

#### **DNRP WTD**

# Loop® Biosolids Program

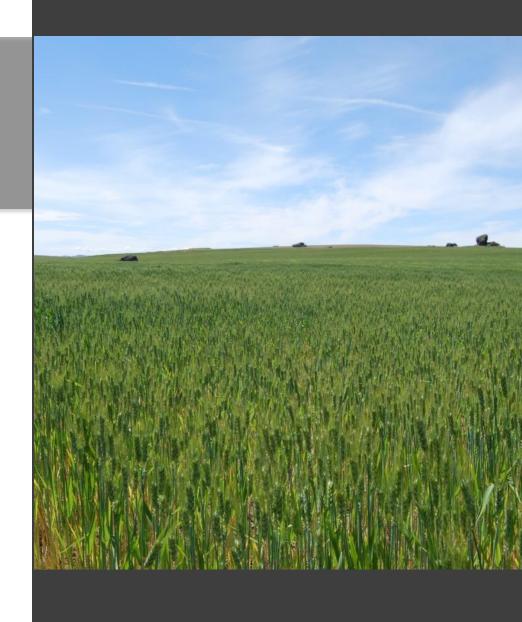
Rebecca Singer Biosolids Program Manager, King County WTD





#### Introduction

- King County Biosolids Program
- Biosolids Regulations
- Biosolids Process
- Current State of KC Program
- Challenges/Opportunities



# **King County Biosolids Program**

#### 1970's:

- Clean Water Act
- Inception of King County program
- Forest Application Begins

#### 1980's:

- EPA award
- Expansion of Forest Application

#### **1990's - Present**:

- Ag partnership begins
- Composting partnership



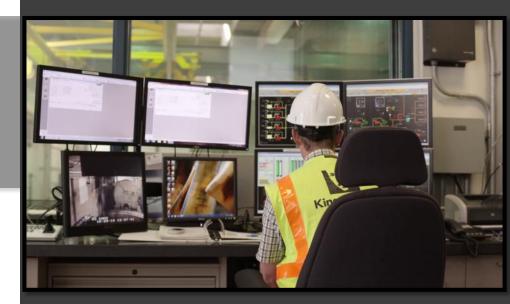
#### Regulations

#### **EPA 40CFR503**

- Developed in 1993
- Reviewed in 1996 & 2002
- Self implemented with annual reporting

Washington State RCW 70.95J Ecology WAC 173-308

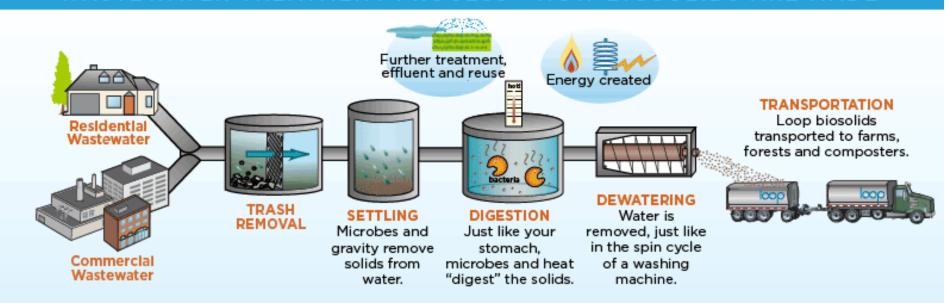
- Written in 1998
- Regulated by Ecology with annual reporting and 5 year permit cycle





## Making Biosolids

#### WASTEWATER TREATMENT PROCESS - HOW BIOSOLIDS ARE MADE



King County makes biosolids through anaerobic digestion. This process uses bacteria to breaks down organic matter in the absence of oxygen. The end products are biogas and biosolids.

# Why Beneficial Use?

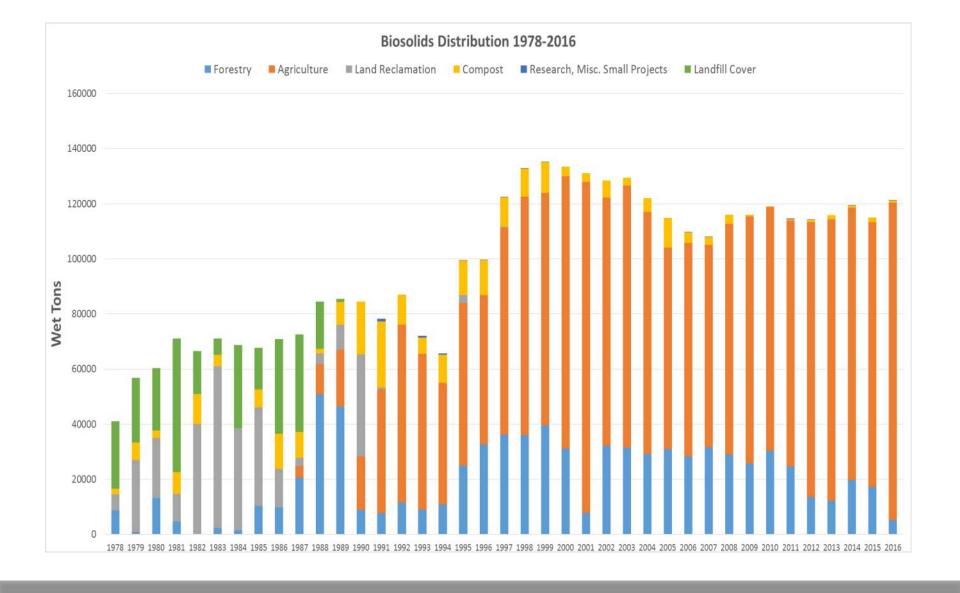
- Reduced need for chemical fertilizers
- Improve plant growth
- Reduce soil erosion and nutrient run-off
- Alleviate soil compaction
- Help soil retain water
- Carbon Sequestration



#### **Current Biosolids Program**

- Transportation
- Agriculture
- Forestry
- Outreach
- Research





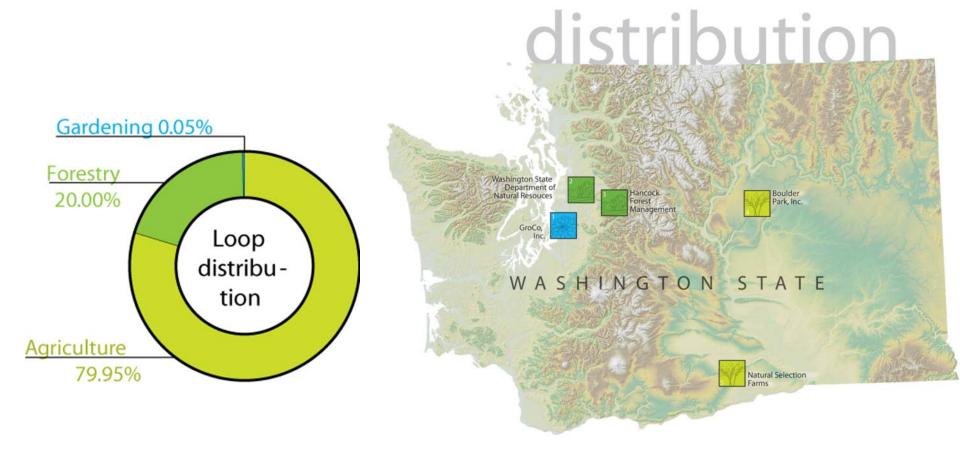
### Biosolids Distribution

# Biosolids Hauling:

2016:

3903 trucks
OR
325 trucks a month
OR
15 trucks a day





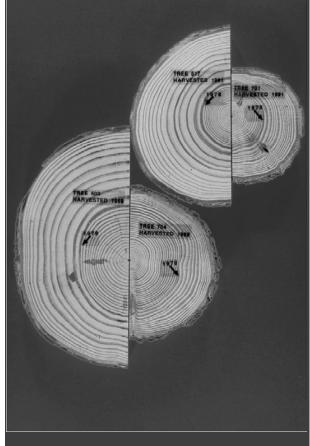
### Where do we go?



# Agriculture Projects

BPI – 90,000 acre partnership NSF – year round and winter backup







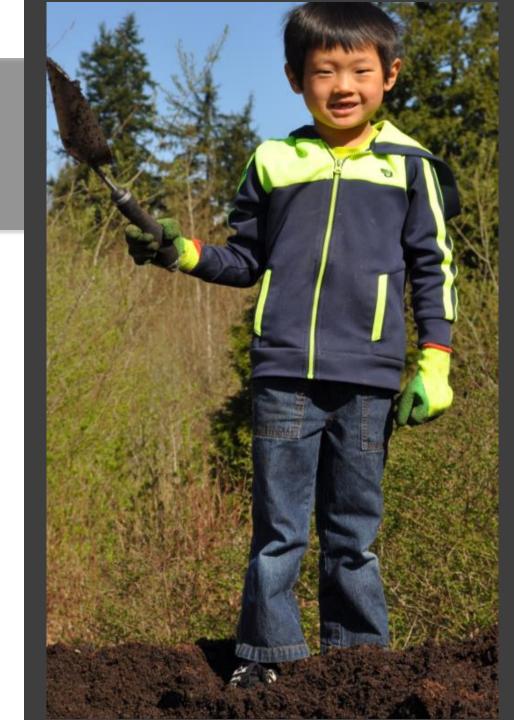
# Forestry Projects

DNR – 300 acres per year Campbell – 1000 acres per year

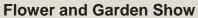
# Composting GroCo partnership

# Owned and Operated by Sawdust Supply

- Class A compost
- Less than 1% King County biosolids production
- Provides 100 yds each year for public outreach and education











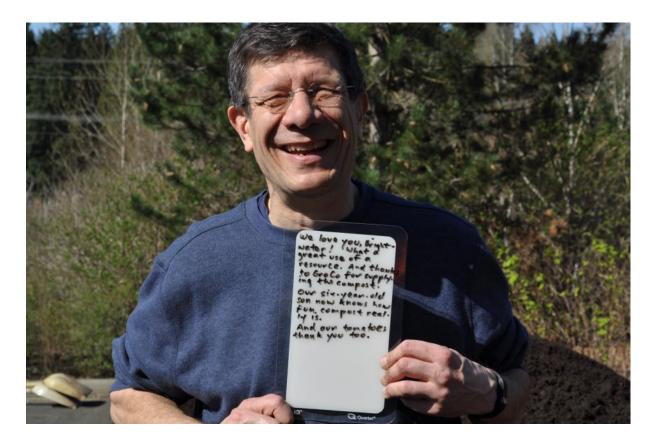
CHOMP!

### Public Outreach and Communication



Research and Reclamation

#### What's Next?



- Find solutions to challenges faced in 2016
- Explore options for expanding market of current product
- Strategic Planning
  - Address challenges
  - Provide options for growth
  - Write a 10 year plan with a 5 year implementation strategy

### Questions?

#### Rebecca Singer

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