

## Port St. Lucie Utility Systems Department

*"Connected to the Community"*

City Council Retreat  
July 2012

## Today's Presentation

- Water Quality Requirements
- AC Water Main Replacement Update
- Water and Sewer Bills 101
- Brief Look at the Radio Read Meter Conversion Program

## First and Foremost!

The wellbeing of our community's  
residents and providing quality service  
is always the first priority of the  
Utility Systems Department

## Water Quality

- Water distributed by Port St. Lucie's Utility must meet all standards set by:
  - Environmental Protection Agency (EPA)
  - Florida Dept. of Environmental Protection (FDEP)
- We regularly perform water quality tests
  - More than 4,000 tests during 2012
  - Assure that our water continues to meet strict standards set by EPA and enforced by FDEP



## More About Water Quality Testing

- City's water distribution system dates to 1960's
  - Older areas predominantly have asbestos concrete (AC) pipe
  - Approaching the end of the expected useful life
    - Anomaly test result in November 2011
    - Additional testing has been performed in accordance with FDEP's recommendations
- All follow-up tests have been "non-detect"
- Final quarter's samples pulled this week
- Will soon be returning to standard EPA testing cycle



## Replacing AC Water Mains is Not a New Idea

- City has a history of replacing mains
  - Along portions of:
    - Port St. Lucie Boulevard
    - Airoso Boulevard
    - Prima Vista Boulevard
  - River Park Units 1, 2, 3 and 10
    - East of the river in the unincorporated County



AC Mains are Scattered Throughout the Utility's Service Area



AC Pipe is Prone to Breakage as it Ages

Southport Area Has Some of the Oldest AC Mains

Repair & Replacement Stats

1,433 Total since 1999

911 In 2010 & 2011

More than 60% of the repairs in the past 2 years



Current Project

Approved by Council on December 12, 2011

\$10,630,388 Felix Assoc. of Florida, Inc.  
(construction and materials)

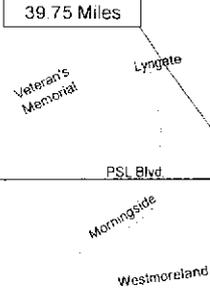
610,190 Culpepper & Terpening  
(engineering services)

136,450 Andersen Andre Consulting Engineers  
(geotechnical testing)

\$11,377,028 total

Southport AC Mains

209,918 LF  
39.75 Miles



Southport Status Report

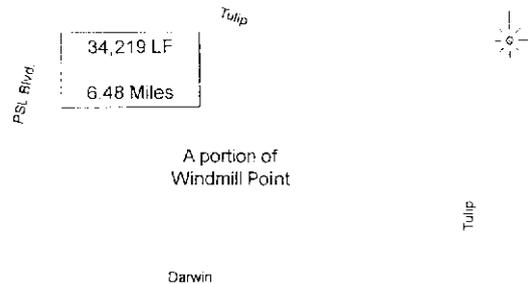
January - June 2012

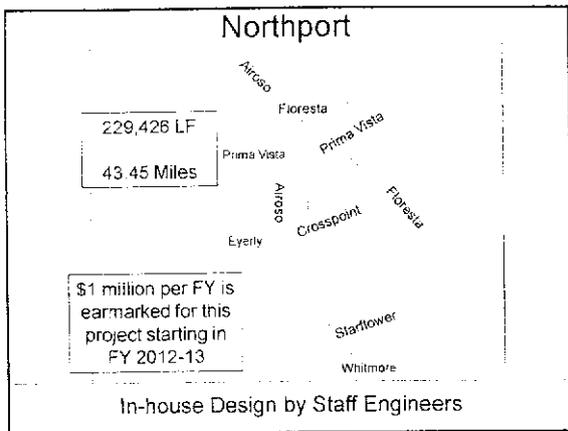
- 60,889 LF 6-inch
- 9,129 LF 8-inch
- 24,000 LF 12-inch
- 1,300 Services
- 643 Driveway Crossings
- 88 Hydrants
- Sod: 44,000 SY
- 342 Radio Read Water Meters



Westport – Included in Felix Contract

34,219 LF  
6.48 Miles





### Estimated Costs to Replace AC Water Mains Throughout the Utility Service Area

Materials and Construction at Today's Costs

\$12,688,000	Southport (under const.)
2,589,000	Westport
<u>10,686,000</u>	Northport
<b>\$25,963,000</b>	<b>total</b>

### Maintaining Open Lines of Communication With the Public

- Door Hangers
- Telephone Hotline  
772-489-9249
- Homeowner Association Meetings
- Sandpiper Bay HOA newsletter inserts

## Questions and Comments

### Water / Sewer Bills 101

- ### Customer Accounts
- + 66,000 customers are billed monthly for all metered water usage
  - + 46,000 customers also have sewer service
    - Residential sewer stops billing at 8,000 gallons
    - 141 customers have just sewer service
      - Billed a flat rate each month

### How are Bills Calculated?

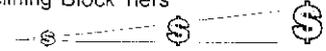
Bills have 4 Components

1. Billing charge
2. Base Facility Charge (BFC)
  - For both water and for wastewater
3. Metered use in whole 1,000s x the water and/or sewer rate
4. 6% surcharge to all customers
  - Customers in the unincorporated County may also pay a 25% surcharge

### Conservation Based Water Billing

If a customer practices good water conservation, they enjoy the lowest rate available

- Water is billed in Inclining Block Tiers



The greater the water use / the higher the rate

- Block 1 = first 5,000 gallons  
Block 1 = \$3.57 per 1,000
  - Block 2 = between 5-12,000 gallons  
Block 2 = \$4.65 per 1,000
  - Block 3 = above 12,000 gallons  
Block 3 = \$5.72 per 1,000
- 70% of the City's residential customers use 5,000 gallons of water or less per month

### Water Bill Calculation for 5,000 gallons

Billing Charge		\$ 2.71
Base Facility Charge		6.29
Block 1 (1 <sup>st</sup> 5,000 gal)	$3.57 \times 5$	17.85
Sub Total		26.85
6% Surcharge		1.61
Total Monthly bill		\$28.46

May include 10-year interest free connection fee loan pmt.

### Same Customer's Sewer Bill Calculation for 5,000 gallons

Base Facility Charge		\$13.44
No Blocks	$7.00 \times 5$	35.00
Sub Total		48.44
6% Surcharge		2.91
Total		\$51.35

May include 10-year interest free connection fee loan pmt.

### Combined Water and Sewer Bill Calculation for 15,000 gallons

Billing Charge		\$ 2.71
Water Base Facility Charge		6.29
Block 1 (1 <sup>st</sup> 5,000 gal)	$3.57 \times 5$	17.85
Block 2 (next 7,000 gal)	$4.65 \times 7$	32.55
Block 3 (next 3,000 gal)	$5.72 \times 3$	17.16
Sewer Base Facility Charge		13.44
No Blocks (caps at 8,000)	$7.00 \times 8$	56.00
Sub Total		146.00
6% Surcharge		8.76
Total		\$154.76

**CITY OF PROVO, UTAH**  
**UTILITY SYSTEMS DEPT.**  
 100 S. 1000 E. SUITE 200  
 PROVO, UT 84601

**ACCOUNT INFORMATION**  
 ACCOUNT NO: 12345678  
 SERVICE ADDRESS: 123 Main Street, Provo, UT 84601

**DATE OF BILL: 01/15/2024**

DESCRIPTION	AMOUNT
Water Base Facility Charge	6.29
Block 1 (1 <sup>st</sup> 5,000 gal)	17.85
Block 2 (next 7,000 gal)	32.55
Block 3 (next 3,000 gal)	17.16
Sewer Base Facility Charge	13.44
No Blocks (caps at 8,000)	56.00
<b>Sub Total</b>	<b>146.00</b>
<b>6% Surcharge</b>	<b>8.76</b>
<b>Total</b>	<b>\$154.76</b>

FOR CUSTOMER SERVICE PLEASE CALL 801-224-3333

## Questions and Comments



## 66,590 Bills Monthly as of June 30, 2012

Predominantly in  
Torino Area  
River Park  
Cycle 3  
Southport

Cycle 2  
18,455

21,144  
Radio Read  
Meters are  
now in use

Cycle 4  
13,575

Cycle 1  
13,535

Cycle 3  
20,025

## Why Radio Read Meters?

- Ability to detect leaks on the customer's side
- Ability to pinpoint dates of high use
  - Tool to help resolve billing complaints
- Improve overall efficiency of meter reading efforts



## Moving Forward

- Meter conversions ongoing
- Currently collecting and analyzing data
  - To project costs
  - To project timeframe
  - Convert the remaining 44,000 meters



A detailed presentation will be provided at the 2012 Winter Retreat

## Questions and Comments