A G E N D A

SPECIAL MEETING
SAN RAFAEL SANITATION DISTRICT
BOARD OF DIRECTORS
FRIDAY – MAY 20, 2022 - 10:00 A.M.
Join Zoom Meeting at https://us06web.zoom.us/j/88446829505

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CORONAVIRUS (COVID-19) ADVISORY NOTICE

Consistent with the provisions in Assembly Bill 361, this Board meeting will be held virtually using Zoom.

Public comments for this meeting can be submitted via email to the District Clerk at Cindy.Hernandez@cityofsanrafael.org. The public comment period opens when the agenda is posted online and will close two hours prior to the start of the meeting. Include your name and the item you would like to provide written comment on.

To provide comments during the meeting, please use the "raise hand" feature in the Zoom Meeting and the host will notify and unmute you when it is your turn to speak.

If you experience an issue providing comments in the meeting or want to comment via phone, please call 415-485-3132.

Members of the public may speak on Agenda items.

1. **ROLL CALL**

2. **ADOPT TELECONFERENCE MEETING RESOLUTION TO COMPLY WITH ASSEMBLY BILL 361 (REMOVE)**

   Adopt resolution making findings that the proclaimed state of emergency continues to impact the ability to meet safely in person and declaring that the Board will continue to meet remotely in order to ensure the health and safety of the public.

3. OPEN PERIOD

Opportunity for the public to address the Board on items not on the agenda. (Presentations are generally limited to 2 minutes.)

4. MINUTES OF THE MEETING (REMOVE)

Request approval as submitted – May 5, 2022.

5. PAYMENTS

None.

6. OLD BUSINESS

a. Discussion on the Bayside Acres Beach Sewer Improvement Project.

7. NEW BUSINESS

None

8. INFORMATIONAL ITEMS

9. DIRECTOR REPORTS/REQUESTS FOR FUTURE AGENDA ITEMS

10. ADJOURNMENT

The next scheduled meeting is June 2, 2022.

SAN RAFAEL SANITATION DISTRICT
Agenda Item No. 6.

DATE: May 20, 2022

TO: Board of Directors, San Rafael Sanitation District

FROM: Doris Toy, District Manager/District Engineer

SUBJECT: Discussion on the Bayside Acres Beach Sewer Improvement Project

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BACKGROUND:

Within the Bayside Acres Beach neighborhood, there are approximately twenty homes located along the beach with addresses on Beach Drive, Oak Drive, Marine Drive and Point San Pedro Road, where the homes sit between the road and the beach, and the road is at a higher elevation. Therefore, their laterals run down to the beach where the sewer main is located. The sewer was installed in 1972, and at that time, the high tides and sea-level rise were not an issue. At present, our sewer infrastructure is in the tidal zone; and the moderate to high tides cover the manholes, which have lids that have corroded shut. Due to this situation, our staff cannot access the sewer main to perform maintenance. In addition, staff has noticed that some laterals on the beach are exposed and are in poor condition. The aging and corroded system must be replaced to prevent potential sewer spills into the Bay.

Staff first began evaluating the challenges posed by the deteriorating sewer main in the Bay in 2014-15 to develop the project's scope and presented the project to the Board in April 2020. The Board entered a Professional Services Agreement with Nute Engineering in July 2020, which included the following sub-consultants, Prunuske Chatham, Inc. for environmental regulatory permitting, Beecher Engineering for electrical engineering, Willis Land Surveying for surveying, and Miller Pacific Engineering Group for geotechnical engineering. In the fall and winter of 2020, staff met with each of the property owners and assessed the existing conditions to provide design concepts and another round of site visits in the summer and fall of 2021 to assess the existing electrical and indoor plumbing conditions.

Staff has developed and considered the following four alternatives to provide secure, cost-effective, and reliable sewer service to the impacted neighborhood:

1. Replace the sewer main in the same alignment in the beach;
2. Install a new above-tideline sewer main along the Bay front;
3. Install District shared pump systems; and
4. Install private individual pump systems.

The first two alternatives were developed to maintain a gravity sewer system. However, after considering the design and construction logistics, environmental permitting, costs, operations and maintenance considerations, and aesthetics, staff has determined they are infeasible. Thus,

staff is now focused on Alternative 3, the District shared pump systems, and Alternative 4, the private individual pump systems.

In both pump system alternatives, the wastewater from the 20 properties will need to be pumped to a new sewer main in the street above their properties. The new sewer main will be installed, owned, and maintained by the District, which is standard.

The Shared Pump Systems (Alternative 3) consist of pump stations serving 2 to 4 homes, in which the pump stations and laterals would be located on private property, requiring both public and private easements. The gravity portion of the laterals connecting from the houses to each pump station would require sewer easements from the neighboring properties. These private sewer easements would need to be negotiated between neighbors. The pressurized pipes from the pump stations to the new sewer main in the street would be owned and maintained by the District, and the District would need to obtain easements from the property owners.

The Individual Pump Systems (Alternative 4) consist of individual pump systems on each of the private properties. Both the gravity and pressurized laterals and pump systems would be private and the responsibility of the property owner, which is the District's current policy.

PUBLIC MEETINGS AND ENGAGEMENT.

Staff has held two public meetings, virtually using Zoom, on March 23, 2022 at 1:00 p.m. and on March 24, 2022 at 6:00 p.m.; and a detailed information packet was emailed and/or delivered to residents in the neighborhood.

After the public meetings, staff received numerous correspondence with comments and questions. In response, staff reached out to all 20 home owners asking if they would like to make phone appointments for a one-on-one call with staff to obtain additional information or to review any questions. Staff spoke to 16 home owners to date. The remaining four did not respond or did not wish to have an additional phone call.

Staff made an additional site visit to respond to detail questions and have responded to additional phone and email correspondence.

At the May 5, 2022 Board Meeting, staff presented and summarized the project, mainly focusing on the Shared Pump Systems and the Individual Pump Systems alternatives. Staff also shared its perspective on both systems; and seven members of the public made comments. The following are some of the key issues that were discussed: liability of change to private individual pump systems, California Environmental Quality Act compliance, quality pump systems, connect 50/51/53 Beach Drive to existing pump station, and costs.

ANALYSIS

The following is a table comparing the Shared Pump System and the Private Individual System:

COMPARE SHARED PUMP SYSTEMS AND PRIVATE INDIVIDUAL SYSTEMS

	SHARED	PRIVATE
Permitting	= SHARED have simple permitting	= PRIVATE have simple permitting
DISTRICT liability and risk	☒ SHARED have more liability	✓ PRIVATE have less liability
CUSTOMER liability and risk	= SHARED reliably maintained by the District	= PRIVATE are simple, reliable, and low risk
Low Visual Impact	☒ SHARED are larger and harder to conceal.	✓ PRIVATE are smaller and easier to conceal
Ease of Obtaining Easements	☒ SHARED require public & private easements	✓ PRIVATE require no easements
Construction Costs	☒ SHARED cost more to build	✓ PRIVATE about $375,000 less to build
DISTRICT Maintenance costs	☒ SHARED cost about $185,000 per year	✓ PRIVATE Maintained by owner after 1st year (Need approval)
CUSTOMER Maintenance Costs	✓ SHARED would be maintained by the District	☒ PRIVATE will cost about $60 to $500 per year
NEIGHBOR Preference	✓ SHARED preferred by majority of neighbors	☒ PRIVATE preferred by one or a couple of neighbors
Fairness to 16,000 Other Ratepayers	☒ SHARED less fair to 16,000 other ratepayers.	✓ PRIVATE more fair to 16,000 other ratepayers
Long--Term Stability of the Solution	☒ SHARED Pump are less stable in the long-run	✓ PRIVATE are readily manageable

The following is a more detailed explanation of the above table:

Permitting:

= **PRIVATE Pump-Sump Systems have simple permitting** because they are entirely on improved private property

= **SHARED Pump-Sump Systems have simple permitting** because they are entirely on improved private property

District Liability and Risk:

✓ **PRIVATE Pump-Sump Systems have less liability** because they can probably be built faster without the need for public or private easements and coordination with individuals rather than groups of people. Therefore, the main sewer in the Bay can be abandoned more quickly, and the risk of a sewage overflow is less.

☒ **SHARED Pump-Sump Systems have more liability** due to potential delays caused by the need to obtain public and private easements and the potential for difficulty siting the large sumps on specific properties. Thus, the risk of a sewage overflow is greater, which could result in the District incurring large fines from environmental agencies.

Customer Liability and Risk:

= **PRIVATE Pump-Sump Systems are simple, reliable, and are low risk.**

= **SHARED Pump-Sump Systems are reliable and will be maintained by the District**

Low Visual Impact:

✓ **PRIVATE Pump-Sump Systems are smaller, and generally easier to conceal.** The systems can sometimes be hidden under decks or crawlspaces, tucked against homes, buried or partially buried, or concealed behind fencing or landscaping. The size varies but are about three or four-feet tall by about four-feet in diameter and require a roughly one-foot by one-foot control panel.

☒ **SHARED Pump-Sump Systems are larger and harder to bury or conceal.** The sizes of shared pump-sump units would vary but could be as much as seven-feet tall by six-feet wide for a four-home system or about seven-feet tall by four-feet wide for a two-home system. Also, a control panel roughly two feet square and one foot deep would need to be situated.

Ease of Obtaining Easements:

✓ **PRIVATE Pump-Sump Systems require no easements.**

☒ **SHARED Pump-Sump Systems require public and private easements.** These can be costly and time consuming to obtain. Some could refuse to offer private easements , which could block the project.

Construction Costs:

✓ **PRIVATE Pump-Sump Systems cost about $375,000 less to build.**

☒ **SHARED Pump-Sump Systems cost more to build.** They are more complex and larger systems, and the electrical requires PG&E design and standards.

District Maintenance Costs:

✓ **PRIVATE Pump-Sump Systems are maintained by the customer after the first year. The cost to the District for one year is estimated to be about $10,000 to $20,000. (The Board has not approved that the District will pay for the first year.)**

☒ **SHARED Pump-Sump Systems cost the District about $185,000 per year to maintain.**

Customer Maintenance Costs:

- ☒ **PRIVATE Pump-Sump Systems will cost owners an estimated $60 annually in electrical costs and about $350-$500 annually depending on use.**
- ✓ **SHARED Pump-Sump Systems would be fully maintained by the District.**

Neighbor Preference:

- ☒ **PRIVATE Pump-Sump Systems are preferred by one or a couple of the Bayside Acres neighbors.** The primary reason given is that they don't want to have an easement, shared odors, or entanglements with others.
- ✓ **SHARED Pump-Sump Systems are preferred by a majority of Bayside Acres neighbors.** The primary reason given is that the District would maintain them.

Fairness to 16,000 Other Ratepayers:

- ✓ **PRIVATE Pump-Sump Systems are more fair to the 16,000 other ratepayers** since the Bayside Acres customers would own and maintain their lateral systems like every other property in the District,
- ☒ **SHARED Pump-Sump Systems are less fair to the 16,000 other ratepayers.**

Long Term Stability of the Solution:

- ✓ **PRIVATE Pump-Sump Systems are readily manageable by a homeowner, they are designed for that.** The District has experience with this in a similar project and a neighbor has given extensive written testimony about how simple and reliable these pumps-sump systems are.
- ☒ **SHARED Pump-Sump Systems are less stable in the long-run if future neighbors don't want the share sump-pump systems on their property, or easements, etc.**

OTHER ISSUES AND ALTERNATIVES

California Environmental Quality Act (CEQA). In regard to complying with the California Environmental Quality Act, staff plans to file a Categorical Exemption, using the Existing Facilities exemption (CEQA Guidelines §15301), since there is an existing sewer system and it is in degraded and deteriorating condition. This applies to both alternatives.

Quality Pump Systems. The District will design and procure industry standard quality materials and equipment for either of the alternatives.

50/51/53 Beach Drive Share Pump-Sump Using Existing Pump Stations. The owners of 50, 51, and 53 Beach Drive asked the District to consider connecting their laterals directly to the District's existing pump station on Beach Drive. From staff's preliminary investigations, the laterals can be designed to connect directly to the existing pump station. The pump station will need to be retrofitted to serve these three properties. If the District chooses the Private Individual Pump System, it may not be fair to their neighbors or the other District ratepayers that the District would be maintaining the shared pump station for just three properties. Some district's charge a special fee for maintaining a pump station for a small number of properties.

Can Property Owners Each Choose Between Shared or Private Pump-Sump Systems. The Board could choose a combination of shared and individual laterals. Nonetheless, Staff has suggested that a combination of shared and private pump-sump systems should not be pursued because it maintains all the negatives of shared systems:

193 Beach Drive Options. The owners of 193 Beach Drive asked staff to evaluate a number of options for their specific challenges in siting either private or shared pump-sump systems. Staff believes there is a practical, unobtrusive way to site a private pump-sump system for this property and all properties.

Staff is committed to working with all property owners in a flexibly, reasonably, and responsibly to implement whatever option is chosen.

COSTS ANALYSIS:

The following is an estimated costs comparison at this preliminary stage of the analysis:

BAYSIDE ACRES: ESTIMATED COSTS COMPARISON AT PRELIMINARY STAGE

	SHARED PUMP SYSTEM		INDIVIDUAL PUMP SYSTEM	
	DISTRICT OFFER TO PAY	PROPERTY OWNER	DISTRICT OFFER TO PAY	PROPERTY OWNER
Annual Sewer Fee (all ratepayers)	N/A	$860	N/a	$860
Project Design	$250k	$0	$250k	$0
Project Permitting	$33k	$0	$32k	$0
Project Construction	$1.7m	$0	$1.35m	$0
Easement: SRSD and Property Owner for easement (consultant, draft and record)	$100k	$TBD*	$0	$0
Operations and Maintenance per year	$185k	$0	N/A	$0
Property Owner Electricity Cost	$0	$0	$0	$60
Property Owner Maintenance (at owner discretion)	$0	$0	$0	$500**
TOTAL ONE TIME	**$2.3M**	**$860 + $TBD**	**$1.6M**	**$920 + $500?**
TOTAL ANNUAL AFTER YEAR ONE (not inflated)	**$185k**	**$860**	**$0**	**$920 + $500?**

*TBD – Based on negotiations between property owners.
**Estimate for individual property owner contracts with a professional plumber ($350-$500 depending on usage/equipment condition).

Additional cost clarifications:

- The District's only legal financial obligation is to pay for the design, construction, and maintenance of the main sewer pipeline that will be moved from the Bay to the Street. The estimate for the design and construction of the new sewer pipeline is $1.2 million which is not included in the above table.
- The District is under no obligation to pay the roughly $40,000 to $100,000+ cost per property to move the laterals and install either the private or shared pump-sump systems. The District is doing this to be fair and reasonable with the Bayside Acres neighborhood.
- Although not legally obligated, the District is offering to pay all design and construction costs, including any needed electrical panel upgrades for the Individual Pump Systems, and new electrical infrastructure per PG&E's requirements for the Shared Pump Systems.
- The District will restore all landscaping in-kind and restore any construction damage.
- The original 1970s sewer assessment district to pay for the original sewer system is paid off. The old system reached the end of its useful life and is being replaced with District funds.
- All residential customers pay $860 per year for sewer service. There are no extra or special charges for any residential customers. All pay the same amount.
- All customers currently pay for and are responsible for their own sewer lateral, even those with pumps. Currently, there are no exceptions.

RECOMMENDATION

In reference to the above analysis, staff recommends that the Board:

1. **Approve the Private Individual Pump System alternative for the following reasons:**
   Private pump-sump systems (Alternative 4) better aligns with District policies. District policies are designed to prevent having laterals cross other properties through easements. When legacy laterals are found crossing other properties, the District seeks to relocate them where possible onto their own property. Shared pump-sump systems (alternative 3) would violate this. While many current Bayside-Acres owners are in favor of this alternative, future property owners may not be in favor. Thus, the shared pump-sump systems could set up potential conflicts that District policies are designed to prevent.

   In addition, it is District policy that all laterals are owned and maintained by the property owner. Shared pump-sump systems (alternative 3) would violate this policy by requiring all other customers to share in this cost.

   Private pump-sump systems (Alternative 4) are lower cost, likely to be faster to implement, and thus decrease the risk of a spill, and be more fair to the 16,000 other customers of the District.
   - Less liability and risk of spill due to likely faster construction process
   - Lower visual impact

- No easements required saving cost and time (private easements could fully block the shared sump-pump alternative.
- Less construction cost.
- Less maintenance cost for the District (Property owners pay what all others do).
- More fair to other 16,000 District ratepayers;
- Precedent for future projects; and
- Long term stability without easements and shared sump-pump facilities on properties.

2. **Approve the following additional actions to provide a smooth transition to the private pump-sump systems.**
   - Contract with a plumbing company with expertise in pump systems to provide phone support for one year to property owners to answer questions about operating the pumps and linking them to resources if they need professional help OR maintain it for the initial year to provide a transition period and ensure it is working well. A one-year contract to maintain all twenty pump stations is $10,000 to $20,000.
   - Develop a list of contractors that inspect and service these types of systems.
   - Make a reasonable effort to screen or hide each control panel and pump-sump unit against the house, in the crawl space, under a deck, by fully or partially burying it, and/or with landscaping or fencing.
   - Provide a small backup generator or battery for use during prolonged power shutoffs. Note that each pump-sump unit provides about 24 hours of backup capacity. A generator is less than $5,000, while a battery unit is approximately $20,000-$25,000.
3. **File a Categorical Exemption per CEQA guidelines for the Private Individual Pump System.**

ACTION REQUIRED:

1. Board to approve the Private Individual Pump System Alternative and any additional actions, and direct staff to file a Categorical Exemption per CEQA Guidelines at the County of Marin; or
2. Provide other direction to staff.