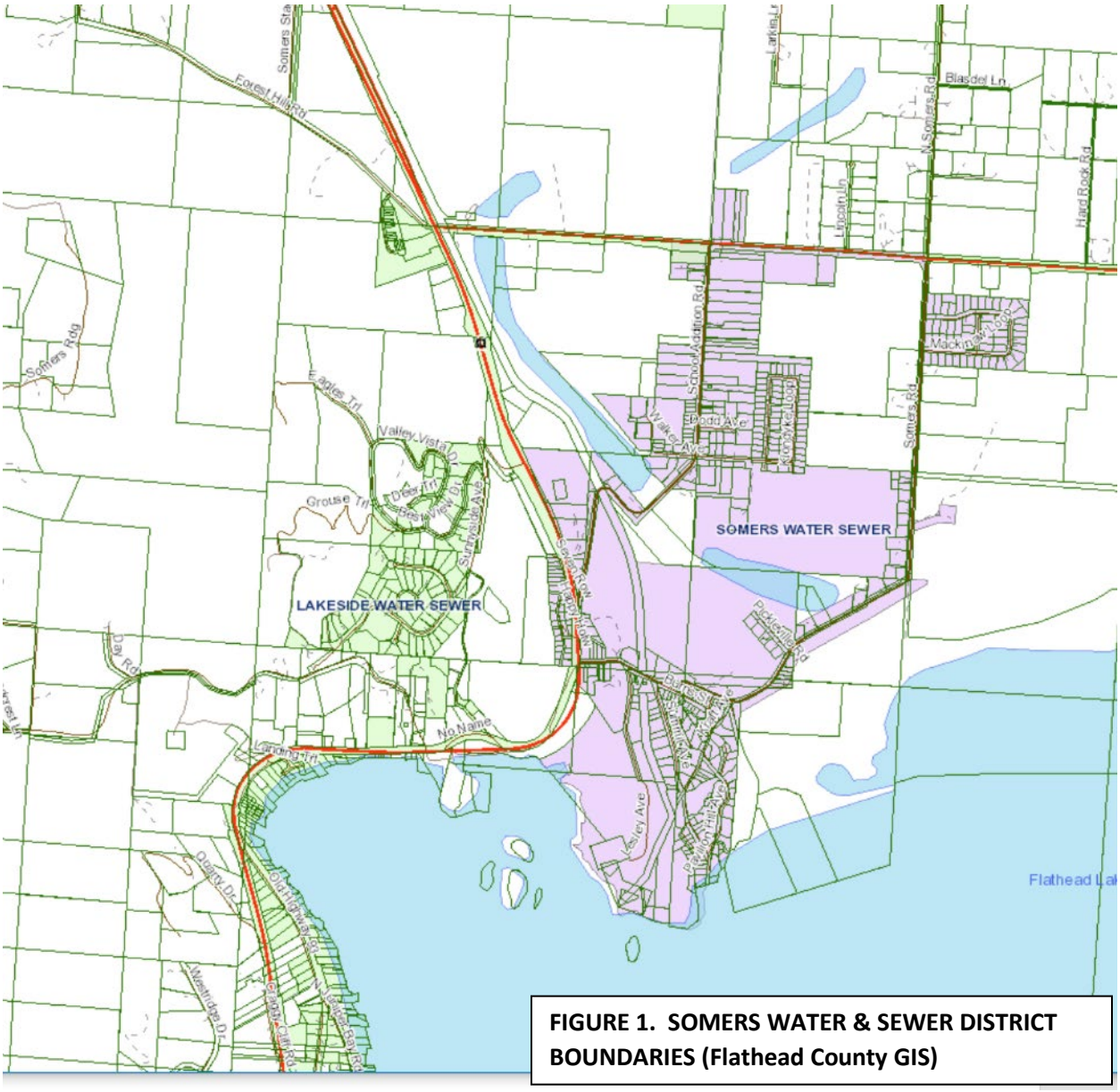


FIGURE 1. SOMERS WATER & SEWER DISTRICT BOUNDARIES (Flathead County GIS)

Water Rights

The Somers W/S District has active water rights for their two existing wells under the following

76LJ 70098-00

- Municipal
- 440 GPM
- 151.62 Ac-ft
- Priority Date November 16, 1988

76LJ 30048240

- Municipal
- 360 GPM
- 511.5 Ac-ft
- Priority Date March 15, 2010

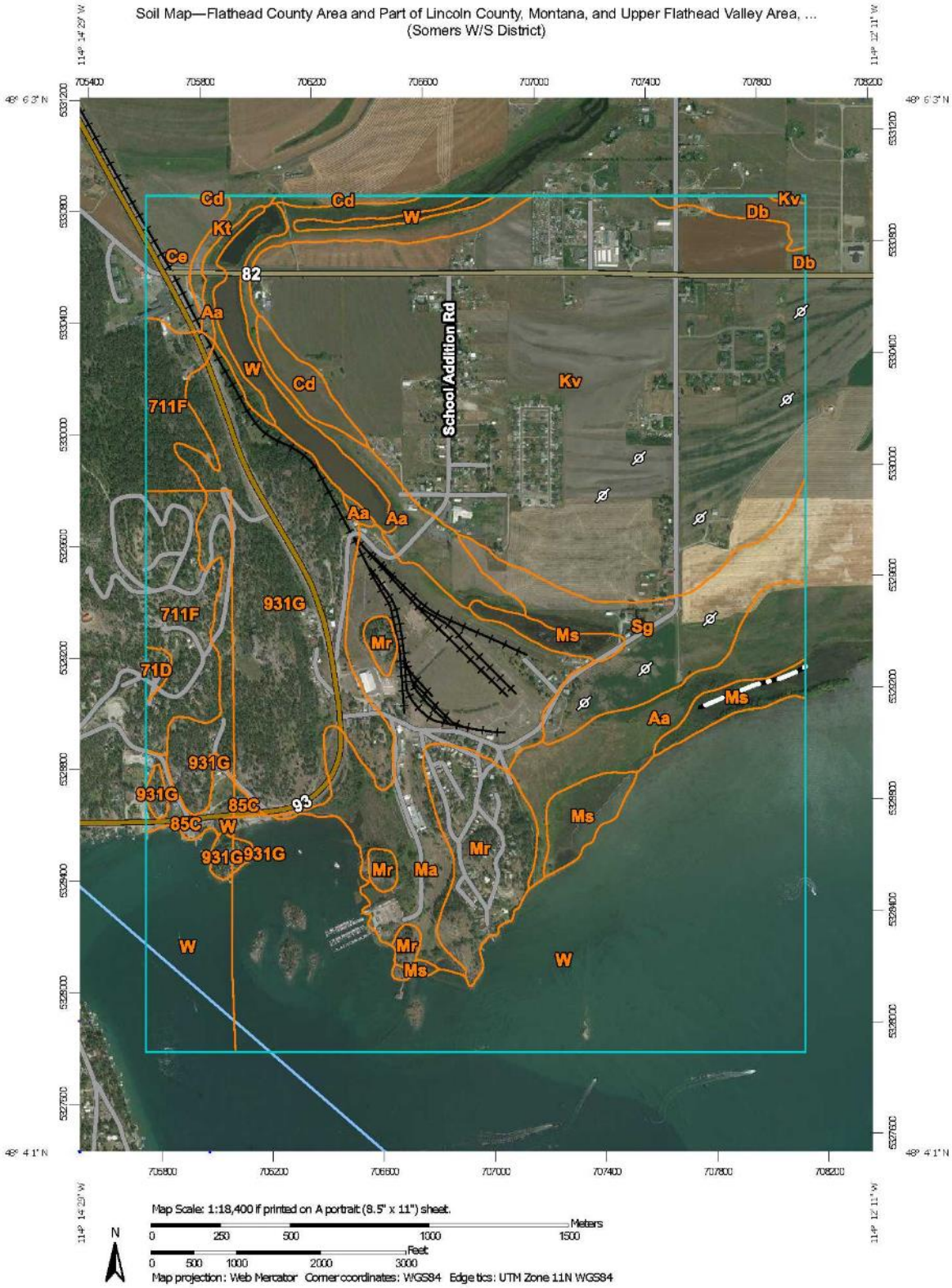
The District Place of Use (POU) is shown in Figure 2. The water rights include a statement that the "POU is within the boundaries of the Somers County Water and Sewer District as it existed on 3/15/2010". Water Rights and Well Logs are attached in Appendix A.

Applied Water CONSULTING LLC	Proj. No: -	Drawn: BJB	SOMERS W&SD	FIGURE 2
	Location: SOMERS, MT	Proj. Mgr: -		
	Scale: 1 inch = 1,000 feet	Checked:	WATER RIGHT POU MAP	
	File Name: SWSD POU	Date: 6-12-17		

Topography, Terrain, & Soils

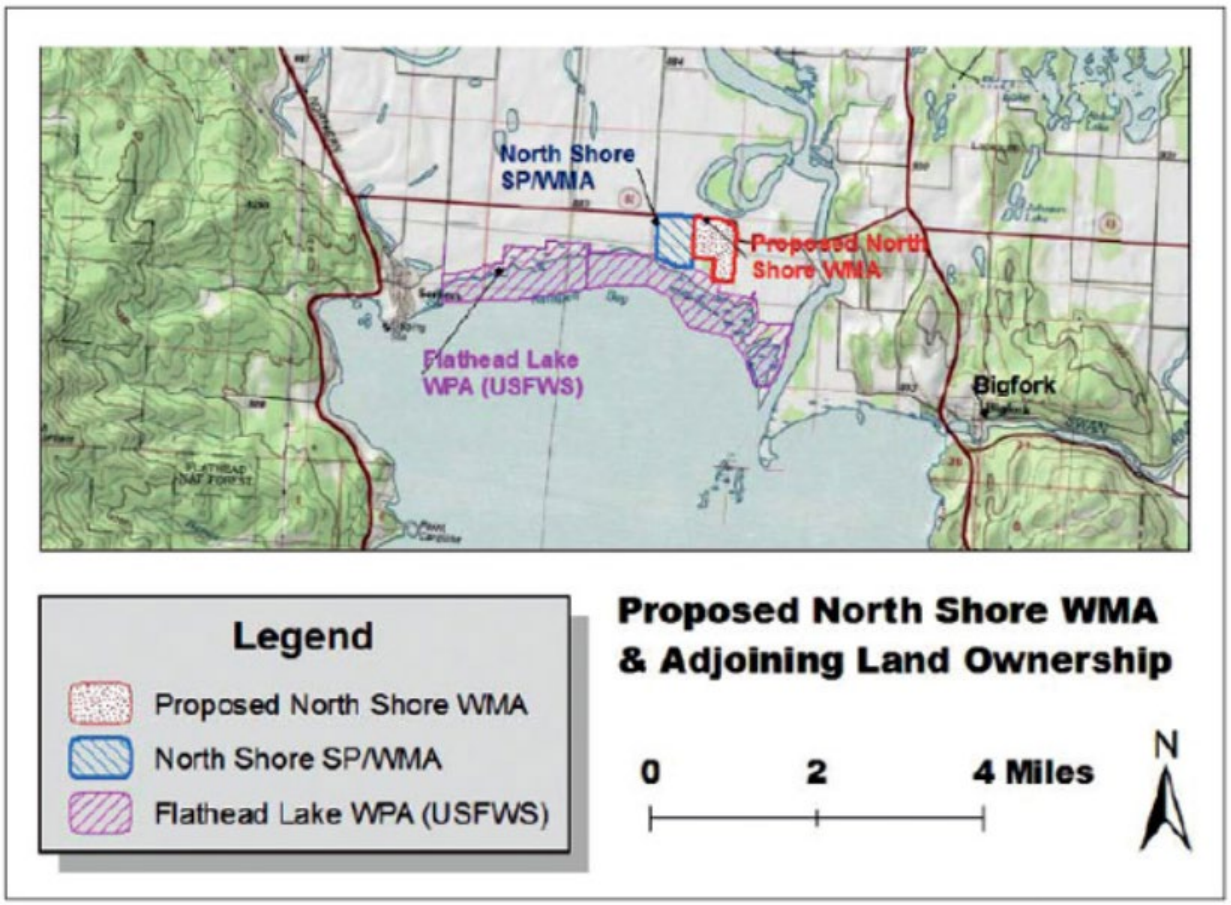
Somers, Montana, consists of variable terrain from flat farm fields to rock outcroppings. This is the result of the Flathead Valley being carved out by glaciers during the last ice age. It is theorized that a large mass of stagnant ice survived after the ice age where the lake exists and caused the Flathead River to build a large delta from Bigfork to Somers where fine soils were deposited. The flat portions of Somers consist of these fine sediments ranging from silt to silty sand; while the hilled portions of Somers are bedrock that was not eroded by the glaciers. The following topographic, aerial, and soil images are of the Somers area.


82
93


Soil Map—Flathead County Area and Part of Lincoln County, Montana, and Upper Flathead Valley Area, ...
(Somers W/S District)
School Addition Rd
Cd
Kt
Ce
82
Aa
W
711F
931G
71D
85C
93
Mr
Ma
Ms
Sg
Kv
Db
Map Scale: 1:18,400 if printed on A portrait (8.5" x 11") sheet.
Meters
Feet
Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84

Wildlife

The Somers W/S District is a close neighbor to the Flathead Waterfowl Production Area first established in 1970. It is an area comprised of the northern lake shoreline with wetlands and uplands. It is estimated over 230 species of birds use the area during different seasons of the year.



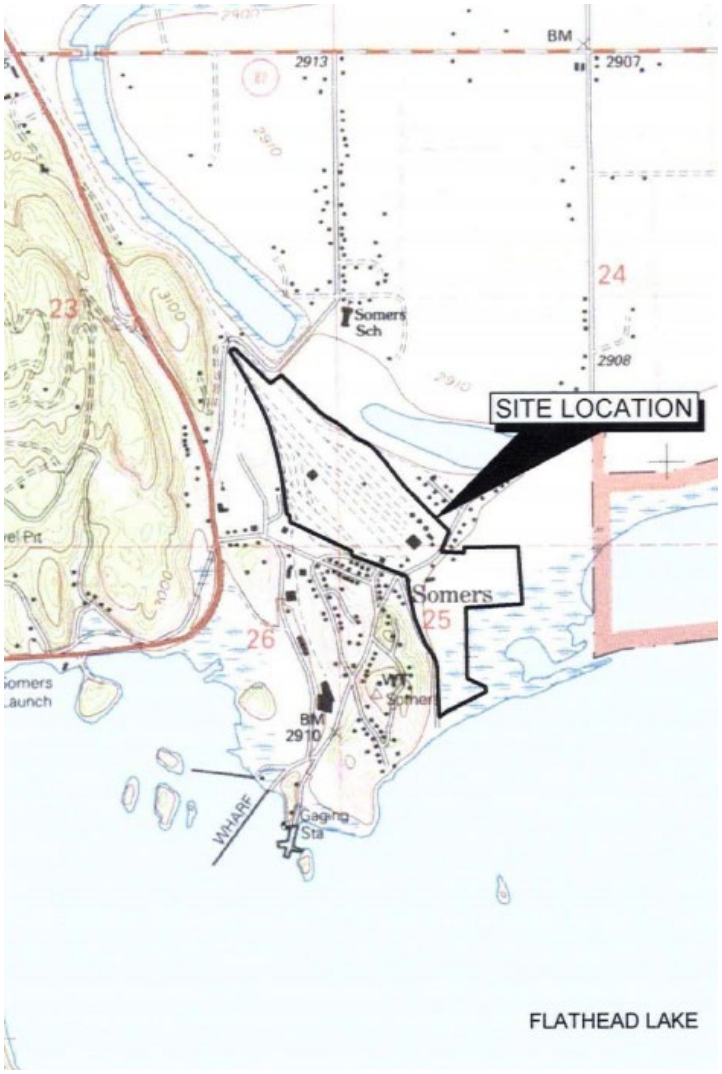
SOURCE: FISH, WILDLIFE AND PARKS

Environmental Concerns

The Somers Tie Plant owned by the Burlington Northern is considered a superfund site under EPA Id MTD053038386. It encompasses approximately 80 acres and was used as a railroad and wood treatment facility from 1901 to 1986. These operations resulted in impact to soils, groundwater, and sediments in Flathead Lake. The most current Five Year Report FYR, signed by the EPA on in June 2017, states, “The FRY has been prepared due to the fact that hazardous substances, pollutants, or contaminates remain at the Site above levels that allow for unlimited use and unrestricted exposure.” The contaminates listed on the EPA website are depicted in the chart below.

Media	Contaminant
Groundwater	PAH
Groundwater	PHENOL
Groundwater	POLYCYCLIC AROMATIC HYDROCARBONS (PAHS)
Soil	CPAH
Soil	PAH
Soil	POLYCYCLIC AROMATIC HYDROCARBONS (PAHS)
Soil	ZINC

Concentration, plume size, and impact to soil and groundwater vary for each contaminate. A detailed discussion of the site can be found in the Fifth Five Year Report FYR, signed by the EPA on in June 2017. Link https://cumulis.epa.gov/supercpad/cursites/cscdocument.cfm?id=0800390&doc=Y&colid=35861. The Tie Plant location is depicted below is a snapshot taken from the report.



Growth Patterns

Flathead County as a whole is growing at a rate of 2.0%. Somers Census Designated Place (CDP) is growing even faster at 8%. However, the CDP is much larger than the Somers W/S District and is not representative of the District. To project water resources for a 20 year plan the county growth rate of 2.0% was used. The limitation to the 2.0% is that there still remains large open land within the District. There have been two subdivisions within the District that received water and sewer services in the last 15 years. The subdivisions provided their own infrastructure that was then adopted by the District to own and maintain, as is the common practice.

A potential 150 home development was proposed in 2018. The land is within the District boundaries and is to be served by the District. The development, if pursued further, will be required to provide their own infrastructure, pay plant investment fees, and connection fees in accordance with the Somers W/S District Bylaws.

The following table depicts growth for the twenty year planning period at the county rate with and without the proposed development. As discussed in the Water System Evaluation and Needs sections, the District is out of compliance with DEQ regulations without considering the proposed development. Although the developer will be required to pay for his own infrastructure, it is important to be sure they are accounted for in the twenty-year plan.

Table 1. Anticipated Growth (20 year planning period)

	Flathead Growth Plus 150 homes at 20/ year			Somers	
	2.00%			2.00%	
Year	EDU	connections		EDU	connections
1	281	112		281	112
2	307	123		287	115
3	333	133		292	117
4	359	144		298	119
5	387	155		304	122
6	414	166		310	124
7	443	177		316	127
8	471	189		323	129
9	491	196		329	132
10	501	200		336	134
11	511	204		343	137
12	521	208		349	140
13	531	213		356	143
14	542	217		364	145
15	553	221		371	148
16	564	226		378	151
17	575	230		386	154
18	587	235		393	157
19	598	239		401	161
20	610	244		409	164

EXISTING WATER SYSTEM EVALUATION

Water Demand

The Somers Water District has 281 EDU's and is predominately residential. Historical water usage is very low. There is one café, one lumber store, a bar, and a post office. Most of the residential connections are in the historic town area on the rock knob and do not have large landscaping water demands. This demographic is changing as more building has occurred in the flat areas on the northern side of the District. These northern parcels are larger and have lawns. Because of the mixed water consumption the typical design standard of 150 gallons per capita per day was used to predict the 20-year planning period water demand.

Table 2. Water Demand

WATER DEMAND SOMERS WATER DISTRICT, FLATHEAD COUNTY						
	Equivalent Dwelling Units (EDU's)	People per EDU	Population	Average Daily Demand (150 gpcd) gpm	Max Daily Demand (4.0 factor) gpm	Peak Demand (2x max) gpm
Historical	281	*Water usage based on meters		24	66	
Existing Connections	281	2.5	703	73	293	585
10 year w/ county growth	336	2.5	840	88	350	700
10 year w/ county growth plus 20/year to 150 homes	501	2.5	1,253	130	522	1,044
20 year w/ county growth	409	2.5	1,023	107	426	852
20 year w/ county growth plus 20/year to 150 homes	610	2.5	1,525	159	635	1,271
	EDU = Equivalent Dwelling Unit					
	gpcd = gallons per capita(person) per day					
	gpm = gallons per minute					

Wells

The District is supplied by two wells, Well 2 and Well 3. Both were drilled in 1990 and are good quality water sources. There are no known contaminates or water quality concerns beyond hard water. The original water source was from the Flathead Lake, but replaced in 1990 when it was discovered that the Somers Tie Plant site was contaminating the lake.

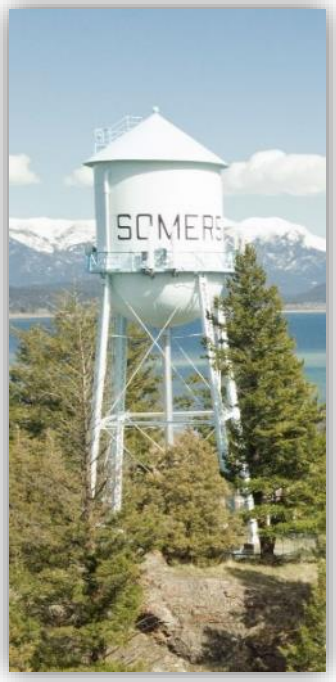
Table 3. Water Wells

	Date Drilled	Pump Rate	Pump Test Rate	Static Water Level	Depth	Annular Seal	Casing Size at Bottom	Completion	Water Formation
Well 1									
Well 2 (Pavilion Hill)	1990	273	400	147.5	660	Cement grouted	10”	¼” Perf	Fractured rock
Well 3 (Yacht Club)	1990	283	400	2.5	365	Cement grouted	10”	¼” Perf	Fractured rock

DEQ Circular 1 requires that a system provide source water for the Maximum Day Demand with the largest well out of service. The maximum day demand from Table 2 is 426 gpm without the proposed 150 home development. With the largest well out of service the District can provide 273 gm of source supply.

Tank

The existing tank provides 80,000 usable gallons of water storage and was built in 1926 on Pavilion Hill above the town. It is an elevated tank standing nearly 90 feet tall at the top of the peak of the roof. It is located on Pavilion Hill above the town. The tank had repairs made in the late 1980’s along with safety and security modifications.



In December 2018 tank divers were hired to evaluate the inside of the tank. The results of their dive indicated some interior corrosion at previous patches and seem lines as well as some exterior corrosion where the coating has failed. One pinpoint of daylight was noted on the roof. Overall the condition of the tank was considered good. There was minor siltation in the tank. A copy of the report is in Appendix B.

Next, a structural assessment was completed in 2019 to identify any major structural concerns with the tank. The scope was limited to a visual inspection by a structural engineer and is attached in Appendix C. The inspection noted that it is a bolted steel tank in relatively good condition for its age. The major concerns are that having been designed nearly 100 years ago and prior to seismic building codes, it is structurally obsolete. The following potential risk factors were noted

- Likely no considerations of seismic design in the original design
    - Somers & Flathead Valley are considered High Seismic Risk areas
- Cotter pins hold the tension rods in place and not positively attached to the structure.
- Footing installations of that time period used less rebar than modern standards

- Only two anchor bolts connect each tower leg to the foundation
    - Current requirement would be four bolts
- Foundations appear small for potential up lift
- Connection between footings and bedrock is unknown
- Holes in the middle of the T brace members suggest some structural member was attached, but it is unknown if it was needed, ever existed, or was removed.

The report stated that estimating the remaining life expectancy is very difficult to determine. The tank has provided water for nearly 90 years and has survived seismic and wind events in that time period. While the tank may be structurally obsolete, it may or may not need to be taken out of service immediately. The District has been preparing for the day that it might no longer function safely and purchased land in 2010 for a new tank site.

The town is short of water storage supply in accordance with DEQ Circular 1. DEQ requires the larger of either the following be met for storage volume.

- Average Day plus Fire Flow or
- Maximum Day plus Fire Flow; less Source Supply

The system cannot meet the Average Day Demand with the 80,000 gallons of effective storage in the existing tank. For the 20-year planning period, the storage required is greater than 500,000 gallons. The largest demand is from the school. The school is in the process of a remodel which is adding an automated fire sprinkler system and the estimated requirement is 1500 gpm for a four-hour duration.

Table 2. Average Day plus Fire Flow

	Average Daily Demand (150 gpcd) gpm	Average Daily Demand (gallons)	Avg Day + Domestic Fire (1000gpm)	Avg Day + Fire (1500 gpm for 4 hrs)
Existing Connections	73	105,375	225,375	465,375
10 year w/ county growth	88	126,000	246,000	486,000
10 year w/ county growth plus 20/year to 150 homes	130	187,875	307,875	547,875
20 year w/ county growth	107	153,375	273,375	513,375
20 year w/ county growth plus 20/year to 150 homes	159	228,750	348,750	588,750

Table 3. Maximum Day plus Fire Flow; less Source Supply

	Max Daily Demand (600 gpcd) gpm	Max Day (gallons)	Source Contribution (gallons)	Max Day + Domestic Fire - supply	Max Day + Fire (1500 gpm for 4 hrs) - supply
Existing Connections	293	421,500	800,640	-259,140	-19,140
10 year w/ county growth	350	504,000	800,640	-176,640	63,360
10 year w/ county growth plus 150 by year 5	522	751,500	800,640	70,860	310,860
20 year w/ county growth	426	613,500	800,640	-67,140	172,860
20 year w/ county growth plus 150 by year 5	635	915,000	800,640	234,360	474,360

Distribution/ System Hydraulics

The water system is comprised of 34,000 linear feet of pipe. The pipes are predominately 6, 8, and 10 inches in size. In 1990 the District underwent a major construction project that replaced nearly all of the existing cast iron mains. Another 2500 lineal feet of leaking cast iron main was replaced in 2018.

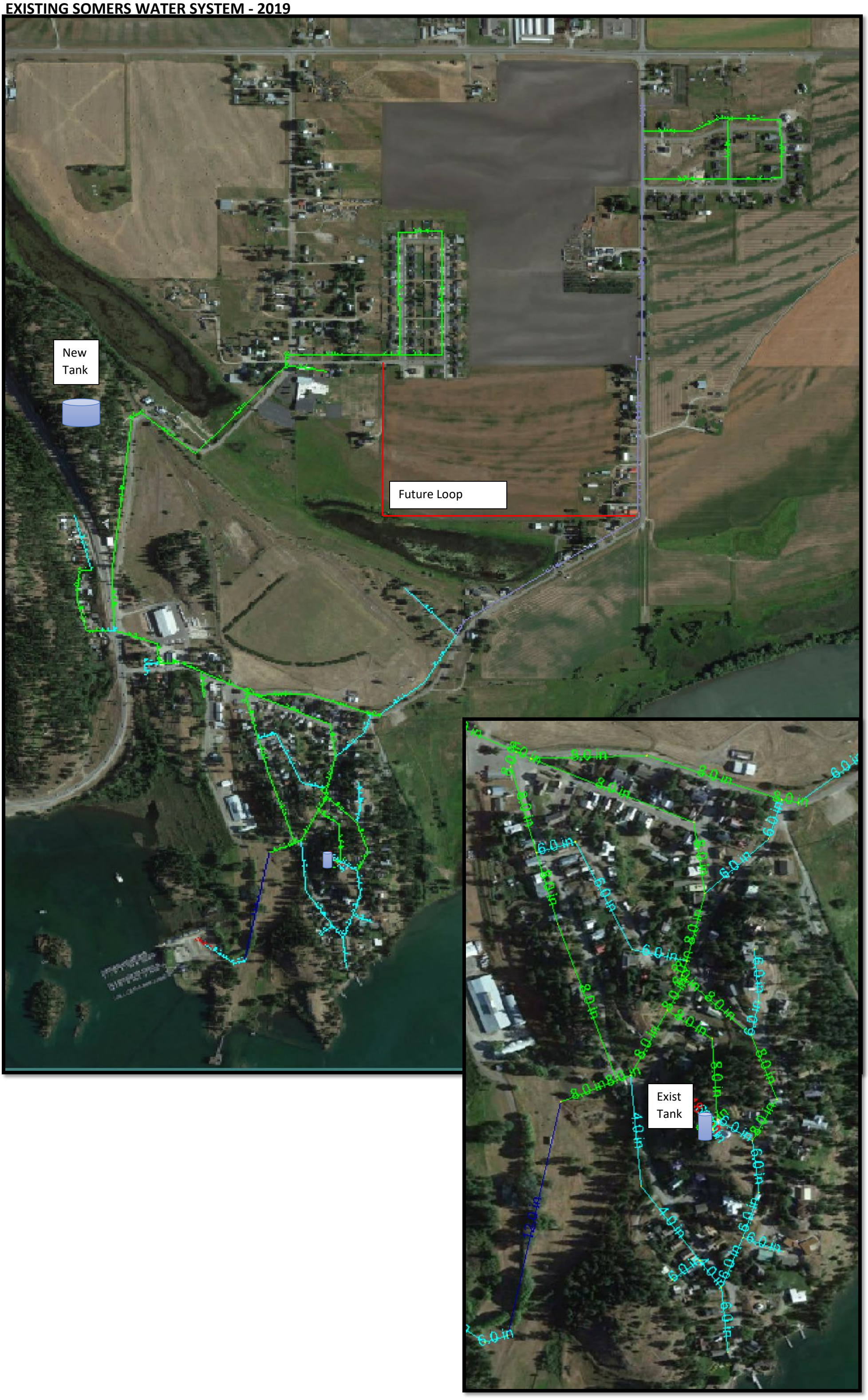
The distribution is in fairly good shape with looping provided in the core of the system. The weakness to the distribution system are the two long branches of mainline heading north to serve the west and east sides of the District. If the proposed development proceeds, the developer will be required to provide a loop connecting these branches.

On the following map, the following colors correspond to the following sizes.

- Dark Blue = 12-inch
- Purple = 10-inch
- Green = 8-inch
- Light Blue = 6-inch and smaller

A water model has been conducted to simulate the existing system with the existing tank, with the new tank only, and both tanks together. Results of the model are in Appendix D.

EXISTING SOMERS WATER SYSTEM - 2019



WATER SYSTEM NEEDS

Water Supply

The District does not meet the DEQ Circular 1 standard for water supply for the maximum day demand with the largest well out of service.

- Supply without largest well = 273gpm
- Current Max Day Demand = 293 gpm
- 10 year Max Day Demand = 350 gpm
- 20 year Max Day Demand = 426 gpm

The District should plan on drilling a third well in the future as finances allow. Water rights will be an integral part of the process as well as siting the well. The existing and migrating contaminate plume from the Tie Plant will limit the available area. An analysis of the shallow and deep aquifers in the area should be made to be sure a pumped well does not influence the groundwater flow direction.

Since there are two wells, there is redundancy in case of a pump failure, water quality issue, or other maintenance need. The new and proposed storage tanks are both provide pressure by gravity and will not be affected by a power outage.

Water Storage

The District does not meet the DEQ Circular 1 standard for water storage for average day demand plus fire.

- Existing effective storage = 80,000 gallons
- Current Avg Day Demand plus Fire = 465,000 gallons
- 10 year Avg Day Demand plus Fire = 486,000 gallons
- 20 year Avg Day Demand plus Fire = 515,000 gallons

Additional storage is the more pressing need for the District. They are significantly short compared to DEQ's regulation created to protect health and safety. And, the tank is nearly 100 years old. The tank may operate for another several years, or it may decline faster. A catastrophic failure is also unpredictable and yet more probable in a structure that is past it's life span.

The District purchased property on the west side of the District in 2010 knowing additional storage was needed. They are now in a position to move forward with funding to build the tank. The District would like to build a glass lined bolted steel 250,000 gallon tank that is expandable to 500,000 gallons. The foundation and base rings would be designed and constructed for the full future size, but the additional ring would not be installed until finances allowed.

The District may decide to keep the existing tank in service until maintenance costs become greater than the value the tank provides. This would provide a total of 330,000 gallons in the near-term future.

One reason to only build a 250,000 gallon tank is the limited ability to place that much water on a fire with equipment available to the voluntary fire department, their ability to draft water from the lake, and mutual aid agreements. A fire at the school is the controlling factor in the fire flow volume needed while the location of the school precludes the ability to use multiple hydrants. Another reason to keep the tank at the 250,000 gallons is to prevent water quality deterioration and freezing due to low consumption.

A Storage Sizing Engineering Analysis will be completed prior to the final selection of tank size.

Water Distribution

Water pressure in the Somers Water District ranges from 35psi to 85psi. There is only one pressure zone. With the addition of a second tank, water pressures will be more constant on that side of town. The tank would be designed to provide the homes with lowest pressure at least 40psi once the existing tank was removed from service. Right now that isn't possible with the tank in service because the homes are nearest in elevation to the base of the tank. Pressure reducing valves may be necessary on homes in the northwest and northeast branches for the District with the addition of the new tank to keep pressures below 80psi.

A water main loop from the west branch of the system to the east branch of the system was shown in the hydraulic model to be very significant when fire flows were experienced at the end of those branches. The District is working with the potential developer to provide the loop thru his land as part of his project approval conditions.

Improvement Priority List

In order of importance are the following projects

1. Additional water storage
2. Loop west to east branches
3. Additional well

Appendix J: Sanitary Survey

DEQ
Montana Department
of Environmental Quality

June 11, 2022

Somers County Water and Sewer District
Attn: Andy Loudermilk (Administrative Contact)
P.O. Box 117
Somers, MT 59932

Re: Sanitary Survey Inspection of Somers County Water and Sewer District
(PWSID: MT0000332).

Dear Andy,

I would like to thank you for assisting me during the recent sanitary survey inspection of Somers County Water and Sewer District Public Water Supply (PWS) system. As a community water supply system, this facility is required to have a sanitary survey inspection once every three years. These routine inspections are required under the Administrative Rules of Montana, Chapter 17.38.231. They offer the Department of Environmental Quality (DEQ) an opportunity to assure adequate protection of public health through proper operation and maintenance of a PWS.

DEQ believes that periodic sanitary surveys, along with appropriate corrective actions, are indispensable for assuring the long-term quality and safety of drinking water. When properly conducted, sanitary surveys can provide important information on a water system's design and operations and can identify minor and significant deficiencies for correction before they become major problems.

Minor deficiencies do not pose serious health threats. However, corrective action of minor deficiencies can be critical in the long-term operation and safety of a public water system. Minor deficiencies are generally described as suggested or recommended corrections. Significant deficiencies can be defined as a defective water supply component(s) having or likely to have an adverse influence on public health. Significant deficiencies require immediate corrective action in efforts to protect consumers.

Montana DEQ is also committed to offering technical, managerial, and financial capacity assistance to all public water supplies across the state. Michael Kropp is the new Capacity Development Coordinator for the state, and will be partnering with MAP, MRW, RATES and other DEQ staff to meet the demand for facility-based training opportunities. DEQ Certification is working with Mr. Kropp to provide operators an opportunity to earn CECs as well for completing facility-based capacity development training. Please contact Michael at 406-755-8971 (mkropp@mt.gov) for additional information on this program.

System description:

The Somers County Water and Sewer District (District) PWS consists of two groundwater wells, a new 500,000-gallon cement storage tank (ST003), and the distribution system. The former 100,000-gallon elevated storage tank (ST002) is no longer in service.

Below are a few comments relating to the sanitary survey conducted on 6/28/2022.

SOURCE(s):

Pavilion Hill Well-1 **(WL003) (GWIC 140158)** is located inside a well house atop Pavillion Hill, next to the former elevated storage tank ST002. It shares the well house with the Supervisory Control and Data Acquisition (SCADA)system used to monitor and control all the PWS well and storage tank functions.

The well log on the Montana Bureau of Mines and Geology Ground Water Information Center (GWIC) web site (log #140158) indicates that the well was drilled by rotary method on May 4, 1990 by Liberty Drilling & Pump Co. There annular space is grouted to 438 feet with cement grouting. The log shows a static water level of 147 feet 6 inches and a total depth of 660 feet. The 12- inch steel casing extends to 438 feet and 8-inch steel casing extends from 433 feet to 660 feet.
Johnson screens are in place for water collection between 446 feet and 466 feet; 547 feet and 567feet; and 635 feet and 665 (sic) feet. The geologic source for the well is given as 400MCRB – Middle Belt Carbonate.

The well has a properly screened air vent which vents to the interior of the structure and a proper sanitary sealing well cap. The submersible 30-hp well pump is controlled by the SCADA system and operates in alternate mode with Well-2 (WL004). Both wells are activated by the level in the storage tank (ST003). There is a suitable tap available for collection of a source sample (RW003) ONLY when the well pump is ON.

Yacht Club Well-2 **(WL005)(GWIC 140159)** is located inside a wellhouse at the edge of Flathead Lake in the North Flathead Yacht Club complex. It is on the southwest side of Pavilion Hill. GWIC log #140159 indicates the well was drilled by rotary method on May 4, 1990 by Liberty Drilling & Pump Co. There annular space is grouted to 213 feet with cement grouting. The log shows a static water level of 2 ½ feet and a total depth of 362 feet. The 12-inch steel casing extends to 213 feet and 8-inch steel casing extends from 211 feet to 362 feet. Water collection is through ¼ inch by 2 ½ in perforations between 237 feet and 276 feet; 289 feet and 294 feet; and 335 feet and 359 feet. The geologic source for the well is given as 400MCRB – Middle Belt Carbonate.

The well has a properly screened air vent which vents to the inside of the structure and a proper sanitary sealing well cap. The submersible 30-hp well pump is controlled by the SCADA system and operates in alternate with Well 1 (WL003). Both wells are activated by the level in the storage tank (ST003). There is a suitable tap available for collection of a source sample (RW004) ONLY when the well pump is ON.

No issues were observed with this item.

TREATMENT:
The Somers County Water and Sewer District PWS does not have, nor require, treatment at the time of inspection.

DISTRIBUTION:
The distribution system is in the continual process of expansion and upgrades related to increased population growth in recent years. Most of the expansion of the PWS is northeast of Somers proper.

No issues were observed with this item

STORAGE:
ST002 is no longer used and considered inactive in DEQ PWS records, it was recently replaced with Storage Tank ST003. This iconic 100,000-gallon elevated storage tank is nearing 100 years old and in good usable condition. The Somers County Water and Sewer District is currently in the process of determining the future use of this tank.

ST003 is the new 500,000-gallon storage tank recently constructed by the PWS for increased capacity. This cable-wrapped cement storage tank was completed the summer of 2021 and was activated August 23rd, 2021. It is located on a hill north of Somers proper on the east side of Highway-93. A single access hatch is located at ground level for maintenance and inspection along with two additional access hatches on the tank roof. A secured aluminum ladder is mounted to the side of the tank with incorporated hardware for fall protection of the climber. A single tank vent is located on top of the tank with additional screen protection installed by the PWS. The tank drain and overflow lines discharge to a rock discharge pad on the southwest side of the tank, both employ proper check valves and screen protection. Flow between the distribution system and the tank influent and effluent is controlled by a valved manifold inside a building within the fenced tank compound.

- It is a recommended that additional sealant be added to the corners of the upper tank hatch seals to limit access of insects into the tank. Although the seals are new and satisfactorily seal the hatch, the manufacture's design presents a minor week point which may prematurely fail over time.

PUMPS, PUMP FACILITIES and CONTROLS:
There are no additional pumps or controls outside of the well pumps and associated SCADA control system, the distribution system is fed by gravity when the wells are inactive.

No issues were observed with this item

MONITORING, REPORTING and DATA VERIFICATION:
A single positive bacterial sample was detected in April of 2020. Repeat samples collected verified it was a false positive and did not present a health hazard. It is believed to be related to repairs made to a distribution main.

A pair of positive bacterial samples were also detected in September of 2022 when storage tank ST003 was activated. The system was sanitized is response to the construction activities.

No operational violations are recorded for the PWS in the DEQ database. The efforts and dedication of the PWS is greatly appreciated.

No issues were observed with this item.

MAINTENANCE, MANAGEMENT, SAFETY and OPERATION:
The PWS appears to be well managed and maintained and has taken a pro-active approach to operational challenges and system upgrades.

No issues were observed with this item.

OPERATOR COMPLIANCE WITH STATE REQUIREMENTS:
You, Andrew Loudermilk, are the certified operator in responsible charge of this system and were in full compliance with all State certification requirements at the time of this inspection.

- It is recommended a backup operator be designated for when you are not available or cannot be reached in the case of an emergency. Please contact Jen VandenBos in the DEQ Operator Certification department to designate a back-up operator once it has been established. Jen can be reached at (406)444-4584.

No issues were observed during this item.

SIGNIFICANT DEFICIENCIES
No significant deficiencies were noted during this inspection.

Other System Deficiencies or Issues:
Bulleted items in the findings section above, but not listed as significant sanitary deficiencies, are recommendations to be addressed. While these items do not meet the EPA definition of significant deficiencies they are issues that should be corrected to minimize the potential for contamination to the system and to safely and effectively operate the system.

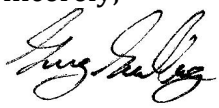
WASTEWATER:
The Somers County Water and Sewer District also manages and maintains a separate wastewater disposal system within the district boundaries.

No items were observed with this item.

SDWIS Database Inventory Changes Made During This Inspection:
No database changes are necessary at the time of this inspection.

Thank you very much for your time and for your dedication to protecting public health through proper management of your public water system. If you have any questions about this report or public water supply regulations, please give me a call at (406) 755-8972. Please contact me if you find inaccuracies within in this letter so I can make the appropriate corrections.

Sincerely,



Greg Sandberg
Environmental Science Specialist
DEQ PWS, Kalispell
Phone: (406) 755-8972
Fax: (406) 755-8977

CC: Helena PWS e-file
Flathead County e-file
Kalispell PWS file

PWSID **MT0000332** | SYSTEM NAME **Somers County Water and Sewer District**

Please insert well logs as needed. Additional sheets may be added.

PAVILION HILL WELL 1 - WL003

Site Name: SOMERS COUNTY WATER AND SEWER DISTRICT - WELL 2
GWIC Id: 140158
DNRC Water Right: P070098-00

Section 1: Well Owner(s)
1) SOMERS WATER DISTRICT (MAIL)
N/A
SOMERS MT 59932 [05/04/1990]

Section 2: Location

Township	Range	Section	Quarter Sections
27N	21W	25	NW¼ NW¼ SW¼ NW¼

County	Geocode
FLATHEAD	

Latitude	Longitude	Geomethod	Datum
48.0761	-114.0963	MAP	NAD27

Ground Surface Altitude	Ground Surface Method	Datum	Date
3104	LIDAR	NAVD88	8/12/2015

Addition	Block	Lot

Section 3: Proposed Use of Water
PUBLIC WATER SUPPLY (1)

Section 4: Type of Work
Drilling Method: ROTARY
Status: NEW WELL

Section 5: Well Completion Date
Date well completed: Friday, May 04, 1990

Section 6: Well Construction Details

Borehole dimensions

From	To	Diameter
0	438	17
438	660	10

Casing

From	To	Diameter	Wall Thickness	Pressure Rating	Joint	Type
-2	438	12				STEEL
433	660	8				STEEL

Completion (Perf/Screen)

From	To	Diameter	# of Openings	Size of Openings	Description
446	466	8			JOHNSON SCREEN
547	567	8			JOHNSON SCREEN
635	665	8			JOHNSON SCREEN

Annular Space (Seal/Grout/Packer)

From	To	Description	Cont. Fed?
0	438	CEMENT GROUT	

Section 7: Well Test Data

Total Depth: 660
Static Water Level: 147.5
Water Temperature:

Pump Test *

Depth pump set for test _ feet.
400 gpm pump rate with _ feet of drawdown
after 80 hours of pumping.
Time of recovery _ hours.
Recovery water level _ feet.
Pumping water level 260 feet.

** During the well test the discharge rate shall be as uniform as possible. This rate may or may not be the sustainable yield of the well. Sustainable yield does not include the reservoir of the well casing.*

Section 8: Remarks

Section 9: Well Log
Geologic Source
400MCRB - MIDDLE BELT CARBONATE

From	To	Description
0	3	BROKEN GRAY ROCK
3	26	LIGHT TO DARK GRAY ROCK
26	30	GRAY GREENISH-GRAY AND BROWN ROCK.
30	49	LIGHT TO DARK GRAY BROWN-GRAY GREEN-BROWN AND BROWN ROCK
49	51	GREENISH-GRAY TAN AND YELLOW-BROWN SLIGHTLY FRACTURED ROCK
51	53	LIGHT TO DARK GRAY AND TAN ROCK
53	64	LIGHT TO DARK GRAY GREENISH-GRAY AND GREENISH- BROWN ROCK
64	73	DARK GRAY ROCK
73	75	GRAY AND GRAYISH-TAN ROCK
75	80	GRAYISH-GREEN AND GRAY ROCK
80	87	GRAYISH-BROWN GRAYISH-TAN AND GRAY ROCK
87	91	GRAYISH-GREEN GRAY ORANGE AND BROWN ROCK. FRACTURED 87' TO 89'.
91	104	MEDIUM TO DARK GRAY ROCK
104	123	GRAYISH-TAN GRAYISH BROWN AND DARK BROWN SLIGHTLY FRACTURED ROCK
123	139	LIGHT TO DARK GRAY GRAYISH-BROWN GREENISH-BROWN ROCK WITH SOME PYRITE

Driller Certification
All work performed and reported in this well log is in compliance with the Montana well construction standards. This report is true to the best of my knowledge.

Name:
Company:LIBERTY DRILLING & PUMP CO

License No:WWC-52
Date Completed:5/4/1990

Site Name: SOMERS COUNTY WATER AND SEWER DISTRICT - WELL 2
GWIC Id: 140158
Additional Lithology Records

From	To	Description
139	157	GREENISH-TAN GRAYISH-TAN AND GRAY ROCK
157	160	LIGHT TO DARK GRAY ROCK
160	180	GRAY GREENISH-GRAY ORANGE-BROWN SLIGHTLY FRACTURED ROCK WITH SOME CALCITE IN FRACTURES. SEEP OF WATER
180	243	GRAY GREENISH-GRAY ORANGE-BROWN SLIGHTLY FRACTURED ROCK WITH CALCITE IN FRACTURES. SEEPS OF WATER
243	259	HARD DARK GRAY ROCK
259	281	LIGHT TO DARK BROWN FRACTURED ROCK WITH WHITE TO ORANGE CLAY STREAKS AND CALCITE IN FRACTURES. 50 GPM TAN SILTY WATER
281	298	HARD DARK GRAY ROCK
298	301	FRACTURED LIGHT TO DARK GRAY ROCK WITH BROWN SEAMS 10 TO 15 GPM
301	329	HARD DARK GRAY ROCK WITH CALCITE SEAMS
329	362	FRACTURED LIGHT TO DARK GREEN ROCK WITH BROWN SEAMS. 75+ GPM
362	428	HARD DARK GREEN AND DARK GRAY ROCK
428	446	HARD LIGHT TO DARK GRAY ROCK
446	467	FRACTURED GRAY ROCK WITH BROWN SEAMS. SOME CALCITE IN FRACTURES. 25+ GPM
467	567	DARK GRAY ROCK WITH SOME BROWN SEAMS - ROCK IS SLIGHTLY FRACTURED. 25+ GPM.
567	601	DARK GRAY AND DARK GREEN ROCK IN ALTERNATE LAYERS
601	635	HARD LIGHT TO DARK GRAY ROCK WITH CALCITE SEAMS
635	640	HEAVILY FRACTURED LIGHT TO DARK GRAY ROCK. 200+GPM
640	655	SLIGHTLY FRACTURED DARK TO LIGHT GRAY ROCK. 75+GPM
655	660	HARD DARK TO LIGHT GRAY ROCK

PWSID **MT0000332** SYSTEM NAME **Somers County Water and Sewer District**

Please insert well logs as needed. Additional sheets may be added.

YACHT CLUB WELL 2 - WL004

Site Name: SOMERS COUNTY WATER AND SEWER DISTRICT - WELL 3
GWIC Id: 140159
DNRC Water Right: P070098-00

Section 1: Well Owner(s)
1) SOMERS WATER DISTRICT (MAIL)
N/A
SOMERS MT 59832 [05/04/1990]

Section 2: Location

Township	Range	Section	Quarter Sections
27N	21W	26	SE¼ SW¼ SE¼ NE¼

County	Geocode
FLATHEAD	

Latitude	Longitude	Geomethod	Datum
48.0747	-114.2257	MAP	NAD27

Ground Surface Altitude	Ground Surface Method	Datum	Date
2899	LIDAR	NAVD88	8/12/2015

Addition	Block	Lot
YACHT CLUB WELL		1GACA

Section 3: Proposed Use of Water
PUBLIC WATER SUPPLY (1)

Section 4: Type of Work
Drilling Method: ROTARY
Status: NEW WELL

Section 5: Well Completion Date
Date well completed: Friday, May 04, 1990

Section 6: Well Construction Details
Borehole dimensions

From	To	Diameter
0	213	17
213	362	10

Casing

From	To	Diameter	Wall Thickness	Pressure Rating	Joint	Type
-5	213	12				STEEL
211	362	8				STEEL

Completion (Perf/Screen)

From	To	Diameter	# of Openings	Size of Openings	Description
237	276	8			1/4 X 2.5 PERFS
289	294	8			1/4 X 2.5 PERFS
335	359	8			1/4 X 2.5 PERFS

Annular Space (Seal/Grout/Packer)

From	To	Description	Cont. Fed?
0	213	CEMENT GROUT	

Section 7: Well Test Data

Total Depth: 362
Static Water Level: 2.5
Water Temperature:

Air Test *

400 gpm with drill stem set at _ feet for 24 hours.
Time of recovery _ hours.
Recovery water level _ feet.
Pumping water level 69.8 feet.

**During the well test the discharge rate shall be as uniform as possible. This rate may or may not be the sustainable yield of the well. Sustainable yield does not include the reservoir of the well casing.*

Section 8: Remarks

Section 9: Well Log
Geologic Source
400MCRB - MIDDLE BELT CARBONATE

From	To	Description
0	9	BRICKS SAWDUST & METAL MIXED IN GRAVEL BROKEN ROCK & CLAY MATRIX
9	10	TAN CLAY
10	24	WET SANDY TAN CLAY
24	31	BROKEN GRAY ROCK WITH CLAY SEAMS. 15 TO 30 GPM DIRTY WATER
31	42	BROKEN GREENISH-GRAY ROCK
42	46	HARD DARK GRAY ROCK
46	51	FRACTURED DARK GRAY ROCK WITH CALCITE SEAMS. 5 TO 10 GPM WATER
51	73	HARD DARK GRAY ROCK
73	80	FRACTURED GRAY ROCK WITH ORANGE CLAY IN FRACTURES. 5 TO 10 SILTY DIRTY WATER.
80	94	HARD LIGHT GRAY ROCK
94	96	CLAY OR GOUGE FILLED FRACTURES
96	104	HARD DARK GRAY ROCK
104	118	FRACTURED DARK GRAY ROCK WITH TAN TO BROWN CLAY OR GOUGE IN FRACTURES
118	121	FRACTURED DARK GRAY ROCK WITH BROWN CLAY OR GOUGE IN FRACTURES.
121	129	DARK GRAY ROCK

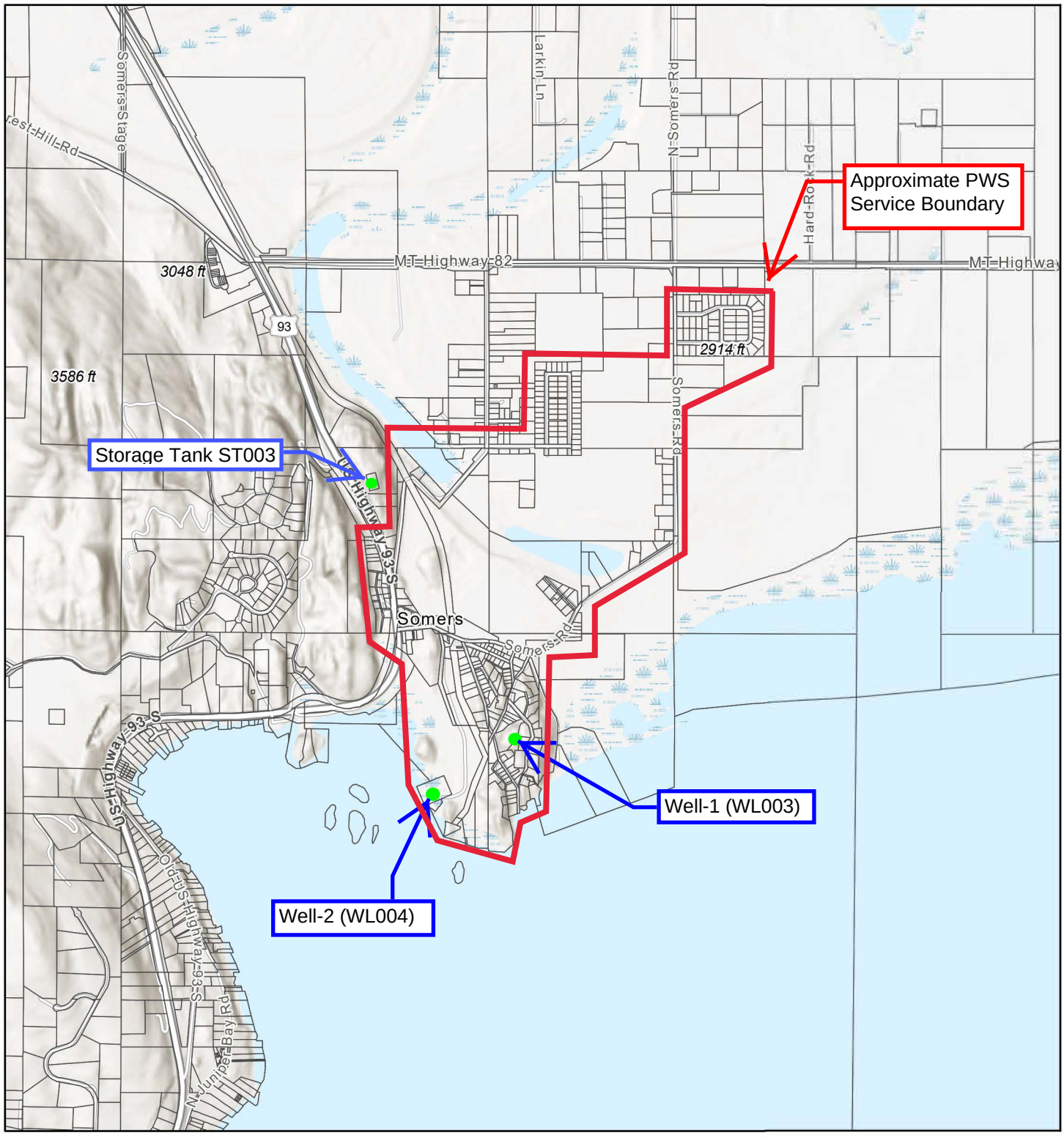
Driller Certification
All work performed and reported in this well log is in compliance with the Montana well construction standards. This report is true to the best of my knowledge.

Name:
Company: LIBERTY DRILLING & PUMP CO
License No: WWC-52

Date Completed: 5/4/1990

Site Name: SOMERS COUNTY WATER AND SEWER DISTRICT - WELL 3
GWIC Id: 140159
Additional Lithology Records

From	To	Description
129	148	BROKEN DIRTY GRAY ROCK WITH SOFT WHITE CLAY SEAMS OR GOUGE
148	170	DARK GRAY ROCK
170	181	FRACTURED DARK GREEN ROCK WITH STREAKS OF CALCITE 20 TO 25 GPM DIRTY WATER.
181	187	HARD GREENISH-GRAY ROCK
187	212	BADLY FRACTURED GREEN ROCK WITH GRAY CLAY OR GOUGE 50 TO 75 GPM DIRTY WATER
212	219	HARD GREEN ROCK
219	237	FRACTURED GREEN ROCK WITH SOFT WHITE & BROWN CLAY OR GOUGE IN FRACTURES. 40 TO 50 GPM DIRTY WAWTER
237	276	FRACTURED GREENISH-GRAY ROCK WITH CALCITE AND QUARTZ SEAMS. 100+ GPM
276	289	DARK GRAY ROCK
289	294	FRACTURED GREENISH-GRAY ROCK WITH B4ROWN CLAY OR GOUGE IN FRACTURES. 60 TO 90 GPM.
294	305	GREENISH-GRAY ROCK
305	336	HARD DARK GRAY ROCK
336	360	FRACTURED GREENISH-GRAY ROCK WITH BROWN CLAY OR GOUGE IN FRACTURES. 250+ GPM
360	362	BROWN CLAY OR GOUGE.



Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, US Census Bureau, USDA, Esri, NASA, NGA, USGS, FEMA

Well-1 (WL003) (GWIC 140158)

Top Left: The Well-1 wellhouse is atop Pavillion Hill next to storage tank (ST001) which is no longer being used by the PWS.
Top Right: Well-1 (right side) and its connection to the distribution system (left side). The pressure relief valve (yellow circle) discharges back into the well. The well is vented inside the building on the right (red circle).
Bottom Left: A smooth nosed bass spigot is available for source sampling as necessary.
Bottom Right: A pressure valve displaying locational distribution pressure in feet-H2O and PSI.

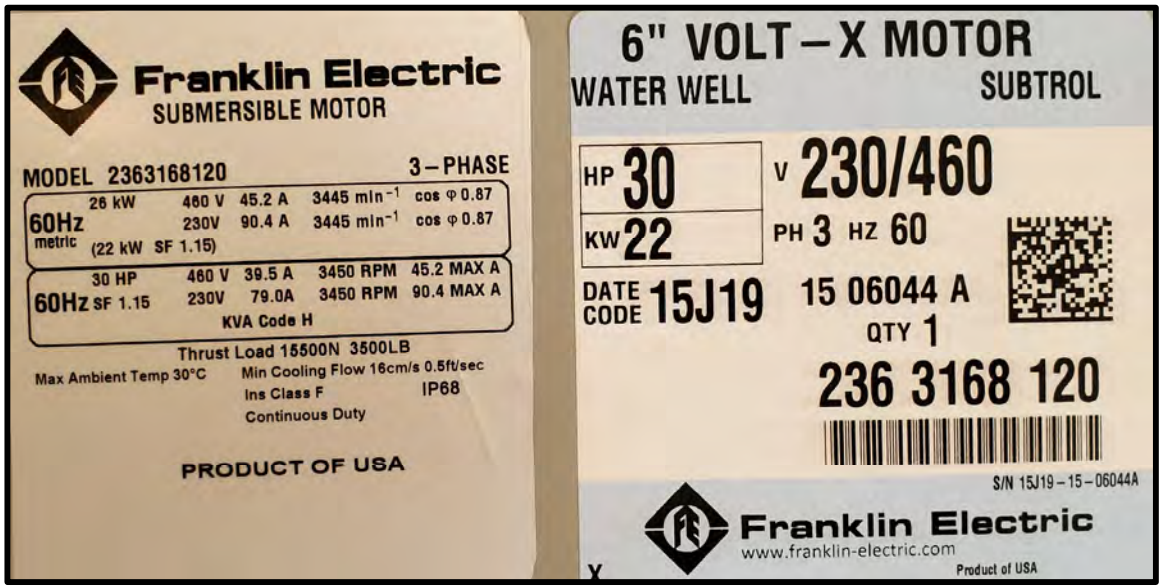
Well/Distribution Controls & SCADA

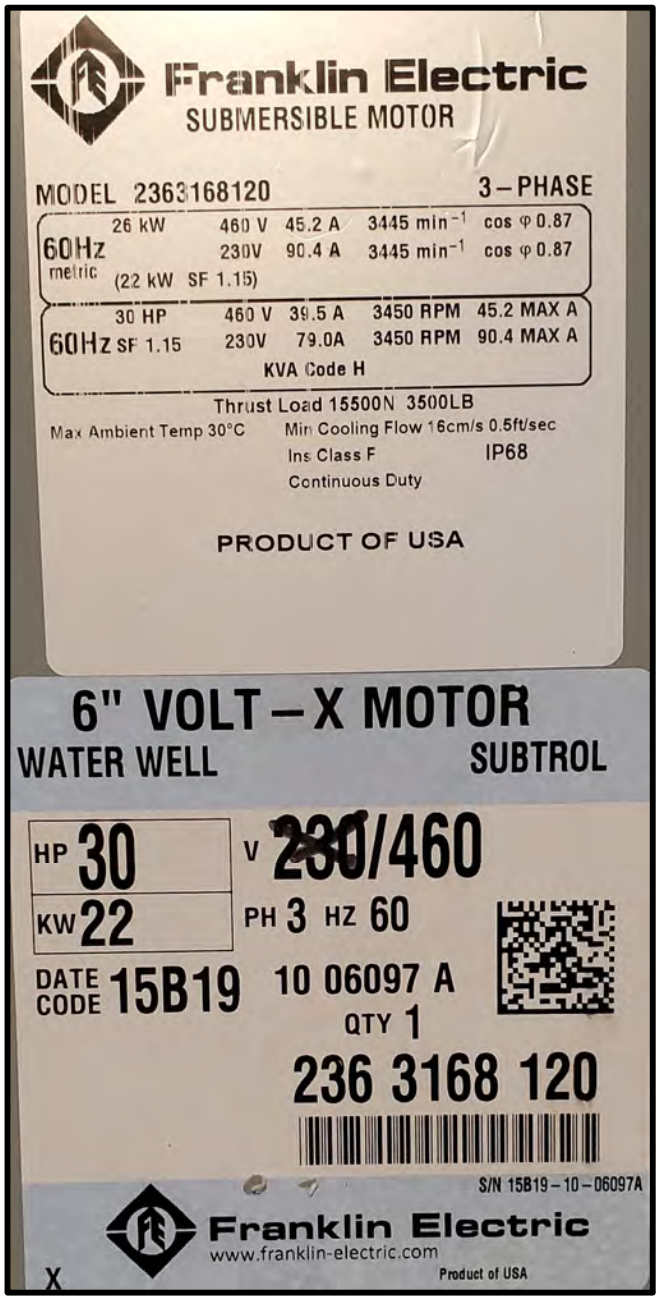
Top Left: The PWS employs a Supervisory Control and Data Acquisition (SCADA) system for automated control of the wells, tanks levels, and alarm notifications. The main control panel is located in the Well-1 wellhouse atop Pavillion Hill although the system can be monitored remotely.

Top Center: The Lesley Road Yacht Club Well-2 (WL004) is connected to the main SCADA control panel using closed-circuit radio communications.

Top Right: In the event there is a failure of the SCADA operating system, the tank level and groundwater wells can be manually operated by control panels in each well house. The Well-1 control panel atop Pavillion Hill is pictured.

Bottom Right: The ability to track and trend well operations and tank levels is an advantage of modern SCADA control systems. Wells can also be cycled and operated in any pattern desired by the PWS.





Well-1 (WL003) & Well-2 (WL004) Pump Specifications

Top Left: Well-1 (WL003)(“Pavillion Hill Tank Well 1”)(GWIC 140158) submersible well pump specifications.

Right: Well-2 (WL004) (“Lesley Rd. Yacht Club Well 2”)(GWIC 140159) submersible well pump specifications.

Well-2 (WL004) (GWIC 140159)

Top left: The "Lesley Road Yacht Club Well-2" (WL004) wellhouse is located at the edge of Flathead Lake in the North Flathead Yacht Club complex.

Top Right: Well-2 (right) and its connection to the distribution system (left). The pressure relief valve (yellow arrow) discharges back into the well. The well is vented inside the building on the right side(red arrow / picture insert). The well flushing line is seen in the far back (green arrow).

Bottom Left: Both Well-1 and Well-2 flushing lines have removable caps with a spigot on the exterior of the wellhouses. The caps are removed when flushing is required. Both valves have a minor leak, the spigots are periodically opened to drain any water that has accumulated in the line.

Bottom Right: The system chlorinator is located in the Well-2 wellhouse.

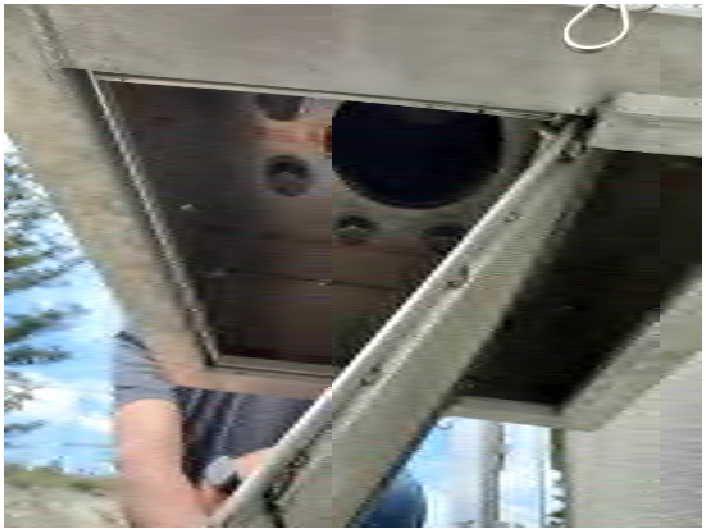
Storage Facility ST003 (500K Gallons)

Top Left: The new PWS storage tank ST003 is a 500,000-gallon cable -wrapped cement tank located just north of Somers along Highway-93. The tank manifold building is seen behind the tank on the right.
Top Right: The tank manifold room with antenna for SCADA communications.
Bottom Right: The main ST003 tank manifold which connects the tank to the groundwater wells and the distribution system. The wells and distribution system enter the manifold on the right (yellow arrow) and fill the tank via a one-way valve on the top left (red arrow). Water from the tank discharges back into distribution system via a second one-way valve on the right (green arrow). The tank can be drained to the exterior through the valve on the left (orange arrow).

Not Shown: Both lines going in and out of ST003 have a second isolation valve found on the ground near the base of the tank.

Storage Tank (ST003) Continued

Top Left: The ladder for ST003 is secured and locked to eliminate unauthorized access to the top of the tank.
Top Center: The ST003 tank overflow and drain lines discharge to a rocky pad on the southwest side of the tank. The discharge points have swing check valves with internal screen protection (photo insert).
Top Right: The tank overflow discharges down a manhole which also drains to the rocky pad southwest of the tank (photo insert). An aluminum box with hinged lower lid is connected to the base of the discharge line from the tank. The screened box is normally closed but will swing open when water is discharged from the tank.
Bottom Right: A closeup of the hinged aluminum discharge box. A second screen was added to the inside of the discharge line by the PWS for additional protection



Storage Tank (ST003) Continued

Top Left & Center: Two lockable access hatches are available on top of the tank for service and inspection. The seals on both hatches were inspected and appeared to be effective and secure.
Bottom Left: A stainless steel manway hatch is also available at the base of the tank for service and inspection.
Top Right: The tank vent is properly screened and secure. The PWS installed additional screen to the vent to ensure its integrity.
Bottom Right: The tank vent located atop ST003.

Appendix K: Water Loss Data

Somers County Water & Sewer District

2019 Water Loss

	Dec-18	January	February	March	April	May	June	July	August	September	October	November	December			
Tank Well Meter	38515	38765	39320	39914	40542	41,473	43063	45319	46637	47823	48513	49149	49798			
YachtClub Well Meter	60852	61952	62544	63141	63835	64,899	66774	69337	73158	74488	75289	76003	76730			
														Totals		
Total Pumped		1,350,000	1,147,000	1,191,000	1,322,000	1,995,000	3,465,000	4,819,000	5,139,000	2,516,000	1,491,000	1,350,000	1,376,000	27,161,000		
Total Sold		1,114,000	933,000	970,000	977,000	1,538,000	3,072,000	4,331,000	4,715,000	2,108,000	1,077,000	933,000	980,000	22,748,000		
														Difference from pumped and sold		
Flushing Gallons								100,000	50,000					4,413,000		
Loss Gallons		236,000	214,000	221,000	345,000	457,000	393,000	388,000	374,000	408,000	414,000	417,000	396,000	**Average**	**Min**	**Max**
GPM Loss		5.4	4.9	5.0	7.9	10.4	9.0	8.9	8.5	9.3	9.5	9.5	9.0	8.1	4.9	10.4
% Loss		17.5	18.7	18.6	26.1	22.9	11.3	8.1	7.3	16.2	27.8	30.9	28.8	19.7	7.3	30.9

Lakeside Sewer Meter	gallons		1,307,000	1,260,000	1,241,000	1,131,000	1,119,000	1,192,000	1,103,000	
Total Sewer Billed	gallons	1,004,000	1,109,000	1,135,000	1,144,000	1,035,000	969,000	1,018,000	1,080,000	
Difference			198,000	125,000	97,000	96,000	150,000	174,000	23,000	

Somers County Water & Sewer District

2020 Water Loss

	Dec-19	January	February	March	April	May	June	July	August	September	October	November	December			
Tank Well Meter	49798	50462	51114	51775	52524	53,357	54704	56704	59518	61923	62902	63629	64273			
YachtClub Well Meter	76730	77512	78254	79026	79869	80,846	82364	84684	88398	91061	92176	92997	93724			
														Totals		
Total Pumped	1,376,000	1,446,000	1,394,000	1,433,000	1,592,000	1,810,000	2,865,000	4,320,000	6,528,000	5,068,000	2,094,000	1,548,000	1,371,000	31,469,000		
Total Sold	980,000	976,000	960,000	992,000	1,091,000	1,391,000	2,324,000	3,826,000	5,873,000	4,577,000	1,562,000	1,064,000	944,000	25,580,000		
														Difference From Pumped and Sold		
Flushing Gallons									100,000					5,889,000		
Loss Gallons	396,000	470,000	434,000	441,000	501,000	419,000	541,000	494,000	555,000	491,000	532,000	484,000	427,000	**Average**	**Min**	**Max**
GPM Loss	9.0	10.7	9.9	10.1	11.4	9.6	12.4	11.3	12.7	11.2	12.2	11.1	9.8	11.0	9.6	12.7
% Loss	28.8	32.5	31.1	30.8	31.5	23.1	18.9	11.4	8.5	9.7	25.4	31.3	31.1	23.0	8.5	32.5

Sewer Accounting

Lakeside Sewer Meter	1,103,000	1,048,000	1,145,000	1,150,000	1,249,000	1,181,000	1,437,000	1,366,000	1,366,000	1,299,000	1,297,000	1,079,000	1,220,000
Total Sewer Billed	1,080,000	1,081,000	1,066,000	1,097,000	1,211,000	1,053,000	1,088,000	1,060,000	1,147,000	1,039,000	953,000	1,205,000	1,052,000
Difference	23,000	-33,000	79,000	53,000	38,000	128,000	349,000	306,000	219,000	260,000	344,000	-126,000	168,000

Somers County Water & Sewer District

2021 Water Loss

	Dec-20	January	February	March	April	May	June	July	August	September	October	November	December			
Tank Well Meter	64273	64968	65717	66397	67184	68,074	69913	73263	76022	77528	78363	79035	79709			
YachtClub Well Meter	93724	94518	95348	96140	97005	98,062	100224	104043	107455	108999	109859	110575	111249			
														Totals		
Total Pumped	1,371,000	1,489,000	1,579,000	1,472,000	1,652,000	1,947,000	4,001,000	7,169,000	6,171,000	3,050,000	1,695,000	1,388,000	1,348,000	32,961,000		
Total Sold	916,000	991,000	1,090,000	981,000	1,064,000	1,488,000	3,317,000	6,628,000	5,240,000	2,613,000	1,201,000	1,028,000	916,000	26,557,000		
														Difference From Pumped and Sold		
Flushing Gallons					30,000	5,000	8,000		500,000	50,000	100,000	20,000		6,404,000		
Loss Gallons	455,000	498,000	489,000	491,000	558,000	454,000	676,000	541,000	431,000	387,000	394,000	340,000	432,000	**Average**	**Min**	**Max**
GPM Loss	10.4	11.4	11.2	11.2	12.7	10.4	15.4	12.4	9.8	8.8	9.0	7.8	9.9	10.8	7.8	15.4
% Loss	33.2	33.4	31.0	33.4	33.8	23.3	16.9	7.5	7.0	12.7	23.2	24.5	32.0	22.3	7.0	33.8

Sewer Accounting

Lakeside Sewer Meter	1,220,000	1,318,000	1,209,000	1,193,000	1,143,000	1,302,000	1,189,000	1,163,000	1,329,000	1,286,000	1,299,000	1,083,000	1,084,000
Total Sewer Billed	1,052,000	1,115,000	1,249,000	1,098,000	1,189,000	1,105,000	1,142,000	1,151,000	1,088,000	1,016,000	984,000	1,027,000	1,021,000
Difference	168,000	203,000	-40,000	95,000	-46,000	197,000	47,000	12,000	241,000	270,000	315,000	56,000	63,000

Somers County Water & Sewer District

2022 Water Loss

	Dec-21	January	February	March	April	May	June	July	August	September	October	November	December			
Tank Well Meter	79709	80440	81180	81836	82617	83,480	84714	87654	91901	94006	94872	95652	96424			
YachtClub Well Meter	111249	111980	112781	113459	114263	115,134	116299	119134	122966	125267	126219	127221	128020			
														Totals		
Total Pumped	1,348,000	1,462,000	1,541,000	1,334,000	1,585,000	1,734,000	2,399,000	5,775,000	8,079,000	4,406,000	1,818,000	1,782,000	1,571,000	33,486,000		
Total Sold	916,000	999,000	990,000	879,000	1,097,000	1,251,000	1,898,000	5,185,000	7,383,000	3,892,000	1,431,000	1,125,000	1,104,000	27,234,000		
														Difference From Pumped and Sold		
Flushing Gallons							50,000					150,000	25,000	6,252,000		
Loss Gallons	432,000	463,000	551,000	455,000	488,000	483,000	451,000	590,000	696,000	514,000	387,000	507,000	442,000	**Average**	**Min**	**Max**
GPM Loss	9.9	10.6	12.6	10.4	11.1	11.0	10.3	13.5	15.9	11.7	8.8	11.6	10.1	11.5	8.8	15.9
% Loss	32.0	31.7	35.8	34.1	30.8	27.9	18.8	10.2	8.6	11.7	21.3	28.5	28.1	23.2	8.6	35.8

Sewer Accounting

Lakeside Sewer Meter	1,084,000	1,274,000	1,225,000	1,176,000	1,231,000	1,392,000	1,318,000	1,372,000	1,365,000	1,376,000	1,224,000	1,275,000	1,316,000
Total Sewer Billed	1,021,000	1,111,000	1,112,000	960,000	1,215,000	939,000	987,000	1,034,000	1,127,000	964,000	970,000	1,242,000	1,211,000
Difference	63,000	163,000	113,000	216,000	16,000	453,000	331,000	338,000	238,000	412,000	254,000	33,000	105,000

Somers County Water & Sewer District

2023 Water Loss

	Dec-22	January	February	March	April	May	June	July	August	September	October	November	December			
Tank Well Meter	96424	97215	98183	99011	99738	101,056	102792	105983	109543	111254	111974	112696	113345			
YachtClub Well Meter	128020	128799	129708	130265	130994	132,311	134193	137365	140930	142440	143232	143907	144639			
														Totals		
Total Pumped	1,571,000	1,570,000	1,877,000	1,385,000	1,456,000	2,635,000	3,618,000	6,363,000	7,125,000	3,221,000	1,512,000	1,397,000	1,381,000	33,540,000		
Total Sold	1,104,000	1,079,000	1,063,000	866,000	948,000	2,114,000	3,196,000	5,778,000	6,551,000	2,746,000	996,000	917,000	880,000	27,134,000		
														Difference From Pumped and Sold		
Flushing Gallons				50,000				25,000	20,000					6,406,000		
Loss Gallons	467,000	491,000	814,000	469,000	508,000	521,000	422,000	560,000	554,000	475,000	516,000	480,000	501,000	**Average**	**Min**	**Max**
GPM Loss	10.7	11.2	18.6	10.7	11.6	11.9	9.6	12.8	12.7	10.9	11.8	11.0	11.4	12.0	9.6	18.6
% Loss	29.7	31.3	43.4	33.9	34.9	19.8	11.7	8.8	7.8	14.7	34.1	34.4	36.3	25.4	7.8	43.4

Sewer Accounting

Lakeside Sewer Meter	1,316,000	1,430,000	1,427,000	1,247,000	1,201,000	1,236,000	1,320,000	1,208,000	1,236,000	1,230,000	1,159,000	1,108,000	1,110,000
Total Sewer Billed	1,211,000	1,193,000	1,171,000	966,000	1,069,000	1,074,000	1,034,000	1,164,000	1,100,000	1,014,000	925,000	1,048,000	1,009,000
Difference	105,000	237,000	256,000	281,000	132,000	162,000	286,000	44,000	136,000	216,000	234,000	60,000	101,000

Somers County Water & Sewer District

2024 Water Loss

	Dec-23	January	February	March	April	May			
Tank Well Meter	113345	114187	114928	115582	116423	117,262			
YachtClub Well Meter	144639	145488	146147	146885	147675	148,574			
							Totals		
Total Pumped	1,381,000	1,691,000	1,400,000	1,392,000	1,631,000	1,738,000	7,852,000		
Total Sold	880,000	1,088,000	855,000	863,000	1,030,000	1,232,000	5,068,000		
							Difference From Pumped and Sold		
Flushing Gallons							2,784,000		
Loss Gallons	501,000	603,000	545,000	529,000	601,000	506,000	**Average**	**Min**	**Max**
GPM Loss	11.4	13.8	12.4	12.1	13.7	11.6	12.7	11.6	13.8
% Loss	36.3	35.7	38.9	38.0	36.8	29.1	35.7	29.1	38.9

Sewer Accounting

Lakeside Sewer Meter	1,110,000	1,495,000	1,119,000	1,195,000	1,175,000	1,147,000
Total Sewer Billed	1,009,000	1,238,000	978,000	979,000	1,165,000	972,000
Difference	101,000	257,000	141,000	216,000	10,000	175,000