

## Watt's Up?

DMPS water consumption:

- 81,651,822 gallons of water 07-08 school year, equal to fill 136.09 Olympic size swimming pools.
- 77,860,703 gallons of water 08-09 school year, equal to fill 129.77 Olympic size swimming pools
- 68,063,878 gallons of water 09-10 school year, equal to fill 113.44 Olympic size swimming pools

As a district, we have reduced water consumption by 13.5 million gallons over the past two years. That's enough water to fill almost 23 Olympic size swimming pools!



Lincoln High School Pool

## Learn More @

"The future of Earth's water resources depends on today's children understanding the importance of water conservation and efficiency. WaterSense is committed to helping teachers communicate these values." Visit the EPA's website at [www.epa.gov](http://www.epa.gov) for resources and make sure to visit **WaterSense for Kids** and play EPA's interactive online quiz in your classroom!

Source: [www.epa.gov](http://www.epa.gov)

DMPS utilizes ENERGY STAR® Portfolio Manager to benchmark energy and water usage and track conservation. Visit [www.energystar.gov](http://www.energystar.gov) to learn more.

Source: [www.energystar.gov](http://www.energystar.gov)



Click the image or visit [www.energystar.gov](http://www.energystar.gov) to take the pledge.

## Sustainable Schools ...

*Sustainability can be defined as "meeting the needs of the present without compromising the ability of future generations to meet their needs". All buildings, even schools built over 100 years ago, can become more sustainable.*

Source: Northwest Energy Efficiency Council (Brundtland Report '87)



Oak Park Elementary, built in 1891, is the oldest school ENERGY STAR® labeled for 2010, with a current rating of 87.

While student achievement is the district's first priority, conservation and sustainability are also very important. Areas of sustainable operations include energy and water conservation, indoor environmental quality, waste management and recycling, landscape management and environmental purchasing. According to the Northwest Energy Efficiency Council, sustainability in buildings is achieved by:

- "increasing the efficiency with which buildings and their sites use and harvest energy, water, and materials, and
- reducing building impacts on human health and the environment, through better siting, design, construction, operations, maintenance and removal—the complete building life cycle."

## Saving Water, Saves Energy and Resources

"It takes a considerable amount of energy to deliver and treat the water you use everyday. American public water supply and treatment facilities consume about 56 billion kilowatt-hours (kWh) per year—enough electricity to power more than 5 million homes for an entire year. For example, letting your faucet run for five minutes uses about as much energy as letting a 60-watt light bulb run for 14 hours.

By reducing household water use you can not only help reduce the energy required to supply and treat public water supplies but also can help address climate change. In fact, if one out of every 100 American homes retrofitted with water-efficient fixtures, we could save about 100 million kWh of electricity per year—avoiding 80,000 tons of greenhouse gas emissions. That is equivalent to removing nearly 15,000 automobiles from the road for one year!" For more information, see **Saving Water Saves Energy**.

Source: [www.epa.gov](http://www.epa.gov)

According to the EPA, water leaks can account for an average of 10,000 gallons of water wasted in the home ever year. Two common sources of water leaks are toilets and dripping faucets. A leaky faucet that drips at the rate of one drip per second can waste more than 3,000 gallons per year and a toilet that runs constantly could waste 200 gallons of water or more a day.

Source: EPA's WaterSense Program



**Help conserve our resources,  
please report leaky faucets and toilets to your custodian.**



# Check It Out ...

Iowa Energy & Sustainability Academy  
Des Moines Public Schools

what's new from our students.

By IESA students—



Tory Walker-Zepeda



Genaro Ruiz

In the beginning of the year for the IESA class we had our first tid bit. A tid bit is a fast, simple, weekly challenge given by Mr. Beall which is an environmental topic of importance or a person of significance. One of the first tid bits this year was water always wins. Water always wins is Strickler's 4<sup>th</sup> law of Geofantasy. Which states that not only does water make a great liquid refreshment it also has the power to dissolve anything and everything... given enough time. In any event nothing can withstand the power of water, and everything that exists will ultimately be dissolved, broken into little pieces, or in some other way altered into new and different forms.

What sustainability means to us is how long we can keep something under control before we corrupt it. On our trip to Chicago we visited a smart home at the Museum of Science and Industry. The Smart home is a self-sustainable home which has some green features. Like a wind turbine, solar panels, roof garden, and a rain collecting system. Some of the furniture in the smart home was made out of an old oak tree which fell in 2009. There is no definite – final definition of sustainability. It is a concept, a way of life. We now understand that our understanding and way of defining sustainability will be an ongoing, never ending process.

This first semester was an introduction to many concepts which included a study and respect for water and sustainability. This study will continue the second semester as we expand our knowledge in many areas of energy, sustainability, and recycling.

# ENERGY REPORT CARD

## YEAR-TO-DATE SITE ENERGY USAGE REPORT

July 1, 2010 – November 30, 2010

Percentage change as compared to the same time period from previous year  
Ranked Lowest to Highest Energy User (measured in kBtu/sq ft)

Site	Total Energy	% Chg	kBtu/Sq Ft	Site	Total Energy	% Chg	kBtu/Sq Ft
McKee	232	14%	5	Phillips	630	0%	15
Stowe	418	-1%	7	Jefferson	658	-2%	15
Hillis	411	-2%	7	Downtown School	604	-8%	15
Windsor	472	-2%	8	Monroe	1,181	30%	16
Morris	580	-9%	8	McCombs			
Dean Operations				Greenhouse	200	18%	16
Center♦	875		9	Casady	695	7%	16
Mitchell■	297		9	Lincoln South	1,804	-13%	16
King	485	17%	9	McKinley	875	7%	17
Samuelson	506	6%	9	Central Academy	1,474	-3%	17
Perkins	509	2%	9	Moulton	2,117	-7%	17
South Union	623	-3%	9	Hiatt Middle	1,813	-26%	17
Wright	265	-4%	9	Park Ave	986	-31%	17
Greenwood	622	6%	10	Central Campus•	8,441	1%	18
Carver	914	3%	10	River Woods	1,103	-4%	18
Goodrell	1,143	-2%	10	Findley	753	31%	19
Howe	384	-14%	10	Welcome Center	121	1%	19
Scavo @ Moore■	495		11	Hoover/Meredith	5,558	-16%	19
Hanawalt	476	2%	11	Hoyt	2,034	-8%	20
Hubbell	610	-6%	11	Lovejoy	669	-8%	20
Jackson■	551		12	East Academy	1,119	29%	21
Brubaker	924	7%	12	East	7,089	-15%	21
Oak Park	717	-1%	12	Lincoln	7,228	-6%	23
Aviation Lab	179	-5%	12	Edmunds	1,079	-9%	23
Capitol View	884	-10%	12	Studebaker	1,061	-2%	24
Cattell	556	-12%	12	River Plaza	315	7%	25
Garton	756	-17%	12	Merrill	2,389	1%	26
Madison	516	-26%	12	Walnut Street	3,044	-6%	26
Willard	795	4%	13	North	5,954	-8%	27
Cowles	587	-4%	13	McCombs	2,387	8%	28
Weeks	1,409	-13%	13	Brody	2,689	-9%	29
Callanan	1,678	19%	14	Smouse	1,590	-7%	30
Pleasant Hill	518	-2%	14	Van Meter	1,881	11%	33
Harding	1,756	-18%	14	Roosevelt•	8,233	15%	34

■ Building under construction comparison year 2009-10    ♦ Building unoccupied part of comparison year 2009-10  
● Building occupied during renovations

Visit [www.dmps.k12.ia.us](http://www.dmps.k12.ia.us) for more details of the district's energy mission and building performance.  
**Tell us about it!** Do you want to share your ideas for saving energy or helping our environment? Or want to let us know about your projects? E-mail [lisa.simpson@dmps.k12.ia.us](mailto:lisa.simpson@dmps.k12.ia.us).



Recognized by the U.S. EPA for the superior energy management of our schools

2010