

WWMDC Privilege Fee Policy & Summary of Flows, Approved 4/8/2024

1. Background

The Wayland Wastewater Management District Commission (WWMDC or District) was established on January 6, 1997. The District enables an economical and efficient wastewater management system as needed and where appropriate; that accurate, appropriate, and self-sustaining fees, rates and charges for the wastewater collection, treatment and disposal services provided by the commission and insure the continued availability of wastewater treatment and disposal services at sufficient rates. The District has primarily funded capital projects through the assessment of betterments.

The original betterment in 1999 was assessed for the construction of the low-pressure sewer system along Route 20. The low-pressure sewer system collects and discharges to a pump station located adjacent to the rail trail near Andrew Avenue. The costs were assessed to users that connected, or planned to connect, based on design flows calculated using Massachusetts General Law, Department Of Environmental Protection 310 CMR 15.000: The State Environmental Code, Title 5: Standard Requirements For The Siting, Construction, Inspection, Upgrade And Expansion Of On-Site Sewage Treatment And Disposal Systems And For The Transport And Disposal Of Septage (Title 5) Title 5 includes flow estimates for various types of facilities. These design flow estimates have been utilized by the WWMDC to determine fees and user charges for persons using or planning to use the District's facilities. All bonding and betterment payments associated with the original betterment have been completed.

A second betterment was issued to properties after the construction of the new wastewater treatment facility in 2014. The value of the betterment was based upon the total capital cost of the new facility divided by the total of all estimated Title 5 flows for existing and planned users of the District facilities. The betterment was assessed to each property based upon the calculation of the Title 5 flow. The betterments required payments over a twenty-year period through Town of Wayland tax bills. Properties owned by the Town of Wayland paid a Payment in Lieu of Betterment (PILOB) for the capital costs associated with treatment facility construction based upon the Title 5 calculations.

The total of all Title 5 design flow allocated to properties connected to the WWMDC facilities between 2010 and 2022 was largely unchanged. The WWMDC allowed limited increases to a few properties during this time. The increased flows were assessed a privilege fee. Prior to 2022, the fee was calculated using the 2014 betterment fee in dollars per gallon, per day, times the total increase in flow.

Since the second betterment, the District has received authorization to discharge under the National Pollutant Discharge Elimination System (NPDES) Small Wastewater Treatment Facility General Permit (authorization MAG580011) effective April 1, 2022 through April 1, 2027 for discharge to surface water of 52,000 gallons per day (gpd) treated wastewater effluent and an Individual Groundwater Discharge Permit 999-1 effective December 20, 2021 to December 30, 2026 for the discharge of 37,380 gpd treated wastewater to the subsurface absorption system at 492 Boston Post Road. The addition of the Groundwater Discharge Permit allows for a total permitted discharge of 89,380 gpd.

In 2022, a new policy was developed for assessing privilege fees and the metrics will be reviewed by the WWMDC, as necessary.

2. Discussion of Design Flow, Treatment Plant Capacity, & Permitted Flows

The sewer collection system and wastewater treatment plant serving the Route 20 corridor and Town Center have a defined ability to collect, treat and dispose of wastewater. The initial wastewater discharge permit for the treatment plant allowed for effluent flows of 52,000 gpd based on an annual average discharge. The estimated design flow for a property/project is based on criteria detailed in Title 5 (310 CMR 15). Title 5 contains tables with flow estimates for several facility types, as well as methodology to determine flows for non-listed entities. The projected flows derived from the tables are based on an estimate of maximum daily flows and are conservative when compared to the average annual flow limit in the permit. The Title 5 flow estimates are approximately 200% of an estimated potential average annual flow. The following information provides a summary of information relative to the design flow allocations, actual flows, and capacities of the District's facilities.

Summary of Design and Permitted Flows

The following tables include wastewater flows for Title 5 Design Flow, Potential Actual Flow, Allowable and Permitted Flows, and Available Design Flow.

| Title 5 Flow Estimates | Gallons per day (gpd) |
|---|------------------------------|
| Town Center | 35,260 |
| Lilian Way | 9,240 |
| Wayland COA (municipal pad) | 3,000 |
| Alta Oxbow ¹ | 34,630 |
| Other Title 5 Flow (outside of Town Center and Alta Oxbow) ² | 35,503 |
| WWMDC (available flow) ³ | 12,367 |
| Total Estimated Title 5 Flow | 130,000 |
| Estimated Potential Average Flow⁴ based on 50% of Title 5 | 65,000 |

| Potential Actual Flow - Estimated & Average from Billing | Gallons per day (gpd) |
|--|------------------------------|
| Billed Flow – Connected ⁵ | 108,193 |
| Billed Flow - Unconnected (billed a base charge only) ⁶ | 9,440 |
| Nonbillable Flow due to No Allocation (Total Unallocated Design Flow) ⁷ | 6,548 |
| WWMDC release (Approved April 8, 2024) | 5,819 |
| Total Title 5 Estimated Flow | 130,000 |
| Estimated Potential Actual Flow based on 50% Title 5 | 65,000 |

| Allowable, and Permitted Flows | Gallons per day (gpd) |
|--|------------------------------|
| Current Acceptable Level of Actual Flow ⁸ | 65,000 |
| Permitted Flows | |
| 2021 NPDES Permitted Surface Water Discharge | 52,000 |
| 2021 NPDES Permitted Groundwater Discharge | 37,380 |
| Total Permitted Flow | 89,380 |

| Available Design Flow | Gallons per day (gpd) |
|---|----------------------------------|
| Remainder from WWMDC Release 11/2022 | 5,338 |
| WWMDC Release 4/2024 | 5,819 |
| Flow difference released based on Alta Oxbow final construction | 1,210 |
| Total Available Flow | 12,367 |

Footnotes:

1 Alta finalized the design flow April 2023 based on the as built number of units. Estimated Title 5 flow was 35,840 gpd and final design flow was 34,630. The final number of bedrooms and flows were (100) 1-bd at 110 gpd, (38) 2-bd age restrict at 150 gpd, (77) 2-bd at 220 gpd, and (3) 3-bd at 330 gpd

2 Other Title 5 Flow: All users outside the Town Center, including users that are not connected but have reserved design flow allocated to their property. These properties pay a base charge for the right to connect.

3 WWMDC Available Flow based on remainder from WWMDC release 11/2022, WWMDC release 3/2024, and flow difference released based on Alta Oxbow final construction.

4 Estimated potential average flow

5 Billed Flow – connected is tracked based on actual billing

6 Billed flow – unconnected is based on customers that do not have a sewer connection but are billed for a reserved design flow

7 Non billable flow due to no allocation is based on previously released flows that are not assigned to a customer

8 The WWMDC decided to increase available flow in steps over a period of time, up to a maximum of 65,000 gpd and when actual flow reaches 35,000 gpd to conduct a review of the facility to ensure all elements of the process and safety factor limits meet operational capabilities.

Title 5 design flow was used as a basis for the initial design, allocation of treatment facility costs, as well as the basis for the major portion of the operation, maintenance, and repair (OM&R) costs of the facilities, a summary of these flows is included in Appendix A. The design flow represents a balanced method to ensure that each entity using the District's facilities would pay its share. It is also used to ensure adequate revenues to pay for the debt service associated with the construction of the facilities as well as to ensure adequate revenue for the OM&R of the facility was received annually.

The total Title 5 estimated flow is greater than the actual average flows reported by the wastewater treatment facility. The following important points need to be taken into consideration when assessing design flow and treatment plant capacity:

- The Title 5 (310 CMR 15) tables estimate a maximum daily flow while the discharge permits are based on an annual average flow.
- The allowable effluent discharge of the NPDES Surface Water Permit issued in 2013 to Wayland when it took ownership of the wastewater treatment facility was 52,000 gpd. The treatment facility was constructed with design capacity of 65,000 gpd. The current NPDES Surface Water and Groundwater permits allow an average annual discharge of 89,000 gpd.
- A 2013 design report identified and provided a preliminary design for an additional subsurface disposal facility adjacent to Town Offices off of Cochituate Road.

3. Massachusetts Department of Environmental Protection Rule Change

The management of flows into sewer collection systems was overseen by the Massachusetts Department of Environmental Protection (MassDEP) during the initial design flow allocation period and construction of the new wastewater treatment facility. MassDEP required permit filings and issued permits for sewer extensions

and connections. These regulations significantly limited the local control of sewer system flows, especially the ability to increase and/or add flow to an existing system.

These regulations, primarily *314 CMR 7 Sewer System Extension and Connection Permit Program*, were substantially changed in 2014. The changes allow for more local control of the flows connected to sewer systems. This change provides more consistency with EPA and MassDEP permitting, and places the responsibility with local controls - those who are most knowledgeable regarding the systems and their limitations. Other regulations were promulgated to strengthen the requirements regarding the impacts of failing to properly manage the wastewater system flow, such as the impacts from sanitary sewer overflows and treatment system bypasses. The net result of this change allowed the WWMDC to review and change allocated design flows and capacities. If additional capacity exists, then the District could consider allocating the flow.

4. Current wastewater flow estimates and determination of available capacity

The current estimates for Design, Actual & Permitted Flows provided in this document provide for the analysis of treatment plant capacity.

- Current Estimated Flow based on Title 5 Flow Design Criteria - 130,000 gpd
- Current Estimated Potential Average Annual Flow – 65,000 gpd
- Current Acceptable Level of Flow based on Wastewater Treatment Plant Design - 65,000 gpd

The estimated flows include allocated design flow for WWMDC releases and a release based on final design of the Alta Oxbow development. The available flow is currently 12,367 gpd.

While the current acceptable level of actual flow of 65,000 gpd represents the facility design capacity, the District recommends that an average monthly annual average flow of 35,000 gpd not be exceeded until the treatment plant is assessed for the ability to meet system performance objectives. The ability to meet performance objectives is the basis of District releases of reserved flow. Additional flows and loadings should be done in an incremental manner and potentially limited to ensure the facilities meet all permit requirements.

5. Methodology for establishment of a privilege fee

The District initially charged a privilege fee of \$65.07 per gallon, per day for increases in design flow. This value was derived from the original cost of the facilities divided by the allocated design flow. As a result, betterments and Payment in Lieu of Betterments (PILOBs) were issued to all users and users that would connect at a future date. The betterments are issued with the third and fourth quarter tax bills each year. Betterments included interest charges which were used to pay for debt service. Between the initial issuance of the betterments and PILOBs, the District issued a limited amount of design flow to existing users upon a change to their facilities, which the District understood could be accommodated under the existing flow regimen. These additional allocations were charged the \$65.07 privilege fee per gpd rate.

6. Calculation of new privilege fee

The original facility costs are covered by the betterments and PILOBs, therefore continued use of the \$65.07 per gpd needs to be supported by the cost for the issuance of additional flows and future capital costs. Recent

guidance issued by the Massachusetts Department of Revenue (MassDOR), identifies the need to base any impact or privilege fee on a clear basis.

The District reviewed current facility capital requirements and identified the need to conduct proactive maintenance to the facility through the replacement of equipment and instrumentation. This analysis resulted in creating an asset management plan (Small Capital List), which identifies costs for most, but not all of the equipment and instrumentation at the wastewater facilities. Most of the equipment costs less than \$50,000, for each unit, and are considered small (i.e., less than \$50,000) capital items (design life that typically exceeds 10 years). The Small Capital List was updated for 2024 and an estimate of the annual costs were developed, Appendix B.

Equipment needing replacement would do so from stock or as a purchased replacement and the stock would be replenished over time. This list is not exhaustive as other equipment may require significant maintenance. Additionally, the particular items and schedule are not specific to the year listed. Equipment failures are unpredictable and replacement may be required from any area of the facilities. The list provides a framework to develop a project cost from which a fee can be established. The fees collected under the release of additional design flow allocations would be reserved to provide for the actual work conducted in this program.

A three-year timeframe of projected equipment needs was determined to be appropriate for calculating the privilege fee. The Privilege Fee was assessed in 2022 and resulted in a fee of \$22.00 per gpd which was approved December 14, 2022 by the WWMDc under this policy. The fee was based on the 2022 Small Capital List and the three-year timeframe estimated basis of \$220,295.25 and the allocated flow release of 10,000 gpd.

The 2024 assessment using the Title 5 based design flow for available flow of 12,367 gpd results in a Privilege Fee of \$24.75 per gpd. The fee was based on the 2024 Small Capital List, the three-year timeframe estimated basis of \$306,082 and the available flow of 12,367 gpd. The fee of \$24.75 (current rate) was approved on April 8, 2024 by the WWMDc under this policy.

The implementation of the Small Capital List is as follows. The estimated annual cost of the program is included in the equipment line of the WWMDc annual budget. A base amount is provided to ensure some core funding is provided for the most critical work. The District would allocate additional design flow as requested by the system users and charge privilege fees commensurate with the allocation.

The benefit of allowing for the allocation of additional design flow capacity is three-fold. First, the implementation of this program will eliminate costs from of this type of work from the operating budget, and existing users will benefit from the funds. Second, by increasing the available design flow, these costs would be covered by the privilege fee and paid for by new and/or expanded users. Third, an increase in the user base would allow for OM&R charges to be distributed to a larger group of users. Expanding the user base will provide for increased rate stabilization.

7. New Connections and Betterment Charges

Each new connection will be assessed based on available flows, and estimated Title 5 design criteria flow. These assessments may require peer review, and the WWMDc, at the expense of the applicant and pursuant to MGL c. 44, § 53G, may engage qualified peer reviewers, including, but not limited to, civil engineers,

architects, and attorneys, to review connection applications. Special consideration should be made to the location and manner at which the additional capacity is introduced into the system. Depending upon the location and the proposed rate of flow, the collection system that transports the wastewater to the treatment facility should be evaluated to ensure the system can manage the flows. Additional flows at existing connections, should be verified so that the existing privately owned facilities - pumps and pipes are adequate to manage the increased flows.

Each new connection will be charged a betterment fee as follows:

- a. Existing facilities that were within the District in 2014 and that did not pay the betterments at that time for their existing Title 5 flow would be charged at the original rate of \$65.07 per gpd. Users that chose not to contribute to the initial costs of the facility should not have benefitted by waiting. The District has established a fairness principle, which would be violated by allowing them to connect at the new fee.
- b. Existing users that did pay the 2024 betterments for their original Title 5 allocations would be allowed to purchase additional capacity at the current rate.
- c. New users (unconnected) would be allowed to purchase capacity at the current rate per gpd providing they are not in category a.

Available flows will be assessed based on system performance objectives and limited to ensure the facilities meet all permit requirements. An increase of flow greater than 500 gpd may impact the existing infrastructure and new connections greater than 500 gpd may be required to provide for system upgrades (such as collections systems, infrastructure, treatment processes), expansion of the treatment plant or increases in effluent disposal infrastructure. The new connections will be assessed as follows:

- All new connections greater than 500 gpd will to be assessed individually for feasibility and may require collection system upgrades.
- Any connection greater than 1,500 gpd will need to include an assessment of the WWTP and may include requirements for upgrades to infrastructure and treatment processes.
- Any connection greater than 3,000 gpd will need to include an assessment of the WWTP and will include requirements for upgrades and/or expansion of infrastructure and treatment WWTP.
- Addition of permitted flow would require a minimum of hydrogeological studies, permitting and effluent disposal infrastructure and would require a major upgrade and expansion of the WWTP.

8. Design flow capacity return

WWMDC will evaluate the return of design flow capacity by users on a case-by-case basis. Return of design flow must be supported by evidenced revisions in discharges from requesting properties using Title 5 tables. The return of design flow will not change until a) the end of the fiscal year and it does not adversely impact the rates paid by all users or b) there is a user that will take over the flow. The District will not buy back returned capacity.

9. Review and reassessment of additional available capacity beyond this policy

This policy is intended to identify available capacity for allocation to existing and new users of the District facilities. It also identifies the process to develop a privilege fee to improve the District's facilities as a result of

the increase in flows. The increased Title 5 design flow allocations are estimated as maximum daily flows and are projected to result in lower average annual flows.

Further studies may be required to assess available flows in a case where the average actual flows are less than actual capacities. Future evaluations may include an evaluation of the appropriateness of the methods to estimate actual flows. Future capital projects may include upgrading existing system components and/or new facilities to better manage and treat the flows that would be discharged by properties under increased design flow allocations.

Appendix A

Summary of Flows (2024)

| Title 5 Flow Estimates - Connected and New Users (gpd) | Jan 2024 | Comments |
|---|----------|---|
| Town Center | 35,260 | 2,500 gpd purchased 8/10/23 |
| Lillian Way 42 Condominiums | 9,240 | |
| COA (Municipal Pad) | 3,000 | COA |
| Alta Oxbow | 34,630 | Alta recalculated their flow prior to connection based on the as built construction |
| Other Title 5 Flow Estimates (Outside Town Center & Alta) | 35,503 | |
| Total Estimated Title 5 Flow (Connected and New Users) | 117,633 | Subtotal |
| Available WWMDC Release (10,000) | 5,338 | Remaining of the 10,000 gpd |
| Release based on Alta final construction | 1,210 | |
| Total Title 5 Estimated Flow | 124,181 | |
| Estimated Potential Average Flow based on 50% Title 5 | 62,091 | |

| Available Flow | | |
|---|-------|---|
| Subtotal Unallocated Design Flow without Alta | 5,338 | WWMDC 10,000 available (minus Total Allocated Design Flow & Privilege Fee) Alta recalculated their design flow April 2023. |
| Available Flow (Alta) | 1,210 | |
| Total Unallocated Design Flow | 6,548 | |

| Current Acceptable Level of Actual Flow (gpd) | Quantity | Comments |
|---|----------|-----------------------------------|
| Acceptable Actual Average Daily Flow | 65,000 | Based on design reports and WWMDC |

| | | |
|--------------------------|-------|---|
| Available to be Released | 5,819 | Bring Estimated Potential up to 65,000 gpd (Acceptable Actual Average Daily Flow-Estimated Potential Average Flow based on 50% Title 5)*2 |
|--------------------------|-------|---|

| | | |
|----------------------------|--------|---|
| Theoretical Available Flow | 12,367 | Total Unallocated Design Flow plus Available to be Released |
|----------------------------|--------|---|

| | | |
|---|--------|--|
| Actual Average Daily Flow based on WWTF | 30,000 | Minutes 2023-12-13 |
| Design Assessment | 35,000 | WWTP current operational issues, needs assessment at 35,000 gpd actual flows for potential upgrades/alternatives |
| | | WWMDC previously decided to review flows at 52,000 gpd but recommended decrease to 35,000 gpd based on operations |
| | | All new connections greater than 500 gpd will need to be assessed individually for feasibility and may require collection system upgrades. Any connection greater than 2,000 gpd will need to include an assessment of the WWTP and may include requirements for upgrades to infrastructure. |

| Permitted Flows | Quantity | Comments |
|------------------------------------|----------|---|
| 2021 NPDES | 52,000 | 2021 NPDES Permit allows 52,000 gpd of treated wastewater to be discharged to the Sudbury River |
| 2021 Individual Groundwater Permit | 37,380 | offsite to the Soil Absorption System located at 492 Boston Post Road, Wayland (Alta Oxbow) |
| Total Permitted Flows | 89,380 | |

| | | |
|---|--------|--|
| Previous Town Hall Proposed GW Disposal | 17,000 | Addition of permitted flow would require a minimum of hydrogeological studies, permitting and effluent disposal infrastructure |
| Theoretical Available Discharge above WWTP Design Flow 65,000 | 41,380 | Adding to design flows may require a major upgrade and expansion of the WWTP |

Appendix B

Asset Management Plan (Small Capital Expenditure List)

| | | | | | | | | | | |
|--|-------------------|--------------------------|----------|---------------------------------------|-----------|-----------|-----------|-----------|-----------|----------------|
| Site Visit 11/2 | Asset Management | | | Estimated Replacement and Maintenance | | | | | | |
| | Inflation Rate | 5.0% | | Future Value Years | | | | | | |
| | | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 10 |
| | 2023 | Date | | | | | | | | Future FY2033+ |
| | Approximate | Purchased | | | | | | | | Ten Year Cost |
| | Cost | | FY2024 | FY2025 | FY2026 | FY2027 | FY2028 | FY2029 | FY2030 | Projection |
| Future | | | | | | | | | | |
| Odor Control - Vapor Phase | | | | | | | | | | |
| Diffuser Replacement | | | | | | | | | | |
| Trash Trap | | | | | | | | | | |
| Fine Screen Replacement | | | | | | | | | | |
| Flood Proofing - Effluent Pump Station | | | | | | | | | | |
| Rte 20 PS Pump 1 | \$8,000 | | | | | | | | | \$13,031 |
| Rte 20 PS Pump 2 | \$8,000 | | | | | | | | | \$13,031 |
| Rte 20 PS Generator | \$50,000 | | | | | | | | | \$81,445 |
| Effluent PS Pump 1 | \$7,000 | | | | | | | | | \$11,402 |
| Effluent PS Pump 2 | \$7,000 | | | | | | | | | \$11,402 |
| Generator | | | | | | | | | | |
| Alta PS Pump 1 | \$8,000 | | | | | | | | | \$13,031 |
| Alta PS Pump 2 | \$8,000 | | | | | | | | | \$13,031 |
| Alta PS Grinder | \$30,000 | | | | | | | | | \$48,867 |
| Alta PS Generator | \$50,000 | | | | | | | | | \$81,445 |
| River Way PS | | By Others | | | | | | | | |
| Main Plant Generator | \$175,000 | | | | | | | | | \$285,057 |
| Building Maintenance | \$3,000 | | \$3,150 | \$3,308 | \$3,473 | \$3,647 | \$3,829 | \$4,020 | \$4,221 | \$4,887 |
| Painting - Interior | | | | | | | | | | |
| Sprinkler System | | | | | | | | | | |
| HVAC | | | | | | | | | | |
| Instrumentation | | | | | | | | | | |
| Level Sensors - 10 | \$2,500 | | \$2,625 | \$2,756 | \$2,894 | \$3,039 | \$3,191 | \$3,350 | \$3,518 | \$4,072 |
| Flow Meters - 11 | \$6,000 | | \$6,300 | \$6,615 | \$6,946 | \$7,293 | \$7,658 | \$8,041 | \$8,443 | \$9,773 |
| Floats - 25? | \$750 | | \$788 | \$827 | \$868 | \$912 | \$957 | \$1,005 | \$1,055 | \$1,222 |
| Hydraulic Systems/Appurtenances | | | | | | | | | | |
| Pipes | | | | | | | | | | |
| Valves - 5 small (each) | \$3,500 | | \$3,675 | \$3,859 | \$4,052 | \$4,254 | \$4,467 | \$4,690 | \$4,925 | \$5,701 |
| Valves - 7 large (each) | \$10,000 | | \$10,500 | \$11,025 | \$11,576 | \$12,155 | \$12,763 | \$13,401 | \$14,071 | \$16,289 |
| Tank Maintenance | | | | | | | | | | |
| Sampler influent | \$7,500 | | | \$8,682 | | | \$10,051 | | | \$12,217 |
| Sampler effluent | \$7,500 | | | | \$9,116 | | | \$10,553 | | \$12,217 |
| SCADA | \$30,000 | | \$31,500 | | | | | | | \$51,310 |
| PLC | \$50,000 | | | | | | | | | \$81,445 |
| Computer and Hardware Upgrade | \$12,000 | | \$12,600 | | | \$14,586 | | \$16,885 | \$19,547 | |
| Laptop - remote communications | \$5,000 | | \$5,250 | | | \$6,078 | | \$7,036 | \$8,144 | |
| VFDs - 16 | \$6,000 | | \$6,300 | \$6,615 | \$6,946 | \$7,293 | \$7,658 | \$8,041 | \$8,443 | \$9,773 |
| Odor Control - carbon | \$20,000 | | | \$22,050 | | | \$25,526 | | | \$32,578 |
| Odor Control - blower | \$3,000 | | | | | \$3,647 | | | | \$4,887 |
| Grinder Pump/Eone | \$8,000 | | \$8,400 | | | | | | | \$13,031 |
| Grit Chamber? | | | | | | | | | | |
| Screen 1 | \$22,000 Replace? | | | \$25,468 | | | | | | \$35,836 |
| Screen 2 | \$22,000 Replace? | | | | | | \$29,482 | | | \$35,836 |
| EQ Mixer | \$8,000 | | | | | \$10,210 | | | | \$13,031 |
| EQ pump 1 | \$7,000 | | | \$7,718 | | | | | | \$11,402 |
| EQ pump 2 | \$7,000 | | | | | \$8,934 | | | | \$11,402 |
| Chemical Feed - PAC (Alum) Pump 1 | \$5,000 | | | | | | \$6,700 | | | \$8,144 |
| Chemical Feed - (PAC) Alum Pump 2 | \$5,000 | | | \$5,788 | | | | | | \$8,144 |
| Chemical Feed - PAC (Sodium Hydroxid | \$5,000 | | | | | \$6,381 | | | | \$8,144 |
| Chemical Feed - (PAC) Sodium Hydroxi | \$5,000 | | | | | | | \$7,036 | | \$8,144 |
| Chemical Feed - Carbon Pump 1 | | Unused | | | | | | | | |
| Chemical Feed - Carbon Pump 2 | | Unused | | | | | | | | |
| Anoxic Mixer 1 | \$7,000 | | | \$7,718 | | \$8,509 | | | | \$11,402 |
| Anoxic Mixer 2 | \$7,000 | | | | | | | | | \$11,402 |
| Pre-Aeration Blower 1 | \$7,000 | | | | | | \$9,381 | | | \$11,402 |
| Pre-Aeration Blower 2 | \$7,000 | | | | | | | \$9,850 | | \$11,402 |
| Membranes 1 | \$100,000 | | | | | | | | | \$162,889 |
| Membranes 2 | \$100,000 | | | | | | | | | \$162,889 |
| Membrane Tank Gate Valve | \$15,000 | | | \$16,538 | | | | | | \$24,433 |
| Aerators | | | | | | | | | | |
| MBR Blower 1 | \$7,000 | | | \$8,103 | | | | \$9,850 | | \$11,402 |
| MBR Blower 2 | \$7,000 | | | | \$8,509 | | | | | \$11,402 |
| MBR Blower 3 | \$7,000 | | | | | \$8,934 | | | | \$11,402 |
| RAS Pump 1 | \$7,000 | | | \$7,718 | | | | | | \$11,402 |
| RAS Pump 2 | \$7,000 | | | | | | \$9,381 | | | \$11,402 |
| RAS Pump 3 | \$7,000 | | | | | | | | | \$11,402 |
| Permeate Pump 1 | \$3,000 | | | | \$3,647 | | | | | \$4,887 |
| Permeate Pump 2 | \$3,000 | | | | | | \$4,020 | | | \$4,887 |
| Permeate Pump 3 | \$3,000 | | | | | | | | | \$4,887 |
| UV Side 1 (incl. meters) | \$7,500 | | | \$8,269 | | | | | | \$12,217 |
| UV Side 2 | \$7,500 | | | | \$8,682 | | | | | \$12,217 |
| Sludge Blower 1 | \$7,000 | | | | | \$8,509 | | | | \$11,402 |
| Sludge Blower 2 | \$7,000 | | | | \$8,103 | | | | | \$11,402 |
| Sludge Transfer Pump | \$8,000 | | \$8,400 | | | | | | | \$13,031 |
| Total Cost Per Year | | | \$99,488 | \$105,013 | \$101,582 | \$101,191 | \$100,507 | \$111,563 | \$105,884 | \$1,538,084 |
| Notes: | | | | | | | | | | |
| Budget-Avrg | \$102,027 | 3 yr projection of costs | | Flow Issued Available 2024 | | | | 12,367 | gpd | |
| Budget-Sum | \$306,082 | 3 yr projection of costs | | Budget-Sum FY24-FY26 | | | | \$306,082 | | |
| Budget Annual Average - Ten Year Proj | \$153,808.38 | | | Estimated Privilege Fee 2024 | | | | \$ | 24.75 | |
| | | | | Original Privilege Fee | | | | \$ | 65.07 | |