

Agenda

Thursday, July 15, 2021
Board of Commissioners Meeting
Mill Valley Community Center
Cascade Room¹
5:30 PM²

IMPORTANT NOTICE:

All persons who are not vaccinated against COVID-19 are required to wear a mask in the Mill Valley Community Center. Persons who are vaccinated against COVID-19 are not required to wear a mask.

CALL TO ORDER AND ROLL CALL

Closed Session: *Conference with legal counsel—Anticipated litigation
Initiation of litigation pursuant to Gov't Code § 54956.9(d)(4)
Number of potential case(s): One*

ADJOURNMENT: To the July 15, 2021 Regular SASM Board of Commissioners Meeting at 6:00 PM in the Mill Valley Community Center, Cascade Room.

1 Note location change.

2 Note early start time to accommodate Strategic Planning Session.

The Sewerage Agency of Southern Marin does not discriminate against any individual with a disability. Upon request, SASM publications will be made available in the appropriate format to persons with a disability.

Materials related to an item on this agenda submitted to the Sewerage Agency of Southern Marin after distribution of the agenda packet are available for public inspection at 450 Sycamore Avenue, during normal business hours. Such documents are also available on the SASM's website at: www.cityofmillvalley.org/Index.aspx?page=461 subject to staff's ability to post the documents prior to the meeting.

S/ADMIN/SASM/SASM BRD

Agenda

Thursday, July 15, 2021
Board of Commissioners Meeting
Mill Valley Community Center
Cascade Room¹
6:00 PM²

IMPORTANT NOTICE:

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CALL TO ORDER AND ROLL CALL

APPROVAL OF AGENDA

PUBLIC OPEN TIME

The Public is invited to address the Board on items that do not appear on the agenda and that are within the subject matter jurisdiction of the Board. State law prohibits Board action on any item not listed on the agenda. Please avoid repetition and please limit your comments to three minutes.

CONSENT CALENDAR

The following items listed on the Consent Calendar are considered routine and are approved by a single motion without discussion. The Board President or any Board Commissioner or the public may request that any item listed under the Consent Calendar be removed and action taken separately. In the event an item is removed from the Consent Calendar, it shall be considered in its numerical order.

1. Consideration of the Minutes of the May 20, 2020 meeting.
Recommended Action: Approve the minutes.
2. Monthly Report.
Recommended Action: Receive report.

PRESENTATION

Sea Level Rise Impacts in Marin

NEW BUSINESS

3. Consideration of the SASM Reserves Policy.
Recommended Action: Receive Report, Approve the Reserves Policy.

**Sewerage Agency of Southern Marin
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STRATEGIC PLANNING SESSION

4. Annual Report for 2020
Recommended Action: Receive report.

PRESENTATION

SASM CIP Progress Update

5. Consideration of the SASM Mission Statement and the FY 2021-22 Work Plan.
Recommended Action: Acknowledge and confirm the Mission Statement and approve the Work Plan for FY 2021-22.

Open Discussion

ADJOURNMENT

The next scheduled Board meeting is August 19, 2021 @ 7 pm

1 Note location change.

2 Note early start time to accommodate Strategic Planning Session.

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S/ADMIN/SASM/SASM BRD

SEWERAGE AGENCY OF SOUTHERN MARIN

Minutes

BOARD OF COMMISSIONERS

May 20, 2021

Teleconference

Call to order and roll call

President Lew Kious called the meeting to order at 5:00 pm.

Commissioners present: Al Leibof, Jeff Slavitz, Jim Jacobs, John McCauley, and Todd Gates

Commissioner absent: Frank Trusheim

Staff present: WWTP Director Mark Grushayev, Mill Valley City Manager Alan Piombo, Mill Valley Finance Director Eric Erickson, Mill Valley Public Works Director Andrew Poster

Members of the Public: Bonner Beuhler, Bill Hansel

Approval of Agenda

Action: M/S McCauley/Jacobs and carried on a vote of 6 to 0 to approve the Agenda.

Public Open Time

There were no comments from the public.

Consent Calendar

1. Consideration of the Minutes of the April 15, 2021 meeting.
Recommended Action: Approve the minutes.
2. Monthly Report.
Recommended Action: Receive report

Action: M/S McCauley/Gates and carried on a vote of 6 to 0 to approve the minutes of the April 15, 2021 meeting and receive the Monthly Report.

NEW BUSINESS:

3. Consideration of the SASM Budget for the Fiscal Year 2021-22.
Recommended Action: Receive presentation on the proposed FY 2021-22 Budget and approve or provide direction to staff.

Mr. Grushayev said that SASM's current budget is 70% expended, which is where it's supposed to be at this fiscal year period and that SASM is in a good financial position in the current fiscal year. He added that in the proposed FY 2021-22 Budget there are a few changes and some new projects for the Board to consider. He reported the following: Salaries increases of 3.7% for operators and mechanics were added to the 2021-22 budget as discussed in the April Board Meeting. Electricity costs have increased due to SASM's energy demanding processes. The percent jump in spare parts is actually an increase of only \$14,600 is due to the new plant equipment having sophisticated components that if need replacement, may require extra time to procure and therefore is better to have them on site as part of contingency plan. Increase in laboratory costs is due to a mandated analytical study that has to be done

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May 20, 2021**

this year. Bond principal payment has increased as per schedule that was established during the bond issue. There has been a reduction in bond interest. The proposed CIP Projects will be paid out of SASM's revenue. Among those: the Private Lateral Program which is popular and successful in preventing infiltration and inflow (I&I); the outfall diffuser inspection which is done every 4 to 5 years to ensure that SASM's infrastructure and assets are properly maintained and was last done in 2017; the Gravity Thickener design which is meant to improve reliability and ease of maintenance; the Effluent Line Reliability Improvement design which is meant to enhance the line's reliability and provide access points for inspections, maintenance, and potential bypass options; Digester #2 is not in good shape and will need to be cleaned and repaired right after the Digester #1 rehabilitation; the Effluent Line Rectifier #1, another component of the effluent line protection system that has to be periodically rebuilt; several buildings throughout the WWTP that need maintenance; the collection system Manhole Rehabilitation which is done every year as part of I&I reduction efforts; the Recycled Water facility expansion design which will be done in preparation for future grant applications; the Administration Building exterior repairs and the Primary Clarifier Odor Control pilot project which will focus on the next phase of odor reduction efforts and may save SASM a lot of money in future CIP work.

President Kious asked Mr. Erickson to explain why the City has increased the Mill Valley Administration fees. Mr. Erickson said that the increase was to offset staff step increases and that it's under 1%.

President Kious asked if the amount allocated to the Private Lateral Program was enough and Mr. Grushayev said yes.

President Kious asked Mr. Erickson about SASM's current reserves and Mr. Erickson said that SASM is on target with 5.3 M.

Commissioner McCauley asked if the Lateral Program fund distribution is even between the six agencies and Mr. Grushayev said yes.

Commissioner Slavitz said that Richardson Bay Sewer District had an unfunded liability that was refinanced into a bond, cutting the interest in half. Commissioner McCauley said that Mill Valley looked into this option and choose a different approach.

Commissioner Gates asked if switching from PG&E to MCE had any bearing on the budget and Mr. Grushayev said yes. Commissioner Leibof asked if SASM was enrolled in the MCE Deep Green Program which costs even more and Mr. Grushayev said yes. Commissioner McCauley and Commissioner Leibof pointed out that PG&E and MCE rates rise in lockstep. Commissioner McCauley said that any large cost discrepancies would be due to usage.

Public Comments

There were no comments from the public.

Action: M/S McCauley/Gates and carried on a vote of 6 to 0 to approve the proposed SASM FY 2021-22 Budget.

Future Agenda Items

There were no future agenda items.

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Minutes of the SASM Board Meeting
May 20, 2021**

Closed Session:

Conference with legal counsel–Anticipated litigation

Initiation of litigation pursuant to Gov't Code § 54956.9(d)(4)

Number of potential case(s): One

Start time: 5:42 pm

End time: 5:55 pm

Commissioners Open Time

President Kiouss said that given that the State is set to reopen June 15th, the Board is tentatively planning on having the next Board Meeting in person at the Mill Valley Community Center, following appropriate State of California guidelines.

Adjourn

Action: M/S Jacobs/Slavitz and carried on a vote of 6 to 0 that the meeting be adjourned at 5:56 pm.

The next scheduled meeting of the SASM Board is June 17, 2021 at 6:00 pm (to be confirmed).

STAFF REPORT

TO: Sewerage Agency of Southern Marin Board Commissioners

FROM: Mark Grushayev, Wastewater Treatment Plant Director

VIA: Eric Erickson, Finance Director

SUBJECT: Consideration of the SASM Reserves Policy

DATE: July 15, 2021

ISSUE:
SASM Reserves Policy.

RECOMMENDATION:
Receive Report, Adopt the Reserves Policy.

BACKGROUND:
The SASM Board of Commissioners originally established a policy on reserves in April, 1987 as follows:

Operating reserve	\$900,000
Major repair and replacement reserve	\$1,000,000
Capital improvement reserve	\$1,000,000
Risk management reserve	\$500,000
Total contingency reserve:	\$3,400,000

For a period of time this policy has provided an adequate reserves fund that was used to: balance revenues and expenses in any given year, provide a source of funds for unanticipated large emergency expenses, and provide a source of funds for future major repairs and replacements. At its regular meeting on August 20, 2020, the Board of Commissioners approved the Capital Improvement Plan for 2021-25 and received the Presentation by Hildebrand Consulting on SASM's long-term financial planning outlook. In August 2021 the SASM Board adopted the 2020 Financial Plan by Resolution No.2020-1.

DISCUSSION:
The purpose of the Financial Plan was to evaluate SASM's revenues, reserves, and available funds to make sure that SASM's Capital program is supported by adequate funding.

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SASM Reserves Policy
July 15, 2021**

Hildebrand Consulting finalized recommendations of the 2020 Financial Plan for the reserves in a Memorandum to establish a new basis for the SASM Board review and update of its Reserve Policy. The Memorandum was completed on May 27, 2021 (Attachment 1).

Based on Hildebrand Consulting May 27, 2021 Memorandum, Staff recommends that the SASM Board adopts a new Reserves Policy as follows:

Reserve	Basis	2021 Amount	Type
Operating	50% of operating budget	\$2,450,000	Minimum
Major Equipment Repair and Replacement	Staff assessment of infrastructure risk factors and shall be escalated annually by the CCI	\$1,000,000	Minimum
Risk Management	Assessment of liability risk factors conducted in 2000 and roughly updated based on inflation pending a more formal assessment update	\$750,0000	Minimum
Capital Improvement	Based on the 10-year average annual capital spending	Up to \$3,500,000	Target

Minimum Target: \$4,200,000
Maximum Target: \$7,700,000

Currently, SASM has approximately \$6 million in total reserves.

Attachments: 1. Hildebrand Consulting Memorandum May 27, 2021



To: Mark Grushayev, General Manager, Sewerage Agency of Southern Marin

From: Mark Hildebrand, Hildebrand Consulting, LLC

Date: May 27, 2021

Subject: Cash Reserves Recommendation

In August of 2020, Hildebrand Consulting completed a 10-Year Financial Plan for the Sewerage Agency of Southern Marin (SASM or Agency) which included recommendations regarding target cash reserves for the agency. The following memorandum re-iterates and updates those recommendations and includes further detail and discussion.

Background

Reserves are cash balances that are maintained by public utilities in order to:

1. Protect the agency from unexpected financial events, and
2. Accommodate operational and capital program cash flow needs.

Often multiple reserves are maintained, each with a specific function. In addition to the direct benefits of financial stability, reserves can help utilities obtain higher credit rankings, which can then help qualify the utility for cheaper debt. Credit rating agencies evaluate utilities on their financial stability, which includes adherence to formally adopted policies regarding reserve targets.

SASM adopted a series of reserve policies in 1987, which were amended most recently in April 2000. The District currently has policies for the following reserves:

- 1) Operating Reserve
- 2) Major Equipment Repair and Replacement Reserve
- 3) Risk Management Reserve
- 4) Capital Improvement Reserve

It is important to note that there is not a “one size fits all” reserve policy for public utilities, but instead it is important to consider each utility’s specific financial and operational circumstances. The following makes recommendations regarding each of the District’s reserve policies, discusses the purpose of each reserve, describes the Agency’s current policy, and provide an explanation for the current recommendation.

We recommend the following updates to the Agency’s reserve policies which are already generally consistent with Consultant’s industry experience for similar systems. Adhering to the Agency’s existing reserve policies is consistent with best practices as reported by reserve studies conducted by the AWWA and is viewed favorably by rating agencies (e.g., Fitch, Moody’s, and Standard & Poor’s).

1) Operating Reserve

Purpose – A proper operating reserve enhances a utility’s ability to manage potential risks and provides the ability to manage fluctuations in revenue or expenses. Operating reserves are also important when facing fiscal emergencies that can result from droughts, natural disasters, and unforeseen economic influences.

Current Policy – The Operating Reserve target is equal to 50% of the operating budget (for a 2021 reserve target of \$2.45 million).

Discussion – As previously explained, the purpose of the Operating Reserve is to keep facilities running in the event of unusual circumstances such as major process failure, changes in operating costs, large financial penalties, or inability of Member Agencies to pay assessments. Typically, these reserves are equal to about 1 – 6 months of annual operating expenses. When determining the appropriate size of this reserve for a utility, we consider:

- 1) The risk associated with the source of revenue
- 2) The frequency with which a utility collects its revenue
- 3) The likelihood of changes in operating costs

Regarding the first factor, SASM’s revenue comes from member agencies and is therefore considered low risk. The latter two factors, however, argue that the SASM should maintain an above-average operating reserve. In the case of revenue frequency, SASM receives payments from member agencies twice per year, which is relatively “lumpy” when compared to utilities that bill on a monthly basis. Utilities with intermittent cash flow should maintain a larger operating reserve in order to bridge the period of time between payments. In addition, SASM’s operating costs are predominately associated with wastewater treatment, which depends heavily on costs such as chemicals, energy, and professional services. All of these costs are subject to significant variability.

Recommendation - We find that the current operating reserve policy of 50% of the operating budget (i.e., 6 months) is appropriate and should remain the same.

2) Major Equipment Repair and Replacement Reserve

Purpose - The purpose of the Major Equipment Repair and Replacement Reserve is to have sufficient cash to address catastrophic failure of critical assets.

Current Policy –The 2000 update to the Agency’s reserve policy set the target for this reserve at \$1 million.

Discussion – Emergency capital reserves are used to fund replacement of critical assets damaged by catastrophic events such as a natural disaster. In determining the amount of emergency capital reserves that may be necessary, the following factors should be considered:

- Risk factors – The types of natural disasters, extreme weather conditions, or other force majeure events that the system may be at risk for and the extent of the damage that could result.
- Critical facilities – Identification of the specific facilities (including condition and replacement costs) that are critical to the operation of the system and may be vulnerable to identified threats.
- Availability of other funds – The ability to quickly access other funds in the event of an emergency, such as a line of credit, transfer from the municipal general fund, or funds from related agencies for investor-owned utilities (as may be appropriate).

Ultimately the appropriate size of this reserve should be determined based on the judgment of an engineer based on the above factors.

Recommendation – SASM’s current reserve policy of \$1 million was based on the original cost of installed equipment. According to staff estimations and confirmed in discussions with the Board this amount remains adequate in 2021. We recommend that, henceforth, the \$1 million reserve target be increased annually by the Construction Cost Index (CCI).

3) Risk Management Reserve

Purpose - The purpose of the Risk Management Reserve is for unexpected, uninsured exposures such as environmental damage caused by sewage overflows. SASM is a closely regulated public utility and its operations carry the risks that are inherent to all wastewater treatment operators, such as fines and penalties for making “off-spec” discharges to natural water bodies.

Current Policy – In 2000 the target for this reserve was set at \$500 thousand.

Discussion – A formal assessment of the Agency’s liability exposure would be the proper method for updating this reserve target.

Recommendation – In the absence of such an assessment, this memorandum recommends using a placeholder target of \$750 thousand based on estimated inflation since 2000.

4) Capital Improvement Reserve

Purpose - The purpose of the Capital Improvement Reserve is to support the Agency’s ability to cash finance its capital program (“pay as you go”). Capital spending is inherently volatile. In some cases there can be peak years where the level of spending is orders of magnitude higher than minimum years. This is normal in the utility industry and does not necessarily need to be avoided. It is far more efficient to carry sufficient reserves that are capable of absorbing the peak years rather than create artificial

scheduling constraints around the capital program in order to spread the costs more evenly. The reserves should be rebuilt in the below-average years that follow the peak years.

Current Policy – The 2000 policy update set the target amount to \$1 million.

Discussion – The 2000 policy update did not explain the methodology for deriving the target of \$1 million. Since the goal of the reserve is to smooth out annual fluctuations in cash funding, the target fund balance should be aligned with the average annual capital spending and the difference between peak years, average years, and minimum years. According to SASM's 2020 Financial Plan, the average annual capital spending over the next 10 years will be approximately \$2.3 million, with the peak year being about \$3.5 million and the lowest year being about \$1.1 million. The difference between an average year and a peak year is about \$1.2 million and the difference between an average year and a minimum year is about the same.

Recommendation – While technically it may be sufficient to set this reserve target to be equal to half of the Agency's average annual capital spending (i.e., \$1.3 million), this would not be sufficient if the Agency were to have two peak years back-to-back. As such, we recommend that the Capital Improvement Reserve target be set to be equal to the Agency's average annual capital spending (i.e., \$3.5 million). It is understood this is a long-term target and the reserve is expected to be drawn down on occasion. In actuality this reserve will most often be below the full target as it gets drawn down and is rebuilt over time.

DISCUSSION – Target Reserve vs. Minimum Reserves

There are two types of reserves. **Minimum reserves** are designed to be maintained at all times during a planning period and should only be drawn down in the event of an unforeseen event. In other words, while all reserves are designed to be drawn down in the case of need, SASM should never *plan* to draw down on minimum reserves. On the other hand, **target reserves** are designed to be drawn down and built up over the course of the planning period. Oftentimes these reserves are below the target as they are being rebuilt after being drawn down. The purpose of target reserves are to give flexibility, not create constraints.

The first three reserves described above (Operating, Major Equipment Repair and Replacement, and Risk Management) are all minimum reserves. SASM should never forecast a drawdown of these reserves during long-term planning. The last reserve (Capital Improvement) is a target reserve and is meant to provide a cushion the inherent volatility of the District's capital spending. The target value for the Capital Improvement Reserve serves primarily as a benchmark or guide for financial and capital spending planning.

CONCLUSION

The following table summarizes the recommended 2021 reserve levels for SASM.

Reserve	Basis	2021 Amount	Type
Operating	50% of operating budget	\$2.45 million	Minimum
Major Equipment Repair and Replacement	Staff assessment of infrastructure risk factors and should be escalated annually by the CCI	\$1 million	Minimum
Risk Management	Assessment of liability risk factors conducted in 2000 and roughly updated based on inflation pending a more formal assessment update	\$750 thousand	Minimum
Capital Improvement	Based on the 10-year average annual capital spending	Up to \$3.5 million	Target

Minimum Target: \$4.2 million

Maximum Target: \$7.7 million

STAFF REPORT

TO: Sewerage Agency of Southern Marin Board of Commissioners

FROM: Mark Grushayev, Wastewater Treatment Manager

SUBJECT: Strategic Planning Session

DATE: July 15, 2021

BACKGROUND:

The SASM Board meets annually for a Strategic Planning Session. The ultimate goal of these sessions is to advance a strategic plan, which reviews SASM’s goals, vision, mission, and objectives, providing a clear path to reaffirming or updating them. The Strategic Planning Session is also an opportunity to look back and reflect on what has been accomplished in the last 12 months and to approve a Work Plan for the upcoming year. The 2020 Strategic Planning Session was cancelled due to the Covid-19 pandemic.

DISCUSSION:

Despite the pandemic, the past year has been productive with substantial accomplishments and progress on important issues. Staff continued to perform and operate under very special circumstances, exercising extreme caution, and closely following the guidelines from the CDC, OSHA, and local health authorities. Tonight’s discussion provides an opportunity to identify goals and priorities for the upcoming fiscal year. This report is intended to provide a reference for a strategic planning discussion, including review of the Board's adopted Mission and Goals Statements and the FY2019-20 Work Plan.

ITEM 4: Annual Report for Calendar Year 2020

Recommended Action: Receive report.

General Overview

It was a challenging year due to unprecedented circumstances. Staff continued to operate and maintain all the wastewater treatment and conveyance facilities, while trying to comply with the regulatory requirements during the pandemic. Nevertheless, it was another year of continued improvements at the WWTP and SASM’s conveyance system and progress on other important issues.

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**SASM Annual Update for
NPDES Permit Compliance in 2020.**

Compliance Record

SASM utilized California Integrated Water Quality System (CIWQS) computer system to report all monitoring results collected during 2020. During 2020, the Agency did not experience any high wet weather flows of greater than 24.7 MGD and as a result, there no blending events in the facility. However, the Agency had four exceedances of the average monthly ammonia limit, one exceedance of the maximum daily ammonia limit, and one threatened violation for monthly whole effluent acute toxicity within the calendar year. The exceedances have been reported in the August, September, November, and December 2020 self-monitoring reports. For each permit exceedance, SASM staff initiated accelerated monitoring until the results achieved compliance. The RWQCB was informed in a timely manner about the exceedances, the threatened violation, and the corrective actions.

Exceedances of the Average Monthly and Maximum Daily Discharge Limits for Ammonia

The five ammonia exceedances that occurred between August and December 2020 resulted from the WWTP Rehabilitation Project. After completing the rehabilitation of the trickling filters by fall of 2019, the Agency experienced exceedances of the average monthly ammonia discharge limit of 12.3 mg/L, and a maximum daily ammonia discharge limit of 32 mg/L in 2020.

In August 2020, the first effluent sample collected on August 4 had a result of 19 mg/L for ammonia that exceeded the average monthly ammonia limit of 12.3 mg/L. Staff became aware of this on September 15 and documented the exceedance. Based on internal ammonia analysis using a method that is not ELAP approved for our laboratory, the laboratory monitored additional effluent samples for ammonia. These additional effluent samples were collected on August 5, 6, 7, 19, 20, 21, 25, 26, 27, and 28. The potential noncompliance incident was reported to the RWQCB on August 20. By then, the Agency voluntarily initiated accelerated monitoring on August 19 before receipt of the final analytical report from its contract laboratory. Once staff became aware of the exceedance on September 16, a five-day report was submitted to the RWQCB on September 22.

During August 2020, the calculated average monthly ammonia for effluent was 16 mg/L, which exceeds the NPDES limit of 12.3 mg/L. The ammonia results between the eleven effluent samples were below the maximum daily ammonia limit of 32 mg/L. SASM staff has been monitoring the levels of ammonia in its effluent samples since July 2018 and noticed that the ammonia levels didn't return to the low ammonia levels experienced prior to construction. To address this, SASM hired consultants in May 2020 to provide support regarding trickling filter process optimization with the specific goal/pursuit of reliable nitrification in the SASM nitrification process. Between May and September 2020, the consultant collected data and continued to summarize the findings. SASM staff continued to provide additional support in data collection and has implemented several

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70 of the consultant's suggestions to improve nitrification, including the manual flushing of the filters
71 to improve sloughing and retrofitting the distribution arms to improve the Skulkraft ratio. In the
72 consultant's opinion, the trickling filters continue to underperform because of the inadequate
73 media specified by the design engineer. SASM is in discussions with the design engineer and the
74 media manufacturer to determine the suitable media required to achieve nitrification.

75
76 In September 2020, the Agency exceeded its average monthly ammonia limit of 12.3 mg/L.
77 During the month, the calculated average monthly ammonia for effluent was 16.8 mg/L, which
78 exceeds the average monthly ammonia limit of 12.3 mg/L. The Agency continued accelerated
79 monitoring in the month of September and a five-day report was submitted to the RWQCB on
80 October 29. The ammonia results between the seventeen effluent samples collected during the
81 month were below the maximum daily ammonia limit of 32 mg/L. Accelerated monitoring was
82 halted on October 1 based on internal ammonia analysis of the effluent sample collected on that
83 day. The ammonia result of 9 mg/L for the effluent sample collected on October 1 demonstrated
84 permit compliance.

85
86 In November 2020, SASM experienced another exceedance of the average monthly ammonia limit
87 of 12.3 mg/L. During the month, the calculated average monthly ammonia for effluent was 12.5
88 mg/L, which exceeds the NPDES limit of 12.3 mg/L. The RWQCB was notified about this
89 exceedance through email on December 9. A five-day report was submitted to the RWQCB on
90 December 22. Once all data for the month was received from the contract laboratory, staff became
91 aware of the exceedance on December 9. SASM initiated accelerated monitoring earlier on
92 December 3 based on available reporting data at that time. Ammonia results between four effluent
93 samples collected during the month were below the maximum daily ammonia limit of 32 mg/L.
94 The Agency initiated accelerated monitoring on December 3 after receipt and review of the final
95 analytical report from its contract laboratory.

96
97 In December 2020, SASM experienced exceedances of the average monthly ammonia limit of 12.3
98 mg/L and maximum daily ammonia limit of 32 mg/L. The calculated average monthly ammonia
99 for effluent was 22.1 mg/L, which exceeds the NPDES limit of 12.3 mg/L. SASM also exceeded
100 the maximum daily ammonia limit of 32 mg/L on December 15 when the effluent sample had a
101 result of 37 mg/L. The RWQCB was notified about these exceedances as required. SASM has
102 continued accelerated monitoring since December 3. Ammonia results from fourteen effluent
103 samples collected during the month were below the maximum daily ammonia limit of 32 mg/L,
104 except the one effluent sample collected on December 15 that had an ammonia concentration of
105 37 mg/L. Accelerated monitoring was halted on January 5 based on internal ammonia analysis of
106 the effluent sample collected on that day. The ammonia result of 11 mg/L for the effluent sample
107 collected on January 5 demonstrated permit compliance.

108
109 Furthermore, in October 2020, the floating cover of the primary digester failed and caused
110 operations to hold sludge in the primaries for about four weeks until the secondary digester reached

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111 its set temperature and desired microbial population. In the meantime, primary clarifiers became
112 overloaded with solids and continued to carry a high sludge blanket through December. As a result,
113 the primary effluent contained high concentrations of solids that reached the recirculation wet
114 wells. During December, sludge was removed directly from the Gravity Thickener. Approximately
115 13,000 gallons of sludge were trucked out and 115,740 gallons were dewatered through our belt
116 filter press. In addition to underperforming media, staff suspects that the ammonia result of 18
117 mg/L that occurred on November 10, and the ammonia result of 37 mg/L that occurred on
118 December 15 are attributed to the abnormal BOD and ammonia loads to the trickling filters. During
119 the week of December 14, the Agency was performing digester cleaning on one of its units which,
120 coupled with the plant's dewatering needs, contributed to high ammonia loads from the filtrate.

121

122 *Threatened Violation of the Whole Effluent Acute Toxicity*

123 The Agency experienced a threatened violation of its monthly whole effluent acute toxicity test
124 that was performed during the week of October 26. This threatened violation occurred possibly
125 due to the high levels of ammonia present in the effluent samples. SASM immediately initiated
126 accelerated monitoring on October 29, after becoming aware of the circumstances. This
127 noncompliance incident was reported to the RWQCB.

128 Based on the final laboratory report from the whole effluent acute toxicity test performed by
129 McCampbell Analytical (MAI) in October 2020, there was 0% survival in the 100% effluent. The
130 analyzed composite effluent samples were collected between October 26 to 29. The 0% survival
131 indicates that the effluent was acutely toxic to fathead minnows during the first completed test of
132 the month. This result required the Agency to initiate a new test on November 2. Based on the
133 investigation, the high levels of ammonia present in the effluent may have contributed to the high
134 mortality rate. With an approval from the RWQCB, the pH of the effluent samples was adjusted
135 to minimize ammonia toxicity interference during the second test. This change in effluent pH,
136 which is in accordance with section V.A.4 of Order No. R2-2018-0039, yielded a test fish survival
137 rate of 100% in the second test, where composite effluent samples collected between November 2
138 to 5 were analyzed. As a result, SASM demonstrated compliance with the maximum daily and
139 average monthly limits for ammonia as well as the 11-sample median and 11-sample 90th
140 percentile effluent limitations for whole effluent acute toxicity. SASM halted accelerated
141 monitoring on November 5. SASM attempted to perform the whole effluent acute toxicity test
142 earlier in the month; however, the poor quality of the organism culture would not allow completion
143 of the tests during the week of October 12th and 19th. For these two whole effluent acute toxicity
144 tests, SASM was not able to meet the test acceptability criteria since there was less than 90%
145 survival in the control test chambers.

146

147

148

**SASM Annual Update for
Private Lateral Replacement Program (PLRP) 2020.**

149 A letter from the San Francisco Bay Regional Water Quality Control Board dated January 29, 2019
150 acknowledges satisfactory completion of the Supplemental Environmental Project obligation of
151 \$600,000 by SASM. SASM has continued to fund and manage the PLRP.

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152 In 2020, SASM provided financial assistance to repair 13 sewer laterals, funded 13 sewer lateral
153 inspections, and expended \$57,550.00 in PLRP loans, grants, and inspections. To date, approximately
154 273 property owners have utilized funds under the program, totaling approximately \$764,291.75
155 worth of repairs and inspections. The financial summary for the PLRP in 2020 is provided below:
156

Member Agency	# of Loans	# of Grants	# of Inspections	Expended Funds
Almonte Sanitary District	1	0	0	\$6,000.00
Alto Sanitary District	0	0	0	\$0
City of Mill Valley (CMV)	2	4	2	\$19,800.00
Homestead Valley Sanitary District	3	2	0	\$12,800.00
Richardson Bay Sanitary District (RBSD)	2	2	0	\$12,950.00
Tamalpais Community Services District (TCSD)	1	0	0	\$6,000.00

TOTAL: \$57,550

Sanitary Sewer Overflows.

157
158
159 Sanitary Sewer System Waste Discharge Requirements (SSS WDRs) require SASM to monitor
160 and report any overflows from the SASM owned portions of the sanitary sewer system. In addition
161 to immediate notification requirements whenever an overflow occurs, monthly certification is
162 entered in the California Water Resources Control Board website. During 2020, SASM had no
163 sanitary sewer overflows from its sewer system.
164

Collection System Sewer Maintenance and Improvements

- 7,485 linear feet of “hot spots” sewer mains were hydro-jetted, in accordance to the Sewer System Management Plan (SSMP).
- 1,800 linear feet of gravity main sewers repaired by CIPP (Cured-in-place Pipe).
- 8,694 linear feet of gravity main sewers (approximately 30% of the system) were cleaned and inspected, based on the SSMP.
- 20 sewer manholes were rehabilitated/sealed.

Operations Process Summary

173
174 The following summary provides wastewater plant flows and biosolids removal and disposal
175 between January 1, 2020 to December 31, 2020. The information below was submitted to the
176 State Water Board as reporting requirements stipulated under the NPDES during the calendar
177 year.

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178
179 **Total Annual Flow Treated and Discharged** **743.02 million gallons of wastewater**
180 Average Annual Daily Flow 2.04 MGD (million gallons per day)
181 Highest Monthly Total Flow 91.15 million gallons (January 2020)
182 Lowest Monthly Total Flow 52.03 million gallons (February 2020)
183 Highest Average Daily Flow 37.47 MGD (February 10, 2020)
184 Lowest Average Daily Flow 0.13 MGD (October 11, 2020)

185
186 **Biosolids Removal and Disposal:** Annual biosolids anaerobically digested, dewatered and
187 disposed at landfill in 2020 as alternative daily cover. (Calendar year)
188

189 Total Biosolids Processed and Disposed, wet US tons: 1478.6 wet US tons
190 Average Cake Solids content: 20.15%
191 Total Biosolids Processed and Disposed, dry tons: 2702 dry metric tons
192 Total Wet Tons to Landfill: 1478.6 wet US tons

193
194 **Reclaimed Water Production and Use:** Annual amount and distribution of reclaimed
195 wastewater from the wastewater treatment plant during 2020 was as follows:
196

197 **Total Reclaimed Water Produced in 2020:** 5.88 million gallons (to which 3.82 million gallons
198 of MMWD water was added for conductivity control):
199

200 Reclaimed Water Distributed: 9.69 million gallons
201 Landscape Irrigation Re-use: 9.25 million gallons
202 Environmental Enhancement: 0.44 million gallons
203 Irrigated acreage: 11.08 acres
204

205 **Laboratory**

206 The SASM laboratory is certified under the California State Environmental Laboratory
207 Accreditation Program (ELAP) to perform a wide array of analyses in-house. The approved
208 analyses are as follows: whole effluent acute toxicity (4th and 5th editions), total and fecal
209 coliform, biochemical oxygen demand (BOD), total residual chlorine (amperometric titration and
210 DPD methods), hardness, dissolved oxygen (DO), pH, non-filterable residue (or total suspended
211 solids (TSS)), total residue, volatile residue, specific conductance, alkalinity, temperature,
212 turbidity and the IDEXX methods for Enterolert, Colilert, Colilert-18 and HPC (Heterotrophic
213 Plate Count). In 2020, the laboratory analyzed a total of 11,698 process control and regulatory
214 samples, from which 26,276 analyses were performed in-house.
215

216 The Laboratory staff provides analytical services to the following agencies:
217

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218 **Sanitary District No. 5** for their final effluent – whole effluent acute toxicity, temperature, pH,
219 dissolved oxygen, specific conductance, alkalinity, hardness, total residual chlorine, and other
220 analyses per request.

221
222 **Sausalito-Marín City SD** for their final effluent – whole effluent acute toxicity, temperature, pH,
223 dissolved oxygen, specific conductance, alkalinity, hardness, total residual chlorine, and other
224 analyses per request.

225
226 **City of Mill Valley, Public Works Department** for their reclaimed water produced at the facility
227 – total residual chlorine, dissolved oxygen, turbidity, and total coliform.

228
229 **City of Mill Valley, Recreation Department** for their recreational water – total coliform,
230 *Pseudomonas aeruginosa*, and heterotrophic plate count.

231 Laboratory and Operations staff also provide sanitary sewer overflow sampling, monitoring and
232 analysis when requested and labor when needed. This service is available to any member agency
233 of SASM. The analysis of SSO samples requires the laboratory staff to perform total coliform,
234 fecal coliform, and enterococcus tests.

235
236 During 2020, SASM laboratory utilized outside laboratory services for other methods (not stated
237 above), since the laboratory is not ELAP-certified for these methods. The outside laboratories are
238 ELAP-certified for the analyses of oil & grease, antimony, arsenic, beryllium, cadmium,
239 chromium, copper, cyanide, lead, mercury, methyl mercury, nickel, phenolics, selenium, silver,
240 thallium, zinc, chlorinated pesticides and PCBs, polynuclear aromatic hydrocarbons, semi-volatile
241 organic compounds, tributyltin, TOC, volatile organic compounds, organophosphorus pesticides,
242 dioxins, nitrate-nitrite as N, nitrate as N, total inorganic nitrogen, total Kjeldahl nitrogen (TKN),
243 total nitrogen, total phosphorus, pH, and chronic toxicity. In 2020, the contract laboratories
244 analyzed approximately 1,631 regulatory and QA/QC samples. The regulatory samples were sent
245 to the following three contract laboratories: Caltest Analytical Laboratory, Frontier Analytical
246 Laboratory, and McCampbell Analytical Laboratory.

247
248 **Budget Update**
249 SASM’s last Fiscal Year was from July 1st, 2020 to June 30th, 2021. As of May 31, 2021, SASM
250 was slightly under budget, with 88.2% of the budget expended while the anticipated operation and
251 maintenance budget to be expended for this period was 91.7%. Note: the yearly Bond Principal and
252 Interest have been paid for the full fiscal year.

253

May actual	Year-to-date actual	2020-21 O&M budget	Remaining O&M budget	Percent complete
336,455.19	6,003,844.42	6,806,597	802,753	88.2%

254

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255 Staff provided an update on the Capital Improvement Project (CIP) budget at the May meeting,
256 along with a proposed budget for FY 2021-2022.
257

258 **ITEM 5: Consideration of the SASM Mission Statement and the FY 2018-19 Work Plan.**

259 *Recommended Action: Acknowledge & confirm the Mission Statement, receive an update on the*
260 *current Work Plan implementation and approve the Work Plan for FY 2021-22.*

261
262 Since 2010 the SASM Board of Commissioners has conducted annual special planning sessions. In
263 these sessions, the Board developed and ultimately adopted a Mission Statement and a Core Values
264 and Goals Statement for the Sewerage Agency of Southern Marin.

265
266 This item is to confirm that the established Mission and Goals Statements are effective and continue
267 to resonate with the board.

268
269 The following are the adopted Mission and Goals Statements:
270

271 **MISSION STATEMENT OF THE SEWERAGE AGENCY OF SOUTHERN MARIN**

272 *The Mission of The Sewerage Agency of Southern Marin (SASM) is to efficiently provide*
273 *wastewater treatment services to its member agencies and work cooperatively with government*
274 *agencies on all compliance requirements, at all times being guided by the following core values:*

- 275
276
 - *Public health and safety, with emphasis on facility operations, employee safety*
277 *and neighborhood well-being*
 - *Operational excellence, customer service, and education*
 - *Environmental stewardship, with emphasis on quality treated effluent, zero*
280 *controllable spills, and re-use of biosolids, methane, and reclaimed water*
 - *Support and encourage cooperative activities between all member agencies.*

282
283 **GOALS STATEMENT**

284 *To operate, maintain and manage the SASM Wastewater Treatment, Reclamation and Disposal*
285 *Facilities in an efficient, cost-effective and well-planned manner in order to protect our water*
286 *environment.*

287 **SASM WORK PLAN 2019-20 UPDATE**

288
289 After review of the proposed Work Plan for FY 2019-20 at the Annual Planning Session in April
290 2019, the SASM Board approved the Work Plan as follows:

- 291
292
 1. Continue executing the Master Plan (MP) and address those elements in the MP through a
293 series of CIPs, while maintaining awareness and continuing consideration of sea level rise.

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- 294 2. Reduction of Infiltration and Inflow (I&I) through the Private Lateral Replacement Program
295 and through collaboration with other bay area agencies that are committed to develop a sound
296 approach to sea level rise. (Ongoing)
297 3. Conduct a Flow Monitoring Study
298 4. Evaluate and Consider CIP Projects for the next phase of the Master Plan 5-Year Capital
299 Improvement Plan for 2020- 2025
300 5. Conduct Financial Evaluation to forecast revenue requirements and funding options for the
301 next phase of the Master Plan implementation.
302 6. Evaluate opportunities for incorporating elements of public art into the SASM capital
303 improvement program with a goal of public outreach, education and awareness of
304 environmental issues.
305

306 Below is a report on the Work Plan completion status as of June 2021:
307

308 **SASM WORK PLAN FISCAL YEAR 2019-20 and 2020-21**
309

- 310 **1. Continue executing the Master Plan (MP) and address those elements in the MP through**
311 **a series of CIPs, while maintaining awareness and consideration of sea level rise.**
312 **(Ongoing)**

313 The Board adopts a CIP annually. The CIP Budget for FY 2020-21 was presented to the SASM
314 Board for approval in May 2020 and subsequently was incorporated in the Work Plan.
315

- 316 **2. Reduction of Infiltration and Inflow (I&I) through the Private Lateral Replacement**
317 **Program and through collaboration with other Bay Area agencies committed to**
318 **developing a sound approach to sea level rise. (Ongoing)**
319 ***The Private Lateral Replacement Program (PLRP).***

320 The SASM Board has committed to continue offering grants and loans to facilitate private lateral
321 replacements in the amount of \$50,000 annually. The PLRP has been a valuable incentive for
322 residents on fixed income to be able to repair failed laterals.

323 ***Sea Level Rise.***

324 The Master Plan (MP) provided an evaluation of sea level rise on the wastewater treatment plant and
325 recommended mitigation measures to reduce the impacts of sea level rise, including the construction
326 of flood walls and modifications to improve the discharge capacity of the effluent outfall. The 2014
327 MP recommended initiating development of the flood protection wall in 2021. However, the further
328 development of the Capital Improvement Program for 2021-25 recommended this project for the
329 2025-30 CIP program. Staff is working in collaboration with the City of Mill Valley Department of
330 Public Works on incorporating the flood protection into the City's Corporation Yard Master Plan as
331 a coordinated and shared project between the City and SASM.
332

- 333 **3. Conduct a Flow Monitoring Study**

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334 The flow monitoring study was conducted in December 2019 - February 2020. It provided good
335 information about the I&I contributions by each member agency. The study also demonstrated that
336 over the last 5-years SASM and member agencies achieved a measurable reduction of I/I in the range
337 of 25% by continuing to implement sewer rehabilitation capital improvement projects and
338 maintaining a robust Private Lateral Replacement Program.
339

340 **4. Evaluate and Consider CIP Projects for the next phase of the Master Plan 5-Year**
341 **Capital Improvement Plan for 2020- 2025**

342 The SASM Board approved the 5-Year Capital Improvement Plan in August 2020 as the second
343 phase of the Master Plan implementation. The most critical elements of the initial Phase of the Master
344 Plan have been either completed or are in the last stages of execution. In addition to the projects that
345 were approved in August 2020 for the 2021-25 CIP phase, there are some elements of the 2015-20
346 that were postponed and will require further consideration by the SASM Board. Staff will continue
347 evaluating these elements and providing recommendations in the upcoming sessions.
348

349 **5. Conduct Financial Evaluation to forecast revenue requirements and funding options**
350 **for the next phase of the Master Plan implementation.**

351 As part of the second phase of the Master Plan implementation, SASM completed a Financial
352 Planning Study in September 2020. The Financial Study for the 2020-25 phase of the Master Plan
353 provided important information to each member agency for evaluation and development of their
354 respective sewer rates and also confirmed that the approved in 2016 gradual increase of the SASM
355 member assessments are sufficient for the next five years.
356

357 **6. Evaluate opportunities for incorporating elements of public art into the SASM capital**
358 **improvement program with a goal of public outreach, education and awareness of**
359 **environmental issues.**

360 SASM is an active participant in the joint public outreach program with the Marin Sanitary agencies.
361 The program is in line with the SASM Board’s mission of environmental stewardship and water
362 environment protection. In August 2020 the SASM Board commissioned a wall mural titled
363 “Renew” that beautified the 80-foot long western exterior wall of the WWTP and emphasized the
364 Agencies role in raising environmental awareness.
365
366

367 **SASM WORK PLAN FISCAL YEAR 2021-22 (DRAFT)**
368

369 The following is a summary of the key elements of the proposed Work Plan for Fiscal
370 Year 2021-22:
371

372 **1. Continue executing the Master Plan (MP) and the 2021-25 Capital Improvement Program**
373 **through a series of CIPs, while maintaining awareness and consideration of climate change,**

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- 374 opportunities for implementation of alternative energy projects, and carbon footprint
375 reduction.
376
- 377 **2. Continue Efforts for Reduction of Infiltration and Inflow (I&I) through the Private Lateral**
378 **Replacement Program and through collaboration between the SASM member agencies and**
379 **other bay area agencies that are committed to developing a sound approach to sea level rise.**
380
- 381 **3. Evaluate and Consider CIP Projects to ensure reliability of the force mains and the 36”**
382 **effluent line.**
383
- 384 **4. Conduct Further Evaluation of the Potential Recycled Water Use with consideration for**
385 **addressing salt water intrusion and expanding options for distribution.**
386
- 387 **5. Conduct Further Evaluation of the Options for Further Reduction of the WWTP**
388 **Emissions and Odors.**