

A large, stylized graphic in the background features a yellow sun with rays on the left and several green leaves of varying shades on the right, all set against a white background.

# **BURNT STORE WATER RECLAMATION FACILITY MODIFICATIONS**

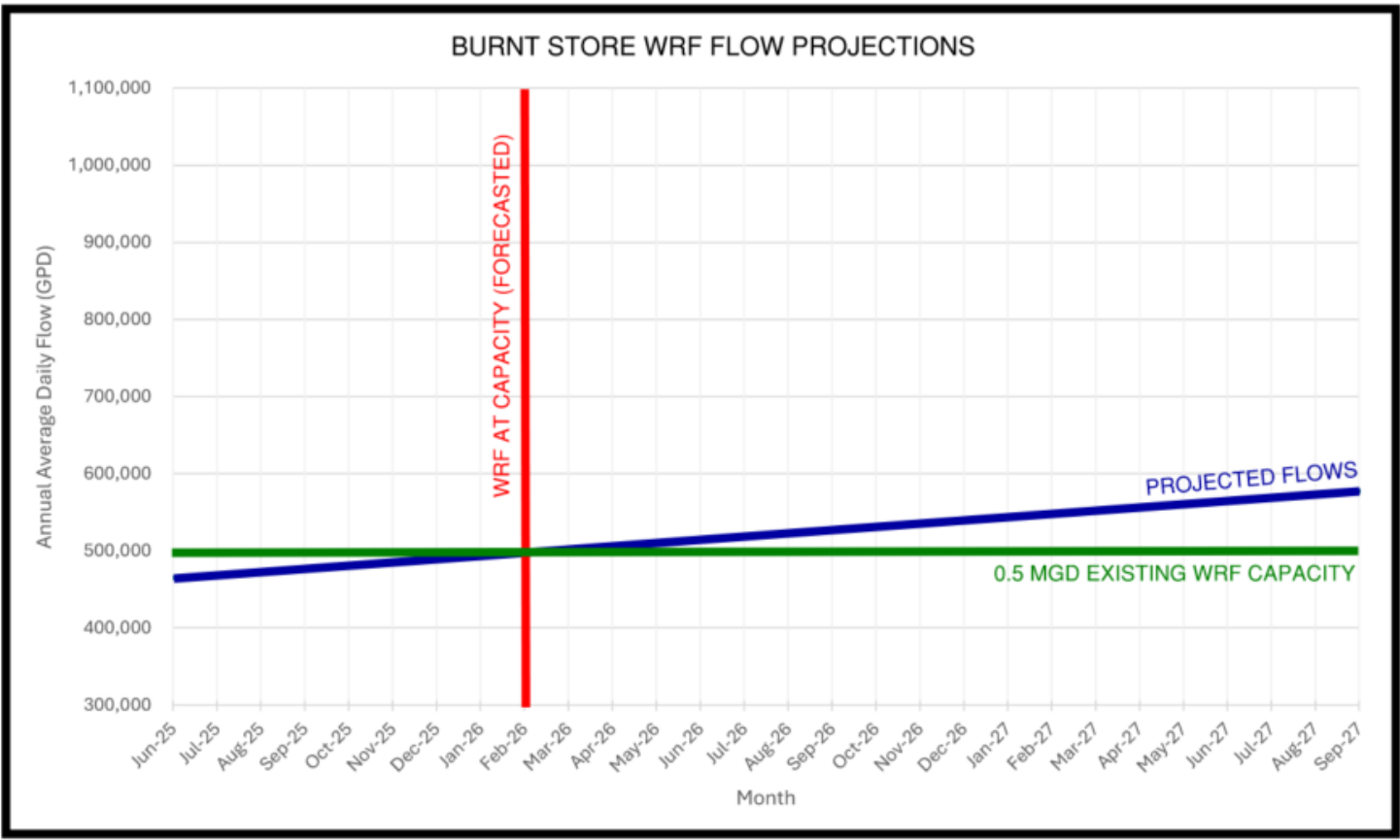


# Agenda

- Review Current Flows and WRF Capacity
- Present Temporary Plan Options
- Provide Project update to increase capacity to at least 1.0 MGD
- Review Alternatives Analysis Options

# Current Flows and WRF Capacity

- Current WRF Permitted Capacity – 0.5 MGD
- Current Flows – 0.465 MGD
- Temporary capacity required by February 2026
- Evaluated 2 Treatment Options + Rerate WRF



**LEGEND**

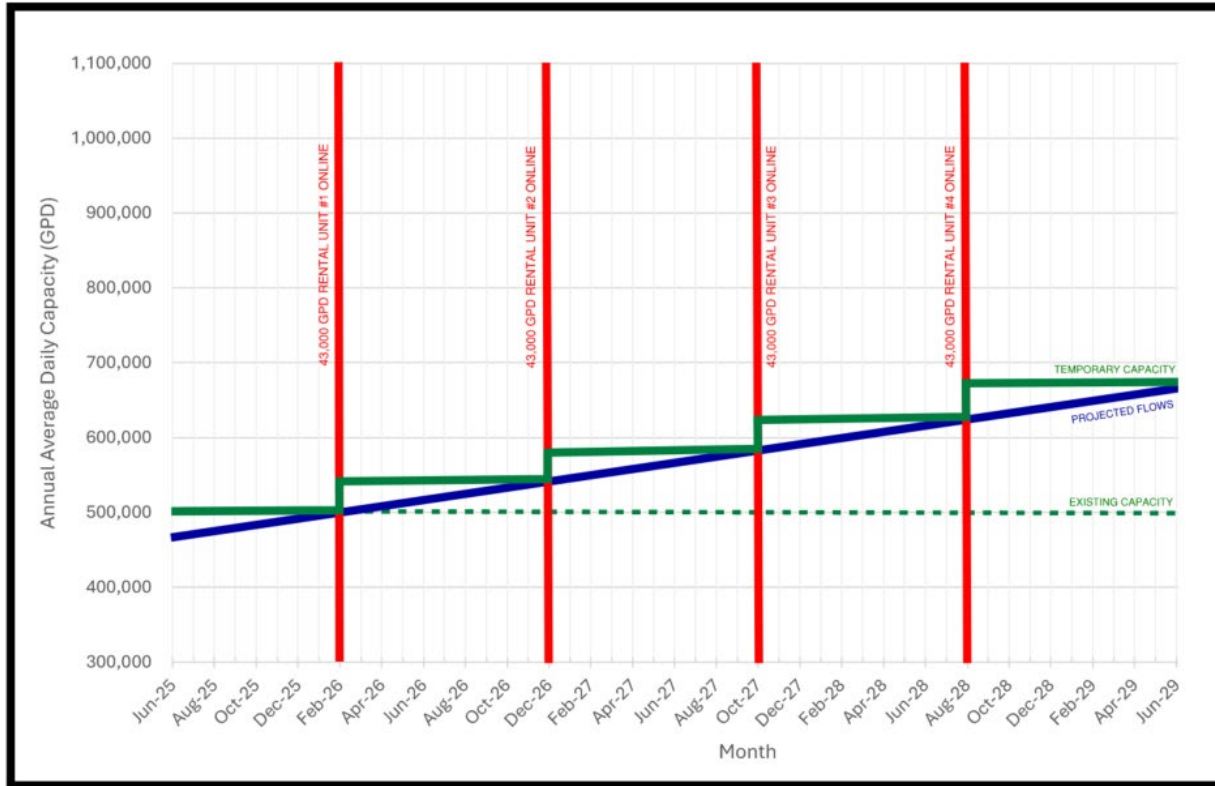
- / CAPACITY MILESTONE
- / PROJECTED FLOWS
- / TOTAL FACILITY CAPACITY

**Notes:**

- Assumes present flow of approximately 0.465 MGD.
- Projected flows per 2024 Charlotte County Sewer Master Plan (additional 4,167 GPD per month).



# Temporary Treatment Timeline (0.43 MGD Units)



**LEGEND**

- / CAPACITY MILESTONE
- / PROJECTED FLOWS
- / TOTAL FACILITY CAPACITY

**Notes:**

1. Assumes present flow of approximately 0.465 MGD.
2. Projected flows per 2024 Charlotte County Sewer Master Plan (additional 4,167 GPD per month).



## Temporary Treatment Alternatives (19-mo Duration Scenario)

Alternative	Rental Capacity (Annual Average Day)	Effluent Quality (mg/l)	Lead Time (Per Unit)	Temporary Capacity Needed at Construction Completion (AADF)	Temporary Treatment Cost Estimate	
					19mo Rental	Purchase
<b>Cloacina MEMPAC-R (MBR)</b>	43,000 GPD (1 <sup>st</sup> Unit, 19mo Duration) 43,000 GPD (2 <sup>nd</sup> Unit, 9mo Duration) <b>86,000 GPD Total Capacity</b>	≤ 20 BOD5 ≤ 5 TSS ≤ 12 TN	<b>3 weeks</b>	<b>71,173 GPD</b>	<b>\$2.0 M</b>	<b>\$3.1 M</b>
<b>AUC Group Conventional System</b>	100,000 GPD (Single Unit, 19mo Duration) <b>100,000 GPD Total Capacity</b>	≤ 10 BOD5 ≤ 15 TSS	<b>4 months</b>	<b>71,173 GPD</b>	<b>\$2.8 M</b>	<b>\$3.4 M</b>
<b>Rerate Ex. WRF</b>	<b>No additional capacity available</b>	-	-	<b>71,173 GPD</b>	-	-

**Notes:**

Cost estimates for rental and purchase of temporary treatment include budgetary estimates for ancillary onsite improvements needed to accommodate the temporary systems, along with an estimate contingency. Detailed design is needed to refine cost estimates.

Engineer does not control the cost of labor, materials, equipment or services furnished by others. Engineer cannot and does not guarantee that proposals, bids or actual costs will not vary from its opinion of probable cost.



## Temporary Treatment Alternatives (37-mo Duration Scenario)

Alternative	Rental Capacity (Annual Average Day)	Effluent Quality (mg/l)	Lead Time (Per Unit)	Temporary Capacity Needed at Construction Completion (AADF)	Temporary Treatment Cost Estimate	
					37mo Rental	Purchase
<b>Cloacina MEMPAC-R (MBR)</b>	43,000 GPD (1 <sup>st</sup> Unit, 37mo Duration) 43,000 GPD (2 <sup>nd</sup> Unit, 27mo Duration) 43,000 GPD (3 <sup>rd</sup> Unit, 17mo Duration) 43,000 GPD (4 <sup>th</sup> Unit, 7mo Duration) <b>172,000 GPD Total Capacity</b>	≤ 20 BOD5 ≤ 5 TSS ≤ 12 TN	<b>3 weeks</b>	<b>154,179 GPD</b>	<b>\$5.4 M</b>	<b>\$6.0 M</b>
<b>AUC Group Conventional System</b>	100,000 GPD (1 <sup>st</sup> Unit, 37mo Duration) 100,000 GPD (2 <sup>nd</sup> Unit, 14mo Duration) <b>200,000 GPD Total Capacity</b>	≤ 10 BOD5 ≤ 15 TSS	<b>4 months</b>	<b>154,179 GPD</b>	<b>\$5.4 M</b>	<b>\$6.4 M</b>
<b>Rerate Ex. WRF</b>	<b>No additional capacity available</b>	-	-	<b>154,179 GPD</b>	-	-

**Notes:**

Cost estimates for rental and purchase of temporary treatment include budgetary estimates for ancillary onsite improvements needed to accommodate the temporary systems, along with an estimate contingency. Detailed design is needed to refine cost estimates.

Engineer does not control the cost of labor, materials, equipment or services furnished by others. Engineer cannot and does not guarantee that proposals, bids or actual costs will not vary from its opinion of probable cost.

# Temporary Treatment Plant Plan Recommendation

## Recommend Cloacina Treatment Option

- Competitive cost
- Lead times
- Staff familiarity with technology
- Effluent quality
- Ease of operation

# Temporary Treatment Plant Plan

## Next Steps

- Discuss with CMAR and staff to review the 3 alternative options.
- Collaborate with CMAR for Temporary Plant GMP approval.
- Proceed with design and permitting of Temporary Plant.
- First unit operational prior to February 2026.
- Present Alternatives at next Board Meeting.

A stylized graphic featuring a yellow sun with rays, a green leaf, and a light blue wave-like shape, all rendered in a soft, semi-transparent style.

# **BURNT STORE WATER RECLAMATION FACILITY MAJOR DESIGN PERMIT MODIFICATION**

**THANK YOU**

