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TO: MAYOR AND CITY COUNCIL
THROUGH:  LINDA NORRIS, CITY MANAGER
FROM: ENVIRONMENTAL ACTION TEAM
SUBJECT: FY 2010-11 ENVIRONMENTAL ACTION PLAN (EAP)

ISSUE:

This staff report provides information regarding the FY 2010-11 Environmental Action Plan's goals, objectives, and action items.

RECOMMENDATION:

For Council information.

BACKGROUND:

Staff introduced the first EAP to the City Council on January 26, 2009. Since then the Environmental Action Team has worked to implement the action items outlined in the plan. The time interval for the initial EAP was changed from a 12-month term, taking place in the 2009 calendar year, to an 18-month term that better aligns the plan with the City's fiscal year calendar. This report introduces the second EAP, which will be implemented during FY 2010-11.

FACTS AND FINDINGS:

In December 2008, the Environmental Action Team, a 17-member, interdepartmental group, defined goals and objectives to make operations more efficient and less wasteful and to prevent pollution. The first-year plan focused exclusively on City operations: energy (electricity and natural gas), energy (vehicle fuel), drinking water, waterway and stormwater quality, and waste reduction and management.

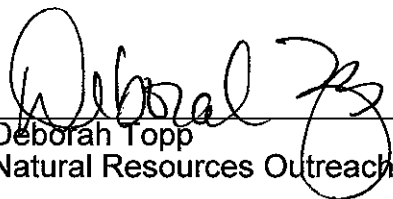
The EAP goals are broad in scope, but the plan's objectives and action items generally provide metrics to measure for results. Since last year was the first year, many action items included assessments and inventories to determine baseline usages and gather information to be used as success indicators in successive years. In some cases, this year's EAP continues with certain objectives, builds on last year's actions and the information collected, and incorporates new goals, tasks, and objectives. (See attachment.)

The FY 2010-11 EAP continues with the same five categories as the previous EAP Energy (electricity and natural gas), Energy (fuel), Drinking Water, Waterway and Stormwater Quality, and Solid Waste Reduction and Waste Management, and includes

one additional category, Parks and Open Space. Given that Parks and Open Space is a new category, the objective is to develop baseline data for City-owned properties based on inventories and assessments.

The City's EAP is operations based, but information with regard to the community component is also provided.

The Environmental Action Team continues to finalize the actions in the 2009 EAP. The first annual report will be presented to City Council in August 2010.


Deborah Topp
Natural Resources Outreach Specialist

Attachment: FY 2010-11 Environmental Action Plan
Ward All

City of Salem FY 2010-11 Environmental Action Plan City Operations

Category	Goals	Objectives	Actions
Energy (Electricity and Natural Gas) Sponsoring Department(s): Information Technology & Facilities, and Public Works	Reduce energy consumed by occupied building space in City facilities	Reduce energy consumed by occupied building space in City facilities* by 15 percent by the end of FY 2012 * as measured by annual kWh or BTUs per square foot of heated space	<ul style="list-style-type: none"> Finalize project development for and begin implementation of heating-efficiency projects: City Hall, the Main Library, Liberty Parkade, Chemeketa Parkade, Building 2, and Building 14. Finalize project development for and begin implementation of lighting-efficiency projects: City Hall, the Main Library, Liberty Parkade, Chemeketa Parkade, Building 2, and Building 14, with the addition of a large number of buildings at the shops complex. Use established baseline data to monitor energy use trends, and modify lights and HVAC systems on all levels of City Hall and the Main Public Library. Install energy monitoring equipment in other City facilities that are managed by the "Building Automated System" (BAS), to establish baseline data, and adjust lights and HVAC systems to improve efficiencies.
	Increase the use of renewable energy sources to power City facilities, where possible	Assess the potential for solar, wind, and geothermal energy sources for City buildings	<ul style="list-style-type: none"> Identify renewable energy opportunities, their potential costs, and funding options.
Energy (Vehicle Fuel) Sponsoring Department(s): Administrative Services	Decrease fuel use in City operations	Improve overall annual fleet miles per gallon and hours per gallon by 5 percent by year-end 2010 and by 10 percent by year-end 2013, from 2008 baseline	<ul style="list-style-type: none"> Continue to implement measures for reducing fuel consumed by municipal fleet equipment as outlined in the City's Fuel Conservation Policy. Implement anti-idling measures, driver education, and right-sizing vehicles to usage (reducing size and loads) of City equipment. Reduce engine idling requirements by replacing the remaining 80 vehicle emergency lighting/amber-warning beacons with low-wattage LED by year-end 2010. Change-out of emergency lighting on frontline emergency services vehicles to LED will be completed in 2011.

Category	Goals	Objectives	Actions
			<ul style="list-style-type: none"> Evaluate hybrid vehicles as possible fleet replacements in FY 2010-11 subject to lifecycle/cost/benefit analysis. The availability of OEM plug-in hybrids, as well as increased types of hybrid vehicles, will increase the efficiency of hybrids and broaden their applications in City service over the coming years. Evaluate electric vehicles (EVs) as possible fleet replacements in FY 2010-11 subject to lifecycle/cost/benefit analysis. Participate with the State of Oregon and other jurisdictions in preparing the City of Salem for the introduction of electric vehicles to the fleet and to develop infrastructure, including charging stations, for charging electric vehicles at selected locations (ongoing). The first EVs will become available in the third quarter of 2010. Monitor the availability of compressed natural gas, liquefied gas, and propane-fueled equipment to use as alternatives to reduce the unit fuel use (ongoing). Focus on fleet replacements to replace existing equipment with smaller, lighter, more fuel-efficient units where operational effectiveness permits (ongoing).
	Reduce carbon dioxide emissions from use of diesel and gasoline-fueled vehicles	Reduce annual carbon dioxide emissions by 5 percent by 2010 and by 10 percent by 2013* *metric will be based on total fuel consumed, using 2008 as a baseline	<ul style="list-style-type: none"> Analyze the possibility to expand the use of biofuels (ongoing). Based on diesel and gasoline consumed, report annually on carbon dioxide produced by fleet operations. (Per the U.S. Energy Information Agency, combustion of one gallon of gasoline produces 19.42 pounds of carbon dioxide, and combustion of one gallon of diesel produces 22.38 pounds of carbon dioxide.) Continue working with the City of Portland on equipping City diesel vehicles with diesel-particulate reduction filters.
Drinking Water Sponsoring Department(s): Public Works	Increase internal water conservation	Reduce water use by City Operations	<ul style="list-style-type: none"> Install meters necessary to establish a baseline for each facility. Categorize each facility by primary use (domestic, irrigation, or industrial) and establish baselines based on the categories, where feasible. Continue internal water-reduction projects (such as low-flow fixture replacement).

Category	Goals	Objectives	Actions
			<ul style="list-style-type: none"> • Incorporate water conservation designs into building rehabilitation and remodeling projects. • Initiate citywide water conservation educational activities. • Identify possible locations and develop cost estimates to create a water conservation demonstration feature (partnership between Water Services, Water Resources, and Parks). • Initiate trial operation of variable irrigation reductions in parks and landscape areas. • Investigate installing/using drought-tolerant landscapes that reduce over-watering, high maintenance costs, bare soil, and high plant turnover. • Identify and evaluate peak water usages and reduce peaks where possible. • Develop a water conservation project prioritization list (using the CIP method) for under \$50,000.
		<p>Reduce water loss in City transmission and distribution system targeting nationally accepted target of no more than 10 percent loss.</p>	<ul style="list-style-type: none"> • Purchase additional leak detection instruments to be used throughout the distribution system. • Replace 3,596 lineal feet of aged pipeline. • Improve internal systems that estimate unmetered water uses by Salem Fire and Public Works. • Implement recommendations of Condition Assessment of Transmission Mains 1 and 2 to reduce leaks.
<p>Waterway and Stormwater Quality</p> <p>Sponsoring Department(s): Public Works</p>	<p>Improve surface water quality</p>	<p>Meet regulatory requirements for state and local permits</p>	<ul style="list-style-type: none"> • Maintain erosion control program compliance. • Maintain compliance with the wastewater National Pollutant Discharge Elimination System (NPDES) Permit. • Maintain compliance with the existing NPDES MS4 Permit, and obtain a new stormwater NPDES MS4 Permit.

Category	Goals	Objectives	Actions
			<ul style="list-style-type: none"> • Reduce sanitary sewer system infiltration and inflow (I & I) by replacing 7,000 lineal feet of aged pipeline by July 2011. • Evaluate existing City infrastructure for opportunities in retrofitting
		Develop a stable funding base for the City's stormwater program	<ul style="list-style-type: none"> • Submit for City Council approval for the proposed stormwater utility by November 2010 and implement the approved stormwater utility as proposed by Council.
		Provide for the treatment and detention of stormwater	<ul style="list-style-type: none"> • Draft and submit for City Council approval a new stormwater code by December 2010 regarding the protection of the storm and surface water systems. • Implement the revised Stormwater Management Design Standards by December 2010 to enhance stormwater treatment and detention in new development and redevelopment. • Construct a permeable parking lot project.
<p>Solid Waste Reduction and Management</p> <p>Sponsoring Department(s): City Manager's Office</p>	Reduce solid waste in City government operations	Reduce the amount of recyclable materials entering the waste stream from City facilities by 25 percent	<ul style="list-style-type: none"> • Increase opportunities for recycling aluminum and plastic at City locations. • Work with stakeholders and department groups to identify needed collection bins and suitable collection points. • Establish personal e-waste interoffice mail program. • Locate a central place where office supplies that are no longer needed can be stored and made available to other departments. • Perform an end-of-year waste audit to determine decrease in recycled goods being diverted from waste stream. • Eliminate printing of earning statements for employees receiving electronic deposits.
		Determine reduction of waste and increase of recycling opportunities through Earthwise certification and other processes	<ul style="list-style-type: none"> • Complete Earthwise certification for all City facilities. • Determine feasibility of using Garten Services for "Zero Waste" City events.

Category	Goals	Objectives	Actions
		Increase education of City staff on waste reduction and recycling opportunities and responsibilities	<ul style="list-style-type: none"> • Create more training and informational aspects to the sustainability pages on the intranet. • Launch "Cover Your Backside" duplex printing campaign. • Encourage the use of the intranet and make meetings as paperless as possible by decreasing the number of meeting handouts.
Parks and Open Spaces Sponsoring Department(s) Public Works and Community Development	Preserve and enhance natural resources and landscapes on City-owned property	Develop baseline data for City-owned properties	<ul style="list-style-type: none"> • Inventory all City-owned properties and determine their designation (park, open space, misc.). • Develop assessment criteria/scorecard for natural resources values and maintenance practices that include but are not limited to: <ol style="list-style-type: none"> 1. riparian shade analysis 2. tree canopy analysis 3. review of operation and maintenance procedures including current management, sensitive area plan, and Integrated Pest Management. • Assess natural resources assets and maintenance practices on all City-owned properties. • Apply criteria/scorecard to identify project opportunities and subsequent project prioritization list. • Determine natural resources designation for undesignated properties.

Community Component

Category	Goals	Objectives	Actions
<p>Community Energy Strategy</p> <p>Sponsoring Department(s): Urban Development</p>	<p>Improve energy efficiency in buildings communitywide</p>	<p>Provide financial incentives and tools to improve energy efficiently</p>	<ul style="list-style-type: none"> • Develop and capitalize a revolving loan fund that provides up front financing for energy efficiency upgrades in existing residential and commercial buildings. Establish Revolving Loan Fund program by September 1, 2010; issue first loan by December 1, 2010. <p>Performance Measures – Building permits issued for energy efficiency or renewable energy projects (15 per year); loans dispersed per year (12 per year)</p> <p>* These activities assume the Department of Energy approval for the community energy strategy.</p>
	<p>Create and support a viable and diverse transportation network that focuses on moving people</p>	<p>Support a communitywide plan for locating electric vehicle charging infrastructure</p>	<ul style="list-style-type: none"> • Develop a communitywide plan that encourages electric vehicle charging infrastructure; initiate and oversee an Electric Vehicle Infrastructure Task Force to prepare for the eTec grant and EV opportunities communitywide. Identify locations for charging stations by May 1, 2010. EV charging stations are scheduled for deployment by December 2010. <p>Performance Measures – Number of electric vehicle charging stations installed (100)</p> <p>* \$5,000 of the DOE/EECBG funds have been allotted for the above items during FY 2010-11.</p>
		<p>Implement recommendations identified in the Willamette River Crossing Alternative Modes Study, to improve access to bicycle, pedestrian, and transit connections</p>	<ul style="list-style-type: none"> • Identify bicycle/pedestrian project(s) by July 1, 2010. Design a bicycle/pedestrian project by December 1, 2010. • Use funding from USDOE and EECBG program to do one capital project by July 2010. • Implement route signage and bike parking in December 2010. <p>Performance Measures – Number of bicycle or pedestrian routes designated and signed (2-3 per year) and number of bike parking/storage facilities constructed (2 per year).</p> <p>* \$85,000 of the DOE/EECBG funds have been allotted for the above items.</p>

Category	Goals	Objectives	Actions
	<p>Complete a public participation program that fosters a sense of commitment and awareness of the benefits of energy savings and greenhouse gas reduction communitywide</p>	<p>Develop marketing and educational outreach plan and materials to promote programs and projects</p>	<ul style="list-style-type: none"> • Develop a marketing plan and materials to promote energy savings programs; develop a website to serve as clearinghouse of information; conduct ongoing outreach activities; complete final Energy Strategy report and conduct outreach to raise awareness. Complete an energy website by August 2010 and conduct Community Energy Forum by December 2010 <p>Performance Measures – Number of outreach materials distributed (500 copies of Community Energy Strategy report); number of residents participating in annual energy forum (1 forum per year; 150 residents)</p> <p>* \$65,000 of the DOE/EECBG funds have been identified to support the development of this.</p>