

# Town of Oak Bluffs

## Comprehensive Wastewater Management Planning Project (CWMP)

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December 2, 2021  
Capital Committee Meeting

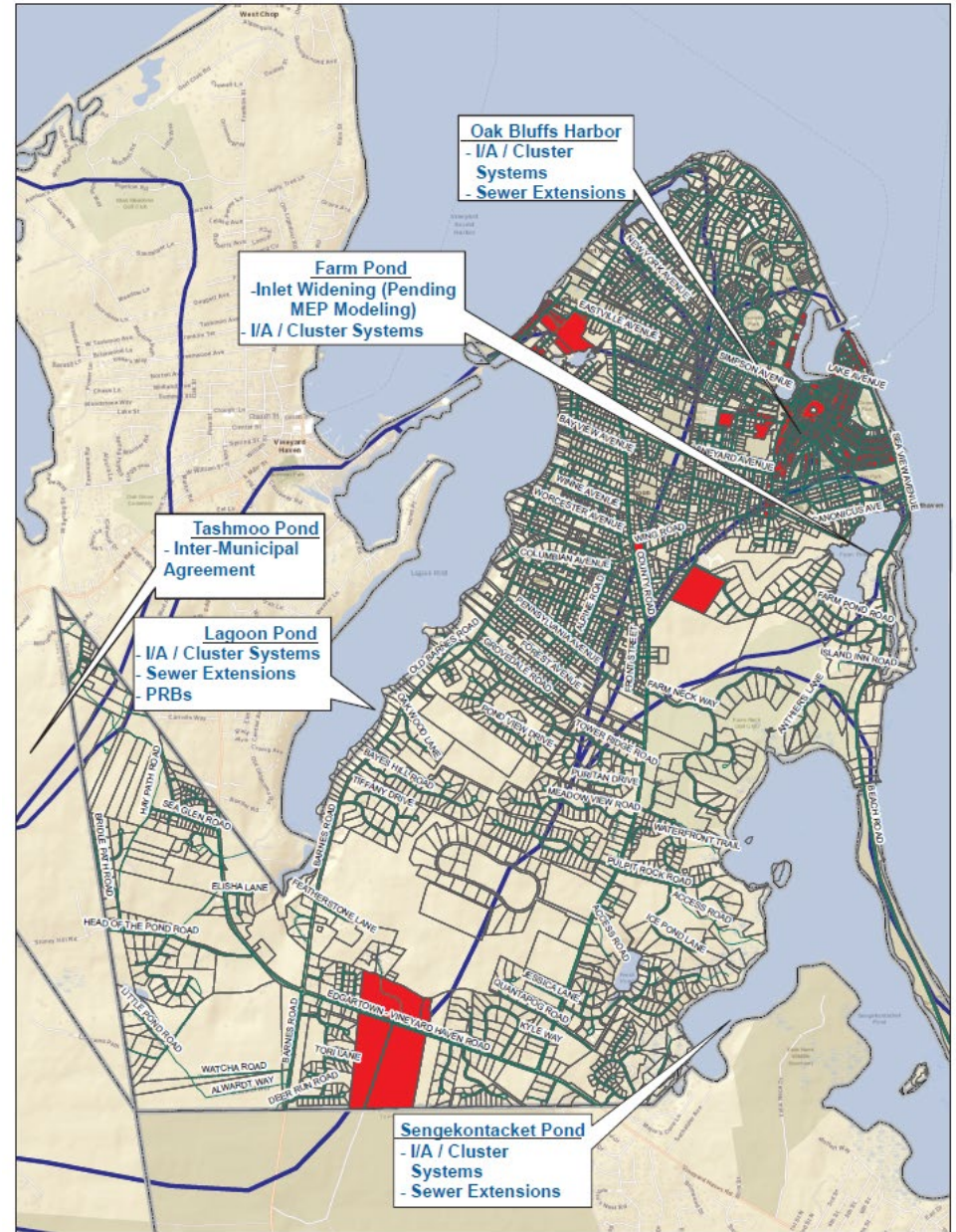


# Planning Period Wastewater Needs

- Nutrient Management Needs
  - Need to meet TMDLs for impaired estuaries
  - Need to accommodate population growth in impaired watersheds
- Centralized wastewater treatment facility
  - Need to accommodate infill properties and consider development within existing collection system (business district and commercial areas)
  - Need to address facility approaching design capacity
  - Need to address facility near end of its design life
- Collection System
  - Need to address pump station equipment near end of design life
  - Need to address pump station vulnerability (3 stations, 100-year flood)

# Preferred Alternative

- TMDL compliance achieved by optimizing non-sewering nitrogen removal alternatives including:
  - Inlet widening
  - Permeable Reactive Barriers
  - I/A systems (11 mg/L TN)
  - Centralized collection & treatment
  - Cluster systems

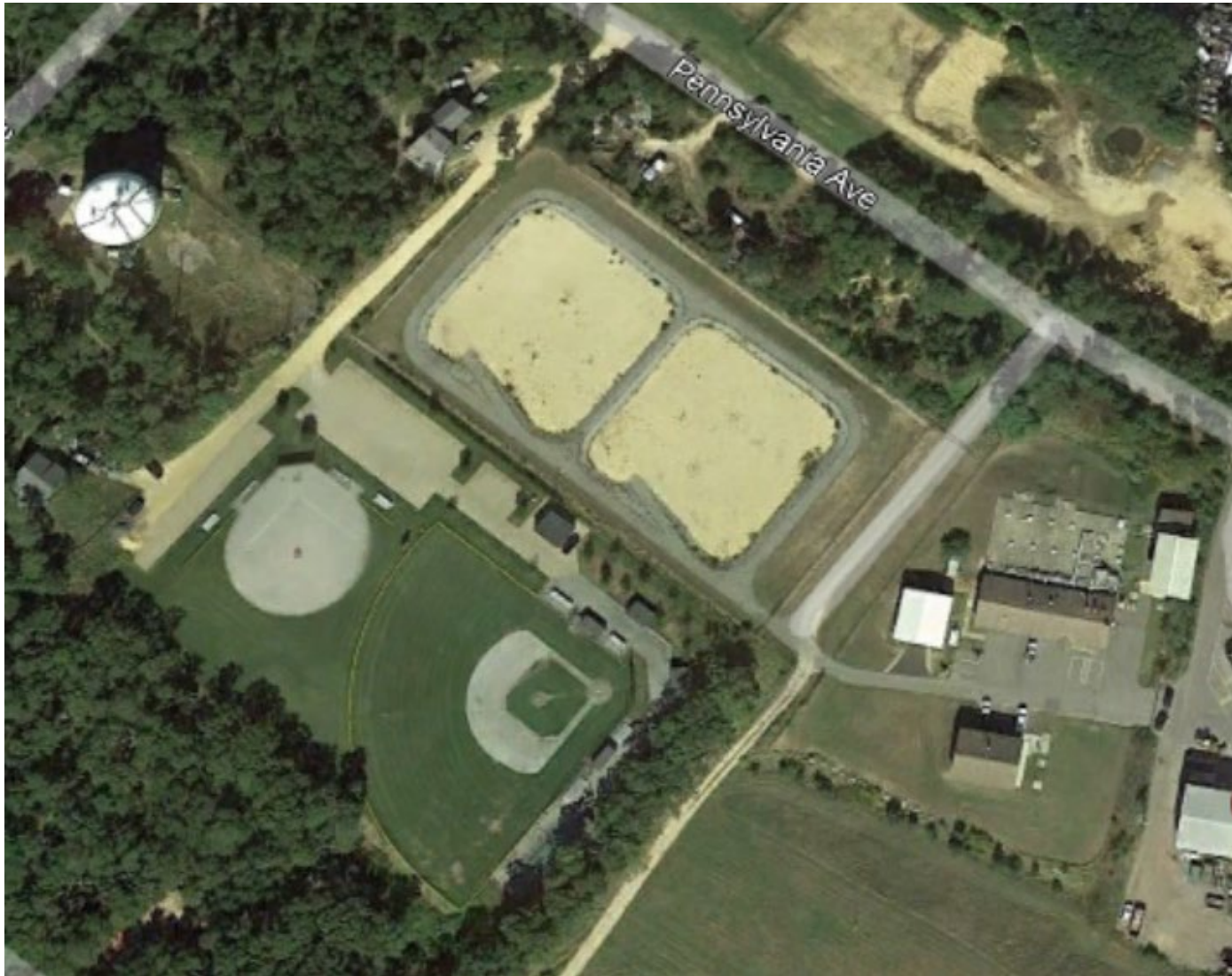


LEGEND

- Existing Sewered Parcel
- Major Watershed Boundaries

Note: I/A Total Nitrogen Effluent Concentration = 19 mg/l

# Existing Wastewater Treatment Facility



# Wastewater Treatment Facility Upgrade

OAK BLUFFS WWTF UPGRADES - CONCEPTUAL SITE PLAN



# Estimated Construction Costs – Approximate Breakdown By Need

	Upgrades for Existing WWTF Capacity	Upgrades to Increase WWTF Capacity
Wastewater Treatment	\$11.4 M	\$4.5 M
Sludge Processing	\$0.7 M	\$1.0 M
Building Services	\$4.5 M	\$2.0 M
Yard Work	\$1.3 M	\$0.6 M
<b>Total</b>	<b>\$17.9 M</b>	<b>\$8.1 M</b>
<b>Total Project Cost</b>	<b>\$26.0 M</b>	

## Notes:

1. Does not include any prior appropriations.
2. All costs include construction, legal, fiscal, construction engineering, area cost factor, inflation adjustment to anticipated midpoint construction (2024) and contingency.
3. Final cost estimates may require adjustment based on inflation outside of historical projections.