

Attachment

5

Greater Los Angeles County Region

*IRWM Implementation Grant Proposal
Schedule*

Attachment 5: Schedule of the *Greater Los Angeles County IRWM 2015 Solicitation Implementation Grant Proposal* (Proposal) is divided into two sub-sections:

- **Proposal Schedule:** Provides a summarized combined schedule for all of the 20 projects within this Proposal
- **Project Schedule Work Items:** Provides a detailed schedule for each project followed by language that provides a justification of individual task schedule dates presented in the Work Plans (Attachment 3) and Budgets (Attachment 4).

Proposal Schedule

A summary schedule for the Proposal is provided in the following table. The Proposal schedule shows the overall duration of each Project's Category (c) Plannign/ Design/ Engineering/ Environmental Documentation tasks in light green and each Project's Category (d) Construction/Implementation tasks in dark blue. Each project also lists the Bid Awarded date (if applicable) following the schedule bar.

It is recognized that the a Final Progress Report will be submitted to DWR within 90 days after the end of the Project (end of Category (d) Task 12) however, to highlight that **all of the projects** within this Proposal will be completed by October 31, 2019, this additional reporting time was not shown in Proposal Schedule. The full completion of Project reporting is included on the more detailed individual project schedules. The Proposal schedule also assumes a grant award date of December 1, 2015.

#	Project	2011	2012	2013	2014	2015	2016	2017	2018	2019	Bid Awarded
1	Franklin D. Roosevelt Park Regional BMP					■	■	■	■		Dec 1 2017
2	Advanced Water Meter Replacement					■	■	■	■	■	Mar 25 2016
3	Gateway Cities Rgnl Recycled Water System Expansion					■	■				N/A
4	Paramount Boulevard Turf Replacement Project					■	■				Mar 18 2016
5	Las Virgenes Creek Restoration – Phase II				■	■	■	■	■	■	Feb 24 2016
6	Calleguas-Las Virgenes Municipal Water Districts Interconnection					■	■	■			Jan 15 2016
7	Comprehensive Water Conservation Project					■	■	■	■		Apr 1 2016
8	Urban Streams Restoration in the Malibu Creek Watershed	■	■	■	■	■	■	■	■	■	N/A
9	Inglewood New Well No. 7				■	■	■	■			May 10 2016
10	Recycled Water for Palos Verdes Golf Course					■	■	■	■	■	Apr 17 2018
11	North Torrance Well Field– Phase III	■	■	■	■	■	■	■	■		Mar 7 2016
12	Upper Los Angeles River Big Tujunga Restoration & Arundo Eradication				■	■	■	■	■	■	Aug 24 2015
13	Nitrate Removal Treatment Facility at Well 2	■	■	■	■	■	■	■			Mar 31 2016
14	Hoover, Toll, & Keppel School Recycled Water Project	■	■	■	■	■	■	■			Jan 15 2016

Legend ■ Planning/Design/Engineering/Environmental/Solicitation ■ Construction/Implementation

#	Project	2011	2012	2013	2014	2015	2016	2017	2018	2019	Bid Awarded
15	Lopez Spreading Grounds Improvement										Sep 29 2016
16	Big Dalton Spreading Grounds Improvement										Jan 18 2018
17	Live Oak Well VOC Treatment Facility										Feb 16 2017
18	Centralized Groundwater Treatment System										Feb 1 2016
19	Southeast Water Efficiency Program										Feb 3 2016
20	Water LA Neighborhood Retrofits										Dec 1 2015

Legend Planning/Design/Engineering/Environmental/Solicitation Construction/Implementation

Project Schedule Work Items

Detailed schedules for each of the projects included within this Proposal are provided in the following sections followed by a justification for individual task schedule dates consistent with project Work Plans (Attachment 3) and Budgets (Attachment 4).

Franklin D. Roosevelt Park Regional BMP Project

Schedule

Project 1: Franklin D. Roosevelt Park Regional Best Management Practices (BMP) Project (Project)

The schedule presented is considered reasonable based on the current available information. The Franklin D. Roosevelt Park Regional BMP Project (Project) is currently in the 30% design phase and conducting pre-project monitoring to develop the baseline data. Geotechnical and environmental studies have been conducted and a Geotechnical Investigation Report was completed in 2013. The Project will have the construction bid awarded by December 1, 2017 and construction complete by June 1, 2019. The justification for each category of the schedule is provided below:

Category (a) Direct Project Administration

Task 1: Project Management – The Project will be implemented by the County of Los Angeles, Department of Public Works (LACDPW). LACDPW's Project Manager for the Project will be responsible for ensuring the necessary steps are underway to keep the Project on schedule and will be responsible for coordination between County Divisions including the Department of Parks and Recreation who owns the land where the construction will occur, and coordination with the applicant, Los Angeles County Flood County District (LACFCD). The schedule for grant application preparation was determined from the schedule provided in the consultant proposal. General project management began with the initiation of the Preliminary Design Concept (*January 1, 2015*) and will end after the Final Project Completion Report is submitted (*July 1, 2019*).

Task 2: Labor Compliance Program – LACDPW has a Labor Compliance Program in place. The implementation of the Labor Compliance Program will occur through the duration of the Project Construction (*December 1, 2017 – June 1, 2019*).

Task 3: Reporting – Quarterly Progress Reports will be produced by the LACDPW staff for the Project as required for grant funding beginning when the grant is awarded through the completion of the Project (*December 1, 2015 – June 1, 2019*). The Draft Completion Report will be submitted to DWR via LACFCD for review after project completion. A Final Project Completion Report will be prepared after receiving comments from LACFCD and DWR (*July 1, 2019*).

Category (b) Land Purchase/Easement**Task 4: Land Purchase**

No land acquisition or easements will be needed since the land is owned by the Los Angeles County Department of Parks and Recreation (a Project partner), therefore, this task does not apply to this project.

Category (c) Planning/Design/Engineering/ Environmental Documentation

Task 5: Feasibility Studies – Geotechnical and environmental studies were completed in 2013 and documented in a Geotechnical Investigation Report completed August 15, 2013.

Task 6: CEQA Documentation – A Mitigated Negative Declaration (MND) is expected for the Project. An Initial Study will be conducted starting August 3, 2015. It is expected that it will take approximately 2 years (*August 3, 2015 – June 1, 2017*) to complete the Initial Study, prepare and circulate the draft MND for public review, respond to comments, and prepare a Final MND. A Notice of Declaration will be filed before the bid package is prepared for the Project in July 2017.

Task 7: Permitting – No permits are required for the Project. The Project will be constructed on land owned by the Los Angeles County Department of Parks and Recreation, who is partnering with LACDPW in this effort.

Task 8: Design – The Preliminary Design Concept was completed June 25, 2015. The Project is currently in the 30% design stage. This stage will be complete by December 31, 2015. There will be a 5 month-gap before 90% design begins to allow time for the Board of Supervisors to delegate the authority to LACDPW to advertise and award the

Franklin D. Roosevelt Park Regional BMP Project**Schedule**

final design. The 90% design stage will begin June 1, 2016 and be complete by April 28, 2017, with 100% design following from May 1, 2017 to June 30, 2017. All design will be complete before construction contracting begins.

Task 9: Project Performance Monitoring Plan – In order to help ensure the Project will meet its intended benefits, a Project Performance Monitoring Plan will be developed. The Project Performance Monitoring Plan will be prepared during the construction contracting stage of the Project (*July 1, 2017 – October 31, 2017*). Pre-Project monitoring results will be used as baseline conditions for the monitoring plan.

Category (d) Construction/Implementation

Task 10: Contract Services – Preparation of the construction bid package will begin after the final design is complete (*July 3, 2017*). The bid will be advertised for approximately one month followed by a 2-month evaluation of the bids. The contract will be awarded and Notice to Proceed (NTP) issued by December 1, 2017.

Task 11: Construction Administration – Construction administration and management activities will be ongoing for the duration of construction beginning when NTP is issued and continuing until demobilization is complete (*December 1, 2017 – June 1, 2019*).

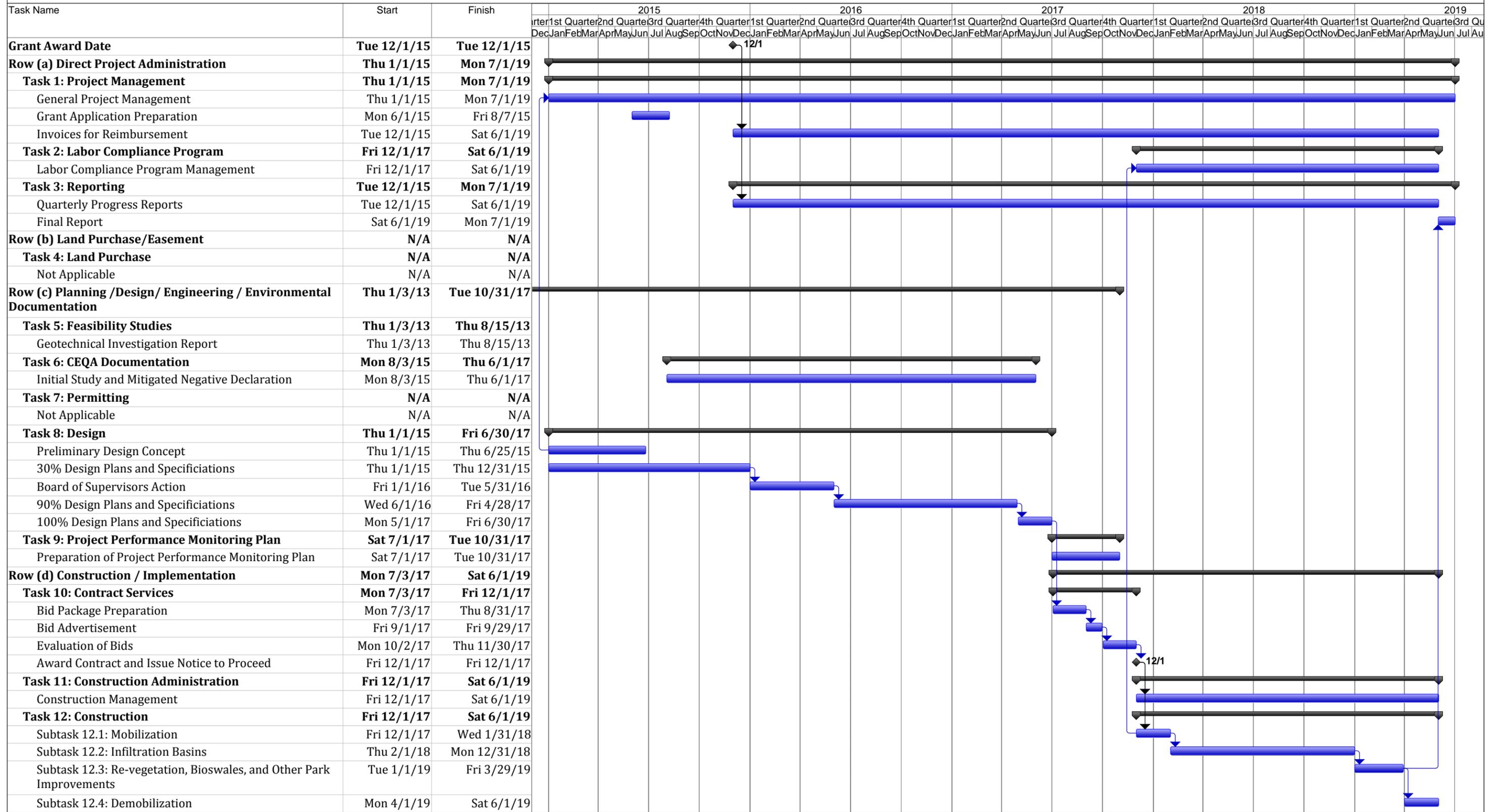
Task 12: Construction

Subtask 12.1: Mobilization – The Contractor will mobilize the site following NTP December 1, 2017.

Subtask 12.2: Infiltration Basins – Approximately two months after mobilization begins, the contractor will begin site excavation and construction of the three infiltration basins. The construction will occur for approximately 11 months (*February 1, 2018 – December 31, 2018*).

Subtask 12.3: Re-vegetation, Bioswales, and Other Park Improvements – Following construction of the infiltration galleries, the Project site will be re-vegetated, bioswales will be installed, and walkway improvements and educational signage will be added over a period of approximately 3 months (*January 1, 2019 – March 29, 2019*).

Subtask 12.4: Demobilization – Following the completion of all components of construction and re-vegetation, the site will be demobilized. This process will take approximately two months, ending June 1, 2019.



Task Milestone Summary

Advanced Water Meter Replacement Project**Schedule****Project 2: Advanced Water Meter Replacement Project**

The schedule presented is considered reasonable based on the current available information. The Advanced Water Meter (AMR) Replacement Project (Project) will award contracts prior to April 1, 2016. With the grant agreement execution in December 2015, the 12 participating agencies (Agencies) will be able to develop agreements and a bid process for the Project and will have the AMR units installed within a 24-month period. With all AMR units installed by July 2018, it is reasonable to assume that all identified leaks can be identified and repaired within a year (by *July 12, 2019*), well before October 31, 2019.

The schedule is achievable because the Project will be modeled after another successful program, the Gateway Regional Advanced Meter Infrastructure (AMI) Program (AMI Program), which helps to facilitate the implementation tasks for this Project. This provides high confidence that the task durations are reasonable. The justification for each category of the schedule is provided below:

Category (a) Direct Project Administration

Task 1: Project Management – The Project will be performed under the direction of Gateway Water Management Agency (GWMA), who will provide administrative, environmental and reporting assistance as needed. GWMA's project manager will be responsible for ensuring tasks are underway and will coordinate with the Agencies. The schedule for grant application preparation was determined from the schedule provided in the consultant proposal. The Project schedule is also based on a previous timeframe that was developed for the AMI Program. Project Management begins with the grant application preparation (*June 1, 2015*) and ends when the final invoice is submitted after all of the AMR units have been installed (*July 11, 2018*).

Task 2: Labor Compliance Program – The Agencies have Labor Compliance Programs in place. Implementation of the Labor Compliance Programs will occur through the duration of the Project implementation, until all of the AMR units have been installed since a vendor will not be required to repair the leaks (*July 11, 2016 – July 11, 2018*).

Task 3: Reporting – GWMA's project manager will compile the Quarterly Progress and Draft and Final Project Completion Reports from the Agencies to ensure timely submission to DWR via LACFCD. These reports will begin the first quarter the grant is awarded (*December 1, 2015*). The Draft Project Completion Report will be submitted to DWR via LACFCD for review within 90 days of project completion (August 23, 2019). A Final Project Completion Report will be prepared after receiving comments from LACFCD and DWR (*September 20, 2019*).

Category (b) Land Purchase/Easement

Task 4: Land Purchase/Easement – No land acquisition or easements will be needed, therefore, this task does not apply to this Project.

Category (c) Planning/Design/Engineering/ Environmental Documentation

Task 5: Feasibility Studies – This Project was modeled after the AMI Program, therefore, assessments and feasibility studies were not required in preparation for this Project.

Task 6: CEQA Documentation – This Project is categorically exempt under CEQA, therefore, a Categorical Exemption will be filed 30 days prior to the beginning of field work (*May 24, 2016 – June 13, 2016*).

Task 7: Permitting – This task does not apply to this Project since the new advanced meters will be replacing existing water meters on city owned property.

Task 8: Design – This Project does not require the preparation of designs, therefore, this task does not apply to this Project.

Advanced Water Meter Replacement Project**Schedule**

Task 9: Project Performance Monitoring Plan – In order to help ensure the Project will meet its intended benefit, the Project Performance Monitoring Plan will be developed. After the grant has been awarded, the development of the Project Performance Monitoring Plan will begin (*January 4, 2016 – April 29, 2016*). Since this Project is based on the AMI Program, information will be updated based on the results of that program.

Category (d) Construction/Implementation

Task 10: Contract Services – Each participating agency will begin soliciting proposals shortly after the grant award date (*December 28, 2015*). Since there are 12 participating agencies, 12 proposals will need to be solicited for award in order to have enough vendors to efficiently install the AMR units throughout the Project area. Each participating agency will be given three months to ensure that all vendors have been secured which includes preparing the bid for solicitation and awarding of contracts. All of the contracts will be awarded by March 25, 2016. An additional three months is allowed to issue all notices to proceed (*June 10, 2016*). GWMA's project manager will be overseeing this entire process to ensure all contractors have been hired.

Task 11: Implementation Administration – The GWMA field technician will assist with implementation management activities by reporting on the installation of the work performed by contractors or any staff members starting at the beginning of implementation (*July 11, 2016*). These activities will be complete after all of the meters have been installed (*July 11, 2018*).

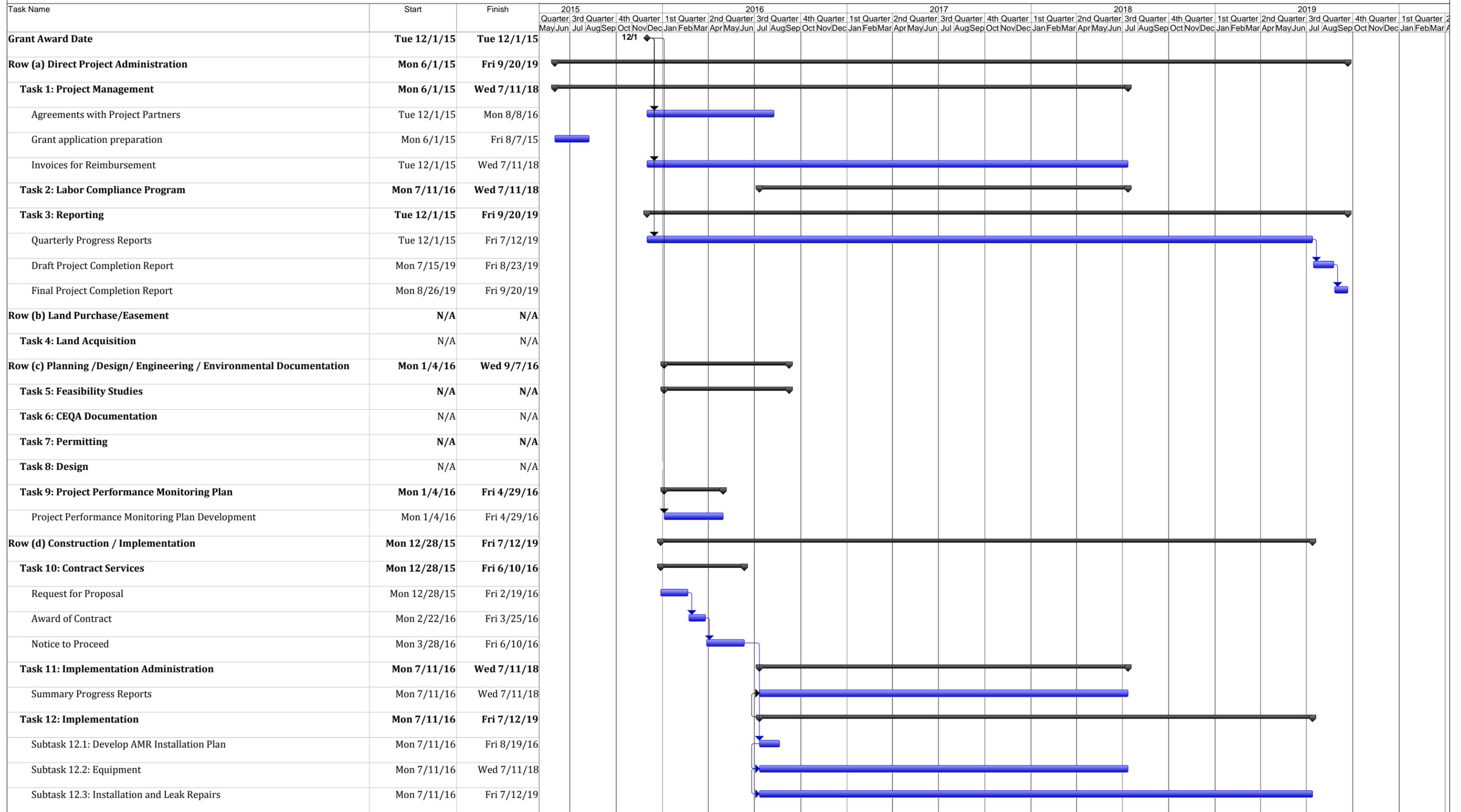
Task 12: Implementation

Since there are 12 agencies participating in the Project, there will be different timeframes that each agency will require in order to prepare the Installation Plan, obtain the required equipment, and install and test the AMR units. In addition, the Project assumes a 12 month window to review of baseline AMR data to identify leaks and then to complete necessary leak repairs.

Subtask 12.1: Installation Plan Preparation – The contracted vendors will gather information from each of the participating agencies in order to develop the Installation Plan, which will lay out the general sequence and schedule of work for implementation. This plan will begin on July 11, 2016 and allow time for each vendor to collect the information needed, develop a schedule of installation, and have the plans approved by each respective agency and GWMA. Each agency will need to have developed and approved their Installation Plans by August 19, 2016.

Subtask 12.2: Equipment – In concurrence with the Installation Plan, the contracted vendors will begin the preparation of obtaining the equipment needed for implementation (*July 11, 2016*). Shipment of the AMR units will coincide and be available ahead of the installation schedule. Each vendor and agency will have approximately 24 months to obtain all of the required equipment for installation (*ending July 11, 2018*).

Subtask 12.3: Installation and Leak Repair – The contracted vendors will install the new AMR units after preparing the Installation Plan and obtaining the equipment for each agency. In addition to installation, the contracted vendors will test each unit to ensure proper functionality. Each vendor will have approximately 24 months to install and test each AMR unit (*July 11, 2016 – July 11, 2018*). The Project assumes 12 months window to review of baseline AMR data to identify leaks and then to complete necessary leak repairs (*July 12, 2019*).



Task Milestone Summary

**Gateway Cities Regional Recycled Water System
Expansion Project**

Schedule

Project 3: Gateway Cities Regional Recycled Water System Expansion Project

The schedule presented is considered reasonable based on the current available information. The Gateway City Regional Recycled Water System (Project)¹ is currently in the very early stages of the project and design has yet to be started. The feasibility studies are expected to start in December of this year, 2015. Design is expected to begin in April, 2016 and will be completed by December 1, 2016. The proponent does not intend to complete construction with this solicitation. The justification for each category of the schedule is provided below:

Category (a) Direct Project Administration

Task 1: Project Management – The Project will be implemented by the City of South Gate (City), in partnership with the City of Bell Gardens, the City of Lynwood, and the Central Basin Municipal Water District (CBMWD). The City's Project Manager will be responsible for ensuring the necessary steps are underway to keep the Project on schedule and will be responsible for coordination with the applicant, the Los Angeles County Flood Control District (LACFCD). The schedule for grant application preparation was determined from the schedule provided in the consultant proposal. Project and grant administration begins with the grant application preparation (*June 1, 2015*) and ends after the Final Completion Report is submitted (*June 1, 2017*).

Task 2: Labor Compliance Program – Not applicable.

Task 3: Reporting – Quarterly Progress Reports will be produced by the City staff for the Project as required for grant funding, beginning when the grant is awarded through the completion of the Project Design (*June 1, 2017*). The Draft Completion Report will be submitted to DWR via LACFCD for review approximately 2 months after project completion. A Final Completion Report will be prepared after receiving comments from LACFCD and DWR.

Category (b) Land Purchase/Easement

Task 4: Land Purchase – No land acquisition or easements will be needed since the land is owned by the City.

Category (c) Planning/Design/Engineering/ Environmental Documentation

Task 5: Feasibility Studies – The *Determination of Irrigation Water Demand for Facilities to be Served with Recycled (Title 22) Water in the Cities of Bell Gardens, Lynwood, and South Gate* Technical Memorandum was completed on July 10, 2015. Based on this analysis, a Feasibility Study/Basis of Design Report will begin on December 1, 2015 and end on April 1, 2016.

Task 6: CEQA Documentation – The CEQA process will be initiated on June 1, 2016 with a "Notice of Intent" and preparation of an Initial Study checklist. The Initial Study will be conducted between June 1, 2016 and September 2, 2016.

Task 7: Permitting – It is known that two permits will be required for the Project from the County of Los Angeles Department of Public Health and Los Angeles County Sanitation Districts. These permits will be applied for during the Project design phase, beginning April 4, 2016, and are expected to be obtained by December 1, 2016.

¹ For the purposes of this grant application, the term "Project" is used to refer to the design and environmental work that is seeking funding under the Proposition 84, Final Solicitation Round. The term "Construction Project" is used to refer to the construction phase, which will occur later and is not seeking funding under this round.

**Gateway Cities Regional Recycled Water System
Expansion Project**

Task 8: Design – Design documents are made up of a number of deliverables, including the, aerial survey and topographic base maps, geotechnical investigations, utility research and field investigation, 30% design packet (including contract documents, drawings and specifications), 60% design packet, 90% design packet, preliminary cost estimates, 100% plans and specifications, and contract documents. The utility research and field investigation began on June 1, 2015 and is scheduled to end on December 1, 2015. The aerial survey, base maps and geotechnical investigation will both begin on December 1, 2015 and end by March 1, 2016. The design plans and specifications the Project is expected to begin on April 4, 2016 and to be completed on December 1, 2016.

Task 9: Project Performance Monitoring Plan

This task is not applicable because this grant will be only used for planning, design, specifications, and environmental documents.

Category (d) Construction/Implementation**Task 10: Contract Services**

This task is not applicable because this grant will be only used for planning, design, specifications, and environmental documents.

Task 11: Construction Administration

This task is not applicable because this grant will be only used for planning, design, specifications, and environmental documents.

Task 12: Construction/Implementation

This task is not applicable because this grant will be only used for planning, design, specifications, and environmental documents.

Paramount Boulevard Turf Replacement Project**Schedule****Project 4: Paramount Boulevard Turf Replacement Project**

The schedule presented is considered reasonable based on the current available information. The Paramount Boulevard Turf Replacement Project (Project) will be ready to proceed prior to April 1, 2016 with the construction bid awarded by March 11, 2016. With the grant agreement execution on December 1, 2015, the City of Lakewood (City) will have the project completed by August 29, 2016. The justification for each category of the schedule is provided below:

Category (a) Direct Project Administration

Task 1: Project Management – The Project will be implemented by the City, and the City’s project manager will be responsible for ensuring that the Project is on schedule and will coordinate with the consultants necessary for successful implementation. The schedule for grant application preparation was determined from the schedule provided in the consultant proposal. Project Management begins with the grant application preparation (*June 1, 2015*) and ends after the final invoice for reimbursement is submitted and demolition has been completed (*August 29, 2016*).

Task 2: Labor Compliance Program – The City has an ongoing Labor Compliance Program in place. The implementation of the Labor Compliance Program will occur through the duration of the Project construction as the contractor will submit all certified employee payrolls (*March 28, 2016 – August 22, 2016*).

Task 3: Reporting – Quarterly Progress Reports will be produced by the City’s staff for the Project as required for grant funding beginning when the grant is awarded through the completion of the Project (*December 1, 2015 – August 29, 2016*). The Draft Project Completion Report will be submitted to DWR via LACFCD for review approximately one month after Project completion. A Final Project Completion Report will be prepared after receiving comments from LACFCD and DWR (*November 7, 2016*).

Category (b) Land Purchase/Easement

Task 4: Land Purchase/Easement - No land acquisition or easements will be needed, therefore, this task does not apply to this Project.

Category (c) Planning/Design/Engineering/ Environmental Documentation

Task 5: Feasibility Studies – A Field Analysis Report will be prepared prior to construction based on results of field analyses and meetings with the public (*October 5, 2015 – October 23, 2015*).

Task 6: CEQA Documentation – This Project is considered categorically exempt under CEQA. Therefore, the City will prepare and submit documentation for Categorical Exempt Sections 15301 Existing Facilities and 15304 Minor Alterations to Land (*October 1, 2015 – January 13, 2016*).

Task 7: Permitting – This task does not apply to this Project since the City owns the land.

Task 8: Design – The construction and design documents will be prepared by consultants and submitted to the local governing agency for review and approval. It is estimated that approximately two months will be needed to complete the 60%, 90%, and 100% design submittals (*November 2, 2015 – January 8, 2016*).

Task 9: Project Performance Monitoring Plan – In order to help ensure the Project will meet its intended benefit, the Project Performance Monitoring Plan will be developed. The Project Performance Monitoring Plan preparation will begin development on January 15, 2016 and will end on March 10, 2016.

Paramount Boulevard Turf Replacement Project

Schedule

Category (d) Construction/Implementation

Task 10: Contract Services – The City will begin soliciting bid proposals shortly after design is completed (*January 11, 2016*). The bid will be advertised for approximately one month followed by a two week evaluation of bids. The contract will be awarded and the Notice to Proceed will be issued by March 25, 2016.

Task 11: Construction Administration – Construction administration and management activities will be ongoing for the duration of construction beginning when the City issues the Notice to Proceed to the contractor and continuing until demobilization is complete (*April 4, 2016 – August 29, 2016*).

Task 12: Construction

Subtask 12.1: Mobilization and Site Preparation – The City’s consultant will conduct field observations and the contractor will mobilize and prepare the site for construction (*April 4, 2016 – May 4, 2016*).

Subtask 12.2: Project Construction – The contractor will begin the removal of turf, irrigation equipment, declining trees, and begin soil excavation on May 5, 2016. The procurement of materials and equipment needed for the irrigation system, the non-planting area, and the trees and planting material will happen concurrently with the installation of these components, as the contractor sees fit. This subtask will take approximately two and half months to complete (*July 13, 2016*).

Subtask 12.3: Performance Testing and Demobilization – The final field observation and demobilization will occur starting on July 14, 2016 and continue until August 29, 2016. During this time, the contractor will ensure the new irrigation system is working properly by performing tests.

Las Virgenes Creek Restoration Project – Phase II**Schedule****Project 5: Las Virgenes Creek Restoration Project – Phase II**

The schedule presented is considered reasonable based on the current available information. The Las Virgenes Creek Restoration Project – Phase II (Project) will start construction activities on January 4, 2016 and the Project will be completed by October 31, 2019. The Project will be implemented by the City of Calabasas (City) in partnership with the Mountains Restoration Trust (MRT). The justification for each category of the schedule is provided below:

Category (a) Direct Project Administration

Task 1: Project Management – The Project will be implemented by the City in partnership with MRT. The City's Project Manager will be responsible for ensuring the necessary steps are underway to keep the Project on schedule and will be responsible for coordination with the applicant, the Los Angeles County Flood Control District (LACFCD). The schedule includes the grant application preparation period of *June 1, 2015 through August 7, 2015* and preparing invoices for reimbursement (*December 1, 2015 through August 2, 2019*). Project management and grant administration, including grant application preparation, began on *June 1, 2015* and will end after the Final Completion Report is submitted (*October 31, 2019*).

Task 2: Labor Compliance Program – The City's Labor Compliance Program will be included in the project specifications and will be managed through the duration of the Project Construction (*January 4, 2016 – September 6, 2019*).

Task 3: Reporting – Quarterly Progress Reports will be produced by City and MRT staff for the Project as required for grant funding beginning when the grant is awarded through the completion of the Project (*December 1, 2015 – September 6, 2019*). The Draft Project Completion Report will be submitted to DWR via LACFCD for review approximately 1 month after project completion. A Final Project Completion Report will be prepared after receiving comments from LACFCD and DWR (*October 31, 2019*).

Category (b) Land Purchase/Easement

Task 4: Land Acquisition – No land acquisition or easements will be needed for the Project.

Category (c) Planning/Design/Engineering/ Environmental Documentation

Task 5: Feasibility Studies – The City commenced work on the *Feasibility Study* on June 1, 2014; it was completed on September 15, 2014. The *Geotechnical Evaluations* were completed on December 15, 2014 and the *Land Surveying and Site Evaluation* was completed on January 9, 2015.

Task 6: CEQA Documentation – The Initial Study and Mitigated Negative Declaration work began on August 3, 2015 and should be completed by December 16, 2015. If applicable, the Mitigation Monitoring and Reporting Program will be managed throughout the duration of project construction (*January 4, 2016 – September 6, 2019*).

Task 7: Permitting – Six permits may be required for the Project: Clearance for In-Stream Barriers and Crayfish Trapping from the California Department of Fish and Wildlife; Section 10 Consultation from the US Fish and Wildlife Service; Flood Control Permit from the County of Los Angeles; Section 404 Permit from the Army Corps of Engineers; 1600 Stream Alteration Permit from the CDFW; a Section 401 Water Quality Certification from the Regional Water Quality Control Board; and a Stormwater Pollution Prevention Plan (SWPPP). The Clearance for In-Stream Barriers and Crayfish Trapping process began on April 1, 2014; Clearance was acquired on June 26, 2014. The Section 10 permit, if needed, will be acquired by December 28, 2015, the Flood Control Permit, if needed, will be acquired by February 29, 2016, and the Section 404, if needed, and 1600 Permits will be acquired by March 1, 2016. The SWPPP will be developed by December 1, 2015, prior to the start of construction. The Section 401 Certification will be obtained around the same time period (*October 1, 2015 – March 1, 2016*).

Las Virgenes Creek Restoration Project – Phase II

Task 8: Design – Work on the 30% Design Packet began on December 1, 2014 and was completed on March 2, 2015. The 60% Design Packet will be completed by August 19, 2015; the 90% Design Packet will be completed by October 5, 2015, and the 100% Design Packet will be completed by January 4, 2016, prior to the start of construction.

Task 9: Project Performance Monitoring Plan – In order to help ensure the Project will meet its intended benefits, a Project Performance Monitoring Plan will be developed. The Project Performance Monitoring Plan will be prepared during the Design phase (*August 3, 2015 – January 1, 2016*).

Category (d) Construction/Implementation

Task 10: Contract Services – The Project involves preparation of multiple bid packages. Preparation of construction bid packages will begin on October 15, 2015. The bid packages will be advertised November 16, 2015 for approximately two months followed by a one month evaluation of the bids (schedule indicates two months to allow for evaluation of the multiple bid packages). Contracts will be awarded between December 21, 2015 and February 24, 2016. Notices to Proceed (NTP) will be awarded between December 30, 2015 and March 4, 2016 to coincide with the beginning of the Pre-Migratory Bird Mobilization and Site Preparation task (Task 12.1) and the Creek Restoration and Bank Stabilization task (Task 12.3).

Task 11: Construction Administration – Construction administration and management activities will be ongoing for the duration of construction beginning after the first NTP is issued and will continue until all Construction activities are complete (*January 4, 2016 – September 6, 2019*).

Task 12: Construction

Subtask 12.1: Pre-Migratory Bird Mobilization and Site Preparation – The contractors will prepare the site to minimize impacts to migratory birds prior to the beginning of Pre-Construction Mobilization and Staging (*January 4, 2016 – March 7, 2016*).

Subtask 12.2: Pre-Construction Mobilization and Staging – Pre-Construction Mobilization and Staging will begin when Pre-Migratory Bird Mobilization and Site Preparation ends and will run for seven months (*March 8, 2016 – October 14, 2016*).

Subtask 12.3: Creek Restoration and Bank Stabilization – Approximately one month after Pre-Construction Mobilization and Staging begins, the contractors and MRT will begin Creek Restoration and Bank Stabilization activities. Construction will run concurrently with Mobilization (Task 12.2) for roughly six months, but these two activities will be occurring on different portions of the Project area. Creek Restoration and Bank Stabilization activities will occur for 3.5 years (*April 1, 2016 – September 2, 2019*).

Subtask 12.4: Demobilization – The contractors and MRT will begin Demobilization activities on certain portions of the Project area prior to the end of Creek Restoration and Bank Stabilization so that Demobilization activities will be completed approximately one week after Creek Restoration and Bank Stabilization is complete (*August 1, 2019- September 6, 2019*).

Calleguas – Las Virgenes MWD Interconnection Project

Schedule

Project 6: Calleguas – Las Virgenes Municipal Water District Interconnection Project

The schedule presented is considered reasonable based on the current available information. The Project will award a construction bid by January 2016 and will be completed by the end of 2016. The justification for each category of the schedule is provided below:

Category (a) Direct Project Administration

Task 1: Project Management – The Project will be implemented by LVMWD for the work to be constructed in Los Angeles County; and the work in Ventura County will be implemented by CMWD. The schedule for grant application preparation is anticipated to take place from June 1, 2015 through August 7, 2015. Project administration will begin with the receipt of the grant and end after the Final Completion Report is submitted in March 2017.

Task 2: Labor Compliance Program – Documentation for Labor Compliance Program (LCP) will be included in the project specifications and will be managed by the LVMWD project manager through the duration of the Project Construction. The project manager will coordinate with CMWD to assure labor compliance requirements are met.

Task 3: Reporting – Quarterly Progress Reports will be produced by LVMWD staff in cooperation with Project partners as required for grant funding, beginning when the grant is awarded through the completion of the Project from December 1, 2015 through June 2017. The Draft Project Completion Report will be submitted to DWR via LACFCD for review approximately 3 months after project completion. A Final Project Completion Report will be prepared after receiving comments from LACFCD and DWR.

Category (b) Land Purchase/Easement

Task 4: Land Purchase – Land purchase is not required for this project.

Category (c) Planning/Design/Engineering/ Environmental Documentation

Task 5: Feasibility Studies – The Final Preliminary Design Report is expected to be completed between June 1, 2015 and September 1, 2015. Both the *2014 Potable/Recycled Water Master Plan Updates* and the *2014 Las Virgenes-Calleguas Interconnection Study* have been completed.

Task 6: CEQA Documentation – The CEQA Mitigated Negative Declaration (MND) is expected to be completed between June 15, 2015 and October 2, 2015. A Notice of Completion is also anticipated by October 2015.

Task 7: Permitting – An Encroachment Permit will be required from the City of Westlake Village, and a permit will be required from the California Department of Public Health. These permits are expected to be obtained by December 2015. LVMWD will also be required to obtain an amendment to their Potable Water System Operating Permit from the State Water Resources Control Board (SWRCB), Department of Drinking Water (DDW) and a Stormwater Pollution Prevention Plan (SWPPP) during construction. These permits will be obtained between September 1, 2015 and December 1, 2015.

Task 8: Design – The Basis of Design Report, the Geotechnical Report, and the Topographical Report will be completed by October 2015. The drawings and specifications and updated cost estimates will be completed by December 2015 in anticipation of the start of construction in early 2016. The task is expected to be completed between September 1, 2015 and December 15, 2015.

Task 9: Project Performance Monitoring Plan – In order to help ensure the Project will meet its intended benefits, a Project Performance Monitoring Plan will be developed. The Project Performance Monitoring Plan will be prepared during the construction stages of the Project, from December 1, 2015 through December 1, 2016.

Calleguas – Las Virgenes MWD Interconnection Project**Category (d) Construction/Implementation**

Task 10: Contract Services – Construction contract services will be established prior to the start of construction. This task includes preparation of the final package for bids, advertising, and actual award and issuance of the Notice to Proceed (NTP). These activities will take place between December 15, 2015 and January 15, 2016. Award of bids is anticipated to occur in January 2016.

Task 11: Construction Administration – Construction administration and management activities will be ongoing for the duration of construction from December 15, 2015 through March 1, 2017.

Task 12: Construction

Subtask 12.1: Mobilization and Site Preparation – The Contractor will mobilize the site following NTP and will conduct mobilization activities for approximately one month in January 15, 2016 and February 15, 2016.

Subtask 12.2: Project Construction – Construction activities are assumed to begin after mobilization. The contractor will complete traffic control, saw cutting, trenching, pipe installation, pavement, restoration of striping, environmental compliance and will implement construction best management practices. Throughout construction, dust, noise, application of best management practices and environmental assessment recommendations will be monitored. The construction activities will occur for approximately one year from January 15, 2016 through December 15, 2016.

Subtask 12.3: Performance Testing and Demobilization – Demobilization is anticipated to occur during December 2016. After the contractor installs all pipeline, perform pressure testing, cleanup of the Project site and storage area, and a final walk through of the site for Project acceptance will occur. A final notice of completion letter will be issued at the end of demobilization activities. This task will be completed between November 11, 2016 and December 15, 2016.

Conservation Water Conservation Project

Schedule

Project 7: Comprehensive Water Conservation Project

The Comprehensive Water Conservation Project (Project) will award contracts by April 1, 2016. With the grant agreement execution in December 2015, the City of Malibu (City) will be able to develop agreements with its project partners (West Basin Municipal Water District (West Basin) and Los Angeles County Waterworks District #29 (District 29) for the Project and will have the entire project completed on June 29, 2018. The schedule is considered reasonable for this Project, as it is based on the SoCal Water Smart Program, which is a rebate program currently implemented by the Metropolitan Water District of Southern California (MWD). The justification for each category of the schedule is provided below:

Category (a) Direct Project Administration

Task 1: Project Management – The City will work with its funding partners throughout the Project to ensure schedule is met. The schedule for grant application preparation was determined from the schedule provided in the consultant proposal. Project Management begins with the grant application preparation (*June 1, 2015*) and ends after the final invoices for reimbursement are submitted (*June 29, 2018*).

Task 2: Labor Compliance Program – The City's, West Basin's, and District 29's Labor Compliance Program will be included in the project specifications and will be managed through the duration of the implementation for the hired consultants and vendors (*April 1, 2016 – June 29, 2018*).

Task 3: Reporting – The agencies will compile the Quarterly Progress and Draft and Final Completion Reports to ensure timely submission to DWR via LACFCD, with the help of a project manager. These reports will begin the first quarter the grant is awarded and last until the end of Project completion (*December 1, 2015 – June 29, 2018*). The Draft Final Completion Report will be submitted to DWR via LACFCD for review approximately two months after project completion (*August 29, 2018*). A Final Completion Report will be prepared after receiving comments from LACFCD and DWR (*September 26, 2018*).

Category (b) Land Purchase/Easement

Task 4: Land Purchase/Easement - No land acquisition or easements will be needed, therefore, this task does not apply to this Project.

Category (c) Planning/Design/Engineering/ Environmental Documentation

Task 5: Feasibility Studies – Feasibility studies were not required for this Project, since the Project components are successful conservation measures already in place throughout Southern California through MWD's SoCal Water Smart Program.

Task 6: CEQA Documentation – This Project is categorically exempt under CEQA, therefore, a Categorical Exemption will be filed prior to the beginning of implementation (*March 1, 2016 – April 29, 2016*) for the two rainwater harvesting cisterns.

Task 7: Permitting – The installation of the two large cisterns require City of Malibu permits which will be obtained by March 15, 2016.

Task 8: Design – The Rainwater Capture Systems Project Concept Report will be completed by January 13, 2016 and Rainwater Capture Systems Project Final Design Report will be completed by January 28, 2016.

Task 9: Project Performance Monitoring Plan –The Project Performance Monitoring Plan will be developed after the project manager has been hired during the first couple months of implementation (*April 21, 2016 – June 21, 2016*).

Conservation Water Conservation Project

Schedule

Category (d) Construction/Implementation

Task 10: Contract Services – West Basin will begin preparing the bid solicitation packages shortly after the grant award date (*December 29, 2015 – January 7, 2016*). The request for proposals for the remaining consultants and project manager will be issued by West Basin (*January 8, 2016 – February 12, 2016*). West Basin will evaluate the bids and send recommendations to the Board or Council in March, so that contracts can be awarded between March 30, 2016 and April 1, 2016. NTPs for all consultants and contractors will be issued by April 4, 2016.

The City will prepare the solicitation package for the design of the rainwater harvesting cisterns and post the request for proposals by November 13, 2015 with a one month response required (*December 15, 2015*). The design services contract will be scheduled for the December 28, 2015 City Council agenda with the NTP issued on December 29, 2015. The request for proposals for the construction bid package will be posted February 1, 2016 with bids due on March 1, 2016. The City Council will award the contract on March 28, 2016 with the Notice to Proceed issued by April 1, 2016.

Task 11: Construction Administration – Construction management and administration activities will be ongoing throughout the implementation of the Project (*February 5, 2016 – June 29, 2018*) beginning with District 29's review of customer water use (shown in Subtask 12.1). The project manager will assist with implementation of the Project and provide coordination between the agencies.

Task 12: Construction/Implementation*Subtask 12.1: Customer Targeting and Project Marketing*

District 29 will review initial customer water use starting on February 5, 2016 to determine a list of potential participants. Once smart meters are installed (shown in Subtask 12.4), District 29's review of those site's baseline water use will be completed and included within the Consumption Analysis Report (*ending on August 17, 2017*). Project marketing will be ongoing throughout implementation to ensure that residents are informed and up-to-date about the Project benefits, rebates, and incentives (*April 22, 2016 – June 29, 2018*).

Subtask 12.2: Rebate Implementation and Incentives

Shortly after the consultants are hired and project marketing has initiated, rebate processing and distribution will begin (*May 12, 2016 – June 29, 2018*). During the same time, educational materials will be passed out and classes and workshops will be held throughout the Project area.

Subtask 12.3: Equipment Procurement

This subtask will require the purchasing of equipment for the smart meter devices, showerheads, drip irrigation kits, and large rainwater harvesting cisterns. District 29 will purchase the smart meter devices starting on April 1, 2016 and lasting for four months (*ending August 8, 2016*). In order to expedite the process, West Basin will purchase the showerheads and drip irrigation kits on April 1, 2016. The two large rainwater-harvesting cisterns will be procured by the contractor selected by the City shortly after NTP has been issued.

Subtask 12.4: Installations

This subtask will include the installation of smart meter devices and the large rainwater harvesting cisterns. District 29 will install the smart meters from August 9, 2016 – June 20, 2017. Leaks can be identified and contact will be made with customers to have leaks repaired within a year (*by June 29, 2018*). The City's selected contractor will begin the installation of the two 10,000-gallon rainwater harvesting cisterns on June 1, 2016 with completion scheduled to end by July 1, 2017. This task should take approximately 12 months (*July 1, 2017*). All participating customers will install the high-efficiency showerheads and drip irrigation kits provided by West Basin by June 29, 2018.

Urban Streams Restoration in the Malibu Creek Watershed Project

Project 8: Urban Streams Restoration in the Malibu Creek Watershed

The schedule presented is considered reasonable based on the current available information. The Urban Streams Restoration in the Malibu Creek Watershed Project (Project) will start construction on April 1, 2016 and the Project will be completed by September 6, 2019. The justification for each category of the schedule is provided below:

Category (a) Direct Project Administration

Task 1: Project Management – The Project will be implemented by the Mountains Restoration Trust (MRT). MRT's Project Manager will be responsible for ensuring the necessary steps are underway to keep the Project on schedule and will be responsible for coordination with the applicant, the Los Angeles County Flood Control District (LACFCD). The schedule for grant application preparation was determined from the schedule provided in the consultant proposal (*June 1, 2015 – August 7, 2015*). Project and grant administration will begin in December (*December 1, 2015*) and end after the Final Completion Report is submitted (*October 31, 2019*).

Task 2: Labor Compliance Program – Not applicable. Labor Compliance Programs are required for Projects that will hire contractors to perform any work. All work performed on this Project will be completed by MRT staff and volunteers; no contractors will be hired. Thus, no Labor Compliance Program is needed for this Project.

Task 3: Reporting – Quarterly Progress Reports will be produced by MRT staff for the Project as required for grant funding beginning when the grant is awarded through the completion of the Project (*December 1, 2015 – September 6, 2019*). The Draft Project Completion Report will be submitted to DWR via LACFCD for review. A Final Project Completion Report will be prepared after receiving comments from LACFCD and DWR (*October 31, 2019*).

Category (b) Land Purchase/Easement

Task 4: Land Acquisition – No land acquisition or easements will be needed for the Project.

Category (c) Planning/Design/Engineering/ Environmental Documentation

Task 5: Feasibility Studies – MRT completed the *Floodplain Analysis* on December 14, 2011 and the *GIS Mapping* on February 4, 2013.

Task 6: CEQA Documentation – The Notice of Exemption for the Project will be acquired by April 1, 2016, which includes coordinating with Ventura County, the lead agency for CEQA documentation on the Project.

Task 7: Permitting – Three permits will be required for the Project: Clearance for In-Stream Barriers and Crayfish Trapping from the California Department of Fish and Wildlife (CDFW), an Encroachment Permit from Ventura County, and a 1603 Streambed Alteration Agreement from CDFW. The Clearance for In-Stream Barriers and Crayfish Trapping from CDFW was acquired June 26, 2014. The other two permits will be secured by April 1, 2016.

Task 8: Design – The *Landscape Design Plan* was completed November 1, 2012. The *Crayfish Barrier Plan* will be completed by March 1, 2016.

Task 9: Project Performance Monitoring Plan – In order to help ensure the Project will meet its intended benefits, a Project Performance Monitoring Plan will be developed. The Project Performance Monitoring Plan will be prepared prior to construction (*March 1, 2016 – April 1, 2016*).

Category (d) Construction/Implementation

Task 10: Contract Services – No contract services will be needed for the Project as all work will be performed by MRT staff and volunteers.

**Urban Streams Restoration in the Malibu Creek
Watershed Project**

Task 11: Construction Administration – Construction administration and management activities will be ongoing for the duration of construction (*April 1, 2016 – September 6, 2019*).

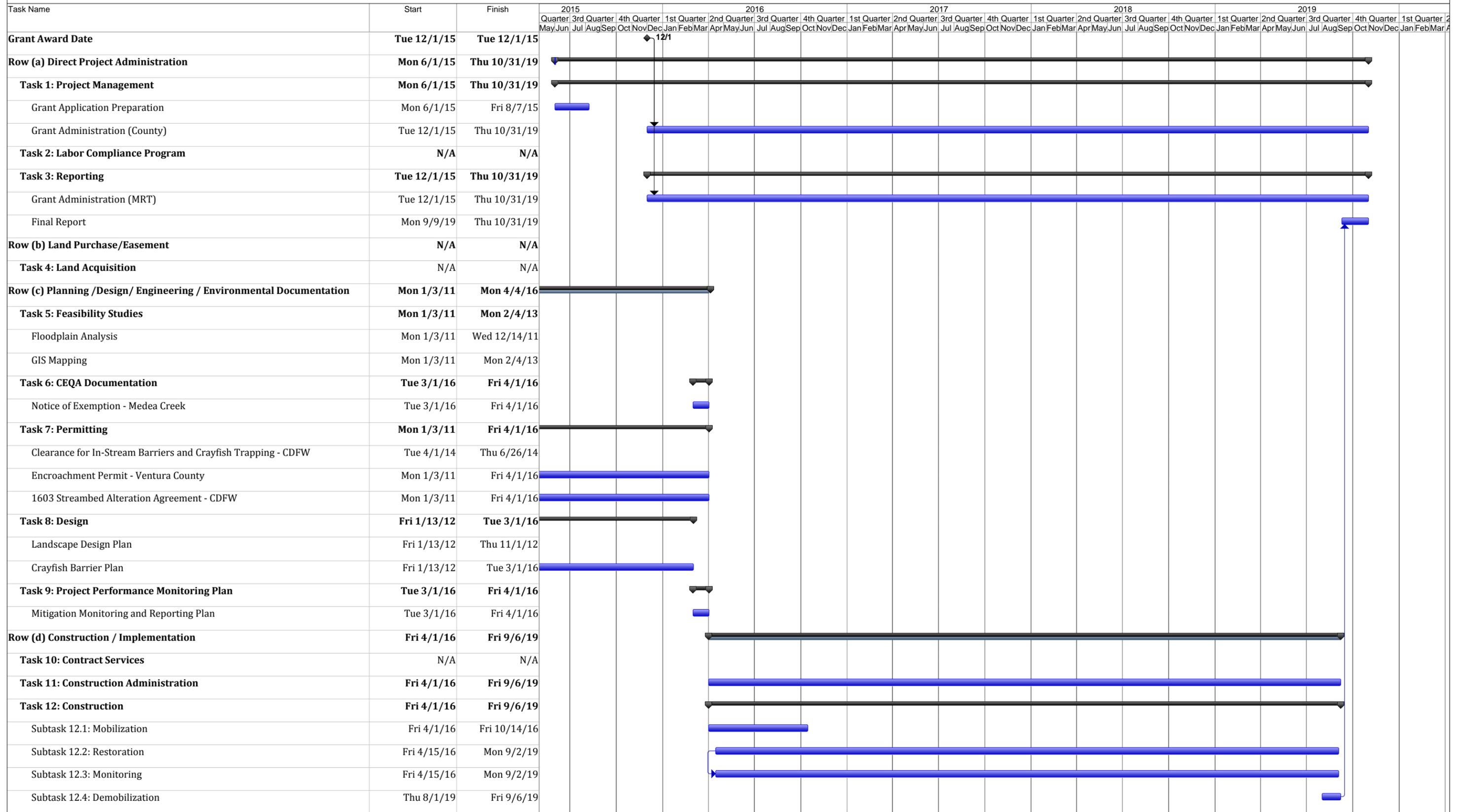
Task 12: Construction

Subtask 12.1: Mobilization – MRT staff and volunteers will mobilize the site for approximately 6 months (*April 1, 2016 – October 14, 2016*).

Subtask 12.2: Restoration – Approximately two weeks after mobilization begins, restoration activities will begin. For roughly 6 months, restoration will occur concurrently with mobilization. These activities will be occurring on different portions of the Creek. Restoration activities will occur for 3.5 years (*April 15, 2016 – September 2, 2019*).

Subtask 12.3: Monitoring – MRT will conduct monitoring activities, which will occur concurrently with restoration (*April 15, 2016 – September 2, 2019*).

Subtask 12.3: Demobilization – MRT staff and volunteers will begin demobilization activities on certain portions of the Creek prior to the end of restoration so that demobilization activities will be completed approximately one week after restoration is complete (*August 1, 2019- September 6, 2019*).



Task [Blue Bar] Milestone [Diamond] Summary [Thick Black Bar]

Inglewood New Well No. 7 Project**Schedule****Project 9: Inglewood New Well No 7**

The schedule presented is considered reasonable based on the current available information. The Well No. 7 Project (Project) will start design in July 2015, the construction bids will be awarded by May 2016, and the Project will be completed by May 2017. The justification for each category of the schedule is provided below:

Category (a) Direct Project Administration

Task 1: Project Management – The Project will be managed by the City of Inglewood (the City). The City's Project Manager will be responsible for ensuring the necessary steps are underway to keep the Project on schedule. The schedule for grant application preparation was determined from the schedule provided in the consultant proposal (*June 11, 2015 – August 7, 2015*). Project and grant administration will begin in December (*December 1, 2015*) and ends after the Final Completion Report is submitted (*October 2017*).

Task 2: Labor Compliance Program – The City's Labor Compliance Program will be included in the project specifications. The Program will be managed throughout the duration of the Project.

Task 3: Reporting – Quarterly Progress Reports will be produced by City staff for the Project as required for grant funding beginning when the grant is awarded through the completion of the Project (*December 1, 2015 – June 30, 2017*). The Draft Project Completion Report will be submitted to DWR for review approximately 2 months after project completion. A Final Project Completion Report will be prepared after receiving comments from DWR (*June 30, 2017*).

Category (b) Land Purchase/Easement

Task 4: Land Purchase – No land acquisition or easements will be needed since the land is owned by the City, therefore, this task does not apply to this Project.

Category (c) Planning/Design/Engineering/ Environmental Documentation

Task 5: Feasibility Studies – This task is complete. The City completed its Feasibility Study Report for Inglewood New Well No. 7 in April 2014.

Task 6: CEQA Documentation – This task is complete. A California Environmental Quality Act (CEQA) Mitigated Negative Declaration of Environmental Impacts (MNDEI) was completed and adopted in November 2014. The Notice of Determination was filed on December 17, 2014.

Task 7: Permitting – Two permits will be required for the Project: a New Well Permit and a National Pollutant Discharge Elimination System permit. These permit applications involve submitting similar information; and therefore, are expected to occur at the same time (*January 1, 2016 – March 31, 2016*).

Task 8: Design – The drawings and Project Specification will be completed by September 2015, the 50% Design Packet will be completed by November 2015, and the 100% Design Packet will be completed by January 2016.

Task 9: Project Performance Monitoring Plan – In order to help ensure the Project will meet its intended benefits, a Project Performance Monitoring Plan will be developed. The Project Performance Monitoring Plan will be prepared during the permit application and during the construction contracting stage of the Project (*January 2016 – March 2016*).

Inglewood New Well No. 7 Project

Schedule

Category (d) Construction/Implementation

Task 10: Contract Services – The City will develop a construction bid package by February 2016, which will be responded to in one month followed by a two-week evaluation of the proposals. The contract will be awarded on May 10, 2016 and the Notice to Proceed will be issued on May 31, 2016.

Task 11: Construction Administration – Construction administration and management activities (overseeing the contract agreements) will be ongoing for the duration of construction beginning after the NTP is issued and continuing until performance testing is complete (*August 1, 2016 – April 28, 2017*).

Task 12: Construction

Subtask 12.1: Mobilization and Site Preparation – Site access cannot be obtained until August 2016. The Contractor will mobilize to the site in August 2016 and spend one month setting up equipment, removing trees, and installing sound barriers (*August 1, 2016 – August 31, 2016*).

Subtask 12.2: Project Construction – Approximately one month after mobilization begins, the contractor will begin construction and development of the well, lasting six months (*September 1, 2016 – January 31, 2017*).

Subtask 12.3: Performance Testing and Demobilization – The contractor will spend two months conducting performance tests of the new well and collecting water quality samples (*February 1, 2017 – April 1, 2017*). They will then spend one month demobilizing equipment and re-grading the site (*April 3, 2017 – April 27, 2017*).

Recycled Water to Palos Verdes Golf Course

Schedule

Project 10: Recycled Water to Palos Verdes Golf Course Project

The schedule presented is considered reasonable based on the current available information. The Recycled Water to Palos Verdes Golf Course Project (Project) will award a construction bid by April 17, 2018, and the Project will be completed by April 23, 2019. The justification for each category of the schedule is provided below:

(a) Direct Project Administration

Task 1: Project Management – The Project will be implemented by West Basin Municipal Water District's (WBMWD) project manager in coordination with the Project partners. WBMWD's project manager will be responsible for ensuring the necessary steps are underway to keep the Project on schedule and will be responsible for coordination with the City of Palos Verdes Estates, the Palos Verdes Golf Club, and Los Angeles County Flood Control District (LACFCD). The schedule for grant application preparation was determined from the schedule provided in the consultant proposal (*June 1, 2015 – August 7, 2015*). Project administration will begin with application preparation and end after the Final Completion Report is submitted (*August 23, 2019*).

Task 2: Labor Compliance Program – Documentation for Labor Compliance Program (LCP) will be included in the project specifications and will be managed by the WBMWD project manager through the duration of the Project Construction (*February 26, 2018 – April 23, 2019*). The WBMWD project manager will coordinate with the Palos Verdes Golf Club to determine labor compliance on the portions of the Project that pertain to habitat restoration.

Task 3: Reporting – Quarterly Progress Reports will be produced by WBMWD staff in cooperation with Project partners as required for grant funding, beginning when the grant is awarded through the completion of the Project (*December 1, 2015 – April 23, 2019*). The Draft Completion Report will be submitted to DWR via LACFCD for review approximately 3 months after project completion. A Final Completion Report will be prepared after receiving comments from LACFCD and DWR (*August 23, 2019*).

(b) Land Purchase/Easement

Task 4: Land Purchase – A notice of intention or option to purchase the necessary land for the pump station will be completed by early 2017 (*January 5, 2017*). A land deed, or easement if determined to be appropriate, will be secured within the same time frame.

(c) Planning/Design/Engineering/ Environmental Documentation

Task 5: Feasibility Studies – The WBMWD 2009 *Capital Implementation Master Plan* (CIMP) was completed in June of 2009 and is not shown in the Schedule. The Jurisdictional Delineation and Habitat Assessment of the Palos Verdes Golf Club Expansion Project was completed in January of 2014, and this document is also not shown in the Schedule. The detailed feasibility study for the connection to the two customer sites in Torrance and the Palos Verdes Golf Course will be completed in early 2016 and a more detailed Habitat Restoration Plan will be completed around the same time (*February 15, 2016*).

Task 6: CEQA Documentation – WBMWD completed the Environmental Assessment: Harbor/South Bay Water Recycling Project Programmatic EIR in 2003 and a Supplemental EIS/EIR in 2009 which includes the recycled water facilities portion of the Project. WBMWD will be preparing a Draft and Final Initial Study/Mitigated Negative Declaration (IS/MND) for the pipeline and booster pump station. The Palos Verdes Golf Course and City of Palos Verdes Estates will review their existing environmental documentation and determine if supplemental CEQA documentation is required for the habitat restoration portion of the Project. All necessary CEQA documents will be complete by February 27, 2017.

Recycled Water to Palos Verdes Golf Course

Task 7: Permitting – Eight permits are potentially required for the Project: Caltrans, City of Torrance Encroachment, City of Palos Verdes Estates Encroachment, State Water Resources Control Board, Division of Drinking Water compliance letter, Fire Department, National Pollutant Discharge Elimination System, Conditional Use Permit, and a modification to the Parklands permit for the Habitat Restoration Plan. The first six permits will be obtained by late 2017 (*between August 15, 2017 and November 6, 2017*) and the last two will be obtained in early 2018 (*between February 27, 2018 and May 21, 2018*).

Task 8: Design – The Preliminary Design Report, Geotechnical Report, and Topographical Report will be completed by May 28, 2017. The drawings and specifications for the 30, 60, 90 and 100 percent design stages will be completed by February 26, 2018 in anticipation of the start of construction in April of that year.

Task 9: Project Performance Monitoring Plan – In order to help ensure the Project will meet its intended benefits, a Project Performance Monitoring Plan will be developed. The Project Performance Monitoring Plan will be prepared during the permitting and construction stages of the Project (*August 2, 2016 – April 23, 2019*).

Category (d) Construction/Implementation

Task 10: Contract Services – Construction contract services will be established prior to the start of construction in 2018. This includes preparation of the final package for bids, advertising, holding a board meeting to award the construction bid, and finally actual award and issuance of the Notice to Proceed (NTP). These activities will take place between February 26, 2018 and April 23, 2018. Award of bids is anticipated to occur on April 17, 2018.

Task 11: Construction Administration – Construction administration and management activities will be ongoing for the duration of construction beginning with public outreach activities in late 2017 and continuing until performance testing is complete (*November 1, 2017 – April 23, 2019*).

Task 12: Construction

Subtask 12.1: Mobilization and Site Preparation – The Contractor will mobilize the site following NTP and will conduct mobilization activities for approximately two months (*April 30, 2018 – June 28, 2018*).

Subtask 12.2: Project Construction – Construction activities are assumed to begin with mobilization. The contractor will complete traffic control, sawcutting, trenching, pipe installation, pavement, restoration of striping, environmental compliance and will implement construction best management practices. Throughout the construction, dust, noise, application of best management practices and environmental assessment recommendations will be monitored. Disposal of pressure test water will be conducted per NPDES permit requirements. The construction activities will occur for approximately one year (*April 30, 2018 – April 23, 2019*).

Subtask 12.3: Performance Testing and Demobilization – The contractor will perform pressure testing, cleanup of the Project site and storage area, a final walk through of the site for Project acceptance, and demobilization. A final notice of completion letter will be issued at the end of demobilization activities. Performance testing and demobilization activities are anticipated to occur for the final two months of project construction (*February 25, 2019 – April 23, 2019*).

North Torrance Well Field Project, Phase III

Schedule

Project 11: North Torrance Well Field Project, Phase III

The schedule presented is considered reasonable based on the current available information from the City of Torrance (City). The North Torrance Well Field Project, Phase III (Project) will start design in February 2016 and be completed by August 2016. As a design-build Project, the bid will be awarded in February 2016, with construction beginning in August 2016. Construction will be complete by November 2018. The justification for each category of the schedule is provided below:

Category (a) Direct Project Administration

Task 1: Project Management – The Project will be implemented by the City. The City's Project Manager will be responsible for ensuring the necessary steps are underway to keep the Project on schedule and will be responsible for coordination with the applicant, the Los Angeles County Flood Control District (LACFCD). The schedule for grant application preparation was determined from the schedule provided in the consultant proposal (*June 1, 2015 – August 7, 2015*). Project and grant administration will begin in December (*December 1, 2015*) and end after the Final Project Completion Report is submitted (*April 1, 2019*).

Task 2: Labor Compliance Program – The City's Labor Compliance Program will be developed, included in the project specifications, and managed through the duration of the Project Construction (*April 1, 2016 – December 31, 2018*).

Task 3: Reporting – Quarterly Progress Reports will be produced by City staff for the Project as required for grant funding beginning when the grant is awarded through the completion of the Project (*December 1, 2015 – April 1, 2019*). The Draft Project Completion Report will be submitted to the California Department of Water Resources (DWR) via LACFCD for review approximately 1 month after project completion. A Final Project Completion Report will be prepared after receiving comments from LACFCD and DWR (*January 1, 2019 – April 1, 2019*).

Category (b) Land Purchase/Easement

Task 4: Land Purchase – All land, easements, and leases needed for the Project have already been secured, including the property for the wells (*process began on January 30, 2007 and completed by August 5, 2008*), the easement from the Torrance Unified School District (*August 14, 2012*), and the lease from Southern California Edison (*July 23, 2015*).

Category (c) Planning/Design/Engineering/ Environmental Documentation

Task 5: Feasibility Studies – The work on all feasibility studies needed for the project including the Well Site No. 10 Report, began on May 10, 2004 and have been completed, as *June 1, 2009*, the Geotechnical Study Report was completed on *August 11, 2011*, and the Inundation Study was completed on *March 24, 2014*.

Task 6: CEQA Documentation – The Mitigated Negative Declaration was completed on *July 28, 2015*.

Task 7: Permitting – Five permits and/or approvals will be required for the Project: a Construction and Excavation Permit from the City, a Well Permit from the County of Los Angeles Health Department, a Well Development Permit from the Regional Water Quality Control Board, an National Pollutant Discharge Elimination System (NPDES) Permit from the Regional Water Quality Control Board, and re-zoning approval from the City of Torrance City Council. All permits will be acquired between *February 17, 2016* and *August 16, 2017*.

Task 8: Design – The 30% Design Packet process began on *November 9, 2010* and was completed on *October 10, 2012*. As a design-build Project, the 100% Design Package will begin after notice to proceed (NTP) is awarded (*February 17, 2016*) and be completed by *August 16, 2017*.

North Torrance Well Field Project, Phase III

Task 9: Project Performance Monitoring Plan – In order to help ensure the Project will meet its intended benefits, a Project Performance Monitoring Plan will be developed. The Project Performance Monitoring Plan will be prepared during the Design phase (*August 1, 2016 – November 1, 2016*).

Category (d) Construction/Implementation

Task 10: Contract Services – The Project involves preparing a bid package to hire a qualified design-build engineering firm. The bid package will be prepared beginning *January 1, 2016*. Proof of advertisement will occur for one week after the bid packet is prepared (*February 1, 2016 – February 8, 2016*). Bids will be evaluated for one month (*February 9, 2016 – February March 7, 2016*) and the contract will be awarded on *March 7, 2016*. The Notice to Proceed will be issued on *April 8, 2016*.

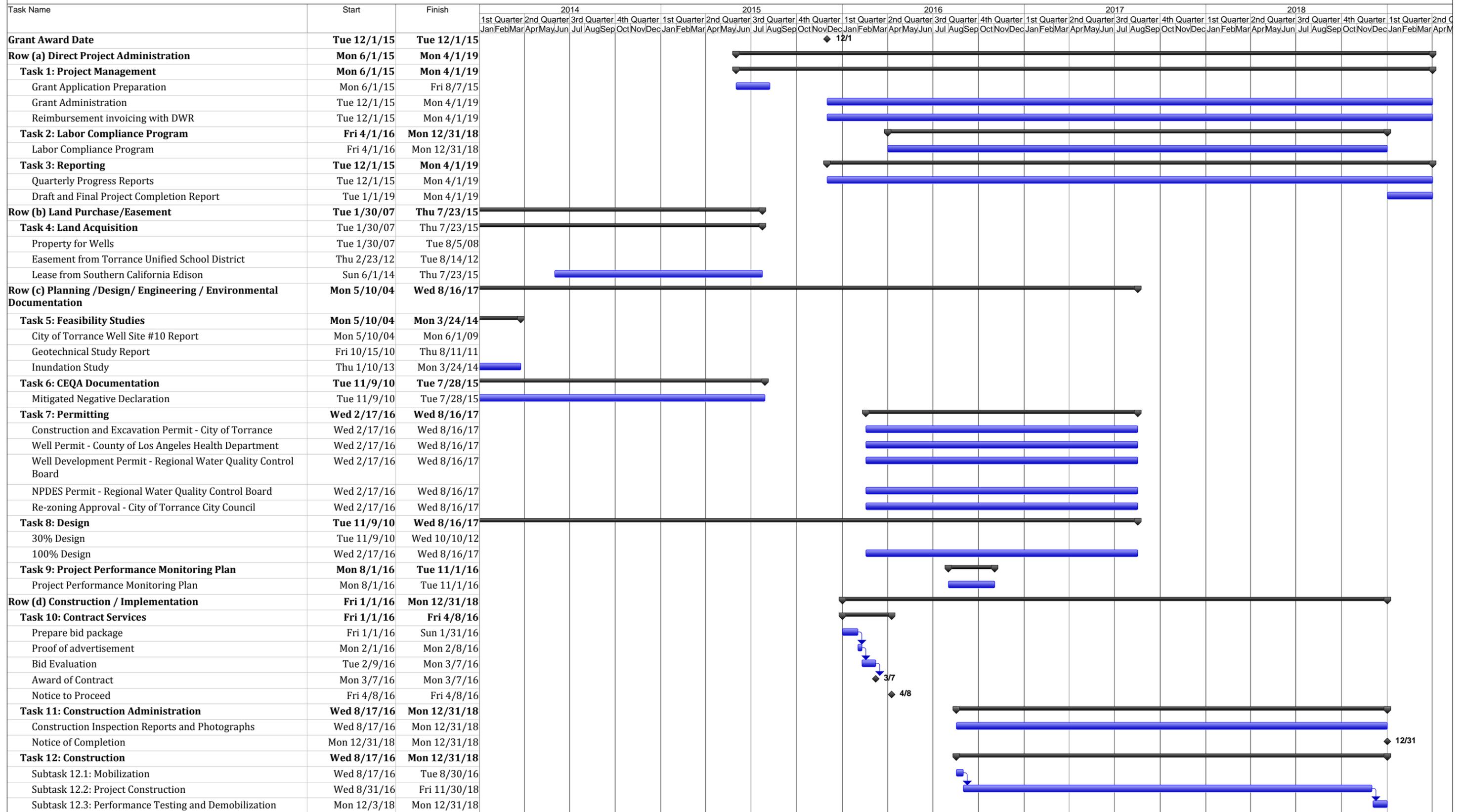
Task 11: Construction Administration – Construction administration and management activities will be ongoing for the duration of construction beginning after 100% Design (Task 8) is complete and when Mobilization (Task 12.1) begins (*August 17, 2016 – December 31, 2018*). The Notice of Completion will be submitted once Performance Testing and Demobilization (Task 12.3) is complete (*December 31, 2018*).

Task 12: Construction

Subtask 12.1: Mobilization – Mobilization activities will begin after 100% Design (Task 8) is complete and will run for approximately two weeks (*August 17, 2016 – August 30, 2016*).

Subtask 12.2: Project Construction – The contractor will begin Project Construction activities immediately after Mobilization is complete, including constructing the wells, pump station, and storage tank. Project Construction will run for roughly two years (*August 31, 2016 – November 30, 2018*).

Subtask 12.3: Performance Testing and Demobilization – The Contractor will begin Performance Testing and Demobilization activities immediately after Project Construction is complete. These activities will occur for roughly one month (*December 3, 2018 – December 31, 2018*).



Task Milestone Summary

Upper Los Angeles Big Tujunga Restoration and Arundo Eradication Project**Project 12: Upper Los Angeles River Big Tujunga Restoration and Arundo Eradication Project**

The schedule presented is considered reasonable based on the current available information. The Upper Los Angeles Big Tujunga Restoration and Arundo Eradication Project (Project) will start construction on September 1, 2015 and the Project will be completed by September 30, 2019. The justification for each category of the schedule is provided below:

Category (a) Direct Project Administration

Task 1: Project Management – The Project will be implemented by the National Forest Federation (NFF). NFF's Project Manager for the Project will be responsible for ensuring the necessary steps are underway to keep the Project on schedule and will be responsible for coordination with the applicant, Los Angeles County Flood Control District (LACFCD). The schedule for grant application preparation was determined from the schedule provided in the consultant proposal (*June 1, 2015 – August 7, 2015*). Project and grant administration will begin in December (*December 1, 2015*) and end after the Final Completion Report is submitted (*December 31, 2019*).

Task 2: Labor Compliance Program – NFF's Labor Compliance Program will be included in the project specifications and will be managed through the duration of the Project Construction (*August 3, 2015 – September 30, 2019*).

Task 3: Reporting – Quarterly Progress Reports will be produced by NFF staff for the Project as required for grant funding beginning when the grant is awarded through the completion of the Project (*December 1, 2015 – December 31, 2019*). The Draft Completion Report will be submitted to DWR via LACFCD for review approximately 2 months after project completion. A Final Completion Report will be prepared after receiving comments from LACFCD and DWR (*December 3, 2019*).

Category (b) Land Purchase/Easement

Task 4: Land Acquisition – No land acquisition or easements will be needed for the Project.

Category (c) Planning/Design/Engineering/ Environmental Documentation

Task 5: Feasibility Studies – NFF completed the *Project Plan* on July 30, 2015.

Task 6: CEQA Documentation – The Mitigated Negative Declaration and Notice of Determination was completed on August 7, 2014. The Draft NEPA Environmental Analysis was completed on April 22, 2015. The Final NEPA Environmental Analysis will be completed on August 31, 2015.

Task 7: Permitting – Two permits will be required for the Project: 1600 Stream Alteration Permit from the California Department of Fish and Wildlife and a General Permit 41 from the Army Corps of Engineers. Both permits will be acquired by August 31, 2015.

Task 8: Design – The *Final Implementation Plan* will be completed prior to the beginning of Project Construction (*September 30, 2015*).

Task 9: Project Performance Monitoring Plan – In order to help ensure the Project will meet its intended benefits, a Project Performance Monitoring Plan will be developed. The Project Performance Monitoring Plan will be prepared during Project Construction (*December 1, 2015 – April 29, 2016*).

**Upper Los Angeles Big Tujunga Restoration and Arundo
Eradication Project****Category (d) Construction/Implementation**

Task 10: Contract Services – Preparation of a construction bid package will begin on July 15, 2015. The bid package will be advertised for approximately two weeks followed by a one week evaluation of the bids. The contract will be awarded on August 24, 2015 and the Notice to Proceed (NTP) will be issued on August 25, 2015.

Task 11: Construction Administration – Construction administration and management activities will be ongoing for the duration of construction beginning after the NTP is issued and will continue until Arundo stand treatment and biomass removal, as well as performance tracking, is complete (*September 1, 2015 – September 30, 2019*).

Task 12: Construction

Subtask 12.1: Mobilization and Site Preparation – The contractors will mobilize the site for one month following NTP (*September 1, 2015 – October 1, 2015*).

Subtask 12.2: Treatment of Stands and Biomass Removal – Approximately one month after mobilization begins, the contractors will begin treating the Arundo stands and removing the resulting biomass. These construction activities will occur for four years (*October 2, 2015 – October 1, 2019*).

Subtask 12.3: Performance Tracking – The contractors and NFF will be doing performance tracking throughout Project construction (*October 2, 2015- October 1, 2019*).

Nitrate Removal Treatment Facility at Well 2 Project

Schedule

Project 13: Nitrate Removal Treatment Facility at Well 2 Project

The schedule presented is considered reasonable based on the current available information. The Nitrate Removal Treatment Facility at Well 2 Project (Project) will start design on October 1, 2015, the last of several construction bids will be awarded by April 19, 2016, and the Project will be completed by March 31, 2017. The justification for each category of the schedule is provided below:

Category (a) Direct Project Administration

Task 1: Project Management – The Project will be implemented by Crescenta Valley Water District (CVWD). CVWD's Project Manager for the Project will be responsible for ensuring the necessary steps are underway to keep the Project on schedule and will be responsible for coordination with the applicant, Los Angeles County Flood Control District (LACFCD). The schedule for grant application preparation was determined from the schedule provided in the consultant proposal (*June 1, 2015 – August 7, 2015*). Project and grant administration will begin after the Grant Award Date (*December 1, 2015*) and end after the Final Project Completion Report is submitted (*March 31, 2017*).

Task 2: Labor Compliance Program – CVWD's Labor Compliance Program will be included in the project specifications and will be managed by Contractor Compliance and Monitoring Inc. through the duration of the Project Construction (*November 2, 2015 – March 31, 2017*).

Task 3: Reporting – Quarterly Progress Reports will be produced by CVWD staff for the Project as required for grant funding beginning when the grant is awarded through the completion of the Project (*November 2, 2015 – March 31, 2017*). The Draft Project Completion Report will be submitted to DWR via LACFCD for review approximately 2 months after project completion. A Final Project Completion Report will be prepared after receiving comments from LACFCD and DWR (*June 30, 2017*).

Category (b) Land Purchase/Easement

Task 4: Land Purchase – No land acquisition or easements will be needed since the land is owned by the City, therefore, this task does not apply to this Project.

Category (c) Planning/Design/Engineering/ Environmental Documentation

Task 5: Feasibility Studies – CVWD completed the *Preliminary Recommendations for Final Pumping Rate and Pump Depth Setting for Permanent Pump in Well No. 2 Technical Memorandum* in January of 2007 and therefore it is not shown in the schedule.

Task 6: CEQA Documentation – The Notice of Intent and the Initial Environmental Study Checklist were completed on July 7, 2015. The Mitigated Negative Declaration, Notice of Public Hearing, and Notice of Determination will be completed by August 18, 2015.

Task 7: Permitting – Five permits will be required for the Project: Excavation Permit, Sewer Connection Permit, Electrical Permit, Building Permit and State Water Resources Control Board Amendment to Operating Permit. The first four permit applications involve submitting similar information; and therefore, are expected to occur at the same time (*January 11, 2016 – March 7, 2016*). The State Water Resources Control Board Amendment to Operating Permit will be developed towards the end of the Project (*December 5, 2016 – March 31, 2017*).

Task 8: Design – The Preliminary Design Technical Memorandum and 60, 90 and 100 percent designs will be completed by April 29, 2016. The 30 percent design plans (Technical Memorandum) will start development in

Nitrate Removal Treatment Facility at Well 2 Project

October 2015. The 60% design will be completed in December 2015, the 90% design will be completed in February 2016 and the 100% Design will be completed in March 2016.

Task 9: Project Performance Monitoring Plan – In order to help ensure the Project will meet its intended benefits, a Project Performance Monitoring Plan will be developed. The Project Performance Monitoring Plan will be prepared during the permit application and during the construction contracting stage of the Project (*November 2, 2015 – March 31, 2016*).

Category (d) Construction/Implementation

Task 10: Contract Services – Preparation of three (3) construction services contracts (geotechnical inspection, construction management and construction stacking services will begin when the final design is almost completed (*March 31, 2016*). The agreement with APT Water for the construction of the ARoNite nitrate treatment system will be completed in September 2015. CVWD will prepare RFP's for the three (3) construction services contracts, which will be responded to in approximately one month followed by a two week evaluation of the proposals. The contract will be awarded on March 31, 2016 and the Notice to Proceed (NTP) will be issued on April 1, 2016.

Task 11: Construction Administration – Construction administration and management activities (overseeing the contract agreements) will be ongoing for the duration of construction beginning after the NTP is issued and will continue until performance testing is complete (*April 1, 2016 – March 31, 2017*).

Task 12: Construction

Subtask 12.1: Mobilization, Site Preparation and Underground Utilities – The Contractor will mobilize the site following NTP and will occur for one month (*April 1, 2016 – April 29, 2016*).

Subtask 12.2: Project Implementation – Approximately one month after mobilization begins, the contractor will install building pads, buildings, above ground piping, electrical system, chlorination system, new pump and assembly, connection to reservoir and other appurtenances. During the same period, APT Water will install the ARoNite nitrate treatment system. The construction activities will occur for one year (*May 2, 2016 – March 1, 2017*).

Subtask 12.3: Performance Testing – The contractor and APT Water will be doing performance testing throughout the Project construction (*May 2, 2016 – March 1, 2017*).

Subtask 12.4: Demobilization – Following the completion of all components of construction, the site will be demobilized. This process will take approximately 1 month, ending March 31, 2017.

Hoover, Toll, & Keppel School Recycled Water Project

Schedule

Project 14: Hoover, Toll, & Keppel School Recycled Water Project

The schedule presented is considered reasonable based on the current available information. The Hoover, Toll, & Keppel School Recycled Water Project (Project) is currently in the design phase and the contractor will be issued Notice to Proceed by January 15, 2016. Previous work for this Project has been completed including the feasibility studies and documentation required for CEQA, completed in 2007 and 2009. The Project will be completed by February 24, 2017. The justification for each category of the schedule is provided below:

Category (a) Direct Project Administration

Task 1: Project Management – The Project will be implemented by the City of Glendale (City). The City's Project Manager will be responsible for ensuring the necessary steps are underway to keep the Project on schedule and will be responsible for coordination with the applicant, the Los Angeles County Flood Control District (LACFCD). The schedule for grant application preparation was determined from the schedule provided in the consultant proposal. Project and grant administration begins with the grant application preparation (*June 1, 2015*) and ends after the final invoice for reimbursement is submitted (*March 1, 2017*).

Task 2: Labor Compliance Program – The City will prepare a Labor Compliance Program by December 15, 2015. The implementation of the Labor Compliance Program will occur through the duration of the Project Construction (*January 18, 2016 – February 24, 2017*).

Task 3: Reporting – Quarterly Progress Reports will be produced by the City staff for the Project as required for grant funding, beginning when the grant is awarded through the completion of the Project (*December 1, 2015 – February 24, 2017*). The Draft Project Completion Report will be submitted to DWR via LACFCD for review approximately one month after project completion (*March 24, 2017*). A Final Project Completion Report will be prepared after receiving comments from LACFCD and DWR (*March 27, 2017 - April 12, 2017*).

Category (b) Land Purchase/Easement

Task 4: Land Purchase – No land acquisition or easements will be needed since the land is owned by the City.

Category (c) Planning/Design/Engineering/ Environmental Documentation

Task 5: Feasibility Studies – The *Glendale Recycled Water System Improvements and Extensions* was completed in October, 2007, and includes sufficient information about the Project to move into preliminary design.

Task 6: CEQA Documentation – This Project is categorically exempt under CEQA, and a Notice of Exemption was filed on April 7, 2009.

Task 7: Permitting – Three permits will be required for the Project: an Excavation Permit, an Encroachment Permit, and a Street Use Permit. The Excavation Permit will be prepared starting on December 1, 2015. The Encroachment and Street Use Permits are expected to be prepared at the same time. All three permits are anticipated to be received by January 15, 2016.

Task 8: Design – Design of the project is expected to take place from September 15, 2015 through December 15, 2015. The Geotechnical Report and Topographic Survey will be completed by December 15, 2015.

Task 9: Project Performance Monitoring Plan – In order to help ensure the Project will meet its intended benefits, a Project Performance Monitoring Plan will be developed. The Project Performance Monitoring Plan will be prepared during the permit application process and during the construction contracting stage of the Project (*December 1, 2015 – December 1, 2016*).

Category (d) Construction/Implementation

Hoover, Toll, & Keppel School Recycled Water Project

Schedule

Task 10: Contract Services – The Design-Build Project and Bond and Insurance documents will be approved on December 15, 2015, at which point the construction bid package will be prepared. The Notice to Proceed (NTP) is expected to be issued on January 15, 2016.

Task 11: Construction Administration – Construction administration and management activities will be ongoing for the duration of construction, continuing until performance testing is complete (*January 18, 2016 – February 24, 2017*). A Notice of Completion will be filed after Subtask 12.3 has been completed (*February 27, 2017*). Design Engineering will be conducted throughout construction (*February 22, 2016 – January 23, 2017*).

Task 12: Construction/Implementation

Subtask 12.1: Mobilization and Site Preparation – The Contractor will mobilize the site following NTP on January 18, 2016 and Site Preparation is expected to last about one month (*January 18, 2016 – February 19, 2016*).

Subtask 12.2: Project Construction – Construction of the Project is expected to take approximately 11 months and begins after the site has been prepared (*February 22, 2016 – January 23, 2017*).

Subtask 12.3: Performance Testing and Demolition – Following the completion of all components of construction, demobilization and performance testing will take place prior to the infrastructure being placed in service. (*January 24, 2017 – February 24, 2017*).

Lopez Spreading Grounds Improvement Project

Schedule

Project 15: Lopez Spreading Grounds Improvement Project

The schedule presented is considered reasonable based on the current available information. The Lopez Spreading Grounds Improvement Project (Project) is currently in the 100% (Final) Design stage. It is anticipated that the Project will have the construction bid awarded by September 29, 2016 and construction complete by September 7, 2017, well before October 31, 2019. The schedule is achievable because the Project is modeled after LACFCD's multiple spreading grounds improvement projects. The justification for each category of the schedule is provided below:

Category (a) Direct Project Administration

Task 1: Project Management – The Project will be implemented by LACFCD. LACFCD's Project Manager for the Project will be responsible for ensuring the necessary steps are underway to keep the Project on schedule. The Project Manager will also be responsible for coordination with Los Angeles Department of Water and Power (LADWP), which is partnering with LACFCD on the Project, and coordination with grant administration staff for the applicant, LACFCD. Project management began July 28, 2011 with the development of the Project Concept Report. Project management will be completed once the Final Project Report is submitted (*December 6, 2017*). The schedule for grant application preparation was determined from the schedule provided in the consultant proposal. A final invoice will be prepared at the end of project construction.

Task 2: Labor Compliance Program – LACFCD has a Labor Compliance Program in place. The implementation of the Labor Compliance Program will occur through the duration of the Project Construction (*November 4, 2016 – September 7, 2017*).

Task 3: Reporting – Quarterly Progress Reports will be produced by the LACFCD staff for the Project as required for grant funding beginning when the grant is awarded through the completion of Project construction (*December 1, 2015 – September 7, 2017*). A Final Project Completion Report will be submitted to DWR within 90 days after Project Completion (*December 6, 2017*).

Category (b) Land Purchase/Easement

Task 4: Land Purchase – The Project does not require the purchase of land or the acquisition of an easement.

Category (c) Planning/Design/Engineering/ Environmental Documentation

Task 5: Feasibility Studies – The Project Concept Report was developed beginning July 28, 2011 and completed July 16, 2013.

Task 6: CEQA Documentation – This project is categorically exempt. A Notice of Exemption is in the process of being developed as of October 10, 2014 and will be filed by June 9, 2016.

Task 7: Permitting – A Section 408 Permit is being obtained from the USACE. This process began October 10, 2014 and will be complete by October 29, 2015.

Task 8: Design – The 60% design stage began on December 31, 2013 and was completed May 14, 2014. The 90% design stage was completed 5 months later, on October 6, 2014. The Project is currently in the 100% (Final) design stage, which is expected to be complete by November 30, 2015.

Task 9: Project Performance Monitoring Plan – In order to help ensure the Project will meet its intended benefits, a Project Performance Monitoring Plan will be developed. The Project Performance Monitoring Plan will be prepared during the 100% Design stage of the Project (*October 30, 2015 – November 30, 2015*).

Category (d) Construction/Implementation

Lopez Spreading Grounds Improvement Project

Task 10: Contract Services – The Project will be advertised for bid for approximately one month beginning August 1, 2016 followed by a one month bid opening and evaluation. The contract will be awarded by September 29, 2016 and the Notice to Proceed (NTP) will be issued by November 3, 2016.

Task 11: Construction Administration – Construction administration and management activities will be ongoing for the duration of construction beginning when NTP is issued and continuing until demobilization is complete (*November 4, 2016 – September 7, 2017*).

Task 12: Construction

Subtask 12.1: Mobilization – The Contractor will complete mobilization to the site within 30 days of issuance of the NTP (*November 4, 2016 – December 2, 2016*).

Subtask 12.2: Project Construction – The contractor will begin construction after mobilization is complete. Reconfiguring and deepening the basins, modifying the intake canal and replacing the spreading grounds gates with automated electronic gates is expected to take approximately 8.5 months (*December 5, 2016 – August 24, 2017*). The construction phase is estimated based on the construction duration of other LACFCD spreading grounds improvement projects.

Subtask 12.3: Demobilization and Performance Testing – Following the completion of construction, the site will be demobilized beginning August 28, 2017. This process will take approximately 2 weeks, ending September 7, 2017.

Big Dalton Spreading Grounds Improvement Project

Schedule

Project 16: Big Dalton Spreading Grounds Improvement Project

The schedule presented is considered reasonable based on the current available information. The Big Dalton Spreading Grounds Improvement Project (Project) is currently in the Feasibility Study Phase; LACFCD is currently completing the Project Concept Report for the Project. It is anticipated that the Project will have the construction bid awarded by January 18, 2018 and construction will be complete by November 29, 2018, well before October 31, 2019. The schedule is achievable because the Project is modeled after LACFCD's multiple spreading grounds improvement projects. The justification for each category of the schedule is provided below:

Category (a) Direct Project Administration

Task 1: Project Management – The Project will be implemented by LACFCD. LACFCD's Project Manager for the Project will be responsible for ensuring the necessary steps are underway to keep the Project on schedule and will be responsible for coordination with the Project partners, Three Valleys Municipal Water District (TVMWD) and City of Glendora, and coordination with grant administration staff for the applicant, LACFCD. Project management began January 4, 2011, concurrent with the start of the development of the Project Concept Report. The schedule for grant application preparation was determined from the schedule provided in the consultant proposal. Invoicing will begin with award of the grant and a final invoice will be prepared at the end of project construction. The Memorandum of Understanding (MOU) between LACFCD, TVMWD, and City of Glendora was initiated November 24, 2014 and will be finalized after the Project Concept Report is complete February 25, 2016. Project management will be completed once the Final Report is submitted (*January 31, 2019*).

Task 2: Labor Compliance Program – LACFCD has a Labor Compliance Program in place. The implementation of the Labor Compliance Program will occur through the duration of the Project Construction (*February 26, 2018 – November 29, 2018*).

Task 3: Reporting – Quarterly Progress Reports will be produced by LACFCD staff for the Project as required for grant funding, beginning when the grant is awarded through the completion of Project construction (*December 1, 2015 – November 29, 2018*). A Final Completion Report will be submitted to DWR after project Completion, per the requirements of the grant (*January 31, 2019*).

Category (b) Land Purchase/Easement

Task 4: Land Purchase – The Project is not expected to require the purchase of land or acquisition of an easement.

Category (c) Planning/Design/Engineering/ Environmental Documentation

Task 5: Feasibility Studies – Project scoping for the Project Concept Report began January 4, 2011 and a draft Project Concept Report has been completed. The Final Project Concept Report is expected to be complete by November 25, 2015.

Task 6: CEQA Documentation – At this time, it has not been determined whether a Mitigated Negative Declaration (MND) or if a Notice of Exemption (NOE) will be appropriate for the Project. Preparation of the appropriate CEQA document will begin October 3, 2016 and will be completed the next year by October 2, 2017, before the Project is advertised for bid.

Task 7: Permitting – LACFCD will have its Permitting experts review the Project to determine what permits are required for the Project. This review will be initiated October 3, 2016, which will provide sufficient time to obtain any and all Federal and State permits determined to be required for the Project by October 2, 2017 before Project construction begins.

Task 8: Design – The 60% design will begin November 30, 2015, after the Project Concept Report is finalized. The 60% design phase will last approximately 5 months. The 90% design will follow, beginning May 2016 and last

Big Dalton Spreading Grounds Improvement Project

approximately 5 months as well. The final (100%) design will follow, beginning around October 3, 2016 and last approximately 10 months. All Project design will be complete by August 3, 2017.

Task 9: Project Performance Monitoring Plan – In order to help ensure the Project will meet its intended benefits, a Project Performance Monitoring Plan will be developed. The Project Performance Monitoring Plan will be prepared after the 90% design is complete and will be finalized before the construction contract is awarded (*October 3, 2016 – December 1, 2016*).

Category (d) Construction/Implementation

Task 10: Contract Services – The Project will be advertised for bid for approximately one month beginning November 6, 2017 followed by a two week bid opening and evaluation. The contract will be awarded by January 18, 2018 and the Notice to Proceed (NTP) will be issued by February 22, 2018.

Task 11: Construction Administration – Construction administration and management activities will be ongoing for the duration of construction beginning when the NTP is issued and continuing until demobilization is complete (*February 26, 2018 – November 29, 2018*).

Task 12: Construction

Subtask 12.1: Mobilization – The Contractor will mobilize to the site within 4 weeks of issuance of the NTP (*February 26, 2018 – March 24, 2018*).

Subtask 12.2: Project Construction – After mobilization is complete, the contractor will begin construction. Reconfiguring and deepening the basins, modifying the intake canal from the Big Dalton Wash, adding a new diversion system from the Little Dalton Diversion, and replacing the spreading grounds gates with automated electronic gates is expected to take approximately 7.5 months (*March 27, 2018 – November 8, 2018*). The 7.5-month construction phase is estimated based on the construction duration of similar projects.

Subtask 12.3: Demobilization and Performance Testing – Following the completion of construction, the site will be demobilized and performance testing will occur. This process will take approximately 3 weeks, ending November 29, 2018.

Live Oak Well VOC Treatment Facility Project

Schedule

Project 17: Live Oak Well VOC Treatment Facility Project

The schedule presented is considered reasonable based on the current available information. The Live Oak Well VOC Treatment Facility Project (Project) will start design in August 2015, the construction bids will be awarded by February 2017, and the Project will be completed by April 2018. The justification for each category of the schedule is provided below:

Category (a) Direct Project Administration

Task 1: Project Management – The Project will be managed by the City of Arcadia (the City). The City's Project Manager will be responsible for ensuring the necessary steps are underway to keep the Project on schedule. The schedule for grant application preparation was determined from the schedule provided in the consultant proposal (*June 1, 2015 – August 7, 2015*). Project and grant administration will begin in February (*February 1, 2016*) and ends after the Final Completion Report is submitted (*April 17, 2018*).

Task 2: Labor Compliance Program – The City's Labor Compliance Program will be developed, approved, and included in the project specifications. The Program will be managed through the duration of the Project construction (*April 6, 2017 – March 9, 2018*).

Task 3: Reporting – Quarterly Progress Reports will be produced by City staff for the Project as required for grant funding beginning when the grant is awarded through the completion of the Project (*February 1, 2016 – March 9, 2018*). The Draft Project Completion Report will be submitted to DWR for review approximately one month after project completion. A Final Project Completion Report will be prepared after receiving comments from DWR (*April 17, 2018*).

Category (b) Land Purchase/Easement

Task 4: Land Purchase – No land acquisition or easements will be needed; the land is owned by the City.

Category (c) Planning/Design/Engineering/ Environmental Documentation

Task 5: Feasibility Studies – Stetson Engineers, Inc. began the work on the Draft Technical memorandum on February 1, 2015 and submitted it to the City on April 24, 2015. The Final Technical Memorandum will be submitted on August 28, 2015.

Task 6: CEQA Documentation – The California Environmental Quality Act (CEQA) process will be started on February 1, 2016 and the deliverables (Notice of Exemption or Mitigated Negative Determination) will be filed by July 29, 2016.

Task 7: Permitting – Four permits will be required for the Project: a Water Supply Permit Amendment, a Discharge Permit from the Los Angeles County Flood Control District, a National Pollutant Discharge Elimination System Construction Discharge Permit, and a Discharge Permit from the Los Angeles County Sanitation District. These permit applications will occur over roughly one year (*January 4, 2016 – January 1, 2017*).

Task 8: Design – The City will begin work on the design bid package by June 1, 2016 and will have it ready by July 1, 2016, which will be responded to in one month followed by a one week evaluation of the proposals. The design consultant will be selected on August 11, 2016. The Initial Design Memorandum and Project Specification will be completed by October 14, 2016, the 100% Design Packet will be completed by January 31, 2017.

Task 9: Project Performance Monitoring Plan – In order to help ensure the Project will meet its intended benefits, a Project Performance Monitoring Plan will be developed. (*December 1, 2015 – March 31, 2016*).

Live Oak Well VOC Treatment Facility Project**Category (d) Construction/Implementation**

Task 10: Contract Services – The City will develop a construction bid package by January 2, 2017, which will be responded to by February 2, 2017. Evaluation of the proposals will end on February 15, 2017. The contract will be awarded on February 16, 2017 and the Notice to Proceed will be issued on March 22, 2017.

Task 11: Construction Administration – The pre-construction meeting will be held on March 22, 2017. Construction administration and management activities (overseeing the contract agreements) will be ongoing for the duration of construction beginning after the Notice to Proceed is issued and continuing until performance testing is complete (*March 23, 2017 – March 8, 2018*).

Task 12: Construction

Subtask 12.1: Mobilization – The Contractor will mobilize to the site starting on March 23, 2017 and will spend two weeks setting up equipment.

Subtask 12.2: Site Preparation – The Contractor will begin preparing the site on April 6, 2017.

Subtask 12.3: Project Construction – The Contractor will begin construction on the LGAC facility on May 15, 2017, continuing until July 31, 2017.

Subtask 12.4: Instrumentation Installation – The Contractor will install electronics and telemetry systems and do performance testing from July 31, 2017 to January 26, 2018.

Subtask 12.5: Demobilization & Cleanup – The Contractor will demobilize from the site between January 29, 2018 and March 9, 2018.

Centralized Groundwater Treatment System Project

Schedule

Project 18: Centralized Groundwater Treatment System Project

The schedule presented is considered reasonable based on the current available information and experience with implementing other treatment projects. The Centralized Groundwater Treatment System Project (Project) is currently in the 100% design phase and the award of construction contract is scheduled for February 1, 2016. The feasibility studies were completed as of 2011. The Project will be completed by July 31, 2017. The justification for each category of the schedule is provided below:

Category (a) Direct Project Administration

Task 1: Project Management – The Project will be implemented by the City of Monterey Park (City). The City's Project Manager will be responsible for ensuring the necessary steps are underway to keep the Project on schedule and will be responsible for coordination with the applicant, the Los Angeles County Flood Control District (LACFCD). The schedule for grant application preparation was determined from the schedule provided in the consultant proposal. Project and grant administration begins with the grant application preparation (*June 1, 2015*) and ends after the Final Completion Report is submitted (*July 31, 2017*).

Task 2: Labor Compliance Program – The City will prepare a Labor Compliance Program by October 1, 2015. The implementation of the Labor Compliance Program will occur through the duration of the Project Construction (*April 1, 2016 – July 31, 2017*).

Task 3: Reporting – Quarterly Progress Reports will be produced by the City staff for the Project as required for grant funding, beginning when the grant is awarded through the completion of the Project. The Draft Completion Report will be submitted to DWR via LACFCD for review approximately 2 months after project completion. A Final Completion Report will be prepared after receiving comments from LACFCD and DWR (*October 31, 2017*).

Category (b) Land Purchase/Easement

Task 4: Land Purchase – No land acquisition or easements will be needed since the land is owned by the City.

Category (c) Planning/Design/Engineering/ Environmental Documentation

Task 5: Feasibility Studies – Two studies completed in June 2006 and April 2011 evaluated alternatives to the Project and upgrades to the current packed tower air stripper. The dates for these studies are shown on the Schedule Gantt chart.

Task 6: CEQA Documentation – The CEQA process will be initiated on October 1, 2015 with a "Notice of Intent" and preparation of an Initial Study checklist. The City of Rosemead, where the Project is located, will be the CEQA lead agency. The Initial Study will begin as the 100% design is wrapping up (*October 15, 2015*) and be completed by January 15, 2016. The public notice process and receipt of the expected "Negative Declaration" will be complete by March 1, 2016.

Task 7: Permitting – Three permits will be required for the Project: Division of Drinking Water permit, Watermaster Section 28 Application, 97-005 Policy Memo evaluation (if required). These three permit applications involve submitting similar information to DDW and the Main San Gabriel Basin Watermaster; and therefore, they are expected to be prepared at the same time (*October 1, 2015 – March 1, 2016*).

Task 8: Design – The 20 percent design was completed on April 11, 2013. The Project is currently in the 100 percent design stage and the final design will be complete by October 30, 2015.

Task 9: Project Performance Monitoring Plan – In order to help ensure the Project will meet its intended benefits, a Project Performance Monitoring Plan will be developed. The Project Performance Monitoring Plan will be prepared

Centralized Groundwater Treatment System Project

during the permit application process and during the construction contracting stage of the Project (*October 1, 2015 – March 1, 2016*).

Category (d) Construction/Implementation

Task 10: Contract Services – Preparation of the construction bid package will begin one month after the final design is complete (*December 1, 2015*). The bid will be advertised for approximately one month followed by a one month evaluation of the bids. The contract will be awarded on February 1, 2016 and the Notice to Proceed (NTP) will be issued on February 29, 2016.

Task 11: Construction Administration – Construction administration and management activities will be ongoing for the duration of construction, beginning one month after the NTP is issued and continuing until performance testing is complete (*March 1, 2016 – July 31, 2017*).

Task 12: Construction/Implementation

Subtask 12.1: Mobilization/Demobilization – The Contractor will mobilize the site following NTP on April 1, 2016. Demobilization after substantial completion will be completed by December 30, 2016.

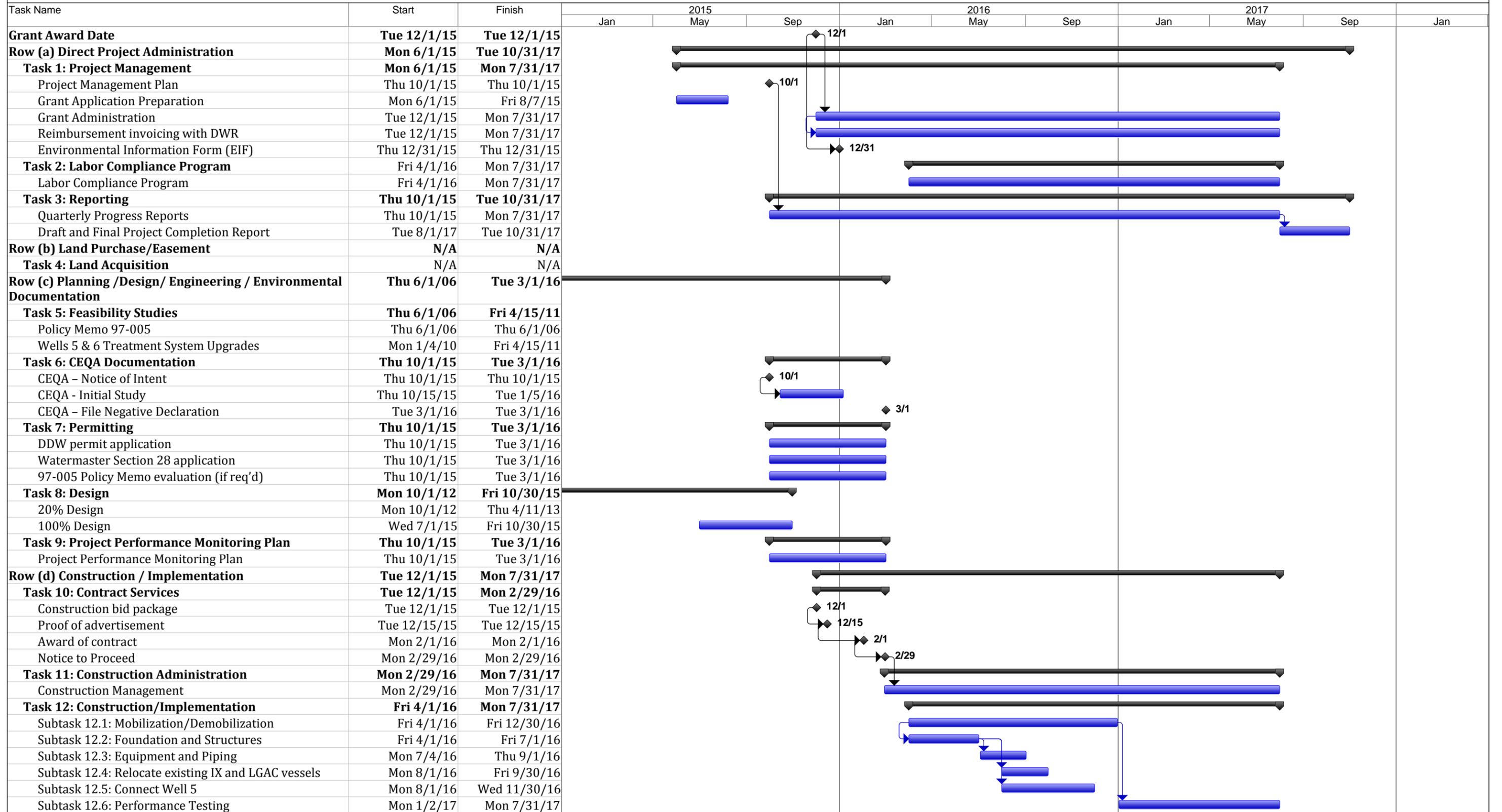
Subtask 12.2: Foundation and Structures – Immediately after mobilization, the contractor will begin construction of the foundation pads for five AO units, eighteen LGAC vessels, two pH adjustments ASTs, two backwash ASTs and an open-sided canopy for the five AO units. Construction of the foundations and structures will take approximately 3 months (*April 1, 2016 – July 1, 2016*).

Subtask 12.3: Equipment and Piping – After the contract is awarded, the equipment and piping will be ordered; and once the foundation pads are complete, the equipment and piping will be installed. The equipment and piping includes the AO units, backwash ASTs, valves and fittings, electrical/control upgrade and multiple pipelines. Installation of the equipment and piping will take approximately 3 months (*July 1, 2016 – September 1, 2016*).

Subtask 12.4: Relocate Existing IX and LGAC vessel – Concurrent with installation of the equipment and piping, the ten inactive IX vessels will be relocated and re-piped. This process will take approximately 2 months (*August 1, 2016 – September 30, 2016*).

Subtask 12.5: Connect Well 5 – A 12-inch diameter pipeline will be installed to connect Well No. 5 and a utility bridge over Alhambra Wash will be installed. This process will take approximately 4 months (*August 1, 2016 – November 30, 2016*).

Subtask 12.6: Performance Testing – Following the completion of all components of construction and demobilization, performance testing will be conducted over a period of seven months (*January 2, 2017 – July 31, 2017*).



Task [blue bar] Milestone [diamond] Summary [arrow]

Southeast Water Efficiency Program Project

Schedule

Project 19: Southeast Water Efficiency Program Project

The Southeast Water Efficiency Program Project (Project) will award contracts on February 23, 2016. With the grant agreement execution in December 2015, Central Basin Municipal Water Basin (Central Basin) will be able to develop agreements and a bid process for the Project and will have the entire project completed in a 36-month period, well before October 31, 2019. The schedule is considered reasonable for this Project, as it is modeled after the Water Conservation Retrofit Program, which is a program currently being implemented by Central Basin. This program will help to ensure the task durations for this Project are achievable. The justification for each category of the schedule is provided below:

Category (a) Direct Project Administration

Task 1: Project Management – Central Basin’s project manager will be responsible for ensuring the steps are underway and will coordinate with staff members and funding partners. Central Basin will work with its funding partners, including Metropolitan Water District (MWD), throughout the Project. The schedule for grant application preparation was determined from the schedule provided in the consultant proposal. The Project schedule is based on a previous timeframe that was developed for a current conservation program. Project Administration begins with the grant application preparation (*June 1, 2015*) and ends after the final invoices for reimbursement are submitted (*October 7, 2019*).

Task 2: Labor Compliance Program – Central Basin has a Labor Compliance Program in place. The implementation of the Labor Compliance Program will occur through the duration of the Project Implementation (*March 24, 2016 – October 7, 2019*).

Task 3: Reporting – Central Basin’s project manager will compile the Quarterly Progress and Draft and Final Project Completion Reports to ensure timely submission to DWR via LACFCD. These reports will begin the first quarter the grant is awarded and last until the end of Project completion (*December 1, 2015 – October 7, 2019*). The Draft Final Project Completion Report will be submitted to DWR via LACFCD for review approximately two months after project completion (*December 9, 2019*). A Final Project Completion Report will be prepared after receiving comments from LACFCD and DWR (*January 6, 2020*).

Category (b) Land Purchase/Easement

Task 4: Land Purchase/Easement – No land acquisition or easements will be needed, therefore, this task does not apply to this Project.

Category (c) Planning/Design/Engineering/ Environmental Documentation

Task 5: Feasibility Studies – This Project will be modeled after the Water Conservation/Management and Education Program therefore, assessments and feasibility studies were not required in preparation for this Project.

Task 6: CEQA Documentation – This Project is categorically exempt under CEQA, therefore, a Categorical Exemption will be filed prior to the beginning of implementation (*January 4, 2016 – March 18, 2016*). This will include time necessary to prepare the documents necessary, present it to the Board and Committee for consideration and adoption, and submit the final documents.

Task 7: Permitting – This task does not apply to this Project since the water efficiency devices will be replacing existing devices on city owned property.

Task 8: Design – This Project does not require the preparation of designs.

Southeast Water Efficiency Program Project

Task 9: Project Performance Monitoring Plan – In order to help ensure the Project will meet its intended benefit, the Project Performance Monitoring Plan will be developed. The Project Performance Monitoring Plan will be developed prior to the implementation of the Project (*January 4, 2016 – March 21, 2016*).

Category (d) Construction/Implementation

Task 10: Contract Services – Central Basin will begin preparing a Request for Proposal shortly after the grant award date (*December 21, 2015 – January 7, 2016*). The bid will be advertised for vendors to submit proposals for approximately one month (*until February 9, 2016*). The contract will be awarded after all of the bids have been evaluated (*February 23, 2016*) and Notice to Proceed will be issued on February 24, 2016.

Task 11: Implementation Administration – Implementation management and administration activities will be ongoing throughout the implementation of the Project (*March 24, 2016 – October 7, 2019*). Central Basin will approve documents developed by the vendor including site selection criteria and water audit reports every year until 100 sites have been implemented.

Task 12: Implementation

This Project is modeled after the current program being initiated in Central Basin's service area. These timeframes are based on the current schedule of the program. This Project will begin implementation on March 24, 2016 to select potential sites for retrofit. In 2019, Central Basin will meet its goal of retrofitting 100 sites at rate of at least 25 sites per year. Subtasks 12.1 through 12.5 will start in sequence and continue in parallel until October 7, 2019. The following subtasks will be complete in approximately 44 months.

Subtask 12.1: Site Development

This subtask will begin on March 24, 2016. The contracted vendors will initiate implementation by gathering information required to develop a list of potential sites to meet the total goal of 100 sites by April 18, 2016.

Subtask 12.2: Program Outreach and Customer Enrollment

In order to ensure success in the completion of the intended number of sites, Central Basin will begin developing a marketing campaign to enroll participants. After the list of potential sites and customers have been developed, the vendor will begin to implement the outreach program to target those customers by April 19, 2016 through June 19, 2016.

Subtask 12.3: Water Audits

After customers are enrolled, water audits will be conducted at the customer sites (*May 2, 2016 – July 1, 2019*). The selected vendor will develop water audit reports based on the results soon after each audit is completed.

Subtask 12.4: Equipment Recommendations and Procurement

Prior to installation of upgraded equipment, the vendor will be required to develop a list of recommended equipment based on the water audits to ensure the installation of all necessary equipment at the participating sites. Based on this list, the vendor will then procure the required equipment (*May 16, 2016 – July 15, 2019*).

Subtask 12.5: Start-up and Testing

This subtask will require the installation of retrofits, potential repairs, start-up, and testing of the retrofits at each site by the vendor and take place over one year (*August 1, 2016 – October 7, 2019*).



Task [blue bar] Milestone [diamond] Summary [arrow]

Water LA Neighborhood Retrofits Project

Schedule

Project 20: Water LA Neighborhood Retrofits Project

The schedule presented is considered reasonable based on the current available information. The Water LA Neighborhood Retrofits Project (Project) is currently completing the GIS analysis to select the most suitable neighborhoods for the Project sites. It is anticipated that the Project will have all contracts awarded by December 1, 2015 with Project installations beginning by February 1, 2016 and all components of implementation complete by October 1, 2019 when the Outreach and Engagement Campaign is complete. The schedule is achievable because the Project is modeled after the Water LA Pilot Project and the Woodman Ave Median Project that were both successfully implemented in 2014. The justification for each category of the schedule is provided below:

Category (a) Direct Project Administration

Task 1: Project Management – The Project will be implemented by The River Project. The River Project's Project Director and Project Manager for the Project will be responsible for ensuring the necessary steps are underway to keep the Project on schedule. The Project Manager will also be responsible for coordination with partnering agencies. Project management began September 1, 2014 with the initiation of the Geographic Information Systems (GIS) analysis to assess the feasible Project locations. Project management will be completed once the Final Report is submitted (*December 31, 2019*). The schedule for grant application preparation was determined from the schedule provided in the consultant proposal. A final invoice will be prepared at the end of project implementation.

Task 2: Labor Compliance Program – The River Project will prepare a LCP before Project Installations begin and implement the program through the completion of the installation phase (*July 31, 2019*).

Task 3: Reporting – Quarterly Progress Reports will be produced by The River Project staff for the Project as required for grant funding beginning when the grant is awarded through the completion of Project Implementation (*December 1, 2015 – October 1, 2019*). The Draft Final Project Completion Report will be submitted to DWR via LACFCD for review. A Final Project Completion Report will be submitted to DWR after Project completion (*October 31, 2019*).

Category (b) Land Purchase/Easement

Task 4: Land Purchase – No land purchase is necessary for the Project.

Category (c) Planning/Design/Engineering/ Environmental Documentation

Task 5: Feasibility Studies – The GIS analyses began in September 2014 and will be complete once LiDAR data is incorporated (*October 30, 2015*). Soil sampling and analyses will begin with the initiation of the workshops once the initial selection of project sites are identified following the GIS analysis. Soil analyses will continue concurrently with the workshops and outreach until May 2019 as analyses will need to occur at each individual retrofit site to confirm soil suitability for recharge.

Task 6: CEQA Documentation – This project is categorically exempt. A Notice of Exemption will be prepared and filed by December 31, 2015.

Task 7: Permitting – The River Project is working with the City and County of Los Angeles on a parkway permit agreement to act as a single permit to cover all parkway basins. This process began June 2, 2014 and will be complete by December 31, 2015. If an agreement cannot be established, individual permits for installing the parkway basins in the public right-of-way will need to be obtained before each of the 1,000 parkway basin installations throughout the duration of the installation implementation (*January 1, 2016 – June 28, 2019*). The River Project worked with the City of Los Angeles and the County of Los Angeles to establish low-fee greywater permits for participants that choose to install branched drain greywater systems as part of their home retrofit. The greywater permits will be obtained after the sites that will use greywater systems are determined during the workshops, thus the permitting will continue until approximately June 28, 2019.

Water LA Neighborhood Retrofits Project

Task 8: Design – Draft Strategy Plans were developed from June 1, 2012 to September 30, 2014. These Strategy Plans are currently being finalized to complement the City of Los Angeles and County of Los Angeles requirements. This process will be complete by the end of 2015. The site-specific design plans for the individual parkway basins and home retrofits will be completed before each installation, following the workshops for the applicable neighborhood that will initiate the design process with the assistance of the home owner. Site-specific design will begin shortly after the initial workshop for each neighborhood. Some site will require more or less design than others depending on the types of retrofits chosen. Design will continue for the 1,000 parkway basins and 100 home retrofits until May 1, 2019, at which point all design should be complete.

Task 9: Project Performance Monitoring Plan – The Project Performance Monitoring Plan will be prepared following the initial selection of the Project sites when the GIS Analysis is complete (*November 2, 2015 – April 8, 2016*).

Category (d) Construction/Implementation

Task 10: Contract Services – Contract negotiations with the arborist, masonry, and greywater, rain tank, and parkway basin specialists began April 1, 2015. All contracts will be awarded by December 1, 2015.

Task 11: Construction Administration – A foreman will be onsite at all installations for the duration of the Project Installations phase of the Project (*February 1, 2016 – July 31, 2019*).

Task 12: Construction/Implementation

Subtask 12.1: Outreach – The Outreach and Engagement Campaign for the Project will begin November 2, 2015 following the completion of the GIS analysis that will be used to select the suitable Project sites for participation. This process will end approximately two months after the completion of the last project installation to ensure all BMPs are established and participants understand how to maintain stewardship of the sites (*October 1, 2019*).

Subtask 12.2: Education/Workshops – The How-To Guides for the Workshops are under development and will be finalized before the completion of the first workshop series. The workshops will begin following the initial stages of the Outreach Campaign after determining who will be participating in the Project. Workshop series for neighborhoods will last approximately 2.5 months, during which site-specific design for each retrofit location will begin. Participants will receive hands-on training related to their chosen retrofits. The workshops will be complete by June 2019.

Subtask 12.3: Project Installations – Retrofits will occur in eight neighborhoods with approximately two neighborhoods per year being retrofitted. The 1,000 parkway basin retrofits and 100 home retrofits will be installed from February 1, 2016 to July 31, 2019 with approximately 23-24 parkway basins installed each month and 20-30 home retrofits completed each year. This schedule assumes some retrofits will require less design and be able to begin after the initial workshop, with minimal site-specific design required before installation.

