

City of Margate

Department of Environmental and Engineering Services (DEES) Utilities

Interlocal Agreement (ILA)
Between Broward County and City of Margate
Design Phase – Regional Biosolids Management Facility

January 21, 2026
Curt Keyser, DEES Director



Agenda

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– Why This Is A
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What Are Biosolids?

Biosolids are the treated organic solids produced during wastewater treatment. After contaminants are removed, the remaining material is stabilized and dewatered, resulting in a nutrient-rich product that can be safely reused or disposed of in permitted ways.

Margate Production:

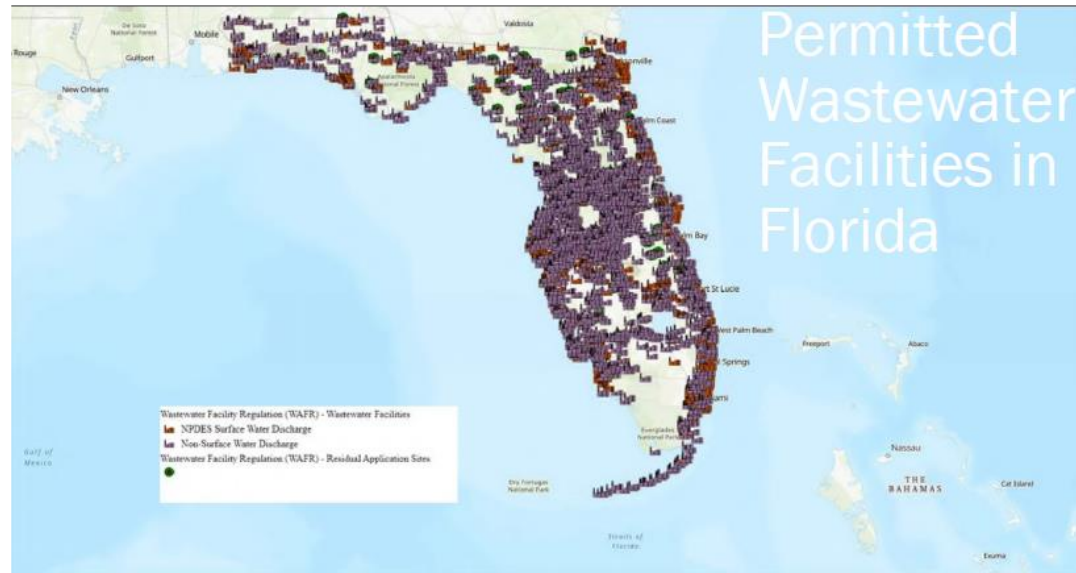
- *Current:*
 - 6,800 wet tons per year (WTPY)
- *Baseline Projections:*
 - 7,500 WTPY by 2045
- *Max at Current Permitted Capacity (10.1 mgd):*
 - 8,700 WTPY
- *High-end Projections (15% planning safety factor):*
 - 10,100 WTPY

How We Manage Biosolids Today?

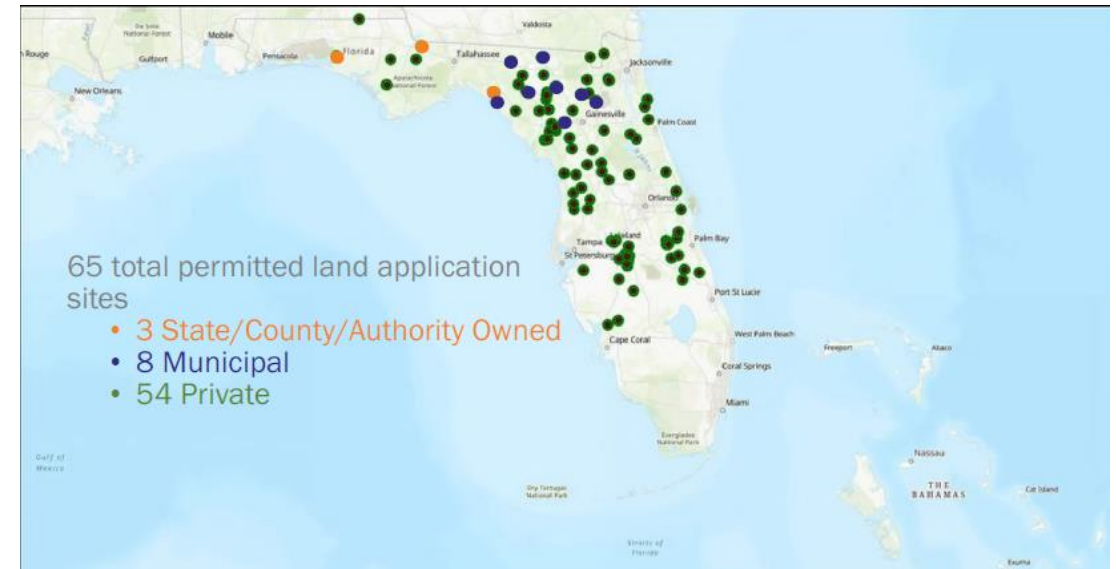
- Margate produces **Class B Biosolids**, meets pathogen reduction but do not meet the higher standards required for unrestricted reuse (Class A or Class AA).
- Class B Biosolids are dewatered to approximately 16% solids and hauled offsite for permitted land application or landfill disposal—options that are becoming increasingly constrained under Florida law.



Biosolids in Florida – Why This Is A Problem



There are over **4,100** permitted domestic wastewater facilities.



Class B Biosolids Land Application Sites Rapidly Declining:

- ~140 sites (2019)
- ~130 sites (2021)
- ~ 60 sites (2025)

Utilities face shrinking outlets,
higher costs, and increased hauling distances.



Biosolids Regulatory Timeline

State (Florida DEP) – 1990

- 1990 - Chapter 62-640, F.A.C.
 - *Florida established its own Biosolids management rule, aligning with federal standards while adding permitting and land application requirements.*
- 2020 - Florida Statute 403.0855
 - *Restricted land application of Class B Biosolids within Basin Management Action Plan (BMAP) areas.*
 - *Required nutrient management plans.*
- 2021 - HB 1309 Signed, Effective July 1, 2024
 - *Enhanced nutrient testing.*
 - *Further limited Class B land application.*
- 2025 - SB 290/HB 433 – Pending, Effective July 1, 2026
 - *Increased PFAS and nutrient constraints.*
 - *Site closures and permit non-renewals.*
 - *Would allow only **Class AA Biosolids** to be land applied.*
 - *Margate relies on **Class B disposal today.***

Federal (EPA 40 CFR Part 503) - 1987

- National standards for the treatment, quality, and disposal (reuse) of Biosolids, including pathogen and metal limits.
- The EPA can take enforcement action against any WWTP not meeting **Part 503** standards, even without a specific biosolids permit.
- Treatment facilities must submit annual Biosolids reports by February 19th each year detailing Biosolids treatment, management and **disposal practices.**



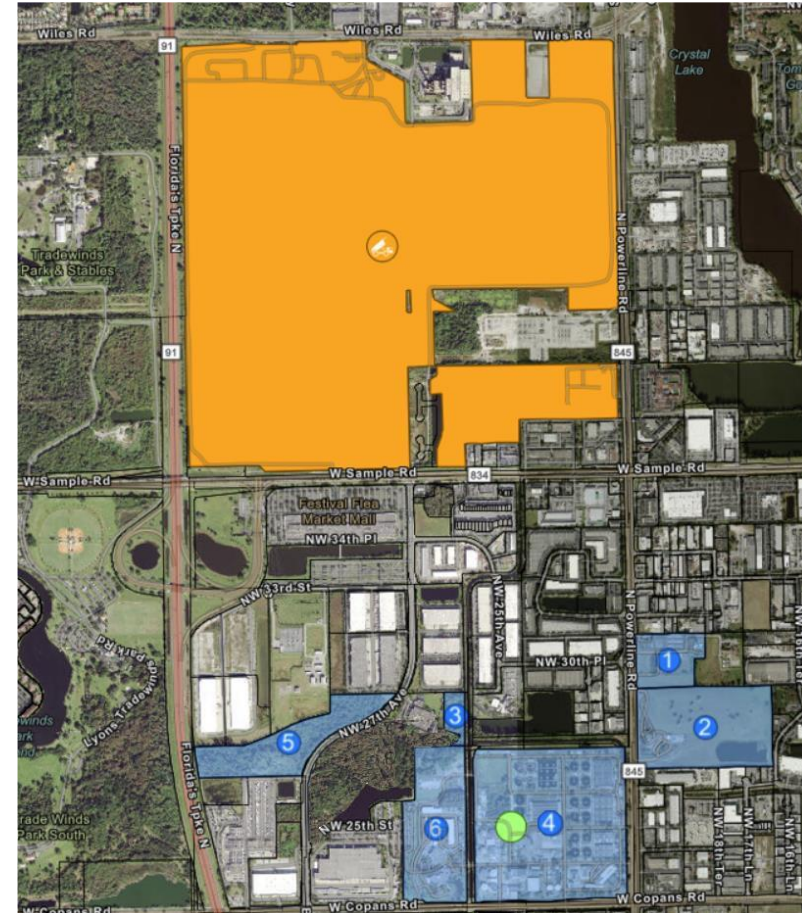
Regional Biosolids Solution(s) Working Group

- 2021 - Broward County Water and Wastewater Services (WWS) initiated the Regional Biosolids Solutions (RBS) Working Group to evaluate a regional, cost-shared approach to advanced Biosolids treatment and disposal.
 - *The Working Group includes 11 utilities, led by Broward County WWS, including the Cities of Sunrise, Cooper City, Miramar, Pembroke Pines, Plantation, Fort Lauderdale, Hollywood, and Margate, the Town of Davie, and the Coral Springs Improvement District.*
- 2023 - The 11 participating utilities entered into an Interlocal Agreement (ILA) to jointly fund and undertake a regional conceptual and feasibility study evaluating long-term biosolids management solutions for the region (Conceptual Study).
- 2024 - The Conceptual Study was completed, confirming the technical and financial feasibility of constructing a Regional Biosolids Management Facility to process wastewater residuals, reduce landfill dependence, and ensure compliance with current and future Florida regulations (FDEP).



Regional Biosolid Facility – Site Selection

- As a part of Conceptual Study, six (6) potential sites were evaluated within the Broward County Water and Wastewater Services (WWS) service area.
- All evaluated sites are located within 0.72 miles of a landfill, providing close proximity for Biosolids handling and even potential methane gas utilization.
- The selected site also offers ready access to reclaimed water, natural gas, and existing utilities, which simplifies infrastructure integration and reduces overall project complexity and cost.
 - *The preferred location, **Site No. 4**, was selected based on technical, operational, and logistical advantages.*
 - *77 acres of the existing BC Regional WWTP site.*



Thermal Drying – Advanced Biosolids Treatment

- Thermal The thermal drying process heats biosolids to approximately 350°F–500°F, effectively destroying pathogens, bacteria, and viruses.
- This process produces a Class A, Exceptional Quality biosolids product that is pathogen-free, odor-stable, and suitable for unrestricted beneficial reuse, including public landscaping, agriculture, turf, and soil conditioning.
- Thermal drying results in significant volume and mass reduction (approximately 4–5 times) and produces a marketable, pelletized product that can be reused or sold as fertilizer.
- The process supports continued compliance with EPA Part 503 and Florida DEP Chapter 62-640, helping ensure long-term permit viability under increasingly stringent regulations.
- Thermal drying is a scalable, regional solution capable of accepting biosolids from all participating utilities and is considered a necessary first step should future PFAS-related treatment requirements be implemented.



Proven, reliable process with hundreds of installations across the U.S. since 1950-ties:
Palm Beach County
Solid Waste Authority (SWA) - 2009



Comparable Regional Model – Palm Beach County

- The Palm Beach County Water Utilities Department (PBCWUD) manages biosolids through a regional thermal drying facility in West Palm Beach operated by Synagro under a public–private partnership (P3) model.
- Constructed in 2009 at an estimated cost of approximately \$200 million, the facility was financed, permitted, and capacity-restricted exclusively for Palm Beach County utilities and their municipal partners, including West Palm Beach, Wellington, and Greenacres.
- Utilities outside Palm Beach County, including those in Broward County, cannot utilize the facility because they are not parties to the interlocal or disposal agreements, and no excess capacity is available without significant expansion or re-permitting.
- Facility Capacity Comparison:
 - *Palm Beach Synagro Facility (2009): ~500 wet tons/day*
 - *Proposed Broward Regional Facility: ~741 wet tons/day (approximately 48% larger daily capacity)*



Recommended Action

Reserved Capacity

10,000 WTPY (~3.7%)

Design Cost: \$50M (24–30 month)

Not to exceed \$1.85 million
(Project included in Bond
Referendum - 2024)

Construction Cost: \$200M-\$570M

Separate ILA
\$7.4M - \$21.1M
(\$30M Allocated w/Bond)

Coverage

Provides sufficient capacity
to cover both expected
operations and high-end
design conditions.

Aligns with the consultant's
(Hazen) conservative upper-
bound biosolids production
projections.

Avoids over-reserving
capacity and unnecessary
cost while maintaining
operational flexibility.



Interlocal Agreement (ILA) Status – Regional Participants

- Broward County Broward County has requested confirmation of participating utilities by end of February 2026 in order to proceed with procurement of the Regional Biosolids Management Facility design consultant.
- **Confirmed / Scheduled for Approval (January 2026)**
 - **Broward County** – ILA approved; moving forward with design procurement prerequisites
 - **Plantation** – Commission approval scheduled **January 14**
 - **Miramar** – Commission approval scheduled **January 21**
 - **Margate** – Commission approval scheduled **January 21**
- **In Progress**
 - **Coral Springs Improvement District (CSID), Cooper City, Sunrise, Pembroke Pines, Town of Davie**
- **Pending / Evaluation Phase (February 2026)**
 - **Hollywood** – Evaluating participation as a backup option (currently produces Class AA Biosolids)
 - **Fort Lauderdale** – Participation pending



Questions



Department of Environmental and Engineering Services (DEES)

