



CITY OF SANTA BARBARA

PARKS AND RECREATION COMMISSION REPORT

AGENDA DATE: May 27, 2015

TO: Parks and Recreation Commission

FROM: Administration Division, Parks and Recreation Department

SUBJECT: Status Report on Parks and Recreation Drought Response

RECOMMENDATION: That the Commission receive a report on the Department's implementation of the 2014-2015 Parks and Recreation Strategic Drought Response Plan to achieve City water conservation goals.

DISCUSSION:

The following report provides an overview of the Parks and Recreation Department's efforts to achieve the City's 20% water conservation goal since a Stage 2 Drought was declared in May 2014. City Council declared a Stage 3 Drought on May 5, 2015, increasing the City water conservation goal to 25%, and adopted a number of new regulations to comply with the Governor's declaration of a State of Emergency and Executive Order relating to water conservation in California.

In May 2014, the Department implemented the *2014-2015 Parks and Recreation Department Strategic Drought Response Plan* (Plan). Over the period May 2014 to April 2015, the Department reduced water use by 22% compared to the previous year – exceeding the City's 20% mandate. This report speaks to how the Plan was implemented by the three divisions. Also addressed are preliminary considerations for how the Plan may need to be modified to achieve increased water conservation goals. The Department will be challenged to meet the 25% conservation target, given how worsening drought conditions are affecting our parks, trees, and recreational areas.

Background

Over the last few years, much of the western United States has been experiencing an extreme drought. On January 17, 2014, the Governor of California declared a State Of Emergency throughout the State, due to extreme drought conditions. On April 25, 2015, the Governor proclaimed a Continued State of Emergency and issued an Executive Order that, among other things, imposed a statewide 25% reduction in potable urban water through February 26, 2016.

The City of Santa Barbara, currently experiencing its driest consecutive four-year period in history, has undertaken similar actions. City Council declared a Stage 1 Drought on February 11, 2014, asking the community to voluntarily conserve water by 20%. With little rainfall, the Council declared a Stage 2 Drought on May 20, 2014, and adopted Extraordinary Water Conservation Regulations requiring City water users to decrease water consumption by 20% among other restrictions and requirements. Again, with rainfall well below normal range, on May 5, 2015, the City Council declared a Stage 3 Drought, and adopted new regulations to comply with the Governor's order to achieve a 25% water conservation goal.

The drought has fiscal impacts as well. Although community water use has declined, the cost of water continues to increase. In June, the City Council will decide whether or not to move forward with the reactivation of the Desalination Plant. Although water rates are proposed to increase July 1, 2015, with the reactivation of the Desalination Plant, rates will climb even higher. This will have significant financial impacts for City water users, including the Parks and Recreation Department. For the financially challenged Golf Course this increase in water cost could be as much as \$80,000 for Fiscal Year 2016.

Strategic Drought Response Plan

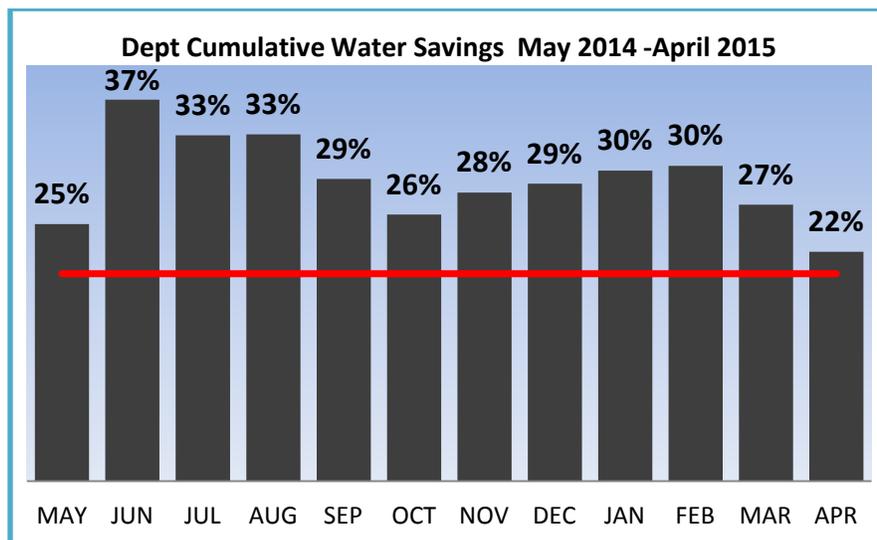
The Parks and Recreation Department developed a comprehensive *2014-2015 Strategic Drought Response Plan* to guide the Parks, Recreation, Creeks, and Golf Divisions in successfully achieving the required 20% water conservation goal for the Department. The Plan considers the following:

1. Short-term and longer-term impact of reduced water use to turf, plants, and trees
2. The need to protect historic and other natural resources
3. Priorities for public use of certain parks and recreation facilities
4. Programmatic changes to conserve water use
5. Modifications to irrigation and plumbing infrastructure to further increase water conservation
6. Financial impacts due to increased cost of water, loss of revenue from the changes in appearance of park and facility rental areas; and, particularly loss of play and revenue at the Santa Barbara Golf Club

The Plan was drafted as a working tool to be modified, as needed, in response to changed conditions. For each division, the Plan outlines a general strategy, water infrastructure efficiencies, and detailed actions to achieve the water conservation objective. For example, for parks and the golf course, the Plan identifies how specific areas will be irrigated, for example, no irrigation, irrigation reduced by 20% or more, or no change to how the area is irrigated. For recreation facilities, the Plan speaks to water saving infrastructure enhancements and some modifications to when certain facilities will be open to the public.

2014 -2015 Department Water Conservation Achievements

Since the Stage 2 Drought was declared in May 2014, the Parks and Recreation Department has achieved a 22% reduction in water use as compared to the previous year, surpassing the City's required 20%. The Parks Division which accounts for 41% of the Department's water use achieved a savings of 29%, while the Recreation Division which accounts for only 4% of the Department's water use achieved 17%. Recreation surpassed 20% per month through February, but saw their water use increase in March and April due to billing changes for the water meter serving Los Baños Pool. The Golf Course, which accounts for 55% of the Department's water use, was the most challenged to reduce water use, given the course's fiscal challenges and the competitive local golf market. The Golf Course ended the year with a cumulative saving of 16%, but it is important to note that for 10 out of the 12, months the course exceeded the 20% target.



PARKS DIVISION

The Parks Division achieved a water savings of 29% compared to the previous year. As outlined in the Plan, the Parks Division prioritized turf areas and planter beds within parks and at facilities into three irrigation categories: those with no change in irrigation; those with 20%-30% reduced irrigation; and areas where irrigation is completely turned off. The water to the decorative fountains in Chase Palm Park Expansion and the Rose Garden were turned off. To preserve the attractive venue for weddings and events, Parks Division staff planted the Chase Palm Park fountain with

a variety of drought tolerant plants. This planting has provided the public with a demonstration of what they can do if they have a fountain at home.

Park turf in various parks throughout the City saw changes over the months depending on weather, rainfall, and modifications to the irrigation plan as needed. Overall, turf associated with active recreation spaces such as sports fields and areas heavily used by the public for recreational activities was greener in order to facilitate necessary turf quality. Turf in parks less frequented by the public and park areas that are not used for active recreation, saw greater degrees of yellow or brown turf. In general, park users and the community were supportive of the water conservation efforts. The Department did receive some complaints from the public about the dry conditions in parks most frequently used for events.

The Parks Division will be challenged to further reduce the use of water without significant impacts to turf, horticultural resources, and trees. Looking ahead, the Division will be considering further reductions in irrigation, primarily to turf areas, outreach initiatives, options for use of recycled water, and some exceptions to policy in order to preserve resources such as trees and landscaping. Other considerations include:

- Monitor park landscapes and trees and allocate increased water as needed so these resources are not lost.
- Further reduce potable water used on turf at A.C. Postel Memorial Rose Garden, Alice Keck Park Memorial Garden, Escondido, Los Robles, Parque de los Niños, De la Guerra Plaza, San Roque, and Skofield parks.
- Evaluate the cost benefit of retrofitting the potable irrigation system at the MacKenzie Lawn Bowl for recycled water use.
- By exception, allow planting of rare trees in parks as they become available.
- Allow replanting of landscapes in medians, if the median is served by the recycled system.
- In partnership with the Santa Barbara Rose Society, resume planting roses at the A.C. Postel Memorial Rose Garden to replace dead, dying, and diseased roses.
- Where appropriate, develop and install signage in parks to notify the public that the park uses recycled water versus potable water.
- Develop and install additional signage in park restrooms with phone contact information for the public to report leaking pipes/faucets.

Forestry Program

Over the past years, many of the trees in Santa Barbara's urban forest, whether public or private, are showing signs of significant drought stress, and it appears that many trees

are dead or dying. Continued drought conditions are an increasing concern and focus for the Parks Division's Forestry Program. The Plan contains a number of actions, which have been implemented to support tree health during the drought. Of particular note are the following:

- Prioritized irrigation to 660 trees including trees still establishing their root system, those that are an important community asset, of a rare species, of high value, or are historic or a notable specimen.
- Monitoring trees found within historically significant parks, as well as all pine and eucalyptus species, to determine if supplemental irrigation is needed.
- Changes to pruning practices to decrease removal of live tissue and focus on removal of dead tissue.
- Outreach to neighbors or neighborhood associations where rare or historic tree exist to solicit support for street tree watering or lawn watering in areas where it supports a street tree.
- Outfitting the water truck and trailer with outflow meters to better quantify and monitor water use on a per tree basis.

Since July 2014, Forestry staff has watered over 2,000 trees at various frequencies. Trees receiving water include the prioritized trees as well as a number of additional trees showing signs of drought stress. To support tree watering, the Department increased staff support, purchased and installed 200 gator bags on young trees, and utilized mulch at feasible locations to reduce evaporation. Outflow water meters were installed on the water truck and water trailer to track and manage water use, and tree planting has ceased with the exception of a replaced historic tree (described below). Tree watering practices have largely moved from a hand-held hose and truck side sprayer to slow release watering devices and the soil probe. Staff developed cost estimates and funding options for expanding watering and tree care and include: equipment and staff resource needs, private contract costs, and estimates for hardscape removal. These options are again being reviewed as the Department moves forward and into the Stage 3 Drought.

Outreach to neighbors included tags on gator bags and a city-wide mailer to solicit support for street tree watering. Gator bag tags requested support in refilling and provided staff contact information. The mailer included tree care tips and efficient watering methods, as well as, staff contact information.

Tree care staff have been instructed to change tree-trimming practices, if needed, based on the health and needs of the tree. Tree pruning practices have largely gone unchanged for healthy trees. For trees showing signs of stress, staff has reduced or eliminated the removal of live tissue and are removing dead branches, if necessary. Full canopy pruning is being deferred to trees most in need. An unanticipated outcome of the drought is the number of trees, primarily Queen Palms, with over-active seed production in an effort to propagate. This is known to happen to trees responding to environmental triggers. Because of this, staff has increased trimming to Queen Palms and responded to a number of community requests to trim trees where fallen seeds are

creating a public safety issue. Staff has observed an increasing number of species, (including pines, pittosporum and native oaks) showing steady rates of decline.

In August 2014, the Department developed the *Historic and Specimen Tree Drought Action Plan* to provide specific tree care for designated historic and specimen trees. Actions include water management, pest and disease management, improvements to other growing conditions as feasible, and community outreach. The Historic Italian Stone Pines, Moreton Bay Fig, and Franceschi Flame Tree (removed and replaced with grafts from the parent tree) are the only historic trees watered on a regular basis. The remaining historic trees on City property have been watered on an as-needed basis where adequate space exists to provide water.

The Department acquired 56 irrigades (stationary watering devices) for the historic Italian Stone Pines along East Anapamu Street with a \$15,000 donation from the Pearl Chase Society. Outreach led to four irrigades being adopted by a local church, media attention including a drought response video produced and aired by City TV, and interest in these systems by private parties for personal use. Pest management led to 38 of the 71 Historic Stone Pines being injected with pesticide to suppress the bark beetle infestation. While the pests are not a result of the drought, the injections are to relieve the number of stressors so that the trees may have energy to survive the drought. Regular site inspections to historic trees indicate the Historic Stone Pines have improved with the regular watering. The remaining historic trees are not showing signs of disease or decline.

Moving forward, the challenges to tree care will be the increasing number of trees needing water and the potential increase in trees declining and/or dying. Recognizing this, staff are currently:

- Reviewing and re-prioritizing trees that will receive water.
- Assigning additional Forestry tree care staff to tree watering.
- Purchasing a new trailer to accommodate additional tree watering.
- Purchasing and installing additional gator bags.
- Increasing mulch in parkways.

The Department is also reviewing the following options:

- Determining the feasibility of mixing recycled and potable water at a ratio safe for trees.
- Re-assigning other parks staff to water trees.
- Adjusting watering routes for watering efficiency.
- Outreach options to private property owners to support appropriate tree care and irrigation with Stage 3 drought requirements.

Although there is policy to halt the planting of trees until the drought is over, there are a number of reasons where exceptions may need to be considered. The Department is reviewing exceptions and working to clarify its tree planting policy.

RECREATION DIVISION

Since the declaration of the Stage 2 Drought in February 2014, the Recreation Division has achieved a water savings of 17% compared to the previous year's water use. It is important to note that Recreation surpassed 20% per month through February, but saw their water use increase in March and April due to billing changes for the water meter serving Los Baños Pool.

The Division implemented all of the water efficiency improvements identified in the Plan. In addition to completing a few low-flow fixture upgrades in Recreation facilities, the primary focus was on high water use facilities, such as, Los Baños Swimming Pool, the Cabrillo Bathhouse, and the Municipal Tennis Facility. The plan to temporarily reduce the total number of recreation facility shower heads by 40% and installing lower-flow shower heads and valves was initially perceived as drastic, but has since become the new standard. The plan for the Community Gardens to transition to hand watering at designated times and to receive increased mulch was successfully implemented. Throughout this process, staff made a concerted effort to post drought signage and notify facility users ahead of the changes, which significantly assisted all facility users with the transition.

Recreation staff has received minimal public discontent with the implemented measures. This is credited to the public process by which the Department strategized and implemented water conservation measures and the comprehensive community outreach by Water Resources regarding the drought.

West Beach Wading Pool will remain closed for the 2015 summer season, due to a significant leak. Families with young children will once again need to drive to Oak Park to cool off in the summer months. The 2014 closure was initially met with strong feelings and some outspoken opinions; however, once people were informed that the Oak Park wading pool would remain open, there was general acceptance. There are no plans at this time to initiate facility repairs to the West Beach facility, given the high cost of repairs and continuing interest in a possible redesign to better meet community recreation and aquatic interests (i.e., splash park, expansion of Los Baños pool, etc.). The longer the pool remains closed, the greater the deterioration of the pool circulation systems and the cost to re-open the facility.

Staff continues to receive occasional inquiries regarding the outside East Beach showers being temporarily turned off and the lack of tennis court washing; however, once explained, users understand the need for water conservation.

At the Cabrillo Bathhouse shower facility, staff will be implementing a further modification to showers to reduce vandalism and water waste. The showers were retrofitted with a handle which required it be continuously held to activate the shower. The cost to tamper proof and constantly repair these valves continues to escalate. Staff will be reducing the hours the showers are available from 8:00am – 5:00pm to 10:00am – 2:00pm, hours that should support the vast majority of recreational users. This change will increase the number of people using the facility at any one time and discourage vandalism. If this modification is not effective at reducing vandalism and water waste, the Department will consider closing the shower facility except for permitted community and special events.

It will be a challenge for the Recreation Division to achieve greater water conservation without significantly inconveniencing recreation facility users and the public by limiting access to various facilities.

GOLF DIVISION

The Golf Course, which accounts for 55% of the Department's water use, was the most challenged to reduce water use given the course's fiscal challenges and the competitive local golf market. The Golf Course ended the year with a cumulative saving of 16%, but it is important to note that for 10 out of the 12 months the course exceeded the 20% target.

The Division implemented all actions identified in the Plan. Irrigation is the main water use at the golf course and therefore the focus for savings. The Plan prioritized the areas of the course that need irrigation the most due to the nature of the turf and the most trafficked areas of the course for golf shots to minimize the impact on the golfer. Some of the actions taken to reduce water consumption at the course have had adverse impacts on the financial performance of the golf course. Drier conditions have impacted revenue, while expenses have increased in labor due to the use of hourly and permanent staff to hand water greens and use soaker hoses around distressed trees. In order to protect the greens, the Golf Division received an exemption by the Public Works Director from Stage 2 water regulations to enable the watering of greens outside of established hours with hoses or automatic sprinkler system during exceptionally dry or hot conditions.

In keeping with the Plan, the Golf Division reads each water meter every weekday to track progress, assist in the identification of leaks in the system, and enable planning for future weeks and months in order to manage within conservation targets. This work enabled staff to adjust irrigation practices and reduce the frequency and length of irrigation cycles. Irrigation has been turned off in many areas of the golf course.

Golfer reaction to the implementation of the Plan was generally positive; however, rounds and revenues suffered greatly over the months of May thru August 2014 as

golfers saw the impact of the dry conditions at Muni as contrasted with greener conditions at surrounding courses. Play since September 2014 has recovered. It seems that the community has grown accustomed to the conditions or that other courses are also looking drier.

Conclusion

The careful planning, development, and implementation of the *Parks and Recreation Strategic Drought Response Plan* has insured that Parks and Recreation would be successful in achieving the water conservation goal set by the City. With the Stage 3 Drought now declared, accompanied by tighter water regulations and increased conservation mandates, the challenge becomes even more difficult for the Department. Staff is increasingly aware of the cumulative effects of the worsening drought on our park horticulture and trees. We need to redirect more of our limited water resources to protect horticultural plantings and trees – how and how much, and at what priority, are the questions going forward. In the next few months, staff will be updating the Plan to insure we can continue to achieve the water conservation target.

ATTACHMENT: 2014-2015 Parks and Recreation Strategic Drought Response Plan, June 30, 2014

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