# Progressive *Lessons Learned* - A Continuous Improvement Process

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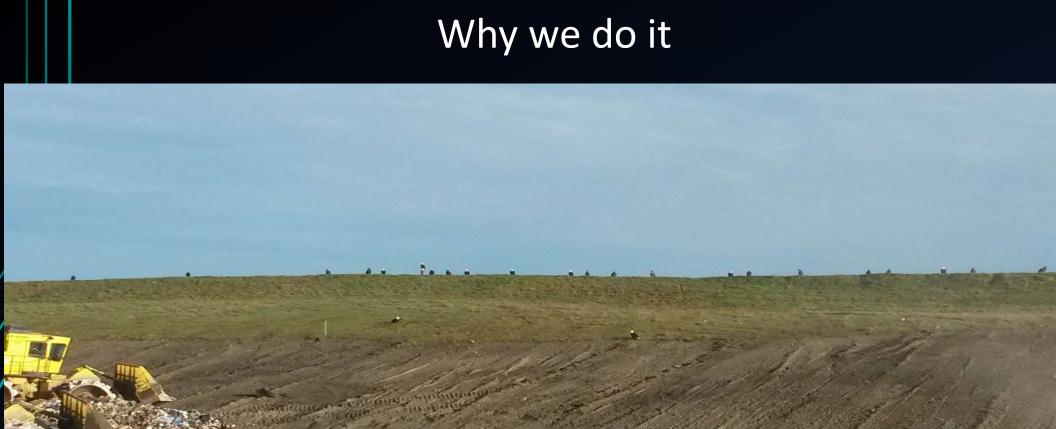
# George or Washington



# Why we do it

# Why we do it





#### **Presentation Outline**

- King County Solid Waste Division
- Factoria Recycling and Transfer Station Project
  - Key Lessons Learned
    - **✓** Operations Perspective
    - **✓ Project Management Perspective**
- From Lessons Learned to Knowledge Transfer
- Incorporating Lessons into Future Projects



# Solid Waste Division Service Area

- 8 Transfer stations
- Cedar Hills Regional Landfill
- 2 Drop Boxes

#### Factoria Recycling & Transfer Station

#### **Key Lessons from old station**

- Layout inefficient
- Processing Equipment
  - Stationary compactors vs pre-load compactors
- Priority Services
  - Limited space
  - Recycling vs HHW

#### **Factoria Transfer Station**



#### Modern Era Transfer Stations

Bow Lake & Shoreline Transfer Station

- Constructed 2012 & 2008
- Entrance
- Separation of SWD and customer traffic
- Traffic control system
- Yard Waste/Wood waste processing

#### Modern Era – Bow Lake Transfer Station



### What we learned: operations

- Separation of operations and customers
- Traffic management
- Processing floor
- Methodology for engagement needs improvement

# New Factoria Recycling & Transfer Station



#### Factoria Lessons Learned

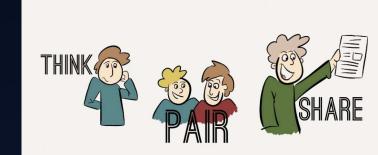
- Design flat floor
- Traffic flow
- Machine control
- Owner representation

### **Lessons Learned Challenges**

- Gathering end-users feedback
- Lessons reside with individuals
- Loss of institutional knowledge

# Think, Pair, Share

How do you capture your organization's institutional knowledge?



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#### Lessons Learned: project management

- Requirements collection employee engagement
- Performance -based specifications quality control
- Risk management proactive
- Communications

# Collect requirements

- Understanding stakeholders requirements
- Incorporating owner's requirements
- Delivering the right product



# Risk Management

- Uncertainties failed factory test
  - Lesson learned inspector at the factory
- Unknown delivery schedule
  - Lesson learned allow sufficient time



#### Communications

"The problem with communication is the illusion that it has been accomplished" – George Bernard Shaw

"What you do speaks so loud that I cannot hear what you say" – Ralph Waldo Emerson

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From Lessons Learned to Knowledge Transfer processes Capture Apply Analyze Contextualize Store Retrieve

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# Processes for Incorporating Lessons 1 of 3

- Employee Engagement
  - Multi-tier meetings
  - Feedback loops
  - Technical staff integration







#### Processes for Incorporating Lessons 2 of 3

- Develop Performance-Based Specifications
  - Major equipment
  - Facilities
- Building Information Model
- Supervisory Control And Data Acquisition

## Processes for Incorporating Lessons 3 of 3

- Communications
  - On-site SWD site engineer
  - Continuous focus on relationships



#### Call to Action!

- Never stop learning
- Apply new lessons
- Evaluate the outcome
- Share the results
- Improve continuously



