



MINT LANE PUMP STATION

Consent Decree and Future Sewer Service Discussion

Charles H. Martin, P.E., Director, Division of Water Quality

Environmental Quality & Public Works Committee

August 12, 2025





AGENDA

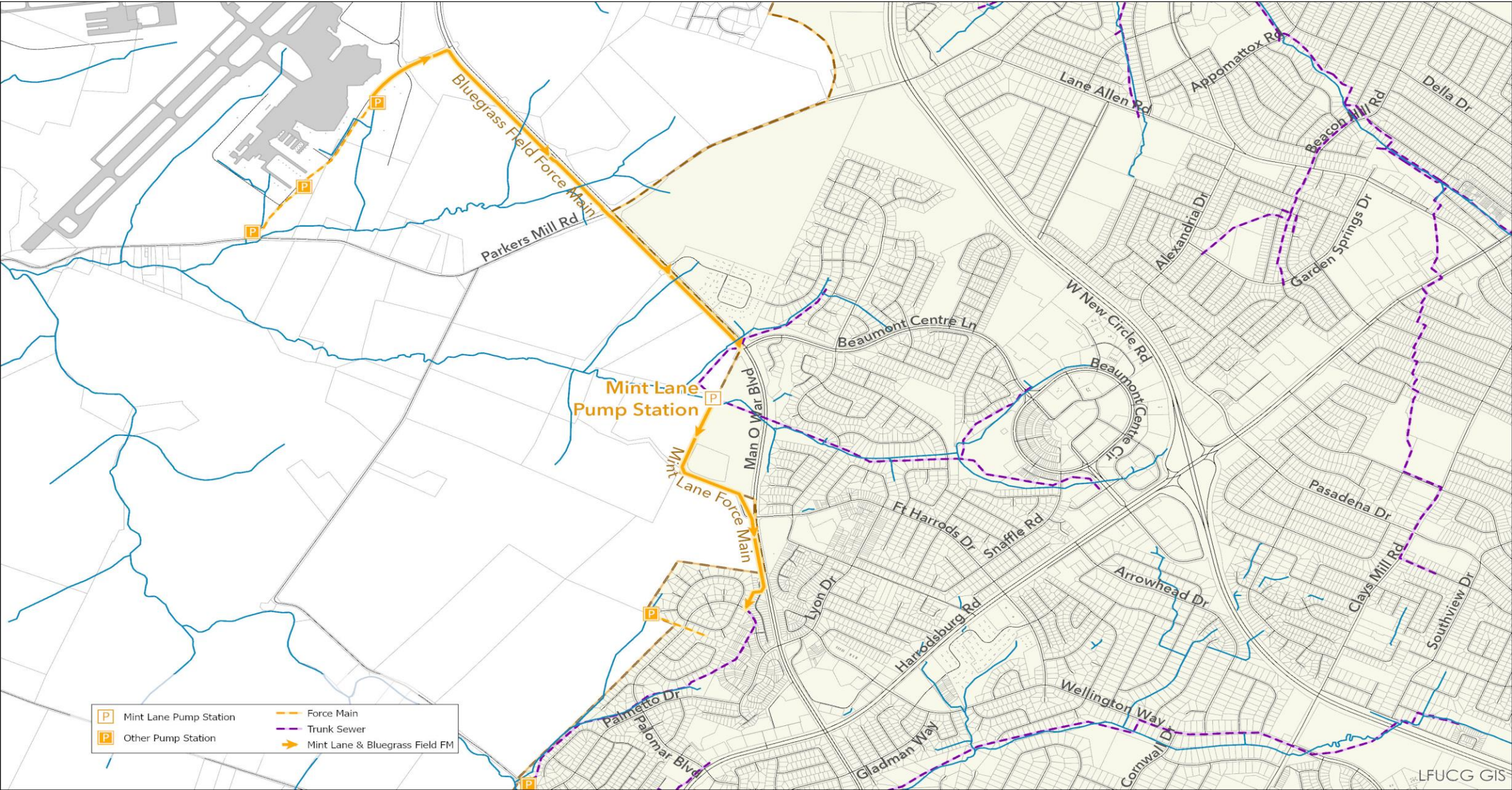
- Purpose of today's presentation
- Mint Lane Pump Station
 - Current situation / required Consent Decree obligation
 - 2023 Sewerability Study / Expansion Recommendation
- Expansion Outcome – Funding the Path Forward
- Questions



MINT LANE PUMP STATION 2025



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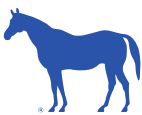


Mint Lane Pump Station Facts

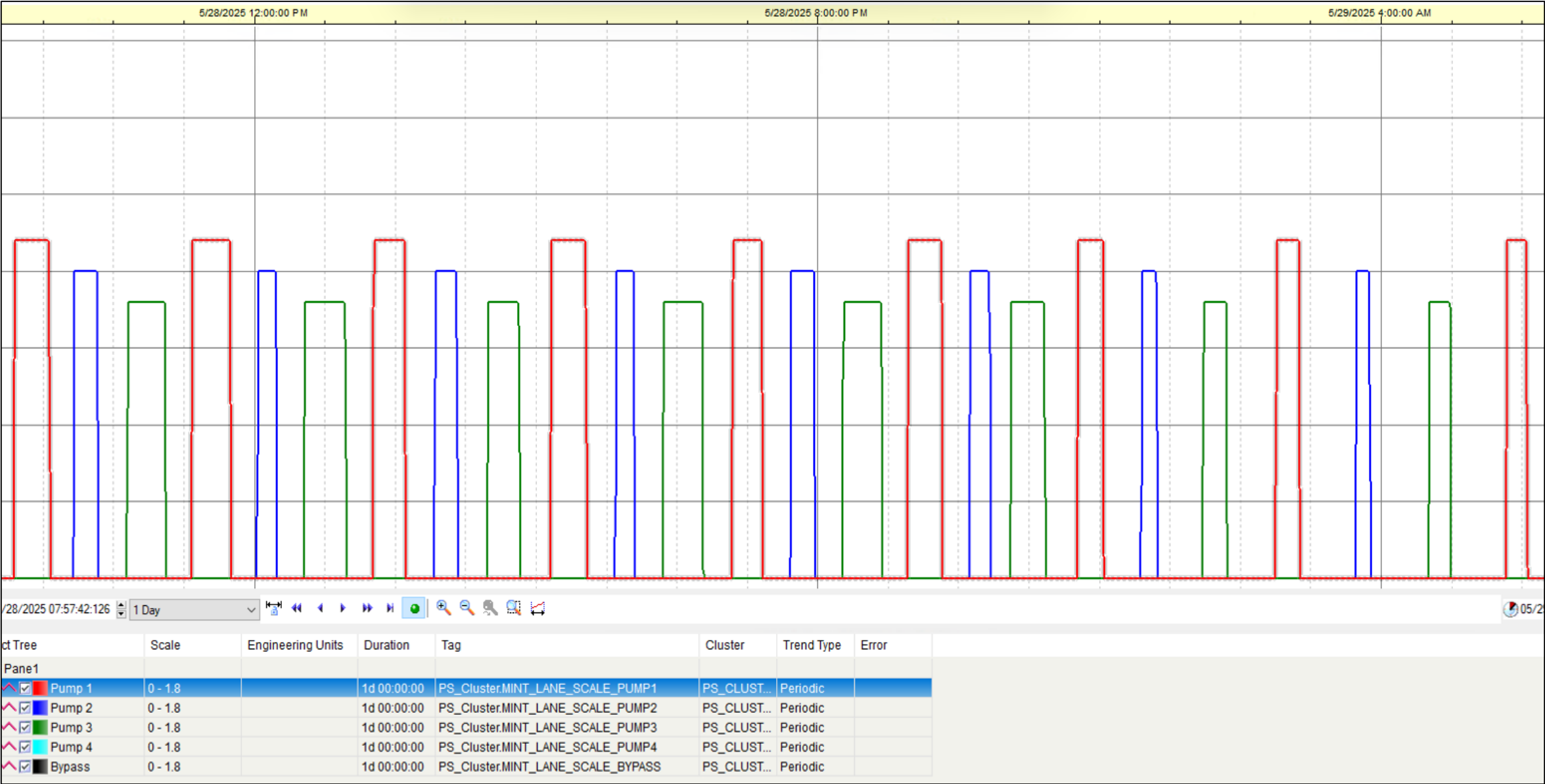
- Class B station placed into service 1998.
- Design Capacity – 1,535 gallons per minute (gpm). All three pumps running – 2,500 gpm range.
- On-site generator for emergency power.
- Identified as a Recurring SSO Requiring Remediation By the Consent Decree.
 - 28 reported wet-weather overflows or bypasses since March 2015
 - 12.9 million gallons of untreated sewage released
 - Remedial project schedule: design 2026, construction 2027-28



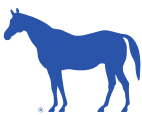
MINT LANE PUMP STATION 2025



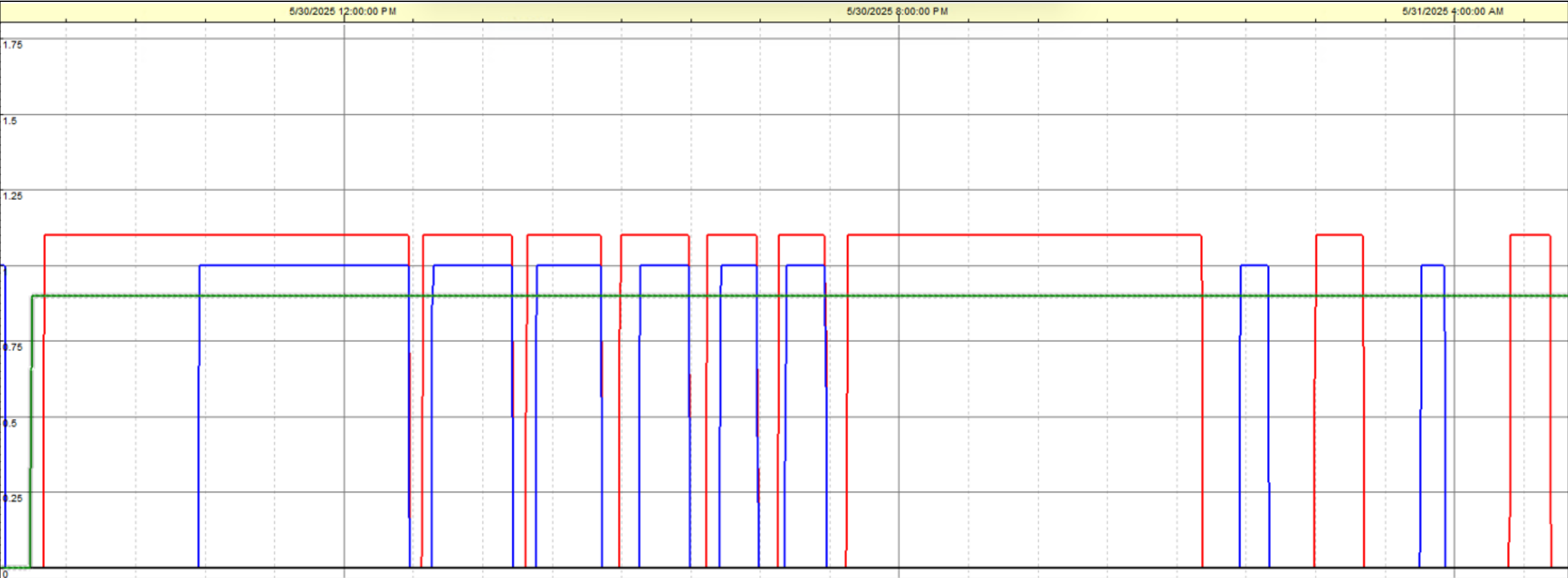
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MINT LANE PUMP STATION 2025



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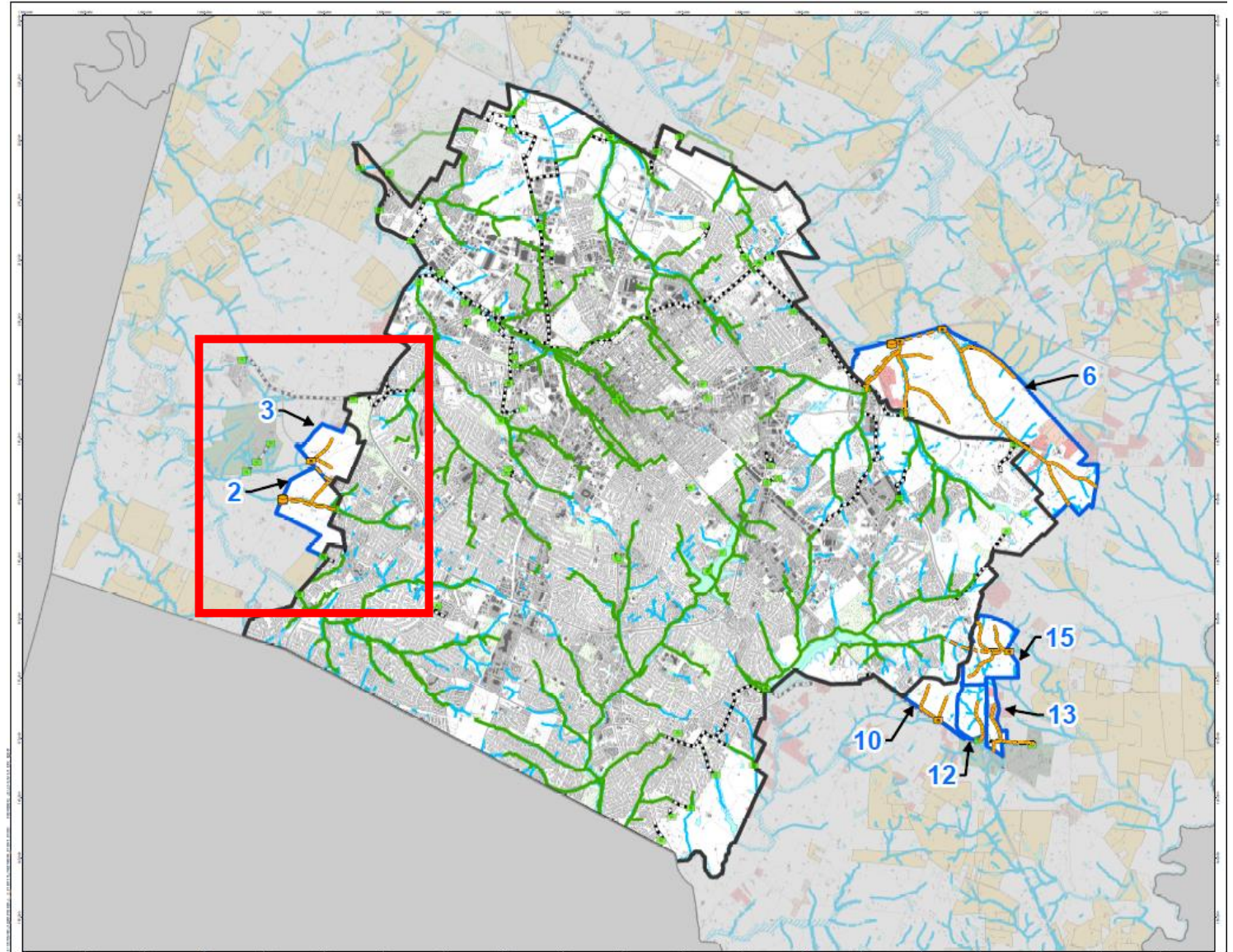


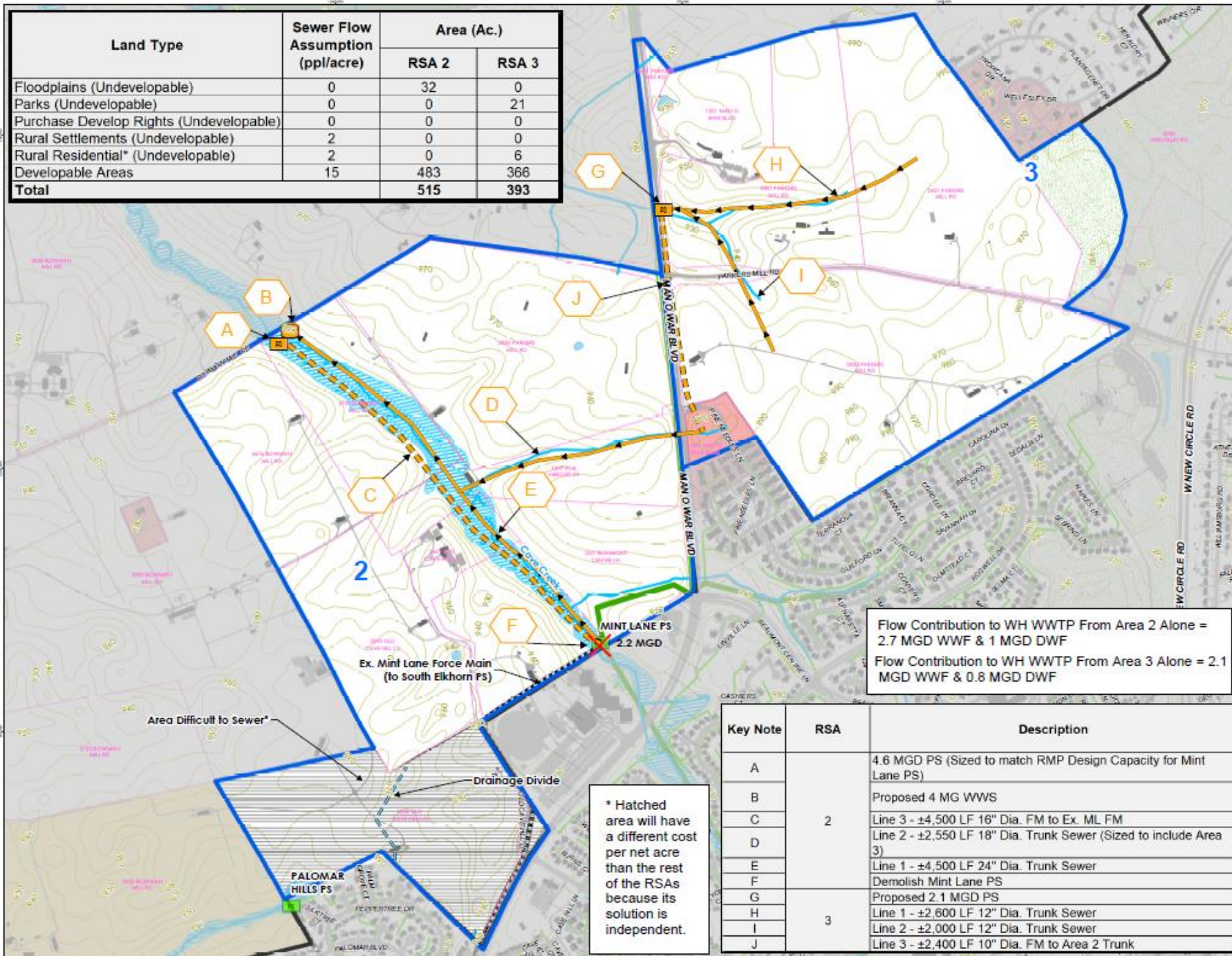
05/30/2025 07:00:048 1 Day 05/31/20

Object Tree	Scale	Engineering Units	Duration	Tag	Cluster	Trend Type	Error
Pane1							
<input checked="" type="checkbox"/> Pump 1	0 - 1.8		1d 00:00:00	PS_Cluster.MINT_LANE_SCALE_PUMP1	PS_CLUST...	Periodic	
<input checked="" type="checkbox"/> Pump 2	0 - 1.8		1d 00:00:00	PS_Cluster.MINT_LANE_SCALE_PUMP2	PS_CLUST...	Periodic	
<input checked="" type="checkbox"/> Pump 3	0 - 1.8		1d 00:00:00	PS_Cluster.MINT_LANE_SCALE_PUMP3	PS_CLUST...	Periodic	
<input checked="" type="checkbox"/> Pump 4	0 - 1.8		1d 00:00:00	PS_Cluster.MINT_LANE_SCALE_PUMP4	PS_CLUST...	Periodic	
<input checked="" type="checkbox"/> Bypass	0 - 1.8		1d 00:00:00	PS_Cluster.MINT_LANE_SCALE_BYPASS	PS_CLUST...	Periodic	



2023 “Sewerability” Study





Land Type	Sewer Flow Assumption (ppl/acre)	Area (Ac.)	
		RSA 2	RSA 3
Floodplains (Undevelopable)	0	32	0
Parks (Undevelopable)	0	0	21
Purchase Develop Rights (Undevelopable)	0	0	0
Rural Settlements (Undevelopable)	2	0	0
Rural Residential* (Undevelopable)	2	0	6
Developable Areas	15	483	366
Total		515	393

Flow Contribution to WH WWTP From Area 2 Alone = 2.7 MGD WWF & 1 MGD DWF
 Flow Contribution to WH WWTP From Area 3 Alone = 2.1 MGD WWF & 0.8 MGD DWF

Key Note	RSA	Description
A	2	4.6 MGD PS (Sized to match RMP Design Capacity for Mint Lane PS)
B		Proposed 4 MG WWS
C		Line 3 - ±4,500 LF 16" Dia. FM to Ex. ML FM
D		Line 2 - ±2,550 LF 18" Dia. Trunk Sewer (Sized to include Area 3)
E	3	Line 1 - ±4,500 LF 24" Dia. Trunk Sewer
F		Demolish Mint Lane PS
G		Proposed 2.1 MGD PS
H		Line 1 - ±2,600 LF 12" Dia. Trunk Sewer
I		Line 2 - ±2,000 LF 12" Dia. Trunk Sewer
J		Line 3 - ±2,400 LF 10" Dia. FM to Area 2 Trunk

* Hatched area will have a different cost per net acre than the rest of the RSAs because its solution is independent.

Figure No. 2

RSA 2 & 3 (Rev 1)
Mint Lane & Man O War

Client/Project
 Lexington-Fayette Urban County Government
 Sewer Capability Study

Project Location
 Lexington, Fayette CO, KY

500 0 500 1,000 Feet
 1 in = 500 ft at original document size of 22x34

Legend

- Revised Study Area
- Parcel
- Trunk Sewer
- Collector Sewer
- Force Main
- Ex. Pump Station
- Ex. Pump Station to be Eliminated
- 1% Annual Chance Flood Hazard
- Contour (10')
- Purchase Development Right Parcel
- Rural Residential Parcels*
- Rural Settlements
- Waterways
- Waterbodies
- Parks
- Current Urban Service Boundary
- Rural Activity Center

* Parcels classified as "Rural Residential" are less than or equal to 10 acres in size and are zoned as residential. These parcels are applied WWF based on their acreage but DWF is assumed to be 2 people/acre.



Key Points

- The study and Water Quality did not provide “recommendations” about expansion, they provided technical information to the decision-makers.
- Projections on infrastructure costs were based on highly variable parameters including:
 - Population density
 - Developable verses undevelopable land
 - Timing
- At no time during the study was information about future plans for the airport discussed.



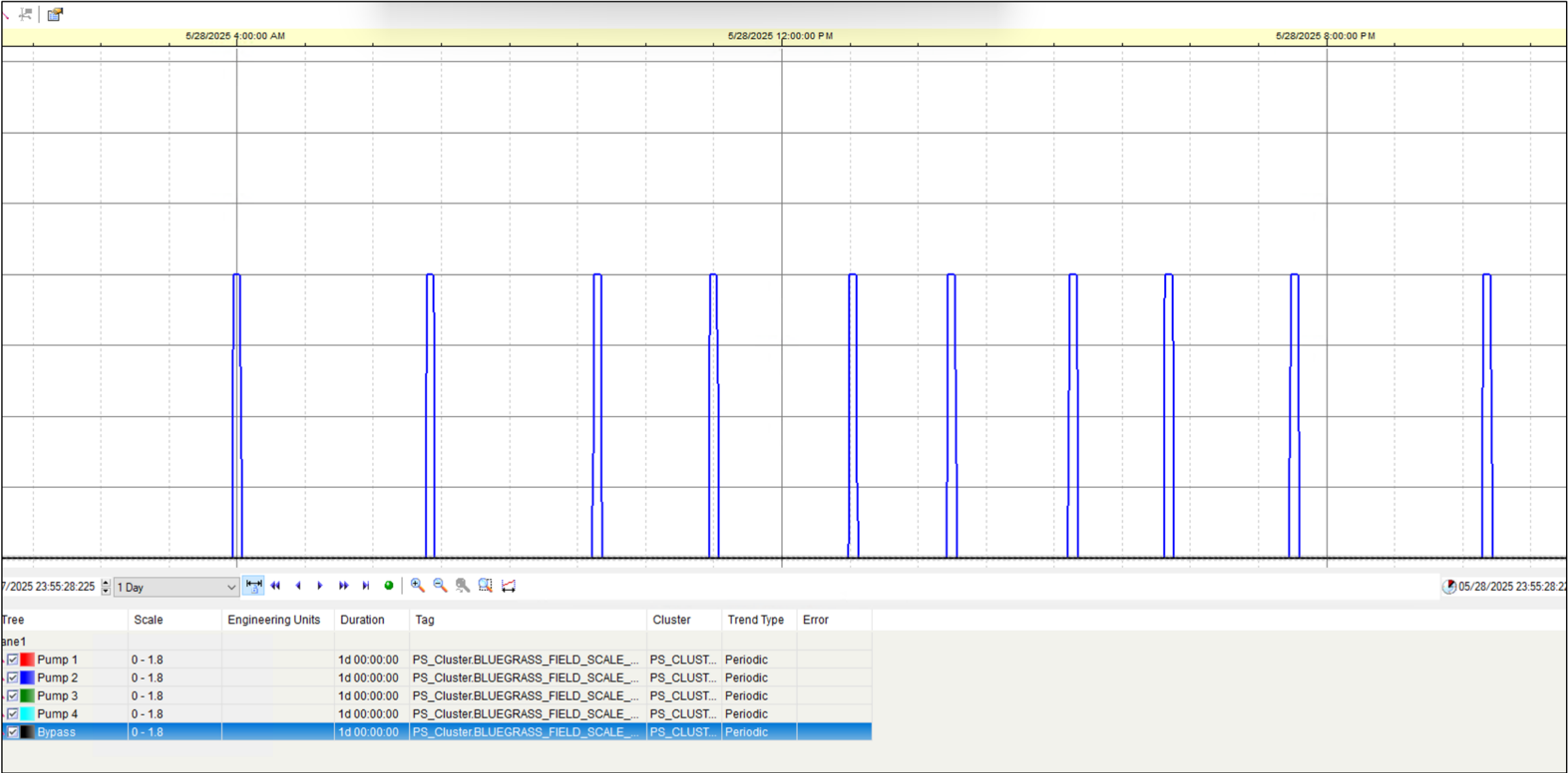


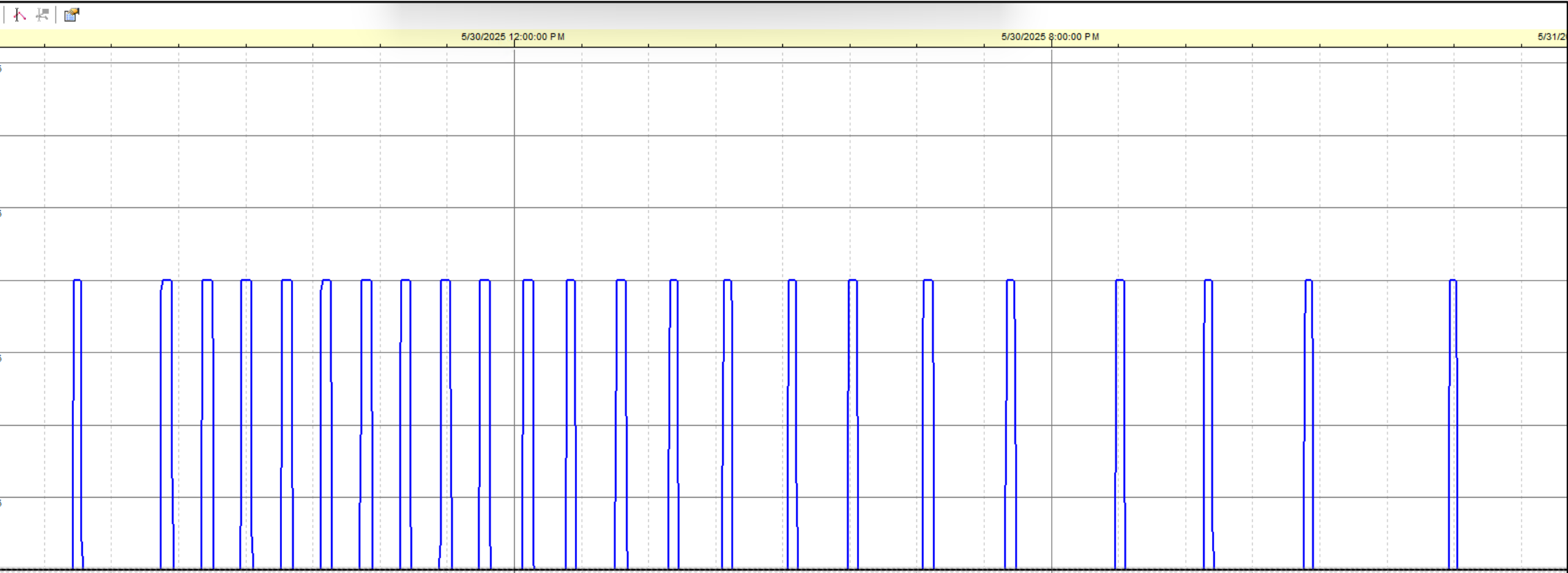
Blue Grass Airport Pump Station Facts

- Pumps to point just upstream from Mint Lane pump station.
- Capacity expansion in 2011.
- Class C station
 - Design Capacity – 425 gallons per minute (gpm)
 - Two pump configuration.
 - On-site generator for emergency power
- No history of overflows since 2011 expansion. Station capacity is influenced by aircraft deicing operations in the winter.









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ject Tree	Scale	Engineering Units	Duration	Tag	Cluster	Trend Type	Error
Pane1							
<input checked="" type="checkbox"/> Pump 1	0 - 1.8		1d 00:00:00	PS_Cluster.BLUEGRASS_FIELD_SCALE_...	PS_CLUST...	Periodic	
<input checked="" type="checkbox"/> Pump 2	0 - 1.8		1d 00:00:00	PS_Cluster.BLUEGRASS_FIELD_SCALE_...	PS_CLUST...	Periodic	
<input checked="" type="checkbox"/> Pump 3	0 - 1.8		1d 00:00:00	PS_Cluster.BLUEGRASS_FIELD_SCALE_...	PS_CLUST...	Periodic	
<input checked="" type="checkbox"/> Pump 4	0 - 1.8		1d 00:00:00	PS_Cluster.BLUEGRASS_FIELD_SCALE_...	PS_CLUST...	Periodic	
<input checked="" type="checkbox"/> Bypass	0 - 1.8		1d 00:00:00	PS_Cluster.BLUEGRASS_FIELD_SCALE_...	PS_CLUST...	Periodic	



EXPANSION OUTCOME

- Sewerability study area draining to Cave Creek was reduced:
 - RSA 2 – eliminated from consideration
 - RSA 3 – area located between Parkers Mill Road and Versailles Road eliminated from consideration.
- RSA 3 become known as 2025 Expansion Area 1.
- Expansion Area 1 did not provide authority to move the Mint Lane pump station farther downstream on Cave Creek.



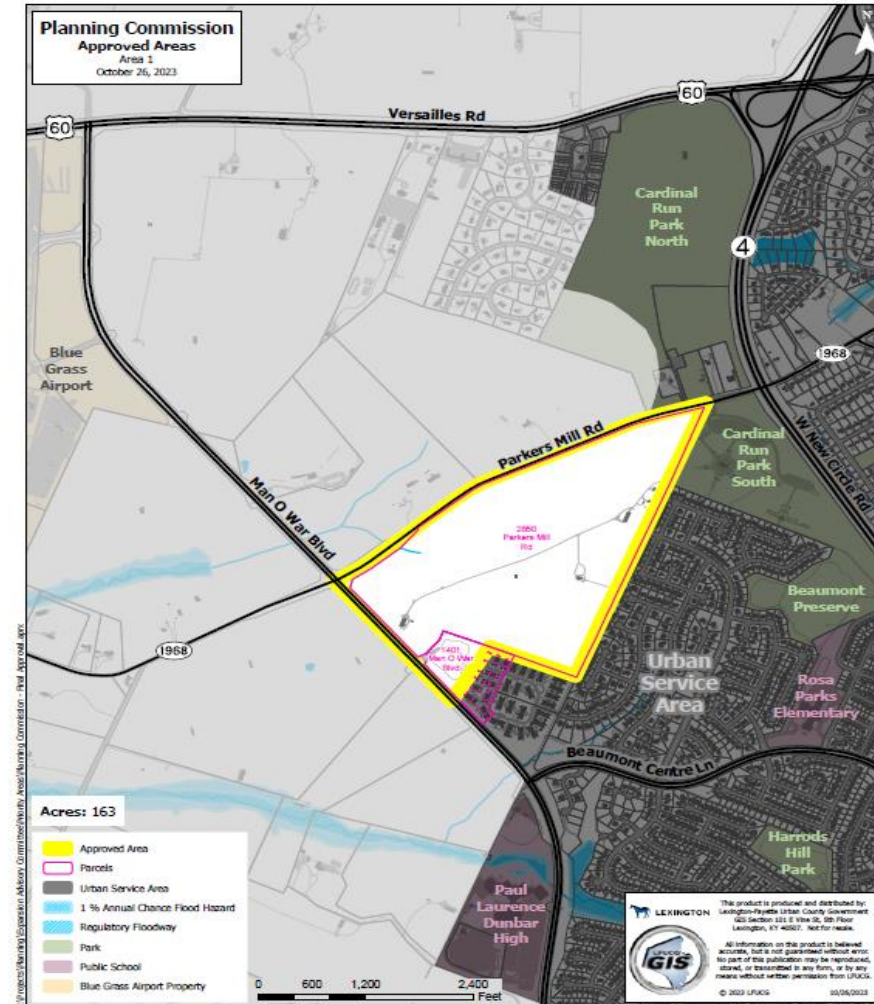


Area 1

Parkers Mill & Man O' War

Area 1 is the smallest of the five areas. The land is currently being used for cattle and horse pastures with paddocks for horses and areas for grazing animals. There are several associated barns, outbuildings, and the original farmhouse on site.

The vegetated entry to Pine Needles Lane is included in Area 1. This parcel is owned and maintained by the Heritage Place HOA, which is the adjoining active adult community.



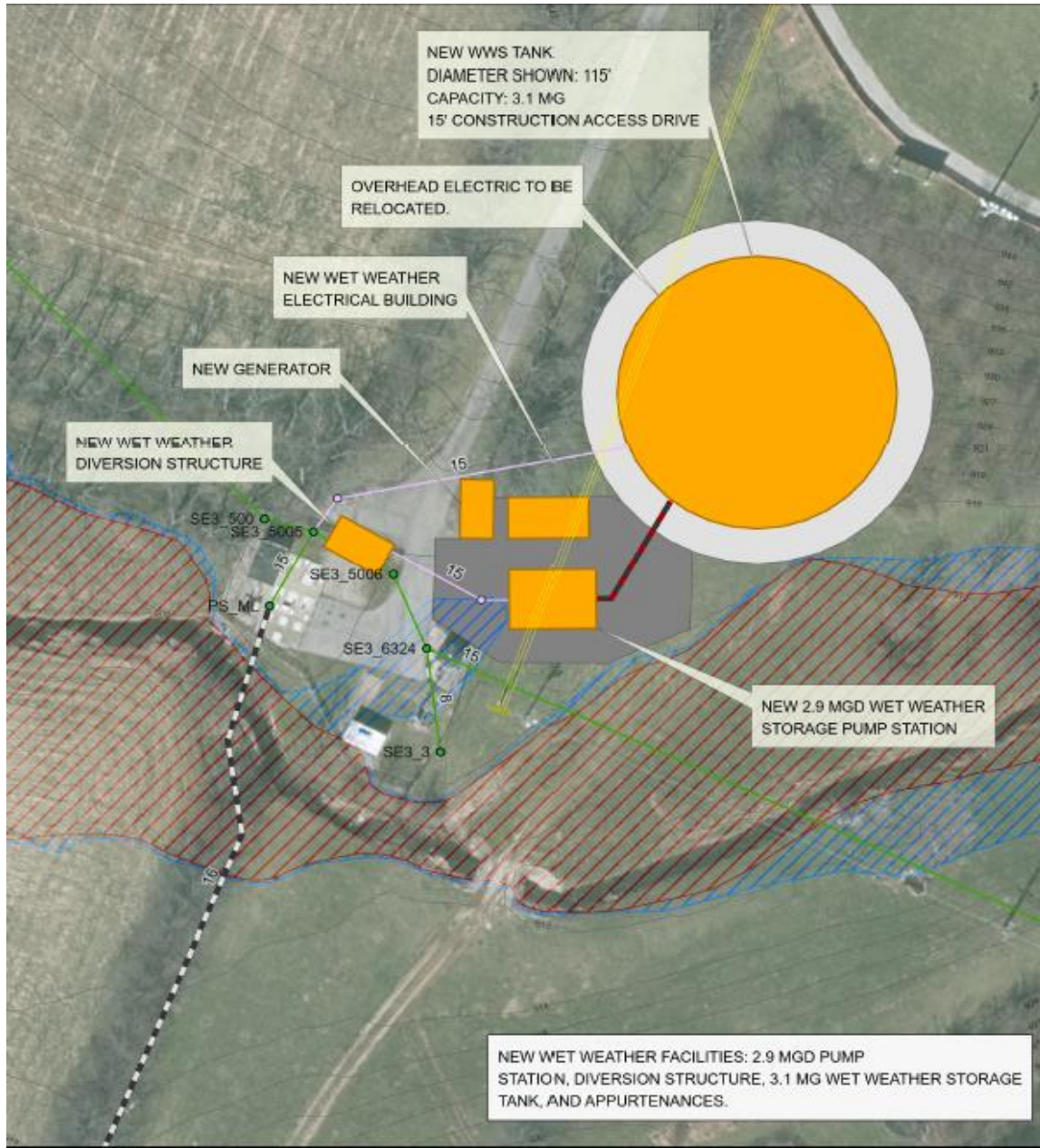


EXPANSION OUTCOME

Given the deadlines imposed by the Consent Decree, Water Quality recommended proceeding with:

- Constructing a new pump station and wet weather storage tank within the limits of the existing Urban Service Boundary.
- Proceeding with design services and property acquisition in FY26.





Projected Layout Mint Lane Pump Station Improvements



Questions?

