

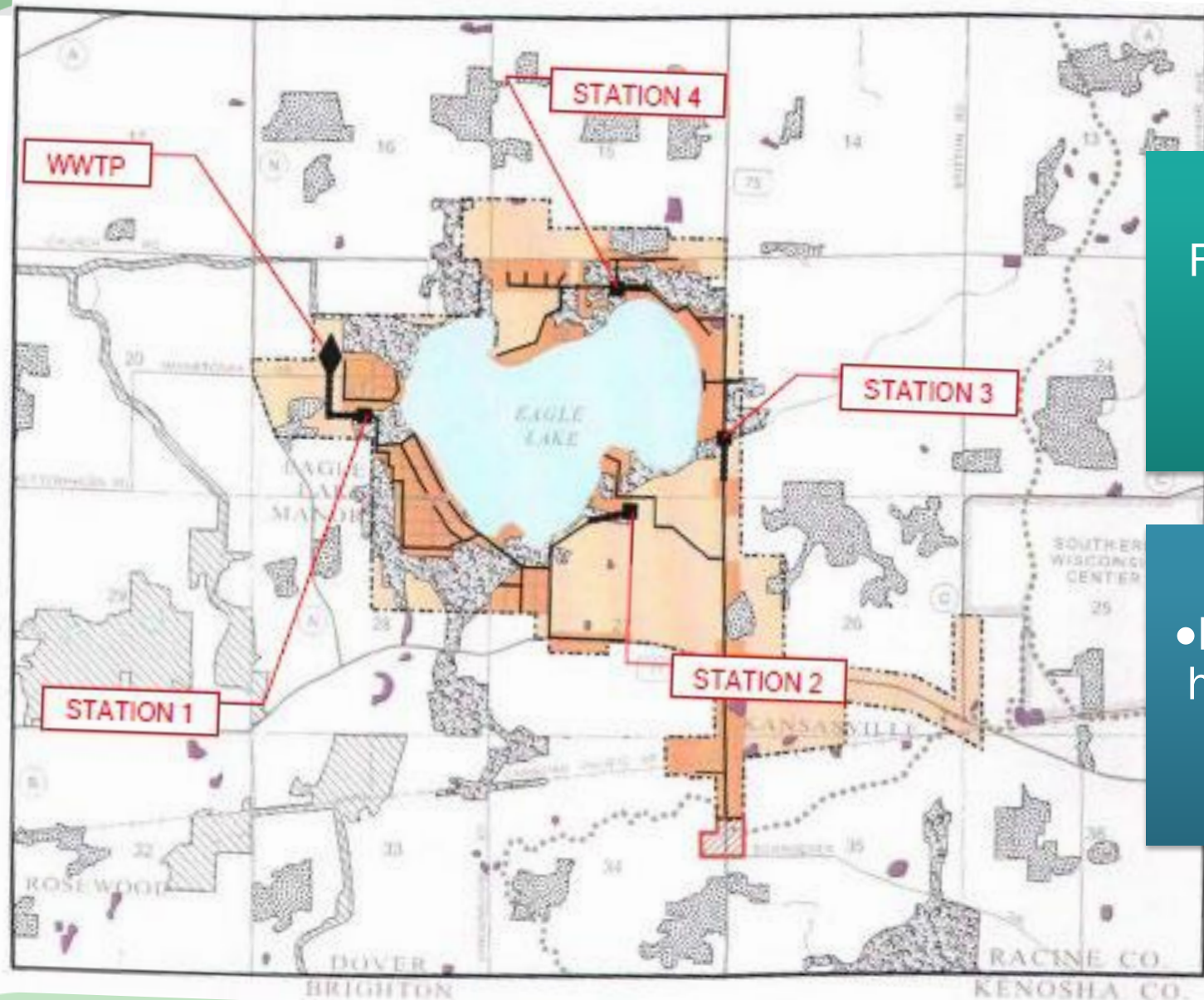
EAGLE LAKE SEWER UTILITY DISTRICT

Lift Station Improvements



January 10, 2022
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Background



Facilities are 44 years old and beyond their service lives.

- Insufficient firm pumping capacity for peak flows.

- Force main breakages have increased due to corrosion.

- Lift stations are permit required confined spaces, making maintenance difficult and hazardous.

Condition and Performance Findings

Key:

1	Excellent, Component functioning as intended
2	Slight visible degradation and/or in-service, but higher than expected O&M
3	Visible degradation and/or in-service, but function is impaired
4	Integrity of component moderately compromised and/or in-service, but function is highly impaired
5	Integrity of component severely compromised and/or component is not functioning as intended

Recommendation

Near-Term
Improvements
(0-2 years)

Recommendation

Mid-Term
Improvements
(3-5 years)

Recommendation

Long-Term
Improvements
(6-10 years)

No. / Location	No. 1 Minnehaha Drive	No. 2 Circle Drive	No. 3 S. Beaumont Drive	No. 4 Church Road
Station Condition	5	4	3	3
Station Performance	5	4	3	3
Pump Condition	4	4	4	4
Pump Performance	4	4	4	4
Valve and Piping Condition	4	4	4	4
Valve and Piping Performance	4	4	4	4
Generator Condition	4	4	4	1
Generator Performance	4	4	4	1
Force Main Condition	5	4	2	2
Force Main Performance	5	4	2	2

Lift Station 1

Findings

- Extensive corrosion, including the dry well.
- Pumps lack sufficient capacity.
- Confined entry permit.
- Force main is experiencing failures.



Recommended Improvements

- Abandon drywell.
- Install a new 10' dia well and larger submersible pumps.
- Replace controls, WWTP flow meter, and standby generator.
- Install driveway and replace force main.



Lift Station 2

Findings

- Wet well is in fair condition, as are the dry well piping, valves, and hardware.
- Standby power, controls, SCADA, and force main have reached the ends of their design lives.
- Pumps lack sufficient capacity.
- Difficult to access pumps.



Recommended Improvements

- Abandon drywell.
- Install new higher capacity submersible pumps in new wetwell.
- Replace station controls and standby generator.
- Add a flow meter.
- Install driveway and replace force main.



Lift Station 3

Findings

- No significant wet well corrosion.
- Extensive corrosion in the dry well.
- Pumps are in poor condition and lack sufficient capacity.
- Difficult to access pumps.
- Access pavement is deteriorating.



Recommended Improvements

- Abandon drywell.
- Install larger submersible pumps in existing wet well.
- Replace station controls and standby generator.
- Add flow meter.
- Repave driveway.



Lift Station 4

Findings

- Wet well appears to be in fair condition.
- Dry well, valves, and piping are corroded.
- Pumps lack sufficient capacity.
- Difficult to access pumps.



Recommended Improvements

- Abandon drywell
- Install larger submersible pumps in existing wet well.
- Replace station controls.
- Add flow meter
- Install driveway.



Cost Estimates

Near-Term

Mid-Term

Long-Term



Total: \$4,823,800