Memo

То:	Rockport Select Board
From:	Bill Bow, Bob Kollmar, and Doug Cole
CC:	Jon Duke (Rockport Town Manager)
Date:	April 8, 2024
Re:	Recommendation on WRRF Funding Approval and High-Level Analysis of Camden's Wastewater Treatment System

As Rockport residents, we recommend that voters approve funding for the Water Resource and Recovery Facility (WRRF) that has been proposed for a location adjacent to Pen Bay Medical Center (PBMC). It is an economically viable plan that gives Rockport the opportunity to cost effectively treat its wastewater, as well as (i) allow for development that is critical to our long-term sustainability as a vibrant and economically diverse community, (ii) protect and enhance human health and the environment, and (iii) provide a unique resilience opportunity with respect to our drinking water supply in Mirror Lake. It is a sound plan that benefits the Town of Rockport, and it should be passed.

We are acutely aware that this is a significant investment for Rockport. However, the need is being driven by the very real issues of (i) high current cost to Rockport's residents, (ii) Camden's insistence by letter and in court mediation that we exit their treatment system, and (iii) Camden's inability to allow Rockport to increase its flow to accommodate future economic development. These issues cannot be "wished away" or resolution delayed by "hoping" some accommodation can be achieved at a future date. The WRRF Task Force has developed a viable solution for locating a plant within Rockport to address our wastewater treatment needs and delaying approval is not in our best interest, especially as it relates to currently available grants or funding associated with the recently passed infrastructure or inflation reduction acts. Delay potentially puts those funding opportunities at risk.

We also choose to believe that Camden is serious about their decision that Rockport must exit their system and, based on the analysis of Camden's wastewater flows that is presented below, we believe we understand why they have taken this position. At the same time, we also have absolutely no objection to continuing to try and find common ground with Camden, just not at the expense of delaying approval of the WRRF.

In reality, once the WRRF is approved by Rockport's voters in June, developing a project management plan, finalizing various legal agreements with PBMC, securing funding, and retaining an engineering design firm will require 2 to 4 months to complete, which is ample time to secure an agreement with Camden that meets the Guiding Principles outlined below. If that were to occur, then there would be no need to continue pursuing a WRRF within Rockport.

Recommendation on WRRF Funding Approval and High-Level Analysis of Camden's Wastewater Treatment System

Any contract discussions with Camden should be governed by the following Guiding Principles:

- Fair Price: sewage treatment must be available for a fair price to all residents who use the public sanitary sewer system. It is not appropriate that Rockport's users should agree to remain on Camden's system regardless of cost. Rockport is currently paying among the highest wastewater rates in the state and based on analysis of Camden's wastewater system (see below), there is material risk that cost increases will continue to escalate, worsening an already difficult financial environment for Rockport's users, especially under the terms of the now-expired wastewater agreement between the two towns.
- **Sufficient Treatment Plant Capacity**: additional wastewater treatment plant capacity must be available, thus preserving or expanding Rockport's ability to pursue economic development (*e.g.*, workforce housing or commercial business expansion). Camden has significant capacity challenges that make it difficult for them to provide that opportunity to Rockport.
- **Business Model Innovation**: we need to look for innovative ways to develop a business structure and financial solution that is consistent with these guiding principles. That can include the concept of a Municipal Utility District (MUD) for both towns (and perhaps include Rockland) or having a new plant in Rockport accept flows currently sent to Camden (*e.g.*, the landfill) to relieve stress on their plant. Nothing should be eliminated from consideration.
- **Protective of Human Health and the Environment**: the gradual reduction of septic waste being discharged from aging and failing systems directly to our waterways and ultimately to Rockport Harbor will provide long-term benefits to human health and the environment. This requires sufficient available treatment capacity to accommodate these additional flows to the public sewer.
- **Climate Resilience Benefit**: the potential beneficial reuse of the plant discharge is an opportunity to lessen the pressure on our drinking water supply located in Mirror Lake. For example, the discharge could be considered for boiler or cooling water at the hospital. The average home uses over 300 gallons of drinking water each day; therefore, a savings of 5,000 gallons per day through non-potable re-use of the plant discharge allows for up to 15 new homes without placing additional ecosystem stress on Mirror Lake, which already requires refilling from Grassy Lake each year to maintain adequate water levels. Through leadership, we can work to address this long-term risk to our water supply.

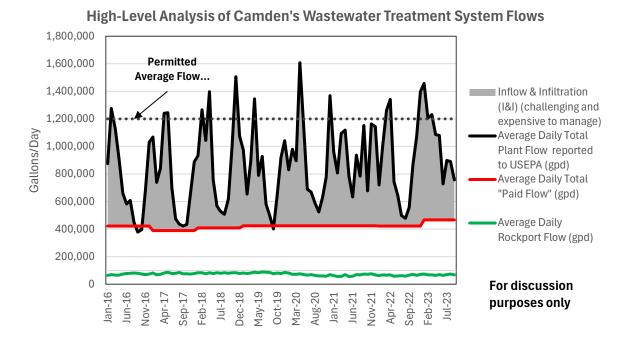
From a practical perspective, we would put a deadline of October 31, 2024 to obtain a signed agreement with Camden. This date allows Rockport to conduct the preliminary, but necessary tasks described above at relatively minimal expense without inserting what amounts to a one-year delay in the project if the WRRF funding is not approved by Rockport's voters.

HIGH LEVEL ANALYSIS OF CAMDEN'S FLOWS

The reasons for Camden's insistence that Rockport exit their system have not been explicitly stated. Public speculation has included disputes over what is a fair rate for Rockport users to

pay Camden, concern over contamination in Camden harbor from treatment plant discharges, recent litigation, or the differing priorities of the two towns that has made it difficult to meet and discuss this issue. Rather than accepting these explanations, an effort was made to try and understand, at a technical and financial level, why Camden wants Rockport off their treatment system, and therefore, is apparently willing to forgo approximately \$365,000 in revenue (roughly 18% of their annual wastewater budget) based on 2023 numbers.

Data for the analysis was extracted from various sources, including Camden's wastewater budgets from 2016 to 2024, Discharge Monitoring Reports (DMRs) submitted by Camden to the United States Environmental Protection Agency (U. S. EPA), and flow data for Rockport's contribution to Camden's treatment system. As such, this analysis should be considered high level and used only for the purpose of evaluating alternatives. It is also subject to refinement should additional, relevant data be provided by Camden or from any other source.



The following graphic depicts Camden's wastewater flows from 2016 through 2023.

By way of explanation:

- Average Daily Rockport Flow (green line) was taken from the flowmeter located at the town line between Rockport and Camden. It measures the volume of wastewater that Rockport pumps to Camden each day.
- Average Daily Total "Paid Flow" (red line) was calculated using Camden's annual wastewater budgets and their published user rates. It represents the flow that is paid for by customers (including Rockport's users) who are connected to the public sewer system and is, effectively, the primary source of revenue to pay for plant operations.
- Average Daily Total Plant Flow data (black line) was taken directly from the Camden DMRs.

- Inflow and Infiltration (I&I) was calculated as the difference between the Total Plant Flow (black line) and the "Paid Flow" (red line) and is represented by the gray shaded area.
- The dotted line was taken from Camden's Discharge Permit issued by the Maine Department of Environmental Protection (DEP).

The graph shows rather consistent annual flows from paying customers located in both Rockport and Camden. This is not unexpected. However, the graph also indicates that I&I is likely a significant, undesirable, and costly challenge with Camden's system. Candidly, our first reaction was that we had erred in our calculation methodology, as this level of I&I, while not unheard of, is not common. However, we have no reason to believe it is not directionally correct.

In general, I&I is groundwater and/or surface water that seeps or, as is likely in this case, flows into distribution system piping through cracks, joints, faulty connections, or collapsed sections and is subsequently pumped to the treatment plant prior to discharge via the outfall (located in Camden Harbor just offshore from Peter Ott's restaurant). It is a significant cost and compliance challenge that is further compounded by peak (or "max flow") events (not shown on the graph).

The I&I flow depicted is the *average* daily I&I flow; it is not based on the "max flow" reported on the DMR each month, typically occurring during high precipitation or flooding events, which can include rapid snowmelt. These "max flow" events can overwhelm both the plant's treatment capacity and pump stations which has, in the past, apparently resulted in overflow to the harbor. On those days, I&I is undoubtedly much higher than the graph depicts.

Camden's I&I issue is significant and will be costly to mitigate. Addressing I&I is also the subject of the Consent Agreement between Camden and the DEP that was entered in September 2021, which is another reason for us to suspect that our calculations are generally correct. The Agreement calls for Camden to identify the source(s) of the I&I and develop mitigation plans. These investigations and plan submissions were to occur in 2022; however, Rockport is not in possession of these documents, assuming they were completed in accordance with the schedule in the Agreement.

ECONOMIC IMPACT

Mitigating these substantial I&I issues, as well as addressing potential investment needs for a 50-year-old treatment plant (not at all uncommon for municipalities across the country) and moving the outfall further out into Camden Harbor (as has been publicly mentioned) will require substantial investment. It is understood that Camden recently spent \$2M to reduce I&I, and is seeking a \$12.5M bond during the upcoming year; we understand that this bond may also be focused on addressing some of the I&I challenges. Additionally, if the plant is typical of other municipally owned plants located throughout the country, additional investment in the range of \$20M to \$30M would not be unheard of, not to mention the cost of extending the outfall (\$2M to \$4M). Absent hard data, this is speculation; however, the Select Board should be aware of these potential costs when considering whether to renew with Camden, especially under the same terms as the now-expired agreement, should the opportunity present itself.

Camden's user rates (currently \$9.94 per HCF) have increased 73% since 2019. It is not unreasonable to assume that the current \$12.5M bond will increase those rates to \$13 or \$14 per HCF, depending on when interest or principal payments are scheduled to be made, and assuming those costs are incorporated into their wastewater budget. If Rockport were to extend

under the terms of the previous agreement with Camden (*i.e.,* we still maintain our own distribution system), Rockport would likely experience rates from \$25 to \$30 by 2028, and into the mid-\$30s if Camden must undertake a major upgrade to their plant, move their outfall, etc.

Creation of a Municipal Utility District (aka "MUD") has also been floated as a potential option. Under that construct, both communities would contribute their distribution and treatment systems to the MUD, and users would pay the same rate irrespective of community affiliation. This option on its face has some potential appeal and should be fully evaluated. However, this is not without its financial challenges and Rockport should use the Guiding Principles as a framework during any potential discussion of that potential structure.

As a not-unreasonable strategy, therefore, Camden appears to be working incrementally to try and get their I&I under control with the \$12.5M bond currently being sought and by eliminating flow from Rockport. As such, they may be hoping to delay any significant future investment in the treatment plant itself, or at least be able to invest incrementally over time, without stark increases in their user rates.

CONCLUSION

Camden's demand that Rockport exit their wastewater treatment system appears to be directly related to their understandable desire to reduce historical I&I, control treatment costs, comply with their discharge permit, and ultimately extinguish their Consent Agreement with DEP. If successful, they may also be able to delay larger investment in their treatment plant.

In addition to the Guiding Principles outlined in this memo, the Rockport Select Board should keep these potential financial risks in mind when, should the opportunity arise, considering any future wastewater agreement with Camden, especially under the terms of the now-expired agreement. From our perspective, we would need to see specifics on how this investment strategy will be successful before signing on to any longer term agreement.

One final thought. We have heard objections to Rockport building its own WRRF that relate to, and we are paraphrasing, "no need to have another discharge of wastewater going into Penobscot Bay." Though understandable from a certain perspective, the total flow of wastewater into the bay will remain unchanged, as what will be discharged from Rockport's new WRRF would no longer be discharged from Camden's or Rockland's system. And from an environmental perspective, it reduces the point-source loading of contaminants that currently exists at two locations (Camden and Rockland) by adding a third (Rockport). Moreover, effluent exiting the system proposed for Rockport's WRRF will be of higher water quality due to the newer and more efficient treatment technology being proposed.

Summarizing, we recommend that the Select Board place the warrant article for approving the bond for the WRRF on the June 2024 ballot. This is an economically viable plan that gives Rockport the opportunity to cost effectively treat its wastewater, as well as (i) allow for development that is critical to our long-term sustainability as a vibrant and economically diverse community, (ii) protect and enhance human health and the environment, and (iii) provide a unique resilience opportunity with respect to our drinking water supply in Mirror Lake. It is a sound plan that benefits the Town of Rockport and its sewer users. Any delay in moving forward with this option would only increase construction costs and potentially reduce the available funding opportunities (*i.e.,* grants, low interest loans, etc.) that can be obtained to help finance this project.

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At this same time, we also believe that, during the initial phase of the WRRF project while expenditures will be relatively low, the two towns should engage to find common ground and execute an agreement that both parties find acceptable. However, we would propose a fixed date of October 31, 2024 for completion of that effort; we cannot afford to have an open-ended delay in solving this problem.