

The Energy Educator



ENERGY MANAGEMENT

Year Three

Walla Walla Public Schools
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The Energy Management Program

Purpose: To avoid wasting utilities in order to save money to be used for instructional needs.

Guiding Rules:

- Do not interfere with the classroom instructional program.
- Do not light areas that are not in use.
- Do not heat or cool unoccupied areas. Establish and practice equipment shutdown procedures for daily and holiday savings.

Three Steps to Energy Savings

1. Turn off lights when you leave the room.
2. Turn off all electronic equipment at the end of the day.
3. Turn off or setback the thermostat every day.

Settings for Setback: Heating 55 Degrees
Cooling 90 Degrees
(Fans set on Auto.)

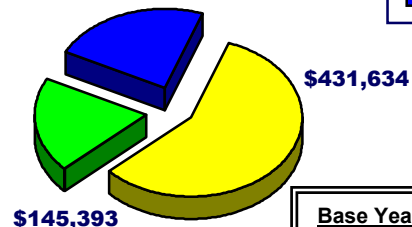


Year 3/ Oct. 2001– Sept. 2002

	<u>Percent Saved</u>
ADMINISTRATION	13.72%
BERNEY ELEMENTARY	24.51%
BLUE RIDGE ELEMENTARY	29.32%
EDISON ELEMENTARY	22.49%
GARRISON MIDDLE SCHOOL	21.31%
GREEN PARK	26.43%
PAINE CAMPUS	32.61%
PIONEER MIDDLE SCHOOL	32.15%
PROSPECT POINT	27.53%
SHARPSTEIN	NA
SUPPORT SERVICES	18.60%
WALLA WALLA HIGH SCH.	23.69%
Grand Totals:	27.17%

Year 3 Costs \$749,180

\$172,153

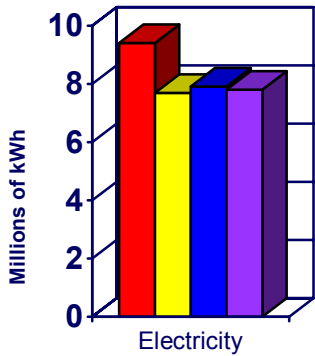


Base Year Costs: \$748,288
Year 1 Costs: \$645,033
Year 2 Costs: \$681,280

Consumption Comparison

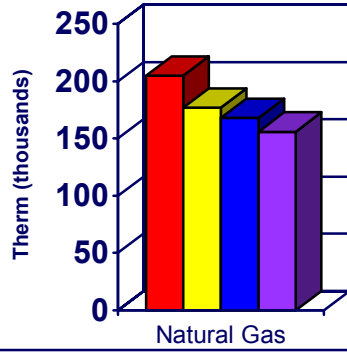
Electricity

Saved 1,679,472 kWh
18%



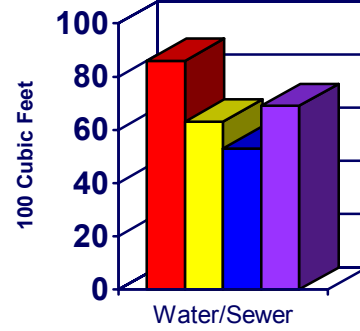
Natural Gas

Saved 48,809 therms
24%



Water/Sewer

Saved 16,714 CCF
19%



■ Base ■ Year 1 ■ Year 2 ■ Year 3

FULL PROGRAM SAVINGS

Building	Adjusted Building Cost	Actual Cost	Cost Avoidance	Percent Saved
ADMINISTRATION	\$59,077	\$50,338	\$8,689	15%
BERNEY ELEM.	\$157,612	\$121,049	\$36,563	23%
BLUE RIDGE ELEM.	\$168,422	\$139,219	\$29,203	17%
EDISON ELEM.	\$89,545	\$68,741	\$20,804	23%
GARRISON MIDDLE SCH.	\$225,618	\$174,267	\$51,351	23%
GREEN PARK ELEM.	\$158,238	\$132,920	\$25,318	16%
PAINE CAMPUS	\$111,054	\$74,657	\$36,397	33%
PIONEER MIDDLE SCH.	\$338,656	\$205,442	\$133,215	39%
PROSPECT POINT ELEM.	\$169,789	\$130,772	\$39,017	23%
REFUNDS AND REBATES	\$60,430		\$60,430	
SHARPSTEIN	\$35,574	\$30,487	\$5,087	14%
SUPPORT SERVICES	\$69,114	\$58,715	\$10,399	15%
WALLA WALLA HIGH SCH.	\$896,056	\$659,256	\$236,800	26%
Grand Totals:	\$2,539,187	\$1,845,914	\$693,273	27%

Year 1 Savings

Oct. 1999 - Sept. 2000

ELECTRIC	24.68%
NATURAL_GAS	9.90%
WATER	29.52%
Total:	23.74%

Year 2 Savings

Oct. 2000—Sept. 2001

ELECTRIC	23.59%
NATURAL_GAS	18.33%
WATER	41.72%
Total:	27.36%

Year 3 Savings

Oct. 2001—Sept. 2002

ELECTRIC	25.70%
NATURAL_GAS	17.78%
WATER	36.49%
Grand Total:	27.17%

YEAR THREE SAVINGS SUMMARY

Year Three Cost Avoidance	\$280,349
Less Operating Expenses:	
EEI Consulting Fees	\$78,029
Salaries	\$18,000
Software & Computing Costs	\$400
Miscellaneous	\$2,000
NET SAVINGS	\$181,920

Websites of Interest:

Local Weather:

www.wrh.noaa.gov/pendleton/climate/climateIndex.html

POWERhouse Home Energy Calculator:

<http://www.article19.com/shockwave/ph.htm>

WWPS Energy Management:

http://www.wwps.org/02_Community_Wire/Energy_Management/energy.htm

FULL PROGRAM SAVINGS

ELECTRIC	23.16%
NATURAL_GAS	15.75%
WATER	44.34%
Grand Total:	27.30%

Did you know:

- The benefits of turning equipment off include financial savings, longer equipment life and reduced risk of damage to motors, computers and lighting caused by power fluctuations/lightening.
- It takes 20 times the energy to keep a classroom at 68 degrees for 14 hrs., then it does to set it back to 55 degrees for 14 hrs. and then bringing it back up to 68 degrees(in 10 degree weather).
- It is more economical to turn incandescent and fluorescent lights off each time you leave the room.
- A F40 rapid start fluorescent lamp operating continuously lasts 4.3 yrs. The same lamp used for a normal 40 hr. work week, lasts 10 ½ yrs. You cut Power Consumption and Replacement Costs.
- A computer left on 24 hrs. per. day is wearing out its components at least 3 to 4 times faster then necessary. A computer operating continuously will have a average life of 2.3 yrs. Turned off nights and weekends it increases to 9.6 yrs.
- Experts in the computer industry have determined that turning them off will not hurt them. They have determined that heat is the primary reason for failure.
- A computer left on for 8 hrs. a day will cost the district about \$50.00 annually. On for 24 hrs. = \$150.00 annually.
- Computer monitors can be turned on and off an average of 5 times per day without creating any problems.