

Wakulla, FL Spring Restoration Workshop

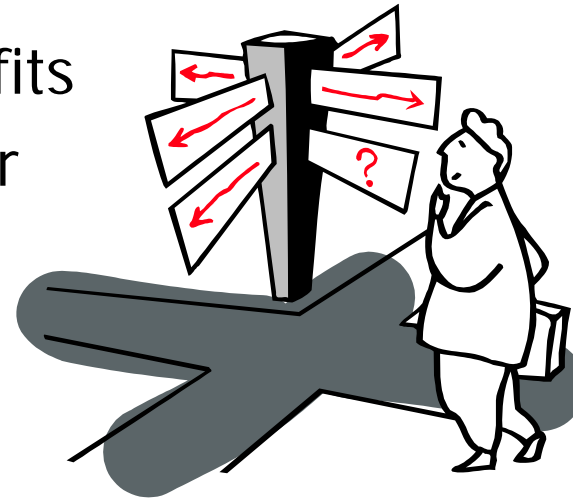
Decentralized Wastewater Systems Management

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Decentralized Wastewater Management

- What is Decentralized Wastewater Management?
- How do we implement a level 4 or 5 RME?
- What are the cost \$\$ benefits of Decentralized Wastewater Management?





Basic Attributes of Decentralized Management Entity

- Administration
- Operation and maintenance
- Repair
- System upgrade/replacement



Administration

- Ownership management
- Use regulation
- Regulatory compliance reporting, i.e. monitoring, permit requirements
- Customer service, billing, and collections
- User-charge system
- Financial
- Program management for capital improvements



Operation and Maintenance

- Electricity use
- Labor
- Chemicals
- Equipment servicing
- Residuals removal and ultimate disposal
- Routine repair/parts replacement
- Equipment and major component replacement



Management Responsibilities

	Level 4	Level 5
1. Administration	RME	RME
2. O&M		
3. System Repair	Owner	RME
4. Amortization of system upgrade/ replacement		
5. Future Capital Repair Fund (Depreciation Account, insurance)	Owner	RME



Management Model Overview

Level	4	5
Owner	Property Owner	RME
Operational Responsibility	RME	RME
Permittee	Owner	RME
Warranty	Owner (RME limited)	RME
RME Responsibility	Limited	Total



Decentralized Wastewater RME (4)

- Service organization
- Economies of scale
- Can be public or private
 - Public wastewater department
 - Private utility
 - Franchise
 - Open competition
- May be subject to FL PSC regulations when flows $>10,000$ gpd or 40 EDUs



Decentralized Wastewater RME (5)

- Provides “sewer equivalency”
 - Owner pays bill
 - RME does any repairs
 - Contractual language prevents/minimizes abuses
- Can be public or private
 - Public wastewater department
 - Private utility (franchise)
- May be subject to FL PSC regulations when flows >10,000 gpd or 40 EDUs

Implementation

How do we implement a level 4 or 5 RME?





Implementation Steps

- Step 1 – Needs Analysis and Develop Repair, Replace, Upgrade Plan
- Step 2 – Optimize System Management
 - Pumping
 - Monitoring
 - Routine O&M
- Step 3 – Asset Management
- Step 4 – Repairs, Replacement, Upgrades



Benefits of Proper Management

- \$\$\$ - Significant savings are not unreasonable to achieve
- Allows for smart growth management
- Protective of public health and environmental resources
- Provide sewer equivalency at lower cost



Questions / Answers

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