

Solid Waste Management Division



SOUTH WAKE LANDFILL

update to the SW Citizen's Committee

April 23, 2019



Agenda

- Introductions, Overview and Briefing on New Facility
- Presentation - SWLF Odor Management System - Marc Byers, Byers Scientific & Manufacturing
- Solid Waste Projects - Mattress Recycling, Waste Characterization Study, Comprehensive Solid Waste Plan and 86it Study
- South Wake Operations - SWLF Stats (truck counts, waste volume), Waste placement & daily cover techniques, Landfill Gas System Improvements, Odor complaints update
- Education & Outreach - Landfill Tours, Upcoming Community Outreach Events, Wake County Tree Program – Completed, for now
- Other Business

Solid Waste Division Overview

- Solid Waste Operations
 - Manage 19 waste facilities
 - 11 Convenience Centers
 - 3 Multi-Material Recycling Facilities
 - 3 Household Hazardous Waste Facilities
 - **SOUTH WAKE LANDFILL (SWLF)**
 - East Wake Transfer Station
 - Landfill gas systems
 - Illegal dumping enforcement
 - Closed North Wake Landfill



Solid Waste Division Overview

- Solid Waste Outreach & Education
 - ▣ Feed the Bin School Program
 - ▣ 86it Anti-Litter Campaign
 - ▣ Community Outreach
 - ▣ Facility Tours
 - ▣ Food Waste Reduction



South Wake Improvements



Byers Scientific Presentation



Solid Waste Projects

- Mattress Recycling
 - ▣ Request for Interest going out soon to gauge interest and capabilities in the area
 - ▣ Plan to use one half of the South Wake Transfer Station (where the Waste Characterization is going on this week)
 - ▣ Will focus primarily on commercial sources as opposed to residents, but may expand if successful

Solid Waste Projects

- Waste Characterization Study
 - ▣ What is the composition (percentages) of waste that comes to the landfill?
 - ▣ Helps us determine potential program changes
 - ▣ Last one was done in 2011
 - ▣ Is being conducted this week at the SW Transfer station

Solid Waste Projects

- BOC Growth & Sustainability Goal GS 2.1 - Update and implement the comprehensive solid waste plan to 1) extend the life of the landfill through recycling and technology, 2) maximize recycling, 3) reduce litter, and 4) engage the community through outreach and education.
 - Life of Landfill Study underway and to be reported to Growth & Sustainability Committee in May (20th)
 - A Comprehensive Solid Waste Plan will start later this year to ask questions like “What is our next waste disposal method”, “What can we do to improve recycling”, etc.

Solid Waste Projects

- 86it Anti-Litter Study
 - Is 86it meeting intended goals?
 - What contributes to the success of other anti-litter campaigns?
 - Strengths and opportunities for improvement
 - Presentation to BOC Growth & Sustainability Committee in May



South Wake Operations

□ SWLF Stats

■ Overall increase in waste volume due to 2 reasons:

1. Population growth in the Wake County
2. More commercial waste coming thru East Wake Transfer station

■ Truck Counts have remained fairly stable as most of the increase in tonnage is at the East Wake Transfer station

Month	Truck Count
Sep-18	3,544
Oct-18	4,057
Nov-18	3,615
Dec-18	3,295
Jan-18	3,895
Feb-18	3,355
Mar-18	3,825

SWLF Waste Placement/Cover

- December – May:
 - ▣ Posi-shell (recycled paint and cementitious mixture)
 - ▣ Tarps
 - ▣ Soil
- June – November:
 - ▣ Focused on soil
 - ▣ Tarps and posi-shell used in limited fashion
- Extremely wet winter/spring has led to difficult conditions on-site, including a higher than usual amount of odor complaints
- We plan to have our landfill operator come to future meetings to discuss this topic further

Landfill Gas System Improvements

- Installation of additional pumps to remove watered in LFG wells
- Installation of automated LFG wells (30) that will provide better adjustments to system due to weather changes ([Loci Controls](#))
- Implementation of [Envirosuite](#) software/hardware solution
 - ▣ Provides mobile application
 - ▣ Allows review of odor complaints and provides associated data based upon field measurements



SWLF Odor Issues

- Wind Speed (1-5 mph) & Direction (to S/SW/SE) are always a contributing factor

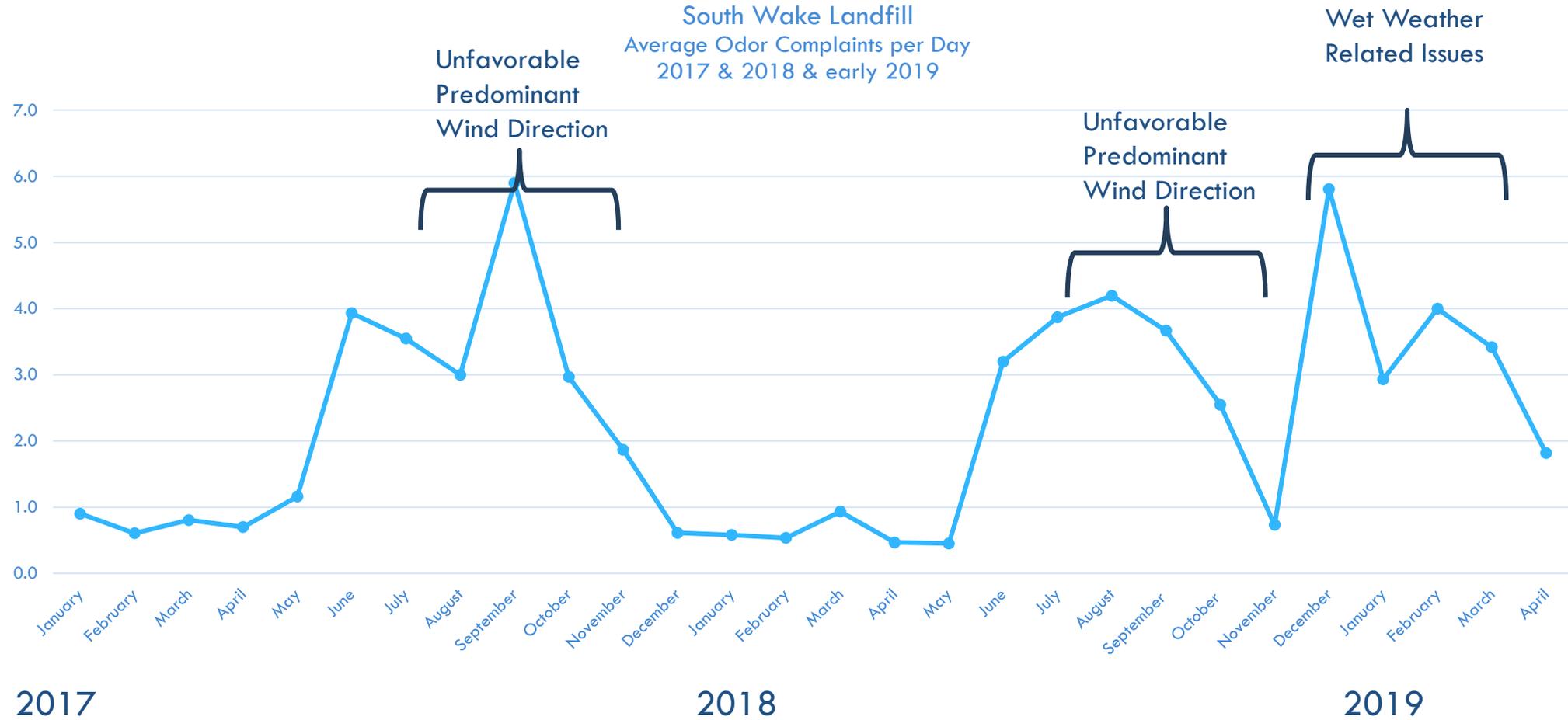
Working Face Related

- Extremely wet waste
- Restaurant waste stored in dumpsters for multiple days
- Use of Alternative Daily covers
- Waste is covered EVERY DAY, without exception

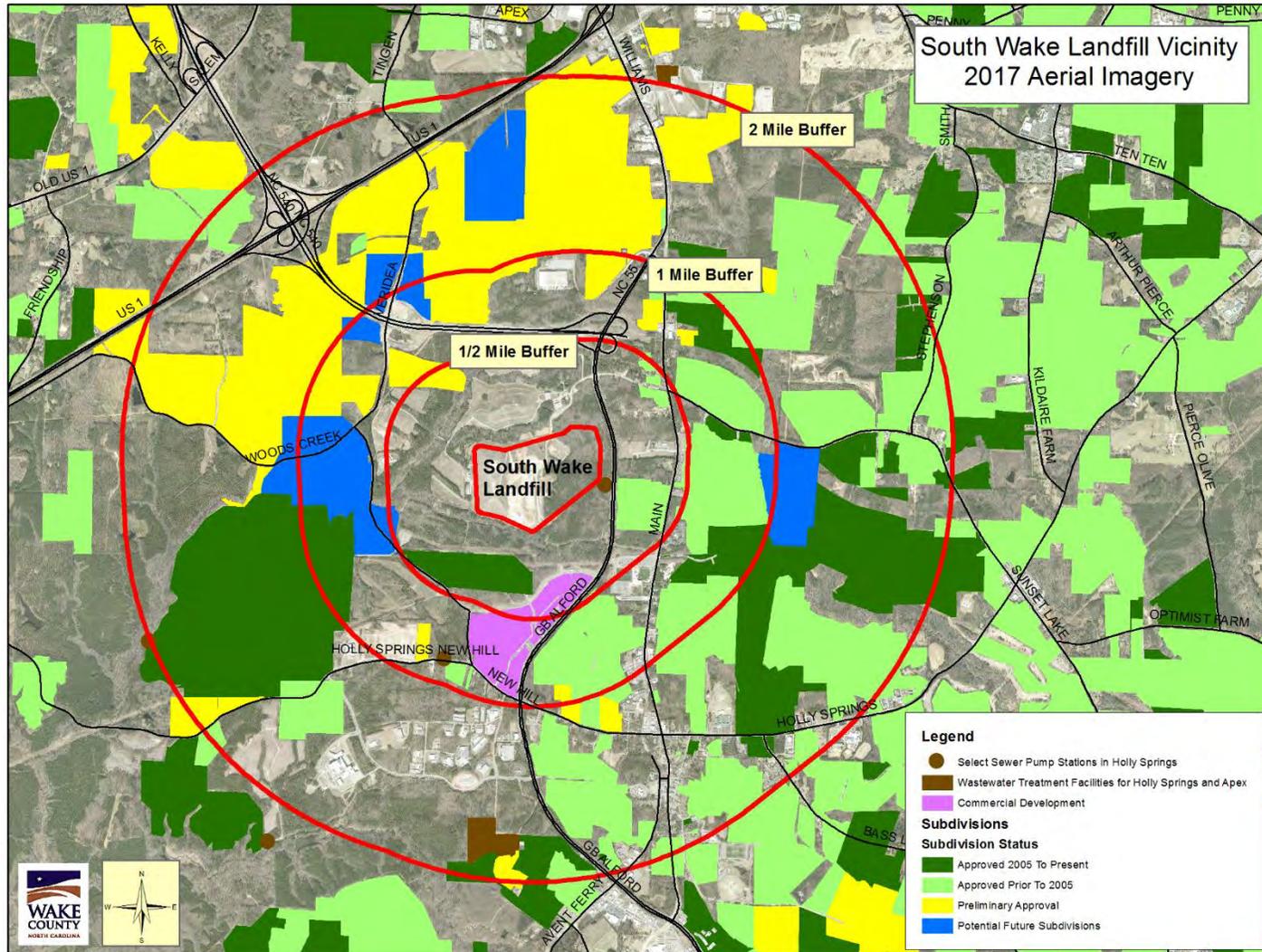
Landfill Gas Related

- Shutdowns due to electrical storms
- System gets out of balance due to rain or other environmental conditions
- System operational 99+% of time

Odor Complaint Data



Aerial Maps of Development



Public Landfill Tours

- ❑ **2019 Public Tour Dates:**
 - ❑ May 8 (sold out)
 - ❑ June 8 (7 spaces)
 - ❑ Register now for tours through Dec
- ❑ **Eligibility:**
 - ❑ Aged 8 or over by date of tour.
 - ❑ Wake County residents.



Private tour bus at top of landfill

Upcoming Outreach Events

Local Festivals

- 4/27, Songbird Celebration
- 4/27, Spring Daze
- 5/12, May Flowers
- 5/18 – 5/19, Artspllosure

Compost Bin Sale

May 1 – 31

www.wakegov.com/compost



QUESTIONS?

