

APPROVED

REPORT OF GENERAL MANAGER

OCT 09 2009

NO. 09-248

DATE October 9, 2009

BOARD OF RECREATION and PARK COMMISSIONERS

C.D. ALL

BOARD OF RECREATION AND PARK COMMISSIONERS

SUBJECT: STRATEGIC WATER CONSERVATION PLAN

R. Adams	_____	J. Kolb	_____
H. Fujita	_____	F. Mok	_____
S. Huntley	_____	K. Regan	_____
V. Israel	_____	*M. Shull	<i>om for</i>

*[Signature]*  
 General Manager

Approved \_\_\_\_\_ Disapproved \_\_\_\_\_ Withdrawn \_\_\_\_\_

RECOMMENDATION:

That the Board review, consider and adopt the water conservation measures, irrigation and landscape standards, and storm water best management practices, contained in the Strategic Water Conservation Plan on file in the Board Office.

SUMMARY:

Due to its location in a semi-arid climate, and its reliance on imported water, the City of Los Angeles must utilize sustainable design principles to preserve and protect limited water resources. California's growing water demand, increasing water quality concerns, and water supply variability due to periodic drought are just a few of the environmental challenges that Los Angeles faces in the near future. The potential impact of global climate change on precipitation patterns is another serious concern as the majority of the City's imported water supply emanates from surface (snowmelt) runoff, and therefore is subject to substantial vulnerability due to hydrologic variability.

In light of these challenges, it has become necessary for the City to adopt a number of sustainability initiatives to help it pursue cost-effective water conservation, water recycling, and storm water capture projects to increase supply reliability and offset increases in water demand due to growth and environmental concerns. As one of the largest land owners in the City, the Department of Recreation and Parks (RAP) will play an important role in the City's efforts. Sustainable improvements to the City's park system will have a positive environmental impact that will be felt in communities and neighborhoods across the City.

## REPORT OF GENERAL MANAGER

PG. 2                      NO. 09-248

As a national leader on the issue of global climate change, Mayor Antonio Villaraigosa has made greening Los Angeles a top priority. In May 2007, Mayor Villaraigosa released Green LA, an action plan to reduce green house gas emissions and create a more sustainable environment. As the RAP pursues sustainable goals and objectives, it is critically important to strive to balance its commitment to improving the environment with its mission of providing quality recreation programs and services to residents. As the largest water user of any City Department, our primary sustainable objective is to conserve our City's valuable water resources while meeting the growing recreational park needs of this large City.

Under the Mayor's Directive No. 10, dated June 6, 2007, Mayor Antonio Villaraigosa called for a 10% reduction in water use. On August 14, 2008, the Mayor signed into law a new water-use ordinance with expanded restrictions and penalties to encourage water conservation.

On June 20, 2007, the RAP Board of Commissioners approved a Memorandum of Understanding (MOU) with the Los Angeles Department of Water and Power (LADWP) for irrigation improvements at selected parks. The purpose of the MOU was to develop and promote water conservation by maximizing landscape water use efficiency at City parks through actions that include, but are not limited to, the repair and/or replacement of existing irrigation distribution systems and the installation of weather sensitive irrigation control equipment that irrigates on the basis of actual site characteristics and local weather conditions. The MOU will expire on June 30, 2011 and includes funding from LADWP in an amount not to exceed \$3,000,000 per year. RAP is required under the terms of the MOU to submit an annual water conservation work plan for written approval by the LADWP on or prior to October 1<sup>st</sup> of each year. Additional funding opportunities exist through Proposition K, Quimby and future competitive grants that involve capital projects which relate to irrigation infrastructure.

On June 27, 2008 a council motion was submitted (Council File No. 08-1725) by Richard Alarcon, Councilmember, 7<sup>th</sup> District and seconded by Tony Cardenas, Councilmember, 6<sup>th</sup> District directing City Departments to form a working group to develop a draft ordinance, that implements the State Department of Water Resources Model Landscape Ordinance, Assembly Bill (AB) 1881. RAP is currently working with City Planning and the Department of Public Works to coordinate continuity with existing efforts set forth in this plan as well as the City's Water Conservation Ordinance. The goals and water conservation measures outlined in this plan are compatible with the latest Water Conservation Ordinance amendments adopted by City Council on July 24, 2009.

This plan is measuring RAP's water savings against our "baseline water usage" adopted in the amendment to the City's Water Conservation Ordinance which defines "baseline water usage" as the amount of water used for the same period during Fiscal Year 2006-2007. The following report details RAP's monthly water usage beginning with the baseline fiscal year.

REPORT OF GENERAL MANAGER

PG. 3 NO. 09-248

Water Usage Report (Fiscal Year 06/07 to 08/09)						
Please note that this report excludes Rate Code 44 (recycled water)						
City of LA, Department of Recreation and Parks						
Month	Year	Water Consumption	Year	Water Consumption	Year	Water Consumption
July	2006	640,529	2007	656,946	2008	590,175
August		709,254		853,405		546,546
September		568,617		584,442		466,869
October		494,561		503,756		406,601
November		376,084		330,504		269,672
December		271,012		225,425		245,568
January	2007	286,617	2008	154,433	2009	163,066
February		198,475		117,644		121,658
March		224,831		182,173		177,020
April		395,390		328,915		265,168
May		457,251		437,727		348,671
June		612,617		495,508		463,660
Grand Total (HCF)		5,235,238		4,870,878		4,064,674
Grand Total (Gallons)		3,915,958,024		3,643,416,744		3,040,376,152
Source: Department of Water and Power, Premier Account Management Section, July 23, 2009						

The primary goal of the Strategic Water Conservation Plan is to reduce our water consumption by 1.2 billion gallons by July 1, 2013. This would be nearly a 30% decrease in total water consumed by RAP. As shown in the aforementioned water usage report, we have already achieved a reduction of 875 million gallons toward that goal which represents a 23% reduction.

As one of the largest water supply users in the City of Los Angeles, RAP has made water conservation a priority. Our efforts began in 2006 with updating the inventory and infrastructure condition of our water systems that would allow us to develop a plan based on priorities set by water waste. With 92% of our water being consumed via irrigation use, our primary focus is to improve the water efficiency of our irrigation infrastructure while working with LADWP to convert as many parks and golf courses as possible to recycled water.

To help ensure that the City's existing and future park developments reach our water usage goals, RAP has identified the following water conservation measures:

- Use of Smart Irrigation Controller Technology
- Replacement of Irrigation Infrastructure
- Use of Recycled Water
- Turf Area Reduction
- High Efficiency Plumbing Fixtures

## REPORT OF GENERAL MANAGER

PG. 4                      NO. 09-248

The background and objectives of each of these measures are outlined in the Strategic Water Conservation Plan. As the aforementioned conservation measures will provide measurable reporting goals on our water use, the plan also calls for:

- Maintenance and Construction reorganization to centralize into the new Landscape Irrigation Infrastructure Division (LIID) which will better align our resources with available capital funding to implement the conservation measures identified in this plan.
- Irrigation standards to ensure maintenance efficiency and uniformity.
- Use of low water use planting and mulching on new and renovated parks.
- Use of recirculation systems on all water features.
- Storm water management, quality and ground water re-charge through the use of bio-swales, porous paving, retention basins, and storm water diversions in the design of all new or renovated parks.

Staff has determined that the water conservation improvement projects engendered by the proposed plan will consist primarily of the repair and/or replacement to existing subsurface irrigation pipelines and associated control systems, along with the installation of accessory features and landscaping at existing parks. For these reasons, the individual projects envisioned in the plan will most likely be exempt under CEQA. Therefore, the plan and its associated projects are provisionally exempt pursuant to categories for minor modifications to and/or replacement of existing facilities (Classes 1, 2, and 4) and construction of new accessory structures (Classes 3 and 11). Each project will be separately re-evaluated according to CEQA for any exceptional site characteristics or unique environmental resources prior to approval of project funding, including acceptance of annual funds under the MOU between the Department and LADWP.

### FISCAL IMPACT STATEMENT:

The Board's approval of this plan will have no fiscal impact on the Department's General Fund, as all salary costs and expenses are to be covered through the capital funds identified in the report. In addition, existing staff will be utilized for all aspects of this plan.

This report was prepared by Michael Shull, Superintendent of Planning and Construction.