



Chapter 62-640, F.A.C. Public Workshop

**Division of Water Resource Management
June 25 - 27, 2019**



Agenda

- **Welcome and Introductions**
- **Overview of Biosolids**
- **Proposed Revisions to Ch. 62-640, F.A.C.**
- **Public Comment**
- **Closing Remarks**



Overview

Presentation covers:

- **Biosolids**
- **Florida's Biosolids Regulations - History**
- **Biosolids TAC**
- **Draft Revisions**



Biosolids

- Treatment of domestic wastewater produces two principal end products: effluent and biosolids (by-product)
- Defined in dictionaries as “solid organic matter recovered from a sewage treatment process and used especially as fertilizer”



Biosolids Management Options

- **A wastewater treatment facility may choose from several biosolids use or disposal options:**
 - **Transfer to another facility**
 - **Landfill**
 - **Land application**
 - **Distribution and marketing as a fertilizer**
 - **Incineration**
 - **Bioenergy/Innovative technology (potential)**



Classes of Biosolids

- **Two primary uses:**
 - **Land application**
 - **Typically Class B biosolids – minimum quality for beneficial use**
 - **Distribution and marketing as fertilizer**
 - **Class AA biosolids – highest quality for beneficial use**





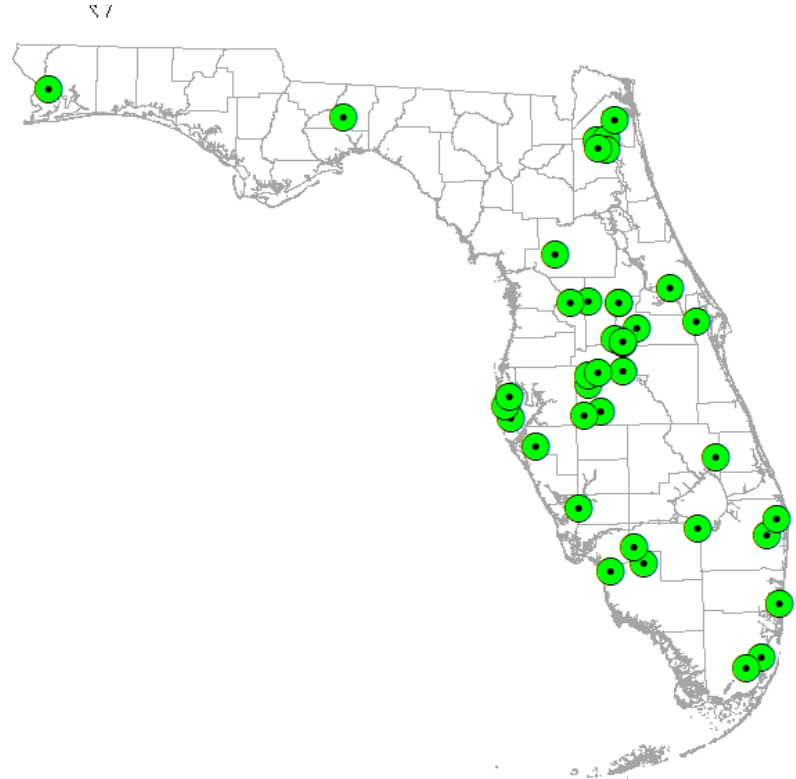
Biosolids Management in Florida

- **Estimated Total Production – 350,000 dry tons/year**
- **Use and Disposal:**
 - **Used for Class AA production – 45%**
 - **Used for Class B land application – 30%**
 - **Disposed in landfills – 25%**
- **Additionally, approximately 9,000 dry tons of Class AA pellets shipped in from out-of-state facilities annually**



Class AA Biosolids - Distribution and Marketing

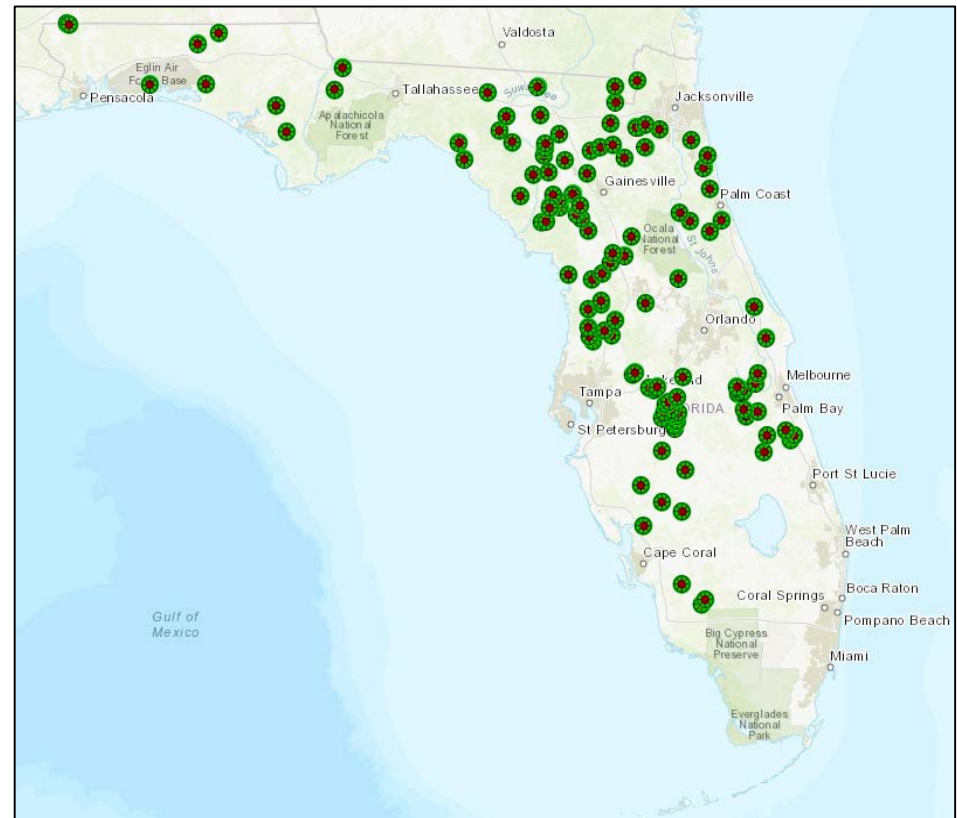
- **Distributed and marketed as a fertilizer**
 - Sold or given away under a fertilizer license or to someone with a fertilizer license
- **Approximately 39 Florida facilities produce Class AA**
 - **192,879 dry tons distributed and marketed in Florida**
 - **26,717 dry tons distributed and marketed outside of Florida**





Class B Land Application

- **Approximately 130 permitted land application sites in Florida**
- **Haulers are the most common site permittees**
- **Utilities commonly contract with haulers/appliers instead of applying the biosolids themselves**
- **Primarily pasture and hay crops**





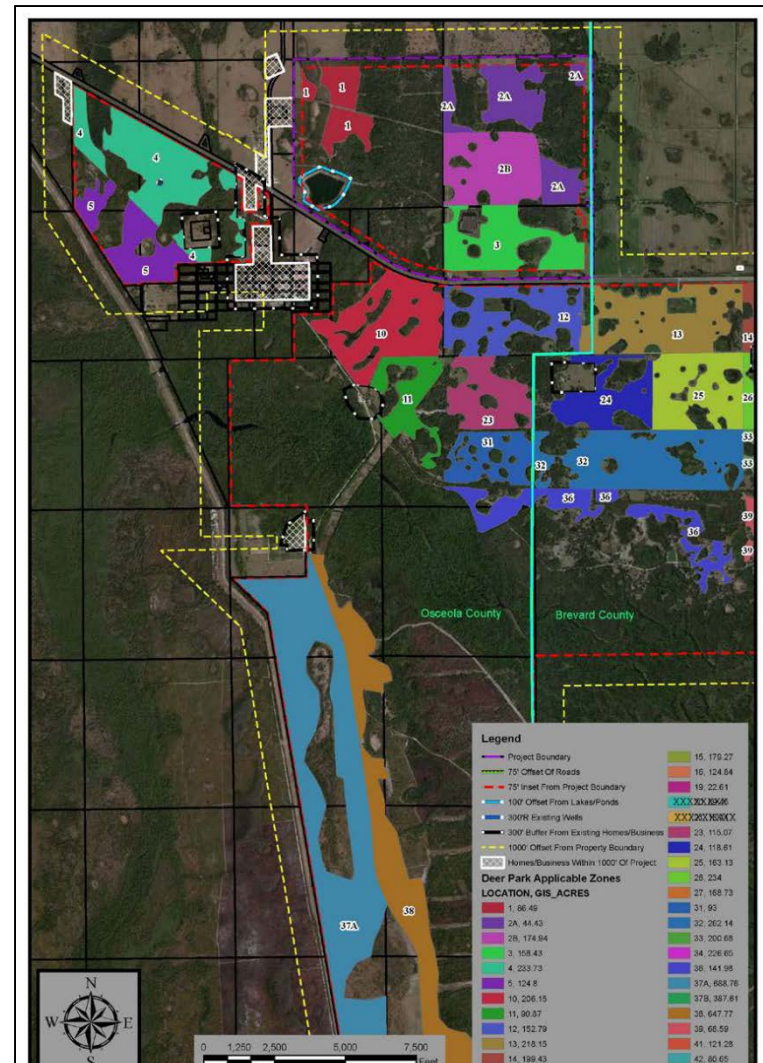
Septage Management Facilities

- **The land application of septage under Florida Department of Health (DOH) regulations was prohibited after June 30, 2016, affecting 80-90 entities regulated by DOH**
- **Under DEP rules, septage is regulated as “biosolids”**
- **Since 2016, DEP has issued 43 septage management facility permits**



Example Application Site

- **Site in Osceola and Brevard Counties, shows the application zones, setbacks, etc.**
- **This site has 30 application zones covering 5,736 acres**
- **The odd shapes of the application zones, or fields, primarily result from setback buffers (i.e., wetlands, surface waters, residences, etc.)**





Biosolids Regulations

- **Federal – Title 40 CFR Part 503 (Florida is not delegated Part 503)**
- **State – Chapter 62-640, Florida Administrative Code (F.A.C.)**
 - **Primarily based on Part 503, but addresses additional items of concern**
- **Local ordinances**



Florida Biosolids Regulations

- **Chapter 17-7, F.A.C.**
 - **Effective 1984**
- **Chapter 62-640, F.A.C.**
 - **Originally Ch. 17-640, F.A.C., effective 1991**
 - **Revised 1998, to be more consistent with Part 503**
 - **Revised in 2010 to improve site accountability and nutrient management**



State Regulations for Land Application (Ch. 62-640, F.A.C.)

- **Land application permits include:**

- **Nutrient management plan (with P assessment)**
- **Setback provisions**
- **Ground water depth provision at time of application**
- **Signage requirements**
- **Storage requirements**
- **Public access, grazing, harvesting restrictions**
- **Runoff provisions**
- **Record keeping/reporting requirements**





Biosolids Technical Advisory Committee

- **The Biosolids Technical Advisory Committee (TAC) convened in September 2018 to evaluate biosolids management and explore opportunities to better protect Florida's water resources.**
- **The TAC members represented stakeholders from environmental interests, agricultural, large and small utilities, waste haulers, consultants and academics.**
- **Each public meeting included an open public comment period, as well as discussion with experts among the TAC members, the audience and the Department**



TAC Recommendations

- **Permit biosolids in a manner that minimizes migration of nutrients, specifically phosphorus, to prevent impairment to waterbodies.**
 - **Establish the rate of phosphorus application based on site specifics, such as soil characteristics/phosphorus adsorption capacity, water table, hydrogeology, site use, distance to surface water;**



TAC Recommendations

- **Increase DEP inspection rate of land application sites;**
- **Develop monitoring protocols to detect nutrient migration;**
- **Develop and conduct biosolid and nutrient management research on nutrient run-off through surface and groundwater flow; and**
- **Promote innovative technology pilot projects for biosolids processing that could provide a wider range of beneficial end products.**



Ch. 62-640, F.A.C.

- **Department published notice of rule development to amend Ch. 62-640, F.A.C. on March 22, 2019.**
- **Rule revisions incorporate the recommendations of the TAC**
- **Holding three public workshops on the draft revisions**



Primary Draft Revisions

- **62-640.500 Nutrient Management Plans**
 - **Revise criteria for determining biosolids application rates (500(5)(i))**
 - **Table for crop nutrient demands when biosolids are used (provided by IFAS)**
 - **Require soil phosphorus storage “capacity index” for each application zone**
 - **Require percent water extractable P for biosolids (PWEF)**
 - **Provisions for adjusting P based on soil “capacity index” and biosolids**
 - **Provisions to adjust N limited to 1.5 factor**



Primary Draft Revisions

- **62-640.500 Nutrient Management Plans (cont)**
 - **NMP shall describe how it complies with any applicable basin management action plans (BMAPs)**
 - **Require at least annual soil fertility testing**
 - **Provisions for septage application rates**
 - **Annual requirement to review NMP and make revisions as applicable**



Primary Draft Revisions

- **62-640.650 Monitoring, Record Keeping, Reporting and Notification**
 - **Include method for water extractable P (WEP)**
 - **Include WEP to the list of parameters required to be monitored in biosolids**
 - **Require the soil fertility testing to use the “Phosphorus Index” test provided by the IFAS Extension Lab**



Primary Draft Revisions

- **62-640.650 Monitoring, Record Keeping, Reporting and Notification (cont)**
 - **Revise ground water monitoring requirement**
 - **Reduce N amount and setting a P amount for monitoring to be required**
 - **Allow DEP to install wells and monitor**
 - **Include surface water monitoring for sites next to surface waters**



Primary Draft Revisions

- **62-640.700 Requirements for Land Application**
 - **Prohibit land application on soils having a seasonal high water table less than 15 cm from soil surface or within 15 cm of the intended depth of biosolids placement**



Primary Draft Revisions

- **Septage provisions**
 - **Allow registered septic tank contractor to operate small septage management facility**
 - **Remove references for DOH regulation of septage management facilities**
 - **Modify septage treatment provisions for pathogen reduction and vector attraction reduction**



Primary Draft Revisions

- **Miscellaneous**

- **Add BMAP reference to “other applicable rules”**
- **Add provision that all biosolids permit applications shall be considered projects of heightened public interest**



Review of Draft Rule

- Review draft language section-by-section



For Additional Information

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DEP Biosolids Webpage:

<https://floridadep.gov/water/domestic-wastewater/content/domestic-wastewater-biosolids>



Public Comment

- **Please complete a speaker card**
- **Please identify yourself**
- **Please observe the time limit**
- **Comments may also be submitted via the webinar questions feature**
- **After the workshop, written comments may be submitted online at: <http://floridadep.biosolids-rulemaking-comments.sgizmo.com/s3/>**
- **Written comments may also be mailed to:
Maurice Barker, 2600 Blair Stone Rd, MS#3540,
Tallahassee, FL, 32399-2400**

