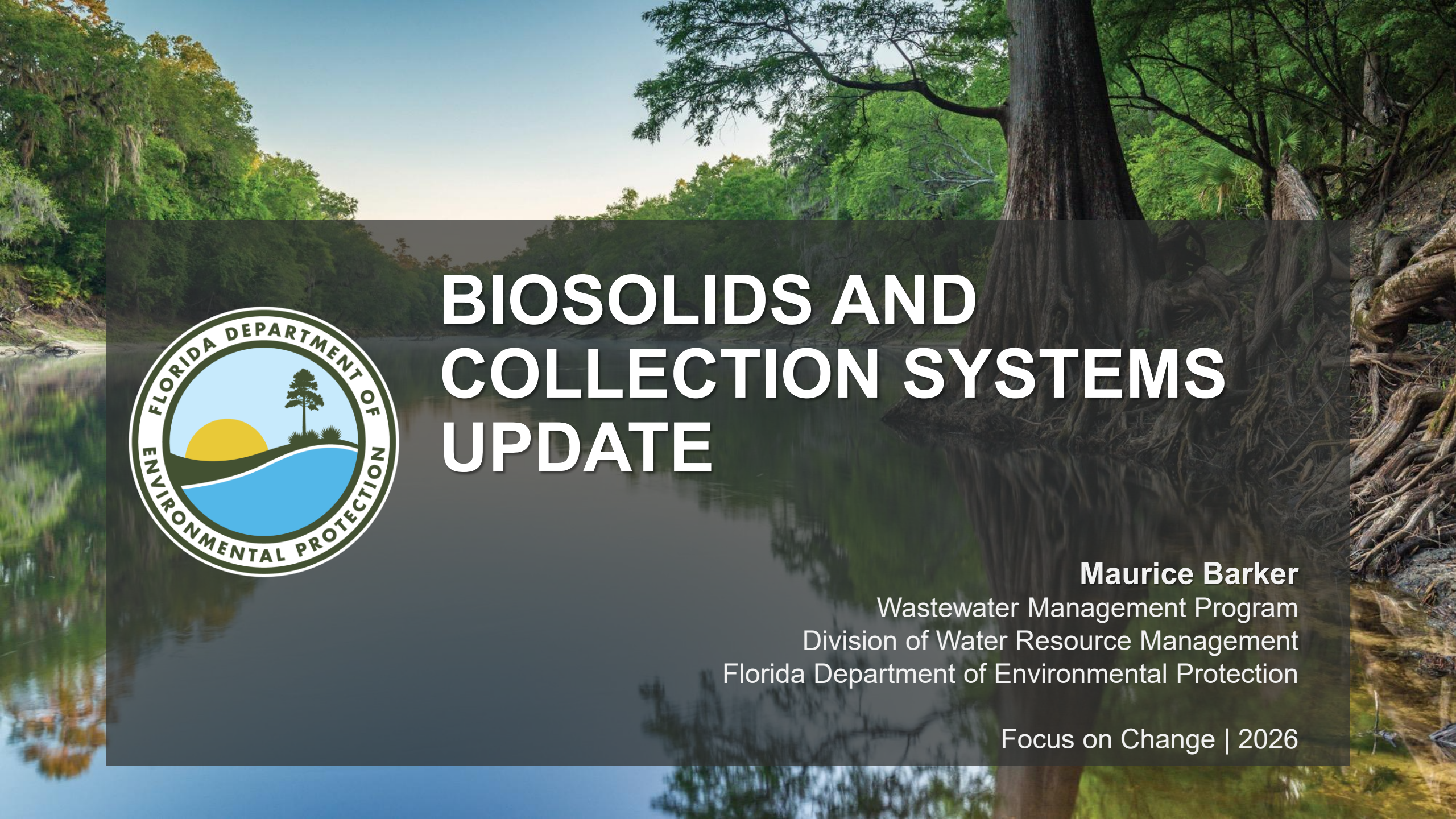

BIOSOLIDS AND COLLECTION SYSTEMS UPDATE

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Focus on Change | 2026

AGENDA

- Biosolids update.
  - Biosolids rule revisions overview.
  - Biosolids rule implementation.
  - Biosolids rule revisions results.
  - Biosolids statistics.
- Collection systems update on the collection system annual report on costs and expenditures for pollution mitigation and prevention.

BIOSOLIDS UPDATE

Biosolids and Collection Systems Update

BIOSOLIDS RULEMAKING OVERVIEW

- Biosolids rulemaking for Chapter 62-640, Florida Administrative Code (F.A.C.), began in 2019 following recommendations made by the Biosolids Technical Advisory Committee.
  - Minimize migration of nutrients that impair water bodies.
  - Permit-based site-specific conditions and water quality monitoring requirements.
- The initial rulemaking was modified to ultimately address provisions in the Clean Waterways Act of 2020, Senate Bill (SB) 712, which established biosolids management requirements in section 403.0855, Florida Statutes (F.S.).
- House Bill (HB) 1309 signed by the Governor on June 21, 2021.
  - Ratified the proposed biosolids rule.
  - Rule became effective June 21, 2021.

MOST IMPACTFUL RULE REVISIONS

- Nutrient Management Plans (NMPs) must include phosphorus (P) based application rates for each application zone, in addition to nitrogen (N) based rates, and neither rate can be exceeded.
  - P-based rates are typically about 75% lower than N-based rates.
- In addition to biosolids land applications rate limitations from NMPs, septage application rates were set to lower, fixed rate limits (i.e., 40,000, 30,000 or 12,000 gallons per acre per year, depending on the site characteristics).
  - Prior rates ranged from 40,000 gal/acre per year to approximately 100,000 gal/acre per year.
- Groundwater monitoring criteria was expanded (now required for most sites).
- Surface water monitoring required for sites within 1,000 feet of a surface water.
- All permits were required to comply with the new rule by June 21, 2023.

WATER QUALITY MONITORING

- Ground water monitoring.
  - Required for any of the following situations.
    - The application rate is 160 lbs. of total N acre/year or more.
    - The application rate is 40 lbs. of phosphorus pentoxide (P2O5) acre/year or more.
    - The soil phosphorus storage capacity index (CI) is less than zero (negative).
  - Requires monitoring wells to be installed and quarterly sampling.
- Surface water monitoring.
  - Required when the biosolids application zone is bordered or crossed by waters of the state and the application zone is located within 1,000 feet of waters of the state (excluding wetlands), unless there is property owned by someone else between the application and the surface water.
  - Requires quarterly sampling.
- Many site permittees have stated that the site landowners do not want water quality monitoring.

IMPLEMENTATION

- The Florida Department of Environmental Protection (DEP) revised biosolids site permits in early 2022 to require the submittal of minor permit revisions to incorporate updated NMPs that would meet the requirements of the revised rule.
  - Many sites have ultimately discontinued land application of biosolids.
  - By the end of 2024, 58 biosolids sites remained and are subject to the revised rules.
- DEP has 48 sites that are under approved NMPs or under schedules to fully meet their revised NMP requirements.
- DEP is working with an additional 10 sites to ensure all remaining biosolids sites are in full compliance with their revised NMP reductions.
  - For example, one biosolids contractor has entered into a consent agreement with DEP to scale-down application rates annually until compliance with the rule is achieved.

RESULTS

- Since 2018, the number of permitted sites has decreased from approximately 120 to 58, with 18 of these being septage “only” sites.
  - Significant reduction in land application.
- Production of Class AA biosolids fertilizer products has increased in Florida.
  - Increased interest in permitting new Class AA treatment facilities, especially composting facilities.
- Landfilling has increased moderately – many landfills do not take biosolids.
- Increased costs for biosolids management.

BIOSOLIDS QUANTITY CHANGES SINCE 2021

Activity	2021 Quantity	2024 Quantity	Trend
Land Application of Class B Biosolids	96,000 dry tons	41,000 dry tons	Decreased by ~57%
Distribution and Marketing of Class AA Biosolids Products	228,000 dry tons	327,000 dry tons	Increased by ~43%
Landfill	61,000 dry tons	93,000 dry tons	Increased by ~52%

NUMBER OF LAND APPLICATION SITES SINCE RULEMAKING BEGAN IN 2018

Type of Site	Number in 2018	Number in 2024	Trend
Biosolids Site	75	45	Decreased by ~40%
Septage Site	45	18	Decreased by ~60%
Total	120	58	Decreased by ~52%

FUTURE

- Expect a continued decrease in the number of biosolids land application sites.
- Expect a continued increase in Class AA facilities and Class AA biosolids.
- Expect a continued slight increase in the quantity of biosolids disposed of in landfills.
- Expect periodic disposal issues for septage.
- Other considerations:
  - The U.S. Environmental Protection Agency (EPA) draft risk assessment for per- and polyfluoroalkyl substances (PFAS) in biosolids.
  - Continued increase in biosolids disposal/management costs.
  - Dewatering to transfer or landfill biosolids.

COLLECTION SYSTEMS UPDATE

Biosolids and Collection Systems Update

ANNUAL COSTS/EXPENDITURES REPORT FOR COLLECTION SYSTEMS

- Rule 62-600.700(4), F.A.C., requires public utilities or their affiliated companies to submit annual reports with costs and expenditures on the prevention of sanitary sewer overflows (SSOs), collection system pipe leakages and infiltration and inflow (I&I).
  - Report may be combined with the facility's annual collection system action plan update required in paragraph 62-600.705(2)(b), F.A.C.
  - Report is due no later than June 30 of the year following the close of the fiscal year covered by the report.
  - Permit renewals after December 2021, now include a permit condition requiring the report; most facilities should either be submitting reports or will be soon.
  - **For any facility that had an SSO, DEP is required to include a copy of the facility's annual report with DEP's March 1 annual report to the Governor and Legislature on SSOs**.

FORMAT FOR THE ANNUAL COSTS/EXPENDITURES REPORT

- There is no required format for the annual costs and expenditures report for collection systems.
- The primary information to be conveyed in the report is **the amount of money spent during the previous fiscal year to prevent, minimize or reduce the occurrence of SSOs, sewer leaks and I&I.**
  - Should not include the cost of response after an SSO has occurred.
- There is no criteria regarding the costs - which means the cost can be:
  - Planning and design costs.
  - Capital costs.
  - Operational costs.
    - Training, preventative maintenance, outreach, data analysis, etc.
    - Consumable equipment and supplies, etc.

POTENTIAL CONTENT OF THE ANNUAL COSTS/EXPENDITURES REPORT

- Introduction/executive summary.
  - Summarizes the content of the report.
- Brief overview of the utility's collection systems, operations and staffing.
  - Summarizes the physical composition and extent of the collection system.
  - Summarizes the operations and staffing for the collection system.
- Listing of costs or expenditures with a brief explanation of each cost.
  - Costs or expenditures should be related to reducing, minimizing or eliminating SSOs, sewer leaks, reducing I&I.
  - Planning, design, construction, repair, replacement, specific maintenance, and other related costs to address potential reductions in SSOs, leaks and I&I.

EXAMPLES OF POTENTIAL COSTS

- Costs to improve the collection system power outage contingency plan.
- Costs to implement and train personnel on the power outage contingency plan.
- Costs to implement and conduct pump station evaluations.
- Costs for additional or upgraded emergency pumping capability such as new or improved generators or portable bypass pumps.
- Costs to upgrade and improve mapping services for the collection systems such as newer software and equipment.
- Costs to improve collection system data collection and analysis.
- Costs to upgrade or improve pump stations such as rehabilitating the stations, upgrading the control panels for resiliency against storms and sea level rise, improving communications and automated features, etc.
- Costs to upgrade the collection system such as pipe rehabilitation or replacement, upgrade undersized sewer lines, etc.

EXAMPLES OF POTENTIAL COSTS - 2

- Costs to conduct I&I assessments, studies, evaluations, investigations and surveys including techniques such as flow measurements, closed-circuit television (CCTV) and smoke testing.
- Costs to conduct increased preventative maintenance (e.g., inspections, cleanouts).
- Additional or increased personnel costs directly related to prevent, reduce or minimize SSOs, sewer leaks or I&I.
- Costs related to public education campaigns to address use of the collection system to reduce SSOs or I&I.
- Costs to implement a corrosion control program.
- Costs to implement a fats, oils and grease program.
- Costs to implement a roots control program.
- Costs related to a implementing a private sewer lateral program.

RESOURCES FOR POWER OUTAGE CONTINGENCY PLANS

- DEP's webpage: https://floridadep.gov/water/domestic-wastewater/content/collectiontransmission-system-power-outage-contingency-plans.
- Power Resilience - Guide for Water and Wastewater Utilities: https://www..gov/system/files/documents/2023-05/PowerResilienceGuide_2023_508c.pdf.
- Is Your Water or Wastewater System Prepared? What You Need to Know About Generators: https://www..gov/sites/default/files/2016-03/documents/waterwastewatersystemgeneratorprredness.pdf.
- Florida Rural Water Association (FRWA) webpages.
  - Power Outage Contingency Plan Checklist: https://assets.noviams.com/novi-file-uploads/frwa/pdfs-and-documents/Power_Outage_Contingency_Plan_Checklist_040924-002d6deb.docx.
  - Power Outage Contingency Plan Template: https://assets.noviams.com/novi-file-uploads/frwa/pdfs-and-documents/Power_Outage_Contingency_Plan_Template_docx-72d18d0e.doc.

RESOURCES FOR COLLECTION SYSTEM ACTION PLANS

- DEP's webpage: https://floridadep.gov/water/domestic-wastewater/content/collection-system-action-plans.
- FRWA.
  - Collection system action plan template: https://assets.noviams.com/novi-file-uploads/frwa/pdfs-and-documents/Collection_System_Action_Plan_Template-1111a12e.docx.
  - Collection system action plan annual report template: https://assets.noviams.com/novi-file-uploads/frwa/pdfs-and-documents/CSAP_AnnualReportTemplate-747dccd5.xlsx.
- Guidance (Capacity, Management, Operation and Maintenance [CMOM] program and other materials): https://www.epa.gov/npdes/npdes-sso-technical-reports-and-materials.

QUESTIONS?

Biosolids and Collection Systems Update

THANK YOU

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