

CITY OF LOS ANGELES
INTER-DEPARTMENTAL CORRESPONDENCE

DATE: March 27, 2014

TO: Honorable Felipe Fuentes, Chair
Honorable Bob Blumenfield, Vice Chair
Honorable Tom LaBonge, Member
Honorable Jose Huizar, Member
Honorable Paul Koretz, Member
Energy and Environment Committee

FROM: Enrique C. Zaldivar, Director
Bureau of Sanitation



SUBJECT: **COUNCIL FILE NO. 13-1336 – ONE WATER PLANNING CONCEPT/BLUE-GREEN PROJECTS AND SOLUTIONS/MEETING WATER QUALITY STANDARDS**

This communication is in response to the City Council Motion 13-1336 (Fuentes - Blumenfield) that asks the Bureau of Sanitation to report on the status of the following:

1. Principles and objectives of the "One Water" planning concept and its associated blue-green projects and solutions to effectively meet local and regional water mandates.
2. Formation and recommended participants of a "One Water" implementation team/group consisting of relevant City departments, environmental organizations and community stakeholders tasked with developing methods and approaches to implement the objectives and principles of the "One Water" planning concept.
3. All federal and state mandates affecting the City's urban runoff water system including the timelines for which we have to meet compliance and details on the City's current progress in meeting all requirements.
4. Development of a community outreach plan, which would include Neighborhood Councils, to effectively engage the public and seek input on the "One Water" planning concept and the implementation of blue-green solutions in communities.

1. The One Water Planning Concept

The "One Water" Management concept focuses on integrating efforts within the water community to better leverage resources outcomes in drinking water, wastewater, groundwater, recycled water, and stormwater management; to improve stakeholder relations; and to advance regional water sustainability. "

This concept builds upon the extensive national and global work on integrated water resources management. A national "One Water" policy is currently in the works as the Clean Water America Alliance is building a network of leaders representing an array of research foundations, national trade associations, federal agencies, and non-governmental organizations (NGOs) to unite for integrated water management.

The "One Water" management approach is building on the need to leverage precious resources and to provide multi-benefits that provides communities safer as better conditions while making our City more sustainable and resilient. Adapting the "One Water" approach in L.A. will build on the

good foundation established in the effort of the City's 2020 Water Integrated Resources Plan (Water IRP) which was adopted by Council in 2006.

The One Water L.A. 2040 Plan

Now is the time to begin the process of planning beyond 2020. The City will achieve this through a *One Water L.A. 2040 Plan* that will build on the success of the Water IRP and will move meaningfully integrate this many sectors of the water industry to effectively capture, conserve and reuse our limited water supply. As part of the City's environmental sustainability and resiliency, it is a priority for Mayor Garcetti and the City Council that the water resources of the City be managed and protected in the most sensible way for the benefit of its resilient and future generations.

This plan will be developed in two phases. Phase I is currently in its early development stage and will include the vetting of the "One Water" concept jointly with the Department of Water and Power (LADWP) and various other City Departments involved with water initiatives, followed by significant collaboration and planning among the City family. Once the concept is vetted among the City Departments, the One Water L.A. Plan will also entail extensive stakeholder participation the development of the One Water L.A. Plan guiding principles. As part of the stakeholder process, the City will seek participation from Neighborhood Councils, environmental organizations, and community stakeholders. Interested Stakeholders will then become part of a One Water L.A. Implementation Team which will also include representatives from relevant City departments and will help guide the development of the One Water L.A. Plan.

Phase II will consist of technical studies and continuing stakeholder collaboration for identification and comparison of projects, policies and alternatives. The goal is to complete the One Water L.A. Plan in approximately three years. Any new projects will need to be analyzed and certified through the California Environmental Quality Act (CEQA).

Building upon the Water IRP success not only entails broadening the scope, but improving on the concepts already applied through evaluating what has already been accomplished as well as the lessons learned through the implementation process.

The Water IRP: The Beginning

The Water IRP sought to accomplish two basic goals as part of developing an implementable facilities plan: integrate water supply, water conservation, water recycling, and runoff management issues with wastewater facilities planning through a regional watershed approach; and enlist the public in the entire planning and design development process at a very early stage to guide the planning process.

At the time this integrated process began, it was a departure from the City's traditional single-purpose planning efforts for separate agency functions, and, since the completion of the Plan and City Council approval in 2006, it has resulted in greater efficiency in water resource management and additional opportunities for citywide benefits. These benefits have included overall cost savings and a reduction of the City's dependence on imported water supplies by putting more recycled water to use, managing more stormwater and urban runoff for beneficial uses, and continuing to conserve drinking water.

The Water IRP documents include a preferred recommended alternative which was selected due to its multiple benefits along with an implementation strategy containing projects recommended for immediate implementation, projects for future implementation (if needed), and policy directions to be adopted.

Since 2006, the City has been implementing the multiple elements of the Plan while simultaneously keeping Water IRP stakeholders engaged through meetings, publications and updates, as well as a dedicated website. The focus has been on sustainable planning with community involvement, that is, greener projects and initiatives that were directly recommended by the Water IRP or have followed the Water IRP's innovative approach.

Water IRP recommended projects include the future construction of two new interceptor sewers which will provide relief and additional capacity to prevent sewer overflows and spills. Additionally, several projects are recommended for future implementation if triggered by closely monitored regulations, flows, and/or population. Among these projects are potential upgrades to advanced treatment as well as improvements at several of the City's water reclamation plants.

The Water IRP Implementation Strategy not only consists of recommended projects, it also includes 25 policy directions that provide direction to staff on immediate activities and actions in the areas of recycled water, water conservation, and runoff management.

- ***Recycled Water:***

The Water IRP recycled water policy directions (5 policies) direct the City's Departments of Water and Power and Public Works to coordinate projects and regulations that will maximize the use of recycled water. Related efforts include the completion of the City's Recycled Water Master Planning Documents in 2012. These Master Planning Documents identified potential new non-potable reuse customers and projects to expand the recycled water infrastructure along with implementing a groundwater replenishment (GWR) project in the San Fernando Valley.

A joint project of LADWP and LASAN, the GWR project will replenish up to 30,000 AFY of highly purified recycled water in the San Fernando Basin. The environmental analysis was launched in September 2013 and the project will be operational by 2022

Together non-potable reuse projects and GWR will help the City to achieve 59,000 acre - feet per year (AFY) of recycled water use to displace imported water. In addition, the Master Planning Documents indicated how the city can maximize recycled water use beyond 59,000 AFY.

The City has been using recycled water for over 30 years. We have numerous recycled water projects in place to supply recycled water to customers for landscape irrigation and industrial uses throughout the City.

- ***Water Conservation:***

The Water IRP conservation policy directions (5 policies) direct the City's Departments of Water and Power and Public Works to continue conservation efforts by considering new water conservation technologies for City facilities and the public in general, as well as increasing incentives and public education programs. Since the adoption of the Water IRP, the City has implemented a number of programs and incentives. One of the newer programs is the California Friendly Landscape Incentive Program. This program was launched in 2009 and offers rebates to residential and commercial customers for removing turf and planting low-water using plants. In addition, the City updated the Emergency Water Conservation Ordinance in 2009 and 2010 to better define outdoor watering restrictions and adopted the Water Efficiency Requirements Ordinance that establishes the installation of efficient fixtures in new development and redevelopment projects.

In 2013, LADWP launched a new water conservation outreach campaign to remind customers about the Water Conservation Ordinance and proper water days, and to promote the new

landscape incentive program. This campaign included traditional media advertising that included television, radio, newspaper, bus tails, movie screens, and online ads; and also included social media using Twitter, Facebook, and YouTube. As a result of the ordinances and media campaign, LADWP customers have responded with significant water use reductions. Overall city-wide water usage is down almost 18% from Fiscal Year 06-07 water usage.

• ***Stormwater Management:***

LASAN is managing stormwater by initiating the Green Infrastructure Program that includes Green Streets and Rainwater Harvesting programs. The Green Infrastructure Program is being implemented through a mix of institutional measures, policies and ordinances, local solutions and regional and green infrastructure projects. These measures are focused on capture, infiltration and use of stormwater while greening our communities and providing multiple-benefits. These solutions include green streets, porous sidewalks and pavements, constructed wetlands, trees, grassy swales, wetlands, rain gardens, rain barrels, and cisterns. These projects are providing multi-benefits while leveraging our limited resources and maximizing our return on investments.

As part of the City's efforts to better manage stormwater, new initiatives, regulations and programs have been undertaken including the Green Streets and Green Alleys Committee, and a Low Impact Development (LID) Ordinance and a Stormwater Capture Master Plan.

The LID ordinance was approved by Council and became effective May 12, 2012 and requires 100% of the runoff generated from a 85th percentile (3/4-inch) storm to be managed on site in the priority order of infiltration, evapotranspiration, capture and use, and/or treated by a high removal efficiency bio-filtration/ bio-treatment system. It applies to all development and redevelopment projects that require a building permit to create, add, or replace an impervious area of 500 square feet or more.

LASAN implemented a Rainwater Harvesting Program to pilot a Downspout Disconnection Project for rainwater capture and use for irrigation. A total of 600 rain barrels were installed prior to the rainy season. Additionally, LASAN is pilot testing rain barrels and rain gardens to evaluate its effectiveness for infiltration. This pilot program has been so successful that LASAN is currently looking into launching a citywide program.

Projects currently under construction or recently completed include:

- Glenoaks-Sunland Stormwater Capture
- Woodman Avenue Stormwater Capture Project
- Ed P. Reyes River Greenway
- Avalon South Green Alley
- Manchester Greenway
- Temescal Canyon Park Rainwater Capture and Use
- Penmar Park Rainwater Capture and Use
- Rosecrans Recreation Center Stormwater Enhancements
- Wilmington Drain Multiuse

LADWP is collaborating with City Departments, governmental agencies, and stakeholders to develop the Stormwater Capture Master Plan (Master Plan). The Master Plan will investigate and create potential strategies for implementation of stormwater and watershed management programs and projects in the City. The Master Plan will be used to guide decision makers in the City when making decisions affecting how the City meets its centralized and decentralized stormwater capture goals. The Master Plan will include evaluation of existing stormwater capture facilities and projects, quantify the maximum stormwater capture potential, develop feasible stormwater capture alternatives (i.e., projects, programs, policies, etc.), and provide potential strategies to increase stormwater capture. The Master Plan will also evaluate the multi-beneficial aspects of increasing

stormwater capture, including potential open space alternatives, improved downstream water quality, and peak flow attenuation in downstream channels, creeks, and streams such as the Los Angeles River.

In addition, LASAN is working with partner agencies across the watersheds to develop Enhanced Watershed Management plans to comply with the water quality mandates while managing capture, infiltration and reuse of runoff.

The One Water Paradigm

The above programs, projects and policies are just a glimpse into the tremendous results the Water IRP has had in terms of managing our existing water supplies. Building on the Water IRP, the City will benefit tremendously in expanding this effort into the future to make our City more sustainable and resilient while leveraging our resources and enhancing the quality of life in our neighborhood.

Through the one water concept, the City will embrace a new way of thinking and functioning: multi-beneficial initiatives and projects with integrated planning and transparent communication with stakeholders have become a norm. We have been moving closer towards better water, wastewater, and stormwater management with the ultimate goal of finding new sources of water to meet future demands, to increase local water supply and, in the process, make Los Angeles a more sustainable city.

The One Water L.A. Plan will build on the foundation of the Water IRP model, and through its development, the City strives to enlist the help of our stakeholders in creating innovative water related solutions that can help transform our neighborhoods into healthy, livable and sustainable communities.

Over the next 3 years, a 2040 One Water L.A. Plan will be developed with full Stakeholder involvement and participation to establish the path forward to meet our infrastructure demand in an integrated way while leveraging resources and providing multi-benefits.

The 2040 One Water L.A. Plan will connect the various efforts in the City to ensure that activities and programs are coordinated and integrated as much as implementable. It will lay the path forward for meeting our future water demands, addressing our water quality mandates, increasing our local water supply, maximizing reuse and provide cleaner and healthier communities.

2. The One Water Implementation Team

As we embark on the development of the 2040 One Water L.A. Plan, the LASAN recognizes that collaboration with other City departments is a vital part in implementing new programs, projects and policies that will not only ensure a reliable water supply for Angelinos, but improve our communities and environment in the process. To that end, LASAN will collaborate with LADWP and other City Departments to develop the One Water L.A. Plan concept and proposes to form a One Water L.A. Implementation Team consisting of representatives from the following relevant City departments:

- 1) Bureau of Sanitation (LASAN)
- 2) Bureau of Engineering (BOE)
- 3) Bureau of Street Services (BSS)
- 4) Department of Water and Power (LADWP)
- 5) Department of Building and Safety (LADBS)
- 6) Department of City Planning (DCP)
- 7) Department of Recreation and Parks (RAP)
- 8) Department of Transportation (LADOT)
- 9) General Service Department (GSD)
- 10) Department of Neighborhood Empowerment (DONE)

3. Relevant Water Regulations

Parallel to the development of the One Water L.A. Plan, the City continues to meet all current federal and state mandates affecting the City's water system, as well as prepare for future regulations. The following are water regulations relevant to the "One Water" concept including the timelines for which we have to meet compliance and details on the City's current progress in meeting all requirements.

- **Recycled Water:**

The following are relevant water regulations that pertain to recycled water:

- California Department of Public Health's (CDPH) Draft Groundwater Recharge Regulations – to be finalized by CDPH in the near future
- Statewide Recycled Water Policy- Salt Nutrient Management Plans (SNMP)
 - Central/West Coast Basin SNMP will be completed in May 2014
 - San Fernando Basin Plan SNMP is in progress

- **Water Conservation:**

The following are relevant water regulations that pertain to water conservation:

- The Water Conservation Act of 2009 (Senate Bill x7-7) requires water agencies to reduce per capita water use by 20 percent by the year 2020. This includes increasing recycled water to offset potable water use. Water suppliers are required to set water use targets for 2015 and 2020. Failure to meet water use targets will result in the ineligibility of a water supplier to receive water grants or loans administered by the State.

- **Stormwater Management:**

The operation of the City of Los Angeles' (the City) municipal separate storm sewer system (MS4) is regulated by a National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit (Permit). The federal NPDES stormwater program came about as the result of the 1987 amendments to the Clean Water Act (CWA), and the City has been subject to four successive Permits that were issued in 1990, 1996, 2001, and 2012, respectively. The current Permit was adopted by the Los Angeles Regional Water Quality Control Board (Regional Board) and became effective December 28, 2012 for the County of Los Angeles and the incorporated cities. The City of Los Angeles, the other cities in the County, and the County of Los Angeles are all considered individual permittees of this Permit.

The current Permit contains the most extensive provisions to date. They include increased permittee responsibilities for inspections, monitoring, and the implementation of programs to satisfy Total Maximum Daily Load (TMDL) regulations. The current Permit identifies 22 TMDLs that the City must comply with. Moreover, it is expected that additional TMDLs will be adopted during this Permit term in accordance with the CWA Section 303(d) that lists the impaired water bodies and pollutants and provides for a TMDL development schedule.

The TMDLs are for the Santa Monica Bay, Los Angeles River, Ballona Creek and Dominguez Channel watersheds. The twenty-two TMDLs that are in effect include:

- L.A. River Trash
- L.A. River Metals
- L.A. River Nutrients
- L.A. River Bacteria
- Ballona Creek Trash
- Ballona Creek Metals
- Ballona Creek Bacteria
- Ballona Creek Estuary Toxic Pollutants
- Ballona Creek Wetlands Sediment and Invasive Exotic Vegetation
- Echo Park Lake Nutrients, Organochlorine Pesticides and PCBs, and trash
- Lincoln Park Lake Nutrients and Trash
- Santa Monica Bay Beaches Bacteria (Dry Weather)
- Santa Monica Bay Beaches Bacteria (Wet Weather)
- Santa Monica Bay Nearshore Debris
- Santa Monica Bay DDTs and PCBs
- Marina Del Rey Back Basins Bacteria
- Marina Del Rey Harbor Toxics
- Machado Lake Trash
- Machado Lake Nutrient
- Machado Lake Toxics
- L.A. Harbor Bacteria
- Los Angeles and Long Beach Harbors Toxic and Metals

Since 2005, WPD has developed TMDL implementation plans that address stormwater quality impairments for several of the TMDLs that are in effect. The City is currently implementing the necessary measures to comply with the Trash TMDLs in the L.A. River, Ballona Creek and Dominguez Channel watersheds, the Bacteria TMDLs for Santa Monica Bay, the TMDLs for Machado Lake and Echo Park Lake, as well as other TMDLs.

4. Community Outreach Plan

As previously stated, Phase I of the One Water L.A. Plan is currently in its early development stage and will build upon the ongoing stakeholder engagement efforts of the Water IRP. The proposed community outreach plan will include extensive outreach to compile a stakeholder list to supplement the existing list of actively engaged organizations and individuals. These stakeholders will be asked to provide input during the development of the "One Water" guiding principles.

As part of the stakeholder outreach, the City will seek participation from Neighborhood Councils, environmental organizations, and community stakeholders. This will be achieved through presentations at Neighborhood Council and community meetings, extensive outreach at public events, as well as the use of social media and a dedicated website.

As of today, LASAN has conducted outreach at the Annual Neighborhood Council Congress and at the L.A. Green Festival. A stakeholder list is being compiled from these and numerous upcoming meetings/events. A comprehensive stakeholder database will be developed and utilized throughout the development of the One Water L.A. Plan. Stakeholder workshops will begin in early 2014. Stakeholders will have the option to enlist through a tiered approach to allow for different levels of involvement. The following three tiers will be solicited:

1. Steering Group: Members will be actively involved with the development of the plan; this level of participation will require the greatest commitment of time.
2. Advisory Group: Members will provide feedback and comments to the City and the Steering Group through a series of yet determined meetings; participation in this group will require a fair amount of time commitment.
3. Information Group: Members will be informed about the project through email updates, social media outlets and the website but members are not required to attend meetings or provide feedback to the process.

All stakeholders will be part of the One Water L.A. Implementation Team which will also include representatives from relevant City departments and will help guide the development of the One Water L.A. Plan.

Additionally, as part of the One Water L.A. outreach efforts, LASAN will be proposing a "One Water" Day at Council during which City Council and Board members can hear about water integrated planning past and future efforts. Coordination and planning among City Departments for *One Water Day* at Council is already underway.

If you have any questions or require further information, please contact me at (213) 485-2210, or have a member of your staff contact Mr. Ali Poosti, Division Manager of the Wastewater Engineering Services Division, at (323) 342-6228.

ECZ/AP:lm

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