
BUDGET MINI SESSION: FACILITIES, MAINTENANCE AND CUSTODIAL**POLICY ISSUE / SITUATION:**

As part of the 2012-13 budget process, the School Board will receive monthly budget mini sessions in preparation for the adoption of the budget. This presentation covers Facilities, Maintenance and Custodial Services.

BACKGROUND INFORMATION:

The Facilities and Maintenance Departments are responsible for the general management of the District's real property assets totaling 5 million square feet of buildings and 800 acres of property. The Beaverton School District is the second largest property owner within the Urban Growth Boundary in Washington County.

The departments perform buildings and grounds maintenance, forecast future facility requirements based upon growth projections, develops capital (bond) investment programs, and manages the planning, design, and construction of bond projects. Other services include: environmental, hazardous waste, energy & resource conservation services, and demographic analyses for enrollment forecasts. Several District centralized services are also provided including postal services, print shop operations, and courier services. In addition, in 2011-12 the District's custodial services function was reorganized and consolidated under the management of the Maintenance Department.

Financial data and information about various programs and services provided to the District by these departments is contained in the attached report to the Board.

FACILITIES / MAINTENANCE & CUSTODIAL SERVICES

REPORT TO THE BOARD
MARCH 12, 2012



KEEPING IT ALL TOGETHER



Facilities, Maintenance & Custodial Services Mini-Budget Review for the School Board

Overview

The Facilities and Maintenance Departments are responsible for the general management of the District's real property assets totaling 5 million square feet of buildings and 800 acres of property. The Beaverton School District is the second largest property owner within the Urban Growth Boundary in Washington County.

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Organization of this Document

This document provides current information on a wide variety of matters under the cognizance of the Facilities and Maintenance Departments. Separate background papers covering each distinct topic have been included and organized by topic groups. A Table of Contents is included on Page ii to help the reader immediately find detailed information on a particular topic of interest. Pages iii – iv contain an Executive Summary of all the topics to allow for a quick reference.

Table of Contents

Facilities, Maintenance & Custodial Services

Topic No.	Page	Group	Topic Description
-	iii - iv	Summary	Executive Summary by Topic
1	1	Financial	Department Savings, Grants, and Efficiencies
2	3	Financial	General Fund Budget Overview
3	5	Capital	Facilities Plan and Next Construction Bond Planning
4	9	Maintenance	Forecasted Major Maintenance Requirements through 2025
5	11	Maintenance	District Warehouse Operations
6	12	Maintenance	Integrated Pest Management
7	14	Custodial	Custodial & Maintenance Consolidation & New Service Model
8	15	Demographics	Annual Enrollment Projections
9	17	Demographics	Attendance Boundary Changes
10	21	Energy	Energy Conservation Program – Overview
11	25	Energy	EnergyStar Program
12	28	Energy	Solar Photovoltaic Initiative
13	29	Energy	Reimbursable Energy Conservation Facilities Projects (Senate Bill 1149)
14	30	Sustainability	District Sustainability Program
15	32	Sustainability	Oregon Green Schools

Executive Summary by Topic

Facilities, Maintenance & Custodial Services

1) Savings, Grants and Efficiencies. Over the past three years, the Departments have developed savings and efficiencies for the General Fund and obtained numerous grants and funding for reimbursable facilities projects. Together, these efforts have a value of over \$12 million.

2) General Fund Budget Overview. The Departments operate with six Cost Centers in the General Fund, with a combined budget totaling \$25.4 million and 228 APU (excludes construction bond funds). In 2011-12, Custodial Services was centralized for the entire District, resulting in an additional \$8.6 million and 147 APU being reassigned to Maintenance (included in above totals).

3) Facilities Plan and Next Construction Bond. In June 2010, the School Board adopted the *Beaverton School District Facilities Plan 2010*, which forecasts requirements for the next 15 years, and directed staff to prepare for the next BSD construction bond. The key project for the next bond is expected to be the District's sixth comprehensive high school.

4) Forecasted Major Maintenance Requirements. All District facility condition assessments are reviewed and updated on a three-year rotation. The investment requirements are prioritized in three groupings and currently total about \$95 million.

5) District Warehouse Operations. In 2011, Maintenance absorbed the district-wide function of warehouse operations and surplus material management. Services include a web-based inventory, efficient circulation of goods between the warehouse and building sites, immediate updates on surplus inventory from schools, and secure records storage.

6) Integrated Pest Management Program. In 2009, the Legislature passed SB 637, designed to improve pest control in schools, and requiring all school districts in Oregon to implement an Integrated Pest Management (IPM) plan by July 1, 2012. IPM is a process for achieving long-term, environmentally sound pest suppression through a variety of tactics to reduce the food, water, shelter and access used by pests.

7) Custodial and Maintenance Services Restructuring. In order to achieve more efficiency at less cost, building custodians were merged with the Maintenance Department to form one service group in 2011-12. When fully implemented, savings are expected to be \$1.4 million annually.

8) Annual Enrollment Projections. The District Demographer develops annual enrollment projections for grades 1-12 using a variety of information. The Demographer evaluates and integrates the student impact of residential development proposals with regard to available capacity of schools, current enrollment, and projected student impact of approved and planned dwelling units.

9) Attendance Boundary Changes. Facilities Department staff review school enrollments and percentages of occupied capacity on an ongoing basis. The boundary change process, initiated by the Superintendent, is based on the guidance of School Board Policy JC. Several boundary adjustments have been made in recent years.

10) Energy Conservation Program. The District's Energy Conservation Program employs strategies such as the establishment of annual electricity and natural gas conservation targets for each school. A scorecard reporting system is used to provide monthly performance feedback on each building's energy consumption. Construction projects completed from 2008-2010 have added 12% to BSD's inventory of building space, yet total District electricity consumption has decreased 10%, and natural gas usage is down 9%.

11) EnergySTAR Program. EnergySTAR partnership and certifications assure our community that BSD is wisely using its resources and maximizing funds for education. In 2010/11, the District reduced total energy consumption by more than 10%, and had an average EnergySTAR score among the top 11% of all school districts in the country. BSD has 29 EPA certified EnergySTAR schools, more than any other district in Oregon.

12) Solar Photovoltaic Initiative. The Photovoltaic Initiative has enabled the District to secure 15 years of free solar electricity at three District schools at no cost to the District. Additionally, BSD has secured grants totaling more than \$50,000 in curriculum, teacher training, and internet monitoring of the solar systems for maximum educational benefit of these projects.

13) Reimbursable Energy Conservation Facilities Projects. In 2002, Senate Bill 1149 established a mechanism and funding resource to implement energy conservation facilities projects. General Electric and PacifiCorp provide funds that are distributed to school districts for reimbursable energy efficiency facilities projects. Projects completed since 2002 total about \$4.9M.

14) Sustainability Program. School Board Policy EDD and Administrative Regulation (EDD-AR) created an Advisory Committee for Sustainability to help guide the District's adoption of practices that balance environmental, social and fiscal responsibility. Key tasks assigned to the Committee were development of a five-year plan for the District to implement sustainability practices and annual reporting to the School Board.

15) Oregon Green Schools. The Oregon Green Schools Association offers a framework for schools to create resource conservation programs unique to their needs, while Regional Coordinators provide technical assistance and recognition of their efforts. Currently, 31 Beaverton School District schools are OGS certified.

Facilities and Maintenance Departments Savings, Grants and Efficiencies

Background

The Departments have been creative in leveraging multiple sources of funding for the benefit of the District. Grants and reimbursable funding have been secured for multiple projects. Cost savings from various programs have provided resources that were applied to District General Fund budget shortfalls. The District custodial services function was restructured and moved under the Maintenance Department resulting in substantial cost savings. In addition, various efficiency measures and staff reductions have also provided savings. Over the past three years, the value of these efforts has exceeded \$12 million.

Issues, Current Actions & Status

- The attached table provides a detailed tabulation of each measure.

**Facilities Maintenance Departments Cost Saving Measures
Over the Past Three Years**

3/6/2012

Efficiency Description	General Fund	Grants - Other	Explanation - Notes
	Budget Savings	Funding Source	
Custodial & Maintenance Services Restructuring - Labor Cost Savings, FY 2011-12	\$ 400,000		Redesigned Custodial and Maintenance Dept service delivery & implemented the new Model. Provides same level of service with less labor cost. This is on-going savings.
Custodial & Maintenance Services Restructuring - Labor Cost Savings, FY 2012-13	\$ 388,000		Continues phase-in of new Model's staffing structure. This is additional, on-going savings.
Furniture, Fixtures & Equipment outfitting of new (2006 Bond) constructed schools and classrooms	\$ 2,900,000		Facilities Grant program managed very efficiently meeting all new classroom needs with a remaining balance of \$2.9M in cost savings, which were transferred into the General Fund in FY 11-12 budget.
Print Shop Operations	\$ 150,000		Enterprise Fund cost center managed efficiently generating FY 09-10 cost savings, which were transferred into the General Fund in FY 10-11 budget.
Print Shop Operations	\$ 100,000		Enterprise Fund cost center managed efficiently generating FY 10-11 cost savings, which were transferred into the General Fund in FY 11-12 budget.
Capital Center Rent Revenue		\$ 905,000	Revenues from tenants in Capital Center used for Cap Ctr building maintenance and repair work avoiding General Fund expenses from 2009 - 2011.
Seismic Upgrade Projects		\$ 880,000	Obtained a Grant from the State for upgrades to 4 schools.
Energy Efficiency Facilities Projects		\$ 3,397,000	Reimbursable funding applied toward energy efficiency facilities projects, 2009 - 2011. (SB 1149 & ARRA funding)
Reduced Energy Consumption Cost Savings	\$ 1,064,000		General Fund savings in electricity and natural gas costs due to energy efficiency facilities projects plus energy program management (conservation) measures. Cumulative savings over the past 3 years.
Solar PV Systems installed at 3 schools: Capital Center, Springville, Elmonica		\$ 1,500,000	Capital cost funded entirely through partnership with private investors. Investors also providing all O&M services on solar systems for 15 years.
Solar PV electricity generated at 3 Schools; annual District savings for 2012 - 2026	\$ 30,000		Reduces electricity purchases from PGE by 300,000 kWh/year for 15 years.
Curriculum support utilizing solar systems' electricity production data.		\$ 52,000	Includes: Website available District-wide, lesson plans tied to Oregon teaching targets & science kits for 3 grade levels. Grants obtained from Kenyon Energy, PGE, Gerding-Edlen Sustainable Solutions & Bonneville Environmental Foundation covering all costs, including reimbursement for teacher training time (15 teachers for half-day training).
Electronic PGE bill processing for electricity	Estimate not Available		240 bills per month are now received and processed electronically by Facilities and Business Office. Improves accuracy, speed of processing, & requires less staff time. Reduces risk of late payment fees. This efficiency measure was a joint effort with the Business Office and IT Dept. Working to expand to other vendors.
Facilities Development Dept staff reductions	\$ 224,000		Administrator and secretary General Fund positions were eliminated.
Shared Secretarial Support (covering 3 Depts)	\$ 124,000		Deputy Superintendent, Business Office, & Facilities Dept reduced secretarial positions from 3 to 1 over last two FYs.
District-wide Warehouse Management	Estimate not Available		Maintenance Dept absorbed management of District-wide warehouse operations including secure records storage and surplus inventory with no additional staff. Established Webpage with photos for posting surplus inventory items. Provides efficient storage & retrieval system and cost savings by facilitating District-wide reuse of good condition surplus furniture.
Subtotals:	\$ 5,380,000	\$ 6,734,000	
Grand Total	\$12,114,000		

Facilities & Maintenance General Fund Budget Overview

Background

The Facilities & Maintenance Departments operate with six Cost Centers in the General Fund. The combined budget totals approximately \$25.4 million and 228 APU. The table below reflects the adopted budget. Excluded from this data are all the construction bond funds. Effective with the 2011-12 fiscal year, Custodial Services became centralized for the entire district. This resulted in \$8.6 million and 147 APU being reassigned from other district cost centers to the newly combined Maintenance & Custodial Services Dept. (part of grand totals above). The attached charts provide some budget trend historical perspectives.

Printing Services is operated as an Enterprise Fund; budget numbers are estimated for this fund based on anticipated revenue and adjusted accordingly throughout the fiscal year.

Budget Summary

FY 2011-12 General Fund Budgets					
Fund	Cost Center	Cost Center Description	Labor Budget	Non-Labor Budget	Total Budget
100	640	Facilities Planning & Construction	\$ 390,078	\$ 56,983	\$ 447,061
100	641	Maintenance & Operations	\$ 3,960,241	\$ 2,323,597	\$ 6,283,838
100	642	Custodial Services	\$ 10,690,382	\$ 875,022	\$ 11,565,404
100	644	Energy & Environmental Management	\$ 176,634	\$ 70,834	\$ 247,468
100	649	Utilities	\$ -	\$ 6,507,779	\$ 6,507,779
100	655	Mail Services	\$ 60,170	\$ 292,278	\$ 352,448
		Total General Fund Budget	\$ 15,277,505	\$ 10,126,493	\$ 25,403,998

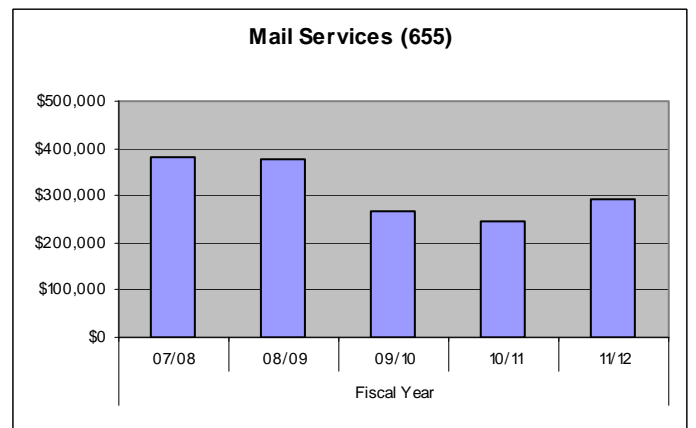
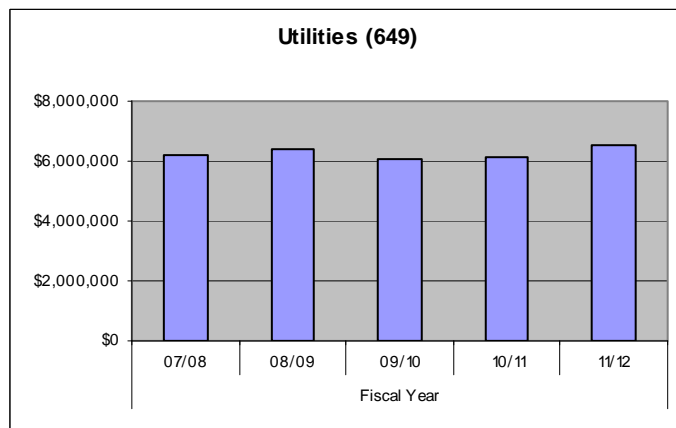
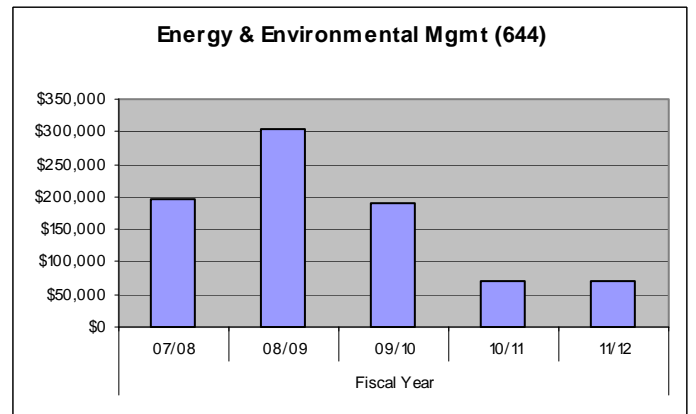
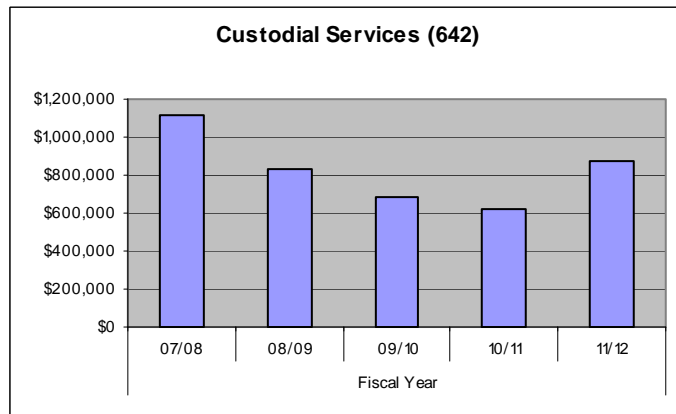
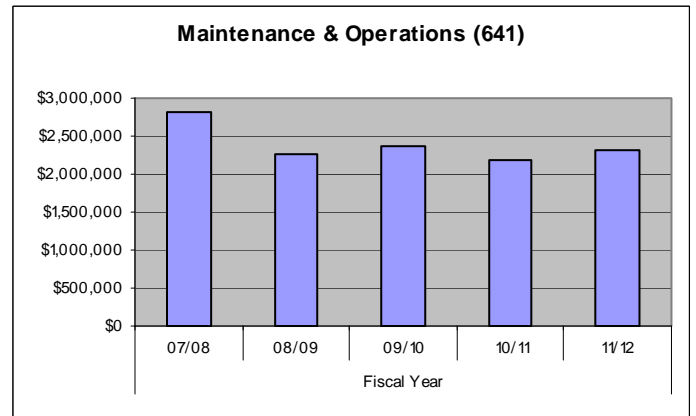
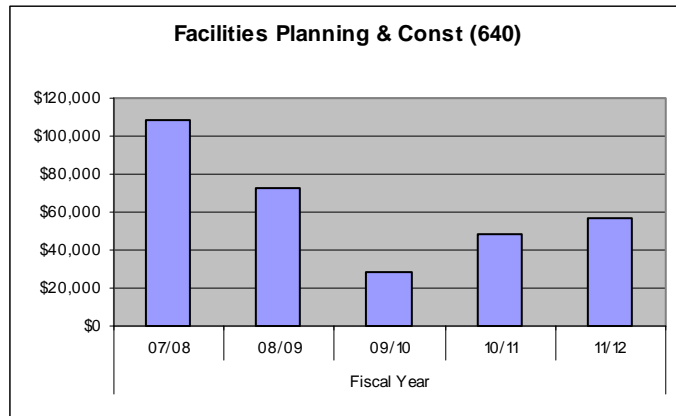
FY 2011-12 Enterprise Fund Budgets					
Fund	Cost Center	Cost Center Description	Labor Budget	Non-Labor Budget	Total Budget
614	653	Printing Services	\$ 105,576	\$ 449,424	\$ 555,000
		Total Enterprise Fund Budget	\$ 105,576	\$ 449,424	\$ 555,000

Non-Labor General Fund Budget Trends (Not adjusted for inflation)

Note:

FY 07/08, 08/09, 09/10 & 10/11 data are actual costs

FY 11/12 data reflects adopted budget



Facilities Plan and Next Construction Bond

Facilities Plan

The Facilities Department maintains a facilities plan which forecasts facility requirements over a 15-year planning horizon. Provisions of the plan include student enrollment projections, identification of desirable future school sites, descriptions of necessary physical improvements and financial plans to meet the construction and land acquisition needs. In June 2010, the School Board adopted the *Beaverton School District Facilities Plan 2010* and directed staff to prepare for the next BSD construction bond and to implement a series of recommendations in the Plan. Of the 14 recommendations in the Plan, five specific items required District staff effort and budgets for architectural, engineering, and planning support.

Facility Plan Recommendations Requiring Follow-Up Actions:

- Ancillary Facilities (Recommendation #4)
 - Conduct an assessment linking student enrollment growth to future ancillary facilities needs. Complete assessment by 2012.
- Design Workshop (Recommendation #6)
 - Conduct workshop(s) for major projects to be included in the next capital construction bond program. Complete the workshop by 2013.
- Site Capacity (Recommendation #7)
 - Conduct a site-by-site assessment of school campuses to estimate the optimal capacity of each site. Complete by 2012.
- Educational Capital Improvements (Recommendation #8)
 - Based on core facility guidelines, conduct a study to determine what facility needs exist to enhance and equalize educational programs. Complete by 2012.
- Physical Education Improvements (Recommendation #9)
 - To comply with state law, evaluate site-by-site school PE facilities and determine additional needs to meet 2017 deadline. Complete plan by 2013.
- New issue: Full Day Kindergarten (SB248)
 - The passage of SB 248 allows districts to receive state funding for operational costs of full-day programs. An evaluation of elementary schools' classroom space availability is underway.

Facilities Plan and Next Construction Bond

(Continued)

Status & Issues:

- As required by state law, Washington County and the City of Beaverton accepted the District's 2010 Facility Plan and included it in their comprehensive plans.
- A plan of action and milestones was developed to implement Board direction.
- The FY 2011/2012 General fund budget was unable to support funding needs to fully implement the plan of action.

Timeline for the next Construction Bond:

- The key project for the next bond is expected to be a new comprehensive high school.
- Based upon the 2010 Facility Plan analysis, it is projected that a new HS needs to be operational by 2017.
- A Facility Needs Projection timeline is attached that shows the relationship between enrollment growth & capacity requirements, planning / design and construction durations for a new high school, and a notional bond election timeline. In summary, approximate schedule would be:
 - High school programming and planning in 2012
 - High school building design, land use approvals 2013 – 2014
 - High school construction 2015 – 2017
- To support this schedule, the bond election should be in May or November 2014.
 - The attached current GO Bonds rate chart indicates additional debt capacity exists in 2015 for a construction bond without increasing the tax rate.

Next Steps:

- Facilities staff will recalibrate what is possible within existing resources and bring forward an alternative work plan for the Facility Plan recommendations.
- District should set a target date for the next construction bond measure.
- Planning funding will need to be identified in FY 2012-13.

Conceptual Schedule for New High School on the Ward / Cemetery Site

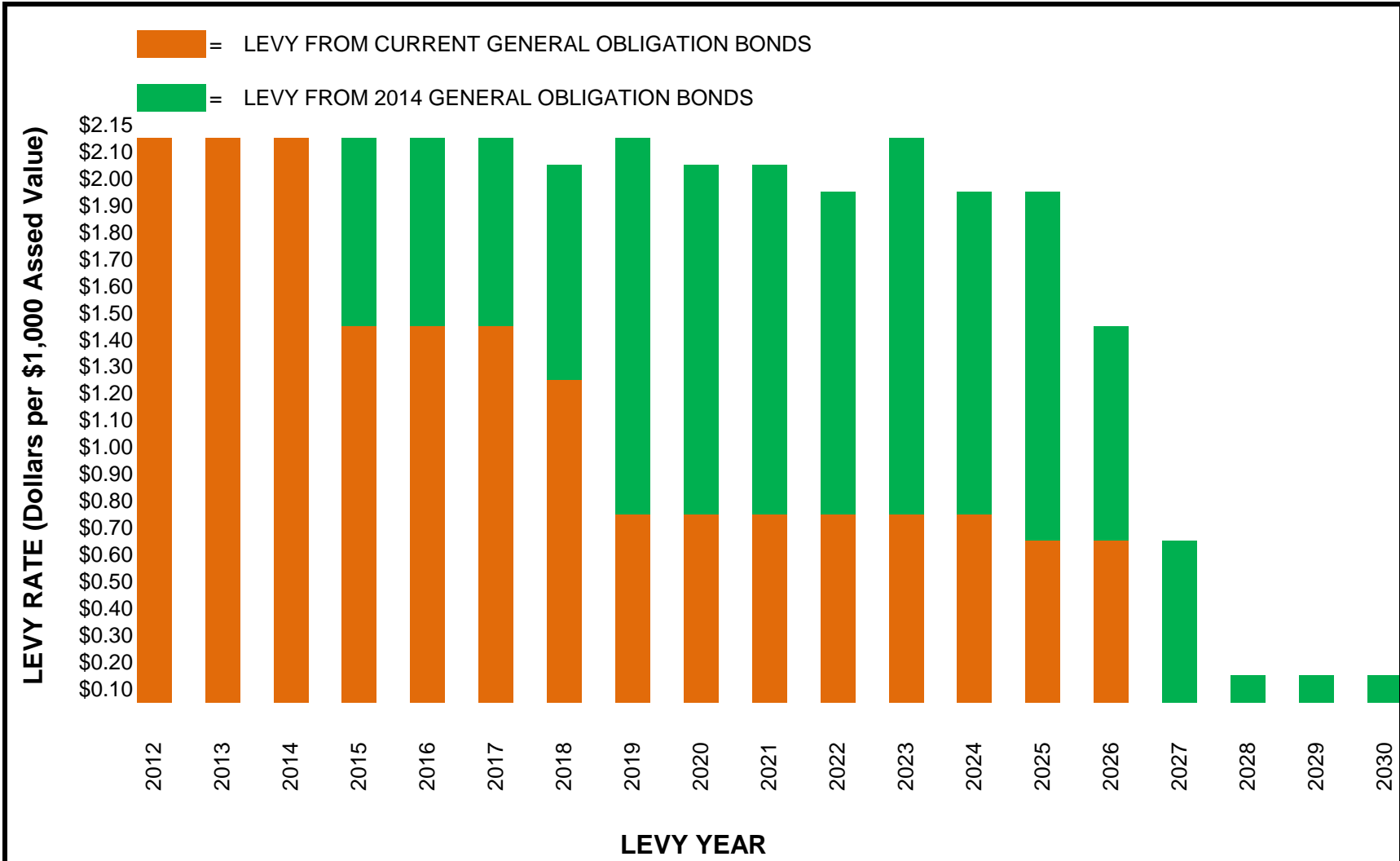
2011				
AUG	SEP	OCT	NOV	DEC
1st				
	30th			
	28th			
		13th		
		20th		

[illegible][illegible][illegible]

SEPTEMBER 2017

February 27, 2012

General Obligation Bonds



Forecasted Major Maintenance Requirements Through 2025

Background

Major maintenance work requirements have been forecasted to 2025, but are not currently funded in annual budgets or Bond programs. This work is tracked in the Megamation “Building Condition Assessment” (BCA) module. BCA reports indicate recommended timelines and costs based on estimated deterioration rates, out-year inflationary factors, and soft cost estimates (planning, design, permitting, etc.). The total forecasted requirement is about \$95 million.

Issues, Current Actions and Status

- Funding limitations directly impact our ability to control increased deferred maintenance.
- Facility assessments are updated on a three year rotation. One third of the sites are visited for re-assessment each year.
- Inflationary factors and RS Means costs (nationally recognized cost estimating guide for construction work) within the Megamation BCA module are adjusted as needed.
- ADA compliance concerns are currently being loaded in Megamation, when completed will be a portion of the deferred maintenance package.
- The deferred maintenance data we are collecting does not include inconsistencies between facilities throughout the District from the perspective of educational space configuration or layout. Many buildings are different, especially those with older designs.
- The 2012 Facility Plan addresses the maintenance requirements and recommends funding this work in three, five-year phases between 2012 and 2025 (see attachment A and the 2012 Facility Plan, Recommendation #3).
 - Phase I, by 2015: \$36 million
 - Phase II by 2020: \$44 million
 - Phase III by 2025: \$15 million

Next Steps

The BCA \$36 million Phase I requirements should be addressed in the next construction bond.

Attachment A – Results of Condition Assessments

Table A-1 Summary of Deficiencies by Building Element

Annual Rate of Inflation:		2.10%			
Soft Cost:		35.00%			
Contingency:		10.00%			
Project Funding Budget Details					
		Year 2015	Year 2020	Year 2025	
		Requirements	Requirements	Requirements	
B10	(SUPERSTRUCTURE)	0	0	0	
B20	(EXTERIOR CLOSURE)	2,759,112	4,634,761	8,016,642	
B30	(ROOFING)	6,851,837	2,601,959	1,812,425	
C10	(HALLWAY)	329,675	1,502,262	653,979	
C11	(CAFETERIA)	74,939	244,070	194,108	
C12	(KITCHEN)	187,993	434,508	111,071	
C13	(OFFICES)	16,872	277,683	12,077	
C14	(STUDENT RESTROOMS)	883,378	5,596,095	38,180	
C15	(STAFF RESTROOMS)	66,720	630,487	1,207	
C16	(LOCKER ROOMS)	12,477	64,090	1,016	
C20	(STAIRS)	12,861	15,755	382	
C21	(INTERIOR STORAGE SPACE)	7,785	9,073	0	
D10	(CLASSROOMS)	1,386,833	2,777,996	918,938	
D11	(LIBRARY)	1,409	93,440	68,852	
D12	(MUSIC/BAND ROOMS)	68,624	115,809	3,052	
D13	(ART/WORK SHOPS)	112,393	45,844	83,195	
D14	(AUDITORIUMS)	0	479,020	2,353	
D15	(AUXILLARY GYM)	73,644	222,791	158,377	
D16	(MAIN GYM)	172,776	796,602	278,540	
D17	(STAGE)	80,541	149,635	42,719	
D18	(WEIGHT ROOM)	0	1,625	2,861	
E10	(CONVEYING)	0	152,205	0	
E20	(PLUMBING)	1,953,570	1,670,404	0	
E30	(HVAC)	9,276,425	10,646,026	279,147	
E40	(FIRE PROTECTION)	293,391	900,835	49,888	
E50	(ELECTRICAL SERVICES)	4,419,368	5,901,957	1,444,234	
E60	(GENERATORS)	0	119,457	0	
F10	(TURF FIELDS)	0	346	0	
F11	(ARTIFICIAL PLAYING FIELDS)	5,956,601	0	0	
F12	(BASEBALL FIELD)	0	1,488,562	167,345	
F13	(SOFTBALL FIELD)	0	1,085	0	
F14	(TRACK)	0	0	318,927	
F15	(TENNIS COURTS)	0	93,511	0	
F20	(LANDSCAPING)	15,295	673,617	46,048	
F30	(PARKING LOTS)	1,008,991	1,029,454	52,861	
F31	(SIDEWALKS)	276,242	225,269	0	
F40	(PLAY AREAS)	17,478	115,383	0	
F41	(COVERED PLAY)	105,131	157,270	53,461	
G10	(EXTERIOR RESTROOMS)	0	3,967	0	
G20	(EXTERIOR SNACK BARS)	0	2,757	0	
G40	(PRESS BOXES)	0	0	0	
Totals		36,422,362	43,875,610	14,811,885	

District Warehouse Operations

Background

In 2011, the District outgrew its loosely organized storage system and needed a new, structured warehousing system for surplus furniture, AV equipment, and records storage. A robust inventory tracking system to manage goods and to inform staff of surplus availability was also needed. Tracking of records had been done manually and disposal dates were not being adequately monitored. Warehouse space was incorporated into the Transportation Support Center (TSC) renovation project which provided an opportunity to reorganize this service. By restructuring existing staffing and utilizing the warehouse space at TSC, the Maintenance Department took over the district-wide responsibility for warehouse operations and surplus material management in 2011.

Current Operations and Capabilities

- Inventory management system is being utilized within the Megamation work order software program
 - Quantity and location of surplus goods is being tracked
 - Surplus goods are requested by staff through the work order system
 - Surplus goods from schools are collected and placed in inventory
- Surplus goods can be viewed using the District intranet website
 - Viewing is available from a “First Class” desktop icon
- Warehouse racking systems were installed to make best use of vertical storage space
- All confidential records are stored in a separate secure area
 - Records are also managed utilizing Megamation
 - All record destroy dates are tracked at regular intervals
- The District Mailroom has been relocated to the TSC warehouse space:
 - Warehouse and mail room duties were combined under a single staff person
 - Mail couriers are routed from the warehouse location

Progress

The following procedures are used to meet the expanding needs of the District:

- Maintain accurate inventory
- Quickly incorporate donated goods into District inventory for re-distribution
- Continue to efficiently circulate goods between the warehouse and our sites
- Provide immediate updates on availability of new inventory from schools
- Ongoing review and disposal of records based on Oregon State archive rules and needs of departments

Integrated Pest Management (IPM)

Background

In 2009, the Oregon Legislature passed Senate Bill 637, designed to improve pest control in schools, and requiring all school districts in Oregon to implement an Integrated Pest Management (IPM) plan by July 1, 2012. IPM is a process for achieving long-term, environmentally sound pest suppression through a variety of tactics, including structural and procedural improvements to reduce the food, water, shelter and access used by pests. IPM focuses on remediation of the fundamental reasons why pests are found on school sites, which results in the District rarely needing to use pesticides for control.

Structural and landscape pests can pose significant problems in schools. Mice and cockroaches can trigger asthma, rodents can be vectors of disease, and many children are allergic to yellow jacket stings. The pesticides used in the past to remediate these and other pests can also pose health risks to people, especially children, animals and the environment. Health and safety of students and staff is the District's first priority – and a prerequisite to learning – so it is the policy of the District to approach pest management with the least possible risk to students and staff.

IPM Basics

The Integrated Pest Management model is built on four practices that all lead to the remediation of pests in District buildings and on property. Following these practices will lead to a reduction in pesticide usage on District sites:

1. Education and Communication: The foundation for an effective IPM program is education and communication. We need to know what conditions can cause pest problems, why and how to monitor for pests, proper identification, pest behavior and biology before we can begin to manage pests effectively. Communication from schools to the IPM Coordinator about pest issues is essential. A protocol for reporting pests or pest conducive conditions and a record of what action was taken is the most important part of an effective IPM program.
2. Cultural and Sanitation: Knowing how human behavior encourages pests helps prevent them from becoming a problem. Small changes in cultural or sanitation practices can have significant effects on reducing pest populations. Cleaning under kitchen serving counters, reducing clutter in classrooms, putting dumpsters farther from kitchen doors/loading docks are some examples of cultural and sanitation practices that can be employed to reduce pests.
3. Physical and Mechanical: Rodent traps, sticky monitoring traps for insects, door sweeps on external doors, sealing holes around buildings, proper drainage and mulching of landscapes, and keeping vegetation at least 24 inches from buildings are examples of physical and mechanical control.

4. Pesticides: IPM focuses on remediation of the fundamental reasons why pest problems arise. However, some situations will require the use of pesticides to eliminate pest problems. The use of pesticides will only be used when all other methods of remediation have failed.

Current Operations and Capabilities

- Maintenance is currently monitoring the use of pesticides with a focus on interior spaces.
- A baseline was established by reviewing historical data on pesticide use.
- Self-developed interim goal was a 50% reduction of pesticide use inside District buildings.
 - Chemical usage is tracked and reported to the District Sustainability Committee
 - Maintenance has an adequate inventory of traps that are immediately available for use when rodents are reported.

Next Steps

The following steps are currently under development to comply with Senate Bill 637:

- Beaverton School District is working with representatives from Oregon State University to further develop an IPM program to be presented to the School Board for adoption in June 2012.
- OSU has included the Beaverton School District as part of a grant funded IPM pilot program. The schools participating in the IPM pilot program are William Walker Elementary and Aloha High.

Custodial & Maintenance Services Restructure

Background

Custodial Services has been a site-based program for many years in the District. In order to achieve more efficiency at less cost, the Maintenance Services Department and building custodians merged to form one service group in the 2011-12 budget. The restructured service model is expected to save \$1.4 million/year in General Fund costs when fully implemented.

Implementation Status

The following processes have been implemented:

- Centralization of custodial supervision under Maintenance Dept. leadership
- Restructured staffing model includes:
 - 75 positions reclassified to Custodian I; 50 at 185-day contracts
 - Fewer Foreman, Custodian IV and III level positions
 - Every school retains one Foreman position
 - All staffing changes being implemented by attrition; no permanent employees lost their jobs or were impacted financially
 - Key cleaning equipment investments to improve efficiency
- Realignment of custodial duties to common standards
 - Standardized cleaning processes
 - Development of standardized cleaning routes & task durations
 - More uniform shift scheduling
 - Standardized job performance expectations
- Increased flexibility in covering custodial absences
- Enhanced employee training program
 - Covering all maintenance and custodial staff
 - Next training session scheduled for June 18
- Centralized all maintenance and grounds work
 - Utilize current high school maintenance and grounds custodians
 - Equipment sharing among all buildings

Continuous Process Improvement

- Independent consultation conducted staff survey and individual interviews
 - Recommendations included establishing process improvement Work Group of 10 staff: Principals, Custodians, the OSEA President, and Central Staff
 - The Work Group met 5 times and concluded its work in February. A final report being drafted which will contain a list of agreements and understandings.

Annual Enrollment Projections

Background

The District Demographer develops annual enrollment projections for grades 1-12 using three types of information: cohort survival history, current and projected housing development, and overall economic picture. Cohort survival is a commonly used demographic technique that looks at the number of students in a given grade or series of grades (called a “cohort”), and determines how many of those students will move up to the next grade or school level. Cohort survival in a given area is affected by in- and out-migration of families in response to economic climate, the type of housing available (i.e., single family units vs. multiple family units), and general mobility of the population. Because there are no previous years’ “cohorts” to compare classes with, kindergarten projections are generated using birth rates and BSD historical “capture” rates of eligible births in Washington County.

The Demographer works closely with local cities and counties to monitor residential development that may bring new children into its boundaries. We evaluate the student impact of the residential development proposals with regard to available capacity of schools, current enrollment, and projected student impact of approved, though not yet constructed, dwelling units. The number of students projected from a development is obtained using student generation factors, which are determined by counting the number of students generated by similar previous developments.

The following table shows historic cohort survival and projected enrollment for Fir Grove Elementary.

FIR GROVE			K-1											
Attending Enrollment			Cohort									Total	Total	Cohort
2010 Boundaries	K	1	%	2		3		4		5		1-4	2-5	%
9/02 Actual	62	85	100.0%	88	100.0%	110	86.6%	90	102.3%	96	91.4%	373	384	94.1%
9/03 Actual	98	79	127.4%	81	95.3%	83	94.3%	104	94.5%	95	105.6%	347	363	97.3%
9/04 Actual	68	111	113.3%	73	92.4%	86	106.2%	79	95.2%	97	93.3%	349	335	96.5%
9/05 Actual	82	78	114.7%	113	101.8%	79	108.2%	96	111.6%	85	107.6%	366	373	106.9%
9/06 Actual	85	86	104.9%	70	89.7%	106	93.8%	79	100.0%	88	91.7%	341	343	93.7%
9/07 Actual	59	98	115.3%	93	108.1%	68	97.1%	107	100.9%	72	91.1%	366	340	99.7%
9/08 Actual	69	72	122.0%	89	90.8%	91	97.8%	72	105.9%	109	101.9%	324	361	98.6%
9/09 Actual	69	76	110.1%	69	95.8%	84	94.4%	83	91.2%	75	104.2%	312	311	96.0%
9/10 Actual	83	79	114.5%	85	111.8%	68	98.6%	94	111.9%	84	101.2%	326	331	106.1%
2011 Proj	78	91	109.6%	79	100.0%	83	97.6%	70	102.9%	95	101.1%	323	327	100.3%
2010	493													
2011 Proj Total	496													
Difference	3													

Enrollment projection is seldom easy for any school, but schools with a high rate of mobility in their population present additional challenges. In the Fir Grove example (above), we can see that cohort survival at the school level (grades 1-4 moving up to grades 2-5) since 2006 has varied between 93.7% and 106.1%, with large jumps and drops in overall survival from one year to the next. Grade level cohort survival is similar. This makes it difficult to determine a most likely projected cohort survival for the upcoming year. Other factors, such as projected development in the area can help: a large amount of projected development would indicate likely in-migration to the area, prompting a higher projected cohort survival, rather than lower.

Issues, Current Actions & Status

- Preliminary enrollment projections for September 2012 were issued November, 2011. Enrollment and school capacity reports are provided to the School Board monthly.

Boundary Changes

Background

Facilities Department staff review school enrollments and percentages of occupied capacity on an ongoing basis. Staff present data for approved and anticipated developments within schools' attendance areas, the students projected to be generated from those residential developments, and the resultant projected school enrollments, as well as school capacity. The Superintendent considers proposing boundary changes based on recommendations from staff, based on the guidance of School Board Policy JC: "If student enrollment at one or more schools is outside the guideline range established by the District, the Superintendent shall determine whether the attendance boundaries of such school(s) should be adjusted."

The Deputy Superintendent's office identifies the issues surrounding the need for boundary changes and develops Boundary Change Objectives (with rationale and supporting data) for the Superintendent. The Superintendent proposes these objectives to the School Board for its approval of the initiation of the boundary change process.

If the boundary changes involve more than two schools, per Board Policy JC an Attendance Boundary Committee must be convened. The Committee, headed by the Deputy Superintendent, includes District staff, Regional Administrators, school principals from involved and non-involved schools, Local School Committee members from involved and non-involved schools. A neutral meeting facilitator shall be selected. District staff present information to the Committee about the attendance areas and schools involved, and the Committee uses this information and Board Policy JC criteria to craft its boundary change recommendation to the Superintendent.

The Superintendent reviews the Committee recommendation, and presents his/her boundary change recommendation to the School Board, which approves or denies the recommendations based on adherence to the Policy JC.

Issues, Current Actions & Status

- Boundary changes for Beaver Acres and Kinnaman Elementary Schools, Five Oaks and Mountain View Middle Schools were approved by the School Board in December, 2011, and will be implemented in September, 2012.

Attachment: History of Boundary Changes Since 1980

BEAVERTON SCHOOL DISTRICT
Boundary Adjustments Since 1980

School Year	Areas/Schools Involved	Notes
1980/81	Southwest Elementary Schools	Opening of Errol Hassell Elementary
1980/81	North/Central Elementary Schools	Closure of Sunset Valley
1981/82	Northwest Elementary Schools	Opening of Elmonica Elementary School
1982/83	Southeast Elementary Schools	Closure of Garden Home Elementary
1983/84	Northeast & Central District Elementary Schools	Closure of Cedar Hills and Merle Davies
1984/85	Mountain View & Meadow Park	Boundary changes to balance enrollments
1984/85	Aloha High & Sunset High	Boundary changes to balance enrollments
1985/86	McKay, Montclair, Raleigh Hills	Boundary changes to balance enrollments
1988/89	Southwest Elementary Schools	Boundary changes to balance enrollments
1989/90	Cooper Mountain, Hiteon, McKay	Opening of Sexton Mountain Elementary
1990/91	Highland Park & Whitford	Children not required to change schools. Incoming 7th graders transitioned each year.
1991/92	Terra Linda attendance area transitions from Meadow Park to Cedar Park	Children not required to change schools; incoming 7th graders transitioned each year
1986 thru 1991/92	Selected new subdivisions transferred from Oak Hills to Bethany and Rock Creek	New subdivisions; no residents at time of the boundary change
1992/93	Cooper Mountain, Hiteon, McKay, Sexton Mountain Elementary Schools	Opening of Nancy Ryles Elementary
1994/95	Entire District, all levels	Opening of Conestoga Middle School and Westview High School; reconfiguration of grade levels
1995/96	Bethany & McKinley	Children not required to change schools. Transitioned an area from Bethany to McKinley
1995/96	Nancy Ryles & Greenway	Selected new subdivisions temporarily assigned from Nancy Ryles to Greenway
1995/96	Oak Hills & Bethany	Selected new subdivisions temporarily reassigned from Oak Hills to Bethany

BEAVERTON SCHOOL DISTRICT
Boundary Adjustments Since 1980

School Year	Areas/Schools Involved	Notes
1996/97	Oak Hills, Bethany & Rock Creek	Selected new subdivisions from Oak Hills to Bethany & Rock Creek
1997/98	Elementary Schools North of Sunset Highway	Opening of Findley Elementary School
1998-1999	District-wide	Opening of Scholls Heights Elementary, Stoller Middle, and Southridge High School
2000-2001	Findley	Enrollment was capped at 805 for Grades 1-5. Kindergarten students were housed at Findley Annex (future Jacob Wismer campus). New students were reassigned to Cedar Mill and Terra Linda (if they lived on west side of the north/south powerlines, they went to Terra Linda; if they lived east of the powerlines, they went to Cedar Mill).
2001-2002	Findley, Bethany	Opening of Jacob Wismer Elementary
2002-2003	Aloha Park & Chehalem	Boundary changes to balance enrollments--area south of Farmington Road moved to Chehalem
2002-2003	Sexton Mountain, Nancy Ryles	Boundary changes to balance enrollments--area south of Weir Road moved to Nancy Ryles
2004-2005	Scholls Heights, Nancy Ryles	New subdivision; no residents at time of the boundary change. Moved Progress Ridge from Scholls Heights to Nancy Ryles
2005-2006	Findley, Oak Hills	Claremont and area north to NW Laidlaw from Findley to Oak Hills and west of NW Bethany Boulevard.
2005-2006	Findley, Cedar Mill	The area south of NW Thompson Road and east of NW South Road.
2005-2006	Hazeldale, Kinnaman	Includes the area north of SW Farmington Road and east of SW 198th Avenue
2005-2006	McKinley, Elmonica	The area of new development immediately east of NW 185th Avenue and north of the northern attendance boundary at that time
2005-2006	Scholls Heights, Nancy Ryles	The area north of the Progress Ridge development, west of the power lines, south of SW Scholls Ferry Road, and east of the intersection of SW 155th Terrace and SW Scholls Ferry Road.
2005-2006	Meadow Park, Cedar Park	North of SW Butner Road/Commonwealth Lake Park and west of Johnson Creek
2005-2006	Stoller, Meadow Park	Claremont development and the area north to NW Laidlaw Road and west of NW Bethany Boulevard.

BEAVERTON SCHOOL DISTRICT
Boundary Adjustments Since 1980

School Year	Areas/Schools Involved	Notes
2008-2009	Elementary Schools North of Sunset Highway - Cedar Mill, West TV, Findley, Oak Hills, Terra Linda. Meadow Park, Cedar Park, Sunset, and Westview.	Opening of Bonny Slope Elementary School - sections of Cedar Mill, West TV, Findley, and Terra Linda moved to Bonny Slope. Section of Oak Hills moved to Terra Linda. Small section of Meadow Park moved to Cedar Park, small section of Westview moved to Sunset.
2009-2010	Elementary Schools North of Sunset Highway - Findley, Oak Hills, Jacob Wismer, Rock Creek, Bethany. Meadow Park, Stoller.	Opening of Springville K-8 School - sections of Jacob Wismer, Rock Creek, Oak Hills, and Bethany moved to Springville K-8. Sections of Findley moved to Jacob Wismer. Sections of Bethany moved to Rock Creek. A section of Rock Creek moved to Bethany. Section of Meadow Park moved to Stoller, section of Stoller moved to Meadow Park.
2010 - 2011	Hiteon, Nancy Ryles, Scholls Heights, Sexton Mountain	Section of Sexton Mountain east of SW Murray moved to Hiteon, eastern end of Nancy Ryles moved to Hiteon. Eastern section of Scholls Heights moved to Nancy Ryles.
2010 - 2011	Kinnaman, Hazeldale	North central/east section of Hazeldale moved to Kinnaman.
2010 - 2011	Chehalem, Errol Hassell	New subdivision on boundary line, shifted boundary line to put development entirely within Chehalem: no students at time of change.
2012-2013	Beaver Acres, Kinnaman, Five Oaks, Mountain View	Southwest section of Beaver Acres/Five Oaks moved to Kinnaman/Mountain View

Energy Conservation Program–Overview

Background

Beginning with the 2008/09 school year, the District renewed its Energy Conservation Program. Among the strategies employed were the establishment of annual electricity and natural gas conservation targets for each school and support building based on Oregon Department of Energy guidelines for schools. A scorecard reporting system was developed to provide monthly performance feedback on each building's energy consumption along with important information pertaining to "recognition and commitment": listing a school's participation in the District Energy Pledge, their status as an Oregon Green School and also as an EnergyStarSchool. This scorecard is provided monthly to each principal, head secretary, custodian, to the Superintendent's Council, and is also posted in the lobby of the Central Office and on the web at:

<http://www.beaverton.k12.or.us/home/departments/facilities/energy-and-resource-conservation/energy-conservation/>(The December 2011 Scorecard is attached to this document.)

A presentation containing an overview of the District's program is at:

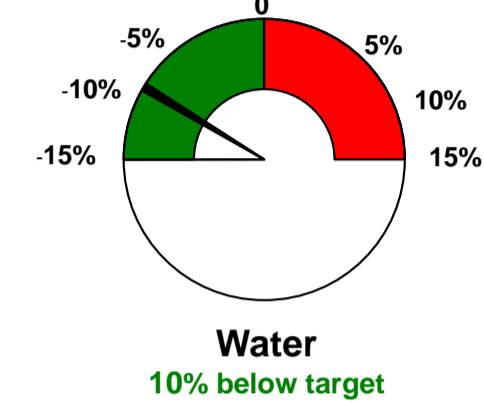
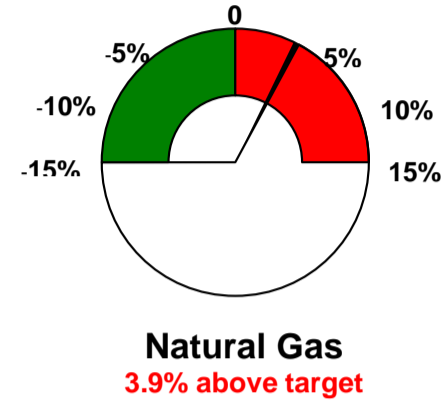
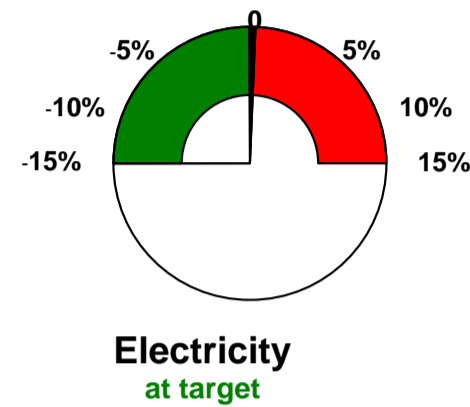
http://www.beaverton.k12.or.us/pdf/facil/facil_BSD%20Lane%2010-18-11_final.pdf

Issues, Current Actions & Status

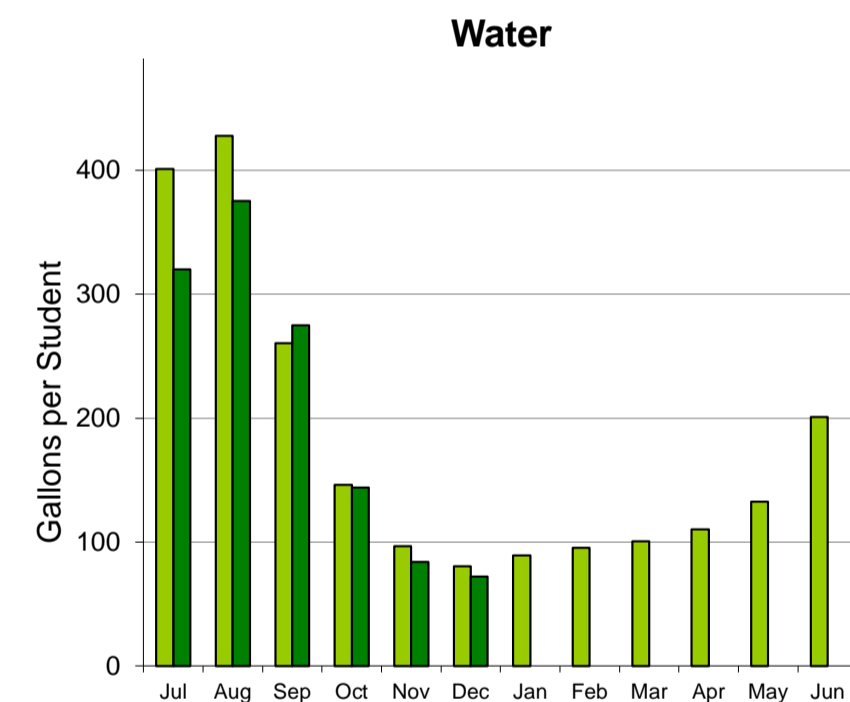
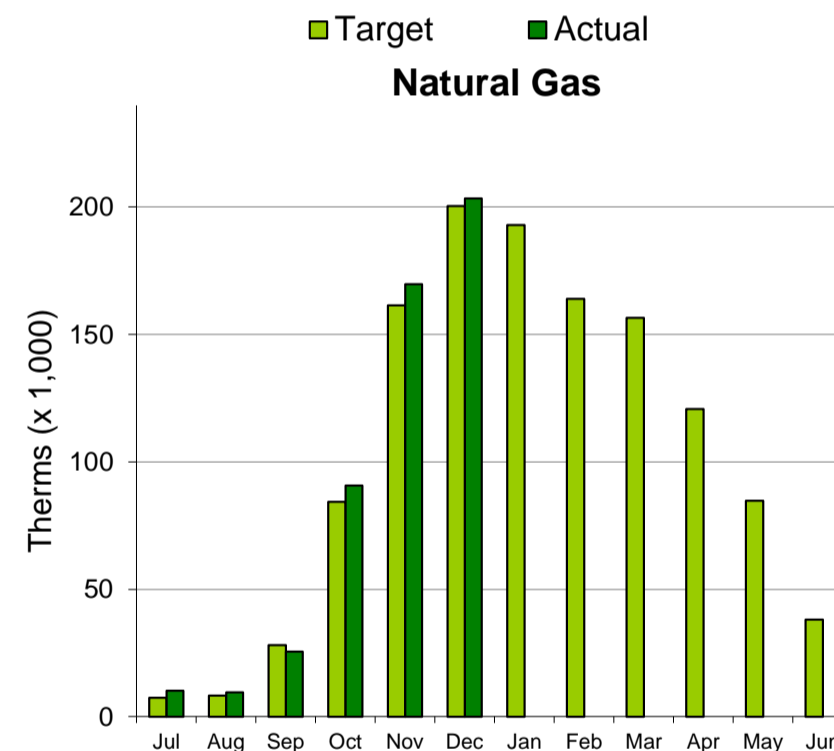
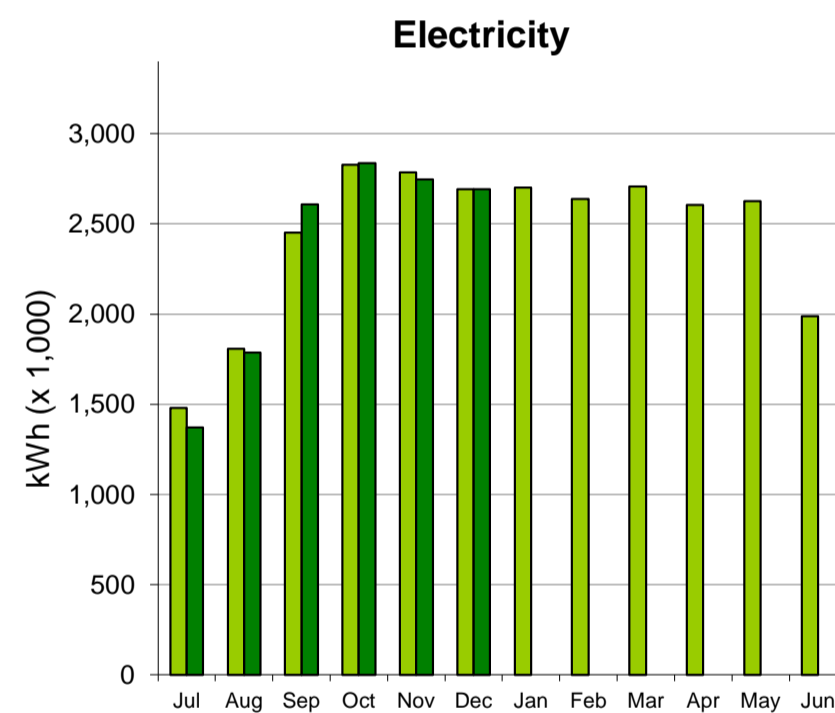
- With energy costs at roughly \$4.5M/year, energy consumption is a significant budget expense for the District. Improved conservation practices over the past three years have saved the District more than \$1M. The conservation performance is due to:
 - o Behavior modification by students and staff in schools and buildings through District Energy Pledge, strongly supported by administration.
 - o Substantial tightening of building operation schedules made possible by advances in remote building control from HVAC central office and new automated method of building scheduling requests.
 - o Robust participation in SB1149 program resulting in energy efficiency upgrades funded 100% by public purpose charge (see SB1149 paper).
 - o HVAC system tune-ups by Maintenance Department staff.
 - o Change in IT Dept practice to not auto-start school computers in the AM.
 - o Energy efficiency implementations as part of the 2006 Bond (2006-2010).
 - o Energy efficiency projects funded by stimulus grant awards (~\$500,000).
- The District has become a recognized leader both locally and at the federal level:
 - o Various Energy Star awards (see Energy Star Program paper).
 - o Presented the 2010 PGE Energy Leader Award alongside Nike for "demonstrating wise use of energy...so that others may follow."
 - o Program Manager named Energy Manager of the Year 2011 by the Association of Energy Engineers for Region 5 (9 western states).
- Facilities Energy & Resource Conservation Department will continue all activities as outlined above, renewing goals each year.
- Construction projects completed from 2008-2010 have added 12% to BSD's inventory of building space, yet total District electricity consumption has decreased 10%, and natural gas usage is down 9%.

District-wide Consumption - Year to Date

(% below/above target)



District-wide Consumption - Monthly



Key Observations

Performance Trend, Year to Date (Dec)

Electricity, **at target**
Natural Gas, 3.9% **above** target
Water, 10% **below** target

Energy Budget, Year to Date

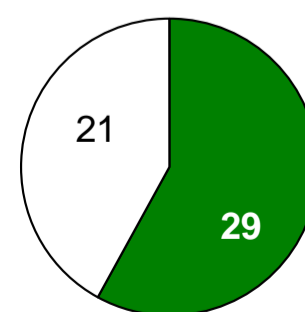
Electricity: \$69,700 under budget
Natural Gas: \$25,800 under budget
Total: \$95,500 under budget

Why are we above target but below budget for natural gas? Our aggressive consumption targets are separate from the budget.

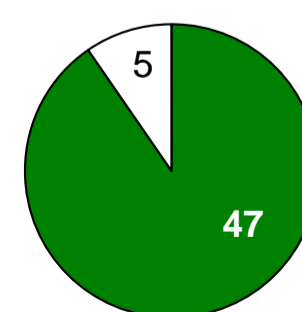
4 NEW Energy Star Schools this Month!

Recognition & Commitment

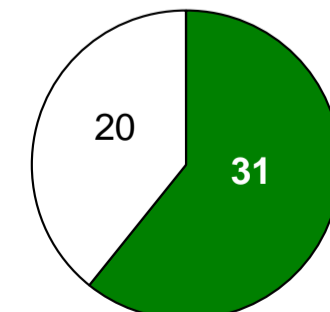
Energy Star



Energy Pledge



Green Schools



■ Number of Schools as of Feb 22, 2012

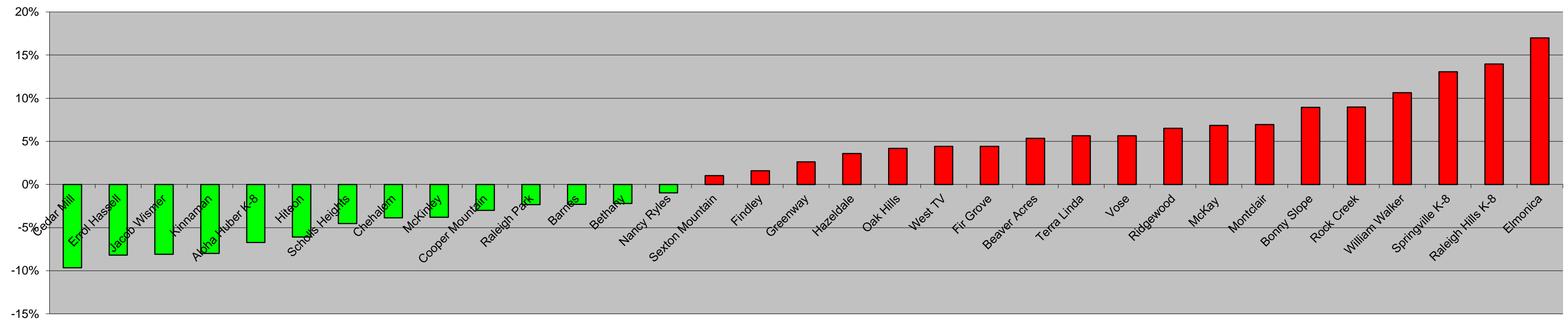
Are You Using Less Electricity?

In the green...YES!

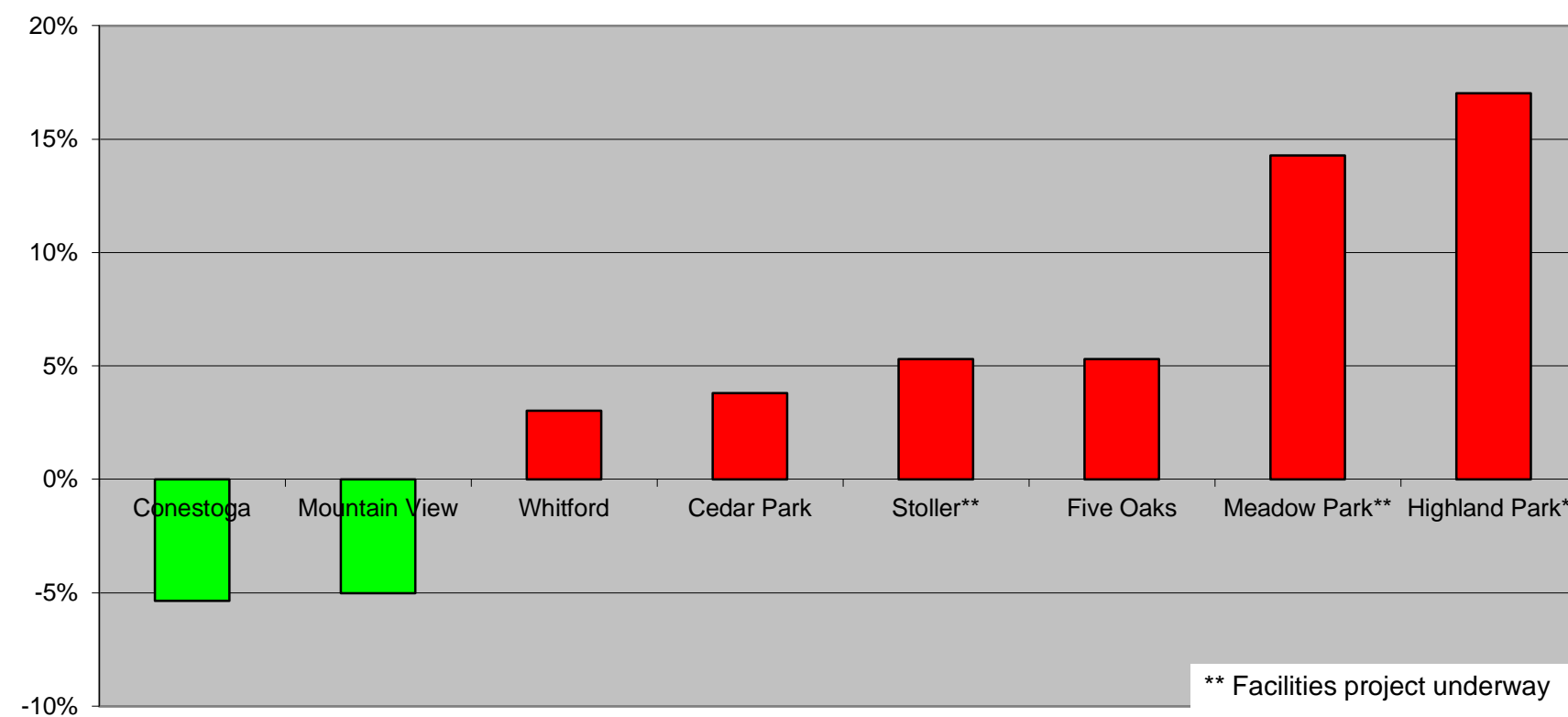
In the red...No.



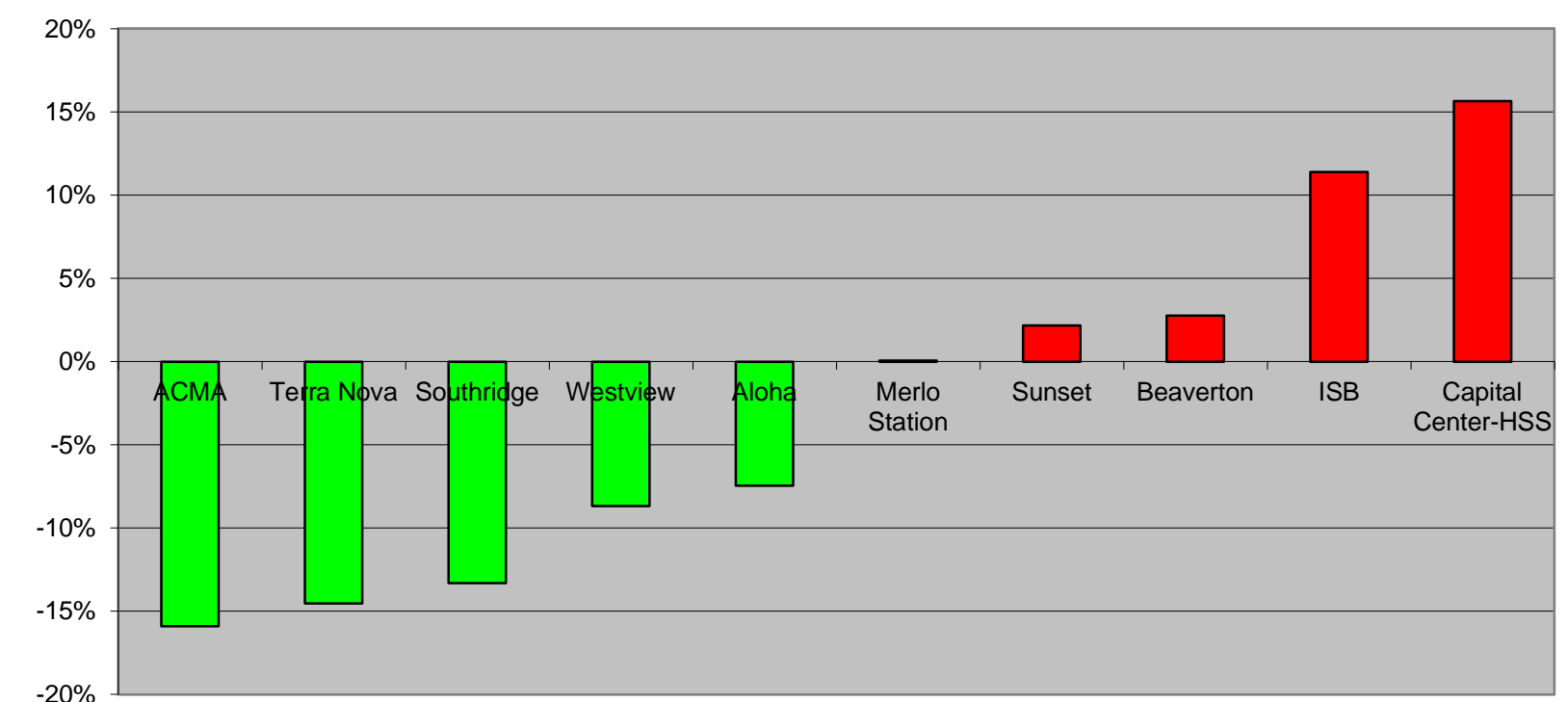
2011-12 December Elementary Schools




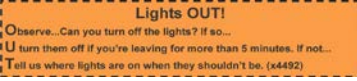

Middle Schools



High/Options Schools



This data represents the percentage that each school was above or below their electricity consumption target for the month.

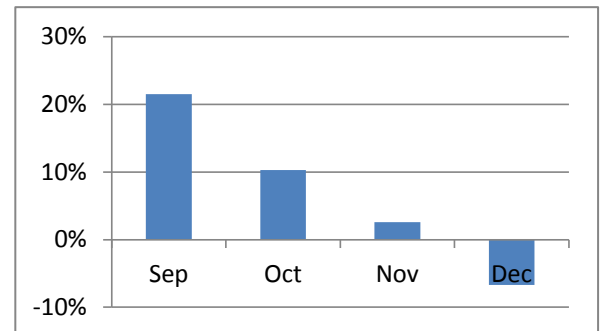
	 Energy Star School	 Energy Pledge Participant	 Oregon Green School
Elementary Schools			
Aloha Huber Park	✓	✓	
Barnes	✓		
Beaver Acres		✓	
Bethany	✓	✓	✓
Bonny Slope	✓	✓	✓
Cedar Mill	✓	✓	
Chehalem	✓ NEW!	✓	
Cooper Mountain		✓	
Elmonica	✓	✓	
Errol Hassell	✓	✓	
Findley	✓	✓	✓
Fir Grove		✓	✓
Greenway	✓	✓	✓
Hazeldale	✓	✓	
Hiteon		✓	✓
Jacob Wismer	✓	✓	✓
Kinnaman	✓	✓	✓
McKay		✓	
McKinley		✓	✓
Montclair	✓	✓	
Nancy Ryles	✓	✓	✓
Oak Hills	✓	✓	✓
Raleigh Hills		✓	
Raleigh Park		✓	✓
Ridgewood			✓
Rock Creek	✓ NEW!	✓	✓
Scholls Heights	✓	✓	
Sexton Mountain	✓	✓	✓
Springville		✓	
Terra Linda	✓	✓	✓
Vose	✓	✓	✓
West TV	✓	✓	
William Walker	✓		
Middle Schools			
Cedar Park	✓	✓	✓
Conestoga		✓	✓
Five Oaks		✓	
Highland Park		✓	✓
Meadow Park		✓	✓
Mountain View		✓	
Stoller	✓	✓	✓
Whitford		✓	✓
High & Options Schools			
ACMA		✓	✓
Aloha	✓	✓	
Beaverton			✓
Deer Park Academy	not eligible	✓	not eligible
HS2	not eligible	✓	
ISB	✓	✓	✓
Merlo Station		✓	✓
Southridge	✓ NEW!	✓	✓
Sunset			✓
Terra Nova		✓	✓
Westview	✓ NEW!	✓	✓

February 2012
TOP Pledge
Participant

**Aloha Huber
Park**



AJ Davis and the entire staff of Aloha Huber Park are really seeing results! In September they were using 22% "too much" electricity. They began to make changes and have dropped an average of **10% each month**. Now they are 7% under their target. That's an improvement of 30%!



CONGRATULATIONS AHP!

Let us know how you're putting the pledge into action and be featured here as our next month's TOP Pledge Participant!

EnergyStar Program

Background

For more than a decade, ENERGY STAR, the joint program of the U.S. Environmental Protection Agency and the U.S. Department of Energy, has worked with businesses and organizations to save money and protect the environment through strategic energy management practices. To qualify for the ENERGY STAR, a building must score in the top 25 percent based on EPA's National Energy Performance Rating System. An ENERGY STAR qualified facility meets strict energy performance standards set by EPA and uses less energy, is less expensive to operate, and causes fewer greenhouse gas emissions than its peers.

Issues, Current Actions & Status

- In 2008, the District began benchmarking its facilities with EPA's online tools.
- In 2009, the BSD became an EPA ENERGY STAR Partner committing to continuous improvement of our energy performance. Our letter of commitment is attached.
- In 2009/10 the District began aggressively pursuing ENERGY STAR certifications for our qualifying school buildings. To date, 29 BSD schools have been qualified by EPA as ENERGY STAR schools, *leading the state of Oregon* with the most ENERGY STAR schools of any school district. BSD's ENERGY STAR schools are depicted at: http://www.energystar.gov/index.cfm?fuseaction=labeled_buildings.showMap&ALSO_SEARCH_ID=NONE&BUILDING_TYPE_ID=910&ZIP=&S_CODE=ALL&STARTNUM=1&CITY=&OWNER_ID=Beaverton%20School%20District&STR=&MINI=&VIEW=&YEAR=&PROFILES=0&FILTER_B_ID=&PAGE=1
- In 2010/11 the District was named ENERGY STAR Top Performer in 2010 in two categories: reducing total energy consumption by more than 10%, and earning an average ENERGY STAR score of 89 out of 100 (i.e., BSD's energy performance is among the top 11% of all school districts in the country). This link provides more details: http://www.energystar.gov/index.cfm?fuseaction=partner_list.showLeadersStory&lds_id=2725&o_id=1089529
- ENERGY STAR certifications provide very deserving recognition for our schools, the District maintenance crews, and our energy conservation staff, but more importantly, they inspire our 43,000 students and staff to continually improve upon already excellent performance. ENERGY STAR partnership and certifications assure our community that BSD is wisely using its resources and maximizing funds for education.

Next Steps

- Some opportunities exist for obtaining ENERGY STAR certifications for additional BSD schools, however, many of those not yet certified may not be good candidates due to limitations of their building design/age.



Jerome Colonna
Superintendent of Schools
16550 SW Merlo Road
Beaverton, OR 97006
503.591.4401 FAX 503.591.4175
www.beavton.k12.or.us

"One Goal, One Focus"

District Goal for 2004-2009: Increase academic achievement Districtwide with a special emphasis on literacy and mathematics gains for each student. The intent is to give every student the skills to succeed in challenging courses, meet academic standards, graduate from high school and be fully prepared for a range of post-secondary education and vocational options.

July 6, 2009

Ms. Jean Lupinacci
Director, ENERGY STAR Commercial & Industrial Branch
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, NW (6202J)
Washington, DC 20460

Dear Ms. Lupinacci:

With this letter Beaverton School District joins ENERGY STAR® as a Partner, and makes a fundamental commitment to protect the environment through the continuous improvement of our energy performance. We believe that an organization-wide energy management approach will help us enhance our financial health and aid in preserving the environment for future generations. In partnership with ENERGY STAR, we will:

- Measure and track the energy performance of our organization's facilities where possible by using tools such as those offered through ENERGY STAR
- Develop and implement a plan consistent with the ENERGY STAR Energy Management Guidelines to achieve energy savings
- Help spread the word about the importance of energy efficiency to our staff and community
- Support the ENERGY STAR Challenge, a national call-to-action to help improve the energy efficiency of America's commercial and industrial buildings by 10 percent or more
- Highlight our achievements with recognition offered through ENERGY STAR.

We understand that our commitment to measure, track, and improve the energy performance of our organization is supported by the resources and tools offered through ENERGY STAR. In addition, we understand that we will be recognized on the ENERGY STAR web site as a Partner and as a supporter of the ENERGY STAR Challenge. To be eligible for additional recognition, we will share with EPA our progress and milestone achievements. As a Partner, we agree to follow all applicable terms and conditions governing the use of the ENERGY STAR logos, which are registered trade and service marks.

Beaverton School District looks forward to our partnership with ENERGY STAR.

Sincerely,

Jerome Colonna
Superintendent

Encl: Organization Information EPA Form 5900-19

Attachment to Partnership Letter Organization Information

Chief Executive

Name & Title: Jerome Colonna, Superintendent
Mailing Address: 16550 SW Merlo Road
Beaverton, OR 97006

E-mail Address: jerome_colonna@beaverton.k12.or.us
Phone Number: 503-591-4401
Facsimile: 503-591-4175

Energy Manager

Name & Title: Sheri Stanley, Energy & Res Cons PM
Mailing Address: 2180 SW 170th Avenue
Beaverton, OR 97006

E-mail Address: sheri_stanley@beaverton.k12.or.us
Phone Number: 503-591-4492
Facsimile: 503-591-4469

Communications Contact

Name & Title: Sheri Stanley, Energy & Res Cons Program Manager
Mailing Address: 2180 SW 170th Avenue
Beaverton, OR 97006

E-mail Address: sheri_stanley@beaverton.k12.or.us
Phone Number: 503-591-4492
Facsimile: 503-591-4469

Organization's Primary Business or Function (check one):

- ☐ Commercial Real Estate
☐ Corporate Real Estate
☐ Multifamily Housing, *include:*
 _____ Number of units owned/managed
☒ K-12 Education
☐ Higher Education
☐ State Government
☐ Local Government
☐ Federal Government
☐ Healthcare & Senior Care Facilities
☐ Hospitality & Entertainment
☐ Manufacturing/Industrial, *include:*
 _____ NAICS code
 _____ Number of Manufacturing Plants Operated in the United States
 _____ Number of Employees in the United States
☐ Religious (Congregations)
☐ Retail
☐ Drinking Water Treatment and Distribution, *include:*
 _____ Total Capacity (mgd)
☐ Wastewater Treatment, *include:*
 _____ Total Capacity (mgd)
☐ Other. Describe: _____

Organization's total building/facility square footage (required):

Owns	5.1 million sq ft
Leases	0
Manages	0

How did you learn about ENERGY STAR?

colleague

The government estimates the average time needed to fill out this form is 30 minutes and welcomes suggestions for reducing this level of effort. Send comments (referencing OMB control number) to the Director, Collection Strategies Division, U.S., EPA (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460.

Solar Photovoltaic Initiative

Background

In addition to aggressive energy management, the BSD Sustainability Plan includes procurement of renewable energy when financially feasible. BSD has secured 15 years of free solar electricity at three BSD schools at no cost to the District. Additionally, BSD has secured grants totaling more than \$50,000 in curriculum, teacher training, and Internet monitoring of the solar systems for maximum educational benefit of these projects.

The Oregon Legislature directed the establishment of a pilot Feed-in Tariff program effective July 1, 2010. The FIT provides a new alternative for financing installation of PV solar energy systems that appears more attractive for public sector organizations than the alternatives which existed in the past. Gerding Edlen Sustainable Solutions (GESS) is partnering with BSD in this venture. With GESS assistance, BSD obtained FIT allocations for three buildings and secured an investor (Kenyon Energy) who funded all the capital costs (\$1.5M), contracted for the installation work, and will provide system maintenance for 15 years. We have also partnered with Gladstone School District, which has three schools participating, in order for the solar package to be large enough to attract an investor.

More details about the FIT program are contained in a PowerPoint briefing presented at the Oregon Sustainable Schools Conference in January 2011:

http://www.beaverton.k12.or.us/pdf/facil/facil_Solar%20for%20Your%20Schools%202-28-11%20web.pdf

Current Actions & Status

- The School Board approved BSD's participation in the FIT program in March 2011
- BSD executed a 15-year agreement with Kenyon Energy in May 2011
- Solar PV systems rated at 100 kW each have been installed on three schools:
 - o Springville K-8
 - o Capital Center
 - o Elmonica Elementary
- Installation was complete in October 2011 and systems are generating free electricity as anticipated.

- Interactive flat-screen monitoring systems are being installed in the lobbies of the three sites and will feature the following displays:
<http://www.solar4rschools.org/node/1075>
<http://www.solar4rschools.org/node/1107>
<http://www.solar4rschools.org/node/1076>

- Teachers are being selected for participation in an all-day training event.

Next Steps

- Host a public "ribbon cutting" event when the monitoring systems are completed and funding partners' schedules align.

Reimbursable Energy Conservation Facilities Projects Senate Bill 1149 Program

Background

Effective in 2002, Senate Bill 1149 established a mechanism and funding resource to implement energy conservation facilities projects. As the funding source, SB1149 requires Portland General Electric and PacifiCorp to collect a public-purpose charge from consumers within their service areas equal to three percent of the total revenues from electricity. Ten percent of these public purpose funds must go toward energy efficiency efforts in the public schools. These funds are distributed monthly to school districts in proportion to their Average Daily Membership. The funds are 'banked' by the district and may be used as a reimbursement fund for energy efficiency audits and subsequent implementation of projects completed in accordance with SB1149 Program Guidelines. The program has been extended through 2025.

Issues, Current Actions & Status

- SB1149 Financials
 - o Funds allocated annually to BSD: ~\$600,000 (~\$14 M through 2025)
 - o Reimbursements received to date: \$4.9 million
 - o Pending reimbursements to date: \$1.1million (anticipated by Sept 2012)
 - o Projects planned for summer 2012: \$0.5million
- Development of qualifying projects requires completion of a detailed, building-wide energy audit that documents specific Energy Efficiency Measures (EEMs).
- Identified projects require initial capital outlay by BSD that is then reimbursed. SB1149 reimbursements occur after project completion, normally several months after costs are incurred. BSD established a revolving fund to support up-front costs.
- Project management is often provided by the Facilities Development staff.

Next Steps

- Continue implementation of currently identified measures and strategically utilize available funding.
- Conduct energy audits at additional eligible schools; update old audits.
- Continued participation in SB1149 Program.

District Sustainability Program

Background

Board Policy EDD established sustainability priorities for the District. The implementing Administrative Regulation (EDD-AR) created an Advisory Committee for Sustainability to help guide the District's adoption of practices that balance environmental, social, and fiscal responsibility. Key tasks assigned to the Committee were development of a five-year work plan for the District to implement sustainability practices and annual reporting to the School Board.

Issues, Current Actions & Status

- Scope of the Advisory Committee's work:
Help guide the District's practices in a direction consistent with the Sustainability Policy. The Committee shall serve in an advisory capacity to staff as they establish practices that support the Sustainability Policy, create specific implementation plans that outline objectives in targeted topical areas, and develop and report measures of success related to such plans. Topical areas include the following:
 - a) Curriculum
 - b) Facilities Design/Construction
 - c) Energy Management
 - d) Sustainable Procurement
 - e) Reduction in the use of Toxic Materials
 - f) Indoor Air Quality
 - g) Sustainable Food
 - h) Transportation
 - i) Waste Prevention and Recycling
 - j) Water Management
- May 2010 Board Appearance: The Committee presented preliminary five-year plan:
http://www.beaverton.k12.or.us/pdf/facil/facil_Sustainability%202010%20Board%20Appearance.pdf
- June 2011 Board Appearance: The Committee developed a scorecard tracking system, tracked 2010-11 performance on the work plan, noted progress made on all items in the current five-year plan, and reported on plans to update the five-year plan:
http://www.beaverton.k12.or.us/pdf/facil/facil_Sustainability%202011%20Board%20Appearance.pdf
- Monthly scorecards are used for tracking progress on the annual work plan.
The January 2012 scorecard is attached.

Next Steps

- The Committee is currently providing oversight of the 2011-12 work plan and updating the five-year plan.

Beaverton School District
2011 - 12 Sustainability Performance Scorecard
December 2011

1/23/2012

Status	Work Stream	Goal / Objective / Action Step	Performance Metrics			Reporting Department	Departments' Performance Assessment (Year-to-Date)												Departments' Comments
			Measure	June 30, 2011 Status	FY 11-12 Target *		2011						2012						
							Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	
	A	Procurement & Materials Mgmt	A.1	Transition to electronic bidding process	A.1.1	% of annual formal procurements	25%	75%	Purchasing										Upcoming Formal Procurements- Copiers. Planned listing on ORPIN. On Track to meet goal PGE complete. Grainger, Axian, First Response using electronic invoices. On Track to meet goal
			A.2	Procure sustainable office & custodial products	A.2.1	% of \$ purchases	32%	40%	Purchasing										
			A.3	Electronic transactions for POs, billing & payments	A.3.1	Number of vendors participating	0	2	Purchasing										
			A.4	Printer toner cartridges recycled	A.4.1	Number of schools participating	Unknown at this time	60%	Purchasing										
	B	Energy & Water Management	B.1	All schools are ENERGY STAR® certified	B.1.1	Number of schools certified	25	28	Facilities									Applications submitted to EPA for 4 additional schools Utility data avail through Nov. 32 schools within ODOE range, -1 from Sept. Summer 2012 work plan (Certifications = new + renewals + advanced certification level) Still @ 31 Schools Had 5 meetings in Nov; 6 in Dec Completed and operating at Springville K-8, Elmonica ES, Capital Center Building	
			B.2	Active participation in SB 1149 program	B.2.1	Schools' EUI within ODOE Range	33	36	Facilities										
			B.2		B.2.2	SB 1149 annual work plan	NA	Approved by Feb	Facilities										
			B.3	All schools are Oregon Green Schools	B.3.1	Number of schools certified	31	5 New OGS Certifications	Facilities & Schools										
			B.3.2	Number of schools contacted	B.3.2	Number of schools contacted	NA	5 Schools Per Month	Facilities										
			B.4	Procure renewable energy	B.4.1	Install solar PV systems on school buildings	0	3 by Oct	Facilities										
	C	Buildings & Grounds	C.1	Reduce toxic chemical use	C.1.1	Complete HS lab chemicals inventory	3	6	Risk									To be completed: BHS, WHS, HSS; annual CIH chemical storage survey in Jan. Target is 5% below past 5-year moving average Target is to complete minor work; award contracts for summer 2012 work. On track; working with OSU. BSD joined EPA Pesticide Env. Stewardship Prog. Determination of resource requirements will follow completion of Plan (C.3.1)	
			C.1		C.1.2	Cost / FY of toxic chemical disposal	\$8,866	\$8,422	Risk										
			C.2	Upgrade HS hazardous chemical storerooms to meet Risk Mgmt Report recommendations	C.2.1	Status of upgrade work	Recommendations report completed	Upgrades completed, or contracts awarded at 6 HS's	Risk & Maintenance										
			C.3	Develop Comprehensive Integrated Pest Management Program	C.3.1	Approved plan	NA	June	Maintenance										
			C.3.2	Implementation resources budgeted	C.3.2	Implementation resources budgeted	NA	June	Maintenance										
	D	Food	D.1	Develop & implement a system to identify and document the total dollar value of products NS purchases that are locally produced, packaged, packed or processed. Use this system to create a baseline for 2012-2013	D.1.1	System is created and implemented for on-going use. Baseline for 2012-2013 is created.	NA	March	Nutrition Services									Plan to include requirement in new contracts that vendors document which purchases we make that are locally sourced. Data need to be re-analyzed. Initial analysis done June, 2011 not in-depth enough. This indicator is dependent on D.3 moving forward, and reanalysis of data.	
			D.2	Continue 2010-11 Pilot at Barnes & Aloha Huber Park ES to more precisely determine cost offset from reduction of garbage waste	D.2.1	Cost of pilot vs. current practice	NA	≤ 1.0	Nutrition Services										
			D.3	Implement use of compartment type permanent ware trays at Elementary Schools. (Note: This goal depends on the outcome of D.2)	D.3.1	Number of ES using compartment type permanent ware trays	3	4	Nutrition Services										
			D.4	Increase the number of activities/experiences that connect Health Learning Targets on Nutrition to the meals served in the cafeteria	D.4.1	Number of Nutrition learning experiences that connect the classroom to the cafeteria.	2	5	Nutrition Services										
	E	Transportation	E.1	Reduce bus idle time	E.1.1	Establish idle time baseline	NA	March	Transportation									First results on qualified buses by 6/1/12 Pursuing grant to fund remaining particulate filter work 6 schools have been identified for mapping. Five have been started. Solar websites being built by Bonneville Environmental Foundation Challenge all set up, but the team had requested "prizes". Need Committee input. 2 articles posted in November; 3 articles in December 6 more lessons were added in Nov & Dec to TeacherSource that have a sustainability connection Need to make the "links" and inform teachers about the lessons.	
			E.2	Install particulate filters on all BSD eligible buses	E.2.1	% of filters installed	72%	100%	Transportation										
			E.3	Increase walking & biking to schools	E.3.1	Number of ES & MS with walking maps	1	5	Safety Office										
	F	Education	F.1	Utilize solar PV data in student classwork	F.1.1	PV lessons posted on TeacherSource	0	3	Teaching & Learning									Solar websites being built by Bonneville Environmental Foundation Challenge all set up, but the team had requested "prizes". Need Committee input. 2 articles posted in November; 3 articles in December 6 more lessons were added in Nov & Dec to TeacherSource that have a sustainability connection Need to make the "links" and inform teachers about the lessons.	
			F.2	Implement Sustainability Challenge	F.2.1	Program designed & executed	NA	Successfully Completed	Teaching & Learning										
			F.3	Schools & Depts post sustainability efforts on web	F.3.1	Articles in Staff Talk and posted on web	14	One article per month	Teaching & Learning										
			F.4	ID learning target-focused instructional materials on sustainability	F.4.1	All relevant items on TeacherSource are searchable by term "sustainability"	0	all (past and future)	Teaching & Learning										
			F.4.2	Sustainability-linked lesson for every applicable target identified in 2011 doc	F.4.2	Sustainability-linked lesson for every applicable target identified in 2011 doc	10%	50%	Teaching & Learning										
			F.4.3	Sust. units "bundled" on TeacherSource	F.4.3	Sust. units "bundled" on TeacherSource	0	1 grade level band completed	Teaching & Learning										

Status Key

On Track to Reach Target

Questionable (list issues)

Not on Track (list barriers)

No Information at this point

Abbreviations

NG = natural gas

EUI = energy use index (BTU per square foot / year)

FY = fiscal year

therm = energy unit of natural gas

MMBTU = 1,000,000 BTU [British Thermal Units] of energy

ODOE = Oregon Department of Energy

kWh = kilowatt-hour of electricity

SB 1149 = reimbursable energy conservation projects

Overall Work Stream Performance Status Tracking for the Year

Work Stream: A
Procurement

Work Stream: B
Energy & Water

Work Stream: C
Buildings & Grounds

Work Stream: D
Food

Work Stream: E
Transportation

Work Stream: F
Education

BEAVERTON

SCHOOL DISTRICT

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Oregon Green Schools

Background

The Oregon Green Schools Association (OGS) is a non-profit organization that provides guidance to Oregon schools in their quest for conserving resources. OGS offers a framework for schools to create resource conservation programs unique to their needs, while Regional Coordinators provide technical assistance and recognition of their efforts. Schools may apply for three levels of progressive certification: Entry, Merit, and Premier, each requiring greater commitment and action from the school community. The term of certification is for three years, allowing schools time to accomplish identified goals and gain program strength. BeavertonSchool District encourages schools to participate in the OregonGreenSchool program.

Issues, Current Actions & Status

- Currently, 31 BeavertonSchool District schools are OGS certified.
 - 20 Entry Level certifications
 - 10 Merit Level certifications
 - 1 Premier Level certification
- BSD's Oregon Green Schools are listed at:
http://www.beaverton.k12.or.us/pdf/facil/facil_GR%20OGS%20schools%202011.July.pdf
- The District's Resource Conservation Specialist fulfills the role of the OGS Regional Coordinator for BeavertonSchool District schools.
 - Provides application assistance
 - Coordinates waste audit activities with schools
- Oregon Green Schools Association maintains a web site, oregongreenschools.org identifying current certified schools and their certification level. Premier Level schools are called out with a picture and thumbnail sketch celebrating their achievement.
- The annual Oregon Green School Summit invites teams of students from OGS certified schools to participate in a day full of opportunities to build skills, share ideas, network, and explore creative hands-on resource conservation learning activities. The location of the Summit changes each year and registration is competitive. Garbage haulers and OGS donations fund the event and provide sponsorships for substitute staff and transportation costs. BSD students have attended the Summit since 2005.

Next Steps

- Continue to promote the participation in the Oregon Green Schools Association certification program and provide assistance to schools in the development of resource conservation programs unique to their needs.