October 25, 2016

The Honorable City Council
c/o Office of the City Clerk
Room 395, City Hall
Mail Stop 160

Attention: Councilmember Mitch O'Farrell
Chair, Arts, Parks and River Committee

Honorable Members:

Subject: Progress Update for Los Angeles River Revitalization Master Plan – Council Motion 16-0639 Recommendation No. 1

This report is in response to Recommendation No. 1 of the above motion (enclosed). The motion, requests Los Angeles Department of Water and Power (LADWP), in conjunction with other City Departments, to report on proposed and implemented major projects, programs, partnerships and investments to meet the goals and objectives of the Los Angeles River Revitalization Master Plan (LARRMP).

LADWP provided an oral report alongside other City Departments during the September 19, 2016, Arts, Parks and River Committee meeting. The content in this report is intended to memorialize the information presented at the Committee meeting.

Subsequent to the September 19, 2016 report, additional instructions were issued by the Committee relating to responsibilities, jurisdiction, strategic management, permitting and enforcement issues along the LA River. LADWP will continue to collaborate with other City Agencies to appropriately respond to all additional recommendations set forth by the Committee.

Background

The waters of the LA River have been important to the City since its beginning. Prior to channelization in the 1930s, much of the river was historically an ephemeral stream, appearing dry for most of the year and becoming full during storms, often expanding over the floodplain. Today, the LA River flows through the nation's second largest urban region from the San Fernando Valley into the Pacific Ocean.

For more than a decade, LADWP has worked closely with key City departments to support revitalization efforts of the LA River. The City has led a comprehensive and collaborative public process to inform the planning, design, implementation and decision-making related to the LA River's habitat and economic revitalization.

As the revitalization efforts move forward, LADWP will continue to play an active role.

I. Status of Major Projects and Programs

LADWP is continuously striving to implement stormwater capture and recycle water projects in conjunction with other local agencies and stakeholders that will augment the City's reliable local water supply.

Stormwater Capture Projects

Between 2006 and 2016, LADWP has contributed more than $84 million towards local and regional stormwater capture projects in the Upper Los Angeles River (ULAR) Watershed.

Stormwater capture projects in the ULAR Watershed augment local groundwater supply, improve stormwater runoff quality, attenuate peak flows in the LA River, provide for additional open space, increase recreational opportunities, and enhance habitat. These projects remove pollutants including bacteria, oil, grease, trash, sediments, and metals from the street and are part of the City's effort to protect our rivers and oceans. These projects also assist in meeting state and federal water quality Total Maximum Daily Load regulations.

Future projects are under development to further capture stormwater for local aquifer and water supply reliability and water quality improvements benefitting the LA River and the Pacific Ocean.

Since 2010, the City and its partners have implemented projects that have increased average stormwater capture capacity in the Upper LA River watershed by 11,000 acre-

feet per year (AFY). Additionally, over the next ten years, planned projects are expected to increase average stormwater capture in the ULAR watershed by 25,800 AFY. A list of these relevant stormwater capture projects and descriptions are provided in Appendix A.

Headworks Facility and the Headworks Restoration Project

The Headworks Reservoir Project, located adjacent to the LA River north of Griffith Park, replaces storage in LADWP's former Silver Lake and Ivanhoe Reservoirs. The Headworks Reservoir is divided into two portions, East and West Reservoirs, and has storage capacity for 125 million gallons of water.

The project is split into four phases. The final phase is the Headworks Ecosystem Restoration Project. LADWP and the United States Army Corps of Engineers (USACE) will partner on the Ecosystem Restoration Project.

The restoration efforts may include riparian wetlands, and open areas with additional bike path and improved equestrian and pedestrian access. The bike path along the Headworks Project will further the goal of complete bike-connectivity along the LA River. LADWP has been coordinating extensively on the bike path with LADOT. Proposed date of completion for the project is 2023.

II. Status of Major Partnerships

The City is a part of a complex multi-jurisdictional region. As such, implementing effective projects involves a collaborative effort between non-governmental organizations (NGO) and governmental agencies.

LA River Cooperation Committee (LARCC) - Water Focus Group

Coordinated by LADWP, the Water Focus Group (WFG) is a subset of the Staff Focus Group of LARCC. WFG was set up to provide water supply-related recommendations to LARCC on LA River projects. WFG will also inform the Adaptive Management process of USACE's LA River Ecosystem Restoration Projects.

WFG will provide a venue for discussion, planning, and recommendations specifically regarding water inputs and outputs, projects and infrastructure planning with regards to water supply in the LA River.

- There are seven participating agencies:
    - City of Los Angeles – Office of the Mayor

  - Los Angeles Department of Recreation and Parks
  - Los Angeles County Department of Public Works/Flood Control District
  - LADWP
  - LASAN
  - BOE
  - USACE

- The kickoff meeting took place June 2, 2016. WFG will meet regularly to support activities of LARCC.

Teaming Partners

LADWP regularly meets and collaborates with governmental agencies and NGOs to meet LARRMP goals. Partners include:

- BOE, LASAN
- City of Los Angeles Departments of City Planning, LADOT, Recreation and Parks
- Los Angeles County Flood Control District
- USACE
- Metropolitan Water District of Southern California
- Los Angeles Unified School District
- Council for Watershed Health
- TreePeople
- The River Project
- Los Angeles Beautification Team
- City of Los Angeles Recycled Water Advisory Group (stakeholder outreach)
- City of Los Angeles, One Water LA (stakeholder outreach)

The collaborative relationship depends on the scope and objective of the project and program. Partnership details for major projects are presented in the project descriptions in the attached appendix.

Interaction with Other Planning Documents

- Urban Water Management Plan
- Stormwater Capture Master Plan
- Recycled Water Master Planning Documents
- Water Conservation Potential Study
- One Water LA 2040 Plan
- Los Angeles Sustainable City pLAn

One Water LA Plan

Coordinated by LASAN, the City recently embarked on developing the One Water LA 2040 Plan. One Water LA is a collaborative interagency approach, co-led with LADWP, to develop an integrated framework for managing the City's watersheds, water resources, and water facilities in an environmentally, economically and socially beneficial manner.

LADWP continues to support the stakeholder engagement aspects of the planning process. To this end, participation by stakeholders in the City's Recycled Water Advisory Group (RWAG) was recently integrated with One Water LA stakeholder outreach. RWAG participants include over 70 stakeholder organizations who have been actively engaged with LADWP and the City team since 2009 to develop recycled water strategies and opportunities to increase local water supplies.

III. Status of Major Investments

Since 2005, LADWP has invested more than $7.3 million towards multiple planning efforts and studies which support LA River revitalization.

LA River Revitalization Master Plan (LARRMP) ($5.1 Million)

Completed in April 2007, the LARRMP was created to provide a 20-year blueprint for implementing a variety of improvements to the river that include goals of open space enhancements, improved water quality and preservation and enhancement of flood control. LADWP contributed $3 million toward the completion of the LARRMP. Subsequent to the initial $3 million contribution for the LARRMP, LADWP contributed an additional $900 thousand and $1.2 million for subsequent consultant services to develop studies and implementation planning.

US Army Corps' Ecosystem Restoration Feasibility Study ($1.35 Million)

As part of its joint effort with the City, USACE developed the LA River Ecosystem Restoration Feasibility Study. The Study is focused on a segment of the river between East San Fernando Valley and Downtown Los Angeles, known as the ARBOR stretch (Alternative with Restoration Benefits and Opportunities for Revitalization). The approximately 10-mile ARBOR stretch is subdivided into reaches with generally similar characteristics. Since 2010, LADWP contributed $1.35 million towards completion of this study.

Stormwater Capture Master Plan (SCMP) ($856,000)

LADWP's 2015 SCMP provides potential strategies for implementation of stormwater and watershed management programs, projects and policies in the City. In addition to local water supply development, future projects identified in the SCMP will benefit the LA River through peak flow attenuation, flood control, and water quality improvements.

SCMP provides project prioritization to economically maximize the benefit from future stormwater capture projects for water supply. LADWP has set forth goals to achieve stormwater capture of 68,000 AFY by the year 2035. SCMP also recommends a handful of future projects and programs to increase the City's current stormwater capture. LADWP invested $856 thousand in the development of SCMP.

If you have any questions or require further information, please contact me at (213) 367-1338, or have a member of your staff contact Ms. Winifred J. Yancy, Director of Legislative and Intergovernmental Affairs at (213) 367-0025.

Sincerely,

David H. Wright
General Manager

AAN/RV:yrg
Enclosures
c/enc: Councilmember Curren D. Price, Vice-Chair, Arts, Parks and River Committee
Councilmember Paul Koretz, Member
Councilmember Bob Blumenfield, Member
Councilmember David E. Ryu, Member
Mr. Eric Villanueva, Legislative Assistant

Ms. Winifred J. Yancy

Appendix A: Major Projects

Stormwater Capture Projects

Many of the stormwater capture projects led or supported by the Los Angeles Department of Water and Power (LADWP) have benefits for the Los Angeles River. These projects are located in the Upper Los Angeles (LA) River Watershed and provide multi-benefits such as peak flow attenuation, flood control, water supply and water quality enhancements.

Through joint collaborations or individual efforts, the City of Los Angeles (City) and its partner agencies and non-governmental organizations have worked to develop and implement a wide range of stormwater capture projects. The large centralized facilities include dams, spreading grounds and conveyance system. The smaller distributed facilities include sub-regional, neighborhood, and parcel based stormwater capture (i.e., parks, green streets, rain gardens, rain barrels, and cisterns.)

Since 2010, the City and its partners have implemented centralized and distributed stormwater capture projects that have increased average stormwater capture capacity in the Upper LA River Watershed by 11,000 acre-feet per year (AFY). Additionally, over the next ten years, planned centralized and distributed stormwater capture projects are expected to increase average stormwater capture in the Upper LA River Watershed by 25,800 AFY. Below project schedules and anticipated stormwater capture benefits are estimates and subject to change.

Completed Centralized Improvement Projects

Implemented centralized projects have increased the amount of stormwater captured by an average of 10,600 AFY in the Upper LA River Watershed. Below is a sample of recently implemented centralized projects:

Sheldon-Arleta Gas Management System
Completed in 2010. Scope included the installation of a methane gas abatement system mitigating methane migration during groundwater recharge operations at Tujunga Spreading Grounds. Project increases regional annual average stormwater recharge by 4,000 AFY.

Big Tujunga San Fernando Basin Groundwater Enhancement Project
Completed in 2011. Scope included the retrofit of the Big Tujunga Dam to meet state seismic and spillway requirements and increase the reservoir's storage capacity. Project increases regional annual average stormwater capture by 4,500 AFY.

Hansen Spreading Grounds Upgrade
Completed in 2013. Scope included combining and deepening the spreading basins as well as upgrading the intake structure to increase recharge capacity. Project increases regional annual average stormwater recharge by 2,100 AFY.

Completed Distributed Projects

The City's already implemented distributed projects have increased the amount of stormwater captured by an average of 424 AFY in the Upper LA River Watershed. Below is a sample of recently implemented distributed projects:

Sun Valley Economic Development Administration Public Improvements Project
Completed in 2016. Scope included the installation of 46 dry wells to capture, treat, and infiltrate stormwater. Project increases regional annual average stormwater capture by 93 AFY.

Oros Avenue Green Street and Stormwater Infiltration Project
Completed in 2008. Scope included installing vegetated swales in the parkway, and an underground retention system for infiltration at a park at the end of the street. Project increases regional annual average stormwater capture by 3 AFY.

Sun Valley Park Stormwater Infiltration Project
Completed in 2010. Scope included installing a stormwater pretreatment system, infiltration gallery, and retention system for infiltration. Project increases regional annual average stormwater capture by 30 AFY.

Los Angeles Zoo Green Parking Lot Stormwater Infiltration Project
Completed in 2011. Scope included installing pervious surfaces, vegetated swales, and an underground retention system for infiltration. Project increases regional annual average stormwater capture by 28 AFY.

Garvanza Park Stormwater Capture Use and Infiltration Project
Completed in 2011. Scope included installing a stormwater pretreatment system, infiltration gallery, and retention system for use at the Garvanza Park. Project increases regional annual average stormwater capture by 51 AFY.

Elmer Avenue Neighborhood Green Street/Elmer Paseo Green Alley Stormwater Infiltration Projects
Completed in 2011 and 2013. Scope for Elmer Avenue Green Street included installing stormwater underground retention infiltration system under the street, vegetated swales and rain gardens in the parkway and private property. Scope for Elmer Paseo Green Alley included installing underground retention infiltration system and vegetated swales to increase stormwater capture. Combined projects increase regional annual average stormwater capture by 23 AFY.

Riverdale Avenue Green Street Stormwater Infiltration Project
Completed in 2012. Scope included installing stormwater underground retention infiltration system under the sidewalk, and previous surfaces, vegetated swales and rain gardens in the parkway for infiltration. Project increases regional annual average stormwater capture by 7 AFY.

North Hollywood Alley Retrofit BMP Demonstration Project
Completed in 2013. Scope included retrofitting four alleys with pervious surfaces to facilitate stormwater infiltration. Project increases regional annual average stormwater capture by 29 AFY.

Glenoaks – Sunland Stormwater Infiltration Project
Completed in 2013. This project constructed dry wells and parkway infiltration swales along a portion of the sidewalks of Glenoaks Boulevard which currently have no storm drains. Project increases regional annual average stormwater capture by 28 AFY.

Ed P. Reyes River Greenway Project
Completed in 2014. Scope included installing stormwater underground retention system, previous surfaces, vegetated swales and rain gardens in the parkway for infiltration. Project increases regional annual average stormwater capture by 77 AFY.

Woodman Avenue Median Stormwater Infiltration Project
Completed in 2014. Scope included replacing an existing concrete median with vegetated swales and an underground retention system for infiltration. Project increases regional annual average stormwater capture by 55 AFY.

Future Centralized Projects
Within the next five years, 13 centralized projects are expected to be implemented in the Upper LA River Watershed that will provide an estimated 25,049 acre-feet (AF) of increased groundwater recharge annually. Below is a short description of these future projects:

Arundo Donax Removal Project
Construction in progress. Scope includes removing 57 acres of Arundo Donax, an invasive water intensive plant species, from the Big Tujunga and Little Tujunga Canyon watersheds. Project expected to increase regional annual average stormwater recharge by 1,140 AFY.

Tujunga Spreading Grounds Upgrade
Construction in progress. Scope includes consolidating and deepening existing spreading basins, installing two high-flow rubber dam intakes, and modifying the existing intake to remove sediments. Project expected to increase regional annual average stormwater recharge by 8,000 AFY.

Big Tujunga Dam Sediment Removal Project
Construction expected to begin in 2017. Scope includes removing sediment upstream of the Big Tujunga Dam in order to protect valves and increase storage capacity. Project expected to increase regional annual average stormwater capture by 500 AFY.

Pacoima Dam Sediment Removal Project
Construction expected to begin in 2017. Scope includes removing sediment upstream of the Pacoima Dam in order to protect valves and increase storage capacity. Project expected to increase regional annual average stormwater capture by 700 AFY.

Lopez Spreading Grounds Upgrade
Construction expected to begin in 2017. Scope includes expanding and deepening existing spreading basins, excavating sediment to improve infiltration rates, and improving the intake structure. Project expected to increase regional annual average stormwater recharge by 480 AFY.

Canterbury Power Line Easement Project
Construction expected to begin in 2018. Scope includes installing a series of stormwater infiltration basins in an existing power line easement. Project expected to increase regional annual average stormwater capture by 1,335 AFY.

Branford Spreading Basin Upgrade
Construction expected to begin in 2018. Scope includes installing a pump to divert water from the Branford Basin into the Tujunga Spreading Grounds. Project expected to increase regional annual average stormwater recharge by 590 AFY.

Pacoima Spreading Grounds Upgrade
Construction expected to begin in 2019. Scope includes consolidating existing spreading basins, excavating sediment to improve infiltration rates, and installing a new automated intake structure. Project expected to increase regional annual average stormwater recharge by 5,300 AFY.

Rory M. Shaw Wetlands Park Project (Strathern Pit)
Construction expected to begin in 2019. Scope includes constructing detention ponds and wetlands to store and treat stormwater runoff. Treated water will be pumped to Sun Valley Park for infiltration. Project expected to increase regional annual average stormwater recharge by 590 AFY.

Bull Creek Stormwater Capture Pipeline
Construction expected to begin in 2019. Scope includes installing a pipeline from Bull Creek to Pacoima Spreading Grounds to convey captured stormwater. Project expected to increase regional annual average stormwater capture by 3,000 AFY.

Lakeside Debris Basin Stormwater Capture Project
Construction expected to begin in 2019. Scope includes constructing stormwater storage upstream of the Van Norman Complex to increase utilization of the Bull Creek Stormwater Capture Pipeline. Project expected to increase regional annual average stormwater capture by 238 AFY.

East Valley Baseball Stormwater Capture Project
Construction expected to begin in 2019. Scope includes installing subterranean infiltration galleries at Strathern Park North to receive stormwater flow from Tujunga Spreading Grounds and local street gutters. Project expected to increase regional annual average stormwater capture by 868 AFY.

Van Norman Complex Stormwater Capture Project
Construction expected to begin in 2020. Scope includes constructing a reservoir upstream of the Lower San Fernando Dam to increase stormwater storage and increase the utilization of the Bull Creek Stormwater Capture Pipeline. Project expected to increase regional average annual stormwater capture by 2,308 AFY.

Future Distributed Projects

Within the next five years, 15 distributed projects are expected to be implemented in the Upper LA River Watershed that will provide an estimated 753 AF of increased groundwater recharge annually. Below is a short description of these future projects:

Laurel Canyon Boulevard Green Street Stormwater Infiltration Project
Construction in progress. Scope includes constructing a 1,400-foot long infiltration swale, drywells, and curb, gutter and sidewalk improvements. Project expected to increase regional annual average stormwater capture by 40 AFY.

Branford Street – Laurel Canyon to Pacoima Wash Stormwater Capture Project
Construction expected to begin in 2017. Scope includes the installation of drywells for stormwater capture and infiltration. Project expected to increase regional annual average stormwater capture by 55 AFY.

Bradley Green Alley
Construction expected to begin in 2017. Scope includes the revitalization of an existing alley with swales, pervious pavers, infiltration trenches, and dry wells. Project expected to increase regional average annual stormwater capture by 5 AFY.

Valley Generating Station Stormwater Capture Project
Construction expected to begin in 2017. Scope includes capturing and directing stormwater runoff through a series of recharge basins, swales and overflow culverts to strategic points on-site within one of LADWP's power generation facilities. Project expected to increase regional annual average stormwater capture by 32 AFY.

Albion Dairy Park Stormwater Capture and Use Project
Construction expected to begin in 2017. Scope included installing stormwater underground retention infiltration system, parkway vegetated swales, porous pavement in the parking lot, and simulated streams for stormwater capture use and infiltration at the park. Project increases regional annual average stormwater capture by 30 AFY.

Van Nuys Boulevard Great Street
Construction expected to begin in 2018. Scope includes the installation of swales and drywells for stormwater capture and infiltration. Project expected to increase regional annual average stormwater capture by 95 AFY.

Lankershim Boulevard Great Street
Construction expected to begin in 2018. Scope includes the installation of swales and drywells for stormwater capture and infiltration. Project expected to increase regional annual average stormwater capture by 105 AFY.

Glenoaks-Fillmore Stormwater Capture Project
Construction expected to begin in 2018. Scope includes the installation of drywells for stormwater capture and infiltration. Project expected to increase regional annual average stormwater capture by 86 AFY.

Agnes Avenue Stormwater Capture Project
Construction expected to begin in 2018. Scope includes the installation of drywells for stormwater capture and infiltration. Project expected to increase regional annual average stormwater capture by 60 AFY.

Whitnall Highway Power Line Easement/Whitnall Gardens Stormwater Capture Project
Construction expected to begin in 2018. Scope includes capturing stormwater runoff at several locations along the easement and directing flow into a network of swales, culverts, hydrodynamic separators and infiltration basins for pre-treatment and infiltration. Projects combined are expected to increase regional annual average stormwater capture by 95 AFY.

Burbank Boulevard Stormwater Capture Project
Construction expected to begin in 2019. Scope includes widening 0.7 miles of Burbank Boulevard to 70-feet for traffic and commerce conveyance improvements. The project will also install 20 drywells for stormwater capture and infiltration. Project expected to increase regional annual average stormwater capture by 53 AFY.

Glenoaks-Nettleton Stormwater Infiltration Project
Construction expected to begin in 2020. Scope includes constructing an 800-foot long infiltration swale to replace a concrete median. Project expected to increase regional annual average stormwater capture by 37 AFY.

Van Nuys Boulevard Median Stormwater Infiltration Project
Construction expected to begin in 2020. Scope includes directing flows through pre-treatment devices and into a vegetated swale that will replace the 1,200 foot long elevated median. Project expected to increase regional annual average stormwater capture by 35 AFY.

Victory-Goodland Median Stormwater Infiltration Project
Construction expected to begin in 2020. Scope includes directing flows through pre-treatment devices and into a vegetated swale that will replace the 1,400 foot long elevated median. Project expected to increase regional annual average stormwater capture by 25 AFY.

File No. 16-0639

ARTS, PARKS AND RIVER COMMITTEE REPORT relative to the progress reports from various City departments on the Los Angeles River Revitalization Master Plan (LARRMP).

Recommendations for Council action, as initiated by Motion (O'Farrell - Blumenfield - Martinez):

1. INSTRUCT the Department of Public Works, Bureau of Engineering, Bureau of Sanitation, Department of Water and Power, City Planning, Department of Recreation and Parks, and the Department of Transportation to report, in 60 days, on major projects, programs, partnership and investments implemented in their efforts to address the LARRMP.

2. INSTRUCT the Department of Recreation and Parks with the assistance of the Bureau of Engineering and the Office of the Chief Legislative Analyst (CLA), to report on the feasibility of expanding RAP's presence regarding recreation and park activities along the river.

3. DIRECT the CLA and the City Administrative Officer (CAO) with the collaboration of the necessary departments to:

    a. Report back on the current structure relating to all responsibilities and jurisdictions relative to the management and maintenance of the Los Angeles River and tributaries.

    b. Create a strategic management plan with the goal of recommending a clear management structure in order to carry out the functions of the City, County, and Federal governments.

    c. Make recommendations on a streamlined permitting structure for activities such as community events, recreational activities, programmatic or other activities as needed.

    d. Report back on the enforcement of Los Angeles Municipal Code 56.11, as it relates to the Los Angeles River and river adjacent areas. The report should include recommendations for any changes needed to clarify the jurisdictional and enforcement issues for the posting and cleanup of attended or unattended belongings or trash in the river or next to the river.

Fiscal Impact Statement: Neither the CAO nor the CLA has completed a financial analysis of this report.

Community Impact Statement: None submitted.

Summary:

On September 19, 2016, the Arts, Parks, and River Committee considered Motion (O'Farrell - Blumenfield - Martinez) relative to the progress reports from various City departments on the Los Angeles River Revitalization Master Plan.

Representatives from the Department of Transportation, Bureau of Engineering, Bureau of

Sanitation, City Planning, Recreation and Parks, Department of Water and Power, and the Mayor's office provided some background on the matter and responded to questions from the committee members. After consideration and having provided an opportunity for public comment, the Committee moved to recommend approval of the Motion, as amended, and detailed in the above recommendation. This matter is now submitted to Council for its consideration.

Respectfully Submitted,

ARTS, PARKS, AND RIVER COMMITTEE

MEMBER	VOTE
O'FARRELL:	YES
PRICE:	YES
KORETZ:	ABSENT
BLUMENFIELD:	YES
RYU:	YES

EV
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-NOT OFFICIAL UNTIL COUNCIL ACTS-