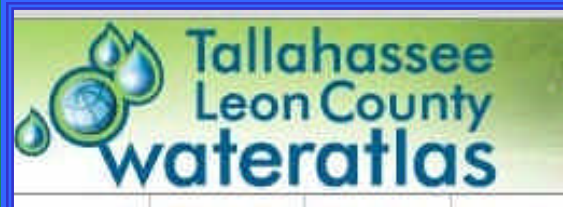
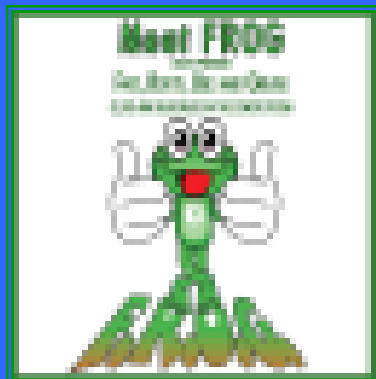


# City of Tallahassee Protecting Water: *Today and Tomorrow*

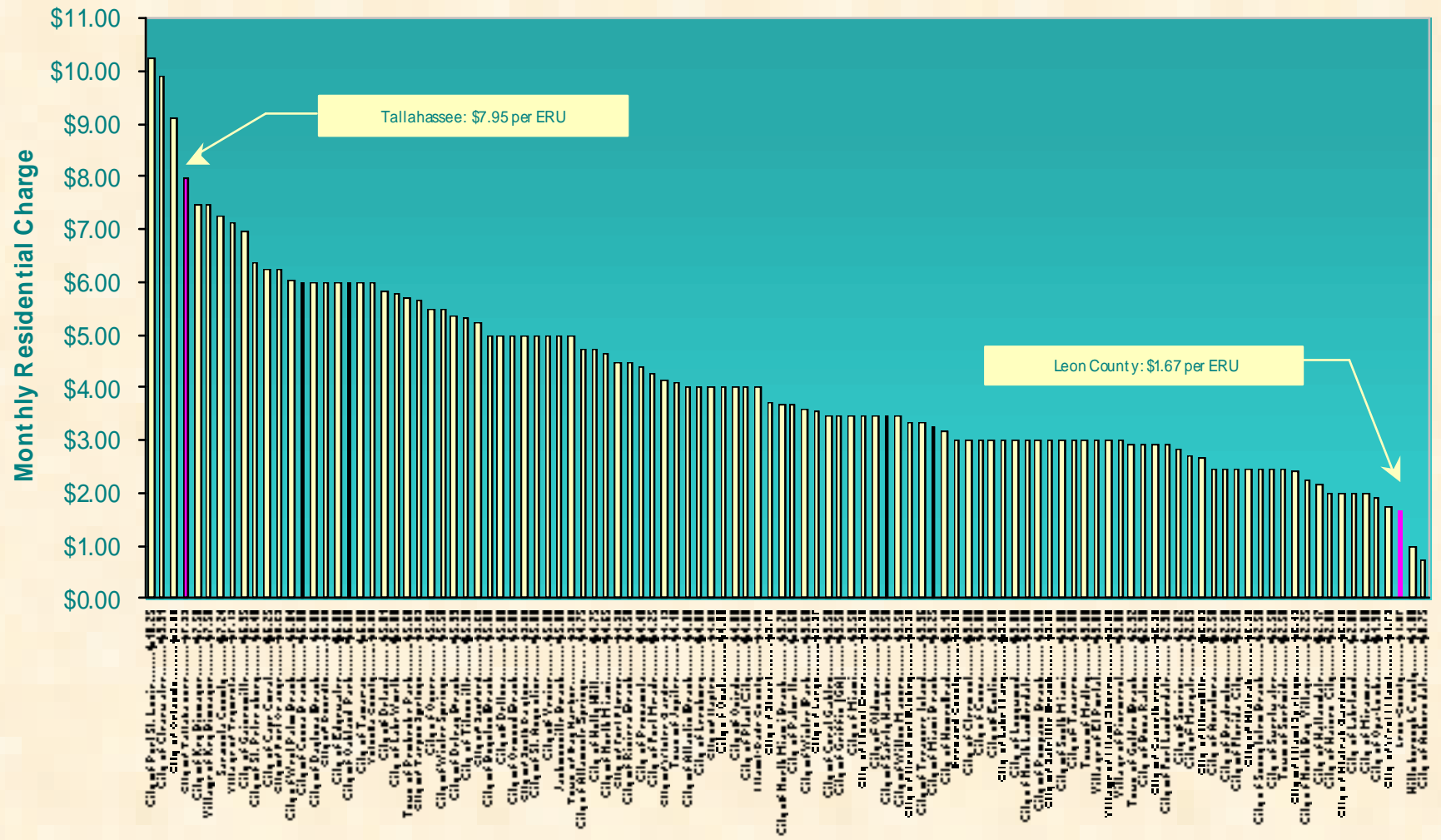
Commissioner Debbie Lightsey to the  
Wakulla Springs Basin Working Group  
February 4, 2010



# City of Tallahassee

## Stormwater Management

- Tallahassee's Stormwater Management program *is progressive & proactive*
- Tallahassee - *First City* in the State to adopt a user fee to fund Stormwater Management
- Tallahassee funds Stormwater Management through a user fee on developed property (*Ranks among the highest in FL and USA @ \$7.95/ERU*)
- A \$1.70 rate increase phased over five years (this year is final year) will generate an additional \$60 million over 20 years to improve stormwater quality



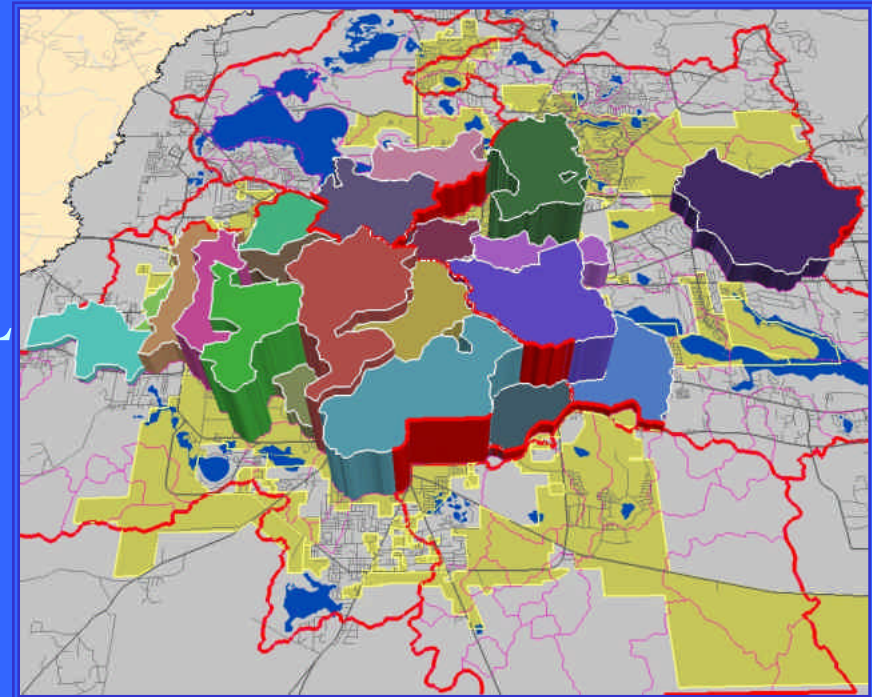
Stormwater Utility Rates in Florida  
February 2009

# **Stormwater Pollution Reduction Program (SPRP)**

- **Began late 1999 due to self imposed Comp Plan Amendments and deadlines**
- **SPRP study (\$800K) - A watershed level analysis of relative pollutant loading, problem area ranking, pollution reduction options, and costs**
- **Involved runoff monitoring, modeling, problem area ID, selection of treatment alternatives (BMPs), a cost analysis, and a recommended financial plan**
- **SPRP identified the City's 20 watersheds with highest pollutant loading (nutrients, metals, sediments)**

# Tallahassee Stormwater

- 12 of 20 priority watersheds identified are in the Lake Munson & Aimes Sink Basins
- Nitrate/Nitrite Levels
  - Tallahassee Stormwater 0.13 mg/L
  - Proposed Springs Target 0.35 mg/L
  - Wakulla Springs ~0.5 mg/L
- Total Nitrogen Levels
  - Tallahassee Stormwater 1.5 mg/L
  - Florida Stormwater 1.8 mg/L
  - National Stormwater 2.2 mg/L





Capital Cascade

## Capital Improvement Projects (Structural)

Last 10 years City-wide  
\$74 Million, 45 Projects



Call-Cadiz



Bond Pond

54% of Total  
Funding Benefits  
Lake Munson  
Basin



FSU-RSF

# **City is Out-front With New Development Standards**

- **Growth management regulations for Tallahassee and Leon Co. are comprehensive and tough**
- **Outstanding Florida Water (OFW) level treatment or higher required citywide**
- **Special provisions include operation permits, onsite inspections (3000/yr)**

**✓ June 2009 Tallahassee-Leon County Planning Department received the Florida Planning and Zoning Association's Excellence in Environmental Planning Award work associated with the Comprehensive Plan policies to protect Wakulla Springs.**

# Public Education (Non Structural) Think About Personal Pollution - TAPP

- **Media Campaign Focus:**  
**Pet Waste and Better Control of Fertilizer**
  - ✓ Passed new Pet Waste Ordinance (June 2008)
  - ✓ Passed new Fertilizer Applicator Ordinance (Jan 2009)
    - ✓ City Certified 229 Fertilizer Applicators since 2009
  - ✓ Survey results show people changed their behavior – resulting in lower fecal and nutrient loading



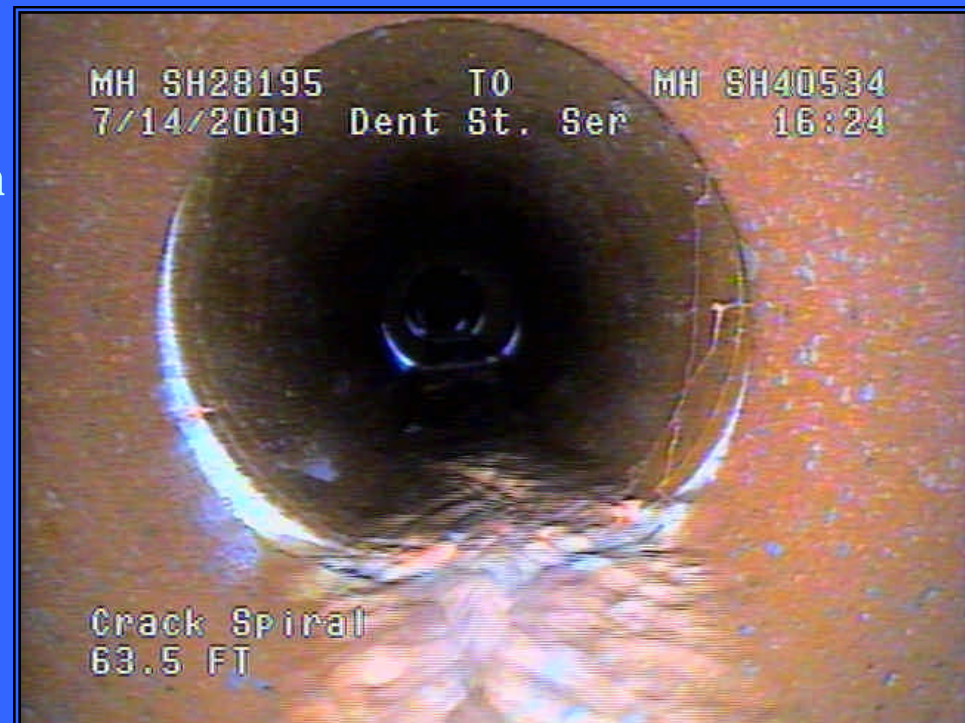
# City of Tallahassee Wastewater Utility

- **Reuse rather than discharge**
  - ✓ Award winning model worldwide
  - ✓ Recycle 100% of treated wastewater
- **Ahead of Schedule on nitrogen reduction**
  - ✓ Optimizing operations and continuing education for operators



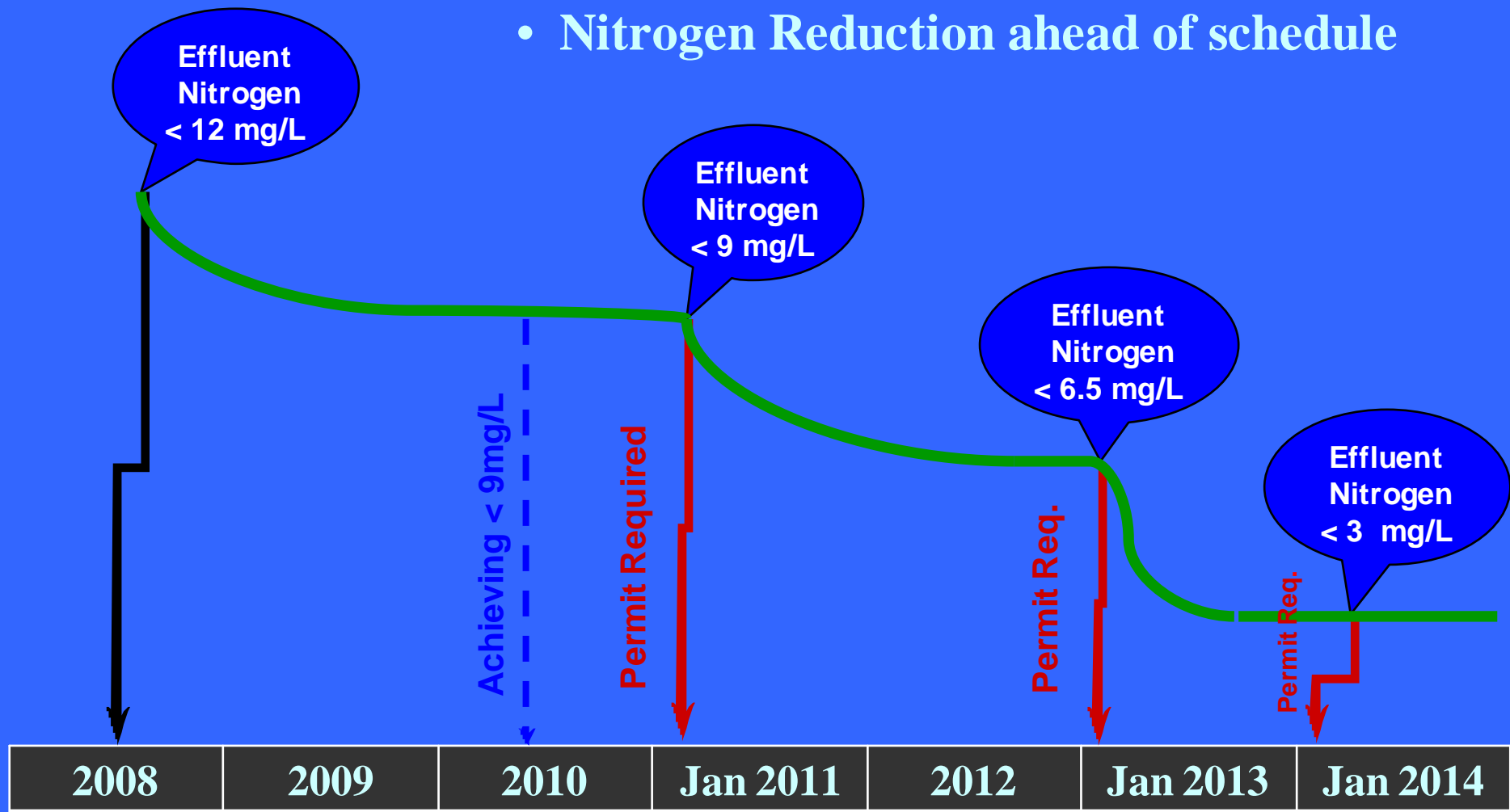
# Sewage Collection System Assessment and Rehabilitation Program

- City embarking on a long-term sewage collection system rehab program
  - ✓ Objective to evaluate condition of collection system and refurbish as warranted
  - ✓ Pilot project (\$290,000) to test evaluation methods and rehab techniques
  - ✓ Entire system
    - Assessment \$Several-million
    - Repairs \$Multi-million and > 7-10 yrs



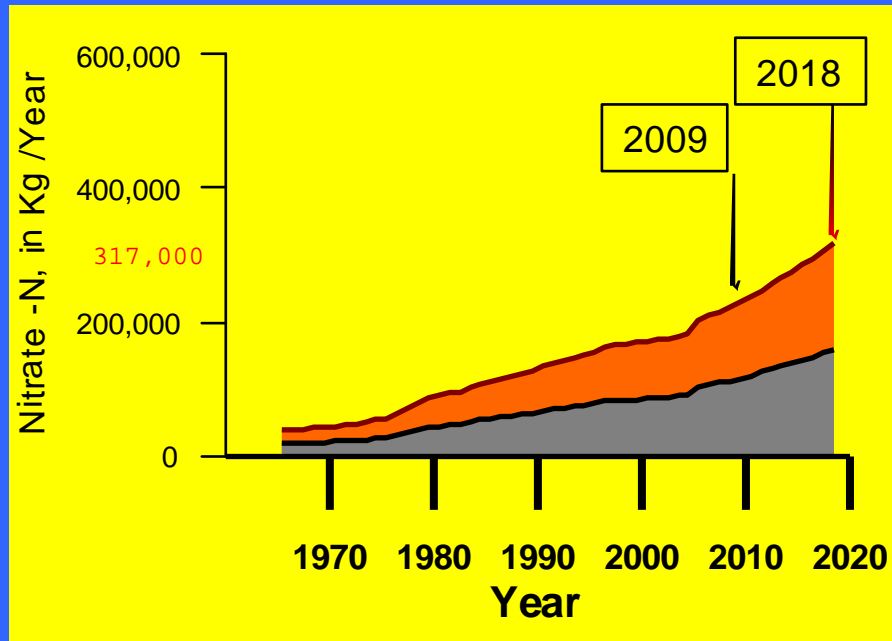
# Advanced Wastewater Treatment

- Expected Costs: \$227 Million Dollars
- Nitrogen Reduction ahead of schedule

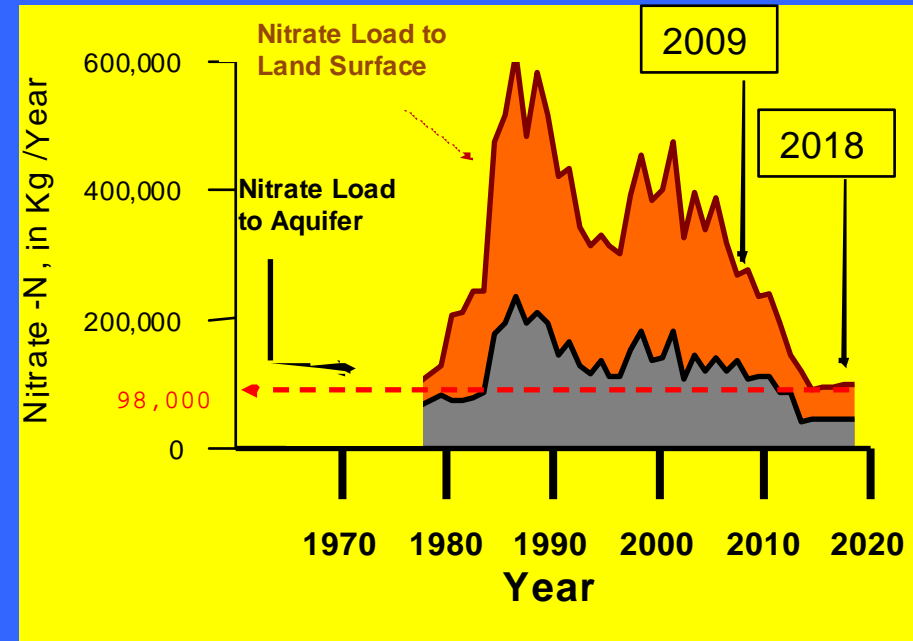


# Nitrate Loading Over Time

## Conventional Septic Systems vs. City Sprayfield



**Nitrate Load From Onsite Disposal Systems From 1966 to 2018**



**Nitrate Load at the TP Smith Sprayfield from 1980 to 2018**

**Current Trend – By 2020 Nitrate Load From Septic Tanks Will Greatly Exceed Sprayfield Effluent Load**

# **Non-Structural Measures Policies and Ordinances**

- **Both Leon County and the City of Tallahassee adopted Wakulla Springs protection Comprehensive Plan policies on January 7, 2009**
- **Both the City and County adopted Primary Springs Protection Zone ordinances effective April 10, 2009**
- **Leon County's Draft Performance Based Treatment System Ordinance undergoing revision for March 2010 review**
- **On June 9, 2009 the Leon County Board established focus group review options for:**
  - Financial assistance programs for upgrading septic systems in the Primary Springs Protection Zone,
  - County-wide septic system inspection program,
  - Review the draft ordinance

# Non-Structural Measures

## Regional Cooperation

Leon and Wakulla Counties and the City funding a study of management alternatives for rural wastewater load

- Evaluate Responsible Management Entity (RME) options for the region
- Evaluate alternatives to septic tank approach
- Proposals were opened January 20, 2010 and are under review





# Questions ??



A scientific expedition, searching up the Amazon River to discover fossils, is mysteriously attacked by the "Gill-Man," a horrible half-man, half-fish who lives there. Richard Carlson, John Adams and Richard Widmark. "CREATURE FROM THE BLACK LAGOON" to be released Sunday, June 2, 1956. 11:30pm, ET as part of "Sci-Fi Channel's Jack Arnold Trilogy"