

City of Santa Barbara Parks and Recreation Department

2014 - 2015 STRATEGIC DROUGHT RESPONSE PLAN

This Plan has been developed to guide the Parks and Recreation Department's response to the Stage Two Drought Condition declared by the City of Santa Barbara City Council on May 20, 2014. The plan will be modified as needed in response to progress or changed conditions.

June 30, 2014



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I. EXECUTIVE SUMMARY

In Santa Barbara, it is not unusual to experience extremely dry conditions from time to time. Water is a precious resource and conservation is routinely practiced throughout the community. In our City parks, recreation facilities, community buildings, and golf course, water conservation is always a priority. Like much of Santa Barbara, the City's infrastructure has become significantly more water efficient since the previous serious drought and overall water use has declined since that time.

The 2013-2014 rain year is the fifth driest year on record, and Santa Barbara is currently experiencing the three consecutive driest years on record. The Santa Barbara City Council declared a Stage One Drought on February 11, 2014, asking the community to voluntarily conserve water by 20%. With only limited rainfall since then, a Stage Two Drought was declared on May 20, 2014, and Extraordinary Water Conservation Regulations have been adopted. City water users are required to reduce water use by 20%, more with irrigation. To encourage compliance, higher water rates will go into effect on July 1, 2014. If rainfall continues to be below the norm, Santa Barbara could face Stage Three Drought as early as next spring. To assist the Parks and Recreation Department (Department) in meeting water conservation objectives, staff developed the 2014-2015 Strategic Drought Response Plan to meet the City's water conservation mandate. The Plan is intended as a working tool that will be modified as conditions change.

In developing this Strategic Drought Response Plan for the Parks and Recreation Department, a number of factors were taken into consideration, including:

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

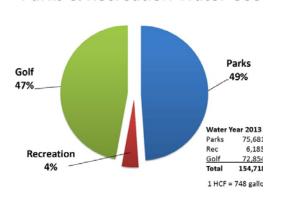
Water Use, Potable and Recycled

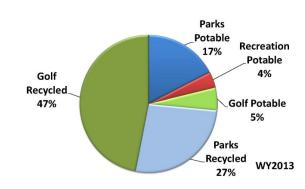
The Department uses both potable and recycled water. In Water Year (WY) 2013, 49% of all water use was in the Parks Division, 47% was at the Golf Course, and 4% was in the Recreation Division. Of all water used, 74% is Recycled and 26% is potable. Recycled water is used in irrigating parks and facility landscaping. Potable water is used in restrooms, showers, kitchens, and pools. In parks, potable water is also used for watering young trees, and in fountains, ponds, park restrooms and drinking fountains. At the golf course, 88% of water use is recycled and 12% is potable. The majority of potable water is used on the golf greens (small, manicured area immediately surrounding each hole), and in restrooms, the

restaurant facility, and drinking fountains. The following charts reflect how water is used in the department.



Parks and Recreation Water Mix





The City's recycled water facility has been in a steady state of decline over the past few years. The Tertiary Treatment Facility Rehabilitation Project is now underway and due to be completed in summer 2015. Until then, the recycled water system is delivering potable water. Once the facility is in operation there will be no further reliance on the City's potable water resources. Because of this, the Parks and Recreation Department Strategic Drought Response Plan makes no differentiation in the type of water used for this water year. Once the plant is functioning, the department's use of potable water will decrease significantly, providing an equal benefit to the City's potable water resources. Under normal circumstances, 1% of the City's potable water use would be attributed to Parks, Recreation and Golf. With the recycled plant under construction, that potable water use increases to 3.2%.

Parks, Sports Fields and Public Landscaped Areas

The Parks Division is responsible for maintenance of 47 City parks, as well as landscaped areas of 26 sports facilities and recreation buildings, various City facilities such as the libraries and City Hall, as well as 81 medians, islands, and parkways areas throughout the City. Turf, planter beds, and trees are the main categories of plant material that are considered in the 2014-2015 Strategic Drought Response Plan. Turf irrigation is the largest water use in the Parks Division.

Irrigation priorities have been determined based on how the area is used by the public, safety, types and characterization of horticultural or landscaping elements (i.e., historically important, unique species, etc.), as well as short and long-term impacts of sustained drought conditions. Water resources will be directed first to higher priority needs, with fewer to no resources applied to others. Two tables, Irrigation Priorities for Turf Areas (pg. 12) and Irrigation Priorities for Planter Beds (pg. 14), show how various park/facility areas are prioritized into three categories: No Change in Irrigation, Irrigation

Reduced 20-30%, and Irrigation Off. Staff will monitor conditions and adjust the plan as needed over the drought period.

Other than changes to landscape irrigation, there will be new restrictions on water use for permitted events in parks and decorative water fountains in two parks have been turned off. Maintenance of water ponds in Chase Palm Park and Alice Keck Park Memorial Garden are not affected under Stage Two regulations.

Trees

The Parks Division is responsible for maintaining over 32,000 trees, including 23,600 street trees, and 9,295 trees in parks and public property. Inadequate water uptake during prolonged drought conditions can adversely affect several of a tree's growth processes. Long-term damage from drought happens over a period of years and includes stunted growth, branch die-back, and possible death. With three years of dryer weather many trees around the area are beginning to show stress. The Parks Division's general strategy will be to limit the loss of this important community resource.

New trees are regularly watered the first three years to establish the root system, then watering is tapered off and the tree is sustained through rainfall or localized irrigation in parks or from front lawns. No changes are planned to this operation. A number of trees have been prioritized to receive supplemental water, including those that are an important community asset, of a rare species, of high value, or are historic or a notable specimen. Additional strategies include adjustments in pruning practices for tree health and public safety, resupplying mulch to newly planted trees, and the postponement of new plantings. All trees will continue to receive the care and maintenance necessary for tree health and public safety.

Recreation Facilities

The Recreation Division manages nine recreation and rental facilities, three neighborhood centers, two lawn bowl clubs, four community gardens, four swimming pools and two tennis facilities. Water use includes restrooms, drinking fountains, kitchens, showers, pools, and gardens. Of these, aquatic facilities (pools, showers, locker rooms) are the biggest water user. The emphasis in recreation facilities will be installation of additional low-water use plumbing fixtures and educating and encouraging facility users to conserve water, particularly in showers, kitchens and restrooms.

The only change in pool programming is that West Beach Wading Pool will remain closed this summer season. The pool has a significant leak requiring extensive repairs; also, operation requires daily power washing for health and safety reasons. Oak Park Wading Pool will operate per normal schedule. A pool cover is being purchased for Ortega Park Pool to comply with Stage Two Drought Regulations. The Public Works Director has granted an exemption for Oak Park Wading Pool due to the seasonal nature of the facility, and because the pool is drained when out of season.

Pool decks are routinely cleaned on a daily basis with hoses using high pressure/shut off water nozzles. To comply with Stage Two Drought Regulations and reduce water use, the Department is purchasing three battery powered blowers for daily maintenance. On an as needed basis, maintenance staff will spot clean using buckets and brushes or high pressure water nozzles to minimize the amount of water required to meet Health and Safety regulations.

The Recreation Division manages five shower facilities. Extremely low flow shower heads (0.62gpm) are being installed to reduce water use by 50% and signage will inform patrons that showers should not exceed five minutes. At Los Baños, the Department is proposing to reduce the number of showerheads and install water cut off valves which would allow staff to turn off all non-health code required showers during summer recreation swim when showers are often left running and unattended. Showers prior to entering and immediately exiting the pool will be available but not during programming. At Cabrillo Bathhouse, the number of showerheads will be reduced by 50% and installation of a handle activated shower will create a greater sense of urgency to take a shorter shower. The upper shower heads of the East Beach outside showers will be turned off, leaving the two foot showers active. Showers at Municipal Tennis Facility, which have infrequent use, are being turned off. No changes are proposed at Carrillo Gym showers due to infrequent use; however, staff will carefully monitor use and implement changes as needed.

The Department maintains 12 tennis courts at the Municipal Tennis Center and two tennis courts at Oak Park. SBCC maintains the eight tennis courts at Pershing Park. Regular tennis court washing practices on City courts is conducted twice a week with a water efficient water broom using recycled water. To further conserve water, Tennis is purchasing a battery powered blower for daily court maintenance. As needed, the water broom will be used to remove any stubborn residues or materials that create unsafe playing surfaces.

At Recreation rental facilities and neighborhood centers water conservation will focus on educating facility users, eliminating wasteful water activities and new water conservation policies for caterers. At the four community gardens, hand watering with a self-closing nozzle will only be allowed between 4:00 pm and 10:30 am, additional mulch will be provided, and bilingual signage will be posted.

Creek Restoration Areas

The Creek Restoration Water Quality Improvement Program has completed four large creek restoration projects that have over 23,000 native plants and eight smaller projects with over 3,700 plants. The sites are initially irrigated for two to three years following plant installation. Irrigation is completely shut off after three years. Currently only two projects are still being irrigated, and after June only the Mission Creek Restoration Project at Tallant Road will receive occasional watering.

Golf Course

The Santa Barbara Golf Club, the city's only municipal golf course, is open for play 364 days a year, with over 4,000 people a year playing more than 64,000 rounds. The course operates as an enterprise fund,

meaning it is dependent upon revenue generated at the course and does not receive any tax dollars. The golf course is set in just under 100 acres of land with 20 putting greens, hundreds of trees, and miles of fairway. The challenges facing the golf course to maintain an attractive playing experience while conserving water are not to be underestimated. In the last major drought (1989-90), play declined over 25%, affecting revenues for the City and its concessionaires for several years. The golf course has faced serious financial setbacks over the last few years related to major construction and the recession. Although play has increased somewhat since the lowest point in 2009, it has still not recovered to pre-2009 levels. Staff is very concerned about dry course conditions becoming a deterrent to play, further jeopardizing revenue and financial solvency of the municipal golf course.

At the golf course, 88% of water used is recycled and 12% is potable. Potable water is used in the restaurant, restrooms, and drinking fountains. It is also used to water the golf greens (for non-golfers this is the small, manicured putting area immediately surrounding each hole). The chemicals found in recycled water make it too damaging for the delicate turf comprising the greens, so potable water is used. Recycled water is used for the majority of irrigation and other areas of the course where allowed.

Careful and specialized management of irrigation will ensure the golf course meets the standards expected of paying customers, while demonstrating effective water conservation to achieve the desired reduction in water use. The plan identifies which areas of the golf course area higher priority for water use, with the higher priorities being the greens, teaching areas, certain trees, and tee boxes. Lower priority areas include fairways, rough, and other low-traffic or non-playable areas.

The Santa Barbara Golf Club has a well-earned reputation for the quality of putting surfaces — maintaining that reputation is the highest priority for the golf course. Given that, it is unlikely that much can be done to reduce the amount of water used on greens without damaging the turf beyond repair. Moreover, the grass on the greens is particularly sensitive to heat and dry conditions given the need to maintain it at a shorter cut. Since only 10% of the water used at the course is used on greens, it is expected that savings from other areas will negate the need to risk the putting surfaces.

Hand watering is currently practiced on the greens and some trees to save water. This is less efficient from a labor standpoint, but necessary to ensure appropriate coverage and cooling in certain conditions. The Public Works Director has approved an exception from the Stage Two Drought Regulations to allow for watering the greens outside of allowed hours. When the weather is exceptionally dry and hot, it is necessary to use sprinklers or hand water the greens, which may occur outside of the allowed hours. The hose that is used for hand watering the greens has an automatic shut off nozzle as required within the regulations.

Aerification has been stepped up and completed earlier in the year than would be typical. Aerification improves the amount of water that penetrates the turf and in turn encourages stronger deeper roots for the grass helping to improve the resilience of the turf and allowing staff to water more infrequently

ending in significant water savings. Turf maintenance equipment is now being cleaned using air pressure and will be washed with water far less often.

The ProShop and Mulligans are engaged in promoting water conservation within their respective businesses. Golf Carts, which have routinely been cleaned with hose and nozzle, are being washed with cloths, and floor boards and cup holders being rinsed after each use. Full cart washes will be limited to once a month.

Department-Wide Efforts and Conclusion

Most significant drought responses are discussed by program. However, the plan also addresses the following:

- New planting projects in parks, facilities and public right of ways will likely be delayed until drought conditions improve.
- The department operates a number of vehicles in various operations. The frequency of vehicle washing routines is being reduced except where there is risk of damage to equipment.
- Outreach and Public Education is a critical component of implementing this Strategic Drought
 Response. Water conservation signage is being installed in all of our public buildings, shower
 facilities, and restrooms. In parks and at the golf course, the reduction in water use will be
 increasingly visible to the public as turf and some landscape areas dry out. Signage is being put
 in place to remind parks and golf course visitors that we are working to conserve our community
 water resources. Information and this Drought Strategic Response Plan will be placed on the
 Department website as well.

The Department will be closely monitoring the 107 Parks and Recreation water accounts with respect to water use and water cost vs. budget. While water cost may increase, less water is expected to be used throughout the Department. In Parks and Golf, most water meters are being monitored on a daily and/or weekly basis to assist with water conservation planning. Due to varying water priorities, it is expected that some meters may see a reduction greater than 20% while others may see a lower reduction or even an increase in use. Management will be reviewing division and department performance on a weekly and monthly basis, evaluating progress towards the water conservation target and monitoring impacts to natural resources and programs. Staff will provide occasional reports to the Parks and Recreation Commission on implementation of the Strategic Drought Response Plan and water conservation efforts in our parks, recreation facilities and golf course.

CONCLUSION

The 2014-2015 Strategic Drought Response Plan will guide the Parks and Recreation Department in how best to achieve City water conservation objectives. Water conservation is the key objective as the City, region and state are facing unprecedented drought conditions. However, as stewards of the community's park and recreation resources, staff will also need to carefully manage how and where water is used to mitigate long-term damage and potential loss of these valued community assets.

It has been 25 years since Santa Barbara, the Parks Department and Recreation Department (now Parks and Recreation Department), faced similar extreme drought conditions. There are many stories of parks and the golf course going brown, dry fountains, and similar outcomes. Unfortunately, staff has been unable to locate any planning documents that may have been used to guide the Department through that time. Staff will be using this Strategic Drought Response Plan as a working tool over the duration of the drought conditions. The plan will be modified as needed to ensure that the required reduction in water use is achieved. The plan and subsequent status reports will reside in department files so that these materials can be a resource going forward.

II. INTRODUCTION

In Santa Barbara, it is not unusual to experience extremely dry conditions from time to time. Water is a precious resource and conservation is routinely practiced throughout the community. In our City parks, recreation facilities, community buildings, and golf course, water conservation is always a priority, and many improvements have been made to infrastructure over the years, especially since the last declared drought in the late 1980s-early 1990s. Water efficiency improvements include but are not limited to plumbing fixtures, pool systems, HVAC and other facility systems, irrigation systems, and water conserving landscaping. Like much of Santa Barbara, the City's infrastructure has become significantly more water efficient since the previous serious drought and overall water use has declined.

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- 4. Programmatic changes which could conserve water use
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- 6. Financial impacts due to increased water cost, loss of revenue from the changed appearance of park and facility rentals areas; and, particularly loss of play and revenue at the Santa Barbara municipal golf course.

Infrastructure Water Efficiencies

The City of Santa Barbara has prioritized retrofitting infrastructure with low-flow plumbing and water efficient devices for many years. Most Parks and Recreation offices and recreation and park facilities are outfitted with water efficient devices in restrooms, showers, kitchens, work sinks, and drinking

fountains. Such improvements include low-flow and dual-flush toilets, waterless urinals where possible, reduced flow faucets and/or faucet aerators, low-flow showerheads, etc.

Irrigation Water Efficiencies

Both the Parks Division and Golf Course have computerized Central Control Irrigation Systems to provide the highest irrigation efficiencies in the landscape industry. Due to the many different microclimates in Santa Barbara, there are weather stations placed in two parks (one beach, one inland park location) and on the golf course. These weather stations operate the Central Control Irrigation System through daily weather data collection using evapotranspiration rates, commonly known as ETo (which is simply the loss of water from the soil surface into the atmosphere). The system automatically adjusts irrigation schedules daily to match actual landscape water requirements, and allows irrigation technicians to prevent or terminate irrigation during rain events and windy conditions. The central control also monitors for mainline breaks and shuts off the system, saving thousands of gallons of water annually. It also has automatic wind velocity shut down capacity for when wind speeds exceed five miles per hour. In those situations, the system goes into a pause mode, and once the wind speed drops below five miles per hour the system restarts itself and continues with the scheduled irrigation cycles.

There are 33 satellite irrigation controllers on the golf course, and 33 satellite irrigation controllers located in 20 parks. All ballfields and major parks with substantial turf acreage are irrigated using the Central Control Irrigation. This includes Alice Keck Park Memorial Garden, the Alamedas, A.C. Postel Memorial Rose Garden, Mackenzie, Ortega, and Pershing parks, among others. The newest park added to the Central Control Irrigation list is Willowglen Park (2014). Additionally, there are over 44 standalone Smart Irrigation Controllers in other neighborhood parks, passive parks, and facilities maintained by the Parks Division. These are monitored by Parks staff weekly, adjusting irrigation programs per weather data collection. Parks also uses the newest state of the art irrigation sprinklers throughout its park system.

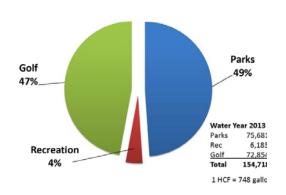
Additional infrastructure improvements specific to different program areas are discussed within this report.

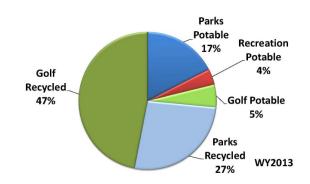
Water Use, Potable and Recycled

The Department uses both potable and recycled water. In Water Year (WY) 2013, 49% of all water use was in the Parks Division, 47% was at the Golf Course, and 4% was in the Recreation Division. Of all water used, 74% is Recycled and 26% is potable. Recycled water is used in irrigating parks and facility landscaping. Potable water is used in restrooms, showers, kitchens, and pools. In parks, potable water is also used for watering young trees, and in fountains, ponds, park restrooms and drinking fountains. At the golf course, 88% of water use is recycled and 12% is potable. The majority of potable water is used on the golf greens (small, manicured area immediately surrounding each hole), and in restrooms, the restaurant facility, and drinking fountains. The following charts reflect how water is used in the department.

Parks & Recreation Water Use

Parks and Recreation Water Mix





The City's recycled water facility has been in a steady state of decline over the past few years. The Tertiary Treatment Facility Rehabilitation Project is now underway and due to be completed in summer 2015. Until then, the recycled water system is delivering potable water. Once the facility is in operation there will be no further reliance on the City's potable water resources. Because of this, the Parks and Recreation Department Strategic Drought Response Plan makes no differentiation in the type of water used for this water year. Once the plant is functioning, the department's use of potable water will decrease significantly, providing an equal benefit to the City's potable water resources. Under normal circumstances, 1% of the City's potable water use would be attributed to Parks, Recreation and Golf. With the recycled plant under construction, that potable water use increases to 3.2%.

III. PARKS, SPORTS FIELDS AND PUBLIC LANDSCAPED AREAS

The Parks Division is responsible for maintenance of 47 City parks, as well as landscaped areas of 26 sports facilities and recreation buildings, various City facilities such as the libraries and City Hall, as well as 81 medians, islands, and parkways areas throughout the City. Each of these areas is addressed below. The Division is also responsible for maintaining over 32,000 trees, including 23,600 street trees, and 9,295 trees in parks and public property. Trees are maintained primarily by the Forestry staff with assistance from Parks staff in park areas. Trees are addressed in Chapter III, Trees.

General Strategy

Turf, planter beds, and trees are the main categories of plant material that are considered in the Strategic Drought Response Plan. Irrigation priorities have been determined for the various parks, sports facilities, public buildings, and other areas maintained by the Parks Division. How the area is used by the public, types and characterization of horticultural or landscaping elements (i.e., historically important, unique species, etc.), as well as short and long-term impacts of sustained drought conditions have all played a role in developing this plan. Water resources will be directed first to higher priority needs, with fewer resources applied to others, and in some cases, no irrigation will support the vegetation or landscaping. Staff will monitor conditions and adjust the plan as needed over the drought period.

Water Efficiencies

<u>Existing</u> – The Parks Division uses an advanced Central Control Irrigation system and maintains its own weather stations to facilitate efficient use of water in City parks. Past droughts have also fostered greater use of native and drought tolerant plant materials.

<u>In Progress</u> – The City's water truck and trailer used to irrigate street and park trees will be outfitted with outflow meters to monitor and evaluate the use of water on a per tree basis. Weekly monitoring of water use will be conducted to determine where adjustments needs are necessary and more accurately account for water used.

Turf Areas

Turf irrigation is the largest water use in the Parks Division. Prioritizing water use on park turf takes into consideration the issues of safety, recreational use, aesthetics, and revenue generation. Also considered is the Maintenance Service Level (MSL) assigned to all parks and facilities. These MSLs range from 1 to 5 and are indicative of the standards the Division maintains at the site. Level 1 is assigned to our most visible and popular sites and Level 5 is assigned to most open spaces and undeveloped parks.

The table below shows the groupings of Turf Irrigation Priorities. Some sites will have no changes to turf irrigation, others will see a reduction of 20% to 30%, and others will have no irrigation. Some turf in high profile MSL 1 sites will continue to be irrigated with no reduction. These locations are "gateway" sites or

event locations in parks. Ball field turf will be irrigated as it has in the past, with no reductions. This will keep the ball fields in a safe and playable condition. No changes in irrigation will occur in Moreton Bay Fig Tree Park in order to protect this important City historical resource. Sports field turf and turf in parks areas that generate substantial revenue through rentals are addressed further below. Irrigation will be reduced by 20% to 30% in sites where the turf is not a developed sports field or not a substantial revenue generator, based largely on the MSL assigned to the site.

The turf sites where irrigation will be eliminated completely are planted predominantly in Kikuyu. This type of grass is a deep-rooted perennial, has underground rhizomes or runners and is more tolerant of irrigation reductions. The Kikuyu turf grass will turn brown and will appear dead above ground. Runners below ground may or may not survive. With winter 2014/2015 rains or irrigation, the Kikuyu grass may be expected to at least partially recover.

Irrigation Priorities for Turf Areas

Turf Irrigation – No Change				
Cabrillo Ball Field & Chromatic Gate	Ortega Park			
Chase Palm Park Soccer Field	Pershing Park and Plaza del Mar			
Dwight Murphy Ball Field	MacKenzie Park			
Chase Palm Park Expansion Interior Turf	Moreton Bay Fig Tree			
(meadow area)				
Turf Irrigation – Reduced 20% - 30%				
<u>Parks</u>				
A.C. Postel Memorial Rose Garden	Los Robles Park			
East Beach Park	Oak Park			
Alameda Park - East and West	Parque de los Niños			
Alice Keck Park Memorial Garden	Pilgrim Terrace Park			
Ambassador Park	Plaza Vera Cruz Park			
Bohnett Park	San Roque Park			
Chase Palm Park	Sheffield Park			
De La Guerra Plaza	Shoreline Park			
Eastside Neighborhood Park	Skofield Park			
Escondido Park	Stevens Park			
La Mesa Park	Willowglen Park			
Leadbetter Beach Park				
<u>Facilities</u>				
Cabrillo Pavilion Arts Center & Bathhouse	Central Library			
Eastside Library	Spencer Adams/ Davis Center			
Franklin Neighborhood Center	Westside Neighborhood Center			
Turf Irrigation - Off				
Andree Clark Bird Refuge	City Hall			
Cemetery Island	Coast Village Road Islands			
Hidden Valley Park	Hilda Ray Park			
Sunflower Park	Orpet Parks (upper and lower)			

<u>Stage Two Drought Regulation Exemption Granted</u> - Ambassador Park does not have an automated sprinkler system. The Public Works Director has approved an exemption from the Stage Two Drought Regulations to allow Parks staff to water this park by use of hose and a sprinkler attachment. The Parks Division will adhere to watering the park between the hours of 4:00 pm and 10:30 am.

Sports Fields

The Department maintains sports fields at 6 different facilities, including Pershing Park, Dwight Murphy Field, Cabrillo Ballfield, Chase Palm Park Soccer Field, Ortega Park and MacKenzie Park. Sports field turf will remain irrigated at levels that maintain the safety and playability of the field. Infield maintenance will allow for watering of the infield to reduce dust as part of field preparation, after dragging, and after practice or ball games. This activity helps maintain the infield in a safe and playable condition.

Planter Beds

The table below shows Irrigation Priorities for Planter Beds. Some beds will see no changes in irrigation, some will see a 20% to 30% reduction in irrigation, and others will receive no irrigation. Shallow rooted turf is generally watered differently than deep-rooted landscape shrubs and planter beds. Shrubs and perennials are generally more tolerant of changes in irrigation. Therefore, shrubs and deep-rooted plants in planter beds are targeted for a reduction in irrigation. There are some exceptions to protect the City's special and/or historical resources.

Priority is also given to recently planted or renovated areas, sites of concern for exterior of rental facilities, and preservation of plant resources. Preservation of plant resources includes recent plant installations that need more water to establish. Once established, the plants are sustained through rainfall, or only the occasional irrigation.

For sites that received regular irrigation in the past, the water will be reduced or eliminated based largely on the MSL of the site and on the ability of the plants to survive on less water. In locations where beds are not currently regularly watered or that have very low water requirements, no irrigation will occur. If extremely stressed, these sites may be strategically watered.

Irrigation Priorities for Planter Beds

Irrigated Beds – No Change							
A.C. Postel Memorial Rose Garden	Oak Park						
Alice Keck Park Memorial Garden	Orpet Parks (upper and lower)						
Andree Clark Bird Refuge – native	Moreton Bay Fig Tree						
restoration areas							
Irrigated Beds – Reduced 20% - 30%							
<u>Parks</u>	<u>Facilities</u>						
Alameda Park East	Cabrillo Pavilion Arts Center & Bathhouse						
Escondido Park	Carrillo Recreation Center						
Franceschi Park	Community Development & Public Works						
La Mesa Park	Parks and Recreation Administration Bldg.						
Parque de los Niños	Police Station						
Dolphin Fountain Promenade	Spencer Adams/Louise L. Davis Center						
Plaza Vera Cruz Park	Westside Community Center						
San Roque Park	Chase Palm Park Center						
Shoreline Park	Casa Las Palmas						
Irrigated Beds - Off							
Dwight Murphy Ball Field	City Hall						
Sunflower Park							

Medians, Islands and Parkways

The majority of the Medians, Islands, and Parkways the Parks Division maintains are not irrigated. Of those that are irrigated most, if not all, will be shut off. Water use will be prioritized to sustain young, historic or specimen trees, using the water truck or water trailer. Water which serves the Coast Village Road Islands is provided by the Montecito Water District (MWD). The MWD is facing a severe water shortage and reports that their water supply could be depleted within the next three to four months. For that reason, turf irrigation for the Coast Village Road Islands has been turned off. Water will be prioritized for preservation of certain landscaping and trees.

Park and Picnic Rentals Areas, Private and Public Events

To the degree possible, designated rental venues in parks that generate substantial revenue to the Department will be maintained at standard irrigation levels, or irrigated to the least level possible to maintain the desired turf health. This will be a continuing challenge as the Department is already receiving complaints from people who made their event reservation months ago and are concerned about how conditions, browning turf, and non-functioning decorative fountains will affect their event experience. This is particularly the case with some of the more popular outdoor wedding venues, such as Chase Palm Park. Staff will continue to educate people about the drought and need to conserve water. At some point, it may be necessary to consider price reductions to attract or retain renters.

A number of changes will be made to park permit conditions. Renters and event organizers using park facilities will only have access to water for health and safety reasons, such as food preparation, drinking,

hand washing, and sanitation. Prohibited uses include water-filled barrels to weigh down tents, VIP portable restrooms that require water hook-ups, and rides or activities that use water (such as water slides, portable wading pools, amusement rides). Limited water use will be allowed to pressure wash sidewalks and venues after major events to remove spilled liquids/foods (sanitation only). In some cases, County Health food handling regulations may supersede City water use regulations such as the number of required hand washing stations, number of 3-sink cleaning stations, etc. These may be required for events to obtain the health permit.

Water Fountains and Ponds

Per Stage Two Drought regulations, all decorative water fountains are turned off. These include A.C. Postel Memorial Rose Garden and Chase Palm Park. Regulations do not apply to ponds, so staff will continue to manage the open water ponds in Alice Keck Park Memorial Garden and Chase Palm Park.

Barbeques and Increased Wild Fire Concerns

Given increased concerns for wild fire, the Department consulted with the City Fire Marshall regarding barbeque structures in City parks and whether any changes in use should be considered. No changes are recommended at this time. Parks staff will continue to maintain vigilant brush clearance in these areas, and work closely with the Fire Marshall should conditions change. Per City policy, during Red Flag Warnings all barbeque activity is prohibited in all City parks located in high fire areas.

Public Buildings Maintained by Parks Division

The Parks Division maintains the landscaping of a number of public buildings, including the Central Library, City Hall, Police Department, Community Development/Public Works and others. The reduction in irrigation will be decided jointly with the Directors of each respective building. It is anticipated that an irrigation reduction of 20% or more will be achieved at these sites.

IV. TREES

The Parks Division is responsible for maintaining over 32,000 trees, including 23,600 street trees, and 9,295 trees in parks and public property (i.e., City Hall, Central Library, recreation facilities). Trees are maintained primarily by the Forestry staff with assistance from Parks staff in park areas.

Inadequate water uptake, during prolonged drought conditions, can adversely affect several of a tree's growth processes, including ceased photosynthesis, death to feeder roots (inability to supply canopy with water), and decreased carbohydrate production. When any one of these processes slows or stops, the tree cannot provide adequate water to portions of the canopy, respond to damage by disease or pest infestation, or heal wounds caused by pruning or tree damage. Short-term effects may include leaf wilting, leaf scorch, and some defoliation. Long-term damage from drought happens over a period of years and includes stunted growth, branch die-back, and possible death. Trees can take up to three years after a drought to display negative long-term effects. After three years of dry conditions, many trees in the community are showing signs of stress.

General Strategy

The loss of trees can have detrimental effects to the community as well, including wildlife habitat loss, disruptions to ecosystem services (reduced air and water quality, drop in aesthetics, reduced wind and shade control, and increased erosion), loss to horticultural heritage and enhanced opportunities for invasive or unwanted tree and plant species. The Parks Divisions general strategy will be to limit the loss of this resource.

When new trees are planted they are regularly watered with a watering truck, trailer, or in the case of some park trees hand watered, for roughly the first three years to establish the root system. Once a tree displays signs of establishment, watering is tapered off and the tree is sustained through rainfall or localized irrigation in parks or from front lawns. No changes will occur to this operation at this time. Although most established and mature trees are not watered, there are times when those trees display signs of water stress and are watered using the water truck or water trailer. The urban forest will continue to be monitored as the drought persists and the water table continues to lower, potentially causing more mature trees to show signs of water stress.

A number of trees have been prioritized to receive supplemental water as is described below. Additional strategies include adjustments in pruning practices for tree health and public safety, resupplying mulch to newly planted trees, and the postponement of new plantings. All trees will continue to receive the care and maintenance necessary for tree health and public safety. Scheduled pruning may be adjusted to decrease the amount of trimming to live tissue, with more focus on brittle branches as trees begin to show signs of dying back. The Division is working on a long-term specific plan to address the needs of the urban forest during drought times.

Irrigation Priorities

The Division has prioritized 660 trees to receive irrigation in an attempt to preserve their health, safety to the public and value in the community. These include trees that are newly planted and 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. Since 2012, 524 trees have been planted in street parkways and 12 in City parks. The Division will postpone any new plantings plus resupply these trees with mulch to decrease evaporation from the soil. Historic and specimen trees account for 72 of the 660 trees prioritized for irrigation. Sixty-two (62) of these are in City parkways and 10 are found at the Central Library, City Hall, Parking Lot 12, and on privately owned property maintained by the City. Rare species that are drought intolerant are generally species native to temperate or tropical climates and add to the diversity of Santa Barbara's urban forest. Thirty (30) rare species exist in City parkways and 22 in parks including Bohnett, the Alamedas, Chase Palm Park, Alice Keck, and Franceschi Parks.

In addition to the trees mentioned above, trees found within historically significant parks will be closely monitored to determine if supplemental irrigation is needed. Species of pines and eucalyptus are among the trees that will be monitored due to their susceptibility to pest/beetle infestations under stressful environmental conditions. Outreach to neighbors or neighborhood associations may occur to request front and side lawn watering for the benefit and health of nearby street trees. Neighborhoods where rare or historic trees exist may be targeted first.

It is anticipated that there will be an increase in the number of trees that die annually, as the result of the drought. This will impact tree maintenance planning. Particular attention will be paid to removal of dead trees within the high fire hazard areas. The Department routinely schedules removal of dead trees based on its hazard to the public. Where fire is not an issue, recently dead trees are not typically an immediate hazard and are scheduled when appropriate for removal.

Water Efficiencies

<u>Existing</u> - Newly planted trees are mulched to reduce the amount of water lost due to evaporation. In addition, hand watering techniques include a soil probe to reduce water overflow and soil oversaturation.

<u>In Progress</u> - Forestry staff are outfitting the water truck and trailer with outflow meters to better quantify and monitor water use on a per tree basis. Weekly reporting will be conducted to see where adjustments in watering will need to be made. In addition, staff will be re-supplying mulch to trees where mulch is needed.

V. RECREATON FACILITIES

The Recreation Division manages nine recreation and rental facilities, three neighborhood centers, two lawn bowl clubs, four community gardens, four swimming pools and two tennis facilities. Water use includes restrooms, drinking fountains, kitchens, showers, pools, and gardens. The Recreation Division manages several leases of various Recreation buildings. Tenants of four facilities including the East Beach Grill, Westside Boys and Girls Club, Twelve35 Teen Center, and Haley Street Youth Center are responsible for water use and payment as part of their lease requirements. Cost for water service for neighborhood center tenants (SB County Health Clinic, Special Olympics, UCP, etc.) is included in their leases. Sports facilities including soccer and softball fields, and irrigation surrounding recreation buildings, are included in Chapter II. Parks, Sports Fields and Public Landscaped Areas.

General Strategy

Staff has evaluated each facility individually for opportunities to reduce water use. Staff have met, or will soon meet, with Water Conservation staff to evaluate possible steps for further reduction. Aquatic facilities are the biggest program area of water use, with other recreation facilities use remaining relatively constant over the years. A large emphasis in recreation facilities will be educating and encouraging facility users to conserve water, particularly in showers, kitchens and restrooms.

Water Efficiencies

<u>Existing</u> – In most cases, low-flow fixtures, dual flush toilets, waterless urinals, and faucet aerators were installed a number of years ago in recreation facilities. City pool facilities have also seen energy and water efficient improvements to their systems.

<u>In Progress</u> – Staff has identified a few fixtures that need upgrading to low-flow, and some fixtures (i.e., "wall" toilets at the Bathhouse) that will be upgraded with future renovation. Facilities water meter sizes are being evaluated to determine possible size reductions which will have a corresponding decrease in meter charges. Though an expenditure savings, this will not result in reduced water use.

Swimming Pools

<u>Pool Covers</u> – Stage Two Drought Regulations require covers on all outside pools. Los Baños Pool currently has a pool cover. A pool cover is being purchased for Ortega Park Pool. The Public Works Director has granted the Parks and Department an exemption from the pool cover regulation for Oak Park Wading Pool due to the seasonal nature of the facility and because the pool is drained when out of season.

<u>Year Round Swimming Pool</u> – Los Baños Del Mar Swimming Pool - The Department plans to operate the pool facility with no impacts to regular scheduled programming. However, staff is exploring the feasibility of installing an automatic backwash flow meter. The installation of an automated device will trigger the backwash cycle for the pool filters when the gallons per minute (gpm) flow falls below the

Health Department Operating Standards. The cost for installation is estimated at \$5,500 and will be a priority in FY 2015 due to the potential savings of 62,500 gallons through the elimination of eight manual backwash cycles per year.

<u>Seasonal Swimming Pools</u> – The Department operates three seasonal swimming pools. Ortega Park Pool will operate for the 2014 summer season with no impacts to regular scheduled programming. Although staff has confirmed that the Ortega Park pool has an identified leak, repairs are planned for FY 2015, with work being completed before the next operational season. The Department operates two seasonal wading pools, one at Oak Park and one at West Beach adjacent to Los Baños. The West Beach facility has an extensive leak, and requires daily high-pressure deck washing for health and safety requirements to remain operational in the summer months. The Department plans to close this facility for summer 2014. To mitigate the impact, staff is investigating an expansion of hours at the Oak Park pool, which is traditionally the more popular venue with young families.

<u>Pool Maintenance</u> – During operational periods, prior to opening swimming pools, pool decks are routinely cleaned on a daily basis with hoses using high pressure/shut off water nozzles. Stage Two Drought Regulations prohibit the use of running water from a hose, pipe or faucet for the purpose of cleaning buildings, pavement, tile, wood, plastic or other hard surfaces. To reduce use of water, the Department is purchasing three battery powered blowers for daily maintenance. On an as needed basis, maintenance staff will spot clean using buckets and brushes or high pressure water nozzles to minimize the amount of water required to meet Health and Safety regulations.

Shower Facilities

The Recreation Division manages five shower facilities. Staff has identified a number of improvements or policy changes which can be implemented for further water efficiencies in shower facilities.

Los Baños Del Mar - The average monthly gallons of water used for the operation of the Los Baños locker room facility is 78,600 gallons. Low-flow showerheads (1.25gpm), waterless urinals, dual flush toilets, and wash sink aerators are installed. The Department is currently investigating and testing the installation of new low-flow showerheads (0.62gpm) that will further reduce water use by 50%. New standardized signage is being designed to inform patrons that shower use is not to exceed five minutes. Installation of new signage will coincide with the upcoming spring/summer Los Baños electronic newsletter which will further inform patrons about drought restrictions. Additional options which are being considered include:

- Reducing the amount of available showerheads in an effort to create a greater sense of urgency by the user to take a quick shower due to swimmers standing in line.
- Installing water cut off valves to allow staff to turn off all non code required showers during summer recreation swim when showers are often left running and unattended. Showers prior to entering and immediately exiting the pool would be available but not during programming.

<u>Cabrillo Bathhouse</u> – The average monthly gallons of water used for the entire facility; including the upper level, exterior beach showers and restrooms is 257,935 gallons. The highest water use can be attributed to the interior Bathhouse showers. All showers are currently equipped with low-flow showerheads (1.5gpm); however, the existing internal plumbing is dilapidated and will not support installation of low-flow urinals and dual flush toilets. The Department plans to install new low-flow showerheads (0.62gpm) that will further reduce water use by 50%. Concurrent with the showerhead replacement, new individual shower valves will be installed and the number of available showers will be reduced by 50%. The concurrent implementations will require patrons to continuously hold a handle to deliver water while showering and create a greater sense of urgency to take a shorter shower. New standardized signage is being designed to inform patrons that shower use is not to exceed five-minutes.

<u>East Beach Showers</u> – These exterior showers are intended for the use of persons using the beach. The Department plans to turn off all three upper showerheads, but leave the two foot-showers active. The adjacent Cabrillo Bathhouse showers are available for use.

<u>Carrillo Gym</u> – Except for the table tennis program which is open to the public, gym use is reserved by private user groups including non-profits, private schools, and a small adult pick-up game lunch group. Water use at the facility is very low, averaging less than two HCF per month. Though staff considered turning off the showers, since the benefit achieved would be minimal and the impact to the few shower user very high, it was decided to leave the showers on at this location. However, if water use increases, the decision may be revisited. Standard shower signage and the new low-flow (0.62 gpm) showerheads will be installed.

Municipal Tennis Facility – The average monthly gallons of water used at the Municipal Tennis Facility is less than 3,000 gallons. The existing restroom toilets and urinals cannot be updated with new waterless or dual flush options due to the existing plumbing. There are a total of 12 interior showers, which have low-flow showerheads (1.5gpm). Currently the showers are only accessible to annual permit holders that have been issued a combination for access. There are a total 175 annual tennis permit holders, of which, fewer than 10 who use the shower facilities as part of their tennis activities. Staff has confirmed that these permit holders enjoy the convenience of having a shower following their tennis activity but it is not considered a necessity. Due to the infrequent use of the shower facilities and the potential for use to go up as residential water rates increase for residents, the Department plans to temporarily turn off and close these shower facilities. This closure will involve consistent signage and annual tennis permit holders will be notified in-person and with the electronic tennis newsletter.

Tennis Courts

The Department maintains 12 tennis courts at the Municipal Tennis Center and two tennis courts at Oak Park. SBCC maintains the eight tennis courts at Pershing Park. Regular tennis court washing practices on City courts is conducted twice a month with a water efficient water broom using recycled water. To further conserve water, Tennis is purchasing a battery powered blower for daily court maintenance. As

needed, the water broom will be used to remove any stubborn residues or materials that create unsafe playing surfaces.

Recreation Rental Facilities

For the most part, water use at Recreation rental facilities does not fluctuate, and since the water use is driven by public use (toilets, sinks, drinking fountains) and facility cleaning, the opportunity for water reducing measures is small. Water conservation will focus on educating facility users, eliminating wasteful water activities and on new water conservation policies for caterers.

Neighborhood Centers

The Recreation Division operates three neighborhood centers, including Westside, Franklin, and Louise Lowry Davis Center. Bilingual signage will be posted specific to area of use, tenants will be sent water conservation letters, and power washing will be discontinued on exterior surfaces (sidewalks and corridors) except for sanitation purposes.

Community Gardens

The Recreation Division manages four community garden facilities, including Rancheria, Parque de los Niños, Yanonali, and Pilgrim Terrace. Following the Stage Two Drought regulations, garden hand watering with a self-closing nozzle will only be allowed between 4:00 pm and 10:30 am, additional mulch will be provided, and bilingual signage will be posted.

VI. CREEK RESTORATION AREAS

The Creek Restoration Water Quality Improvement Program has completed four large creek restoration projects that have over 23,000 native plants and eight smaller projects with over 3,700 plants. The sites are initially irrigated for two to three years following plant installation. Irrigation is completely shut off after three years. The projects also use recycled water when available at the site. In addition, wood chips and drip irrigation are used at these sites to conserve water and to keep weeds down.

General strategy

The Creeks Division is currently irrigating the Mission Creek Restoration Project at Tallant Rd and the newly installed Low Impact Development (LID) parking lot landscaping. The Tallant Rd. site is irrigated on an as-needed basis, which has been about twice per month. Permits for the Tallant Rd. project require a certain amount of vegetative growth, so some irrigation will continue in order to ensure the project meets the permit performance measures. And the LID parking lot site is being irrigated two mornings for an hour at a time. This will be reduced in June to one day per week, then no irrigation once we get rain.

In response to the drought, the Creeks Division has significantly reduced or ceased irrigation at all of its other restoration sites. For example, the restoration areas on the Santa Barbara Golf Club property are not being irrigated at all now, and have not been irrigated for months. Because the Creeks Division utilizes drought tolerant native plants in all of its restoration projects, the plants should survive (although they will not look as healthy) and bounce back when the rain does arrive.

VII. GOLF COURSE

The Santa Barbara Golf Club, the City's only municipal golf course, is managed by the Golf Division. The golf course is open for play 364 days a year, with over 4,000 people a year playing more than 64,000 rounds. The City maintains and operates the golf course with two concessionaires, Mulligans Restaurant and the Pro Shop. The course operates as an enterprise fund, meaning it is dependent upon revenue generated at the course and does not receive any tax dollars.

At the golf course, 88% of water used is recycled and 12% is potable. Potable water is used in the restaurant, restrooms, and drinking fountains. It is also used to water the golf greens (for non-golfers this is the small, manicured putting area immediately surrounding each hole). The chemicals found in recycled water make it too damaging for the delicate turf comprising the greens, so potable water is used. Recycled water is used for the majority of irrigation and other areas of the course where allowed.

The golf course is set in just under 100 acres of land with 20 putting greens, hundreds of trees of many species, and miles of fairway. The challenges facing the golf course to maintain an attractive playing experience while conserving water are not to be underestimated. In the last major drought (1989-90), play declined over 25%, affecting revenues for the City and concessionaires. The golf course has faced serious financial setbacks over the last few years related to major construction and the recession. Although play has increased somewhat since the lowest point in 2009, it has still not recovered to pre-2009 levels. Staff is very concerned about dry course conditions becoming a deterrent to play, and the financial impact that will hold for the golf course operation.

General Strategy

Careful and specialized management of irrigation will be needed to ensure the golf course meets the standards expected of paying customers, while demonstrating effective water conservation to achieve the desired reduction in water use. The Santa Barbara Golf Club has a well-earned reputation for the quality of putting surfaces – maintaining that reputation is the highest priority for the golf course. Given that, it is unlikely that much can be done to reduce the amount of water used on greens without damaging the turf beyond repair. Moreover, the grass on the greens is particularly sensitive to heat and dry conditions given the need to maintain it at a shorter cut. Since only 10% of the water used at the course is used on greens, it is expected that savings from other areas will negate the need to risk the putting surfaces.

Shallow rooted turf needs to be watered differently than deep-rooted landscape shrubs. Shrubs and perennials are generally more tolerant of changes in irrigation. Therefore, shrubs and deep-rooted plants in landscape beds are targeted for a reduction in irrigation along with areas of the course that the golf ball rarely travels into. In general, both the number of weekly irrigation cycles and the run-time of each cycle will be reduced.

The ProShop and Mulligans are engaged in promoting water conservation within their respective businesses.

Water Efficiencies

<u>Existing</u> – The Golf Course computerized Central Control Irrigation System provides the highest irrigation efficiencies in the landscape industry. This system allows irrigation technicians to prevent or terminate irrigation during rain events and windy conditions. The system automatically adjusts irrigation schedules daily to match actual landscape water requirements, shuts off the system when mainline breaks or rainfall are detected, and automatic wind velocity detectors shut down the system when wind speeds exceed five miles per hour and allow the system to resume when wind speed fall below that level. The golf course weather station operates in conjunction with the 33 satellite irrigation controllers and Central Control. Using daily weather data collection and evapotranspiration rates, commonly known as ETo (which is simply the loss of water from the soil surface into the atmosphere), to help manage water use on the course in the most efficient manner.

Over the years, upgrades to the golf course irrigation system have improved water efficiency; however, the basic system is quite aged. Staff has been working with Public Works Water Resources over the last several months to map the 1,300+ sprinkler heads and irrigation system, identify where recycled and potable water are used, and evaluate the recycled water pumping operation for best efficiency.

Water efficient icemakers and dishwashers are in used within the restaurant, along with waterless urinals in the maintenance shop. Taps have efficient aerifiers, and timing has been set to reduce the water wasted in basins.

<u>In Process</u> – Coupled with determining what is watered and how frequently, staff has been working with Public Works Water Resources to evaluate what irrigation infrastructure improvements might increase the effectiveness of irrigation, and the water pressure of the current system to ensure that sprinklers have the correct coverage, meaning that no one area is overwatered due to low pressure. Additionally, staff is evaluating whether the potable and recycled water irrigation infrastructures around all 20 greens can be redesigned to improve water efficiency. Retrofitting of plumbing fixtures is being undertaken to reduce the amount of water used in restrooms. The use of waterless soap and waterless urinals is being evaluated where financially feasible to install.

Maintenance Practices and Modifications

Hand watering is currently practiced on the greens and some trees to save water. This is less efficient from a labor standpoint, but necessary to ensure appropriate coverage and cooling in certain conditions. (Heat can exacerbate damage and disease, especially on the delicate greens.) The sprinkler system is controlled in blocks, meaning large areas are irrigated at one time. Unfortunately, modifying the system to enable targeted watering of certain areas would require a major capital investment, thus hand watering is required.

Aerification has been stepped up and completed earlier in the year than would be typical. Aerification improves the amount of water that penetrates the turf and in turn encourages stronger deeper roots for the grass helping to improve the resilience of the turf and allowing staff to water more infrequently ending in significant water savings.

A reduction in the time and frequency of watering the golf course has been in place for many months. This has resulted in some areas of the course looking drier than would typically be the case. The irrigation system works overnight when there is less evaporation due to heat and sunlight. Sprinklers are not being turned on in daylight hours unless due to exceptional circumstances. The Central Control Irrigation System will stop all sprinklers if wind conditions are sufficient to lessen the effectiveness of the irrigation program.

Mulching around trees, planters, and the practice areas enables less evaporation and reduces the amount of water required in those areas. Water Trucks may be used to transport recycled or fresh water to areas where irrigation cannot be targeted sufficiently. Care will be needed in terms of the weight on the access roads and turf to ensure damage is kept to a minimum.

The Santa Barbara Golf Club has fully embraced the City's Integrated Pest Management (IPM) Program, and is proud to be a leading example of reduced chemical use for other golf courses. Occasionally, more hazardous materials are required to combat disease on the greens, especially as disease can take one or more greens literally overnight — resulting in thousands of dollars of damage. As needed, additional exemptions to use more hazardous materials will be submitted to the IPM Advisory Committee, should the Superintendent believe that the application will protect the greens, assist in compliance with Stage Two Drought regulations, and/or help to conserve water.

Reduced Irrigation Frequency, Duration and Coverage

The frequency and length of irrigation cycles have been reduced in response to the Stage One Drought declaration in February 2014, and additional changes are being implemented with Stage Two. Weighing the impact on safety and play, targeted areas for further reduced watering have been identified, with a priority for protecting the playing surface of greens.

Irrigation Priorities

Resources will be focused on the following areas of the golf course in order of importance:

- 1. Greens #1-18
- 2. Main Putting Green
- 3. Practice and Teaching Area
- 4. Trees along perimeter of Course
- 5. Second Putting Green (near #10)
- 6. Tee Boxes on par 3s
- 7. All other tee boxes
- 8. Fairways

- 9. All other trees
- 10. Rough
- 11. First 100 Yards
- 12. Par 3 between Tee and Green
- 13. Non playable areas

Staff has prioritized further reductions in the low traffic areas of the course in order to achieve at least a 20% or more reduction in water. These actions will impact the look and playability of the course, but will also allow continued watering of more vital assets such as greens, tee boxes, fairways, and perimeter trees. All four actions will be implemented concurrently; however, the following are ranked according to the frequency that golf shots are played from that area (i.e., number one has less impact to the golfer experience than number four).

- 1. Out of play areas (target 10% of total water saving)
- 2. Par 3, tee box to green (target 2% of total water saving)
- 3. First 100 yards of Par 4 and Par 5 holes. (target 12% of total water saving)
- 4. Rough Areas (target 10% of total water saving)

Trees

Many trees will require hand watering to maintain them. Trees are a natural shield for errant golf balls both internally on the course and on the perimeter; therefore, maintaining healthy trees are a safety priority for the course. These trees require occasional deep watering, which can result in the perception of being wasteful; however, it is essential to ensure that the water penetrates deep enough for the trees to use it.

Exception to Stage Two Regulations

The Public Works Director has approved an exemption from the Stage Two Drought regulations to allow the Golf maintenance staff to water the greens outside of allowed hours. The golf course has 20 greens. Greens are maintained at a higher level than fairways, tee boxes, etc. due to the priority of those areas for the golfer experience. Greens are particularly susceptible to disease, fungus, and heat. When the weather is exceptionally dry and hot, it is necessary to use sprinklers or hand water the greens, which may occur outside of the allowed hours. The hose that is used for hand watering the greens has an automatic shut off nozzle as required within the regulations.

Signage

Communication with the customers is important so they can better understand the changes that they see on the golf course and in the restaurant, and to encourage water conservation actions. Signage is on display in the restaurant, pro shop and golf carts advising of the drought conditions. These include tent cards on tables in Mulligan's and "waterwise" posters in the ProShop and restrooms, detailing some of the steps taken to reduce water use.

Mulligan's Restaurant

The restaurant has water conservation tent cards on display at all tables. They now only serve water on request and in smaller glassware. Restaurant staff will use power washers to clean outside areas, but will only do so to meet health and safety requirements given the area is used for eating and drinking.

Cleaning of Vehicles, Equipment and Golf Carts

Turf maintenance equipment is now being cleaned using air pressure and will be washed with water far less often. Cleaning with water is required on an occasional basis to remove salts that damage the blades and other metal components. When the machinery is cleaned with water, it is cleaned on the golf course with recycled water on grass areas around trees and on tee boxes to maximize water use.

Golf Carts, which have routinely been cleaned with hose and nozzle, will be washed with cloths, and floor boards and cup holders being rinsed after each use. Full cart washes will be limited to once a month. It should be noted that water used to clean the carts is collected by drains that irrigate the course near the #1 tee box.

VIII. DEPARTMENT WIDE EFFORTS AND CONCLUSION

Outreach and Public Education

The Department is working with the City's Water Conservation Program to install water conservation signage in all of our public buildings, shower facilities, and restrooms. Tenants of Parks and Recreation facilities have been notified and encouraged to take extraordinary water conservation actions as well. In parks and at the golf course, the reduction in water use will be increasingly visible to the public as turf and some landscape areas dry out. Signage is being put in place to remind parks and golf course visitors that we are working to conserve our community water resources. Information and this Drought Strategic Response Plan will be placed on the Department website as well.

Landscape Installation or Renovation Projects

While the Department prioritizes renovation of landscaped area to reduce labor, water, and pesticide use, new plantings must be watered regularly for 2-3 years to establish healthy plants. For this reason, the Department will carefully analyze each proposed project to determine whether the project can be postponed until drought conditions have improved, or whether installation can be phased over time. For example, it may be cost effective to complete design and construction, delay plant installation and mulch the area until drought conditions have improved.

Vehicle Washing

The Department fleet includes work trucks, aerial lifts, tractors, mowers, and other assorted large vehicles, passenger vans, and a bus. The smaller Parks Division trucks and Recreation vans are cleaned at a drive-through car wash with recycled water. The large recreation bus is hand washed by a cleaning service that collects and recycles the water. Vans and the recreation bus are washed only when needed, no more than once or twice a year. The lifeguard truck is used primarily on the beaches and subject to sand and ocean moisture. It is washed daily during the summer operational months and as needed in the off-season to properly maintain the vehicle. Cleaning is conducted at the City's Yanonali wash station using a high pressure undercarriage device. Parks Division trucks, mowers, and tractors are also washed at the City's Yanonali wash station, but on an as needed basis, typically this is done twice a month. The Forestry section also washes the aerial lift trucks at the City's Yanonali wash station 15 times a year to retain the dielectric capabilities and maintain electrical conductivity reduction. This practice will not be reduced.

Financial Impacts of Drought Water Rates

Over the last couple of years the Department has seen increased water expense, in most cases due to increased use of water due to dry conditions, as well as increased cost of water. In particular, the Department is projecting several shortfalls in water budgets in the current year, primarily due to changes in the City's water rate structure and pricing which shows the cost of water increased between 50% - 66%. In the General Fund the total shortfall is near \$100,000 (\$84,000 in Parks, \$16,000 in Recreation), and Golf is projected at \$76,000.

In developing the FY 2015 budgets, the Department adjusted water budgets to the projected FY 2014 actual. For the General Fund, \$100,000 in new funding will augment the Parks Division and Recreation Division Budgets. The Golf Fund increased its water budget similarly by reducing other planned expenditures.

While water cost may increase, less water is expected to be used throughout the Department. However, the Department is very concerned about the impact of the newly adopted Stage Two drought rates that will go into effect July 1, 2014. Staff will need to carefully monitor water use to insure compliance with the required 20% reduction. There is also the need to watch the cost of that water over the months against what is budgeted. For the Golf Course especially, finding the right balance between conservation, cost containment, and preservation of rounds will be a challenge.

Accountability

The Department has 107 water meters that serve parks, recreation facilities, community building and golf course. There are separate meters for potable and recycled water, and each meter has a separate water bill. See table below.

	Potable	Recycled	Total
GOLF	4	1	5
PARKS	62	25	87
RECREATION	14	1	15
TOTAL	80	27	107

Parks and Recreation Water Meters

The Department will be closely monitoring all water accounts with respect to water use and water cost vs. budget. While water cost may increase, less water is expected to be used throughout the Department. In Parks and Golf, most water meters are being monitored on a daily and/or weekly basis to assist with water conservation planning. Due to varying water priorities, it is expected that some meters may see a reduction greater than 20% while others may see a lower reduction or even an increase in use. Management will be reviewing division and department performance on a weekly and monthly basis, evaluating progress towards the water conservation target and monitoring impacts to natural resources and programs. Staff will provide occasional reports to the Parks and Recreation Commission on implementation of the Strategic Drought Response Plan and water conservation efforts in our parks, recreation facilities and golf course.

CONCLUSION

The 2014-2015 Strategic Drought Response Plan will guide the Parks and Recreation Department in how best to achieve City water conservation objectives. Water conservation is the key objective as the City, region and state are facing unprecedented drought conditions. However, as stewards of the community's park and recreation resources, staff will also need to carefully manage how and where water is used to mitigate long-term damage and potential loss of these valued community assets.

It has been 25 years since Santa Barbara, the Parks Department and Recreation Department (now Parks and Recreation Department), faced similar extreme drought conditions. There are many stories of parks and the golf course going brown, dry fountains, and similar outcomes. Unfortunately, staff has been unable to locate any planning documents that may have been used to guide the Department through that time. Staff will be using this Strategic Drought Response Plan as a working tool over the duration of the drought conditions. The plan will be modified as needed to ensure that the required reduction in water use is achieved. The plan and subsequent status reports will reside in department files so that these materials can be a resource going forward.

APPENDICES

- A. Stage Two Drought Conditions Water Use Regulations, adopted by City Council May 20, 2014.
- B. Los Baños Signage (English and Spanish)



City of Santa Barbara Stage 2 Drought Regulations & Waste of Water Prohibition

On May 20, 2014, the Santa Barbara City Council declared a Stage Two Drought Condition in response to the driest consecutive three years on record, triggering drought related water use regulations.

The Stage Two Water Use Regulations (SBMC 14.20.215) are Summarized as Follows:

- Hoses must be equipped with an automatic shut-off nozzle.
- Washing of pavement and other hard surfaces is generally prohibited. Exception: preventive
 maintenance of buildings and other facilities if accomplished by means of a pressure washer and when
 it is the only feasible means of correcting a potential threat to health and safety, provided it is
 accomplished by use of a pressure washer, mop, bucket, or brush.
- Irrigation is limited to evening and early morning hours between the hours of 6:00 p.m. and 8:00 a.m. If manually operated, such irrigation is allowed only between the hours of 4:00 p.m. and 10:30 a.m.
- Cars and boats must be washed at commercial facilities that recycle the water, or by hose with shut-off nozzle.
- The use of water in ornamental water features and fountains is prohibited except:1) if located indoors or on residential properties; 2)for fountains that have a total water surface area less than or equal to 25 ft.²; or 3)as of May 20, 2014 are home to aquatic life.
- Pools and spas must be equipped with a cover when not in use.
- No draining of pools by more than one third, unless authorized.
- Drought notices required in restaurants and hotels; water served on request only.
- Gyms, pools and other businesses providing showers must post drought notices and promote limitation of shower use.

Santa Barbara Municipal Code (SBMC 14.20.007) Prohibits Waste of Water at All Times:

Waste: "Waste" means any excessive, unnecessary or unwarranted use of water, including but not limited to any use which causes unnecessary runoff beyond the boundaries of any property as served by its meter and any failure to repair as soon as reasonably possible any leak or rupture in any water pipes, faucets, valves, plumbing fixtures or other water service appliances.

Prohibition Against Waste of Water. It shall be a violation of this Chapter for any consumer or account holder to waste any water obtained from or through the distribution facilities of the City.

Wasting Water - Repairs - Required. Each and every consumer shall maintain in good order all his water pipes, faucets, valves, plumbing fixtures or any other appliances, at all times, to prevent waste of water.

Violations

- A. Any failure to comply with a provision of this Chapter shall constitute a violation of this Code, regardless of whether the failure to comply is caused by an account holder, a consumer or any other person or entity.
- B. Where the failure to comply with this Chapter is continuing and reasonably preventable by the person or entity failing to comply, each successive hour of such failure to comply shall be a separate and distinct violation.

Enforcement Process:

1st Violation: Door hanger and Warning letter

2nd Violation: \$250 fine per violation

3rd Violation: \$250 fine per violation and possible flow restrictor

4th and Subsequent Violation: \$250 fine per violation, possible flow restrictor or shut off water service

Enjoy Your Shower, But also Save Water!



Please Limit your Shower to less than 5 minutes.



During these dry times any additional water savings you can do, helps offset water shortages that are projected for next water year.





Let's Save Together

APPENDIX B

Disfrute su Ducha Pero Tambien Conserve Agua!



Por favor Limite su ducha a menos de 5 minutos.



Durante estos tiempos de sequedad cualquier ahorro de agua adicional que usted puede hacer, ayuda a compensar la escasez de agua que se proyecta para el proximo año.

Ahorremos juntos