

ATTACHMENT 5: SCHEDULE

This attachment presents the detailed schedule for the four projects included in this application and the overall application schedule. The project schedules presented in the Gantt charts are realistic and reasonable based on currently available project-specific information and experience with similar projects. Grant administration will occur throughout the execution of the three non-administrative projects; thus the overall proposal schedule covers the entire duration of all projects.

Proposal Schedule

The proposal schedule presented in Gantt format on the following page summarizes the schedule for each of the four projects included in the application. As shown in this schedule, all three non-administrative projects are currently underway with the following anticipated completion dates: May 11, 2018 for the Kaljian Drainwater Reuse Project; September 25, 2017 for the Orestimba Creek Recharge and Recovery Project; and November 9, 2017 for the Newman LID Project for Water Quality Improvement and Water Conservation. Detailed schedules for each project are presented and described in the following pages.

**Westside - San Joaquin IRWM Region
2015 IRWM Implementation Grant Application**

Proposal Schedule

**Attachment 5
Schedule**

ID	Task Name	Start	Finish	2	2013		2014		2015		2016		2017		2018	
				H2	H1	H2										
1	Westside-San Joaquin Region 2015 IRWM Implementation Grant Application	Tue 1/1/13	Fri 6/15/18													
2	Draft Grant Award Date	Mon 11/2/15	Mon 11/2/15													
3	Final Grant Award Date	Mon 12/21/15	Mon 12/21/15													
4	Grant Administration Project	Mon 12/21/15	Fri 6/15/18													
5	Category (a): Direct Project Administration	Mon 12/21/15	Fri 6/15/18													
23	Category (b): Land Purchase/Easement (Not Applicable)	Mon 12/21/15	Mon 12/21/15													
24	Category (c): Planning/Design/Engineering/ Environmental Documentation (Not Applicable)	Mon 12/21/15	Mon 12/21/15													
25	Category (d): Construction/Implementation (Not Applicable)	Mon 12/21/15	Mon 12/21/15													
26	Kaljjan Drainwater Reuse Project	Mon 2/3/14	Fri 4/13/18													
27	Category (a): Direct Project Administration	Mon 11/2/15	Fri 4/13/18													
46	Category (b): Land Purchase/Easement	Mon 7/20/15	Tue 3/1/16													
49	Category (c): Planning/Design/Engineering/Environmental Documentation	Mon 2/3/14	Fri 9/2/16													
67	Category (d): Construction/Implementation	Fri 9/2/16	Fri 3/23/18													
78	DPWD Orestimba Creek Recharge and Recovery Project	Mon 7/1/13	Mon 9/25/17													
79	Category (a): Direct Project Administration	Thu 5/28/15	Mon 9/25/17													
95	Category (b): Land Purchase/Easement	Wed 4/15/15	Tue 1/5/16													
99	Category (c): Planning/Design/Engineering/Environmental Documentation	Mon 7/1/13	Fri 4/22/16													
119	Category (d): Construction/Implementation	Tue 6/14/16	Fri 5/12/17													
130	Newman LID Project for Water Quality Improvement and Water Conservation	Tue 1/1/13	Thu 11/9/17													
131	Category (a): Direct Project Administration	Mon 6/15/15	Thu 11/9/17													
148	Category (b): Land Purchase/Easement	Tue 1/1/13	Fri 12/30/16													
153	Category (c): Planning/Design/Engineering/Environmental Documentation	Tue 1/1/13	Fri 7/29/16													
172	Category (d): Construction/Implementation	Mon 8/1/16	Thu 10/26/17													

Project: Proposal Schedule Date: Fri 8/7/15	Task		Project Summary	
	Summary		External Milestone	

PROJECT 1: Grant Administration Project

The Grant Administration Project schedule presented in the Gantt chart on the following page is reasonable based on the currently available project information and experience with similar projects. The following is the justification for each of the budget category shown in the schedule. This is an administrative project and will not include any specific project design and/or construction.

- (a) Direct Project Administration:** *Task 1 – Agreement Administration:* SLMDWA will obtain all documents necessary from the project proponents to execute a grant agreement with DWR. Assuming a final grant award on December 21, 2015, the grant is anticipated to be executed by January 29, 2016. *Task 2 – Invoicing:* SLMDWA will be responsible for compiling invoices and submitting to DWR, and payment of invoices. SLMDWA will coordinate with the project managers on invoicing activities during the entire duration of all projects. *Task 3 – Progress Reports and Project Completion Reports:* SLDMWA will compile and submit to DWR quarterly progress reports for each project included in this application. SLDMWA will coordinate with the project managers to prepare and submit draft and final project completion reports to DWR. Project Completion Reports are shown as deliverables in the individual project schedules. Additionally, SLDMWA will also prepare and submit a grant completion report as shown in the schedule below. This will be a final deliverable to demonstrate that all applicable administrative actions and all required work of the grant was completed according to the grant agreement with DWR. *Task 4: Performance Monitoring and Tracking:* SLDMWA will review the projects progress and track the performance of each project throughout the project execution. *Task 5: Labor Compliance Tracking:* SLDMWA will coordinate with the project proponents to ensure that a Labor Compliance is prepared and submitted to DWR, and will track that each project is implementing the plan.
- (b) Land Purchase/Easement:** This project is purely administrative in nature, therefore this category is not applicable.
- (c) Planning/Design/Engineering/Environmental Documentation:** This project is purely administrative in nature, therefore this category is not applicable.
- (d) Construction/Implementation:** This project is purely administrative in nature, therefore this category is not applicable.

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Grant Administration Project

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Schedule**

ID	Task Name	Start	Finish	2016			2017			2018					
				Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4		
1	Westside-San Joaquin 2015 IRWM Implementation Grant Application	Mon 12/21/15	Fri 6/15/18												
2	Final Grant Award Date	Mon 12/21/15	Mon 12/21/15												
3	Grant Administration Project	Mon 12/21/15	Fri 6/15/18												
4	Category (a): Direct Project Administration	Mon 12/21/15	Fri 6/15/18												
5	Task 1 - Agreement Administration	Mon 12/21/15	Fri 6/15/18												
6	Executed Grant Agreement	Fri 1/29/16	Fri 1/29/16												
7	Task 2 - Invoicing	Mon 12/21/15	Fri 6/15/18												
8	Task 3 - Progress Reports and Project Completion Reports	Fri 4/15/16	Thu 5/17/18												
9	Quarterly Progress Reports	Fri 4/15/16	Fri 4/13/18												
19	Grant Completion Report	Mon 4/16/18	Thu 5/17/18												
20	Task 4 - Performance Monitoring and Tracking	Mon 12/21/15	Fri 5/11/18												
21	Task 5 - Labor Compliance Tracking	Mon 12/21/15	Fri 5/11/18												
22	Category (b): Land Purchase/Easement (Not Applicable)	Mon 12/21/15	Mon 12/21/15												
23	Category (c): Planning/Design/Engineering/ Environmental Documentation (Not Applicable)	Mon 12/21/15	Mon 12/21/15												
24	Category (d): Construction/Implementation (Not Applicable)	Mon 12/21/15	Mon 12/21/15												

Project: Grant Administration Pro
Date: Fri 8/7/15

Task Milestone Summary

PROJECT 2: Kaljian Drainwater Reuse Project

The schedule presented in the Gantt chart on the following page is reasonable based on the currently available project information and experience with similar projects. The Project will be ready for implementation prior to October 31, 2019, assuming a final grant award date of December 21, 2015. The Project entails the rehabilitation of the Kaljian Pumping Plant, 9,100 feet of Kaljian Pipeline, 17,800 feet of the Main Canal, and the Fittje Pump Station. The following is the justification for each of the category of the schedule:

(a) Direct Project Administration: Task 1 - Project Management: The SLWD project manager will be responsible for ensuring the steps necessary to complete this Project are underway. The schedule for grant application preparation was determined from the schedule provided in the consultant proposal. Project Management begins with the final grant award and ends when the Project Completion Report and final invoice are submitted (May 11, 2018). Task 2 - Labor Compliance Program: SLWD will hire a consultant to develop a Labor Compliance Program prior to construction. The Labor Compliance Plan will be developed and submitted to DWR by September 2, 2016; the time required to develop the Labor Compliance Program is based on previous experience. The program will be implemented throughout the duration of construction (Task 12). Task 3 - Reporting: Quarterly Progress Reports will be produced by the SLWD PM and submitted to SLDMWA for compilation and submittal to DWR as required by the funding agreement. The first quarterly progress report will be due following the first quarter after the grant is awarded (approximately April 15, 2016). The Final Project Completion Report will be submitted following the Project completion (May 11, 2018).

(b) Land Purchase/Easement: Task 4 - Land Purchase: Easement acquisition is required to perform the planned work at the Project site. Easements will be acquired prior to the start of construction at the site. Easement negotiations are currently underway and it is anticipated that the easements will be acquired by March 1, 2016.

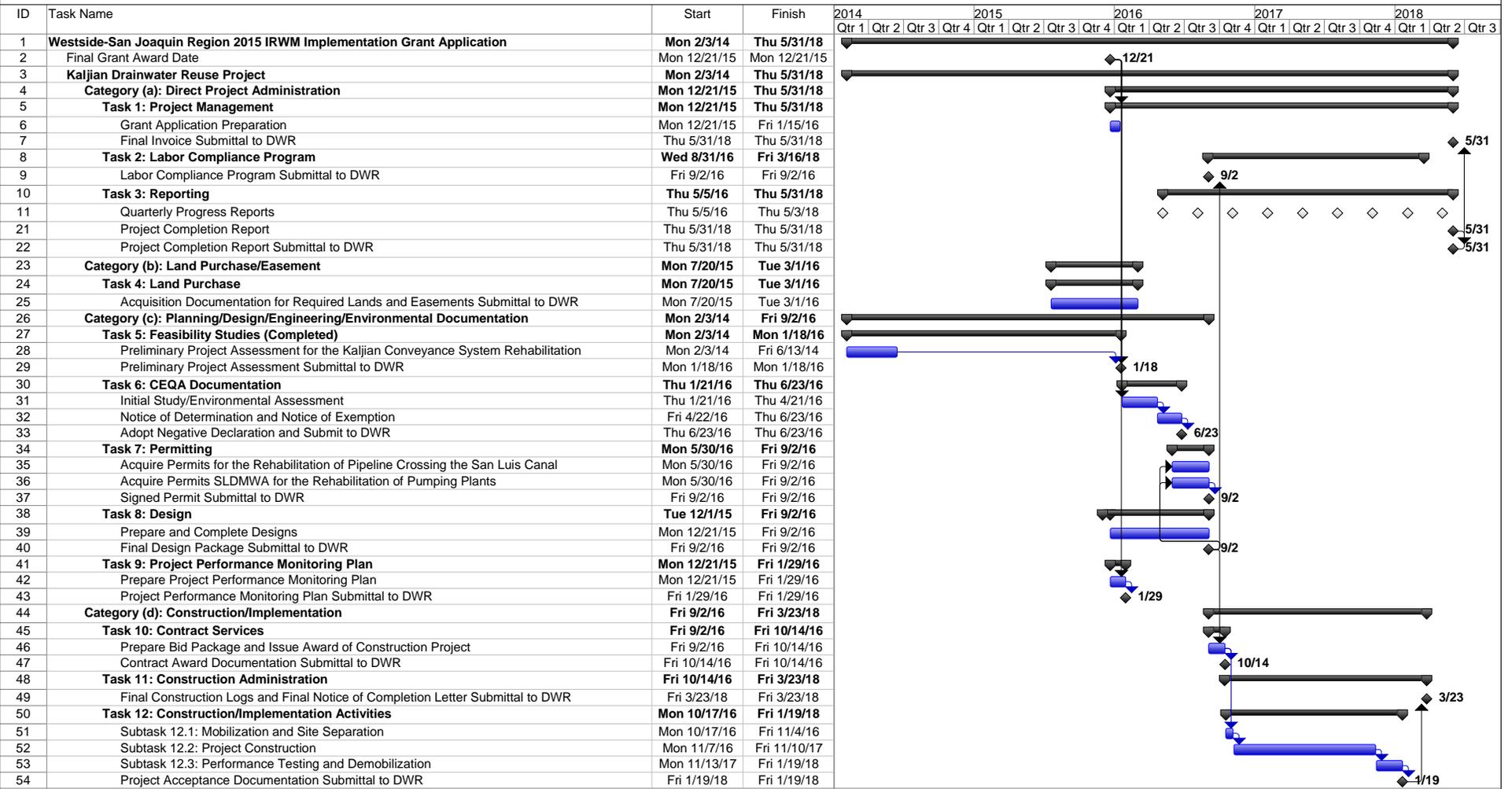
(c) Planning/Design/Engineering/Environmental Documentation: Task 5 - Feasibility Studies: The Preliminary Project Assessment was completed in June 2014 and will be submitted to DWR by January 18, 2016. Task 6 - CEQA Documentation: An Initial Study/Environmental Assessment, Negative Declaration, and Notice of Determination will be completed for the pipelines connecting to the drain water lift stations P-1 and P-2 by June 3, 2016. The rehabilitation work for the Kaljian Pumping Plant and conveyance system will be considered a categorically exempt project. Durations for these tasks are based on prior project experience. Task 7 - Permitting: All permits will be obtained prior to the start of construction at the site. The permits will be obtained when designs are close to completion and will include maintenance permits from DWR and the SLDMWA. It is anticipated that the permits will be acquired by September 2, 2016 based on past experience obtaining similar permits for other projects. Task 8 - Design: Project design will begin on December 21, 2015 and should be completed by September 2, 2016. The anticipated period for project design is based on current project status, consultant availability, and past experience with design projects of a similar nature. Task 9 - Project Performance Monitoring Plan: SLWD will prepare and submit to DWR a Project Performance Monitoring Plan (January 29, 2016) that will be implemented during project execution. The time required to prepare the plan is based on consultant experience.

(d) Construction/Implementation: Task 10 - Contract Services: Preparation for the construction bid will begin by September 2, 2016, with a Notice to Proceed (NTP) issued by October 14, 2016. Task 11 - Construction Administration: Prior to the beginning of construction, a construction management company will be retained to assist with construction management activities. Construction administration activities will track with the project construction and will be complete by March 23, 2018 (following performance testing and final acceptance of project work), with a final notice of completion letter. Task 12 - Construction/Implementation Activities: Construction BMPs (including reporting) will be implemented throughout project construction, which is expected to extend from October 2016 through January 2018. Subtask 12.1 - Mobilization and Site Preparation: The contractor will mobilize starting October 17, 2016, following award of the contract and receipt of the NTP. Clearing and grubbing, construction BMPs, Environmental Assessment (EA) mitigation measures (if required), and NPDES permit requirements for the disposal of the pressure test water will be implemented during construction at each construction location (e.g., pumping station site, pipeline alignment). Subtask 12.2 - Project Construction: Project construction will begin by November 7, 2016 and will be completed November 10, 2017. The expected time for construction is based on previous experience with similar construction and rehabilitation activities. Subtask 12.3 - Performance Testing and Demobilization: Pipeline pressure testing and pump startup and testing will begin by November 13, 2017 and will be completed by January 19, 2018. The period required for performance testing is based on previous experience with similar projects.

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SLWD Kaljian Drainwater Reuse Project

**Attachment 5
Schedule**



Project: Kaljian Drainwater Reuse Project
Date: Fri 8/7/15

Task Summary
Milestone External Tasks External Milestone

PROJECT 3: Orestimba Creek Recharge and Recovery Project

The schedule presented in the Gantt chart on the following page is reasonable based on currently available project information and experience with similar projects. The Project will be ready for implementation prior to September 25, 2017, assuming a final grant award date of December 21, 2015. The Project includes the construction of the following project elements: levees to form a tandem recharge pond system, a 600-foot extraction well to recover banked groundwater, three (3) 300-foot observation wells, and a 6,400-foot PVC pipeline to connect the recharge pond with the DMC. The following is the justification for each of the category of the schedule:

(a) Direct Project Administration: Task 1 - Project Management: The DPWD project manager will be responsible for ensuring the steps necessary to complete this Project are underway. The schedule for grant application preparation was determined from the schedule provided in the consultant proposal. Project Management begins with the final grant award date of December 21, 2015 and ends when the Project Completion Report and final invoice are submitted (September 25, 2017). Task 2 - Labor Compliance Program: DPWD will hire a consultant to develop a Labor Compliance Program prior to construction. The Labor Compliance Plan will be developed and submitted to DWR by July 4, 2016. The time required to prepare the Labor Compliance Program is based on consultant experience with similar projects. The compliance program will be implemented throughout the duration of project construction. Task 3 - Reporting: Quarterly Progress Reports will be produced by the DPWD PM for submittal to SLDMWA for compilation and submittal to DWR as required for by the funding agreement. The first quarterly progress report will be due following the first quarter after the grant is awarded (April 15, 2016). The Final Project Completion Report will be submitted at the Project completion (September 25, 2017).

(b) Land Purchase/Easement: Task 4 - Land Purchase: Easement acquisition is required to perform the planned work at the Project site. Easements will be acquired prior to the start of construction at the site. Easement negotiations are currently in discussion, and it is anticipated that the easements will be acquired by January 5, 2015 based on the current status of negotiations.

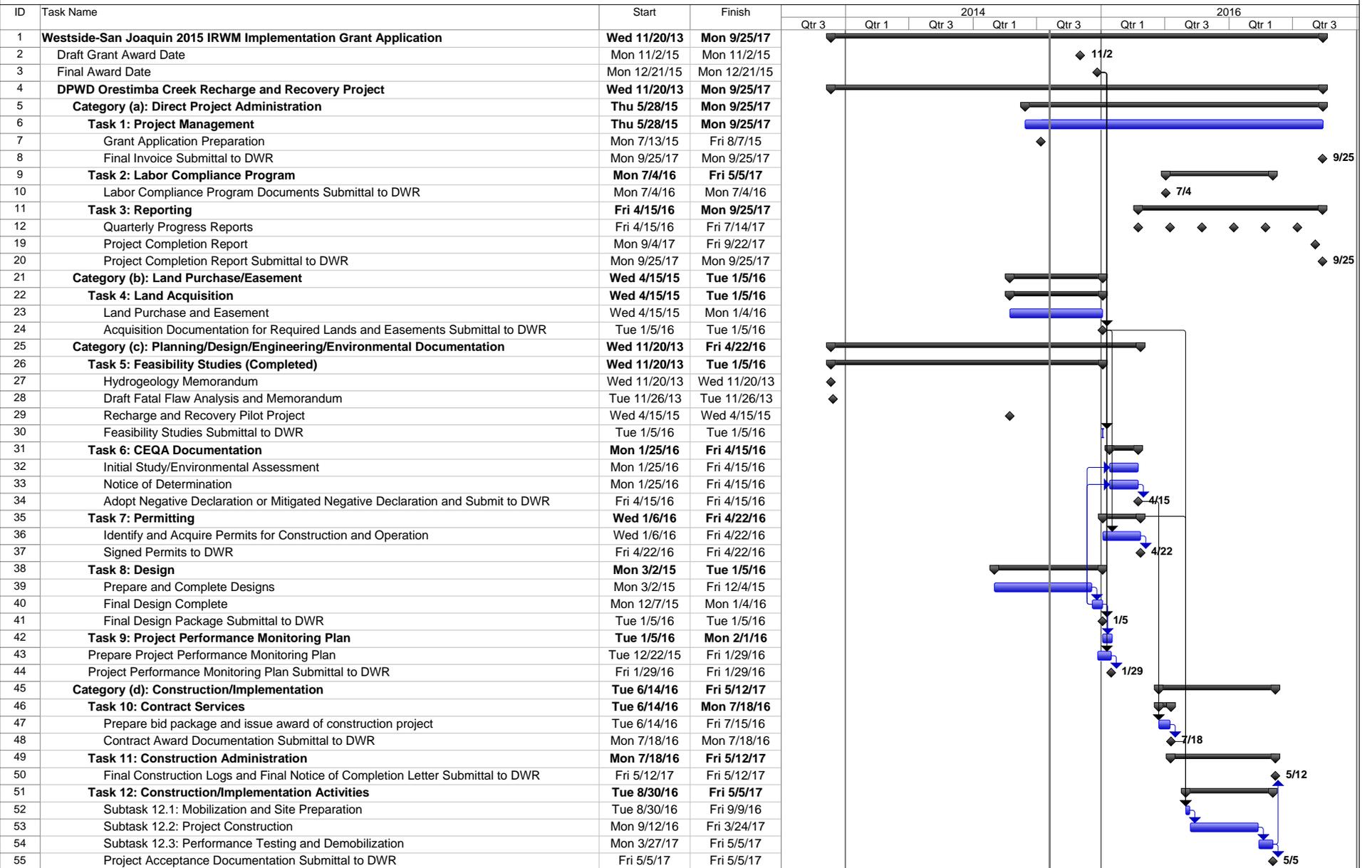
(c) Planning/Design/Engineering/Environmental Documentation: Task 5 - Feasibility Studies: This task has already been completed for the Project with the last feasibility study completed in April 2015. The feasibility study will be submitted to DWR by January 5, 2016. Task 6 - CEQA Documentation: An Initial Study/Environmental Assessment and Negative Declaration (or Mitigated Negative Declaration) will be completed by April 15, 2016. Durations for these tasks are based on prior project experience. Task 7 - Permitting: All permits will be in place prior to the start of construction at the site. The permits will be obtained when designs are complete and are anticipated to be acquired by April 22, 2016 based on previous experience with obtaining similar permits. Task 8 - Design: Project design started in March 2015 and will be complete and reviewed by December 2015 based on the current status of project design, the levels of project design to be contracted and similar project experience. It is anticipated that final design will be completed by January 5, 2016. Task 9 - Project Performance Monitoring Plan: DPWD will prepare and submit to DWR a Project Performance Monitoring Plan to be implemented during project execution by January 29, 2016. The time required to prepare the plan is based on consultant experience.

(d) Construction/Implementation: Task 10 - Contract Services: Preparation of the construction bid will begin by June 14, 2016 with the bid period extending through July 15, 2016 and a NTP issued on July 15, 2016. This scheduled period is based on experience with similar projects. Task 11 - Construction Administration: Prior to the beginning of construction, a consultant will be retained to assist with construction management activities. These activities will be conducted concurrent with project construction (Task 12) and are expected to be completed by May 12, 2017 with a final notice of completion letter. Task 12 - Construction/Implementation Activities: Construction BMPs (including reporting) will be implemented throughout construction and are anticipated to extend from August 2016 through May 2017. Subtask 12.1 - Mobilization and Site Preparation: The contractor will mobilize starting August 30, 2016. Construction BMPs, Environmental Assessment (EA) recommendations, and NPDES permit requirements will be conducted during construction at each site. Subtask 12.2 - Project Construction: Project construction will begin by September 12, 2016 and will be completed by March 24, 2017. The period required for construction is based on past construction experiences of a similar nature. Subtask 12.3 - Performance Testing and Demobilization: Site testing will begin by March 27, 2017 and will be completed by May 5, 2017 with the Project site demobilization. The time required for these activities are based on consultant recommendations from similar projects.

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DPWD Orestimba Creek Recharge and Recovery Project

**Attachment 5
Schedule**



PROJECT 4: Newman LID Project for Water Quality Improvement and Water Conservation

The schedule presented in the Gantt chart on the following page is reasonable based on currently available project information and experience with similar projects. The Project will be ready to begin construction/implementation prior to December 15, 2016, assuming a final grant award date of December 21, 2015. The following is the justification for each of the category of the schedule:

(a) Direct Project Administration: Task 1 - Project Management: The City of Newman PM will be responsible for ensuring the deliverables required to complete this Project are completed in a timely manner. Project management begins with a final grant award date of December 21, 2015 and ends when the Project Completion Report and final invoice are submitted (November 9, 2017). Task 2 - Labor Compliance Program: The City of Newman will develop a Labor Compliance Program prior to construction activities beginning January 2, 2017. The time required to complete this program is based on consultant experience with similar projects. The Labor Compliance Program will be implemented through the duration of project construction. Task 3 - Reporting: Quarterly Progress Reports will be produced by the City of Newman PM for submittal to SLDMWA as required by the funding agreement. The first quarterly progress report will be due following the first quarter after the grant is awarded (April 15, 2016). The Final Project Completion Report will be submitted by October 26, 2017 after the Project completion (September 29, 2017).

(b) Land Purchase/Easement: Task 4 - Land Purchase: Land acquisition (103 acres) was completed on March 11, 2014 for the proposed project. The easement will be acquired to access the purchased land during construction as the land is at the borderline with the County property. Easement will be acquired prior to the start of construction at the site by December 30, 2016; the schedule for obtaining this easement is based on the anticipated date for start of the project construction (January 2017).

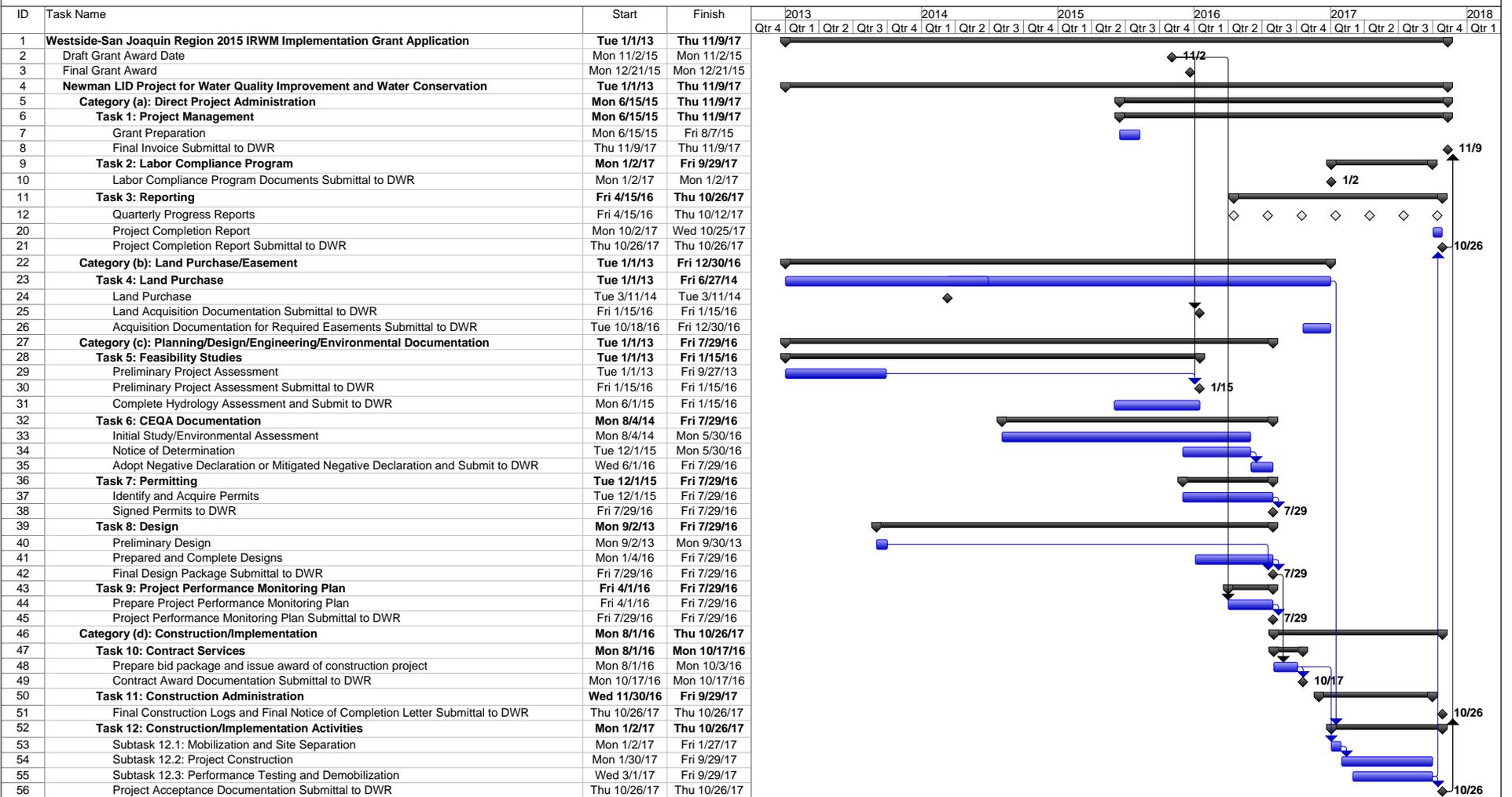
(c) Planning/Design/Engineering/Environmental Documentation: Task 5 - Feasibility Studies: The Preliminary Project Assessment was completed in September 2013. Hydrology assessment is ongoing and will be completed by November 2015. Both documents will be submitted to DWR by January 15, 2016. Task 6 - CEQA Documentation: An Initial Study/Environmental Assessment and Notice of Intent to Adopt a Negative Declaration or Mitigated Negative Declaration will be completed by May 30, 2016 and will be submitted to DWR by July 29, 2016. Durations for these tasks are based on prior project experience. Task 7 - Permitting: All permits will be completed by July 29, 2016, prior to the start of construction at the site. The permits will be obtained when designs are close to complete. The durations required for obtaining the necessary permits are based on past project experience. Task 8 - Design: Project design will be completed and reviewed by July 29, 2016, prior to the beginning of construction. The duration for this task is based on experience with similar projects, current project design status, and the time required to prepare and review the multiple levels of project design. Task 9: Project Performance Monitoring Plan: The City of Newman will prepare and submit to DWR a Project Performance Monitoring Plan to be implemented during project execution by July 29, 2016. The time required to prepare the plan is based on consultant experience.

(d) Construction/Implementation: Task 10: Contract Services: Contract services will begin by August 1, 2016 with preparation and noticing of the construction bid, and will be completed with an NTP issued on October 3, 2016. Task 11: Construction Administration: Staffing required for construction management (including the possible hiring of an independent consultant) will be in place by November 30, 2016. Construction administration will be conducted concurrent to project construction (Task 12), and will be complete by September 29, 2017 with a final notice of completion letter. Task 12: Construction/Implementation Activities: Construction BMPs (including reporting) will be implemented throughout construction from January 2, 2017 through September 29, 2017 based on experience with similar types of construction activities. Subtask 12.1: Mobilization and Site Preparation: The contractor will mobilize to the project site and start the site preparation activities including review of material submittals, notification of USA Alert for utility markings, construction schedule, construction surveying & mapping, shop drawing submittals, contractor permits, attendance at meetings, material and equipment procurement, BMPs, and storage area setup. This subtask is anticipated to begin January 2, 2017 and extend for approximately four weeks based on prior experience. Subtask 12.2: Project Construction: Project construction will begin by January 30, 2017 and be completed by September 29, 2017. Subtask 12.3: Performance Testing and Demobilization: LID BMPs will be tested for flow, infiltration, and water treatment, and a pump station system will be tested. Following project construction, the project site and storage area will be cleaned up and equipment will be removed from the site. A final walk through of the site will be conducted for Project acceptance. These activities will take place between March 1, 2017 and September 29, 2017. The time required for this subtask is based on past experience with similar projects.

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Newman LID Project for Water Quality Improvement and Water Conservation

**Attachment 5
Schedule**



Project: Newman LID Project for Water Quality Improvement and Water Conservation
Date: Fri 8/7/15

Task [Blue bar] Summary [Grey bar] External Milestone [Diamond]

Milestone [Diamond] External Tasks [Grey bar]