



CITY OF
HAYWARD
HEART OF THE BAY

**COUNCIL SUSTAINABILITY
COMMITTEE**

APRIL 03, 2013

Table of Contents

Agenda	2
Council Sustainability Meeting Minutes from January 30, 2013 Minutes	4
Recommendation to Utilize the State Building Code to Comply with Hayward’s Climate Action Plan Strategies 4 and 5 Related to New Development Staff Report	9
Attachment I Comparison of Existing and Recommended Green Building Provisions	14
Attachment II Summary of 2013 State Code Changes	15
Sustainability Policies in the 2040 General Plan Staff Report	20
ATTACHMENT I Current General Plan Policies	25
ATTACHMENT II Current CAP Policies.	26
ATTACHMENT III Potential GP Policies	29
Annual Update Administrative Rule 3.9 – Environmentally Preferred Purchasing Policy Staff Report	30
Attachment I Administrative Rule 3.9	42
Update on City-Wide Water Conservation Efforts Staff Report	46
Annual Update on City’s Waste Reduction and Recycling Programs Staff Report	53



CITY COUNCIL SUSTAINABILITY COMMITTEE MEETING
Wednesday, April 03, 2013
Conference Room 2A
4:30 PM

CALL TO ORDER

ROLL CALL

PUBLIC COMMENTS: *(The Public Comment section provides an opportunity to address the City Council Committee on items not listed on the agenda. The Committee welcomes your comments and requests that speakers present their remarks in a respectful manner, within established time limits, and focus on issues which directly affect the City or are within the jurisdiction of the City. As the Committee is prohibited by State law from discussing items not listed on the agenda, your item will be taken under consideration and may be referred to staff.)*

1. Approval of Minutes of January 30, 2013

[Minutes](#)

2. Recommendation to Utilize the State Building Code to Comply with Hayward's Climate Action Plan Strategies 4 and 5 Related to New Development

[Staff Report](#)

[Attachment I Comparison of Existing and Recommended Green Building Provisions](#)

[Attachment II Summary of 2013 State Code Changes](#)

3. Sustainability Policies in the 2040 General Plan

[Staff Report](#)

[ATTACHMENT I Current General Plan Policies](#)

[ATTACHMENT II Current CAP Policies](#)

[ATTACHMENT III Potential GP Policies](#)

4. Annual Update Administrative Rule 3.9 – Environmentally Preferred Purchasing Policy

[Staff Report](#)

[Attachment I Administrative Rule 3.9](#)

5. Update on City-Wide Water Conservation Efforts

[Staff Report](#)

6. Annual Update on City's Waste Reduction and Recycling Programs

[Staff Report](#)

COMMITTEE MEMBER ANNOUNCEMENTS AND REFERRALS

ADJOURNMENT

NEXT REGULAR MEETING – 4:30PM, WEDNESDAY, JULY 10*, 2013

*REQUIRES COMMITTEE CONSIDERATION AND APPROVAL

Materials related to an item on the agenda submitted to the Committee after distribution of the agenda packet are available for public inspection in the City Clerk's Office, City Hall, 777 B Street, 4th Floor, Hayward, during normal business hours. An online version of this agenda and staff reports are available on the City's website.

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CITY COUNCIL SUSTAINABILITY COMMITTEE MEETING
Hayward City Hall – Conference Room 2A
777 B Street, Hayward, CA 94541-5007

January 30, 2013
4:30 p.m.

MEETING MINUTES

CALL TO ORDER: Meeting called to order at 4:30 p.m. by Chair Al Mendall, Council Member.

ROLL CALL:

Members:

- Al Mendall, Council Member/CSC Chair
- Barbara Halliday, Council Member
- Francisco Zermeño, Council Member
- Vishal Trivedi, Planning Commissioner
- Laura Oliva, Keep Hayward Clean and Green Task Force/CSC Vice Chair

- Dianne McDermott, Planning Commissioner - Absent
- Elisa Marquez, Planning Commissioner - Absent

Staff:

- Alex Ameri, Director of Public Works - Utilities & Environmental Services
- David Rizk, Development Services Director
- Vera Dahle-Lacaze, Solid Waste Manager
- Marilyn Mosher, Administrative Analyst III
- Corinne Ferreyra, Administrative Analyst I
- Angel Groves, Secretary (Recorder)

Others:

- Andrea Schumer, Customer Relationship Manager, PG&E

PUBLIC COMMENTS:

None

1. Approval of Minutes of October 3, 2012 – minutes approved.
2. Update on Partnerships with PG&E

David Rizk, Development Services Director, introduced Andrea Schumer, Customer Relationship Manager at PG&E, who presented a PowerPoint presentation and overview of active partnerships between the City of Hayward and PG&E over the last several months.

Before handing the floor to Ms. Schumer, Mr. Rizk commented to the Committee of a future plan to present the Committee with an overview of the Federal Energy Efficiency & Block Grant Program (EECBG) and how monies were spent, the projected emissions reductions and energy savings.

Ms. Schumer began by emphasizing the importance of the City's partnership with PG&E and the benefits of promoting energy saving initiatives together. She went over the details of the "Green Hayward" business program, most recently completed. The campaign offered: rebates as incentives for businesses to remove certain types of outdated lighting technologies with newer, high efficiency ones, provided no cost energy efficiency surveys, quality assurance inspections, and incentives to decrease installation cost. The campaign was extremely successful. In summary, 572 businesses contacted PG&E, 328 audits were conducted and 41 programs were completed. The energy savings is the equivalent of the annual electricity usage for 214 homes. As of January 30, calls were still being received requesting energy audits.

Barbara Halliday, City Council Member, thanked Ms. Schumer and PG&E for their accomplishments, and asked when PG&E would be presenting their results to City Council Members. Ms. Schumer advised this would take place at the end of February or early March and expressed the desire of Hayward Unified School District personnel to also attend that Council meeting to express their gratitude for the City's actions.

3. Energy Council JPA Report

Alex Ameri, Director of Public Works – Utilities & Environmental Services, noted that Marilyn Mosher, Administrative Analyst III, prepared the report being presented by Corrine Ferreyra, Administrative Analyst I, who has attended various meetings and is familiar with the ongoing discussions.

Ms. Ferreyra provided a background summary of the purpose and goals of establishing the Energy Council by Alameda County Waste Management Authority (ACWMA) and the role of the Joint Exercise of Powers Authority (JPA). The specific goal of the Energy Council is to secure funding for energy-related programs and implementing such programs on a regional basis. Council Member Zermeño asked how many agencies are involved. Ms. Ferreyra noted that there are 14 agencies plus unincorporated areas within Alameda County. Of those, three cities have opted in thus far; Union City, Newark and Albany.

Ms. Ferreyra noted a topic of concern being the inadequate voting structure and informed the Committee that the Board agreed to discuss modifications to the structure at its January 23 meeting. The proposed structure would provide a number of votes for larger Cities that would better represent their population.

Chair Mendall expressed how crucial it is that the City defend the weighted voting structure, support the motion and fight for it. Chair Mendall asked for an official vote from the Committee; the motion being to join contingent upon a weighted vote structure. The motion passed unanimously.

Mr. Ameri advised Committee Members that this action will be brought before Council at the City Council Meeting scheduled for March 26.

4. Clean Energy Efficiency Funding – Proposition 39 and AB 32 “Cap and Trade” Revenue

Ms. Ferreyra presented a PowerPoint presentation and overview of Proposition 39, approved in November 2012 that requires that multi-state businesses use a formula proportional to their total sales in California to pay state income tax and; AB 32, enacted in 2006 requires the California Air Resource Board (ARB) to adopt a statewide GHG emissions limit equivalent to 1990 levels by 2020.

In reference to the discussion of AB 32, Mr. Ameri noted that the cap or emission limit would only affect 1-2 businesses in the City of Hayward. Statewide, about 360 businesses would be affected.

Chair Mendall suggested the main overview focus on the \$550 million a year that can be used toward energy funding. Ms. Ferreyra advised that the main focus of the funds is to promote and support programs that improve energy efficiency; expand implementation of renewable energy sources, mainly solar, job training and workforce development programs. The Legislature along with the California Public Utilities Commission (CPUC) and California Energy Commission (CEC) will determine how monies are spent.

Council Member Zermeño, asked if there were specific projects currently in mind for use of these funds. Mr. Ameri commented that there are not, as the method for allocation of specific dollar amounts has yet to be determined by the Legislature.

Chair Mendall emphasized that the best way to bring these funds to the City is by offering assistance/encouragement to the Hayward Unified School District to apply for these grants.

As a final comment on this item, Chair Mendall asked Committee Members to think of the possibility of the Cap & Trade funds being used towards funding of a Biotech Council.

5. Solar Powered Trash Receptacles

Mr. Ameri reminded the Committee of interest in researching more information regarding the possibility of purchasing Solar Powered Trash Receptacles expressed by Committee Members at the meeting held on October 3, 2012. An opportunity to purchase these receptacles presented itself when it was discovered that unused grant funds from the U.S. Department of Energy’s Energy Efficiency and Conservation Block Grant Program had to be spent before end of year 2012. With these funds, three units were purchased and placed at three locations throughout the City.

Vera Dahle-Lacaze, Solid Waste Manager, provided information regarding the location of each receptacle, a description of each unit and proper use. Chair Mendall, Council Member Zermeño and Council Member Halliday expressed their gratitude for the quick action,

thanked everyone for being proactive and taking advantage of these funds. Council Member Zermeno asked that photos of these containers be sent to staff at Chabot College and the Hayward Unified School District.

6. Single-Use Bag Reduction Compliance in the City of Hayward

Ms. Dahle-Lacaze provided a brief summary and PowerPoint presentation of the staff's findings in relation to the Single-Use Bag Reduction Ordinance that went into effect on January 1, 2013. Solid Waste staff visited various establishments to observe how both staff and customers were responding to the ban and whether they were complying. Ms. Dahle-Lacaze noted that overall, compliance at this stage is extremely encouraging and that staff would continue to monitor compliance periodically in the future.

Council Member Zermeno noted that he has only received two complaints via email; Council Member Halliday received only one negative phone message. Overall, the response has been positive.

7. Review Future Agenda Topics

Mr. Ameri noted an addition to the Meeting Topics for the April 3 Sustainability Committee Meeting, as being the Annual Update on Administrative Rule 3.9, Environmentally Preferred Purchasing Policy.

Mr. Rizk noted that due to the City adopting new green building codes in November, these items would be discussed on April 3 and possibly July as well. He also mentioned that the Committee should re-visit CAP priorities, since it has been four years since it was last reviewed.

All other meeting topics scheduled for the April 3 CSC Meeting remain the same.

COMMITTEE MEMBER/STAFF ANNOUNCEMENTS AND REFERRALS:

Council Member Zermeno expressed his interest in promoting and encouraging residents to plant fruit trees in their yards. Mr. Rizk added that this item would be incorporated into the General Plan under Local Food Production. Additional items would include beneficial information regarding suburban agriculture and co-op gardens. Mr. Trivedi added that researching locations and encouraging residents to participate in community gardens should also be included in the General Plan. Mr. Rizk acknowledged that all above topics would be included.

Council Member Halliday thought these items fell under topic items for New Priorities for CAP actions in the general plan and suggested this be changed to Sustainability Policies vs. New Priorities. Mr. Rizk suggested that perhaps these two topics should be discussed separately. General Plan priorities, which would include sustainability policies, re-visited in April and CAP priorities re-visited at a later time, possibly next year.

Chair Mendall also added that he would like to see financial incentives and funding sources for solar installation in the unscheduled topics for 2013. Council Member Zermeño and Council Member Halliday expressed their support for this item.

Mr. Ameri offered the option of providing low interest loans as well, explaining that though Proposition 39 and Cap & Trade funds would offer \$500 million nationwide, the City's share would be less than \$2 million of those funds. This would not be sufficient funding for programs and so offering low interest loans would prove beneficial and encouraging.

Chair Mendall requested that all Committee Members receive some kind of notification, informing all when businesses take advantage of PACE. This kind of positive reinforcement is encouraging and keeps motivation going.

Chair Mendall also asked about a method of turning sewage water into electricity. Mr. Ameri clarified that it is not turning sewage into electricity, but rather using the energy created by the excess pressure in water distribution mains. He noted that Utilities & Environmental Services is currently looking into the possibility of using this excess energy.

Chair Mendall also asked about the status of the recruitment of the Environmental Services Manager. Mr. Ameri advised all that this was still an ongoing, nationwide recruitment and would provide more information within the next few months.

ADJOURNMENT: 6:05 p.m.



DATE: April 3, 2013

TO: City Council Sustainability Committee

FROM: Development Services Director

SUBJECT: Recommendation to Utilize the State Building Code to Comply with Hayward's Climate Action Plan Strategies 4 and 5 Related to New Development

RECOMMENDATION

That the Council Sustainability Committee (CSC) reviews this report and provides feedback.

SUMMARY

Strategy 4 in Hayward's Climate Action Plan (CAP) is to improve energy performance of new buildings. Up to now, Hayward has worked to achieve this strategy through its local Green Building Ordinance for Private Development, which was adopted in 2009 to require building standards that are more rigorous than those that were in the State's Building Code.

The State is currently in the process of updating all parts of its Building Code as part of the 2013 Code cycle, which will be effective on January 1, 2014. The new Code will be the greenest in the nation, especially the energy section (Part 6). The major implication of this 2013 Code update is that the State of California is now taking responsibility for ensuring that new buildings statewide will get more efficient over time and for ensuring that renewable energy sources will be integrated into all new buildings in the near future. Because of this, in response to Strategy 4 in the CAP, Hayward simply needs to align its own codes with the State's Building Code.

Strategy 5 in the CAP is to use renewable energy, including requiring renewable energy for new private development. The 2013 State Code encourages, but does not require renewable energy. Staff feels confident that the 2016 State Code will include some requirement for renewable energy in new buildings. However, if the City wants to include a requirement earlier than that time, staff is recommending requiring builders of new subdivisions of twenty units or more to offer photovoltaic and solar thermal systems to buyers at an advertised rate. This requirement would take place during the planning review process.

BACKGROUND

The Hayward City Council adopted the Hayward Climate Action Plan (CAP) in October of 2009. The CAP identifies emission reduction targets of 12.5 percent below 2005 levels by 2020 and 82.5 percent below 2005 levels by 2050. In order to achieve these reductions, the CAP recommends strategies, actions to realize each strategy, and a timeline for action implementation. There are nine strategies in the CAP.

This report pertains to Strategy 4 – Improve Energy Performance of New Buildings, and Strategy 5 – Use Renewable Energy.

Actions 4.1 and 4.2 in the CAP are to implement private development green building ordinances for new residential and commercial buildings beginning in 2009. In accordance with that timeline, Hayward’s Green Building Ordinance for Private Development (GBO) took effect January 15, 2010¹. Actions 4.1 and 4.2 also call for regular evaluations of the green building program to ensure that new buildings are getting more efficient over time. In addition, the actions state that the City should be cognizant of the cost to residents and businesses of the green building requirements and “make efforts to balance costs with benefits of reduced energy use.”

Action 5.3 in the CAP is to add a renewable energy requirement into the private development green building ordinance beginning in 2013. At the April 4, 2012 meeting of the CSC², staff presented a report with the purpose of both evaluating the green building program and addressing Action 5.3. At that meeting, staff suggested that the Committee review activities that are happening at the state level before making recommendations to amend the City’s GBO.

Staff returned to the CSC on July 11, 2012³ to present on the two major developments that were occurring at the State level since Hayward adopted its Green Building Ordinance in 2009, which are: 1) the launch of the California Energy Commission’s (CEC) aggressive plan to achieve Zero Net Energy (ZNE) performance in new buildings (which requires the use of renewable energy sources), and 2) the continued refinement and expansion of the California Green Building Standards Code, also known as CALGreen. At the July 2012 Sustainability Committee meeting, the Committee members expressed support for removing the City’s energy efficiency requirements from the GBO because the 2013 State Code will exceed the City’s current energy requirements. In addition, the Committee expressed tentative support for removing the GreenPoint Rated requirement for new residential buildings, with the assumption that staff would return to the Committee in April 2013 after seeing the final draft of 2013 CALGreen.

These developments are explained in more detail below. The major implication of these two developments is that the State of California is taking responsibility for ensuring that new buildings statewide are getting more efficient over time and for ensuring that renewable energy sources will be integrated into all new buildings in the near future.

The CEC’s phased plan to achieve “Zero Net Energy” (ZNE) building performance – A ZNE building generates at least as much energy as it uses in a year through renewable energy systems. The California Energy Commission is implementing its plan to achieve ZNE performance in new residential buildings by 2020 and in new commercial buildings by 2030. The ultimate objective of achieving ZNE in new buildings is to meet the greenhouse gas reduction targets of the Global Warming Solutions Act of 2006 (AB 32) while also planning for the energy needs of a growing state. The plan was first proposed in the [CEC’s 2007 Integrated Energy Policy Report](#). In 2010, the California Pacific Utilities Commission (CPUC), the California Air Resource Board (CARB), and California Environmental Protection Agency (Cal/EPA) joined the CEC to release [California’s Clean Energy Future Implementation Plan](#), which identifies ZNE buildings as a top priority for addressing California’s energy demands.

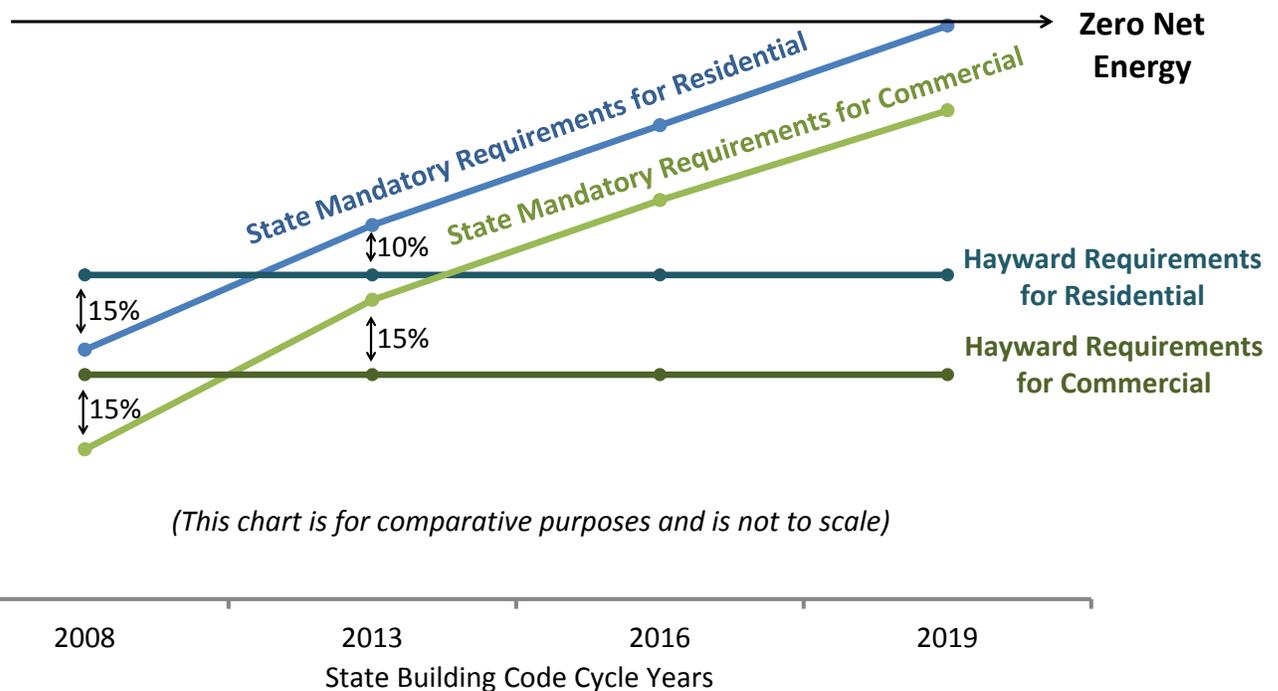
¹ The GBO was first adopted in November 2008, but needed to be cleared by the State before it could go into effect. The code was subsequently amended in November of 2010, which took effect January 1, 2011.

² See report and attachments as agenda item #5 at: <http://www.hayward-ca.gov/CITY-GOVERNMENT/COUNCIL-STANDING-COMMITTEES/COUNCIL-SUSTAINABILITY-COMMITTEE/2012/CSC-CCSC040412.pdf>.

³ See report and attachments as agenda item #3 at: <http://www.hayward-ca.gov/CITY-GOVERNMENT/COUNCIL-STANDING-COMMITTEES/COUNCIL-SUSTAINABILITY-COMMITTEE/2012/CSC-CCSC071112full.pdf>.

To reach ZNE, the CEC will increase the requirements in the State’s Energy Code each code cycle until ZNE performance is realized (see Figure 1 below). As a result, the 2013 Energy Code will require residential buildings to be 25 percent more efficient and nonresidential buildings to be 30 percent more efficient than buildings built under the 2008 Energy Code. This requirement of the 2013 Energy Code will be 10 and 15 percent more aggressive than those of Hayward’s existing requirements. As Figure 1 illustrates, the State’s requirements for energy in new buildings will overtake Hayward’s current standards in 2013.

Figure 1: Statewide Energy Code Requirements in Comparison to Hayward’s Energy Requirements for New Buildings



The Continued Refinement and Expansion of CalGreen – The CEC is doing its part to increase sustainable building requirements through the Energy Code. At the same time, the California Building Standards Commission and the California Department of Housing and Community Development are doing their part to increase sustainable requirements in other building areas through CALGreen. CALGreen was added to the Building Standards Code in 2010 after a handful of cities (including Hayward) and counties took the lead to successfully adopt green building standards at the local level.

CALGreen assembles statewide mandatory “green” measures into one part of the Building Code for easy reference. The CALGreen measures are grouped into five sustainability categories: Planning and Design; Energy Efficiency; Water Efficiency and Conservation; Material Conservation and Resource Efficiency; and Environmental Quality. Some of the measures are duplicated from other parts of the Building Code, like the Energy Code, while some of the measures only appear in CALGreen.

In contrast to the Energy Code, CALGreen is not expected to change significantly during the 2013 code cycle. Instead, the California Building Standards Commission and the California Department of Housing and Community Development will use this cycle to refine CALGreen based on feedback that they have

been collecting over the past two years. The most significant change will be that, starting January 1, 2014, CALGreen will apply to nonresidential additions over 1,000 square feet.

California cities like Hayward that developed green building ordinances before the State adopted CALGreen looked to private certification systems for standards. Hayward's Green Building Ordinance uses the GreenPoint Rated standard as its requirement for new residential buildings. GreenPoint Rated was originally created as a recognition system for residential projects that exceed government codes, but do not have the resources to undertake LEED certification. The Green Point Rating system was developed by Stopwaste.org and is administered by Build It Green, a nonprofit organization based in Berkeley. The cost to be certified as a GreenPoint Rated residential building ranges from \$800 to \$2,000.

DISCUSSION

As stated above, the major implication of the State's action from Hayward's point of view is that the State is now taking responsibility for ensuring that all new buildings are getting more efficient over time and for ensuring that renewable energy sources will be integrated into all new buildings in the near future. Therefore, in order to meet Strategy 4 in the CAP, which is to improve energy performance of new buildings, Hayward simply needs to adopt the State's Building Codes.

Staff has reviewed each of the five sections of the final draft 2013 CALGreen Code. Staff feels that the 2013 Code is equivalent or above the City's current green building requirements in each of the five sections. Because of this, and because of the benefits mentioned above, staff is recommending that the City rescind its local Green Building Ordinance for Private Development and use the State Building Code to meet its CAP goals starting with the 2013 State Code, which takes effect on January 1, 2014. Attachment I provides a comparison of the City's current requirements and the staff-recommended requirements.

Renewable Energy Requirement - Strategy 5 in the CAP relates to the use of renewable energy, including requiring renewable energy for new private development. The 2013 State Code encourages, but does not require, renewable energy. Staff feels confident that the 2016 State Code will include some requirement for renewable energy in new buildings. As stated above, the benefit of following the State Code is that it provides a consistent statewide regulatory framework for developers.

However, if the City wants to pursue a local renewable requirement prior to the next Code update, staff presented two options at the July Sustainability Committee meeting. These were to require builders of new subdivisions of twenty units or more to either: 1) offer photovoltaic and solar thermal systems to buyers at an advertised rate, or 2) build 10 percent of units to be grid neutral. Staff only recommends such a requirement for subdivisions because it is more likely to be cost-feasible for larger projects than for single-unit projects.

The Committee members expressed support for the first option rather than the second because of concerns about costs to builders and homebuyers and because the second option would trigger a cost-effectiveness study requirement from the CEC. This first option would encourage builders to form relationships with solar system providers and would allow homebuyers the opportunity to purchase solar systems as part of a new home. The convenience of purchasing and financing a solar system with the home may encourage more homebuyers to adopt these technologies. If the Committee is still in support of pursuing the first option, and City Council supports such option, staff will incorporate this requirement into the planning review process this fall after the Council takes such action.

Attachment II is a summary from the California Energy Commission that outlines the major changes coming in the 2013 Building Code standards. As it relates to this report, requirements for "solar ready"

for residential buildings are addressed on page 1 and for non-residential buildings on page 4 of that attachment.

ECONOMIC IMPACTS

The 2013 State Energy Code will have a substantial impact on the development community. According to the CEC, the new standards will increase the cost of constructing a new home by \$2,290 on average. This Code will be mandatory for all California cities.

FISCAL IMPACTS

Staff does not foresee any fiscal impact from rescinding the City's current Green Building Ordinance for Private Development and relying on the 2013 State Building Code to comply with the City's Climate Action Plan strategies related to new development. Also, there would be minimal staffing costs associated with adding a requirement to offer renewable energy for subdivisions entailing twenty or more units to the planning review process.

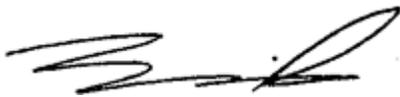
NEXT STEPS

The City must adopt the State's 2013 Building Standards Code between the publication date of the Code, which is July 1, 2013, and the effective date, which is January 1, 2014. Hayward will adopt its new local codes in the fall of 2013, including any amendments to the State codes. Contingent upon direction from the Committee, staff will take recommended Code changes to the Council as part of the City's Code adoption process.

Prepared by: Steve Osborne, Senior Plan Checker
Mary Thomas, City Management Fellow

Recommended by: David Rizk, Development Services Director

Approved by:



Fran David, City Manager

Attachments

- Attachment I Comparison of the City's current requirements and the proposed requirements
- Attachment II Summary of 2013 State Building Code Changes from the California Energy Commission

Type of Project	Existing Regulations/Requirements					Proposed Regulations/Requirements (2014)				
	Energy Efficiency	Resource Conservation	Water Conservation	Indoor Air Quality	Sustainable Sites	Energy Efficiency	Resource Conservation	Water Conservation	Indoor Air Quality	Sustainable Sites
New SF Residential	GPR = 15% above 2008 Energy Code	GPR + CalGreen <i>Division 4.4</i>	GPR + Hayward Water Efficiency Ord.+ CalGreen <i>Division 4.3</i>	GPR + CalGreen <i>Division 4.5</i>	GPR + CalGreen <i>Division 4.1</i>	2013 Energy Code	CalGreen <i>Division 4.4</i>	CalGreen <i>Division 4.3</i>	CalGreen <i>Division 4.5</i>	CalGreen <i>Division 4.1</i>
SF Residential Remodels/Additions	2008 Energy Code	NO REQUIREMENTS	Hayward Water Efficiency Ord.	NO REQUIREMENTS	NO REQUIREMENTS	2013 Energy Code	CalGreen <i>Division 4.4</i>	CalGreen <i>Division 4.3</i> + SB 407*	CalGreen <i>Division 4.5</i>	CalGreen <i>Division 4.1</i>
New MF Residential ≤ 3 stories	2008 Energy Code	GPR + CalGreen <i>Division 4.4</i>	GPR + Hayward Water Efficiency Ord. + CalGreen <i>Division 4.3</i>	GPR + CalGreen <i>Division 4.5</i>	GPR+CalGreen <i>Division 4.1</i>	2013 Energy Code	CalGreen <i>Division 4.4</i>	CalGreen <i>Division 4.3</i>	CalGreen <i>Division 4.5</i>	CalGreen <i>Division 4.1</i>
New MF Residential > 3 stories	2008 Energy Code	GPR	GPR + Hayward Water Efficiency Ord.	GPR	GPR	2013 Energy Code	CalGreen <i>Division 4.4</i>	CalGreen <i>Division 4.3</i>	CalGreen <i>Division 4.5</i>	CalGreen <i>Division 4.1</i>
MF Residential Remodels/Additions	2008 Energy Code	NO REQUIREMENTS	Hayward Water Efficiency Ord.	NO REQUIREMENTS	NO REQUIREMENTS	2013 Energy Code	CalGreen <i>Division 4.4</i>	CalGreen+ SB 407+CalGreen <i>Division 4.3</i>	CalGreen <i>Division 4.5</i>	CalGreen <i>Division 4.1</i>
New Commercial	15% above 2008 Energy Code	CalGreen <i>Division 5.4</i>	CalGreen <i>Division 5.3</i>	CalGreen <i>Division 5.5</i>	CalGreen <i>Division 5.1</i>	2013 Energy Code	CalGreen <i>Division 5.4</i>	CalGreen <i>Division 5.3</i>	CalGreen <i>Division 5.5</i>	CalGreen <i>Division 5.1</i>
Commercial Tenant Improvements/Additions < 1,000 square feet or \$500,000 valuation	5% above 2008 Energy Code	NO REQUIREMENTS	Hayward Water Efficiency Ord.	NO REQUIREMENTS	NO REQUIREMENTS	2013 Energy Code	CalGreen <i>Division 5.713</i> <i>Threshold drops to \$200K and/or 1,000 sf.</i>	CalGreen <i>Division 5.712</i> <i>Threshold drops to \$200K and/or 1,000 sf.</i>	CalGreen <i>Division 5.714</i> <i>Threshold drops to \$200K and/or 1,000 sf.</i>	CalGreen <i>Division 5.710</i> <i>Threshold drops to \$200K and/or 1,000 sf.</i>
Commercial Tenant Improvements/Additions > 1,000 square feet or \$500,000 valuation	2008 Energy Code	CalGreen <i>Division 5.713</i>	CalGreen <i>Division 5.712</i>	CalGreen <i>Division 5.714</i>	CalGreen <i>Division 5.710</i>	2013 Energy Code	CalGreen <i>Division 5.713</i>	CalGreen <i>Division 5.712</i>	CalGreen <i>Division 5.714</i>	CalGreen <i>Division 5.710</i>
New municipal buildings < 20,000 sq. ft. and/or <\$5 million valuation. EFFORT TO DESIGN WITH SIMILAR FEATURES TO 20 LEED POINTS, BUT NO CERTIFICATION.	2008 Energy Code	CalGreen <i>Division 5.4</i>	CalGreen <i>Division 5.3</i>	CalGreen <i>Division 5.5</i>	CalGreen <i>Division 5.1</i>	2013 Energy Code+ LEED CERTIFIED	CalGreen <i>Division 5.4</i> + LEED CERTIFIED	CalGreen <i>Division 5.3</i> + LEED CERTIFIED	CalGreen <i>Division 5.5</i> + LEED CERTIFIED	CalGreen <i>Division 5</i> + LEED CERTIFIED
New municipal buildings ≥ 20,000 sq. ft. or ≥ \$5 million valuation (LEED CERTIFICATION ALSO APPLIES TO ALTERATIONS IN THIS RANGE)	2008 Energy Code + LEED SILVER	CalGreen <i>Division 5.4</i> + LEED SILVER	CalGreen <i>Division 5.3</i> + LEED SILVER	CalGreen <i>Division 5.5</i> + LEED SILVER	CalGreen <i>Division 5.1</i> LEED SILVER	2013 Energy Code+LEED SILVER	CalGreen <i>Division 5.4</i> + LEED SILVER	CalGreen <i>Division 5.3</i> + LEED SILVER	CalGreen <i>Division 5.5</i> + LEED SILVER	CalGreen <i>Division 5.1</i> + LEED SILVER
Municipal Alterations < 20,000 sq. ft. and/or <\$5 million valuation. EFFORT TO DESIGN WITH SIMILAR FEATURES TO 20 LEED POINTS, BUT NO CERTIFICATION.	2008 Energy Code	CalGreen <i>Division 5.713</i>	CalGreen <i>Division 5.712</i>	CalGreen <i>Division 5.714</i>	CalGreen <i>Division 5.710</i>	2013 Energy Code	CalGreen <i>Division 5.713</i>	CalGreen <i>Division 5.712</i>	CalGreen <i>Division 5.714</i>	CalGreen <i>Division 5.710</i>

*Senate Bill 407 is similar to the Hayward Water Efficiency Ordinance (Article 23). It may supersede this local code.

Revised: March 6, 2013

2013 Residential Building Energy Efficiency Standards Measures Summary

Prescriptive Measures:

1. High Performance Windows – Reducing the U-Factor down to 0.32 and SHGC down to 0.25. **(Section 150.1(c)3A)**
2. Duct Insulation – Raise minimum from R-4.2 to R-6.0 in climate zones 6, 7, and 8. **(Section 150.1(c)9)**
3. Night Ventilation – Whole house fan as a minimum; allows Smart Vents and Night Breeze as alternatives in CZs 8-14. **(Section 150.1(c)12)**
4. Adding the Radiant Barrier requirements in CZs 3, and 5-7. **(Section 150.1(c)2)**
5. Increase wall insulation to R15/4 in all CZs **(Section 150.1(c)1B)**

Mandatory Requirements:

1. Duct sealing in all CZs. **(Section 150.0(m)11)**
2. Return duct design or fan power and airflow testing (Residential HVAC Quality Installation Improvements). **(Section 150.0(m)13)**
3. Lighting – Improving and clarifying the mandatory lighting requirements for all residential buildings including kitchens, bathrooms, dining rooms, utility rooms, garages, hall ways, bedrooms, and outdoor lighting. Require at least one high efficacy luminaire in each bathroom. **(Section 150.0(k))** Updated requirements for LED luminaires for manufacturers to certify to qualify as high efficacy. **(JA-8)**
4. Hot water pipe insulation -Requires insulation on pipes $\frac{3}{4}$ inch and larger. **(Section 150.0(j)2Aii and Section 150.0(j)4)**
5. Solar Ready Measure – 250 square feet of solar ready zone on single family roofs. **(Section 150.0(r))**

Compliance Options

1. Solar Photovoltaic can be used as a compliance option to comply under the performance path.
2. Occupant Controlled Smart Thermostat as a tradeoff against the solar ready zone. **(Section 110.10(b)1A EXCEPTION 6)**

Additions and Alteration

1. Simplified Compliance documentation requirements for small additions and alteration projects that do not involve a HERS measure. **(Section 150.2(a) and (b))**
2. Simplified rules for both the prescriptive and performance paths for additions, alterations, and existing plus additions plus alterations. **(Section 150.2(a) and (b))**

2013 Nonresidential Building Energy Efficiency Standards Measures Summary

Envelope

1. Increased low-slope cool roof requirements (increase reflectance from 0.55 to 0.63 for new construction and alterations). **(Section 140.3(a)1Aia1)**
2. Established a maximum air leakage rate (0.04 cfm/sf) except in mild climate zones. Consistent with air leakage requirements in IECC. **(Section 140.3(a)9B)**
3. Increased fenestration requirements to reduce solar gains and increase visual light transmittance for daylighting; 0.36 U-factor, 0.25 SHGC, VT 0.42 for fixed windows; the numbers are different for operable windows and skylights. **(Section 140.3(a)5B,C & D)**
4. Added mandatory minimum wall and roof insulation requirements. **(Section 110.8(e) & (f))**

Lighting

1. Clarification and simplification of existing language; removing exceptions no longer relevant. **(Section 130.0-130.5, 140.6-140.8)**
2. Lighting control devices moving from Title 24 to Title 20; Lighting control systems shall now be acceptance tested for Title 24. **(Section 110.9(b) & Section 130.4(a))**
3. Nonresidential indoor lighting, advanced multi-level lighting controls (controllable ballasts) increased in granularity (in addition to ON/OFF, increasing from one intermediate level to three intermediate levels for or continuous dimming), favoring dimmable ballasts for linear fluorescent lighting systems. These controls will allow precise and non-interruptive adjustment of lighting to match the available daylighting, and provide dimming and demand response function throughout the building. **(Section 130.1(b) & Section 130.1(a) 2C)**
4. Enhancing, modifying, and daylighting controls mandatory requirements (removed off ramps); daylighting language significantly simplified. **(Section 130.1(d))** Inserted prescriptive daylighting control requirements for secondary daylit zones **(Section 140.6(d))**
5. Requirements for demand responsive reduction of lighting power being applied to smaller spaces. **(Section 130.1(e))**
6. Mandatory Automated Lighting Controls and Switching Requirements in Warehouses and Libraries - Require the installation of occupancy sensors in warehouse aisle ways and open spaces, and library stack aisles. **(Section 130.1(c)6A & B)**
7. Mandatory automated multi-level lighting shut-off controls and switching requirements for hotels and multifamily building corridors - Require the installation of occupancy sensors in corridors and stairwells in lodging and multifamily buildings. **(Section 130.1(c)6C)**
8. New mandatory occupancy sensor and daylighting controls in parking garage spaces. **(Section 130.1(d)3)**
9. Increased requirements for multi-level lighting controls for nonresidential outdoor lighting. **(Section 130.2(c)3B)**
10. Existing outdoor lighting cutoff (shielding) requirements, changed to the new IES standard: Backlight, Uplight, Glare (BUG) requirements. **(Section 130.2(b))**

11. Reduction of allowed lighting power density for some nonresidential indoor and outdoor lighting applications. **(Section 140.6(c) and Section 140.7(d))**
12. Tailored lighting revisions - Reduce the allowed LPD for Floor Display, Wall Display, and Ornamental Lighting under the Tailored Compliance. Significant editing of Tailored Method language for clarification. **Section 140.6(c)3I, J & K)**
13. Plug Load Circuit Controls - requiring automatic shut-off controls of electric circuits that serve plug loads, including task lightings, in office buildings. **(Section 130.5(d)1)**
14. Hotel/Motel Guest Room Occupancy Controls for HVAC and lighting systems - would require installation of occupancy controls for HVAC equipment, and all lighting fixtures in hotel/motel guest rooms, including plug-in lighting. **(Section 120.2(e)4 & Section 130.1(c)8)**
15. Reduction of threshold when lighting alterations must comply with the Standards, (from when 50% of the luminaires are replaced), to when only 10% of the luminaires are replaced. Consistent with proposed changes to ASHRAE 90.1-2010. **(Section 141.0(b)I & J)**
16. Added threshold requirements for when luminaire-modifications-in-place (sometimes referred to as lighting retrofits – i.e.: lamp/ballast change-outs) must comply with the Standards. **(Section 141.0(b)I)**

Mechanical

1. Added requirements for Fan Control and Integrated Economizers. Packaged units down to 6 tons must be VAV with the ability to modulate cooling capacity to 20% of maximum. Economizers must also be able to modulate cooling capacity to match VAV units. **(Section 140.4(c) & (e))**
2. Reduced ability for HVAC systems to reheat conditioned air. **(Section 140.4(d))**
3. Increased chiller efficiency requirements, consistent with ASHRAE 90.1-2010. **(Section 140.4(i))**
4. Increased cooling tower energy efficiency and WATER Savings. **(Section 140.4(k)2)**
5. Added requirements for commercial boiler combustion controls. **(Section 140.4(k)3)**
6. Added acceptance tests for HVAC sensors and controls, including those for demand controlled ventilation. **(Section 120.5(a))**
7. Added efficiency requirements for small motors. **(Section 140.4(c)4)**
8. Added credit for evaporative systems that meet the Western Cooling Efficiency Challenge (WCEC program to acknowledge high energy and water efficiency in evaporative systems). **(Section 140.4)**
9. Moving Fault Detection and Diagnostics (FDD) protocols for air temperature, economizers, damper modulation, and excess outdoor air to mandatory measures from the current compliance option. **(Section 120.2(i))**

Electrical Power Distribution Systems

New section in the Standards, for electrical measures which are not specifically related to lighting

1. Added requirements for user accessible metering of total electrical use per Table 130.5-A (for larger rated panels)
2. Disaggregation of electrical circuits according to Table 130.5-B (for larger size services).

3. Added maximum voltage drop requirements. **(Section 130.5(c))**
4. Added mandatory requirement for receptacle controls in private offices, open office areas, reception lobbies, conference rooms, kitchens, and copy rooms to automatically shut off task lighting and other plug loads when the area is not occupied. **(Section 130.5(d))**
5. Added requirements for demand responsive controls and equipment. **Section 130.5(e)**
6. Added requirements for EMCS to meet to be recognized for compliance with Part 6. **Section 130.5(f)**

Process Loads

1. Added mandatory requirements for commercial supermarket refrigeration. **(Section 120.6(b))**
2. Increased mandatory requirements for refrigerated warehouses. **(Section 120.6(a))**
3. Added ventilation control requirements for commercial kitchens. **(Section 140.9(b))**
4. Added prescriptive requirements for laboratory exhaust VAV and heat recovery. **(Section 140.9(c))**
5. Added mandatory ventilation control requirements for parking garages. **(Section 120.6(c))**
6. Added mandatory requirements for VFDs and system controls on compressed air systems. **(Section 120.6(e))**
7. Added mandatory requirements for computer data centers. **(Section 140.9(a))**
8. Added mandatory requirements for process boilers. **(Section 120.6(d))**

Solar Ready

- Added mandatory requirements for nonresidential buildings (3 stories or less) to make provisions to more easily enable the future addition of solar electric or solar water heating systems. **(Section 110.10(a)4)**

Commissioning

1. Moved Part 11 commissioning requirements to Part 6 for energy-related building components. **(Section 120.8)**
2. Added mandatory requirements for design-phase commissioning, which includes an early review of design intent documents and highlighting efficiency specifications in both construction documents and Standards compliance forms. **(Section 120.8(d))**
3. Added performance standard compliance requirement to produce whole building performance rating twice: once during design permit stage (“design rating”) then after construction acceptance testing (“as-built rating”). **(Section 120.8(g))**

Compliance Option

- Hybrid Evaporative Cooling Systems in Nonresidential Buildings.

Residential and Nonresidential

- Compliance Documents Central Repository – Create a central repository to store compliance documentation that can be used by the CEC and others to improve compliance with the standards and perform program evaluation. **(10-103)**



DATE: April 3, 2013
TO: Council Sustainability Committee
FROM: Director of Public Works – Utilities and Environmental Services
Development Services Director
SUBJECT: Sustainability Policies in the 2040 General Plan

RECOMMENDATION

That the Committee reviews and comments on this report. Staff is seeking general direction from the Committee regarding the approach and the types of sustainability-related policies or actions that may be included in the General Plan.

BACKGROUND

The City's Climate Action Plan (CAP) was adopted by Council in July 2009. The CAP includes greenhouse gas (GHG) emission reduction goals for 2020 and 2050 and provides the actions necessary to achieve the reduction goals. Actions are organized by nine strategies including:

1. Transportation and Land Use: Reduce Vehicle Miles Traveled
2. Transportation: Decrease Carbon-intensity of Vehicles
3. Energy: Improve Energy Performance of Existing Buildings
4. Energy: Improve Energy Performance of New Buildings
5. Energy: Use Renewable Energy
6. Solid Waste: Increase Waste Reduction and Recycling
7. Sequester Carbon
8. Climate Change Adaptation
9. Engage and Educate Community

The City's General Plan was last updated in 2002 and includes policies and strategies organized into seven chapters or elements:

1. Land Use
2. Circulation
3. Economic Development
4. Housing
5. Community Facilities and Amenities
6. Conservation and Environmental Protection
7. Public Utilities and Services

A comprehensive update of the General Plan is underway. A draft of the new General Plan is scheduled to be available this fall and is anticipated to be adopted by Council in June 2014. One reason the General Plan is being updated is to integrate the CAP and sustainability-related

policies so that the General Plan reflects the City Council’s “Green” priority. Benefits of integrating the CAP into the General Plan include:

- CAP actions will be elevated to the same level of importance as General Plan policies. Integrating the CAP into the General Plan will reinforce the City’s position that addressing climate change is a priority and that it will be addressed in all City actions through General Plan implementation.
- Reduce policy redundancy. Several General Plan policies are very similar to CAP actions. By incorporating CAP information into the General Plan, there will be fewer total policies and reduced potential for inconsistencies.
- Streamline staff implementation. Integrating the CAP within the General Plan eliminates an additional plan that must be addressed by developers, evaluated by City staff, and considered by the Planning Commission and City Council.
- Streamline development review process. CAP actions will be addressed in the Environmental Impact Report (EIR) that will be adopted for the General Plan. The General Plan will be considered a “qualified GHG Reduction Plan” per State guidelines and will therefore allow new development proposals to use the Plan and EIR in cumulative impacts analyses for GHG emissions. Such process will reduce the development review process time-frame and costs for developers.

DISCUSSION

The current General Plan includes many policies and strategies that address sustainability. As indicated in Attachment I, there are similar policies that appear in multiple General Plan Elements. For example, several policies and strategies address transportation and land use for the purpose of encouraging non-automobile travel. The new General Plan will be a web-based document with policies that can be searched or sorted based on the user’s interest. This will allow a single policy to be flagged as being relevant to multiple General Plan elements and will make the General Plan more user-friendly than it has ever been in the past.

The Climate Action Plan includes many actions/policies that overlap with policies found in the General Plan. For example, Strategies 3 and 4 in the CAP include actions to improve the energy performance of existing and new buildings, and a policy in the Public Utilities and Services element of the General Plan includes a policy to “... promote energy conservation.” Attachment II includes a list of all CAP actions, the emissions savings estimated for each, the priority, and the year for which the action is scheduled to be implemented.

Integrating the CAP into the General Plan also provides an opportunity to re-evaluate the actions that will be implemented to achieve long term GHG reduction goals. Attachment II also includes notes regarding possible changes to CAP actions. Some include changes to the text of the action and some relate to timing of the action. Finally, some actions have been completed or partially implemented.

Staff would appreciate direction from the Committee on the following actions:

Actions 2.1 and 2.2 – Provide incentives for residents to purchase low-carbon vehicles and promote the use of alternative fuels – Estimates included in the CAP show that these two actions alone could achieve GHG emission reductions necessary to meet the City’s 2050 target. These actions assume the average fuel economy of vehicles would increase from less than the current

approximately 20 mpg to 30 mpg by 2020 and to 60 mpg by 2050. Also, the success of GHG emission reductions for these two actions largely is market-driven, related to gasoline prices and car industry technology development and vehicle affordability. Staff intends to review the assumptions and financial implications associated with these two actions, as well as state and federal activities, to see if they should be carried forward into the General Plan and if the GHG reductions estimated for these actions are realistic.

Actions 3.1, 3.2, and 3.3 – Develop Residential (for both single-family and multi-family homes) and Commercial Energy Conservation Ordinances (RECO and CECO) – Collectively, CAP Actions 3.1, 3.2, and 3.3 were expected to account for approximately 16 percent of the GHG emission reductions necessary to meet the City’s 2050 target. The CAP assumed that 12.5 percent of residential units would comply with a RECO by 2017, 45 percent by 2030, and 100 percent by 2050. The same percentages and years were assumed for commercial buildings complying with a CECO. Staff worked with the Committee and City Council in 2010 and 2011 to develop a draft RECO for single family homes, which would have established various triggers when the RECO would be applicable and also various ways for the RECO requirements to be met, including requiring homeowners to install energy efficiency improvements. On May 31, 2011, due to overwhelming opposition from the community, particularly from the real estate community, Council directed staff to not pursue an ordinance, but to consider voluntary measures that homeowners could take to increase energy efficiency and to allow Stopwaste.org to develop a countywide model RECO. Approximately 35 single-family homeowners took advantage of City and PG&E financial rebates to install energy efficiency improvements since the 2011 decision, and a countywide ordinance has yet to be drafted. Staff recommends that consideration of ordinances that require energy efficiency improvements be delayed until at least 2020. In the meantime, ordinances that require disclosure of energy use or an efficiency rating may be more palatable to the community and should be considered prior to a RECO.

Actions 3.7, 3.8, and 3.9 – Develop energy efficiency retrofit financing program for single-family homes, multiple unit homes, and commercial properties – Collectively, Actions 3.7, 3.8, and 3.9 were expected to account for approximately 19 percent of the GHG emission reductions necessary to meet the City’s 2050 target¹. These actions were included in the CAP with the intent to have the City develop in-house financing programs. In January 2010, Hayward joined CaliforniaFIRST, a statewide property assessed clean energy (PACE) financing program of the California Statewide Communities Development Authority (CSCDA), which is a statewide joint powers authority sponsored by the California State Association of Counties and the League of California Cities. CaliforniaFIRST financing is currently available to owners of commercial and multi-family properties in Hayward. Program availability for single-family residential properties has been delayed due to opposition from the Federal Housing Finance Agency (FHFA). As a result of a lawsuit, the FHFA is required to conclude its formal rulemaking process by September

¹ The CAP assumed the following participation rates for the financing program(s):

Building Type	Phase I: 2011-2015	Phase II: 2016-2025	Phase III: 2026-2050
Single-family homes	1.5%	0.75%	0.75%
Multi-family homes	1.5%	0.75%	0.75%
Commercial buildings	5.0%	3.0%	20.0%

16, 2013. Staff recommends that these actions be adjusted to direct resources toward supporting the availability of residential PACE and other financing mechanisms, cooperation with state and regional programs, and outreach to Hayward community members to publicize the availability of financing.

Actions 5.1 and 5.2 – Develop financing program for photovoltaic renewable energy for residential and commercial properties – Collectively, while Actions 5.1 and 5.2 were expected to account for only 2.3 percent of the GHG emission reductions necessary to meet the City’s 2050 target, staff is highlighting these two actions given the interest for such installations expressed by the Committee in the past. The same financing programs that have been or are being developed for energy efficiency may also be used for renewable energy. Similar to the recommendation for Actions 3.7, 3.8, and 3.9 discussed above, staff recommends that the City focus efforts on working with state and regional programs as well as outreach to local property and business owners.

New topics/themes: Staff has also identified several new topics/themes that are not in the CAP, but may be considered to make the new General Plan a more comprehensive policy document addressing all aspects of sustainability. Attachment III is an initial draft list of potential new policy topics derived from input from the General Plan Update Task Force, community and neighborhood workshops, the General Plan Update project surveys, and Hayward2040.org.

The updated General Plan will be a web-based document and will have features that allow a user to search and sort for policies. Staff intends to incorporate sustainability-related policies throughout the General Plan and flag them so that it is possible to view only sustainability-related policies. Similarly, policies that are intended to result in GHG savings will be flagged so that all climate action policies may be viewed on one page.

The new General Plan will also include an implementation plan to identify action-oriented tasks. This section will identify the policies each action will implement, the responsible department(s), and timeframe. Implementation actions will be identified for all sections of the General Plan and many of the current CAP actions will be included in the implementation plan. Below is an example from an implementation plan adopted by the City of Sacramento.

 Table 4-10 Environmental Resources Implementation Programs		2009-2011	2012-2015	2016-2030	Annual	Ongoing
13. The City shall submit an annual report to the City Council on implementation of the Climate Action Plan. The report shall be made available to the public and responsible city officials. (PSR)						
Implements Which Policy(ies)	ER 6.1.7; ER 6.1.8; ER 6.1.9; ER 6.1.19				●	
Responsible Department(s)	General Services					
Supporting Department(s)	Planning, Economic Development, and Development Services					
14. The City shall continue to enforce its existing ordinance that limits idling of diesel vehicles used in construction projects. (PSR)						
Implements Which Policy(ies)	ER 6.1.12	●				
Responsible Department(s)	Planning, Economic Development, and Development Services					
Supporting Department(s)	N/A					

NEXT STEPS

Staff will present a similar report to the General Plan Update Task Force on April 4, 2013 to collect input on sustainability-related and GHG reduction policies for the updated General Plan. Staff will consider input from the Committee, the General Plan Update Task Force, community workshops, surveys, and Hayward2040.org to draft new and revised policies and implementation actions. Staff will work with the General Plan consultant team to develop estimates of GHG reductions associated with each new implementation action.

In June, staff plans to present new policies and actions to the Planning Commission and City Council along with other portions of the draft General Plan. Staff will report back to the Sustainability Committee on July 3 and to the General Update Task Force on July 11, 2013.

Prepared by: Erik J. Pearson, AICP, Environmental Services Manager

Recommended by: Alex Ameri, Director of Public Works – Utilities and Environmental Services
David Rizk, AICP, Development Services Director

Approved by:



Fran David, City Manager

Attachments:

- Attachment I Sustainability-Related Policies and Strategies in the Current General Plan
- Attachment II Current Actions in the Climate Action Plan
- Attachment III Possible Sustainability-Related Policies and Strategies for the New General Plan

Existing General Plan

Policy or Strategy	Existing General Plan Policies and Strategies that may be Considered as part of the Climate Action Plan
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Land Use Element

1.4	Promote mixed-use development where appropriate to ensure a pedestrianfriendly environment that has opportunities such as housing, jobs, child care, shopping, entertainment, parks and recreation in close proximity.
2.0	Support higher-intensity and well-designed quality development in areas within ½ mile of transit stations and ¼ mile of major bus routes in order to encourage nonautomotive modes of travel. (and all supporting strategies)
5.0	Promote transit-oriented development in the Mission/Foothill Corridor in order to help relieve regional congestion and create a distinctively attractive commercial boulevard.
8.4	Promote walkable neighborhoods by encouraging neighborhood-serving commercial activities within residential areas.
8.5	Encourage development that is designed to provide direct pedestrian connections between housing and supporting activities.

Circulation Element

1.2	Support transportation plans that incorporate alternatives to automobile use.
4.2	Provide leadership in educating the community about the benefits of commuting via alternative transportation modes and other ways to help the environment in making transportation choices.
4.4	Encourage use of telecommuting and home offices to reduce the need for trips to work, shopping, libraries, and other frequent destinations.
4.5	Provide leadership in development of regional and local Transportation Demand Management strategies (e.g., HOV lanes, preferential parking, car/van pools, casual car pools, subsidized transit passes).
5.0	Improve Coordination among Public Agencies and Transit Providers (and all supporting strategies)
8.0	Create Improved and Safer Circulation Facilities for Pedestrians. (and all supporting strategies)
9.0	Provide the opportunity for safe, convenient and pleasant bicycle travel throughout all areas of Hayward. (and all supporting strategies)
10.0	Encourage Land Use Patterns that Promote Transit Usage (and all supporting strategies)
12.3	Promote shuttle service between the Amtrak and BART stations and other focal points in the Downtown area.
12.4	Improve access to and circulation within the Industrial Corridor, especially with regard to public transportation.
13.0	Provide for Future Parking Demand in Ways that Optimize Mode Choice

Economic Development Element

	No existing ED policies are Sustainability-Related
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Housing Element

2.5	Promote sustainable housing practices that incorporate a 'whole system' approach to siting, designing, and constructing housing that is integrated into the building site, consumes less water and improves water quality, reduces energy use, and other resources, and minimizes its impact on the surrounding environment. (This policy will be implemented through existing ordinances and guidelines such as the Green Building Ordinance, the recently adopted Environmentally Friendly Landscape Guidelines (with an implementing ordinance expected to be adopted in the spring of 2010), the Water Efficient Landscape Ordinance, and the Alameda County Clean Water Program.)
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Community Facilities and Amenities Element

6.5	Consider additional greenway linkages along fault corridors and in other areas to encourage walking and cycling and to provide improved access to activity centers
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Conservation and Environmental Protection Element

3.0	Protect existing watercourses and enhance water quality in surface water and groundwater sources. (and all supporting strategies)
4.7	Encourage the planting of native vegetation to preserve the visual character of the area and reduce the need for toxic sprays and groundwater supplements.
9.4	Continue collection program for household toxic wastes and small business generators
9.5	Provide educational materials concerning hazardous materials to the general public and enforcement agencies
10.0	Incorporate measures to improve air quality in the siting and design of new development (and all supporting strategies)
11.0	Maintain improved air quality by creating efficient relationships between transportation and land use (and all supporting strategies)
12.0	Support implementation of Transportation Control Measures adopted by the Bay Area Air Quality Management District (and all supporting strategies)

Public Utilities & Services Element

4.0	Public facilities will be maintained and operated in a manner that protects and enhances the environment (and all supporting strategies)
5.0	Hayward will promote energy conservation. (and all supporting strategies)

Existing Climate Action Plan

Action Number	Full Description (key words are in red to assist the reader)	Estimated Annual Emissions Reductions (metric tons CO ₂ e) <small>* assumes Scenario 2 fuel economy and renewable electricity generation and that program goals are achieved</small>		Percent contribution to target reductions (from projected business as usual projections)		Priority Identified in CAP	Year to Begin Implementation	Staff Comments Regarding Possible Revisions
		2020	2050	2020	2050			
Strategy 1 – Transportation and Land Use: Reduce Vehicle Miles Traveled								
Total (community-wide actions implemented and long-term Strategy goals achieved)		32,859	99,174	21.2%	9.3%			
<i>Community-wide Actions</i>								
<i>Increase the Use of Alternative Modes of Transportation</i>								
Action 1.1	Assist businesses in developing and implementing commuter benefits programs . A commuter benefits program might consist of an offer to provide discounted or subsidized transit passes, emergency ride home programs, participation in commuter rideshare programs, parking cash-out or parking pricing programs, or tax credits for bike commuters.	2,286	8,106	1.5%	0.8%	21	2012	may be revised to reflect AB 1339 - "regional commute benefit requirement" (http://rideshare.511.org/employers/sb_1339.aspx)
Action 1.2	Assist businesses in developing and implementing car sharing programs , such as Zip Car® or City Car Share, and encourage large employers such as the colleges and Hayward Unified School District (HUSD) to implement such programs.	416	7,283	0.3%	0.7%	18	2015	
Action 1.3	Modify City parking ordinances to incentivize walking, biking, and public transit by employing parking strategies that include adding bicycle parking, increasing the number of parking spots with time limits, adjusting parking time limits to correspond with adjacent building uses, increasing the number of paid parking spaces, and making space location and fees consistent with demand targets.		9,471	0.0%	0.9%	23	2025	implement sooner
<i>Improve Effectiveness of Transportation Circulation System</i>								
Action 1.4	Collaborate with BART and AC Transit to explore short- and long-term opportunities to expand services (for example, to extend rapid bus service from Bay Fair to the South Hayward BART Station and pursue a hydrogen fueling station for both buses and personal vehicle use, and improve transit stations by expanding amenities at stations).	3,062	15,199	2.0%	1.4%	16	2012	may be amended to consider additional alternatives (additional bus/shuttle providers)
Action 1.5	Continue to implement and expand the City-wide bicycle master plan through aggressive pursuit of grants and other sources of funding which could be used to expand bike lanes and bike parking facilities. Assist businesses in creating or expanding bike-to-work incentive programs, including bike sharing, adequate secure bike parking, bike maps of the City, bike safety classes, and other incentives that reward bikers.	2,419	7,610	1.6%	0.7%	22	2009	
Action 1.6	Develop and implement a City-wide pedestrian master plan that improves the convenience, safety, and attractiveness of and access to pedestrian ways. Update the plan on a regular basis to ensure that walkability improves over time.	1,394	7,121	0.9%	0.7%	24	2012	to be adopted by 2014
Action 1.7	Update the City's Circulation Element of the General Plan to locate, evaluate appropriate transit modes such as street car, bus rapid transit, or other modes that eventually decrease the need for personal vehicles for travel within the City. The Plan should integrate pedestrian, bicycles, and transit modes with motor and other vehicles. When proposing changes to the transportation system, the City should consider the climate impacts and give preference to solutions that reduce auto dependency and minimize GHG emissions.	emissions reductions were not quantified					2014	to be adopted by 2014 (change to "implementation")
Action 1.8	Improve traffic flow and reduce vehicle idling by means of synchronized signals, transit and emergency signal priority, and other traffic flow management techniques. When developing the program, Hayward should work with the Metropolitan Transportation Commission and the Alameda County Congestion Management Agency to expand roadway and intersection performance metrics to include pedestrian, bicycle, and level of service criteria to measure quantitative and qualitative metrics such as accessibility, intersection crossing times, and other relevant data. It is recommended that Hayward use evaluation criteria that consider costs and GHG reduction benefits of biking, walking, carpooling, and public transit.	23,061	21,875	14.9%	2.0%	10	2015	
<i>Utilize Zoning & Land-use Mechanisms to Minimize Need for Transportation</i>								
Action 1.9	In order to encourage non-automotive modes of travel, continue to implement and update the General Plan Circulation and Land Use Elements pertaining to smart growth principles that support higher-density, mixed-use, and well-designed development in areas within ½ mile of transit stations and ¼ mile of major bus routes. Amend the Municipal Code Zoning, Subdivision, and Off-Street Parking Standards to incorporate smart growth principles, policies, and development standards consistent with recommendations provided in the Appendix H and I of the CAP .	emissions reductions were not quantified					continuous	
Action 1.10	Explore the development of zoning and development standards that consider both the land uses and the urban design and form of buildings and public space, where the new standards will result in reduced GHG emissions.	emissions reductions were not quantified					continuous	
Action 1.11	Explore potential strategies related to the creation of additional affordable housing to sell to buyers employed in Hayward but who currently reside in other areas and commute to work in Hayward. For example, consider implementing a community land trust to purchase and resell foreclosed properties. The program could potentially be coordinated with local businesses.	emissions reductions were not quantified					timing not determined	
Action 1.12	Develop an incentive plan to maximize the number of residents that work within the City, and encourage filling local jobs first with local residents , to eliminate commutes.	emissions reductions were not quantified					timing not determined	
<i>Municipal Actions</i>								
Action 1.13	Reinstate commuter benefits such as Commuter Checks to City employees, and when possible expand or develop other commuter benefits programs such as parking cash-out or parking pricing programs, or taking advantage of the new tax credit for biking to work. The City will amend Administrative Rule 2.26 to reflect current transportation demand management opportunities .	emissions reductions were not quantified					timing not determined	
Action 1.14	Explore options in developing a car-sharing and/or bike sharing program for City employees. If private organizations like Zip Car are not interested in managing the car sharing program, it could be administered by the City as a benefit available to City employees only. A bike share program would also be administered by the City as a benefit to City employees.	emissions reductions were not quantified					timing not determined	
Action 1.15	When making decisions about where to rent or build new City facilities , give preference to locations that are accessible to an existing public transit line.	emissions reductions were not quantified					continuous	
Strategy 2 – Transportation: Decrease Carbon-intensity of Vehicles								
Action Number	Full Description	Estimated Annual Emissions Reductions (metric tons CO ₂ e)		Percent contribution to target reductions (from projected business as usual projections)				
		2020	2050	2020	2050			
Total (community-wide actions implemented and long-term Strategy goals achieved)		129,060	532,735	83.5%	49.8%			
<i>Community-wide Actions</i>								
Action 2.1	Play an active role in collaborating with regional, state, and federal efforts to provide financial and non-financial incentives for residents to purchase low-carbon vehicles . For example, the City could host work sessions with regional transportation planners and policy makers, or the City may support pending legislation. They City could consider granting designated vehicles access to preferred parking spaces.	129,060	532,735	83.5%	49.8%		continuous	
Action 2.2	Plan an active role in collaborating with regional, state, and federal entities to promote the use of alternative fuels and increased vehicle fuel efficiency standards. For example, Hayward may advocate for higher fuel-economy standards, or contribute to regional and state marketing and outreach efforts.	129,060	532,735	83.5%	49.8%		continuous	
<i>Municipal Actions</i>								
Action 2.3	Continue to procure fuel-efficient and alternative fuel vehicles for municipal vehicle fleet .	54.28	108.23	5.3%	1.2%		continuous	
Action 2.4	Continue to, whenever possible, negotiate an alternative fuel requirement into new services provided by the City's franchisee .	54.28	108.23	5.3%	1.2%		continuous	

Strategy 3 – Energy: Improve Energy Performance of Existing Buildings									
Action Number	Full Description	Estimated Annual Emissions Reductions (metric tons CO ₂ e)		Percent contribution to target reductions (from projected business as usual projections)					
		2020	2050	2020	2050				
Total (community-wide actions implemented and long-term Strategy goals achieved)		8,723	205,890	5.6%	19.2%				
<i>Community-wide Actions</i>									
Action 3.1	Develop and implement a Residential Energy Conservation Ordinance (RECO) for detached single-family homes which would require improved energy efficiency and energy conservation in residential buildings. Update the RECO on a regular basis to ensure buildings become more energy efficient over time. Typical energy efficiency improvements may include updates to the lighting, heating, ventilation, and air conditioning systems and improvements that lead to water conservation.	639	39,304	0.4%	3.7%	11	2012	revise to encourage voluntary disclosure of energy use	
Action 3.2	Develop and implement a Residential Energy Conservation Ordinance (RECO) for multiple-unit homes which would require improved energy efficiency and energy conservation in residential buildings. Update the RECO on a regular basis to ensure buildings become more energy efficient over time. Typical energy efficiency improvements may include updates to the lighting, heating, ventilation, and air conditioning systems and improvements that lead to water conservation.	983	33,033	0.6%	3.1%	12	2012	revise to encourage voluntary disclosure of energy use	
Action 3.3	Develop a Commercial Energy Conservation Ordinance (CECO) which would require improved energy efficiency and energy conservation in commercial buildings. Continuously update the CECO to ensure buildings become more energy efficient over time. Typical energy efficiency improvements may include updates to the lighting, heating, ventilation, and air conditioning systems and improvements that lead to water conservation.	5,164	105,152	3.3%	9.8%	2	2012	require energy use disclosure	
Action 3.4	Actively participate in local low-income weatherization initiatives with the goal of weatherizing all qualifying low-income homes in Hayward .	emissions reductions were not quantified						continuous	
Action 3.5	Develop public information and education campaign to encourage every household and every business to reduce their energy consumption by 10 percent over ten years.	emissions reductions were not quantified						continuous	
Action 3.6	Develop a program to encourage or require installation of Home Energy Monitors in existing residences. Home Energy Monitors monitor energy use and provide building occupants with feedback on their real-time and long-term average energy consumption. This may be done in conjunction with Actions 3.1, 3.2, or 3.4 or 3.5.	emissions reductions were not quantified						continuous	
Action 3.7	Develop a residential energy efficiency retrofit financing program for single unit homes.	181	40,248	0.1%	3.8%	3	2011	replace with various new actions	
Action 3.8	Develop a residential energy efficiency retrofit financing program for multiple unit homes.	126	33,617	0.1%	3.1%	4	2011	replace with various new actions	
Action 3.9	Develop a commercial energy efficiency retrofit financing program .	1,630	132,025	1.1%	12.3%	1	2010	replace with various new actions	
<i>Municipal Actions</i>									
Action 3.10	Take advantage of California Energy Commission's low interest loans for efficiency retrofits and LED street lighting (http://www.energy.ca.gov/efficiency/financing).	969	1054	93.7%	11.3%			continuous	
Action 3.11	Continue to implement energy conservation practices in City-owned buildings. Prepare an energy conservation plan and update it on a regular basis.	330	1542	31.9%	16.5%			continuous	
Action 3.12	Improve energy performance of City buildings. Begin by auditing city buildings to identify opportunities for efficiency improvements from both operations and equipment upgrades.	330	1542	31.9%	16.5%			continuous	
Strategy 4 – Energy: Improve Energy Performance of New Buildings									
Action Number	Full Description	Estimated Annual Emissions Reductions (metric tons CO ₂ e)		Percent contribution to target reductions (from projected business as usual projections)					
		2020	2050	2020	2050				
Total (community-wide actions implemented and long-term Strategy goals achieved)		5,472	96,761	3.5%	9.0%				
<i>Community-wide Actions</i>									
Action 4.1	Continue to implement the Private Development Green Building Ordinance for residential buildings. Evaluate the program on a regular basis to ensure new buildings are getting more efficient over time.	979	18,836	0.6%	1.8%	9	continuous	Staff to present initial recommendations to CSC on April 2	
Action 4.2	Continue to implement the Private Development Green Building Ordinance for commercial and industrial buildings. Evaluate the program on a regular basis to ensure new buildings are getting more efficient over time.	4,493	77,925	2.9%	7.3%	7	continuous	Staff to present initial recommendations to CSC on April 2	
<i>Municipal Actions</i>									
Action 4.3	Continue to implement the Municipal Green Building Ordinance . Evaluate the program every 5 years to ensure buildings are becoming more efficient over time.	46.59	328.37	4.5%	3.5%			continuous	
Strategy 5 – Energy: Use Renewable Energy									
Action Number	Full Description	Estimated Annual Emissions Reductions (metric tons CO ₂ e) <small>*assumes Scenario 2 fuel economy</small>		Percent contribution to target reductions (from projected business as usual projections)					
		2020	2050	2020	2050				
Total (community-wide actions implemented and long-term Strategy goals achieved)		14,598	80,409	9.4%	7.5%				
<i>Community-wide Actions</i>									
Action 5.1	Develop a program for the financing and installation of photovoltaic renewable energy systems on residential building including single and multiple family residential buildings and mobile homes. Set a target for total MW to be installed.	850	2,149	0.5%	0.2%	15	2010	revise to indicate that staff will continue to pursue options	
Action 5.2	Develop a program for the financing and installation of photovoltaic renewable energy systems on commercial buildings. Set a target for total MW to be installed.	10,768	22,822	7.0%	2.1%	5	2010	revise to indicate that staff will continue to pursue options	
Action 5.3	Incorporate a renewable energy requirement into Private Development Green Building Ordinance.	2,980	24,660	1.9%	2.3%	8	2013	consider eliminating action (state codes will require net zero)	
Action 5.4	Increase the renewable portion of utility electricity generation by advocating for increased state-wide renewable portfolio standards ; and consider participating in community choice aggregation , or other means.		30,779	0.0%	2.9%	17	continuous		
<i>Municipal Actions</i>									
Action 5.5	Conduct a city-wide renewable energy assessment to estimate the total renewable energy potential and costs and benefits of developing that potential within City bounds. Develop a plan for capturing all cost-effective opportunities.	76.4	2,226.94	7.4%	23.8%			timing not determined	
Action 5.6	Ensure that all new City owned facilities are built with PV and/or solar hot water systems as appropriate to their functions.	76.4	2,226.94	7.4%	23.8%			continuous	

Strategy 6 – Solid Waste: Increase Waste Reduction and Recycling

Action Number	Full Description	Estimated Annual Emissions Reductions (metric tons CO ₂ e) <i>*assumes Scenario 2 fuel economy and renewable electricity generation</i>		Percent contribution to target reductions (from projected business as usual projections)				
		2020	2050	2020	2050			
		21,851	68,798	14.1%	6.4%			
Total (community-wide actions implemented and long-term Strategy goals achieved)								
<i>Community-wide Actions</i>								
Action 6.1	Increase participation in existing commercial recycling services by hiring a consultant to contact businesses to offer assistance in implementing waste reduction and recycling programs or expanding current programs.	15,916	38,216	10.3%	3.6%	14	2010	About 70% of all businesses have implemented recyclables collection.
Action 6.2	Continue to implement and promote food scraps collection for single-family homes. Over time, expand food-scrap collection programs with the goal of minimizing organic waste in the landfill.	1,495	11,963	1.0%	1.1%	13	2010	
Action 6.3	Improve the City's construction and demolition debris recycling ordinance by evaluating other jurisdictions' provisions, as well as the processing capabilities of the various transfer stations and facilities in Alameda County and adjacent counties.	1,953	15,634	1.3%	1.5%	6	2011	Staff does not recommend any changes at this time as compliance with the ordinance is acceptable. Consider possible changes in 2015.
Action 6.4	Evaluate the viability of implementing a ban on certain materials from landfill , e.g., yard trimmings, untreated wood, cardboard, plastic bags, or polystyrene.	2,487	2,986	1.6%	0.3%	25	2013	Landfill bans include the: (1) City's ban on polystyrene foam food containers which became effective July 1, 2011; (2) Authority's ban on single-use bags which became effective July 1, 2012; and (3) Authority's plant debris ban which became effective January 2009.
Action 6.5	Evaluate the viability of requiring that residents and/or businesses participate in the recycling programs offered through the City's franchisee.	emissions reductions were not quantified					2014	The Authority's mandatory recycling ordinance became effective July 1, 2012.
Action 6.6	Develop program that encourages overall reduction of waste in residential and commercial sectors. This would include increasing participation in recycling services at multi-family properties and to eventually make recycling by commercial businesses mandatory.	253	304	0.2%	0.0%	19	continuous	Financial incentives are available to multi-family developments and businesses who implement recycling services.
Action 6.7	Advocate for waste management strategies that aim to maximize the useful value of solid waste by, for example, utilizing landfill gas to create electricity.	emissions reductions were not quantified					2010	WMAC installed turbines at its Altamont Landfill in 1987 to convert landfill gas to electricity. WMAC has also built a liquified natural gas facility whose fuel is used to power 300 collection vehicles in California, including trucks servicing Hayward and traveling along the 580 corridor to Altamont Landfill. Use of this near-zero carbon fuel eliminates nearly 30,000 tons of carbon dioxide emissions annually and is equivalent to removing over 5,000 passenger cars from the road. For these efforts, Waste Management Inc. received the Governor's Environmental and Economic Leadership Award in 2010.
<i>Municipal Actions</i>								
Action 6.8	Continue to implement recycling programs in City-occupied buildings.	31.86	70.94	3.1%	0.8%		continuous	
Action 6.9	Implement organics collection programs in City-occupied buildings.	73.34	163.3	7.1%	1.7%		timing not determined	Started February 2013
Action 6.10	Develop an Environmentally Friendly Purchasing Policy.	emissions reductions were not quantified					timing not determined	EPP was updated in 2011

Strategy 7 – Sequester Carbon

Action Number	Full Description	Estimated Annual Emissions Reductions (metric tons CO ₂ e) <i>*assumes Scenario 2 fuel economy and renewable electricity generation</i>		Percent contribution to target reductions (from projected business as usual projections)				
		2020	2050	2020	2050			
			284	0.0%	0.0%			
Total (community-wide actions implemented and long-term Strategy goals achieved)								
<i>Community-wide Actions</i>								
Action 7.1	Develop and implement a program to maximize carbon sequestration activities occurring within Hayward. Activities may include planting trees or managing wetlands.	0	284	0.0%	0.0%	20	timing not determined	
<i>Municipal Actions</i>								
Action 7.2	Develop a protocol for maximizing carbon sequestration on municipal property by way of planting trees or other methods.	5.4	32.4	0.5%	0.3%		timing not determined	revise to incorporate City's tree inventory

Strategy 8 – Climate Change Adaptation

Action Number	Full Description	Estimated Annual Emissions Reductions (metric tons CO ₂ e) <i>*assumes Scenario 2 fuel economy and renewable electricity generation</i>		Percent contribution to target reductions (from projected business as usual projections)				
		2020	2050	2020	2050			
		N/A	N/A	N/A	N/A			
Total (community-wide actions implemented and long-term Strategy goals achieved)								
<i>Community-wide Actions</i>								
Action 8.1	PLACE HOLDER - ACTIONS NOT DEFINED							will be addressed in Land Use Element and other portions of new GP
<i>Municipal Actions</i>								
Action 8.2	PLACE HOLDER - ACTIONS NOT DEFINED							will be addressed in Land Use Element and other portions of new GP

Strategy 9 – Engage and Educate Community

Action Number	Full Description	Estimated Annual Emissions Reductions (metric tons CO ₂ e) <i>*assumes Scenario 2 fuel economy and renewable electricity generation</i>		Percent contribution to target reductions (from projected business as usual projections)				
		2020	2050	2020	2050			
		emissions reductions were not quantified						
Total (community-wide actions implemented and long-term Strategy goals achieved)								
<i>Community-wide Actions</i>								
Action 9.1	Create a stand-alone Green Portal, or website , that would serve as the City's hub for all things green. The site would contain a dedicated area for green building, all programs related to the climate action plan, and information about local green jobs and training. The portal will ensure that all residents and businesses have access to information on the City's climate-related initiatives.	emissions reductions were not quantified					2010	revise to indicate website will be improved
Action 9.2	Develop and implement a plan that aims to engage residents in the City-wide effort to reduce emissions. The plan will be designed to reach residents of all ages, races, and classes on how to reduce GHG emissions and will introduce residents to City climate action programs. This plan will incorporate a long-term plan to involve K-12 schools and universities and utilize the most effective means of engaging the broader community.	emissions reductions were not quantified					2010	revise to require continuous implementation
Action 9.3	Develop and implement an outreach plan to engage local businesses in climate-related programs. This program should provide a benefit for both local government and businesses; the City, will aim to provide businesses with information on local, state, and federal programs, and businesses should be given the opportunity to provide input on ways local government could help streamline their efforts to reduce emissions. In developing this plan, the City will explore options for engaging the Chamber of Commerce, the Keep Hayward Clean and Green Taskforce, the Alameda County Green Business Program, and other business councils.	emissions reductions were not quantified					2010	revise to require continuous implementation
<i>Municipal Actions</i>								
Action 9.4	Offer a GHG reductions education program in which employees will learn about programs the City already offers or will offer in the future to residents and businesses.	not evaluated					timing not determined	revise to require continuous implementation
Action 9.5	Show leadership by setting targets to reduce municipal emissions and work diligently to meet targets.	not evaluated					continuous	
Action 9.6	When awarding contracts, professional service agreements , grants, etc. to businesses or non-profit agencies, the City will request proposals or applications to include information about the sustainability practices of the organization.	not evaluated					continuous	

Possible New Sustainability & CAP-Related Policies		Notes
Economic Deveopment		
1	work with County to expand Green Business Program	
2	work with local businesses to promote Green Business Program	
3	attract more businesses in the renewable and energy efficiency sector	
Quality of Life		
4	modify land use regulations and partner with community groups to support community gardening	
5	modify land use regulations and partner with community groups to support additional farmers markets	
Consumption & Waste		
6	educate community - consume fewer animal products (e.g. support Meatless Mondays)	
7	educate community - reduce overall consumption	
8	implement water conservation strategies and programs to achieve water use targets in accordance with the Water Conservation Act of 2009, as defined in the City's 2010 Urban Water Management Plan. Strategies may include a mix of financial incentives, legislative actions, and education.	
9	consider adoption of a zero waste goal	
Energy		
10	support/participate in Property Assessed Clean Energy (PACE)	to replace CAP actions 3.7, 3.8, 3.9
11	require energy benchmarking for commerical buildings	replace CAP action 3.3
12	support/promote on-bill financing	to replace CAP actions 3.7, 3.8, 3.9
13	participate in collaborative efforts aimed at encouraging PG&E to offer green power options to local customers	
14	collaborate with regional and PG&E efforts to encourage energy audits of residential buildings	
15	collaborate with regional and PG&E efforts to encourage energy audits of commercial buildings	
16	encourage disclosure of energy use - residential	
17	encourage disclosure of energy use - residential	
18	collaborate with regional efforts to develop a retrofit program for Multi family residential buildings	
19	partner with PG&E, leverage resources....	
Transportation		
20	consider/explore shuttle program (feasibliity study)	
21	develop incentives for electric vehicle charging infrastructure	



DATE: April 3, 2013

TO: Council Sustainability Committee

FROM: Director of Public Works – Utilities & Environmental Services

SUBJECT: Annual Update Administrative Rule 3.9 – Environmentally Preferred Purchasing Policy

RECOMMENDATION

That the Committee reviews and comments on this report.

SUMMARY

In compliance with Administrative Rule 3.9, this report serves as an annual update to the Council Sustainability Committee regarding the current sustainable efforts by City Departments to minimize environmental impacts, toxics, pollution, waste, and hazards to workers and the community. Practices are summarized by department, and have been compiled by the Public Works – Utilities and Environmental Services staff. The last report submitted to the Committee was in 2009.

BACKGROUND

Administrative Rule 3.9, titled “Environmentally Preferred Purchasing Policy,” was established in 2010 for the purpose of setting a standard of environmentally preferable procurement, and to demonstrate the City’s commitment to environmental, economic, and social stewardship. The intent is to encourage, reward and foster vendors and manufacturers to produce, deliver, and dispose products that will improve the environmental quality of the region; integrate environmental considerations into every aspect of acquisition, while maintaining cost excellence and value standards; and ultimately become a driving force responsible for lowering environmental impact. The Policy’s procedures set forth that an annual report that identifies the practices that minimized environmental impacts, toxics, pollution, waste, and hazards to workers and the community shall be submitted to the Council Sustainability Committee.

In 2009, the Committee received a report titled “City-Wide Energy Efficiency and Emission Reduction Efforts,” which featured sections prepared by individual departments detailing their efforts specifically in the areas addressed by the then yet to be adopted Climate Action Plan. Since that time, an annual report that updates the Committee on the sustainable practices of City departments has not been prepared. In recognition of this fact, and that all City departments are becoming more sustainable

and are making progress on the goals stated in Administrative Rule 3.9, staff from Public Works – Utilities and Environmental Services reached out to individual departments to gather information about sustainable practices occurring throughout the organization. The information received has been summarized below by department.

DISCUSSION

Code Enforcement

Code Enforcement has reduced annual paper consumption by approximately 880 pounds by integrating Rental Inspection and Community Preservation into the Government Outreach database. This efficiency has reduced the amount of paper and file-folders required, since most storage of documents is done electronically as opposed to the previous system of using hard-copy files for case storage. The Department has also reduced inspector vehicle emissions by implementing software that schedules rental inspections based on geographic areas. This protects the environment by reducing excessive travel time, since inspections are performed in centralized locations. In 2012, 89 abatements were performed, resulting in a reduction of waste being dumped into landfills. The City's abatement contractor ensures that all refuse removed from subject properties is sorted to ensure recyclables are diverted from the landfill.

Development Services

The Development Services Department has implemented sustainable practices in many ways, including through the purchase of office supplies. The department has purchased various supplies through Staples Sustainable Earth line, which offers products that are made with renewable resources, recycled materials and/or are third-party certified to validate their environmental attributes. In addition, staff utilizes the duplex printing function on the copiers whenever possible and actively participates in the City's recycling and organics programs.

Building staff plan checks and enforces the requirements of the City's Green Building Ordinance and the Indoor Water Efficiency Ordinance. Although the current Building Code does not require a LEED certification, the City has an ordinance that requires all new or renovated municipal buildings that exceed either \$5M in construction value or 20,000 square feet in size to be LEED Silver certified. Also, City staff, through the City Council Sustainability Committee, and ultimately via the City Council, will be seeking direction on proposed revisions to the local green building ordinance for private development to rely more on the State's Green Building Code (CalGreen) for the 2013 Codes, effective January 1, 2014.

Finance

The Finance Department has had a unique opportunity to employ green practices and reduce their impact on the environment through an assortment of measures. In 2012, the department established automated telephone messaging to notify utility customers of delinquent bills, reducing the need for printing and mailing notices. Along the same lines, payments for utility bills are accepted online and over the phone, which eliminates customer emission footprints created by driving to City Hall to make payments or utilizing mail delivery. With respect to payroll, the Finance Department has

eliminated envelope use when distributing pay stubs for non-safety employees, while 95% of retirees are receiving direct deposit, eliminating paper checks, mailing costs, and “stuffing the envelope” costs. In general, the Department has reduced the number of printed copies of various budget documents and instead made those documents available online. Paper purchases have been modified to increase the recycled content percent. In 2012, 95% of paper purchased was the 100% post-consumer recycled content (versus the standard 30% recycled content paper).

On the procurement side of the department, language was incorporated in best value bids to allow a broader variety of consideration that has performance and environmental attributes (i.e., product origination, delivery, footprint emission, higher life cycle). Language was also modified in existing specifications to review existing products and services to maximize use of recycled or environmentally preferable products, and identify and eliminate requirements calling for “virgin” products. A review process was established to consider feasibility, durability, liability, price and performance. The new language allows the City the right to review specifications, substitute or add green criteria if they become available during the course of the contract. Finally, updates, correspondence and addendums are being emailed to vendors instead of printing and mailing. For product requirement language, the Finance Department has removed unnecessary qualifications that are not “green” friendly. Performance standards unrelated to actual needs (i.e., UPS next day air morning delivery), as well as requirements that exclude “re-manufactured, re-used or recycled” content products have also been reviewed to encourage more sustainable projects.

The Finance Department has remained committed to responsible and sustainable practices and it has required and incorporated specifications of the soon to be implemented Enterprise Resource Planning software to have green functions such as scanning, electronic filing and retrieval, real time on-line searches and paperless reporting or outputs. Listed below are the “soon to be implemented” green practices that will become available after July of 2013.

Process/Action	Milestone	Summary
Accounts Payable Payments	July 2013	Vendors can elect through a Vendor Self Service module to have payments sent via electronic fund transfer, eliminating paper checks and mailing costs.
Purchase Order Copies	July 2013	Purchase Orders will no longer be printed. Copies will be electronically routed, stored and retrieved, eliminating printing, stuffing, mailing, paper filing and eventual shredding of the physical documents when they reach their proper destruction dates.
Online Receiving	July 2013	Online receiving and verification of items ordered without having to print and submit paper copies of packing slips or receiver form.
Requisitions	July 2013	Requisitions will be submitted and approved via electronic hierarchy. Eliminating printing of forms and redundant data entry/processing.
Self Service Module	Jan 2014	Employee, vendors, and new businesses will have the ability to open, apply, update and manage their secured files (with permission) electronically without having to

		print or submit paper applications.
Tyler Content Management (TCM)	July 2013	Electronic filing or depository of scanned documents, eliminating printed copy filing, storage, and destruction/shredding service.
Utility Account	TBD	Paperless and online set-up, turn on/turn offs, office actions and adjustments.
Vendor Registration	July 2013	Eliminate paper printing of vendor application. Online self-service registration will enable vendors to manage their own files electronically.

Human Resources

An innovative transportation fringe benefit program, TranBen, is offered by the Human Resources Department as an incentive for employees to utilize public transit. The program allows employees to set aside pre-tax wages to pay for work-related commuting expenses via public transportation. Employees do not pay federal and state income, Social Security, or FICA taxes on money that is set aside for these pre-tax benefits, and can save significantly while reducing their carbon footprint and utilizing public transit. To date, twelve employees have participated in the program, which began in January 2013.

The Human Resources Department is also making an effort to print on both sides of the paper to reduce paper costs and eliminate wasteful printing, and is beginning to file documents electronically utilizing Laserfiche software, versus the traditional paper file. General “green” office practices in the Department also include recycling toner cartridges, purchasing recycled content office supplies, and conscious energy choices (such as turning the lights off when not in the office and utilizing the stairs as opposed to the elevator).

Library and Community Services Department

The Main Branch Library is a Certified Green Business, which requires the entity to meet certain efficiency and conservation criteria. The Library now exclusively offers the application for a library card online, eliminating unnecessary paper applications. The Department utilizes recycled paper, and has recently reduced the amount of print newsletters it produces and instead capitalizes on the ability to communicate with residents via email newsletters.

Maintenance Services Department

The Maintenance Services Department consists of Facilities, Fleet, Landscape, and Streets and Traffic Divisions. Each Division’s efforts to support sustainability are listed below.

Facilities Division

Energy and lighting efficiency related improvements make a large impact on the overall sustainability of the City’s facilities. The Facilities Division has implemented “Energy Savings Lighting Retrofits,” funded by a 3% loan from the California Energy Commission. Projects under this program have been completed for the City Hall Parking Garage, Cinema Place Parking Garage, Fleet Management

Building, City Hall, and the Police Department. The new fluorescent fixtures sense, via Wi-Fi or motion sensor, whenever a pedestrian or a vehicle enters the area, and turns on the lights to full-power. Annual energy savings for this project are estimated at \$88,181.

Another innovative project that was similarly funded by a 3% loan from the California Energy Commission is the Solar Power Generation Systems. Systems have been installed atop the Streets and Utilities buildings at the Corporation Yard, and annual energy savings for this project are estimated at \$23,800. Astronomical light timers, which adjust lights to account for changing daylight, were also installed for flag poles and City Hall plaza street lights. LED “exit” lights, which last for up to twenty years, were also installed at City Hall, resulting in a 90% energy savings.

Another area where the Facilities Division assists with supporting sustainability in City facilities is with heating, ventilation, and air conditioning (HVAC) related systems. In 2010, computerized energy management systems were installed at City Hall, Main Library, Weekes Branch Library, Police Department, and Fire Station #1 at Main and C Streets. The systems save energy and protect equipment by: limiting customer settings; automatically adjusting economizer outside air settings, seasonal boiler setbacks, temperature control, and on-off settings; and providing equipment break-down alerts. In 2013, the Division installed upgraded computer-based HVAC control systems at the Police Department and City Hall to enable even more efficient use of heating and air-conditioning, with an anticipated annual savings of \$63,591. In 2012, Facilities retrofitted the air-conditioning chiller at the Police Department, which is anticipated to save approximately 30% of the annual energy costs.

Related to purchasing, the following recycled content products (RCP) are purchased in the Facilities Division:

- Carpet Tiles with 40% RCP and solution-dyed embedded nylon yarn.
- RCP Lumber.
- Janitorial Cleaning Chemicals: (30% RCP), paper towels (40%), and toilet tissue (30%).
- Graffiti Paint with 60% RCP.
- RCP Window Blinds purchased for replacement.

The Division encourages re-use of materials. An example of that practice is when the Division had surplus metal building siding leftover from another project, staff re-used the material for the Police Department dog run roofs. This same practice applies to counter-tops and cabinetry, which are often remodeled for re-application.

The Facilities Division is also planning for the future, and over the next several years anticipates the installation of cool roofs at Fleet Management (2013), Fire Station #3 at Blanch and Medinah (2015), and Landscape Maintenance on Barnes Court (2016). The Division also intends to replace the existing carpet at the Police Department and City Hall with RCP carpets in 2014 and 2015.

Fleet Division

The City of Hayward's Fleet Management is a certified public agency through the Alameda County Green Business Program. This program, which began in 1996, verifies that businesses meet higher standards of environmental performance.

Current practices include the purchase of vehicles that follow the City of Hayward's Fleet Procurement Guidelines of Environmental Considerations. These include fuel economy; both alternative fuel and hybrid vehicles will receive strong consideration at all times. Vehicle models will be as small and fuel efficient as possible while still meeting the needs of the end user(s). Engines will be specified in the smallest size available to meet user needs, along with appropriate horsepower and torque.

Since 2009, the Fleet has increased the number of green vehicles from 14 to 25. This number of vehicles includes:

- 2 Nissan Leafs - all electric vehicles
- 11 Honda hybrids
- 2 C-Max hybrids (to be delivered this month)
- 4 Ford E85 fueled (85% ethanol, 15% gasoline)
- 5 Chevrolet E85 work trucks (85% ethanol, 15% gasoline to be delivered this month)
- 2 Ford Escape SUV hybrids

Over the past few years, twelve diesel powered trucks had their exhaust systems retrofitted to further reduce emissions. The Maintenance Services Director also implemented a 5-minute maximum idle rule for all diesel vehicles in the City Fleet. This policy reduces fuel consumption and diesel emissions.

As with Facilities, the Fleet Division plans to continue sustainable practices into the future. As old equipment is replaced, the Division will continue to purchase the most fuel efficient and emissions friendly vehicles possible.

Streets and Traffic Division

The Streets Program currently utilizes recycled paint for all graffiti abatement, and when possible, the Program uses discarded and illegally dumped paint for these purposes as well. The Program is also responsible for the maintenance and installation of trash capture devices in storm water inlets to capture trash prior to it entering San Francisco Bay. Proper maintenance of these devices is imperative to their function as water pollution prevention measures. In 2012 and continuing into the current year, the Streets Program has focused on controlling and eliminating illegal dumping, acknowledging the link between dumping and the amount of trash entering local waterways. The Program makes an effort to utilize tools and equipment that are environmentally friendly rather than gas powered, reducing the overall emissions produced.

The Traffic Program is responsible for a variety of measures that assist the City in meeting its sustainability goals. For example, all sign plates are recycled when in need of replacement to reduce waste. The Program utilizes thermoplastic stencils for pavement marking rather than paint. The reason for this is that painted road markings need annual reapplication for visibility. Thermoplastic markings will be visible for the life of the asphalt it's applied to, and because the thermoplastic markings are formulated using 100% solids, no solvents are diffused into the air. The Program routinely applies recycled rubber speed humps rather than asphalt humps, which can be removed and re-used when streets are paved or their use is needed at another location.

Landscape Maintenance Division

The Landscape Maintenance Division implements their program while abiding by the “Bay-Friendly Landscape Guidelines,” which consist of the purchase of bay-friendly plants, trees, and landscaping materials that:

- Nurture the soil
- Conserve water
- Conserve energy
- Protect water and air quality
- Create and protect wildlife habitat

The Division utilizes salvaged/recycled soil materials, and the least hazardous chemicals for weed control. In an effort to conserve water, drip irrigation is employed to apply water only to desired plants, while the Division continues their effort to remove invasive plants and replace them with non-invasive plants in City medians and right-of-ways. The Department has a comprehensive Integrated Pest Management (IPM) Policy (reducing the amount of pesticides utilized), and takes pride in promoting the Urban Forest Program by planting trees that match the local microclimate and soil characteristics. Approximately 750 trees have been planted in the last three years, which can decrease urban runoff, protect water quality, and assist in absorbing air pollutants. In the office setting, the Division is purchasing recycled office supplies (including paper), actively participating in the City’s recycling program for plastic, paper, and batteries, and has eliminated the use of aerosol canisters/containers.

Police Department

The Police Department has a unique responsibility within the City of Hayward, and thus has implemented sustainable practices in distinct way. Excess property or evidence recovered during investigations, such as drugs, metals, batteries, firearms, electronics, and cell phones are property recycled as opposed to disposed of, in an effort to reduce the impact on the environment. The Department has a high need for confidentiality and thus contracts with a paper shredding service for sensitive documents. The vendor is required to recycle the pulp as part of their contract agreement. Recycle containers have also been placed adjacent to each garbage can inside the Police Department facility. The Department also sends excess office furnishings to Facilities to be made available to other departments instead of being thrown away.

The Police Department has had energy efficient overhead lighting installed throughout the building, and has also implemented motion detection for lighting. HVAC temperatures comply with the City standards for energy efficiency and employees use a tire changing station in the back parking lot to ensure optimal mileage on vehicles. From an operational standpoint, the Department has substituted electronic intranet distribution for paper distribution wherever feasible, and is migrating away from paper to digital records including incident reports, online citizen reporting, audio and visual evidence and fingerprints. Officers write reports in the field using Mobile Data Computers (MDCs) in their patrol vehicles, increasing their availability to the community and reducing unnecessary driving.

Public Works – Engineering and Transportation

The Public Works – Engineering and Transportation Department has implemented various measures that either reduce energy usage or make use of clean energy. Conversion from incandescent bulbs to LED lights for Traffic Signals has been a well-accepted practice for several years. In 1999, Engineering and Transportation began to modify all existing traffic signals and crosswalk lights to LEDs; this program was supported by rebates offered by PG&E. City standard designs now call for LED lights in all new traffic signals. In total, the conversion to LEDs reduced energy use by about 80%. Funding for the initial installation was obtained through short term borrowing.

During FY2012, through funding provided by an Energy Efficiency and Conservation Block Grant (EECBG), the City was able to replace 72 high pressure sodium streetlights with LED streetlights along a portion of Tennyson Road between Mission Boulevard and Tampa Avenue. In light of the positive response from the public and the considerable savings from the low energy consuming LED lights, staff was able to move forward during the early part of F20Y13 on a separate EECBG-funded project that allowed for the installation of additional LED fixtures along Jackson Street (from the BART tracks to Santa Clara Street), C Street (from Watkins Street to Foothill Boulevard), and Main Street (from C Street to A Street). LED lights were also installed on Mission and Foothill Boulevards as part of the Route 238 Corridor Improvement Project.

For the past several years, the department has implemented a program whereby existing roadway materials are recycled and re-used in pavement reconstruction projects. The process, which is often referred to as the full-depth rehabilitation (FDR) method, is an in-place recycling pavement reconstruction method that is environmentally friendly, sustainable, and a cost-effective alternative to the conventional full-depth pavement reconstruction. With conventional reconstruction, the full depth of existing material is removed, off-hauled for recycling or disposal, and replaced with new material. With FDR, the existing pavement section material is recycled in place and reused as the base for the new pavement section. Other “green” paving/construction strategies include the following:

- **Recycling of Construction and Demolition Materials:** the City requires contractors to recycle all construction and demolition debris generated from a project.
- **Conventional Asphalt Concrete:** the City allows up to 15% of reclaimed asphalt concrete in substitution of virgin aggregate.
- **Warm Mix Asphalt Concrete Approved for Use on City Projects:** this method allows asphalt to be mixed and placed at lower temperatures. Temperature reductions result in

environmentally responsible benefits such as cutting fuel consumption and decreasing the production of greenhouse gases.

- **Aggregate Base and Subbases:** the City allows up to 100% reclaimed material processed from portland cement concrete, lean concrete base, cement treated base, or a combination of any of these materials.
- **Pulverization of Existing Pavement Method Used on City Street Pavement Projects:** this method is similar to the FDR method noted above and involves the reuse of existing asphalt concrete for base resurfacing versus removing existing pavement and replacing with new materials.
- **Cold In-Place Recycling Method Approved for Street Rehabilitation Project:** this method involves pulverizing, grinding and reusing existing pavement aggregates, which is then capped with a new 2” overlay.
- **Portland Cement Concrete:** the City allows the use of fly ash (coal byproduct) in concrete mixes.
- **Rubberized Speed Lumps:** conventional speed lumps are constructed of asphalt concrete. The current City standard calls for the use of a rubberized speed lump, which is composed of 100% recycled rubber.

In addition to the above, Construction Inspection staff have been very diligent in enforcing all recycling requirements called out in project specifications.

Airport staff has incorporated several “green” policies/procedures into their ongoing, daily operations. Noise generated by aircraft using the Airport is closely monitored using state-of-the-art equipment to ensure compliance with the Airport Noise Ordinance. Industrial activities are closely monitored and commercial businesses are annually inspected by Airport staff as part of their responsibilities under the Storm Water and Pollution Prevention Plan (SWPPP). Individual tenants in City-owned hangars receive an annual inspection to ensure compliance with environmental best practices and Airport rules and regulations, while waste oil from aircraft engines is recycled. The design of the new Airport Administration building incorporates “green” elements; such elements include consideration for selection of a sustainable site, water efficiency, use of regional and recycled materials, increased indoor ventilation, thermal comfort, and low-emitting materials.

The Public Works – Engineering and Transportation Department has been taking the lead in exploring and initiating various projects to make its operations greener and cleaner, including the use of Light Emitting Diode (LED) Street Lights. As noted earlier, City staff implemented two smaller scale LED streetlight conversion projects along Tennyson Road, Jackson Street, C Street, and Main Street during FY2012 and FY2013, which were met with positive reviews from the community. The final phase of this program is to convert approximately 7,750 City-owned streetlights from high pressure sodium to LED lights. This project is expected to commence this April and will be completed by the end of September. All of the funding for this project will come from a low-interest loan from the California Energy Commission (CEC). In addition, the City is anticipated to receive PG&E rebates in excess of \$610,000. The rebates will be utilized to address other lighting improvement projects, such as the LED upgrade of the B Street decorative lights in the downtown, where merchants and residents have requested additional lightning, lighting upgrades at the City’s municipal parking lots, and the underpasses on D Street, Winton Avenue and Tennyson Road.

The life expectancy of LED streetlights is twice as long as standard lights and typically have 100,000 hours of operation. LED streetlights are somewhat new and, as with any emerging technology, have yet to experience major market penetration and performance improvement is continuing to increase. According to LED energy experts, streetlights using LED technology will have 60%-70% lower energy consumption, which leads to a dramatic cost savings. Under this project, the City is expected to realize a savings of approximately \$340,000 per year due to this conversion.

Public Works – Utilities and Environmental Services

Solid Waste/Recycling

The Solid Waste Program has a natural opportunity to support the goals of the Environmental Purchasing Policy by promoting human health and well-being, protecting and conserving natural resources and minimizing the City's contributions to global warming.

The City's solid waste, recycling, and composting contract with Waste Management of Alameda County (WMAC), in effect since 2007, requires use of 21 alternative fuel vehicles to collect all organics, trash and recyclables from single-family residences. WMAC continues to convert more of its vehicles using liquefied natural gas (LNG). Use of these vehicles has resulted in reductions in particulate matter emissions and nitric oxide emissions; the former identified as a toxic contaminant by the California Air Resources Board and the latter contributes to smog and is a source of poor air quality.

The WMAC disposes of all solid waste originating from the City of Hayward at the Altamont Landfill, which is owned and operated by WMAC and located in Livermore. Altamont Landfill was one of the nation's first landfills to install turbines to convert landfill gas to electricity in 1987. Built in 2009, the LNG plant features a state-of-the-art vacuum extraction system and network of wells to capture the gas, convert it to green power, and flare any residue to prevent it from entering the atmosphere. This bio-fuel is the lowest carbon fuel available, according to the California Air Resources Board. The plant generates an average of 13,000 gallons of clean-burning natural gas daily and is used to power 300 WMAC collection vehicles in California, including the trucks servicing Hayward and traveling along the I-580 corridor to Altamont Landfill. Use of this near-zero carbon fuel reduces carbon dioxide emissions. Based on the current amount of landfilled organic waste, the LNG plant could generate fuel for the next thirty years. For these efforts, Waste Management Inc. received the Governor's Environmental and Economic Leadership Award in 2010.

The City's franchise agreement with WMAC establishes that all program literature be printed on 100% post-consumer recycled-content paper. WMAC prints brochures that are direct-mailed to residents twice annually and includes other brochures as inserts in the residential garbage bills issued quarterly and the commercial garbage bills issued monthly. Monies from the Recycling Fund are also used to purchase 100% post-consumer recycled-content paper for use by all City staff. Use of this paper results in 25% to 50% less greenhouse gases compared with using non-recycled paper.

Water Conservation

Hayward implements an aggressive and effective water conservation program, consisting of mandatory requirements, voluntary programs, education and outreach and water use reduction strategies at City facilities. Hayward's current per-capita water use is among the lowest in the Bay Area. Many of these programs have been implemented regionally, in cooperation with other Bay Area Water Supply and Conservation Agency (BAWSCA) members, to provide cost efficiencies and a consistent message to customers through the geographic area. In addition to assisting external customers, the City has focused significant resources towards water use efficiency at City-owned properties, notably in landscape irrigation and system leak detection.

The City engaged professional services to examine water use and determine the volume and causes of so-called unbilled water, that is, water purchased from the wholesaler but not sold to customers. The consultant identified areas where water management could be improved, such as meter test and replacement and system pressure. While these strategies do not necessarily reduce water use, they help the City ensure that purchased water is put to beneficial use and that purchase costs are recovered in an equitable manner. The Water Balance and Audit determined that there was potential in the water system for significant loss through leaks. The City completed a system-wide leak detection survey, using acoustical equipment to identify leaks in the distribution lines and at each service connection. About 75 leaks were located and repaired, resulting in the recovery of an estimated 125 million gallons (mg) per year.

The City's Water Operating Fund supports two full-time positions dedicated to ensuring that irrigation systems on City properties maximize water efficiency. In recent years, the City has incorporated Bay-Friendly principles, including water use efficiency, into landscape rehabilitation projects at several City-owned sites. These gardens serve as demonstrations of attractive, water conserving landscapes, and help the City reduce its water costs. Examples of current and planned projects include:

- Route 238 Project – Bay Friendly landscaping has been installed, including a mix of native and water conserving Mediterranean plants.
- Highland 1000 Reservoir – This recently completed water storage facility site is landscaped with mostly California native plants, which provide erosion control, as well as water use efficiency
- Eden Youth Center – Landscaping on this City-owned property is currently under renovation. About 7500 square feet of turf has been removed and will be replaced with native and drought tolerant plants, as well as a more efficient subsurface irrigation system
- Old City Hall (Mission Boulevard) – The overgrown shrubbery will be replaced with a mix of California natives and drought tolerant plant material.

ECONOMIC IMPACT

The economic impacts of these measures are difficult to measure. The practices employed by the City may assist green jobs creation in the region by creating a need for more environmentally responsible vendors.

FISCAL IMPACT

The fiscal impacts of these measures are also difficult to quantify as a whole. Many individual practices are fiscal neutral, consisting of behavioral or process changes within the organization, or result in a net cost reduction.

NEXT STEPS

As stated in Administrative Rule 3.9, Section V, the Public Works – Utilities and Environmental Services staff will work to create a standing committee to create guidelines that provide direction and clarity to carry out the policy. Staff will also continue to facilitate necessary training or education to help further implement the policy and review the policy language on a biannual basis.

Prepared by: Corinne Ferreyra, Administrative Analyst I

Recommended by: Alex Ameri, Director of Public Works – Utilities & Environmental Services

Approved by:



Fran David, City Manager

Attachments:

Attachment I: Administrative Rule 3.9



CITY OF HAYWARD
ADMINISTRATIVE RULE

A.R. NUMBER
3.9

SUBJECT: ENVIRONMENTALLY PREFERRED PURCHASING POLICY

- I. **Purpose:** The purpose of this policy is to set a standard of environmentally preferable procurement and demonstrate the City's commitment to environmental, economic, and social stewardship. The City has a unique opportunity to expand its leadership in the area of environmentally preferable purchasing and, through its actions, elicit changes in the marketplace. By further incorporating environmental considerations into public purchasing, the City will positively impact human health and the environment, remove unnecessary hazards from its operations, reduce costs and liabilities, fulfill its commitments under the climate action plan, and improve the environmental quality of the region. This policy will guide the City's effort in procuring environmentally preferable products and services.
- II. **Application:** This policy shall apply to all City of Hayward departments and divisions.
- III. **Responsibility:** It is the responsibility of department heads and management staff to implement this policy and to make employees aware of its provisions. It is the responsibility of all employees to follow the guidelines established in this policy in regard to the purchasing of goods and services.
- IV. **Policy:** The City recognizes that its purchases of goods and services can contribute significantly to the success of its sustainability policies and goals. Therefore, the City shall incorporate environmental, economic, and social stewardship criteria into its purchases of products and services.

This policy will align the City's purchases and Purchasing Department policies and procedures with the City's climate action plan and programs to:

- Protect and conserve natural resources;
- Minimize the City's contributions to global warming, solid waste, local and global pollution, and toxic chemical exposures to people and the environment;
- Promote human health and well-being; and
- Institute practices that reduce waste by increasing product efficiency and effectiveness.

This policy shall not require the City to exclude competition, or to purchase products or services that do not perform adequately or are not available at a reasonable price in a reasonable period of time.

Evaluation prices for goods and services shall factor in life-cycle costs, total product cost over the lifetime of the product (use, maintenance, and disposal), risk management, regulatory requirements, and penalties for non-compliance.

It is the policy of the City of Hayward to:

- a. Purchase products which contain, whenever practicable, the highest percentage of post-consumer recovered material, the highest percentage of total recovered material available in the marketplace, and reduce waste in the manufacture and use of products and packaging;
- b. Ensure that specifications and performance standards for goods and services do not require the use of virgin materials nor specifically exclude the use of environmentally preferable products;
- c. Procure environmentally preferable products and services where environmental criteria have been established by governmental or other widely authorized authorities; and
- d. Integrate environmental factors into the City's buying decisions, when practicable, where external authorities have not established criteria. Examples include but are not limited to:
 - Purchasing non-emergency fleet vehicles that provide, whenever practicable, the best available net reduction in vehicle fleet emissions;
 - Replacing disposables with re-usable, recyclable, or compostable goods;
 - Providing locally produced, manufactured or grown supplies;
 - Considering life cycle economics;
 - Considering impacts and threats of harm to human health or the environment; and
 - Evaluating, as appropriate, the environmental performance of vendors in providing products and services.

V. Procedure: To achieve these goals:

- a. The City Manager or his/her designee shall appoint a standing committee consisting of mid-level management representatives. Members of the standing committee are intended to represent the various aspects of this program, including but not limited to: businesses, utilities conservation related programs, climate action plan, green procurement, and other related environmental programs.

The standing committee is charged with the following responsibilities:

1. Create guidelines that will provide sufficient direction and clarity to carry out this policy in an efficient and accountable manner at the product level. The guidelines may address, but are not limited to:
 - a. Source reduction
 - b. Recycled content products
 - c. Organics recycling
 - d. Energy and water savings
 - e. Green building (LEED)
 - f. Landscape

- g. Toxics and pollution
 - h. Forest conservation
 - i. Producer responsibility
2. The City Manager and his/her designee will assure that an annual written report is submitted for review to the City Council Sustainability Committee and submitted for approval to the Hayward City Council. This annual report shall identify the practices that minimized environmental impacts, toxics, pollution, waste and hazards to workers to workers and community.
 3. Facilitate necessary training or education for City staff to help further implement policy.
 4. Recommend and submit any updates or changes to the aforementioned guidelines and / or policy every two years or as needed to ensure they align with City priorities and requirements.

The Standing Committee will collaborate and coordinate efforts before, during, and after any new environmental purchasing policy implementation to ensure mutual program needs are met and confer and resolve problems jointly.

VI. Definitions:

City of Hayward – means the City of Hayward’s elected and appointed officials and staff.

Compostable – biodegradable during composting to yield carbon dioxide, water, and inorganic compounds and biomass, at a rate consistent with other known compostable materials and leaves no visually distinguishable or toxic residues.

Environmentally Preferable Products – refers to products and services that have a lesser or reduced negative effect on human health and the environment when compared with competing products that serve the same purpose. This comparison analysis may include raw materials acquisition, production, manufacturing, packaging, distribution, reuse, operation, maintenance, disposal of products, or service delivery.

Specifically, factors that should be considered when determining that a product or service has environmentally preferable attributes include, but are not limited to:

- Minimization of virgin material used in the product or service life cycle
- Maximization of recycled materials used in the product or service life cycle
- Life cycle economics of products and services
- Reuse of existing products or materials in product or service life cycle
- Recyclability, biodegradability and compostability of product
- Minimization of packaging

Reduction of energy and fuel consumption
Reduction of water consumption
Toxicity reduction or elimination
Durability and maintenance requirements
Ultimate disposal of the product
Environmental costs or impact of bringing product to market or point of sale

LEED (Leadership in Energy and Environmental Design) – means the Green Building Rating System developed and administered by the United States Green Building Council and adopted by Council and the Agency in the Green Building Policy.

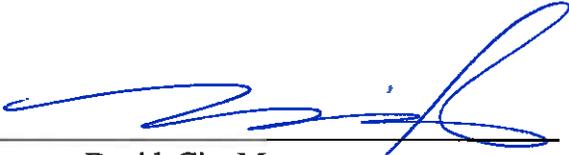
Life Cycle Economics – means the comprehensive accounting of the total cost of ownership, including initial costs, energy and operational costs, longevity and efficacy of service and disposal costs.

Postconsumer Material – means a finished material which would normally be disposed of as a solid waste, having reached its intended end-use and completed its life cycle as a consumer item, and does not include manufacturing or converting wastes.

Practicable – means sufficient in performance and available at a reasonable price.

Producer Responsibility – means an environmental strategy in which producers assume financial and/or physical responsibility for the management of post-consumer products so that those who produce and use those products bear the costs of recycling and proper disposal.

Council Sustainability Committee – established by the City Council on September 25, 2007 to focus on alternative energy generation and conservation, including commercial and residential types of energy sources and uses; green building policies for new developments; programs to generally improve green building renovation throughout the City; and productive steps to reduce global warming on the local level. Committee includes two Council Members, the Mayor, three Planning Commissioners and a member of the “Keep Hayward Clean and Green” Task Force.



Frances David, City Manager



Date

Department Responsible for Revisions: Finance Department 10/6/11

Issued: March 18, 2010
Revised: October 10, 2011



DATE: April 3, 2013
TO: Council Sustainability Committee
FROM: Director of Public Works – Utilities & Environmental Services
SUBJECT: Update on City-Wide Water Conservation Efforts

RECOMMENDATION

That the Committee reviews and comments on this report.

SUMMARY

Hayward implements an aggressive and effective water conservation program, consisting of mandatory requirements, voluntary programs, education and outreach and water use reduction strategies at City facilities. Hayward's current per-capita water use is among the lowest in the Bay Area. The program is fully funded in the Water Fund and therefore impacts water rates that the City must charge to recover costs.

BACKGROUND

Hayward has a long-standing and active commitment to water conservation. As an original signatory to the California Urban Water Conservation Council Memorandum of Understanding (MOU) dated December 31, 2002, the City has implemented cost-effective water demand management measures to reduce water usage by all customer sectors, offering a mix of voluntary programs including rebates, audits, education and fixture replacements. Many of these programs have been implemented regionally, in cooperation with other Bay Area Water Supply and Conservation Agency (BAWSCA) members, to provide cost efficiencies and a consistent message to customers throughout the geographic area. In addition to assisting external customers, the City has focused significant resources towards water use efficiency at City-owned properties, notably in landscape irrigation and system leak detection.

The City's conservation programs are responsible in part for Hayward's residential per capita water consumption, which, at 59 gallons per capita per day (gpcd) in FY 2012, is among the lowest in the Bay Area. Gross per-capita use is also relatively low, in spite of Hayward being home to a state university, community college, two hospitals, and a large diverse industrial sector. Residential per capita water use is considered one of the truest measures of water use efficiency, and further reductions in Hayward's already low usage will be a challenge. Nonetheless, water use efficiency is an important factor in overall environmental sustainability.

Hayward has experienced decreases in overall water consumption in recent years, as have other agencies in the area. The causes of this decline are not fully understood, and while they may partly be attributable to water conservation, other contributing factors may include reduced business activity during the economic downturn, higher vacancy rates, and higher cost of water.

DISCUSSION

Key elements of Hayward's water conservation efforts fall into the following general categories: 1) Water Use Efficiency Policies and Ordinances; 2) Indoor and Outdoor Water Conservation Programs; 3) Outreach and Education; and 4) City-Specific Water Conservation Activities. The following paragraphs briefly summarize the key components of each category.

Water Use Efficiency Policies and Ordinances

The Hayward City Council has enacted a variety of policies and ordinances which demonstrate the City's commitment to water use efficiency.

- *Indoor Water Use Efficiency Standards.* In 2010, Hayward was among the first Bay Area water agencies to adopt stringent indoor water use efficiency standards. The standards apply to all new construction, as well as many remodel projects, and are designed to reduce indoor water use by 20% over the standard plumbing code requirements.
- *Civic Bay-Friendly Landscaping Ordinance.* This ordinance, which went into effect in 2008, establishes sustainable landscaping requirements, including water use efficiency, for publicly funded projects. The new Route 238 landscaping is an example of a Civic Bay-Friendly design.
- *Hayward Environmentally Friendly Landscape Guidelines.* All landscape projects with more than 5,000 square feet of landscaped area are required to include a minimum of 75% water efficient plants, limit turf area to less than 25% of the total landscaped area, lay 3 inches of mulch, and install efficient irrigation and rain sensors.
- *Water Efficient Landscape Ordinance.* The City first adopted a Water Efficient Landscape Ordinance in 1993. An updated City of Hayward Bay-Friendly Water Efficient Landscape Ordinance, which includes elements of the Hayward Environmentally Friendly Landscape Guidelines, became effective in January 2010.
- *Dedicated Irrigation Meter Ordinance.* This ordinance, which went into effect in 2008, requires separate irrigation meters for planting areas that exceed 5,000 square feet. Separating irrigation use from indoor use generally results in improved water use monitoring. The City actively encourages the installation of dedicated irrigation meters for smaller projects as well.
- *Pricing Signals.*
 - *Tiered Water Usage Rates.* Hayward first adopted a two-tier water rate structure in 1993 to encourage water use efficiency. Under the tier rates, lower consumption is charged at lower rates. The structure has gradually evolved and now includes four tiers for single-family residential use.

- *Low Service Charge.* Hayward's service (or fixed) charge is among the lowest in the Bay Area. Most of the customer's water bill is due to the cost of water used and is therefore, to some extent, controllable by the customer. In FY 2012, only about 10% of the total water revenue came from fixed charges. The downside to low service charges is that more of the City's water revenue is subject to fluctuation due to climate and consumption patterns.
- *Residential Wastewater Charges.* Hayward is one of the few agencies to offer a residential wastewater rate structure that is somewhat tied to water usage and thus encourages water conservation. In addition to the standard residential rate, customers can automatically benefit from two lower sewer rates if their water consumption meets certain thresholds.

Indoor and Outdoor Water Use Efficiency Programs

The most reliable and permanent water savings come from the installation of water efficient appliances and fixtures. The City has taken several steps to increase indoor water use efficiency, including:

- *High Efficiency Toilet Rebates.* The City offers rebates of up to \$100 for the replacement of an existing high-water use toilet with a 1.28 gallon per flush model. To date, over 800 rebates have been issued, with estimated water savings of 3.2 million gallons (mg) per year. Staff markets this program through direct contact with vendors, promotional literature and website information.
- *Water Efficient Clothes Washing Machine Rebates.* Customers may receive a rebate of \$100 (in combination with PG&E) for the purchase of an Energy Star certified clothes washing machine. Close to 4,000 rebates have been issued, resulting in estimated water savings of 30 mg per year.
- *Fixture Replacements.* High quality, water saving showerheads and faucet aerators are provided to customers at no cost upon request. To date, 696 showerheads and 1,187 aerators have been given to water account customers.
- *Lawn Conversion Incentives.* The City introduced a new program in 2012 in which customers can receive a rebate (up to \$300 for residential properties and \$3000 for commercial sites) for converting an existing lawn into water efficient landscape. To date, one rebate has been issued; however, these programs tend to take a while to become established.
- *Pre-Rinse Spray Valves.* About 200 food-related businesses have been equipped with a pre-rinse valve to reduce water used for cleaning dishes and cooking utensils. Estimated water savings, as calculated by the vendor, is about 10 million gallons per year.
- *Large Landscape Water Use Surveys.* Hayward contracted with Gates & Associates to prepare water budgets, perform on-site irrigation surveys, and develop recommendations to reduce usage for 20 large landscape sites. The detailed information was provided to the customers, and staff is currently monitoring the results to determine actual savings.

- *Commercial Equipment Rebates.* Rebates are available for cooling tower controllers, which increase the number of cycles, and high efficiency commercial washing machines. Due to the high cost of this equipment, businesses have not responded as hoped, but staff will continue to promote the programs and look for additional opportunities to assist businesses in reducing water use.

Outreach and Education

Hayward has invested considerable resources into educating its customers of all ages about the importance and value of water use efficiency, and how they can reduce their water consumption. Although firm water savings from these types of programs are difficult to calculate, staff believes that public education and outreach is important in maintaining public awareness and encouraging behavioral changes.

- *School Programs*
 - *In-Class Curriculum* – The WaterWise curriculum is offered to about 600 fifth grade students annually at no charge to the Hayward Unified School District, as well as private schools. The program includes teaching aids, activity books, and high quality fixtures that families can install in their homes.
 - *School Assembly Program* – A recent addition to Hayward’s water conservation program are school assemblies. Produced by EarthCapades, a well regarded producer of environmental theater programs, these assemblies teach students about the water cycle and water conservation. Over 6,000 students participated in FY 2012, and feedback from teachers and principals has been uniformly positive.
- *Water Efficient Landscape Classes.* Hayward hosts three classes annually, conducted by a noted landscape professional, to teach residents about water efficient plant selection and irrigation systems. The classes, which are marketed mainly through water bill inserts, are well attended and enthusiastically received.
- *Community Events.* Staff participates in a variety of community events, including the Downtown Street Fairs, school events, and organization meetings, to provide information and water conserving devices to the public.

City-Specific Activities

Recognizing the importance of “practicing what we preach,” the City has implemented measures to manage water resources responsibly and reduce water use at City facilities and in publicly landscaped areas.

- *Water Balance and Audit.* The City engaged professional services to examine water use and determine the volume and causes of so-called unbilled water, that is, water purchased from the wholesaler but not sold to customers. The consultant identified areas where water management could be improved, such as meter test and replacement and system pressure. While these strategies do not necessarily reduce water use, they help the City ensure that purchased water is put to beneficial use and that purchase costs are recovered in an equitable manner.

- *Leak Detection Survey and Repair.* The Water Balance and Audit determined that there was potential in the water system for significant loss through leaks. The City completed a system-wide leak detection survey, using acoustical equipment to identify leaks in the distribution lines and at each service connection. About 75 leaks were located and repaired, resulting in the recovery of an estimated 125 mg per year.
- *Landscape Upgrades.* In recent years, the City has incorporated Bay-Friendly principles, including water use efficiency, into landscape rehabilitation projects at several City-owned sites. These gardens serve as demonstrations of attractive, water conserving landscapes, and help the City reduce its water costs. Examples of current and planned projects include:
 - *Route 238 Project* – Bay-Friendly landscaping has been installed, including a mix of native and water-conserving Mediterranean plants
 - *Highland 1000 Reservoir* – This recently completed water storage facility site is landscaped with mostly California native plants, which provide erosion control, as well as water use efficiency
 - *Eden Youth Center* – Landscaping on this City-owned property is currently under renovation. About 7,500 square feet of turf has been removed and will be replaced with native and drought tolerant plants, as well as a more efficient subsurface irrigation system
 - *Old City Hall* – The overgrown shrubbery will be replaced with a mix of California natives and drought tolerant plant material.
- *Plumbing Fixture Replacements.* Older high-water use toilets and urinals have been replaced with high efficiency models.
- *Landscape Maintenance Activities.* The City’s Water Operating Fund supports two full-time positions dedicated to ensuring that irrigation systems on City properties maximize water efficiency.

Future Water Conservation Activities

In the near term, future activities include expanding the information on the City’s website regarding water conservation and improving the format so that the information is more readily accessible. Staff will be seeking out opportunities to improve the marketing of existing programs to increase awareness and participation. Although additional programs are not imminent, staff will continue to evaluate potential new opportunities to determine their suitability and effectiveness for Hayward, and could potentially include such efforts as financial incentives for upgrading irrigation systems and commercial water use audits. Staff will seek to maximize resources by participating in regional programs when it is in Hayward’s best interest.

Future water conservation activities will also need to consider the impact of Senate Bill 7, the Water Conservation Act of 2009, which is intended to reduce state-wide urban gross per-capita water use by 20% by 2020. Local water purveyors, including Hayward, were required to identify both an interim water use target for 2015 and a final target for 2020 in the 2010 Urban Water Management Plan. Based on the methodology selected by the City Council, Hayward’s interim water use target for 2015 is 126 gpcd, and 122 gpcd for 2020. Hayward was well below this level in 2012, at 107 gpcd; however, as noted earlier, the reasons for this low number are not fully understood, and it is expected

to increase as the economy and real estate market recover. Staff will continue to monitor water consumption and balance the requirements of SB7 with the City Council's desire for economic development.

ECONOMIC IMPACT

To the extent that customers reduce their water use, they will benefit from lower water bills, in comparison to customers who use higher volumes. However, there is also a direct relationship between water consumption and the water consumption rates that the City must charge to maintain a reasonable working capital balance in the Water Fund. As water use decreases, the per-unit rates charged to cover fixed costs, such as employee services, must necessarily increase in order to keep pace.

Some agencies have addressed this issue by increasing the service charge, which is a fixed amount based on water meter size. This charge is intended to cover activities such as meter reading and billing services. It has historically been the Council's desire to maintain the service charge at the lowest possible level, so that customers can exercise maximum control over their water bills.

FISCAL IMPACT

Water conservation activities are fully funded from the Water Operating Fund, and are supported by water rates. The current budgeted costs for all programs total about \$1 million, including staffing and other costs for landscape conservation. This figure represents about 3% of the Water Operating Fund expenditures. To the extent that additional programs are added, the costs will need to be incorporated into the rates. No General Fund monies are utilized in the implementation of water conservation activities.

PUBLIC CONTACT

Depending on the specific program, the City employs a variety of tools to inform and educate about the public programs available to help reduce water consumption, including the City's website, Hayward Highlights newsletter, billing inserts, direct contact at community events, and brochures. As mentioned, a priority for staff is to improve the website design and information to ensure that it is current and readily accessible.

NEXT STEPS

Staff will continue to implement existing programs, assuming they remain cost effective, and seek out additional opportunities to work independently or collaboratively with other agencies on new and innovative programs.

Prepared by: Marilyn Mosher, Administrative Analyst III

Recommended by: Alex Ameri, Director of Public Works – Utilities & Environmental Services

Approved by:

A handwritten signature in black ink, appearing to read 'Fran David', written over a horizontal line.

Fran David, City Manager



DATE: April 3, 2013
TO: City Council Sustainability Committee
FROM: Director of Public Works - Utilities & Environmental Services
SUBJECT: Annual Update on City's Waste Reduction and Recycling Programs

RECOMMENDATION

That the Committee reviews and comments on this report.

BACKGROUND

This report is an annual update on the recycling services offered residents and businesses in the City of Hayward under the City's contract with Waste Management of Alameda County (WMAC). The City's compliance with Phase 1 of the mandatory recycling ordinance authored by the Alameda County Waste Management Authority (Authority) and approved by the City Council on February 28, 2012 is summarized here. Also included are the status updates regarding compliance with the City's ordinances for construction and demolition debris recycling and the ban on the use of polystyrene foam food containers by restaurants. Other topics addressed include the plant debris landfill ban enforced by the Authority. The City's 2011 diversion rate was 71%, which is comparable to the County-wide average.

The City of Hayward's Climate Action Plan identifies actions related to waste reduction and recycling for each of the topics addressed in this report, as listed below. Staff from the Authority and City has initiated measures to address most of the actions listed. Two of the ten actions listed are described in a separate report to the Committee for the April 3, 2013 meeting. They include advocating for waste management strategies that use landfill gas to create electricity (Action 6.7) and developing an environmentally friendly purchasing policy (Action 6.10).

Community-wide Actions:

- *Action 6.1 – Increase participation in the recycling services offered businesses through the City's contract with its franchisee;*
- *Action 6.2 – Increase participation in the recycling services offered single-family homes through the City's contract with its franchisee;*
- *Action 6.3 – Improve the City's construction and demolition debris recycling ordinance by evaluating other jurisdictions' provisions, as well as the processing capabilities of the various transfer stations and facilities in Alameda County and adjacent counties;*

- *Action 6.4 – Evaluate the viability of implementing a ban on certain materials from landfills, e.g., yard trimmings, untreated wood, cardboard, plastic bags, or polystyrene;*
- *Action 6.5 – Evaluate the viability of requiring that residents and/or businesses participate in the recycling programs offered through the City’s franchisee;*
- *Action 6.6 – Develop a program that encourages overall reduction of solid waste in residential and commercial sectors. This would include increasing participation in recycling services at multi-family properties and to eventually make recycling by commercial businesses mandatory.*
- *Action 6.7 – Advocate for waste management strategies that aim to maximize the useful value of solid waste by, for example, utilizing landfill gas to create electricity.*

Municipal Actions:

- *Action 6.8 – Continue to implement recycling programs in City-occupied buildings.*
- *Action 6.9 – Implement organics collection programs in City-occupied buildings.*
- *Action 6.10 – Develop an Environmentally Friendly Purchasing Policy.*

DISCUSSION

State Mandate for Business & Multi-Family Recycling Services – State law (AB 341) provides that municipalities in California require businesses and multi-family developments arrange for recycling services by July 1, 2012. Businesses with four cubic-yards or more of trash service each week are included, as are all owners of multi-family developments (with five or more units). Other elements of the legislation include a municipality’s obligation to provide outreach to businesses to educate them about the law and to notify non-compliant businesses of their obligations. Specific materials targeted for collection are left to the jurisdiction to determine, as is enforcement.

Authority’s Mandatory Recycling Ordinance – The Authority’s ordinance goes beyond the State legislation in that it specifies which materials are targeted for collection and includes inspection and enforcement provisions. The goal of the ordinance is to respond to the member agencies’ stated goals to landfill no more than 10% by weight of all readily recyclable and compostable materials originating in Alameda County by 2020.

The ordinance has two phases; the first began July 1, 2012 and the second will be effective July 1, 2014. Phase 1 requires businesses with four cubic yards or more of weekly garbage collection service (typically larger businesses) and all multi-family property owners to subscribe to recycling services. Recyclables targeted for collection include a variety of paper types, and food and beverage containers made of glass, metal and plastic. Most of the municipalities in the County participate in this phase. Phase 2 requires that all businesses, regardless of their garbage service level, and multi-family owners subscribe to recycling services. Materials required for collection include the above-listed recyclables, as well as food and compostable paper. Inspections and enforcement are performed by the Authority’s agents or staff from participating municipalities. Authority staff anticipates initiating inspections for Phase I in the City of Hayward within the next several months. Notices of violation may only be issued after a warning has been issued and assistance to implement a recycling program has been offered.

Such notices may only be issued by the Authority with written approval by staff from participating municipalities. The Authority will assume all costs to implement these services, including assistance to businesses to implement recycling programs, inspection and enforcement.

Multi-Family Recycling Services – The City’s contract with WMAC provides recycling services to multi-family residents at no additional charge. WMAC’s subcontractor, Tri-CED Community Recycling, offers weekly collection of the recyclables listed previously. City staff offers plastic recycling containers for indoor storage of recyclables and a brochure printed in four languages. Staff has confirmed that about 99% of all multi-family dwelling developments have access to recycling services.

An issue that has been raised by some larger multi-family complex managers in the past is that they prefer to have recycling services using larger bins rather than multiple plastic carts. Unfortunately, Tri-CED is unable to provide bin service at this time. This topic will be addressed in the report to the City Council later in 2013 regarding the Franchise Agreement with WMAC.

Business Recycling Services - Services offered businesses include collection of recyclables and organics. Recyclables collection is available at no additional charge, and organics collection is available at half the price of regular garbage collection. Although not always the case, numerous businesses, including restaurants and food processors, have been able to reduce garbage service and cost after implementing one or both services.

Staff estimates that about 78% of the businesses subject to Phase 1 of the ordinance have arranged for recyclables collection. Assistance implementing programs is provided by WMAC, the Authority and City staff. Other City assistance includes plastic indoor containers for temporary storage of recyclables and organics, as well as labels for the containers and posters for reference by employees and patrons. The labels and posters are printed in Spanish, Chinese and English. City staff will continue to disseminate informational materials to businesses via the monthly bills issued by WMAC.

Construction & Demolition Debris Recycling – The City’s ordinance requires that building permit applicants for all construction, demolition, and/or renovation projects in excess of \$75,000 recycle all asphalt and concrete and at least half of all other materials generated from the project. For the past three years, about 90% of all building permit applicants or their contractors submitted acceptable records to document compliance. Staff believes that compliance is acceptable and does not recommend any revisions to the ordinance at this time for this reason and due to the downturn in the economy. Additionally, all Public Works projects recycle all materials, including dirt, concrete and asphalt, for example, generated as a result of their project.

City Facilities Recycling – Collection of recyclables from City facilities includes all of the recyclables listed previously, as well as common household batteries used for small appliances. Collection of organics and discarded paper hand towels at City Hall began in February 2013; expansion to other City facilities will be completed later this year. Collection of mixed recyclables and organics at all City facilities is provided at no additional charge.

City's Ban on Polystyrene Foam Food Containers - The City's ordinance prohibiting use of polystyrene foam food containers by restaurants and other retail vendors became effective July 1, 2011. The ordinance also requires affected businesses to use recyclable or compostable food service containers. To date, staff has responded to twenty-eight reports of non-compliance by restaurants; staff has confirmed that twenty-four have complied and the other four will comply by early April.

Authority's Landfill Ban on Plant Debris - The ordinance requires that plant debris be separated for later composting, rather than landfilled. Plant debris includes grass, leaves, shrubbery, vines and tree branches. The ordinance applies to residential and commercial property managers, landscapers and gardeners, municipalities, and commercial customers with four cubic yards or more of weekly trash service. Individual single-family residents would not typically be subject to the ordinance because they do not generate a sufficient volume of plant debris to justify hauling to a disposal facility. Instead, residents are encouraged to place their food scraps and food-soiled paper along with yard trimmings in their green carts.

Authority's Reusable Bag Ordinance Effective January 1, 2013 – An informational report was presented to the Committee at its January 30 meeting summarizing the ordinance and compliance status for ten affected larger stores. No additional information is presented in this report.

ECONOMIC IMPACT

Multi-family developments and businesses are provided collection of recyclables at no additional charge. Organics collection is also available to businesses at half the price of regular garbage service. To assist restaurant managers who still do not fully comply with the City's polystyrene ban, City staff provides businesses with a list of local vendors who sell acceptable food containers. During site visits, staff also describes the subsidies available and provides informational literature in order to mitigate the additional costs to buy biodegradable food containers.

With regard to the reusable bag ordinance, the percent of customers buying paper bags is relatively small, based on the anecdotal observations conducted by City staff during the past three months. A majority of customers purchased a reusable bag available for sale by the store or brought their own reusable bag.

Refuse rates typically increase on June 1 of each year, in accordance with the Franchise Agreement with WMAC approved by Council in January 2007. The rate adjustment prescribed in the Franchise Agreement is based primarily on 80% of the change in the annual Bay Area Consumer Price Index and changes in fuel costs. As required by the Franchise Agreement, WMAC's costs to comply with the mandatory recycling ordinance will continue to be based on documented tonnage of recyclables collected. WMAC's expenses are separate from the Authority's costs.

The City's contract with WMAC applies the same annual rate increase to all residents and businesses. Variable rate increases for residents and businesses can be incorporated into the next contract, as has been discussed at previous Committee meetings. The contract will expire on

May 31, 2014. The City has the option to extend the term up to three years in periods of twelve months each.

FISCAL IMPACT

The City's Solid Waste Program staff will continue to work with the Authority to coordinate implementation and enforcement of the mandatory recycling ordinance. The City's costs are separate from the Authority's costs. Recycling Fund monies will be used to fund these activities; there will be no impact to the General Fund. Currently, there is sufficient revenue in the Recycling Fund balance to supplement the Measure D disbursements to pay costs associated with the ordinance.

NEXT STEPS

City staff will continue to offer assistance to property managers of multi-family developments and affected businesses that have not yet implemented mixed recyclables collection. Staff will also continue to coordinate outreach efforts with the Rental Housing Owners Association and the Hayward Chamber of Commerce. Staff will prepare a report to the Committee and to the City Council later in 2013 seeking direction regarding the City's participation in Phase 2 of the Authority's mandatory recycling ordinance.

Prepared by: Vera Dahle-Lacaze, Solid Waste Manager

Recommended by: Alex Ameri, Director of Public Works – Utilities & Environmental Services

Approved by:



Fran David, City Manager