



# Steward Panel Discussion

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*MODERATED BY DAVY CONNERS*

MARY JOAN PUGH, NORTH CAROLINA ZOO

AUBREY MEADOWS, ENGINEERED SINTERED COMPONENTS

JANE WOODALL, DELL – APEX

VICKI LEWIS, FLEET READINESS CENTER EAST



# ESI Steward Requirements

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Mature Environmental Management System.

Aggressive environmental performance goals.

A commitment to meet and go beyond compliance.

An EMS that is integrated into the core business functions.

A process of communicating with the local community about program activities and progress towards performance goals.

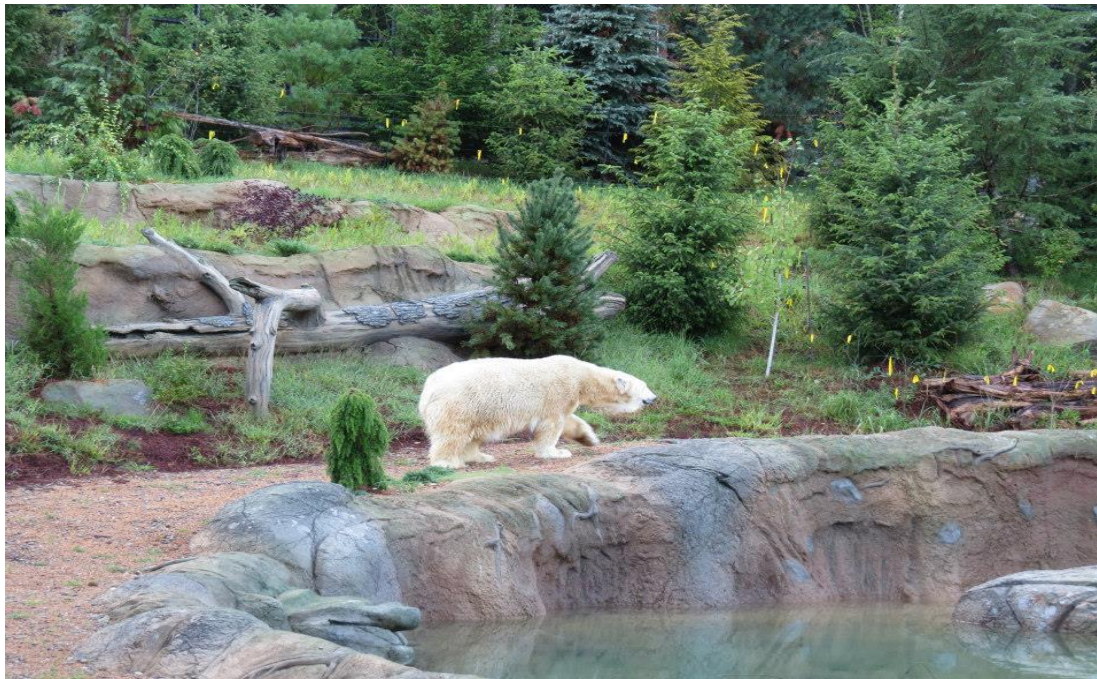
Agree to mentor other ESI members as requested.

# North Carolina Zoo

## Environmental Stewardship Initiative

May 2, 2017

### AGGRESSIVE GOALS



# ENERGY

GOAL – 30%  
reduction by 2015  
using a FY 03  
baseline

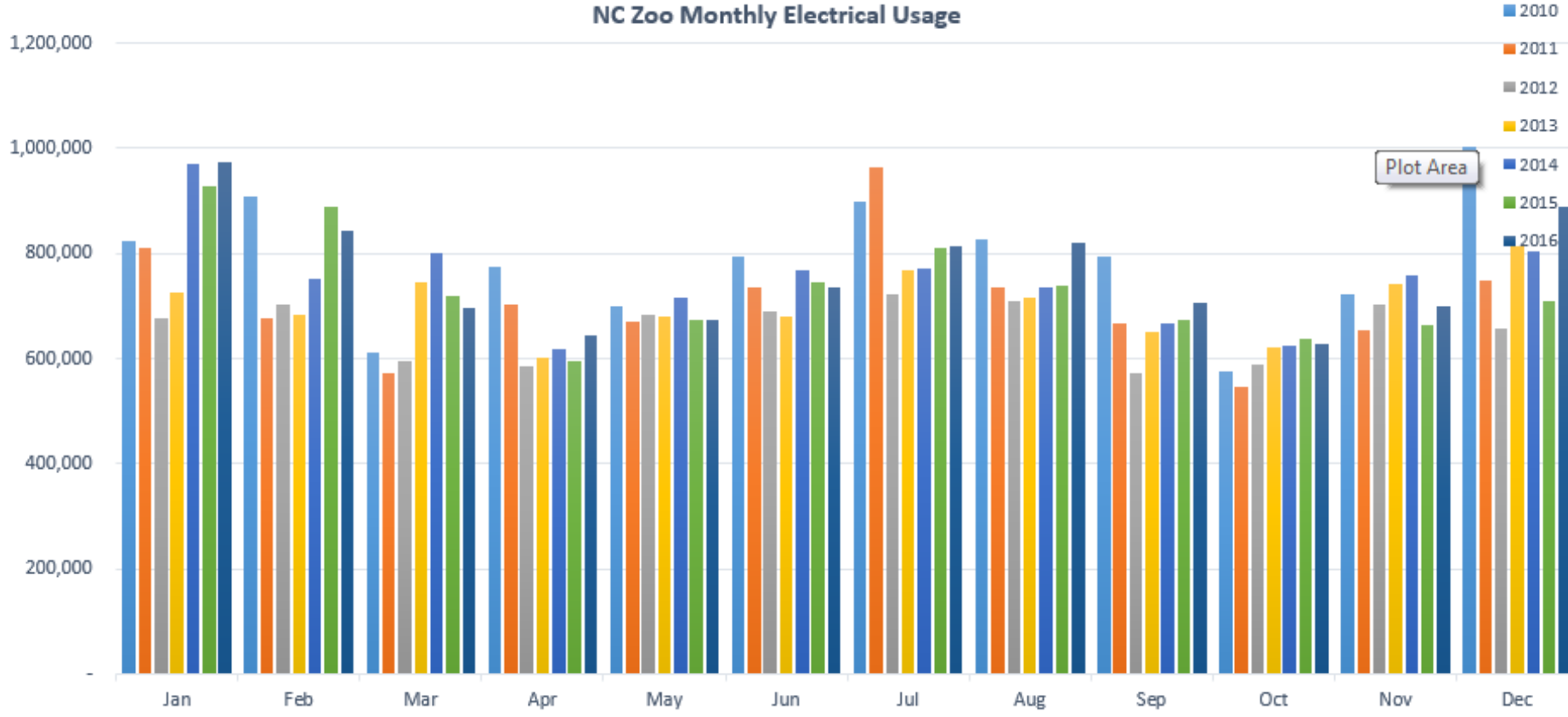
Strategy – Energy  
Upgrades at Top Energy  
“Hogs”

- Polar Bear/Rocky Coast
- Desert
- Aviary
- Education Center



# ENERGY

NC Zoo Monthly Electrical Usage



# WATER

GOAL – 30% reduction by 2015 using a FY 03 baseline

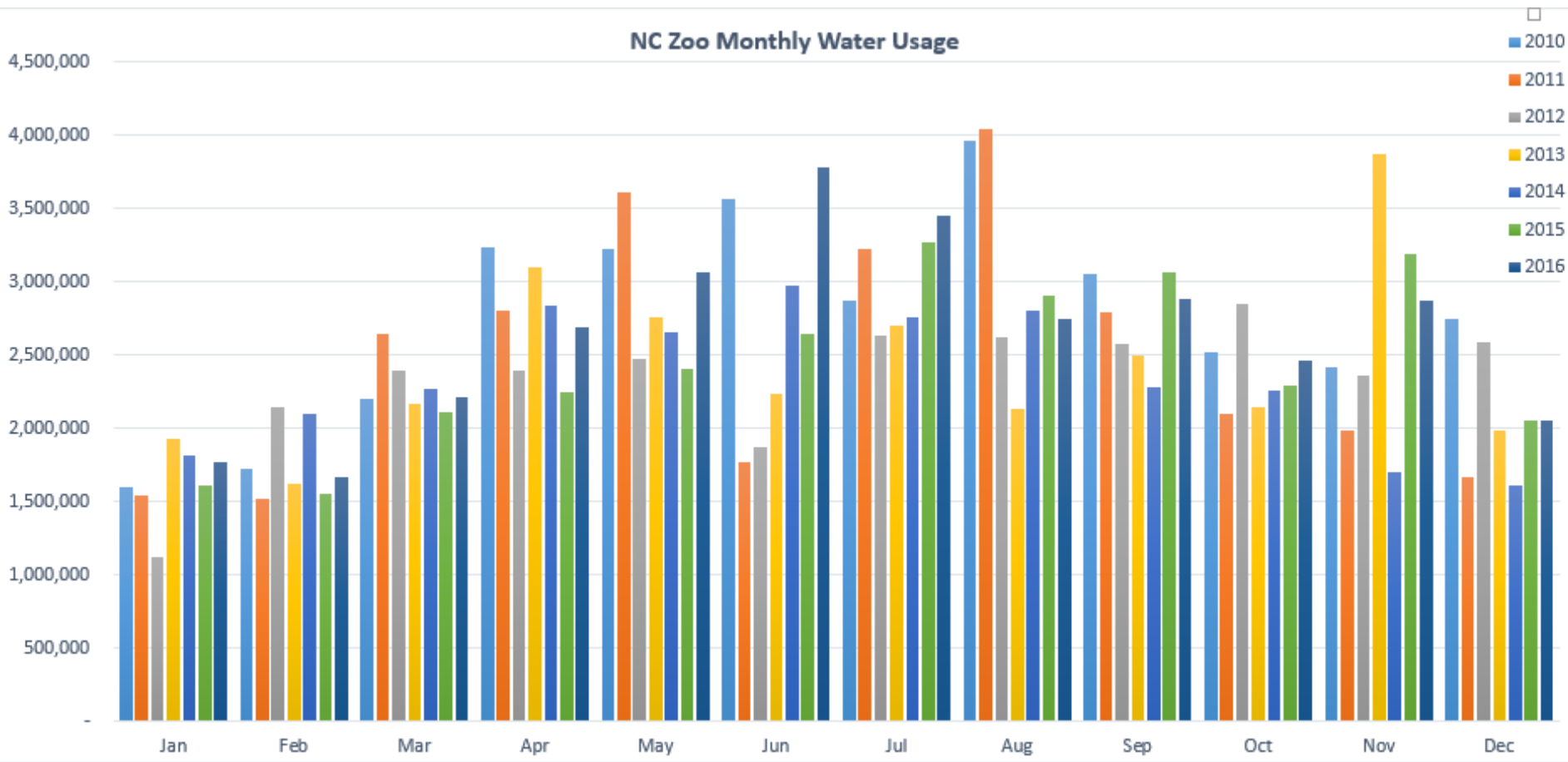
## Strategies

- Increase nonpotable for irrigation
- Repair leaks in pools
- Maintain master irrigation control
- Install water efficient faucets and toilets
- Alternate dry versus wet cleaning in Animal areas



# WATER

NC Zoo Monthly Water Usage



# WASTE

## GOAL – Zero Waste to Landfill

### Strategies

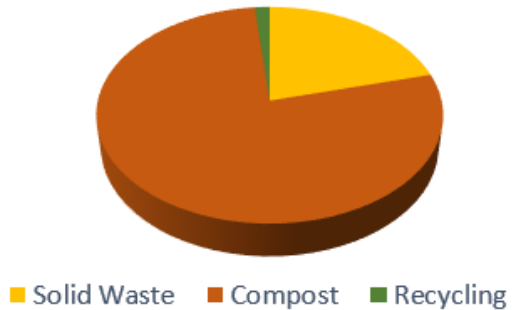
- Increase compost – primate waste
- Increase visitor awareness of recycling especially polystyrene foam cups
- Increase employee awareness of reusing and recycling
- Replace water fountains with bottle fill stations



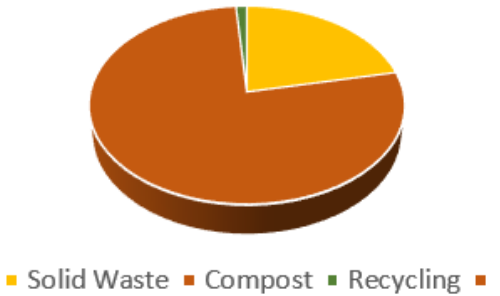


# WASTE

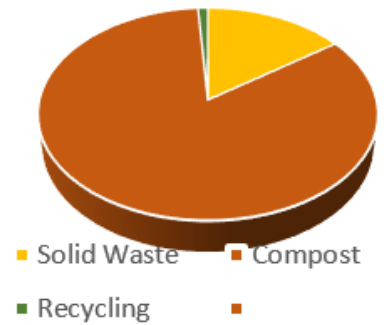
2012 Solid Waste by Category



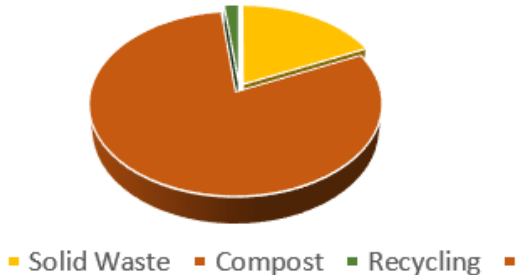
2013 Solid Waste by Category



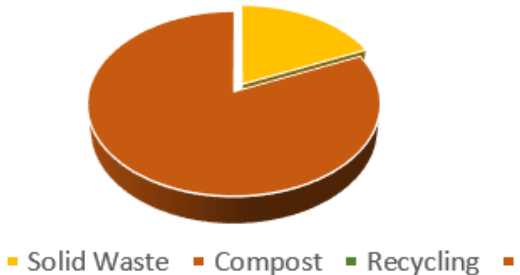
2014 Solid Waste by Category



2015 Solid Waste by Category



2016 Solid Waste by Category



# GOAL

Improve Your  
Ecological Footprint





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# Engineered Sintered Components



*Aubrey Meadows, EHS,  
with Engineered Sintered  
Components for 3 years.*

- *Since we set out to become Zero Waste to Landfill, we have been successful in removing our Swarf, Oily Solids waste and Wood Waste from the Landfill. This removed an additional 113.4 Tons from the Landfill in 2016.*
- *I was elected Chairman of the Global Sumitomo Electric Group Environmental, Health and Safety Committee*

## ESC Company Profile

Name:	Engineered Sintered Components LP.
Location:	Troutman, NC (35 miles North of Charlotte, NC)
Established / Operations Start:	February 1989 / March 1990
Ownership:	 95.9% - Sumitomo Electric U.S.A. Holdings  4.1% - Eaton Corporation
Land:	90 Acres (364,200 m <sup>2</sup> )
Facility Size:	Plant #1: 144,000 ft <sup>2</sup> (13,400 m <sup>2</sup> ) Plant #2: 50,000 ft <sup>2</sup> (4,650 m <sup>2</sup> )
Certifications:	TS16949 / ISO 14001
Number of Employees:	397 (SEI 4 / <u>Atsumi Tech 2</u> )
Capacity:	600t/month



# Zero Waste to Landfill Journey



## Started February 2016!



ESC signed a contract with Instream Environmental to recycle swarf! This removed an average 10 Tons per month from the Landfill! This swarf is used to make rebar!

ESC is now 97% Zero Waste!



## Started October 2016!

ESC worked with Republic Services and L. Lingle's Landscaping to have our wood waste processed into various mulch products to be used for landscaping. This removed an average 13.5 Tons per year out of the landfill!



Last: Breakroom trash (cups, earplugs, food).

# PARTNERSHIPS WITH OUR COMMUNITY



## Local Elementary, Middle & High Schools





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# Mentoring / Best Practice Sharing

2017 ESI Members Meeting

May 2, 2017





# Mentoring...



# Eaton Visit to Dell

## Highlights

- Foam Densifier
- Shared recycling resources
- Utilization of our janitorial service to segregate production recyclables
- Lean Six Sigma – also drives positive environmental impacts (↓electricity)



# Dell Visit to Eaton

## Highlights

- Eaton segregation of production recyclables in their work cells
- Site waste champions (in addition to EH&S)
- Visible metrics
- Kaizen – 3 / year / person
- Employee engagement



# Who Mentored Who?







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