



# **Suwannee River Water Management District**

## **Water Quality Improvement Projects**

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# Rum Island Springs Park project

- Funding source-
  - RIVER (Regional Initiative Valuing Environmental Resources) cost-share grant \$150,000
  - Legislative Appropriation \$150,000
  - And in kind and cash match from Columbia County \$20,000
- Scope:
  - Land acquisition
  - Engineering
  - Restroom construction
  - Spring pool erosion control and sediment removal
  - Aerobic Wastewater treatment

# Rum Island Springs Park project



- MicroFast 3.0 Aerobic Wastewater Treatment System (approx. \$60,000)
- Designed for Variable or seasonal loads typical for a park
- 76% Nitrogen reduction vs standard system
- NSF/ANSI 245 Compliant
- Regulated by Dept. of Health
- 3,000-gallon capacity



# Poe Springs Park Domestic Sewer Infrastructure Upgrade



- Funding Source
  - RIVER grant (Regional Initiative Valuing Environmental Resources) \$150,000
  - Alachua County and Alachua County Environmental Protection Department cash and in-kind estimated \$196,600
- Scope
  - Design and permitting
  - Waterless Restrooms at the spring pool for Poe Spring
  - Educational signage
  - Upgrade the existing septic systems at the concession and multi-purpose buildings to a passive nitrogen reducing system

# Passive Nitrogen reducing system



Average conventional septic system concentrate is 50 mg/l  
Passive system can be 90 % effective and reduce the load to groundwater to 5 mg/l or less  
This project is estimated to provide a net reduction of 576 lbs./year



Installation of the Denitrification System Media - locally sourced wood chips and sandy loam meeting DOH criteria

# Ichetucknee Springs Water Quality Improvement (aka Lake City Wetlands project)



- Funding source
  - Department of Environmental Protection “Springs” grant - \$3,900,000
  - SRWMD - \$283,815
  - Lake City match - \$100,000
  - Total Cost \$4,238,815
- Scope
  - Convert approximately 120 acres of sprayfield to a constructed 9-cell wetland
  - Net nitrogen reduction to groundwater of 30,738 lbs./ year averaged over the past 3 years of operation
  - Net beneficial recharge of 1.19 mgd



# Questions?

