# Fayetteville Public Schools Energy Programs

Summer Energy Academy – June 2014 Dana Smith, FPS Sustainability Coordinator



**FPS By the Numbers** 

- 9,000 students
- 14 schools
- 1400+ teachers and staff
- 1.4 million sq. feet building area
- \$1.6 million annually on utilities
  - > \$1.1 electricity
  - > \$280K water/sewer
  - > \$250K natural gas
- 30% waste diversion



# **Sustainability Office Initiatives**

- Energy Conservation
- Wildlife Habitat Certification
- Waste Reduction
- Green Teams
- LEED Education
- Indoor Environmental Quality
- Seed to Student:
  - FPS Farm to School
  - School Gardens





**Green Team** 

Started in 2006

 Student environmental clubs at each school

 Leader meeting / professional development each semester

End of Year Celebration Event

Annual Awards

Eco-Hero Program

Current Energy Project:

Light and small appliance count

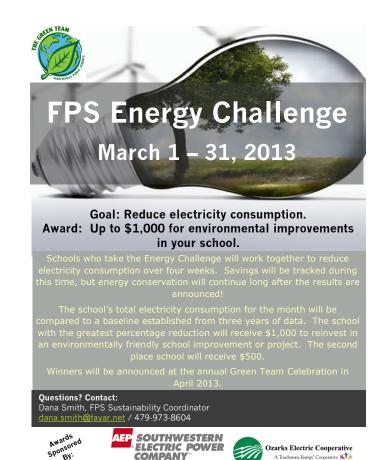
 Replace incandescents to CFLs (through Swepco/Clear Result incentive program)



# **District Energy Challenge**

- 2012, 2013
- Month long challenge measuring kWH –
   % change over baseline
- \$1,000 first place; \$500 second place (partnered with local utilities for sponsorship in 2013 & 2014)





A unit of American Electric Powe



# **Energy Management**

- SchoolDude Utility Direct and Energy Star Portfolio Manager
- In-house Energy Management System 1983–1995
- 1997/98 Trane Tracer BAS Installed
- Since 2000:
  - Operate air systems for optimum temperature and comfort when buildings occupied (7am – 4pm)
  - 48 hour advance override required
  - Temperature Setpoints:

	Occupied	Unoccupied
Heating	74°	60°
Cooling	72°	80°



# **Energy Management**

#### **Lighting:**

- Flourescent lighting updated from T12 to T8 GE Ecolux (2000-2004)
- High pressure sodium lights updated to T5 (2010-2013)
- Motion activated light switches in 4 newest schools

#### **HVAC:**

- Upgraded when replaced (80% more efficient exterior units, 94% interior units)
- Air filters changed 3 times a year

#### **Building Envelope:**

- TPO roofing (white membrane) adopted for all roof replacements
- Low-e windows used when replacing a bank of windows



### **LEED Schools**

- 3 LEED Schools in District:
  - Butterfield Trail Elementary (LEED Certified)
  - Happy Hollow Elementary (LEED Certified)
  - Fayetteville High School Phase 1 (LEED Silver)
- School Board Approval and Support
- Energy Savings + Integrated Design









# Dana Smith FPS Sustainability Coordinator <u>Dana.smith@fayar.net</u> 479-973-8604

## Follow us on Facebook: <a href="https://www.facebook.com/FPSGoesGreen">https://www.facebook.com/FPSGoesGreen</a>

And Twitter!
SustainabilityOffice@FPSGoesGreen

