Real Potential Threats from Wastewater System Failure

NEED FOR PROACTIVE MONITORING AND MAINTENANCE SYSTEMS NOW!
NEED FOR PROACTIVE MONITORING AND MAINTENANCE SYSTEMS NOW!

- DEP has reporting hotline for “wastewater incidents”
- “On average, the State Watch Office receives two wastewater incident notifications a day for the entire state.” Emphasis added
- 2/3 of spills are under 10,000 gallons ... but still!
- Examples of spill events
  - “The ‘all clear’ is given after 3,000 gallons of untreated wastewater spilled into a tributary of Chaney Creek in Jacksonville [North Carolina].”
  Source WITN.com, clarification added, spill occurred July 24, 2015
NEED FOR PROACTIVE MONITORING AND MAINTENANCE SYSTEMS NOW!

“A mechanical issue causes a wastewater spill Friday in Jacksonville [North Carolina].

“ONWASA says the incident occurred at the Heritage Village Pump Station Friday morning. A mechanical joint on a newly-constructed force main separated, allowing the release of about 20,000 gallons of wastewater.

“ONWASA crews were able to recover about 5,000 gallons and repairs to the force main were made under warranty by the contractor.”

Source: WITN.com, clarification and emphasis added, spill occurred September 25, 2015
NEED FOR PROACTIVE MONITORING AND MAINTENANCE SYSTEMS NOW!

“Major plumbing failures and accidents sent nearly 17 million gallons of raw sewage—enough to cover a square mile with waste a foot deep—cascading into Southwest Florida neighborhood streets and vital waterways last year...

“Among the biggest events:
- In November, 1.5 million gallons erupted from a pipe running along Sarasota's scenic bayfront.
- In June, 3.5 million gallons poured from a pipe leading to Bradenton's treatment plant.
- In March, 5.8 million gallons burst from a pipe in Tampa.”

Source: Herald Tribune, 2012, emphasis added
NEED FOR PROACTIVE MONITORING AND MAINTENANCE SYSTEMS NOW!

- Coliform bacteria in Keys raw sewage
  
  10,000,000 to 100,000,000 colonies per 100 ml

Source: Engineering Report for Key Largo Wastewater Treatment District Wastewater Treatment Facility Major Permit Modification, August 2012
NEED FOR PROACTIVE MONITORING AND MAINTENANCE SYSTEMS NOW!

<table>
<thead>
<tr>
<th></th>
<th>Raw Sewage</th>
<th>AWT</th>
<th>BAT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biological Oxygen Demand</td>
<td>150-350</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Total Nitrogen</td>
<td>60</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>Total Phosphorus</td>
<td>6-10</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Units: mg/l

Source: Engineering Report for Key Largo Wastewater Treatment District Wastewater Treatment Facility Major Permit Modification, August 2012
NEED FOR PROACTIVE MONITORING AND MAINTENANCE SYSTEMS NOW!

Wastewater high pressure transmission lines being designed for 130 psi!