CURRENT STATUS OF THE REGIONAL WASTEWATER PROJECT
09-MAY 2018

SFWMD Projects and Lands Committee Meeting
FKAA has six discrete central wastewater systems:

- Key Haven System
- Big Coppitt System
- Bay Point System
- Cudjoe System
- Layton/Long Key System
- Duck Key System

Locations:
- Orlando
- Miami
- Jacksonville
- Tampa
- Layton/Long Key
- Cudjoe
- Bay Point
- Key Haven
- Big Coppitt
- Stock Island RO Facility
Key Haven will soon be decommissioned

**System**

**Attributes**

- Acquired in 2009
- 450 potential EDUs*
- Plant to be decommissioned in 2019
- Three injection wells: 60’ casing depth, 90’ overall depth (8” Schedule 40 PVC)

**Key Haven**

**Design Capacity (10^3 gpd)**

200

**Discharge Permit Limitations (mg/L)**

- CBOD: 5
- TSS: 25
- TN: 25
- TP: 3.5

*EDU = Equivalent Dwelling Unit

Average Daily Flow (10^3 gpd)

- MAY-17
- JUN-17
- JUL-17
- AUG-17
- SEP-17
- OCT-17
- NOV-17
- DEC-17
- JAN-18
- FEB-18
- MAR-18
- APR-18
Big Coppitt has an AWT facility, with reuse water and serves the NAS on Boca Chica.

**System Attributes**

- Construction from 2007 to 2009
- 1,739 potential EDUs
- New AWT facility
- Reuse water available
- Two injection wells: 60’ casing depth, 90’ overall depth (8” Schedule 40 PVC)

**Design Capacity (10^3 gpd)**

- CBOD: 5
- TSS: 5
- TN: 3
- TP: 1

**Discharge Permit Limitations (mg/L)**

<table>
<thead>
<tr>
<th>Month</th>
<th>Influent</th>
<th>Reuse</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAY-17</td>
<td>28.2%</td>
<td>6.5%</td>
</tr>
<tr>
<td>JUN-17</td>
<td>20.3%</td>
<td>6.5%</td>
</tr>
<tr>
<td>JUL-17</td>
<td>26.0%</td>
<td>6.5%</td>
</tr>
<tr>
<td>AUG-17</td>
<td>26.5%</td>
<td>6.5%</td>
</tr>
<tr>
<td>SEP-17</td>
<td>26.5%</td>
<td>6.5%</td>
</tr>
<tr>
<td>OCT-17</td>
<td>23.7%</td>
<td>6.5%</td>
</tr>
<tr>
<td>NOV-17</td>
<td>25.0%</td>
<td>6.5%</td>
</tr>
<tr>
<td>DEC-17</td>
<td>26.4%</td>
<td>6.5%</td>
</tr>
<tr>
<td>JAN-18</td>
<td>33.1%</td>
<td>6.5%</td>
</tr>
<tr>
<td>FEB-18</td>
<td>23.3%</td>
<td>6.5%</td>
</tr>
<tr>
<td>MAR-18</td>
<td>27.2%</td>
<td>6.5%</td>
</tr>
<tr>
<td>APR-18</td>
<td>28.2%</td>
<td>6.5%</td>
</tr>
</tbody>
</table>
Bay Point was the first system, designed with BAT and has the only vacuum collection system.

**System**

**Attributes**
- Construction from 2004 to 2005
- 438 potential EDUs
- New BAT treatment facility
- Two injection wells: 60’ casing depth, 90’ overall depth (6” Schedule 40 PVC)

**Design Capacity**

<table>
<thead>
<tr>
<th>System</th>
<th>Design Capacity (10^3 gpd)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bay Point</td>
<td>54</td>
</tr>
</tbody>
</table>

**Discharge Permit Limitations (mg/L)**

- CBOD: 10
- TSS: 10
- TN: 10
- TP: 1

**Average Daily Flow (10^3 gpd)**

<table>
<thead>
<tr>
<th>Month</th>
<th>Average Daily Flow</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAY-17</td>
<td>25</td>
</tr>
<tr>
<td>JUN-17</td>
<td>25</td>
</tr>
<tr>
<td>JUL-17</td>
<td>25</td>
</tr>
<tr>
<td>AUG-17</td>
<td>25</td>
</tr>
<tr>
<td>SEP-17</td>
<td>25</td>
</tr>
<tr>
<td>OCT-17</td>
<td>35</td>
</tr>
<tr>
<td>NOV-17</td>
<td>35</td>
</tr>
<tr>
<td>DEC-17</td>
<td>35</td>
</tr>
<tr>
<td>JAN-18</td>
<td>35</td>
</tr>
<tr>
<td>FEB-18</td>
<td>35</td>
</tr>
<tr>
<td>MAR-18</td>
<td>35</td>
</tr>
<tr>
<td>APR-18</td>
<td>35</td>
</tr>
</tbody>
</table>
Cudjoe Regional is the largest system and is designed with AWT.

### Attributes
- Construction from 2013 to 2018
- 9,038 potential EDUs
- New AWT treatment facility
- Four shallow injection wells: 80’ casing depth, 110’ overall depth (10” Schedule 40 PVC)
- One deep injection well: 2800’ casing depth, 3200’ overall depth (44” to 12.75” Steel)

### Design Capacity
- (10³ gpd)

### Discharge Permit Limitations
- (mg/L)
  - CBOD: 5
  - TSS: 5
  - TN: 3
  - TP: 1

### Average Daily Flow
- (10³ gpd)
  - MAY-17: 0
  - JUN-17: 0
  - JUL-17: 0
  - AUG-17: 0
  - SEP-17: 0
  - OCT-17: 0
  - NOV-17: 0
  - DEC-17: 0
  - JAN-18: 0
  - FEB-18: 0
  - MAR-18: 0
  - APR-18: 0
Duck Key has an AWT facility, with reuse water and serves Hawk’s Cay Resort, Duck Key and Conch Key.

**Attributes**
- Acquired in 2006, redesigned in 2011
- 1,472 potential EDUs
- New AWT facility
- Reuse water available
  - Two injection wells: 60’ casing depth, 90’ overall depth (8” Schedule 40 PVC)

**Design Capacity (10³ gpd)**

**Discharge Permit Limitations (mg/L)**

- CBOD: 5
- TSS: 5
- TN: 3
- TP: 1

**Average Daily Flow (10³ gpd)**

- Influent
- Reuse

<table>
<thead>
<tr>
<th>Month</th>
<th>MAY-17</th>
<th>JUN-17</th>
<th>JUL-17</th>
<th>AUG-17</th>
<th>SEP-17</th>
<th>OCT-17</th>
<th>NOV-17</th>
<th>DEC-17</th>
<th>JAN-18</th>
<th>FEB-18</th>
<th>MAR-18</th>
<th>APR-18</th>
</tr>
</thead>
<tbody>
<tr>
<td>%</td>
<td>47.5%</td>
<td>33.4%</td>
<td>26.1%</td>
<td>37.7%</td>
<td>19.2%</td>
<td>16.7%</td>
<td>43.6%</td>
<td>61.8%</td>
<td>63.2%</td>
<td>89.2%</td>
<td>82.4%</td>
<td>72.4%</td>
</tr>
</tbody>
</table>

**System**
- Duck Key
Layton is a small BAT system serving the City of Layton and Long Key.

### Attributes
- Construction from 2005 to 2006, expanded in 2017
- 444 potential EDUs
- New BAT treatment facility
- Two injection wells: 60’ casing depth, 90’ overall depth (6” Schedule 40 PVC)

### Design Capacity (10³ gpd)

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>Layton System</td>
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### Discharge Permit Limitations (mg/L)

<table>
<thead>
<tr>
<th>Attribute</th>
<th>Limit</th>
</tr>
</thead>
<tbody>
<tr>
<td>CBOD</td>
<td>10</td>
</tr>
<tr>
<td>TSS</td>
<td>10</td>
</tr>
<tr>
<td>TN</td>
<td>10</td>
</tr>
<tr>
<td>TP</td>
<td>1</td>
</tr>
</tbody>
</table>

### Average Daily Flow (10³ gpd)

<table>
<thead>
<tr>
<th>Month</th>
<th>Flow</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAY-17</td>
<td>20</td>
</tr>
<tr>
<td>JUN-17</td>
<td>20</td>
</tr>
<tr>
<td>JUL-17</td>
<td>30</td>
</tr>
<tr>
<td>AUG-17</td>
<td>20</td>
</tr>
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<td>OCT-17</td>
<td>20</td>
</tr>
<tr>
<td>NOV-17</td>
<td>30</td>
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<tr>
<td>DEC-17</td>
<td>20</td>
</tr>
<tr>
<td>JAN-18</td>
<td>20</td>
</tr>
<tr>
<td>FEB-18</td>
<td>20</td>
</tr>
<tr>
<td>MAR-18</td>
<td>30</td>
</tr>
<tr>
<td>APR-18</td>
<td>30</td>
</tr>
</tbody>
</table>
As of 01-May, 69% of all potential EDU’s in the region are connected to the central sewer.
Questions?

I see you got a new water hose!

Yep, it’s 200 feet long and connected to the New York Snowbirds water meter next door since the FKAA raised my sewer bills!