Using an Asset Management System to Optimize Operation and Maintenance Practices

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- Introductions
- Background
- Implementation
- Vision
- Questions
Introductions

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New River Solid Waste Association

- Florida’s first multi-county regional facility created in 1988
- Member Counties:
  - Baker, Bradford, and Union
- Customer Counties:
  - Alachua, Levy, Gilchrist
- Located in Union County
- 82-acres permitted
- 1000 TPD Class I Facility
Background

Site Operations

- 82-acres permitted Class I (Cells 1-6)
- Future 18-acre Cell 7
- Eight leachate pump stations
- Active gas collection system with 92 wells and 3000 sfcm flare
- LFGTE project in progress

NRSWA staff operates and maintains the site THEREFORE...
the TO DO list, Regulatory Requirements and REPORTING paperwork is
- Varied
- Never ending
- Numerous
- Not efficient

THERE HAS TO BE A BETTER WAY
NRSWA looking for tool to help with:

- Managing assets
- Improving maintenance scheduling and response
- Improving efficiency
- Improving recordkeeping
- Improving accountability
- Go paperless

Why now?  LFGTE project
Why Cityworks?

- Robust Platform with proven successes
- Easily configured for Solid Waste
- GIS-Centric
  - GIS stores the assets
  - Cityworks stores work events
  - Uses unique asset ID
- Value
  - Scalable deployment
  - Cloud-based (or on premise) – no IT
  - Simple licensing (fixed seats or ELA)
  - Any device, anywhere
  - Local implementation partner familiar w/ NRSWA
  - Easily configured by NRSWA
Cityworks®
Empowering GIS®

Established
1986

Founded
1995

Employees
129

Partners
50+

2017 Growth
15%

Client Retention Rate
99%

Organizations
700+

- Pinellas Co (FL)
- Manatee Co PW (FL)
- St. Johns County
- Venice (FL)
- Pasco Co PW (FL)
- Sumter Co (FL)
- Collier Co (FL)
- Tampa Airport (TPA)

- Tallahassee (FL)
- Panama City (FL)
- St Cloud (FL)
- Kissimmee (FL)
- Palm Bay (FL)
- Gainesville /GRU (FL)
- FKAA
## Jones Edmunds Cityworks Clients

<table>
<thead>
<tr>
<th>City</th>
<th>Location</th>
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<tbody>
<tr>
<td>Alachua County, FL</td>
<td>City of Sanford, FL</td>
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<td>Brunswick/Glynn Co., GA</td>
<td>City of Tallahassee, FL</td>
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<td>City of Alachua, FL</td>
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<td>City of Coral Springs, FL</td>
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<td>City of Deland, FL</td>
<td>Destin Water Users</td>
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<td>City of Gainesville, FL</td>
<td>Eglin AFB/ ASUS - Florida</td>
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<td>City of Kissimmee, FL</td>
<td>Ft. Riley/ ASUS - Kansas</td>
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<td>City of Lauderhill, FL</td>
<td>Florida Keys Aqueduct Authority</td>
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<td>City of Miami Beach, FL</td>
<td>Gainesville Regional Util.</td>
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<td>City of North Miami Beach, FL</td>
<td>St. Johns County, FL</td>
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<tr>
<td>City of St. Cloud, FL</td>
<td>Sumter County, FL</td>
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<td>And many more...</td>
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</tbody>
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Environment Configuration

- Cloud-based
  - Cost-effective
  - No server hardware or IT staff to support
  - Upgrades to latest version included

Hosted GIS and Cityworks AMS solutions
Implementation

- Initial brainstorming on potential use of Cityworks
- NRSWA initial focus:
  - Gas collection and control system
  - Flare
- Cityworks:
  - Inspections
  - Work Orders

**Overall Goal: Improved efficiency and tracking**
Workflow Evaluation

- Evaluate existing workflows and inspection forms
- Identify priority workflows
  - Well Field Monitoring
  - Landfill Cover Integrity
  - Daily Flare Log
  - Preventative Maintenance
- Assets
  - Gas Wells
  - Landfill Cells
  - Flare
Initial Configuration:

- Work Order templates
  - Gas Flares
  - Gas Wells
  - Landfill Cells
Asset Management – Work Orders

- Scheduling Preventative Maintenance
- Track gas well monitoring
- Track Repairs
- Improve Response
- Track Costs (Future)
  - Labor
  - Equipment
  - Materials
Asset Management - Inspections

- Inspections produce better data
- Customizable Forms
- Scored Results
- Manage and Schedule
- Easily Share Results
- Examples:
  - Monthly Gas Well Monitoring
  - Landfill Cover Integrity
  - Flare Logs
Onsite end user training and training materials
Benefits of Asset Management Systems

Why?

- Prolonging asset life by improving decisions about asset rehabilitation, repair, and replacement
- Budgeting focused on critical activities
- Reducing costs for operations and capital expenditures
- Meeting regulatory requirements
- Reduce reliance on institutional knowledge
- Transparency
Return on Investment

- Real-time Access Throughout the Organization
- Improved Transparency
- Improved reporting and ad hoc queries – easily exported to excel and pdf
- Prompt completion of work orders in the field
- Field GIS verification and redlines
- Ability to use Cityworks Map to reduce hard copy maps
- Easy to create new Work Order and Inspection templates after Administrator Training
Additional Cityworks Tools

Analysis Tools for better decisions:

- Contract management
- Budgeting processes (task based budgets)
- Resource management
- Inventory Management
- Compliance and other reporting
- Asset Analytics
- KPIs and Dashboards
- Integrated lifecycle modeling options
Vision

- Great potential for future use
  - Leachate pumps/collection stations
  - Engines
  - Equipment
  - Tracking Costs
QUESTIONS?

NEW RIVER SOLID WASTE ASSOCIATION

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