

**KUB**

# Payments in Lieu of Taxes

February 15, 2018



## FY 2018 Payments In Lieu of Taxes (PILOTs)

- FY 2018 payments = \$29,925,260
- Increase of \$0.8M or 2.7%
- Increase reflects Century II capital investments and higher margins

# PILOTs Governance

	Established by	Approved by	Basis	Paid
Water & Wastewater	City Charter	KUB Board	Net Plant Value	February
Electric & Gas	State Law	KUB Board & City Council	Net Plant Value & Avg. Operating Margin	June

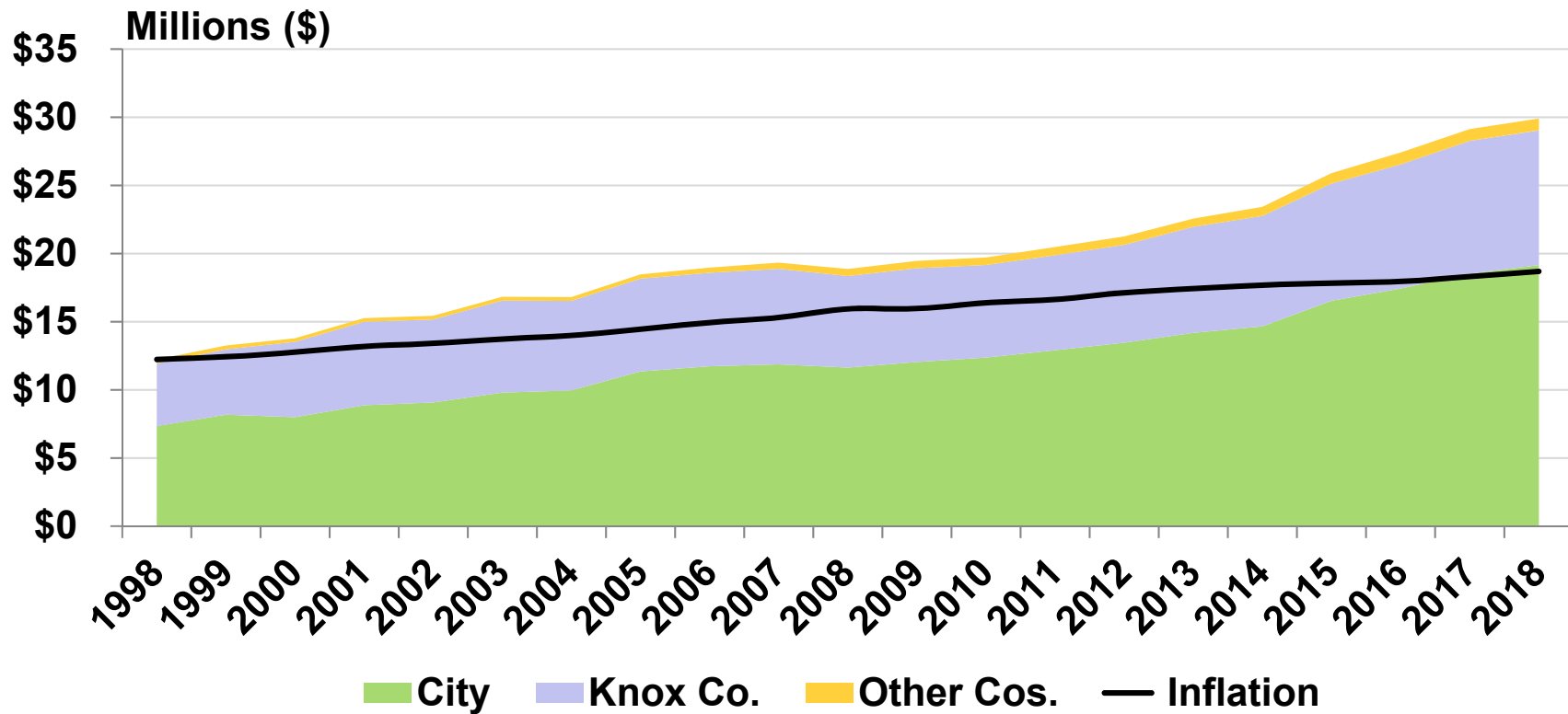
# FY 2018 PILOTs by System

	FY 2018	FY 2017	Increase
Electric	\$15,542,951	\$14,828,556	\$714,395
Gas	6,859,312	6,987,365	(128,053)
Water	3,304,740	3,294,652	10,088
Wastewater	4,218,257	4,017,388	200,869
Total	<b>\$29,925,260</b>	<b>\$29,127,961</b>	<b>\$797,299</b>

# Payments by Jurisdiction

	FY 2018	FY 2017	\$ Change	% Change
City of Knoxville	\$19,144,877	\$18,524,684	\$620,193	3.3%
Knox County	9,888,055	9,742,580	145,475	1.5%
Union County	350,536	337,775	12,761	3.8%
Sevier County	343,139	324,143	18,996	5.9%
Grainger County	136,007	133,658	2,349	1.8%
Jefferson County	37,929	39,253	(1,324)	-
Blount County	12,528	13,276	(748)	-
Anderson County	10,593	11,033	(440)	-
Loudon County	1,596	1,559	37	-
<b>Total</b>	<b>\$29,925,260</b>	<b>\$29,127,961</b>	<b>\$797,299</b>	<b>2.7%</b>

# KUB PILOTs Have Grown Faster Than Inflation



## **Resolution 1373**

### **(Electric and Gas PILOTs)**

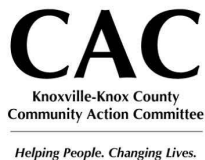
- Requests City Council set electric and natural gas tax equivalent payments for FY 2018 and provides for their distribution
- Total payments = \$22,402,263



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# Project Help Campaign Results

- Campaign ended on February 2
- \$38,808 collected for emergency heating assistance
- More than 100 households can be helped by these donations



# Round It Up Pilot Program Update

February 15, 2018



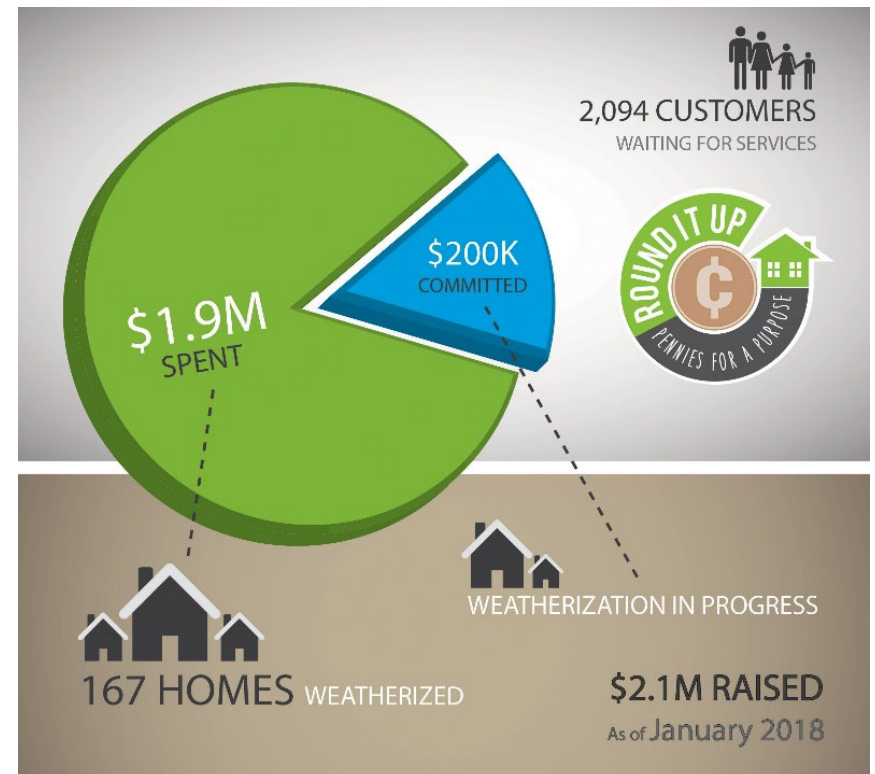
# Round It Up Overview

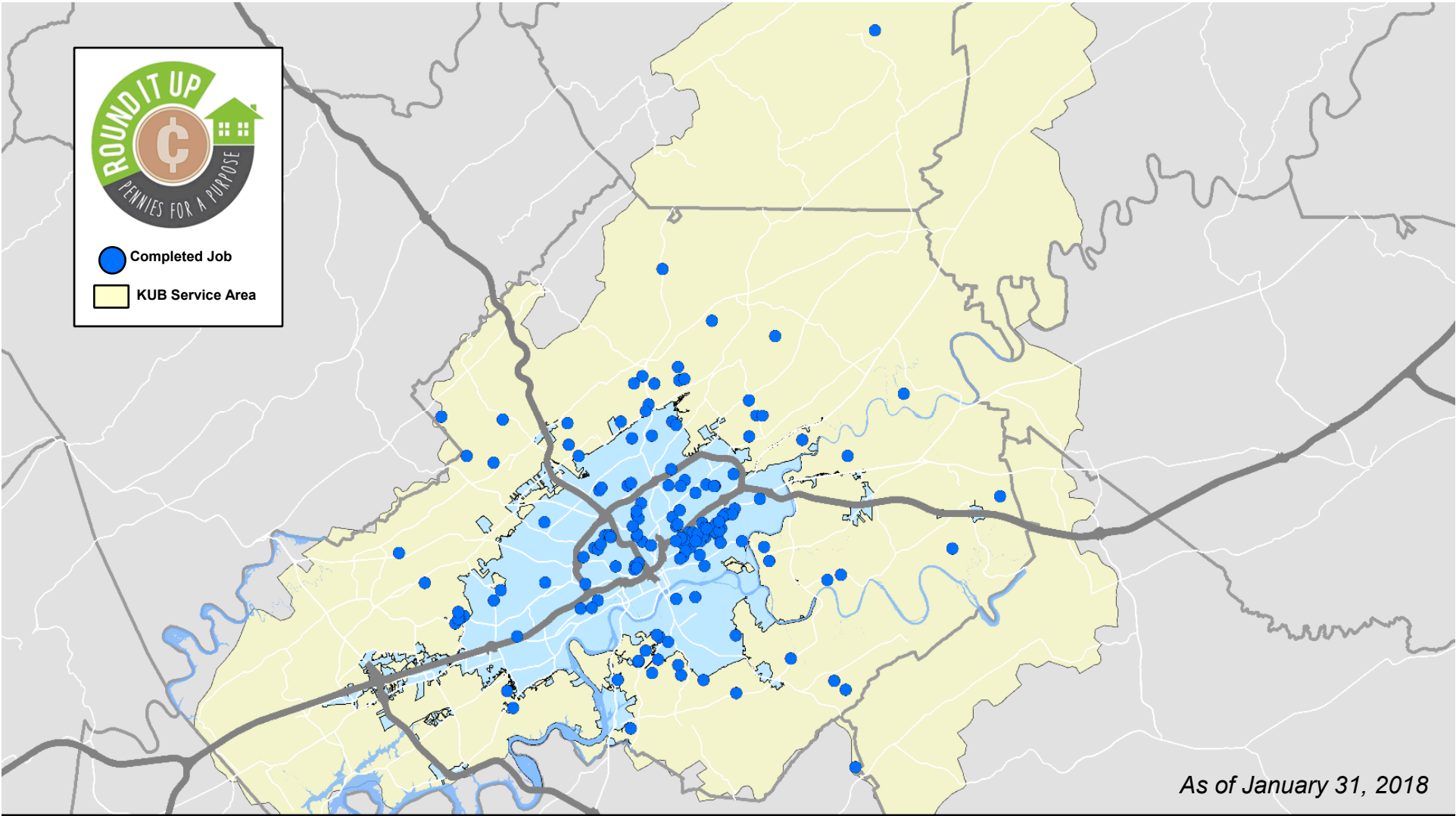
- 3-year pilot approved by Board in November 2014, effective May 2015
- Funds weatherization for low income KUB customers
- Administered by Knoxville-Knox County Community Action Committee (CAC)



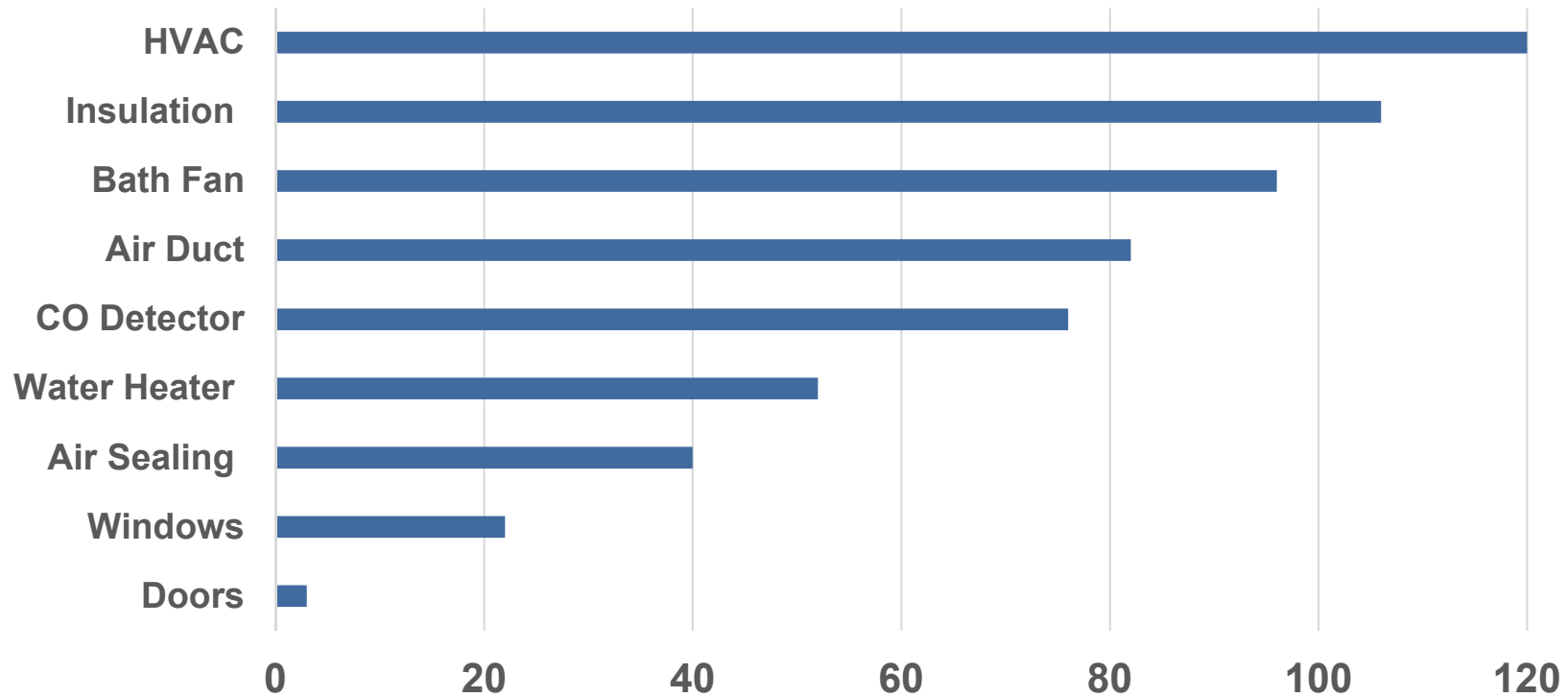
## Strong Customer Participation Assisting Families in Need

- 59% participation rate
- \$2.1 M in contributions to date
- More than 160 homes weatherized
- Over 2,000 waiting for services





# Variety of Improvements for Whole-Home Retrofits



*As of January 31, 2018*

# Round It Up Doubles Community Impact

“Since KUB customers have given generously through Round It Up, we have doubled the amount of services we have been able to provide to low income, elderly and disabled neighbors.”

— Jason Estes

CAC Housing & Energy Services Director



# Round It Up in Action

## Example #1: Background

- Disabled veteran
- 57-year-old home
  - Poor insulation
  - Aged water heater



*Completed in February 2017*

# Round It Up in Action

## Example #1: Improvements

- Water heater replaced
- Attic insulated
- Exterior door replaced



## Round It Up in Action

### Example #1: Customer Impact

- 28% decrease in energy costs
- \$500 in annual utility savings

“The insulation makes a big difference. The contractors were all great. I liked them all.”

— RIU Customer  
December 2017

# Round It Up in Action

## Example #2: Background

- Disabled, elderly customer
- 77-year-old home
  - Poor insulation
  - Aged HVAC system



*Completed in November 2016*



## Round It Up in Action

### Example #2: Improvements

- Replaced heat pump and duct work
- Insulated attic and floors



## Round It Up in Action

### Example #2: Customer Impact

- 16% decrease in energy costs
- \$300 in annual utility savings

“You just don't know how much it means to go from having a cold house in the winter to being comfortable. Drastic reduction in amount of air leakage.”

— RIU Customer  
December 2017

## Staff Recommends Adoption of Round It Up

- Board to consider program renewal in March
  - Knoxville Extreme Energy Makeover program ended in 2017
  - Continuance of Round It Up can provide sustainable funding
  - Doubles number of homes CAC can serve compared to federal funds alone

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# **Kuwahee and Fourth Creek WWTPs Phase II Composite Correction Plans**




**February 15, 2018**



# Background

- 2005 EPA Consent Decree required KUB to address sanitary sewer overflows (SSOs)
- PACE 10 – programmatic approach for wastewater system assessment and capacity improvement
  - Collection system
  - Wastewater storage tanks
  - Wastewater treatment plants (WWTPs)
- PACE 10 merged into Century II

# Consent Decree Timeline

<b>Due Date</b>	<b>Project</b>	<b>Cost</b>	<b>Status</b>
<b>Dec 2012</b>	<b>Kuwahee WWTP – CCP Phase I</b>	<b>\$51M</b>	
<b>Dec 2013</b>	<b>Fourth Creek WWTP – CCP Phase I</b>	<b>\$20M</b>	
<b>Dec 2016</b>	<b>134 Collection System Projects</b>	<b>\$530M</b>	
<b>June 2018</b>	<b>Fourth Creek WWTP – CCP Phase II</b>	<b>\$4.7M</b>	<b>95%</b>
<b>June 2021</b>	<b>Kuwahee WWTP – CCP Phase II</b>	<b>\$52M</b>	<b>10%</b>

# Composite Correction Plan (CCP)

- Construct Biologically Enhanced High Rate Clarification (BEHRC) system
- Provides full treatment to peak wet-weather flows in excess of existing capacity
- Final Consent Decree projects

# Wastewater Treatment Process

## Normal Treatment Train

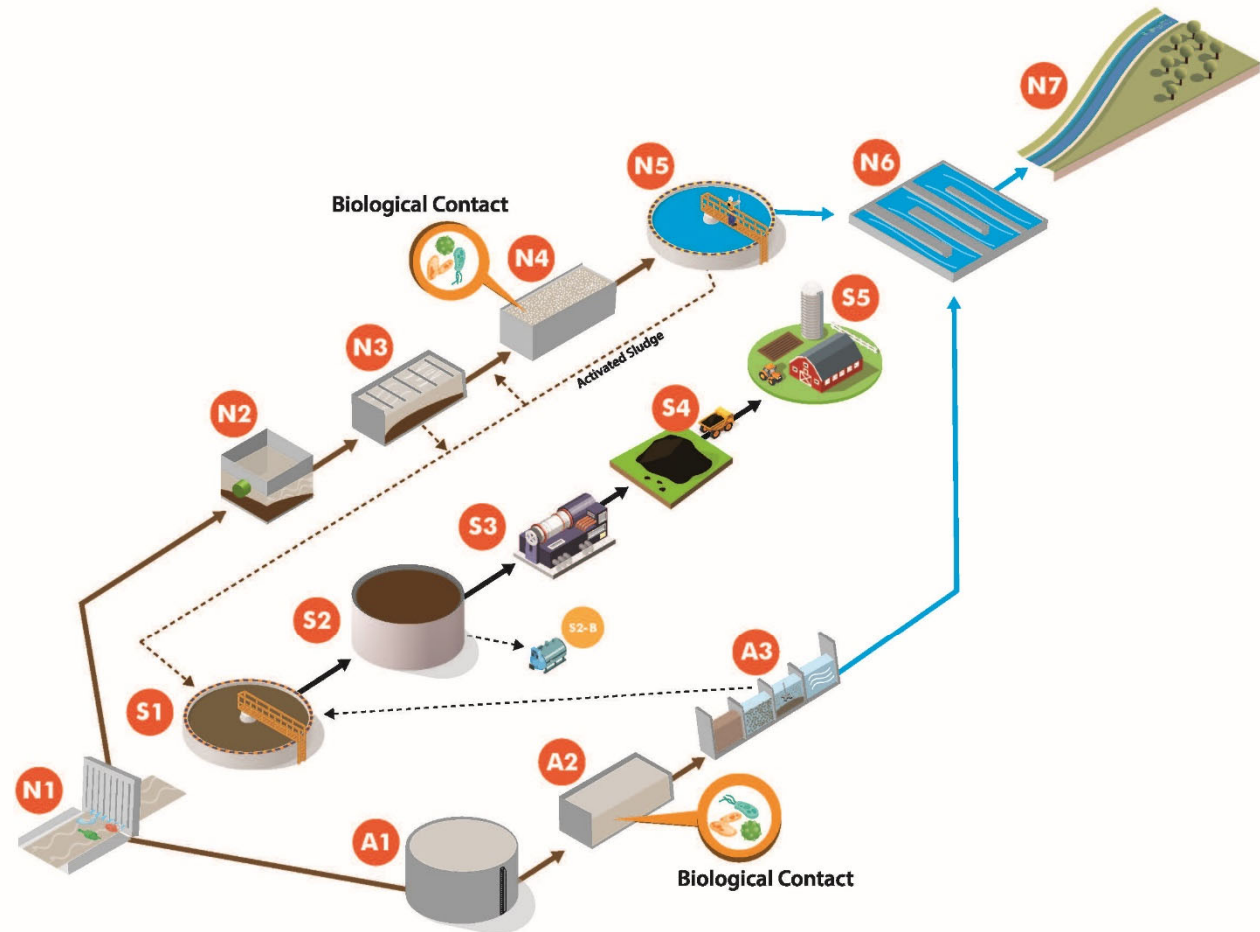
- N1. Influent Screens
- N2. Grit Removal
- N3. Primary Clarifier
- N4. Aeration Tanks
- N5. Final Clarifier
- N6. Disinfection Contact Tank
- N7. Tennessee River

## Solids Treatment Train

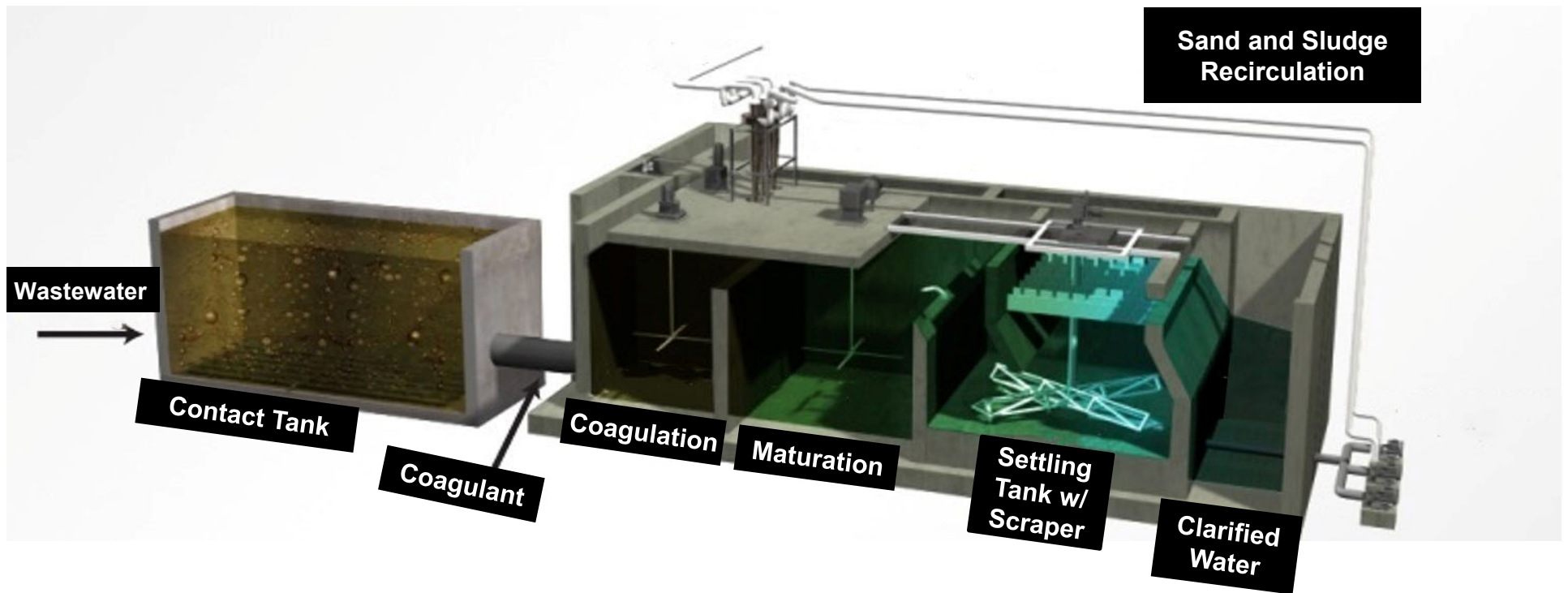
- S1. Solids Thickener
- S2. Digester (S2-B. Biogas Generator)
- S3. Centrifuge
- S4. Biosolids Cake
- S5. Farm

## Wet Weather Treatment Train

- A1. Wet Weather Storage
- A2. Biological Contact Tank
- A3. High Rate Clarifier



# Biologically Enhanced High-Rate Clarification (BEHRC)



# BEHRC Benefits

- Provides
  - Cost-effective full treatment for all flow
  - Operational flexibility
  - Smaller footprint compared to conventional treatment
- Supports system growth



# Fourth Creek WWTP CCP Phase II

- Construction status
  - 95% complete
  - BEHRC operational: March 2018
  - Final contract completion: May 2018
  - CD deadline: June 30, 2018
- Cost: \$4.7M
- Initial tour with TDEC complete



# Fourth Creek WWTP CCP Phase II



# Kuwahee WWTP CCP Phase II

- Current status
  - Design 80% complete
  - Final design documents: June 2018
- Schedule
  - Construction: August 2018 – January 2021
  - CD deadline: June 30, 2021
- Cost estimate: \$52M
- Largest single project in Consent Decree

# Kuwahee BEHRC Location

## KUWAHEE WASTEWATER TREATMENT PLANT UPGRADES





# Kuwahee BEHRC Artist Renderings



**View looking west along Neyland greenway**

**View looking southwest from Neyland Drive**



# Century II Investments Will Continue

- CCP for Fourth Creek and Kuwahee Wastewater Treatment Plants
  - On schedule to meet CD deadlines
  - Final EPA-required projects



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**American Public Power Association (APPA)  
Reliable Public Power Provider (RP3)**

**February 15, 2018**



## RP3 Recognition Program Sets Bar for Public Utilities

- KUB first earned designation in 2015
- Based on sound business and industry practices
- Recognizes proficiency in four areas
  - Reliability
  - Safety
  - Workforce development
  - System improvement



American Public Power Association



## KUB RP3 Application a Corporate Effort

- Electric Systems Engineering
- System Operations
- Safety, Security, and Technical Services
- Human Resources
- Economic Development and Government Relations
- System Maintenance

# Becoming an RP3 Provider

- Comprehensive application process
  - 26-page application
  - More than 1,500 pages of documentation
  - 6 months of preparation
- Peer review
  - 18-member expert panel of public power representatives
  - 3-month process

# Programs Extensively Reviewed

- Safety programs
- Century II
- Vegetation management
- Employee development programs
- Physical and cyber security standards
- Community engagement
- Mutual-aid agreements

## KUB Achieves Highest Recognition Level and Perfect Score

- KUB awarded Diamond level and 100 points in evaluation
- Recognition levels
  - Diamond
  - Platinum
  - Gold
- Achieved by about 10% of utilities nationwide

## RP3 Designation Key to Economic Development

“What makes The Fort unique is our power capabilities. We will have two separate power feeds from our partner, Knoxville Utilities Board, which provides Tier IV power capabilities. Coupled with our cloud services and disaster recovery capabilities, The Fort will offer businesses a way to safely manage and scale their data with first-class technology.”

— Frank Hutchison  
SH Data Technologies

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