



Ni America, LLC

*Regulated Water
and Wastewater Utilities*

**Emphasizing regulatory compliance
and customer service**

Texas - South Carolina - Florida



SOUTH CAROLINA

Palmetto Utilities, Inc.

Palmetto Wastewater Reclamation, LLC (PWR)

Alpine Utility System

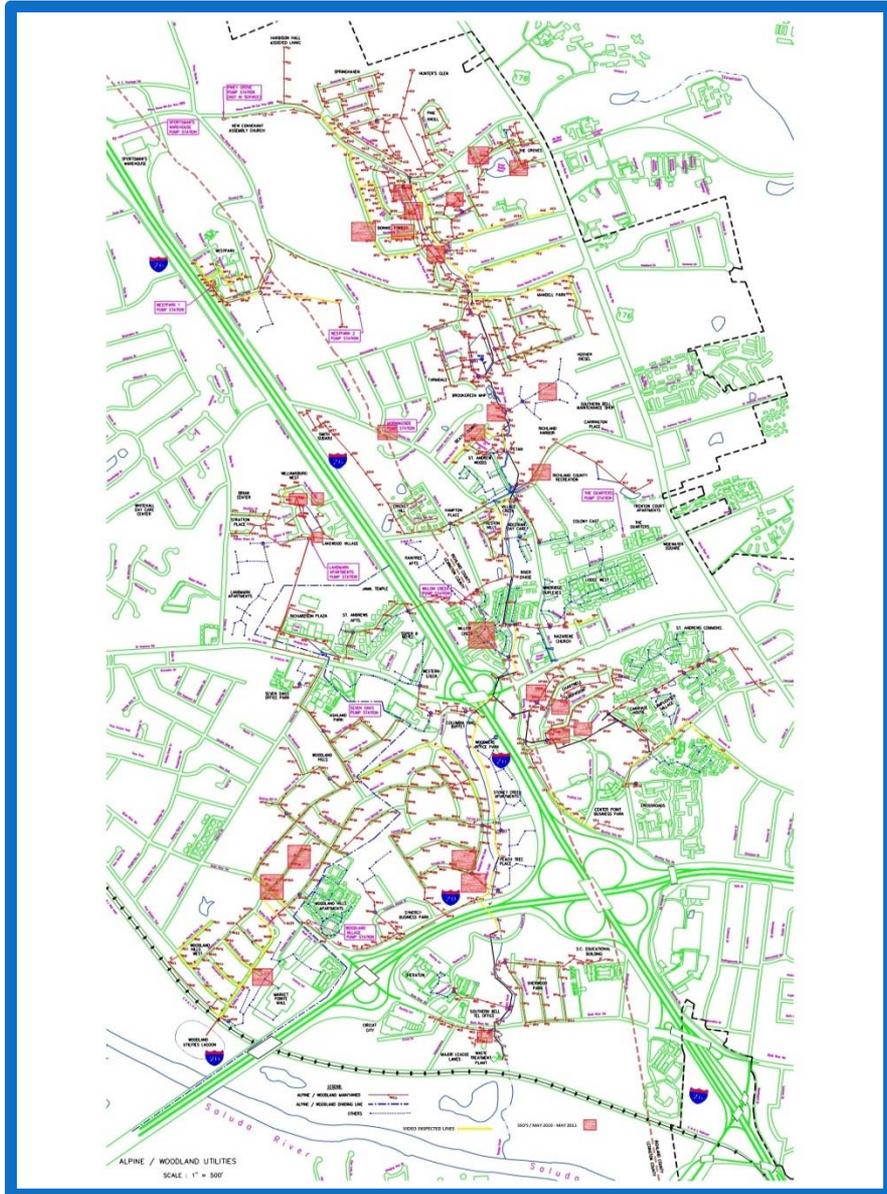
Woodland Utility System

803-699-2422

Alpine

Acquired August, 2011

Woodland





The Water and Wastewater Department of the ORS represents the public interest with regard to the regulation of rates and services of privately owned water and wastewater utilities in South Carolina.

Consumer Services

Resolve Disputes - Settle Inquiries - Get Educated

803-737-5230

800-922-1531 (toll free)

<http://www.regulatorystaff.sc.gov>



WHAT IS REGULATED BY THE COMMISSION?

The Commission regulates investor-owned water and wastewater utilities, telephone utilities, electrical utilities, gas utilities, and motor vehicle carriers as defined in Title 58 of the South Carolina Code. The Seven-Member Commission essentially functions as a court with the principal duty to hear cases involving regulated utilities.

- **exclusive jurisdiction to establish fair and reasonable rates**
- **requires regulated utilities to provide adequate service and to treat all customers equitably**
- **receives formal complaints regarding regulated utilities**

803-896-5100

<http://www.psc.sc.gov>



South Carolina Department of Health and Environmental Control

We promote and protect the health of the public and the environment.

Sanitary Sewer Overflows (SSO)

Blockages - Construction Activities - Pipe failures - Pump Failures
Grease Accumulation - Root Intrusion - Poor Maintenance
Inflow & Infiltration

803-898-4300

<http://www.scdhec.gov>





**PALMETTO
WASTEWATER
RECLAMATION, LLC**

**Alpine
WWTP Facilities**

Authorized Personnel Only

803-699-2422



**PALMETTO
WASTEWATER
RECLAMATION, LLC**
**Alpine System
Lift Station**
In Case of Emergency
803-699-2422

Waste System
Phone Number
803-699-2422

Employees



Authorized Representative of:

**PALMETTO
UTILITIES, INC.**

*Your Connection To
A Cleaner Environment*

803-699-2422

Alpine / Woodland Utilities

Collection System:

172,000 Linear feet of pipe (32 miles)

800 Manholes

10 Lift Stations

WWTP:

Treatment Plant - Two million gallons/day

Treatment Pond - 288,000 gallons/day

Customer Service Improvements

- Commitment to the Utility
- Online account access and bill pay (coming soon)
- Customer Communications
- Faster Response to Service Calls
- 24-Hour Response to Emergency Calls
- Enhanced SSO Notification Procedures
(email list includes area media outlets and other interested parties)

System Improvements

- Video, clean, repair - collection system(5)
- Install “Auto-Dialer” alarm/monitors
- Clear easements/rights of way(5)
- Inspect, repair manholes(3)
- Grease Trap Program
- Utility Management Expertise
- Access to Capital

WWTP (18 months)

- Second clarifier
- Install new bar screen, grit collector, floating aeration system
- Extend plant walls
- Replace chlorine disinfection system with UV
- Woodland - Upgrade berm, additional aeration

Improvement Status

1/1/2012

- “Auto Dialer” Alarm/Monitors Installed at Lift Stations and Alpine WWTP (completed 1st week of ownership)
- Alpine WWTP Aeration System : completed January 2012
- Collection System (172,000 feet):
 - 67,000 feet inspected/videoed
 - 82,000 feet cleaned
- Manholes: All 800 inspected.
 - 600 require repair/200 completed

Alpine WWTP



Floating Aerators



Alpine WWTP



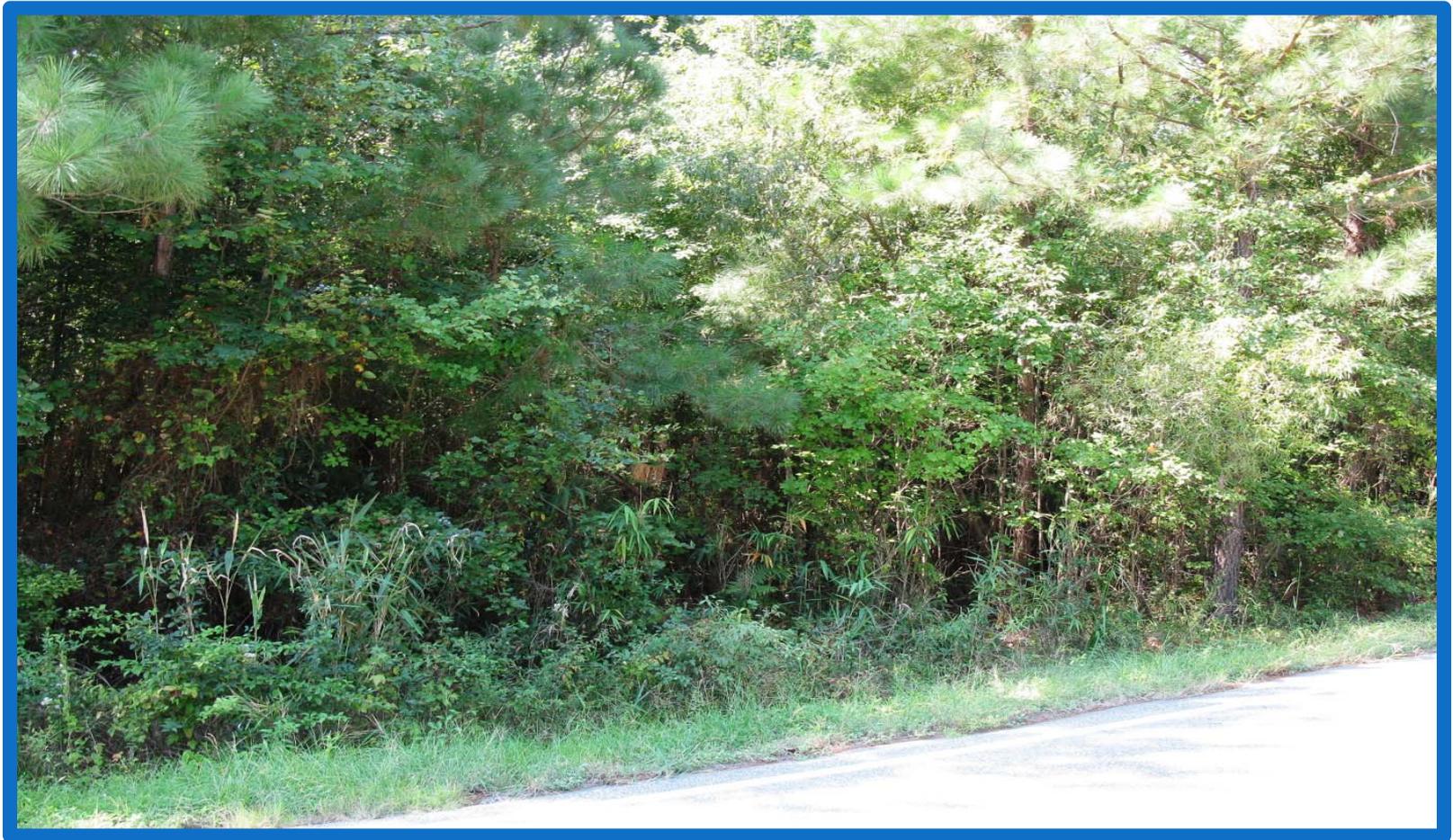
Woodland Treatment Pond



Cleared Utility Easements



Overgrown Utility Easement



Manholes



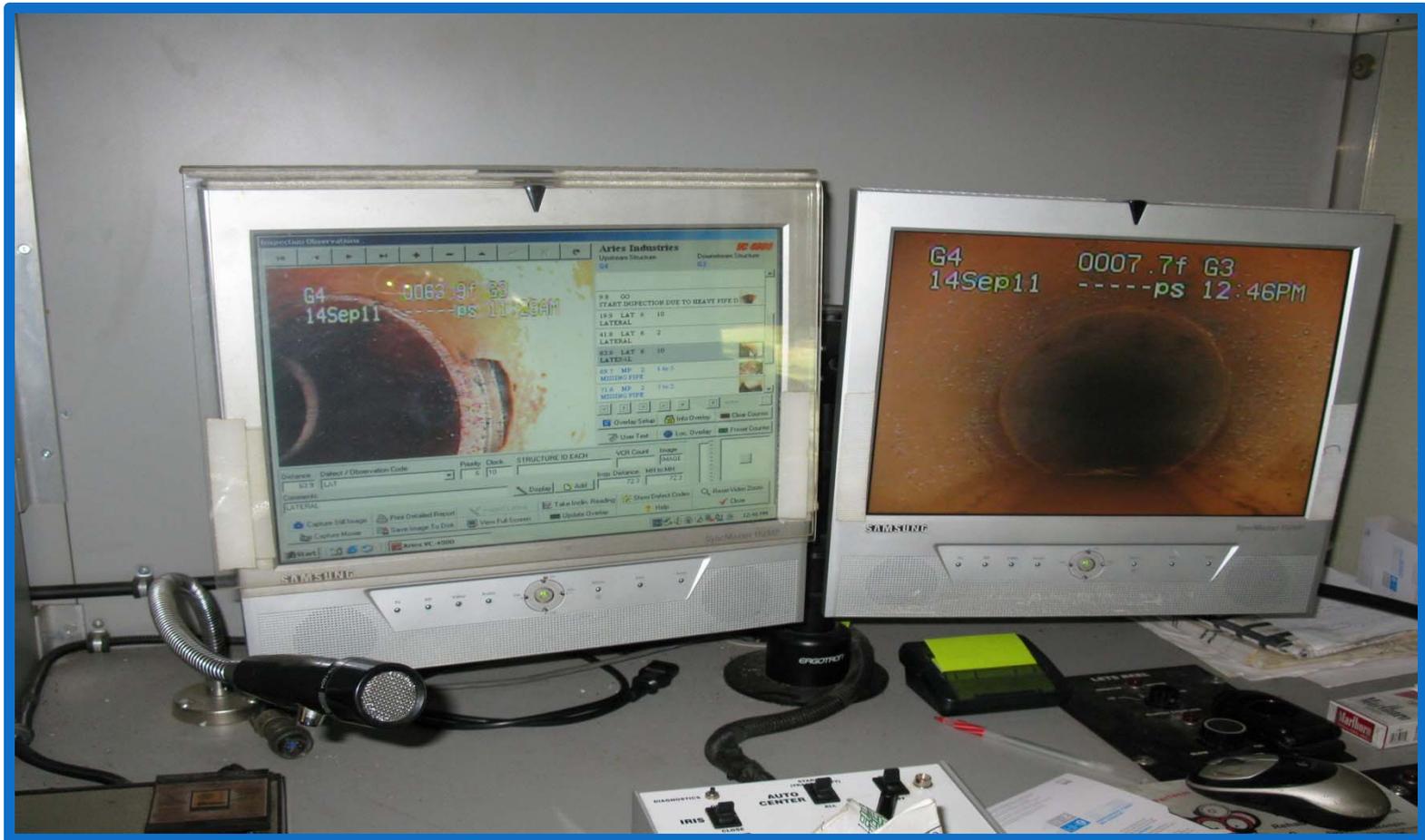
Camera Truck



Pipe Camera



Video Station



Pipe After Cleaning



Steel Rod in Pipe



Broken Pipe



Broken Pipe



Collapsed Concrete Pipe









Root Intrusion

Port Richey, FL 34668
Phone: 727-585-3119
Fax: 727-585-3938
E-Mail: info@ward70@aol.com
Web Site:

Image Report

Date Printed: 12/2/10
Database Name: C:\Program Files\VC4000\

Distance: 463.3
Code: RT1
Location: 2 to 10
Priority: 1
Parameters:
Comments: ROOTS



Distance: 470.8
Code: LAT
Location: 12
Priority: 6
Parameters:
Comments: LATER



Distance: 481.1
Code: RT3
Location: 7 to 11
Priority: 3
Parameters:
Comments: ROOTS



WH-65 0463.37 WH-63
16Jun10 000.Ops 09:20AM

WH-65 0470.87 WH-63
16Jun10 000.Ops 09:21AM

WH-65 0481.17 WH-63
16Jun10 000.Ops 09:22AM

Port Richey, FL 34668
Phone: 727-585-3119
Fax: 727-585-3938
E-Mail: info@ward70@aol.com
Web Site:

Image Report

Date Printed: 12/2/10
Database Name: C:\Program Files\VC4000\

Distance: 68.7
Code: CHP
Location:
Priority: 2
Parameters:
Comments: CHANGE IN PIPE



Distance: 68.7
Code: RT1
Location: 2 to 10
Priority: 1
Parameters:
Comments: ROOTS



Distance: 73.9
Code: RT1
Location: 1 to 5
Priority: 1
Parameters:
Comments: ROOTS



29Jun10 -----ps 01:50PM

29Jun10 -----ps 01:50PM

29Jun10 -----ps 01:51PM

Pipe Repair/Liner

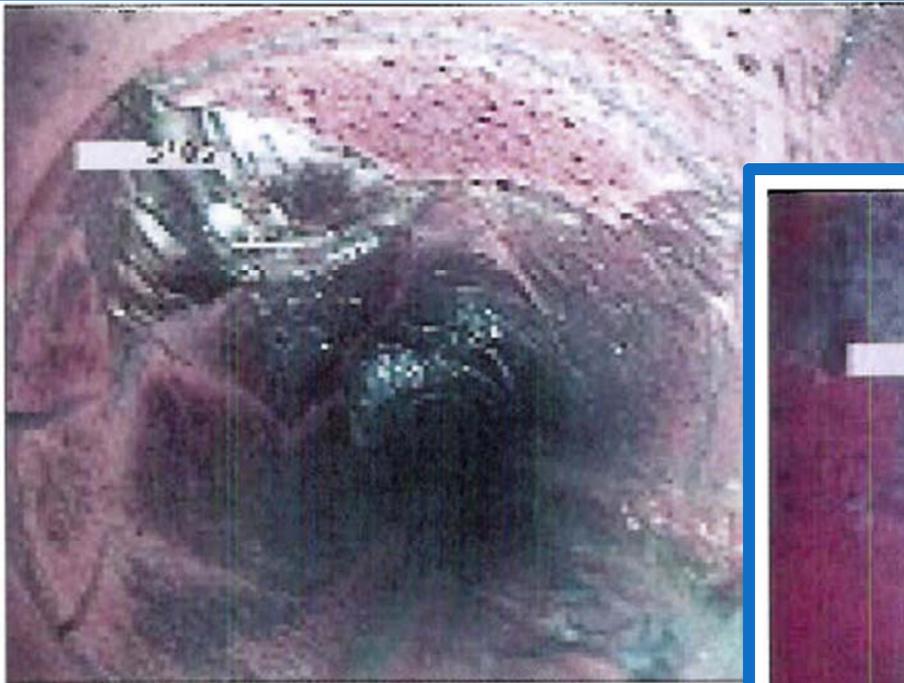


Photo: 19_1A
Multiple Cracks at joint, from 12 to 12 o'clock

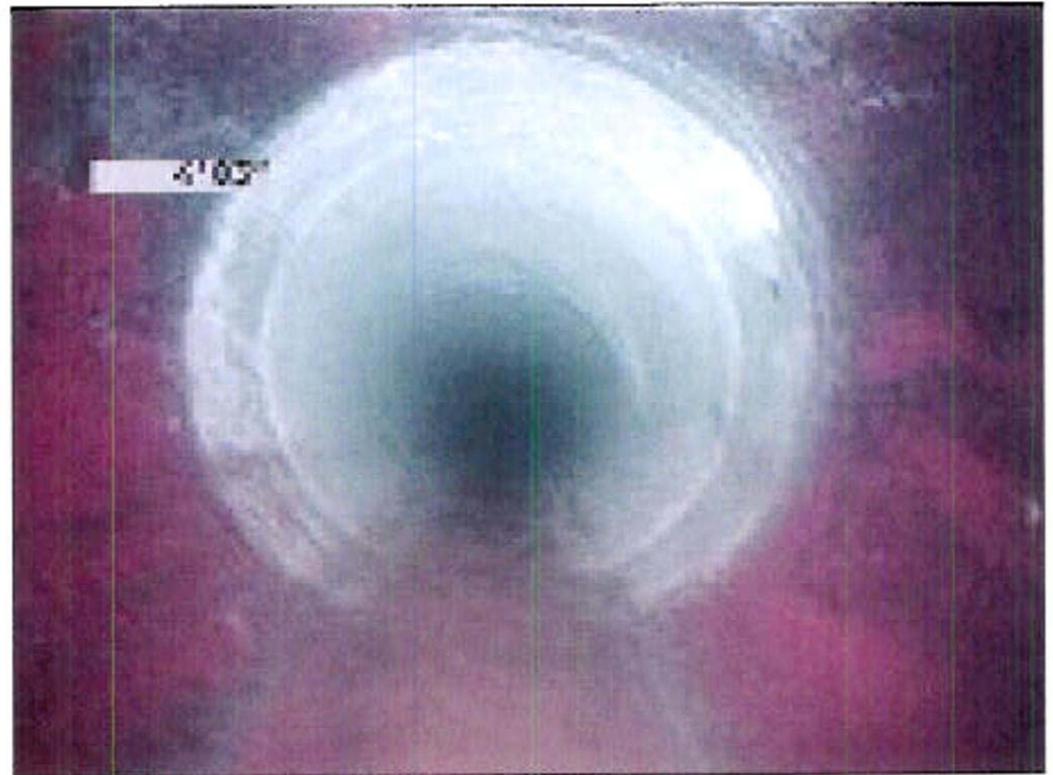


Photo: 17_1B
Multiple Cracks at joint, from 12 to 12 o'clock

Pipe Break / Repair



Fiber Cable Repair



Manhole/Concrete Repair



What is the environmental problem with “FOG” (FATS, OIL, GREASE) in our sewers?

EPA’s report to congress on sewer overflows identifies grease from “restaurants, homes and industrial sources” as the most common cause of blockages (47%). Grease is problematic because it solidifies, reduces system capacity and blocks flow.*

***EPA’s Office of Water -2007**

Grease Blockage at Bar Screen



Grease Accumulation in Lift Station



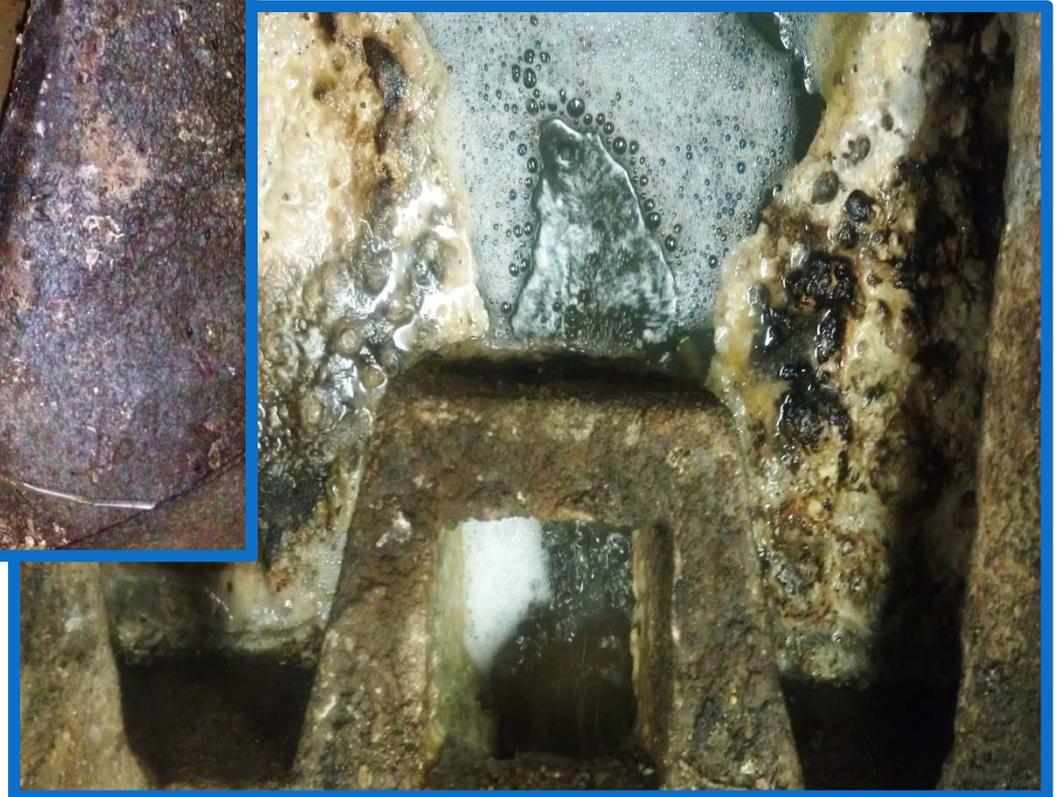
Eliminating Grease From the System

1. Residential Customer Awareness (“FOG”)
2. Commercial Grease Trap Program
 - *Grease Trap Standards*
 - *Inspections*
 - *Pumping*
 - *Final Destination*
 - *Compliance or Disconnection*

New Commercial Grease Trap



Grease Traps Poor Condition



Inflow and Infiltration (I & I) *“Introduction of groundwater/stormwater into the sewer system.”*

Sources:

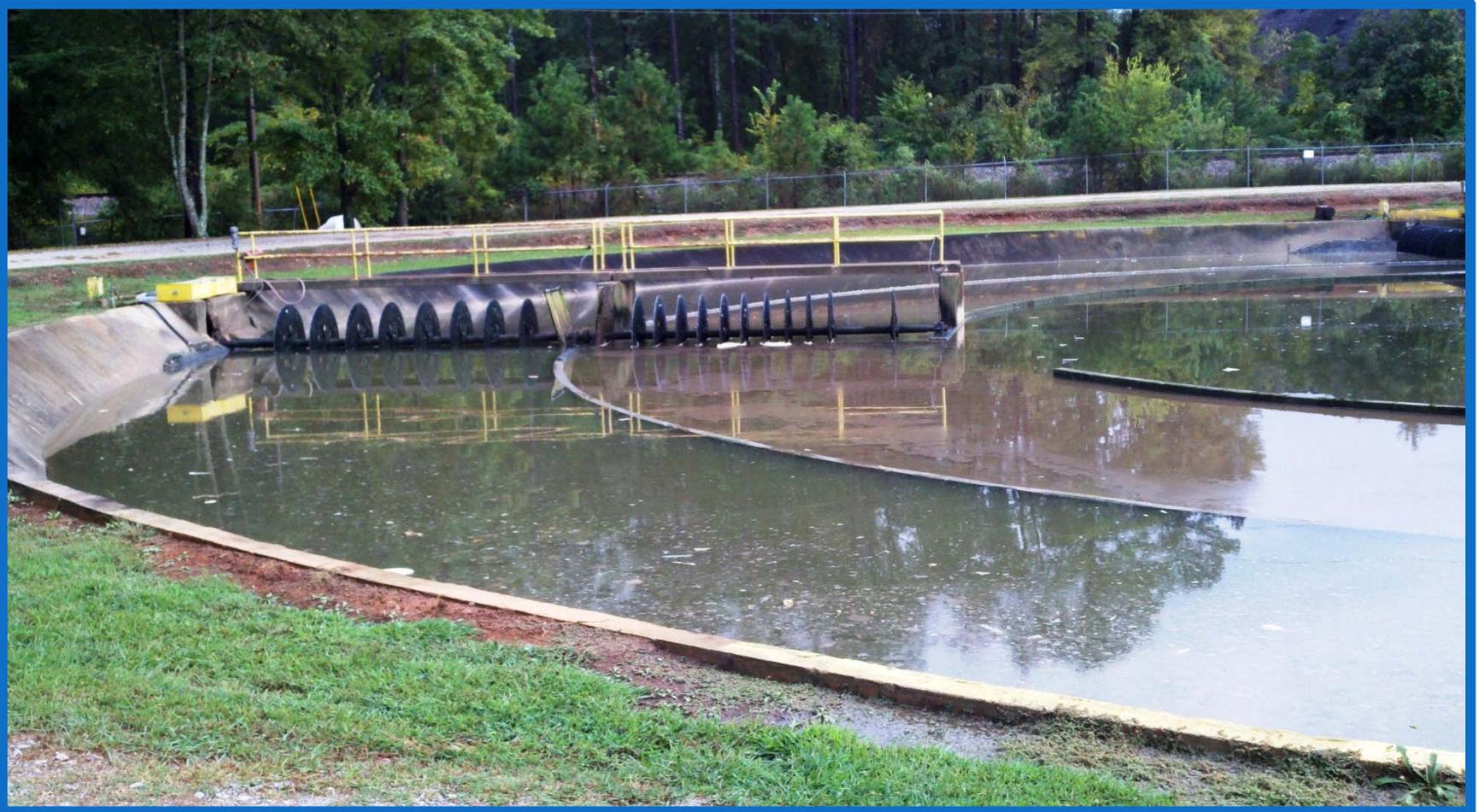
- Improper/illegal connection of stormwater or other drainage to the sewer collection system
- Cracks, breaks in sewer pipes due to age, root intrusion, etc.

Result:

- Overloads the sewer system
- Shortens life of pumps, motors
- System can overflow into the environment
- Sewage can back up into customer residences



Treatment Plant Flood - I&I



Sanitary Sewer Overflows (SSO)

Blockages - *video, clean entire system, auto-dialers*

Root Intrusion - *cut roots, repair breaks*

Pipe failures - *repair or replace as needed*

Pump Failures – *inspect, repair/replace as needed*

Grease Accumulation – *grease trap program,
“FOG” education*

Poor Maintenance – *comply with O&M regs*

Inflow & Infiltration – *repair pipes, inspect
manholes, floating aerators at WWTP*

Alpine/Woodland SSO History

- May 2010 to May 2011 - 27 spills
- Aug 2011 to Dec 2011 – 4 spills

SSO Cleanup: *vacuum, flush, vacuum, disinfect*



Privately Owned Utilities (Investor Owned Utilities)

- Must meet all regulatory guidelines
- EPA survey – small IOUs have the most violations
- EPA determined – the best future for small IOUs is to be purchased by large, responsible utility
- IOU rates must reflect full cost of service
- Rates must also provide a “reasonable rate of return to ensure continued investment/compliance by private owners”

The Rate Process

WHY RATES INCREASE?

- Additional investment/improvements in the utility system
- O & M costs go up

HOW?

- Application is filed with the PSC
- Utility must provide notice to customers
- ORS represents the public interest and conducts audit of utility records
- Expenditures must be “Used and Useful”, “Reasonable and Necessary”
- Hearing is held where customers are invited to participate
- PSC determines final rates

Alpine in the News

- Nov 2009 *“DHEC measuring river contamination”*
- Feb 2010 *“Utility fined for sewage spill in Saluda River”*
- Feb 2011 *“Sewage flows from Alpine manholes”*
- Mar 2011 *“Sewage overflows near Saluda River”*

Aug 2011 *“Alpine wastewater sold”*
Sept 2011 *“Water, sewage company sets public meeting”*

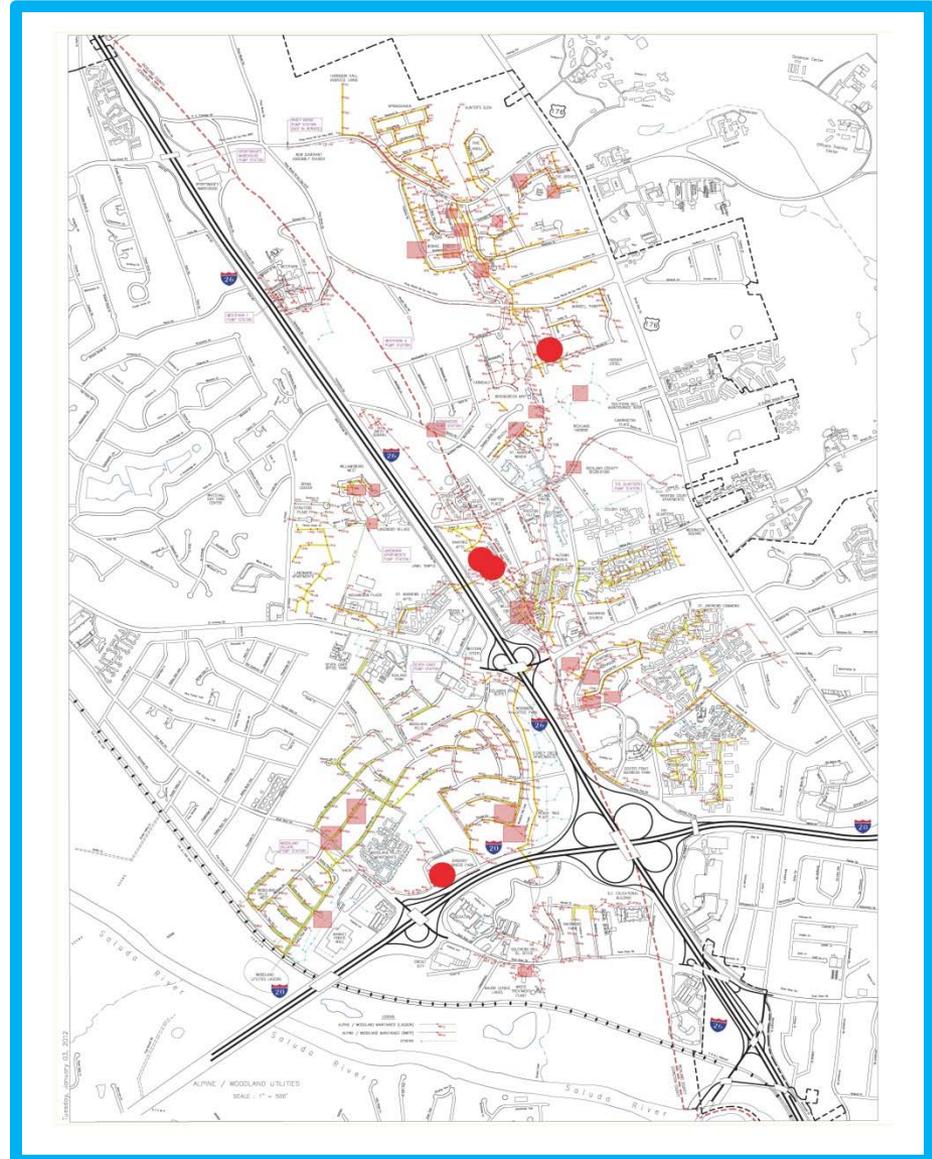
SSOs

**May 2010 – May
2011**



SSOs

**Aug 10-Dec 31
2011**



References

Slides 1, 2: Ni America <http://www.niamerica.com/index.html>

Slide 4: Office of Regulatory Staff

<http://www.regulatorystaff.sc.gov/ORSContent.asp?pageID=630>

Slide 5: SCPSC <http://www.psc.sc.gov>

Slide 6: DHEC http://www.scdhec.gov/environment/water/wpc_sso.htm

http://www.scdhec.gov/environment/water/docs/wpc_ssoFaq.pdf

Slide 10: Enhanced SSO Alpine email list (attached)

Slide 12: System Improvements – “Memorandum Of Understanding” (attached)

Slide 37: Problem With “FOG” <http://www.epa.gov/region1/sso/>

http://www.pprc.org/BrownGreaseSymposium/docs/FOG_Collaborating_to_Keep_the_Pipes_Clear.pdf

FOG: Collaborating to Keep the Pipes Clear

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¹East Bay Municipal Utility District

ABSTRACT

EPA enforcement and pending regulations for sanitary sewer overflows (SSOs) triggered an increased focus on SSOs caused by fats, oils, and grease (FOG) for East Bay Municipal Utility District (EBMUD) and its seven collection system agencies. (cont'd)

(references cont'd)

INTRODUCTION

EPA has estimated 23,000 to 75,000 SSOs occur each year in the U.S. based on data from 2001-2003. (EPA 2007a)

Tracking the causes, EPA also estimates that 48% of SSOs are caused by blockages and 47% of blockages are grease-related, leading to 5,000 to 17,000 FOG-caused SSOs nationwide annually. (EPA 2004) (EPA 2007b)

Recent legislation was passed by the U. S. House of Representatives to provide a uniform, national standard for the monitoring, reporting, and public notification of municipal combined and sanitary sewer overflows, indicating that the focus on SSO continues high nationally. (GovTrack.us. H.r. 2452—110th Congress (2007))

(references cont'd)

Slide 40: Grease Trap Standards (attached)

Slide 47: The EPA on IOUs

http://www.epa.gov/safewater/smallsystems/pdfs/compendeum_smallsystems_restruct.pdf

http://www.epa.gov/safewater/needssurvey/pdfs/2001/report_needssurvey_2001.pdf

<http://water.epa.gov/aboutow/ogwdw/cwssvr.cfm>

<http://www.cbo.gov/doc.cfm?index=3983&type=o>

Slides 50, 51: News Articles (The State Newspaper – search “Alpine Utility”)

http://www.thestate.com/search_results?q=Alpine+Utility&aff=1100&x=13&y=19

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