



CITY OF
HAYWARD
HEART OF THE BAY

**COUNCIL SUSTAINABILITY
COMMITTEE**

JULY 16, 2014

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CITY COUNCIL SUSTAINABILITY COMMITTEE MEETING
Wednesday, July 16, 2014
Conference Room 2A
4:30 – 6:30 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 May 7, 2014
[Minutes](#)
2. Update on Options to Address Sea Level Rise
[Staff Report](#)
[Attachment I Focus Area Map](#)
3. Update on Water Supply Outlook and Water Conservation
[Staff Report](#)
4. Update on Commuter Benefits Program
[Staff Report](#)
5. Briefing on City Participation in 2014 Earth Day Activities
[Staff Report](#)
6. Suggested Sustainability Committee Quarterly Meeting Topics for 2014
[Meeting Topics for 2014](#)

COMMITTEE MEMBER ANNOUNCEMENTS AND REFERRALS

ADJOURNMENT

NEXT REGULAR MEETING – TIME, DAY, DATE

****Materials related to an item on the agenda submitted to the Council 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. All Council Meetings are broadcast simultaneously on the website and on Cable Channel 15, KHRT. ****

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HAYWARD CITY COUNCIL, 777 B STREET, HAYWARD, CA 94541
[HTTP://WWW.HAYWARD-CA.GOV](http://www.hayward-ca.gov)

AUGUST 2, 2011



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

May 7, 2014
5:00 p.m.

MEETING MINUTES

CALL TO ORDER: Meeting called to order at 5:01 p.m. by Chair Al Mendall, Council Member.

ROLL CALL:

Members:

- Al Mendall, Council Member/CSC Chair
- Barbara Halliday, City Council Member
- Francisco Zermeño, City Council Member
- Vishal Trivedi, Planning Commissioner
- Laura Oliva, Keep Hayward Clean and Green Task Force/CSC Vice Chair
- Elisa Marquez, Planning Commissioner (Arrived 5:10 p.m.)

- Dianne McDermott, Planning Commissioner-Absent

Staff:

- Fran David, City Manager
- Kelly McAdoo, Assistant City Manager
- Alex Ameri, Director of Public Works - Utilities & Environmental Services
- David Rizk, Development Services Director
- Greg Jones, City Council Member
- Erik Pearson, Environmental Services Manager
- Tori Johnson, Senior Secretary (Recorder)

Others:

- Roxanne Cruz, Government Relations-PG&E
- Greg Hoaglin, Executive Manager of Energy Solution Services-PG&E
- Andrea Schumer, Customer Relationship Manager-PG&E
- Alex DiGiorgio, Community Affairs –Marin Clean Energy
- Ernest Pacheco, Community Workers of America
- Moses Sullivan, KHGC/Palma Ceia Baptist Church
- Tom Kelly, Kyoto USA
- Kyoko Takayama, Organizing for Action
- Seth Baruch, Carbonomics
- Mandeep Gill

PUBLIC COMMENTS:

Tom Kelly, of Kyoto USA, spoke about the Alameda County Board of Supervisor's Transportation and Planning Committee meeting on Monday. The Committee members are Supervisors Haggerty (chair) and Miley. The Committee recommended that staff prepare for a Board meeting in either April or May to take up Community Choice Aggregation (CCA) by the full Board. Mr. Kelly stated the two supervisors seemed very enthusiastic about Community Choice.

Ernest Pacheco, of Communications Workers of America (CWA), said the CWA is in support of the City of Hayward moving forward on CCA.

Mandeep Gill spoke as a citizen in support of CCA.

1. Review of Minutes of April 2, 2014 – Minutes approved unanimously.
2. Community Choice Aggregation Report

Council Sustainability Committee Vice Chair Laura Oliva recused herself from participating in the discussion of item due to potential conflict of interest since she works for PG&E.

Director of Utilities & Environmental Services, Alex Ameri provided an introduction of Community Choice Aggregation (CCA), and introduced Environmental Services Manager, Erik Pearson who provided an overview of CCA. Mr. Pearson explained this is part of the initial research to determine if CCA is appropriate for Hayward, and staff is looking for direction from Committee whether staff should continue to investigate, hold off, or bring it forward to the full City Council. CCA is a tool that allows cities or counties to purchase or generate electricity on behalf of the customers within their jurisdictions. In California, the primary goal for CCAs has been to reduce greenhouse gas emissions.

Council Member Zermeño asked if all cities within Alameda County would be a part of the CCA, and if it would include unincorporated areas in the County. Mr. Pearson explained that it would be up to each individual city to decide if they want to be a part of it, and it would include the unincorporated areas. City Manager Fran David said she believes that it is Supervisor Haggerty's intent that it include all the cities in Alameda County.

Mr. Pearson introduced speaker Seth Baruch, President of Carbonomics, a consulting firm that is advocating for CCA. Mr. Baruch presented the history of CCAs, the potential impact of greenhouse gas emissions, economic impacts, and potential risks.

Planning Commissioner Marquez asked about the opt out process and rates.

Alex DiGiorgio said that Marin Clean Energy can remove a customer within 48 hours of their request to opt out. He also said that in Richmond, 16% of customers have opted out.

Mr. Pearson introduced speaker Alex DiGiorgio, Community Affairs Coordinator for Marin Clean Energy (MCE), which began serving Marin County in 2010. The City of Richmond joined MCE in

2013. Mr. DiGiorgio presented the process and costs associated with establishing MCE, the sources of electricity that they are currently purchasing, and their current rates.

Council Member Mendall asked about the departing load charges for long-term contracts; if it's permanent or does it expire. Mr. DiGiorgio answered that it resets when people move or when there is a new account created, and, theoretically, it should not reset if you do not move.

Council Member Zermeño asked how a CCA would create jobs.

Seth Baruch responded that it would depend upon where renewable energy facilities are built.

Council Member Zermeño expressed concern about start-up costs.

Alex DiGiorgio said that start-up costs can be repaid relatively quickly and that there are legal protections for individual cities.

Mr. Pearson introduced speaker Greg Hoaglin, Executive Manager of PG&E's Energy Solutions and Services. Mr. Hoaglin presented an overview of PG&E's efforts to comply with the renewable portfolio standard. He explained the current requirement for State law is that utilities provide at least 33% of their electricity from renewable sources by 2020. Those renewable sources are, by the State's definition, wind, solar, geothermal, biomass, and small hydroelectric. Mr. Hoaglin also explained that power costs are pass-through costs and that PG&E does not make money on power costs.

Council Member Halliday asked if natural gas would be provided by a CCA or PG&E. Mr. Hoaglin responded that PG&E would still supply the gas portion.

City Manager Fran David asked why production of geothermal energy was going down so much. Mr. Hoaglin responded that geothermal is a resource that is somewhat diminishing over time. It's a renewable resource, as long as you're able to reproduce steam. It hasn't been a normal practice in Northern California. If steam fields are not replenished it will continue to diminish.

Planning Commissioner Vishal Trivedi, asked for an example of what would fit in the TBD slice of the pie in the presentation. Mr. Hoaglin responded that it may be some kind of advanced technology that is yet to be demonstrated commercially.

Mr. Hoaglin explained PG&E's Green Option, which is a new service that PG&E is working to make available, where customers could have the option to purchase up to 100% renewable energy. PG&E hopes to have a decision by the California PUC by the summer. The benefit of this program is that it would provide an option for customers who can't put solar on their roof.

Council Member Halliday asked if it will cost more in the beginning for the solar option. Mr. Hoaglin answered that it will cost more than regular rates.

Erik Pearson discussed that PG&E has a significant portion of electricity that comes from large hydroelectricity and nuclear sources, and are very low carbon sources. To match the same carbon intensity of electricity, a CCA will need to have more renewables than PG&E, in terms of how the State defines renewables, for that same carbon intensity.

Council Member Mendall asked about other renewables or other non carbon intensive sources like nuclear and large hydro. Mr. Pearson responded that it is unlikely that a CCA would source their electricity from those types of facilities.

Erik Pearson explained that AB 2145, a bill currently being considered by the State Assembly, would, in its current form, change CCA from an opt-out program to an opt-in program. The bill would further require that the annual greenhouse gas emissions rates for electricity actually delivered, or projected to be delivered, be provided to the customers. Mayor Sweeney has signed a letter of opposition that was sent to Sacramento last week. Erik Pearson went over a few questions that need to be answered to decide if a CCA should be pursued such as, the cost effectiveness of CCA in terms of reducing greenhouse gas emissions as opposed to investing in other renewable alternatives; the near and long term rates for a CCA must be competitive; and other financial liabilities such as the start up costs. He explained there are more issues identified in the staff report, and that staff is looking for direction from the Committee to either cease investigation of a possible CCA or prepare a report to gain further direction from the City Council. He added that if it does go to the full City Council another question would be whether or not to forward the resolution that is attached to the staff report.

Council Member Mendall thanked the speakers for the information presented.

The speakers from Carbonomics, Marin Clean Energy, and PG&E took questions from the Committee members and the audience.

It was moved by Planning Commissioner Vishal Trivedi, seconded by Council Member Mendall, and carried, with abstention by Committee Member Laura Oliva, to recommend to bring to the City Council a request to obtain the energy use data either on our own or in cooperation with the Energy Council or the County, whichever makes the most sense. Planning Commissioner Trivedi agreed with the recommendation and said his preference is to find a way that it could be pursued without shouldering all the costs and encourages other cities and the county to share the costs. Planning Commissioner Elisa Marquez, commented that it is good to move forward, and recommended that staff be directed how to proceed, however, she expressed concern about making sure the County is on board and that there be community outreach to residents and businesses. Council Member Mendall concluded that the Committee is suggesting that Council begin the process of studying it in cooperation with other cities, hopefully, the County, and perhaps the Energy Council.

The motion was approved: 5-ayes, 0-noes, and 1-abstention.

COMMITTEE MEMBER/STAFF ANNOUNCEMENTS AND REFERRALS:

Next meeting will be on July 16, 2014 at 4:30 pm.

ADJOURNMENT: 7:03 p.m.

DATE: July 16, 2014

TO: City Council Sustainability Committee

FROM: Director of Utilities & Environment Services

SUBJECT: Update on Options to Address Sea Level Rise

RECOMMENDATION

That the Committee receives and comments on the presentation from Bay Conservation and Development Commission staff. The following staff report is provided as background and for the Committee's information.

BACKGROUND

According to a recent study, the San Francisco Bay is projected to rise up to sixteen inches by 2050 and up to fifty-five inches by 2100. The Hayward Shoreline is already experiencing significant erosion and current levees are sometimes overtopped when storms coincide with high tides.

Hayward staff and the Hayward Area Shoreline Planning Agency (HASPA), a joint powers authority, have been studying sea level rise and exploring alternatives to minimize vulnerability. In December 2008, the three member agencies of HASPA (the City, the Hayward Area Recreation and Park District (HARD), and the East Bay Regional Park District (EBRPD)) hired Philip Williams & Associates to study sea level rise and the potential effects on the Hayward Shoreline. The study identified vulnerabilities and possible approaches that may be taken to protect the shoreline. The report, titled "Preliminary Study of the Effect of Sea Level Rise on the Resources of the Hayward Shoreline," was presented to Council on March 16, 2010¹ and was subsequently presented at many workshops and conferences throughout the Bay Area and beyond in 2010 and 2011. City staff continues to study sea level rise by working with the HARD, EBRPD, with the San Francisco Bay Conservation and Development Commission (BCDC) acting as facilitator.

HARD is actively educating the public about sea level rise and has a webpage dedicated to the topic at http://www.haywardrec.org/hayshore_SLR.html. From June 8, 2013 through September 15, 2013, the Hayward Shoreline Interpretive Center (HSIC) hosted "Sea Change," an exhibition co-sponsored by Women Environmental Artists Directory (WEAD). Sea Change included a diverse collection of contemporary projects by internationally renowned artists, architects and scientists who explore the shifting interactions of land and sea. On November 16, 2013, the HSIC kicked off the first in a series of three programs about sea level rise with a workshop titled "Adapting to Rising

¹ See Item 1 at <http://www.hayward-ca.gov/CITY-GOVERNMENT/CITY-COUNCIL-MEETINGS/2010/cca031610.htm>

Tides – The New Normal?” From January 25 through April 13, 2014, HARD hosted an exhibit titled “55”: Images of Sea Level Rise.” The exhibit highlighted “the monumental beauty of ice and its melting as a harbinger of massive environmental changes due to ever-increasing levels of CO2 emissions” and included paintings by HARD staff member Jennifer Koney.

In conjunction with the exhibit, HSIC presented a series of community discussions about the local impacts of sea level rise and how to respond. “What?! Sharks in My Backyard?” was held at the Castro Valley Library on February 22, 2014, at the San Lorenzo Community Center on March 22, and at the Hayward Shoreline Interpretive Center on April 12. Representatives from HSIC and the Adapting to Rising Tides Project presented information about the local impacts of sea level rise and facilitated small group discussions about possible adaptation responses. These workshops were presented in partnership with 350BayArea.org, AAUW, Castro Valley Library, the HASPA Citizens Advisory Committee, MoveOn, Starr King UU Social Justice Committee, and WEAD.

EBRPD manages over forty miles of Bay Shoreline and is actively engaged in addressing sea level rise, Bay restoration and water quality improvement efforts. The District is currently managing restoration and protection projects along its shoreline; however, with bigger storms and sea level rise in the future, the District will need additional partners and funding streams to protect the Hayward shoreline.

One of the possible strategies identified in the 2010 HASPA study was to create conditions where marshes could accrete to keep pace with sea level rise. Adding freshwater to a marsh to facilitate more vigorous vegetation growth and the addition of sediment can allow marshes to adapt to sea level rise. The Oro Loma Sanitary District (OLSD) received grant funding to implement the *Oro Loma Wet Weather Equalization and Ecotone Demonstration Project*, which will restore a marsh using water from the OLSD treatment plant. The wet weather equalization part of the project addresses a desire to reduce peak flows from the OLSD treatment plant into the East Bay Dischargers Authority (EBDA) line.

Adapting to Rising Tides – The ART Project – In October 2010, BCDC announced the ART Project, a joint effort of BCDC and the National Oceanic and Atmospheric Administration (NOAA) Coastal Services Center. BCDC and NOAA solicited participation from local jurisdictions throughout the Bay Area. Due to the then recently completed HASPA study and interest expressed by Hayward and other East Bay cities, BCDC formally selected the area from Union City to Emeryville as the sub-region for the ART Project in December 2010. This East Bay sub-region was also selected because it includes a wide variety of assets including marshes, parks, bridges, closed landfills, wastewater treatment facilities, BART stations, an airport, and the Bay Trail.

Beginning in January 2011, City staff as well as staff from EBRPD and HARD actively participated in working group meetings and provided input to BCDC and NOAA to assist with activities and the preparation of documents including:

- Asset Inventory
- Existing Conditions and Stressors
- Vulnerability and Risk Assessment
- Characterizing Vulnerabilities and Risks

- Developing an Adaptation Approach and Responses

The ART Project concluded with an open house on October 17, 2013 for BCDC Commissioners and working group members to share results of the project. All reports, presentations, and meeting summaries are available on the project website at <http://www.adaptingtorisingtides.org/>.

DISCUSSION

Hayward Resilience Study – Upon completion of the ART Project, BCDC initiated two projects that have focused on smaller areas within the sub-region. One area includes the Bay Bridge touchdown and the Oakland Airport and the other is the area of Hayward shown in Attachment I. The Hayward study area includes a large swathe of Hayward’s industrial area located west of Clawiter Road and extends about one half mile south and two miles north of State Route 92. The area also includes the City’s Water Pollution Control Facility and Calpine’s recently completed Russell City Energy Center. The purpose of the study is to combine the efforts, data, and findings of the ART Project, the HASPA sea level rise study, and existing exposure mapping on a small area that includes transportation, recreation, wildlife, and utility assets. The study considered vulnerabilities, risks, and adaptation opportunities for addressing sea level rise and flooding impacts. The study engaged a stakeholder group, which began meeting monthly in September 2013 and at its October 24, 2103 meeting, the stakeholder group identified the following goals for Hayward Resilience:

1. Protect the health, safety and welfare of those who live, work, and recreate in the Hayward Shoreline area.
2. Prevent the disruption of key community services by protecting critical infrastructure.
3. Protect the environmental value of the Hayward Shoreline area by preserving habitat, water quality, and endangered species.
4. Build organizational and community capacity so stakeholders can work collaboratively to address future conditions.

The intended outcomes of the Hayward Resilience Study were:

- Active and engaged participation from stakeholders in the focus area, with the potential for a long-term collaboration to develop among participants
- Development of adaptation response suites that will address individual and shared vulnerabilities and risks that are identified during the study
- Application and refinement of ART adaptation planning processes and tools to address multiple vulnerabilities and risks at a focus area scale
- Development and dissemination of communication materials about the study, process, lessons learned, and outcomes
- Eight stakeholder meetings, possible briefings to Boards and Commissions, and a report on the results of the study in summer 2014

The working group developed many different possible strategies at the asset level and focus area scale. Considering 36 inches of sea level rise, the following four visions were evaluated for feasibility, economic benefits, social benefits, environmental improvements, organizational capacity and sustainability.

- Business as Usual – Assuming no landscape-scale protection.
- Traditional Levees – Improve existing levees at current locations.
- Horizontal Levees – Gentle sloping marshes similar to the *Oro Loma Wet Weather Equalization and Ecotone Demonstration Project* described above.
- Room for the Bay – Moving current infrastructure out of areas where inundation is expected.

Staff's presentation at the Committee meeting will further describe each of the four visions. The final meeting of the working group for the Hayward Resilience Study will be on July 31, 2014.

ECONOMIC IMPACT

The effects of sea level rise could have dramatic impacts on the local economy. Adjacent to the Hayward shoreline, just inland of the marshes, are large areas of valuable industrially developed land and some residential areas. Continued study of the anticipated impacts and potential mitigation strategies will better position Hayward to minimize future physical and economic impacts to Hayward businesses and properties.

FISCAL IMPACT

Staff's continued participation in HASPA and regional activities to study sea level rise will have minimal impacts to the General Fund. Impacts are limited to staff time on behalf of the Development Services and Utilities and Environmental Services Departments.

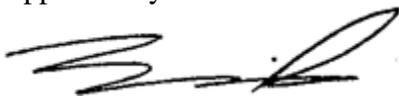
NEXT STEPS

Staff will continue to participate in the Hayward Resilience Study and will report results of the Study to the Committee at a future meeting.

Prepared by: Erik Pearson, AICP, Environmental Services Manager

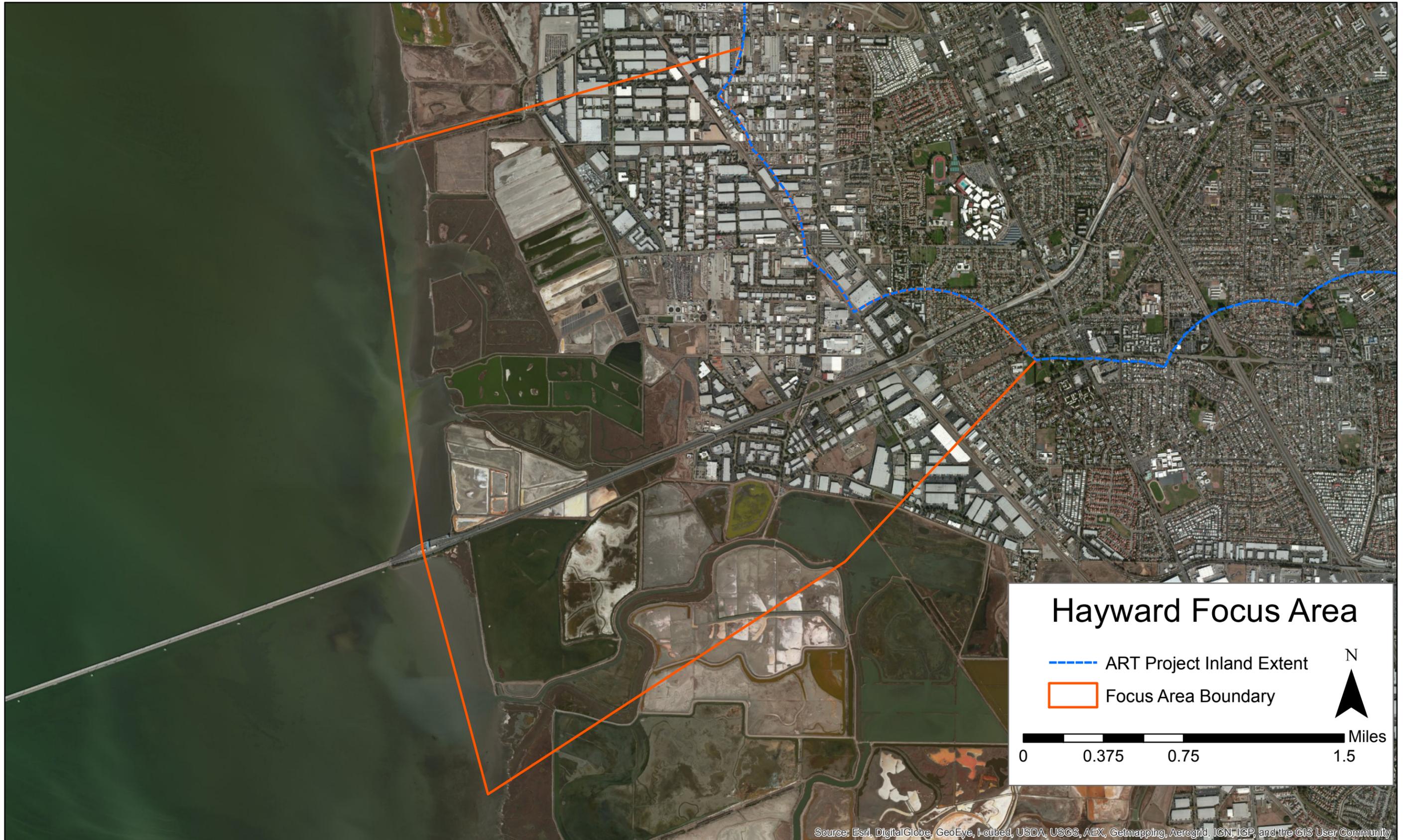
Recommended by: Alex Ameri, Director of Utilities & Environmental Services

Approved by:



Fran David, City Manager

Attachment I: Hayward Resilience Study Area



Hayward Focus Area

--- ART Project Inland Extent

□ Focus Area Boundary

N



0 0.375 0.75 1.5 Miles

Source: Esri, DigitalGlobe, GeoEye, i-cubed, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, and the GIS User Community

DATE: July 16, 2014
TO: City Council Sustainability Committee
FROM: Director of Utilities & Environmental Services
SUBJECT: Update on Water Supply Outlook and Water Conservation

RECOMMENDATION

That the Committee reviews and comments on this report.

SUMMARY

This report provides information about the current water supply outlook, as well as water conservation programs and efforts that support Hayward's sustainability goals. California is currently in the midst of a drought that has seen three consecutive years of below-normal precipitation. Hayward's wholesale water supplier, the San Francisco Public Utilities Commission (SFPUC), has requested 10% reductions in water use from all of its customers. To date, Hayward is exceeding its target; however, there are still several months left in the year. In order to preserve available supplies, continued water conservation programming and education are critical.

BACKGROUND

Hayward is one of 26 suburban purchasers of potable water from the SFPUC's regional water system and receives 100% of its water supply from Regional Water System, which includes the Hetch Hetchy watershed located in Yosemite National Park, and, to a much lesser extent, runoff that is stored in local reservoirs in Alameda County. The Regional Water System is largely dependent on precipitation, particularly snowfall in the Sierras, which melts and flows into the Tuolumne River, and fills Hetch Hetchy Reservoir.

As the Committee is aware, the past three years have seen exceptionally dry conditions throughout the State, prompting the Governor in January to call for a 20% reduction in water use state-wide. Even in drought years, however, water supplies differ from agency to agency, depending on sources, storage capacity, prior water conservation efforts, and other regional factors. While no water supplier is immune from the climate conditions, SFPUC's current storage situation is better than some due to more favorable conditions at the watershed and reduced water use over the past few years. Therefore, rather than imposing a 20% cutback, the SFPUC responded by asking its wholesale and retail customers to voluntarily reduce consumption by 10%. This 10% reduction request is still in effect, as SFPUC continues to monitor usage.

Regardless of water supply conditions, Hayward has an active and long-standing commitment to water conservation and water use efficiency. As an original signatory to the California Urban Water Conservation Council Memorandum of Understanding (MOU), the City has implemented a number of cost effective demand management measures and consumer education programs to reduce water usage among customers. In addition to assisting external customers, the City has also put into place water conservation practices and resources to reduce usage at City properties, most notably in landscape irrigation and system leak detection.

One of the most telling measures of water use efficiency is the average gallons of residential water used per capita per day. In fiscal year 2013, the most recent year for which data is available, Hayward's *residential* use was 58 gallons per capita per day. This places Hayward in the bottom quarter among all of the SFPUC wholesale customers. The *gross* per capita use, was 104 gallons per capita, placing Hayward in the lower third, a significant achievement since the gross usage includes consumption from a state university, community college, industrial customers and two regional hospitals. Hayward customers have been excellent stewards of water usage and continue to do their part during the current drought.

DISCUSSION

Water Supplies

At the end of June, after the anticipated snowmelt had occurred, the total SFPUC system storage was at 64% of capacity. While far from optimum this early in the year, such storage levels place the SFPUC in a somewhat better position, compared to some other water suppliers. This is due to several factors, including the fact that the largest reservoir, Hetch Hetchy, is located at a fairly high elevation where there tends to be more precipitation. SFPUC also benefits from the "water bank," which allows SFPUC to release water for the benefit of partnering agencies during non-drought years, and then cut back on releases during years that the water is needed for SFPUC customers. Another critical consideration is that SFPUC customers, including Hayward, have reduced their purchases over the past few years for various reasons, including the economic downturn, housing crisis, increasing water costs, and water conservation programs and education. Hayward's water purchases, for example, decreased by more than 17% from FY 2009 through FY 2013. Reductions such as these have allowed SFPUC to manage its water supplies prudently.

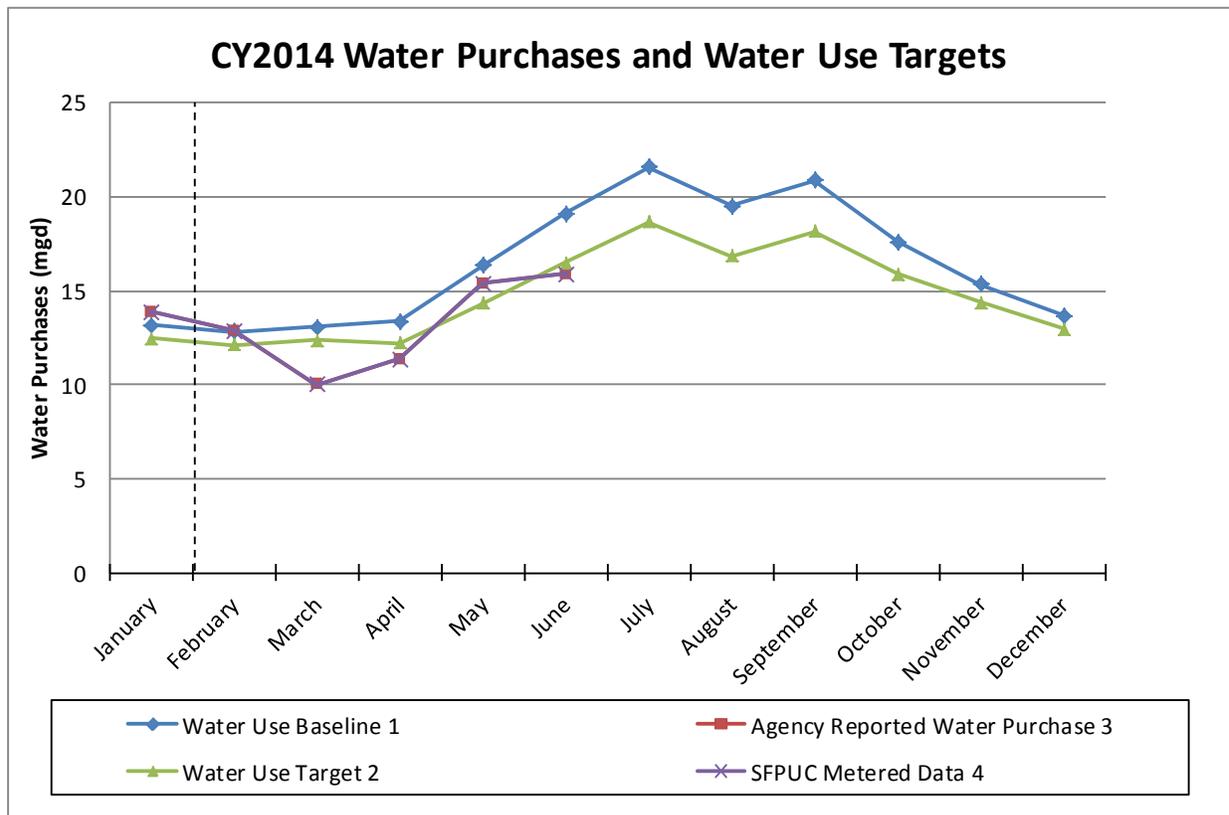
Nevertheless, the persistent dry conditions have resulted in SFPUC requesting a 10% cutback to preserve available supplies in the event that the drought continues next year. In late June, the SFPUC confirmed that the 10% voluntary reductions remain in effect, and SFPUC staff has informed wholesale customers that the cutbacks are likely to be in place at least through the end of this calendar year. Further, SFPUC has stated that mandatory rationing is not off the table if customers do not make sufficient progress towards meeting the reduction target. Therefore, it is critically important to continue efforts towards achieving the goals.

It is important to note that the baseline for the 10% reduction is not the prior year, but rather the amount of water that wholesale customers collectively indicated that they would be purchasing this year and the quantity that SFPUC determined would be sold to its retail customers. This basis has resulted in some confusion about how to determine whether individual agencies are meeting their targets. The Bay Area Water Supply & Conservation Agency (BAWSCA), whose membership

consists of wholesale purchasers of SFPUC water and of which Hayward is a member, has worked with SFPUC to develop a consistent methodology whereby agencies can track their progress. The methodology accounts for variation in use during winter and summer months, recognizing that more discretionary water use for irrigation occurs during the summer. Thus, more savings would be expected during the summer than in the cooler seasons.

Based on metered consumption through June, Hayward has met and exceeded its expected water use reductions from February through June. Hayward’s cumulative savings target during this four-month period was 216 million gallons; whereas actual savings totaled 263 million gallons. However, Hayward’s total water savings target through December is 576 million gallons. It is important to note, however, that the 10% savings target is not linear through the year. Monthly targets for individual agencies have been set based on five-year historical use patterns. There is more discretionary water use during the summer and early fall months, so the savings targets are likewise higher. Thus, while Hayward is off to a good start in achieving 45% of the overall goal so far, the dry summer months are still ahead of us, and a continued focus on conservation is needed.

The following chart depicts this concept. The blue line shows the average historical use pattern over the past five years, with peak usage occurring in July, August and September. The green line illustrates the water use target for each month, and the red line shows actual SFPUC purchases by Hayward through June. It will be a challenge to meet the targets in the summer, but these are critical months in achieving the overall reductions.



As this report was being finalized, staff was notified of proposed State Water Board emergency regulations that could mandate certain State-wide water conservation measures. Staff will provide an update after reviewing the proposed regulations and obtaining additional information.

Water Conservation

Hayward offers a variety of water conservation programs and educational efforts to encourage and assist customers in reducing water usage. The following is a brief overview:

Fixture Replacements and Rebates

- Household Fixtures. The City makes available at no charge good quality low flow showerheads, kitchen and bathroom faucet aerators, and dye tablets to check for toilet leaks. Water conserving devices are also distributed to families as part of the Water Wise school education program (see below).
- Toilet Replacement Rebates. Rebates of \$100 per toilet are offered for the replacement of an existing high water-using toilet with a high efficiency model that uses 1.28 gallons per flush or less. The rebate is available for up to three toilets per residential unit and ten toilets per commercial/industrial facility.
- Residential Washing Machine Rebates. This regional multi-agency program provides combined water agency and PG&E rebates of \$125 to \$200 (depending on the model) for the purchase of an Energy Star rated clothes washing machine.
- Lawn Conversion Rebates. Rebates of \$0.75/square foot up to \$750 for residential properties and \$5,000 for commercial are available for converting a lawn to water efficient landscaping.
- Pre-Rinse Spray Valves. Close to 200 food-related businesses have been equipped with a pre-rinse spray valve, at no cost to the businesses, to reduce the water used for cleaning dishes and cooking utensils.

Conservation-Oriented Water Rates

- Water Usage Rates. The City introduced an inclining block water rate structure in 1993 to encourage water customers to reduce their use. The residential rate schedule originally had two tiers; in 2003, it was expanded to three tiers, and in 2009, a fourth tier was added. The non-residential rate structure has two tiers. The basic principle is that a tiered rate structure discourages higher water usage while providing a reasonable rate for base usage.
- Service Charge. Hayward has one of the lowest service (or fixed) charges among Bay Area water agencies. This is significant because it means that customer billings are primarily driven and affected by water use. Currently, the basic charge for a 5/8" meter is \$6.00 per month (paid bimonthly at \$12). Staff estimates that only about 10% of water sale revenue is derived from service charges, with the remainder coming from water usage charges. It

should be noted that most agencies have much higher (fixed) service charges, and some are raising the amounts since the fixed charges bring more revenue certainty and are less subject to fluctuation.

- **Wastewater Charges.** The City of Hayward is one of the few agencies to offer a residential wastewater rate structure based on wastewater discharge, and provides an incentive to minimize water use. Customers that use five or fewer hundred cubic feet (ccf) of water in a billing period (up to an average of 60 gallons per day) are automatically billed the lowest (Lifeline) sewer rate, which is about 70% lower than the top rate. Customers that use between 6 and 10 ccf (up to an average of 125 gallons per day) pay the middle (Economy) rate, which is about 40% lower. This is a practical method for implementing wastewater rates that are aligned with water usage, since wastewater metering is still impractical.

School Programs and Consumer Education

- **In-Class School Education.** The City offers the WaterWise curriculum (developed by Resource Action) to fifth grade classrooms. This program includes teaching aids, activity books, and CDs. Students also receive high quality showerheads and faucet aerators for installation in their homes. The response to the program has been excellent. Each year, the program is offered to about 600 students in 30 classrooms.
- **School Assembly Programs.** Hayward partners with EarthCapades to offer assembly programs focused on water conservation. Using age-appropriate music, storytelling, juggling, and audience participation, students learn about environmental awareness, water science and conservation. Typically the program is offered at ten elementary schools each year.
- **Water Efficient Landscape Classes.** The City works with the Bay Area Water Supply and Conservation Agency (BAWSCA) to provide free classes each spring and fall, taught by a noted expert in water efficient landscaping. This past spring, close to 70 people participated in two hands-on workshops. Classes are currently being arranged for the fall.
- **Large Landscape Water Budgets.** New to the City this year will be the establishment and monitoring of water budgets for large landscaped areas. About 100 sites will be selected based on their water use and savings potential. Using the services of WaterFluence, an experienced firm in the field of landscape conservation, optimal irrigation water usage targets will be established based on the amount and type of landscaping, as well as seasonal factors. There will be no penalties associated with exceeding the targets, but the customers will be notified of their outdoor water use, and will receive recommendations and suggestions to help them manage it.
- **Special Events.** Staff participates in a variety of special events, including local fairs, festivals, and business activities, to provide information and devices to encourage water conservation. Most recently, Utilities & Environmental Services staffed a table at the Downtown Street Fair in June.

- **Billing Inserts.** From time to time, customers receive information with their bills providing ideas for conserving water, both indoors and outdoors. Billing inserts are also used to promote water efficient landscape classes and the availability of rebates.
- **Consumption Tracking.** Water bills enable consumers to track their water use from year to year by providing information about water use for the same period in the previous year.
- **Website Information.** The City’s website includes information about the City’s current water conservation programs and general water conservation ideas, including a link to H2Ouse.org, the CUWCC’s innovative water conservation website. The website also provides extensive information about water efficient landscaping, plant lists, and the like.

City-Specific Water Conservation Activities

- **Landscape Irrigation Staffing and Equipment.** The City funds four dedicated Landscape Maintenance positions within the Water Operating Fund to manage irrigation systems on all public streets, public right-of-ways, and City-owned properties. These staff members monitor and maintain the systems to ensure that watering times are appropriate for the weather conditions and the sprinkler heads are correctly adjusted to minimize waste. Further, the City is investing in weather-based irrigation controllers that adjust watering rates to weather conditions. These systems are expected to reduce landscape irrigation water use by about 20%.
- **Leak Detection Survey and Repair.** In order to address the issue of unaccounted-for-water, the City retained a consultant in 2011 to identify potential sources of so-called unaccounted-for-water, which is water purchased from SFPUC but not sold to customers. This analysis indicated several possible sources, the most significant being underperforming large water meters, high water pressure in certain areas of the City, and system leaks. These issues have been addressed through more aggressive meter replacement, pressure management, and a system-wide leak detection and repair effort. The amount of unaccounted-for-water has decreased significantly as a result of these actions.
- **Water Conservation Upgrades at City Facilities.** A number of City facilities, including City Hall, the Library and the Utilities Center, have received Green Business recognition for sustainable practices. As part of certification process, water efficient fixtures, such as high efficient toilets and faucets, were installed on the premises.

Regulatory Actions

- **Landscape Ordinances.** The City Council has enacted various ordinances that require installation of Bay-Friendly landscaping in civic projects and in many new developments. Among other things, Bay-friendly landscaping incorporates water conservation practices, such as water-wise plant selection, high efficiency irrigation equipment, minimal use of turf, and use of mulch to hold water in the soil. The City’s Water Efficient Landscape Ordinance exceeds State requirements.

- **Indoor Water Use Efficiency Ordinance.** In 2010, the City was among the first to adopt indoor water use efficiency standards that exceeded State requirements at that time. With the adoption of more stringent State codes, these efficiency standards are now common among agencies; however, it is important to note Hayward's leadership role in this area.

Future Water Conservation and Supply Development Activities

Staff will continue to maintain the programs in place, as long as they are cost effective, and will explore other potential rebates and activities. The City is also current exploring a major initiative that could have significant water conservation potential. Beginning later this summer or early fall, three Advanced Metering Infrastructure (AMI) systems will be pilot tested. AMI systems automate meter reading services, which can reduce the potential for injuries associated with manual meter reading, and they also provide consumers with real-time data regarding their water use. Having this information readily at hand, either on a computer or mobile device, has been shown to be a powerful tool in managing water usage on the part of customers. Once staff has some results from the pilot tests, a report will be prepared for the Committee's review.

In addition to conserving water, the City is looking at other ways of reducing its use of Hetch Hetchy water. For example, staff is exploring the potential for delivering recycled water to customers in the industrial area for irrigation and cooling tower use. An environmental assessment will get underway in July. If this project proves viable, it would create a drought-proof water supply that could deliver an average of 250,000 gallons per day, with higher deliveries during peak summer months.

ECONOMIC IMPACT

The Water Operating Fund includes \$170,000 for direct costs associated with school education, the large landscape program, and some rebates. An additional \$25,000 is budgeted for materials design, printing and distribution. Programs like the replacement of high water use toilets are considered capital investments because of their longer life cycle and are funded in the Water Replacement Fund. The costs for all water conservation programs are recovered in the water rates. In partnership with BAWSCA, the City has received some grant funding for rebate programs, which is used to offset the impact on rates, and staff will continue to seek opportunities for grants to support water conservation.

In the event that mandatory rationing is declared, there will be costs associated with developing and implementing an aggressive program to meet the required targets, including drought water rates and enforcement of mandated water restrictions. Staff would return to Council with a recommended plan of action and cost estimates if and when that occurs.

FISCAL IMPACT

Water conservation program management staffing is provided by the Utilities & Environmental Services Department and is funded entirely in the Water Operating Fund. There are no General Fund impacts.

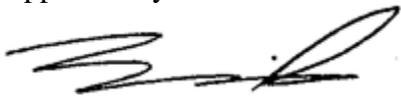
NEXT STEPS

Staff will continue to monitor the water supply situation. Should the need for mandatory rationing arise, an implementation plan will be developed and brought to Council for consideration. In the meantime, current water conservation programs will be preserved, and new cost effective efforts incorporated as appropriate.

Prepared by: Marilyn Mosher, Administrative Analyst III

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

Approved by:



Fran David, City Manager

DATE: July 16, 2014
TO: City Council Sustainability Committee
FROM: Director of Public Works – Engineering & Transportation
SUBJECT: Update on Commuter Benefits Program

RECOMMENDATION

That the Committee reviews and comments on this report.

BACKGROUND

Staff provided the Committee with a report on Commuter Benefits in October 2013¹. This report provides an update on recent events. Senate Bill 1339, signed into law in fall 2012, authorizes the Bay Area Air Quality Management District (Air District) and the Metropolitan Transportation Commission (MTC) to adopt and implement a Bay Area Commuter Benefits Program (Program) on a pilot basis through the end of 2016. The bill is modeled on local commuter benefit ordinances that have already been adopted by several Bay Area cities in recent years, including the cities of Berkeley, Richmond, and San Francisco (as well as San Francisco International Airport).

In response to Senate Bill 1339, the Air District adopted Regulation 14, Rule 1: Mobile Source Emissions Reduction Measures, Bay Area Commuter Benefits Program, which is a joint pilot program between the Air District and the MTC. The Program requires employers with 50 or more full-time employees in the Bay Area to offer commuter benefits to their employees. The proposed rule was unanimously adopted by the governing board of the Air District on March 19, 2014.

DISCUSSION

The goal of the program is to reduce greenhouse gas emissions and traffic congestion by using the federal tax code to encourage employees to commute via alternatives to driving alone. The law is designed to give employers various options for compliance, including simply offering their employees the ability to pay for transit or vanpooling with pre-tax dollars, which can save both employers and employees money through lower taxes. As noted above, the Program was modeled on commuter benefit ordinances established in 2009 in San Francisco, Berkeley and Richmond, as well as at San Francisco International Airport.

¹ See Item 5 at <http://www.hayward-ca.gov/CITY-GOVERNMENT/COUNCIL-STANDING-COMMITTEES/COUNCIL-SUSTAINABILITY-COMMITTEE/2013/CSC-CCSC100213full.pdf>

The Bay Area Commuter Benefits Program gives employers the flexibility to offer one or more of the following commuter benefit options to their employees:

- **Option 1: Pre-Tax Benefit** - Allow employees to exclude up to \$130 of their transit or vanpooling expenses each month from taxable income.
- **Option 2: Employer-Provided Subsidy** - Provide a subsidy to reduce or cover employees' monthly transit or vanpool costs, up to \$75 per month.
- **Option 3: Employer-Provided Transit** - Provide a free or low-cost transit service for employees, such as a bus, shuttle or vanpool service.
- **Option 4: Alternative Commuter Benefit** - Provide an alternative commuter benefit that is as effective in reducing single-occupancy commute trips as Options 1, 2 or 3.

Commuter Benefits for City Employees

Several years ago, the Transportation Division of the Department of Public Works administered an employee commuter benefits program called the STRIDES program. The program provided employees who used public transit for a majority of their home to work commutes to receive a "Commuter Check" which could be used to purchase BART, AC Transit or other public transit tickets or passes. Despite City Hall's proximity to the Downtown BART station, the program suffered from low usage. The maximum utilization for the STRIDES program was about 25 employees per month. In addition, the entire cost of the Commuter Check program was born by the Public Works Department, and was subsequently dropped due to budget reductions.

The City recently re-established a similar program through eflexTRANSIT. This program allows for a pre-tax withdrawal from an employee's paycheck for the purchase of public transit tickets or passes. The program is currently being utilized by approximately twelve (12) City employees.

The City has also received two grants to conduct a Transit Connector Feasibility Study. This study will assess the feasibility of implementing a transit connector service to provide direct transit connectivity between the BART stations and areas that are not currently well served by transit, including the industrial areas west of I-880, the Cal State University Campus and other areas of the City. The study will evaluate the financial and operational aspects of providing shuttle service and perhaps incorporate Employer-Provided Transit (option 3) in the analysis based on the results of employer/public outreach.

Enforcement of Regulation 14

Employers subject to the Program must select a commuter benefit, register via the Program website at <https://commuterbenefits.511.org/> and implement their program by September 30, 2014. MTC and the Air District currently maintain a list of employers with more than 50 employees. Notices were sent out to all employers by the Air District in conjunction with MTC. Additionally, public notices were also sent out to Chambers of Commerce regarding the program. After the September 30 deadline, the Air District intends to send notices to employers that are not in compliance. A monetary fine is expected to follow after the first notice; however, this has not been confirmed yet by the Alameda County representative for Commuter Benefit Program.

The City's eflexTRANSIT program satisfies Option 1 and thus meets the requirements of Regulation 14, Rule 1.

FISCAL IMPACT

The City's eflex TRANSIT program has no fiscal impact to the City other than limited staff time. Employees pay \$1 per month to be enrolled in the eFlex pre-tax benefit program.

PUBLIC CONTACT

As noted earlier, extensive outreach was performed by the Air District and MTC regarding adoption and implementation of the Program. Notices were sent out to employers subject to the program and the Chamber of Commerce regarding the regulation and implementation schedule.

Each County in the Bay Area has an assigned representative that will assist employers with any questions. LaShawn Martin is the assigned representative for Alameda County. She can be reached at martin@rideshare.511.org or 510-273-3610.

NEXT STEPS

Staff will continue to monitor the enrollment in the commuter benefit program and evaluate ways to emphasize the program. Some options to consider include simplifying enrollment, incentivizing use of the commuter benefit program and promoting these benefits during open enrollment period to create awareness.

Prepared by: Abhishek Parikh, Senior Transportation Engineer

Recommended by: Morad Fakhrai, Director of Public Works – Engineering & Transportation

Approved by:



Fran David, City Manager

DATE: July 16, 2014
TO: City Council Sustainability Committee
FROM: Director of Utilities & Environment Services
SUBJECT: Briefing on City Participation in 2014 Earth Day Activities

RECOMMENDATION

That the Committee reviews and comments on this report.

DISCUSSION

Utilities and Environmental Services staff participated in a variety of Earth Day activities during the week of April 21st to promote the City's sustainable practices and programs. The events and activities are described below. Staff has historically conducted outreach efforts around Earth Day, and with the Committee's direction, has made an effort to hone each opportunity in order to have maximum impact on the community.

Earth Day Rotunda Display

In coordination with other City departments, an Earth Day display was erected in the rotunda of City Hall where visitors could view information about recycling services, water conservation, stormwater pollution prevention, Bay Friendly landscaping, green building, and more. The display remained in the rotunda from April 21 through April 26.

Chabot College – Return of the Swallows Festival

Utilities and Environmental Services staff attended the "Return of the Swallows" Festival at Chabot College on April 22, 2014. This event is held on or around Earth Day each year and celebrates the migration of the Swallow bird from South America to Chabot College. The format of the event included a gathering in the main plaza of the campus where various organizations set up outreach tables to raise awareness about sustainability in Hayward. City staff was able to engage students and faculty with information about local utilities and environmental programs at this event.

Bring Your Child to Work Day

The Earth Day Rotunda display in City Hall provided a fitting backdrop to the “Bring Your Child to Work” presentation on April 24, 2014 where sustainability was among the topics discussed by City leaders. Approximately 40 children were in attendance at this event and along with their parents, they were able to enjoy the display both before and after the Mayor and City Manager’s presentation. Utility and Environmental Services staff were available to answer any questions the children had and engaged them with “kid-friendly” items such as pencils and clean water activity books.

Annual City-Wide Clean-Up Event

Although held a few weeks after the week of Earth Day, on May 17, 2014, the Maintenance Services and Utilities & Environmental Services Departments hosted the City’s 31st Annual Cleanup Day at Weekes Park. After registering at the Weekes Parks Community Center lawn and picking up supplies to aid them in their activities (gloves, grabbers, trash bags, etc.), the nearly 200 volunteers then chose the neighborhood they wanted to cleanup. Once full, volunteers left their trash bags on specific street corners so that Maintenance Services staff could pick up the trash and ensure proper disposal. City staff hosted a free barbeque lunch for all who participated and gave away Earth Day T-shirts and reusable bags. The event provided an excellent opportunity to teach volunteers about proper waste management, as bins for waste, recycling, and compostable goods were provided with clear signage indicating what should be put in each bin. About forty cubic yards of materials, of which thirteen cubic yards were recyclable paper and beverage containers, were collected.

ECONOMIC IMPACT

Each Earth Day event was aimed at raising environmental awareness. As awareness increases, residents and business owners within Hayward may benefit from a cleaner City appearance and more sustainable practices. Residents were also given an opportunity to learn more about City programs being offered in the fields of recycling, stormwater pollution prevention, and water conservation.

FISCAL IMPACT

Each event was attended by multiple City staff, so the predominant fiscal impact is related to staff time. All staff and supply costs were borne by City enterprise funds or special funds, not the General Fund.

NEXT STEPS

The Utilities and Environmental Services staff will continue to promote environmental awareness throughout the year.

Prepared by: Corinne Ferreyra, Administrative Analyst II

Recommended by: Alex Ameri, Director of 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

Suggested Sustainability Committee Quarterly Meeting Topics for 2014

Presenting Department	TOPICS
APRIL 2, 2014	
PWU&ES	Annual Update on Administrative Rule 3.9 – Environmentally Preferred Purchasing Policy
PWU&ES	Energy Reduction Initiative & Home Energy Analyzer Pilot Program
PWU&ES	Green Portal (Website)
PWU&ES	WMAC Franchise Agreement
PWU&ES	Waste Reduction Report – Annual Update on Recycling Programs
Maintenance Services	Public Landscaping, Tree Maintenance and City Tree Inventory
MAY 7, 2014 (Special Meeting)	
PWU&ES	Community Choice Aggregation
JULY 16, 2014	
PWU&ES	Update on Water Supply Outlook and Conservation
Engineering & Transportation	Update on AB 1339 – Commuter Benefits
PWU&ES	Update on Options to Address Sea Level Rise
PWU&ES	Briefing on City Participation in Earth Day Events
SEPTEMBER 11, 2014	
PWU&ES	Overview of Bicycle Sharing Programs
PWU&ES	Pollution Prevention and Stormwater Management
Devel. Services & PWU&ES	Use of Artificial Turf
PWU&ES	Update on Property Assessed Clean Energy (PACE)
DECEMBER 11, 2014	
PWU&ES	Energy Report Update – 2013 Energy Use
PWU&ES	Update on PAYS Implementation
PWU&ES	Update on Green Business Program
PWU&ES	Update on Green Hayward Website
PWU&ES	Review Agenda Topics For 2015