

# ATTACHMENT 5

## Schedules

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## **5.1 Project Schedules**

Detailed project schedules have been included at the end of this attachment. The tasks shown in each project matches tasks listed in the Work Plan and the Budget attachments. Items general to all of the project schedules include the following:

- The schedule shows the major tasks needed to complete the project. The schedule also shows major deliverables and linkages between tasks.
- The schedule tasks are consistent with those used in the Work Plan and Budget.
- Days shown on the Gantt chart are working days.
- Long-term project monitoring and annual Project Performance Reports are not shown to allow for better clarity of the immediate timeline. Annual monitoring will continue after project completion for the period specified in the grant agreement.
- Also for clarity, work tasks that have occurred prior to mid 2015 are not shown on the Gantt Chart but rather in tabular format left of the bar chart.
- All three project proponents will award construction contracts (submit Notice of Award to Contractor) prior to April 1, 2016 and begin construction therein.

### **5.1.1 Project 1: Grant Administration**

The Grant Administration Project Schedule is presented in **Figure 5.1-1**. Descriptions of the schedules related to each task are described below:

#### **Task 1 – Agreement Administration**

The anticipated conditional grant award date of December 1, 2015 is based on the tentative dates provided in Table 2 of the Proposal Solicitation Package (PSP). Following the notification of grant award, the proponents will provide the Grantee, BVWSD, with supplementary information to deliver to DWR within one month in order to expedite the preparation of the draft grant agreement by DWR. The proponents will review the draft grant agreement, combine comments, and BVWSD will submit to DWR for final approval. These tasks are expected to take approximately 4 months based on past experience with grant agreements with the Kern IRWM Group.

Within a month after the execution of the Grant Agreement, a Kickoff Meeting will be held with the DWR Grant Manager, the project proponents, and their Grant Administrator consultant (Provost & Pritchard). Invoicing, Reporting, and Grant Agreement conditions will be reviewed. The majority of the work under this Task is related to the initiation of the Grant Agreement but there are tasks throughout the project schedules including: on-going grant compliance documentation, correspondence with DWR regarding grant conditions, and coordination with project proponents on grant administration issues.

#### **Task 2 – Invoicing**

Invoicing work is a continuous process and is shown as solid bars as invoices and backup documentation will be collected and reviewed every month. On a quarterly basis, the month after a quarterly report is due, the Grant Administrator will work with the project proponents to generate a DWR Invoice Packet with necessary documentation, background invoices, and summary tables for submission to DWR. In the case of LOWMWC, it is expected that invoicing will occur on a monthly basis as quarterly reimbursement will be difficult for the Water Company's cashflow.

#### **Task 3 – Progress Reports and Project Completion Reports**

The first quarterly report is expected to be due on April 30, 2016, as shown on the schedule. Provost & Pritchard has a track record of working with project proponents to prepare thorough reports and invoicing/documentation that is delivered on time requiring few to no revisions by DWR Grant Managers. Up to five quarterly reports are anticipated based on the project schedules. The period of time shown includes the Grant Administrator preparing

a template for the quarter, distributing it to the project proponents for updates, receiving the documentation, and preparing the final report before the end of the month.

The Draft Project Completion Reports are shown on the chart as involving two months of time after the completion of the project (less than the 90 day requirements to account for potential delays in obtaining information). It is uncertain when DWR's comments will be received (most likely within 2 months). Once comments are received they will be addressed in an expedited manner and the Final Project Completion Report will be submitted within one month.

In summary, the Grant Administration schedule is considered realistic, reasonable and accomplishable for the following reasons:

1. The Kern IRWM Group has experience with two prior IRWM Grant Agreements, and the current Applicant, BVWSD, was also the applicant on the group's 2014 Drought Grant.
2. Provost & Pritchard, the Grant Administrator consultant, has successfully managed multiple IRWM Grant Agreements throughout the Central Valley, including the two IRWM Grants for the Kern IRWM Group.
3. Strict deadlines will be set on deliverables from project proponents. The Grant Administrator has found that constant and significant communication has worked well in administering past grant agreements.

### 5.1.2 Project 2: BVWSD The Palms Groundwater Recharge and Recovery Project

Figure 5.1-2 includes a Gantt chart schedule for The Palms Groundwater Recharge and Recovery Project. The following should be noted regarding the schedule:

- No land purchase or easement acquisition is required for the project.
- The required permits are expected to be easily acquired based on the proposed work. The District’s engineering consultant has extensive experience obtaining similar permits.
- The schedule includes buffer allowances to ensure that the project stays on track for meeting deadlines.
- The work could be performed any time of the year, and only minor weather delays would occur in the rainy season (generally the winter). Rainfall in the area is very low at only 6.5 inches/year.
- No time will be needed to develop financing since the District already has funds to provide the 28% cost share.

Project tasks are scheduled concurrently at times in order to complete the Project in a timely manner. The Project will have two separate construction contracts: The Palms GRRP Well Equipping Project and The Palms GRRP Recharge Basin and Recovery Pipeline Project. This is done to match contractor specialties, as a contractor that specializes in work for one project would more than likely not specialize in the other project. Schedule contingencies have been included in the Gantt chart to allow for delays. Tasks specific to the Well Equipping Project are shown in green and tasks specific to the Recharge Basin and Recovery Pipeline Project are shown in orange. Tasks that are general to the Palms GRRP are shown in blue.

#### Project Milestones

Major project milestones are shown in **Table 5.1-1**. Refer to the schedule for more details.

**Table 5.1-1: Major Project Milestones**

Task	Date
Grant Award (assumed)	December 2015
Complete Design	December 2015 / April 2016**
Award Contract / Begin Construction	February 2016 / June 2016**
Complete Construction	July 2016 / December 2016**
Submit Final Project Report	March 2017**

\*\* (Well Equipping Project / Recharge Basin and Recovery Pipeline Project)

The project completion date of March 2017 is well before the contractual deadline of October 31, 2019. This provides a large buffer in case of unforeseen circumstances, and will help ensure that the project is completed within the grant agreement period.

#### Description of Schedule Categories

A description of the schedule by several broad categories is provided below:

##### Category (a) – Direct Project Administration

Grant Administration occurs throughout the entire project from the Grant Award to final report documentation. Under the 2014 Drought Solicitation Implementation Grant, BVWSD has prepared a Labor Compliance Plan

(LCP) and is awaiting approval of the plan; anticipated in October 2015. This LCP plan will be used for the proposed project too. Initial grant milestones such as the required quarterly reports will provide feedback to DWR regarding the Project's progress. We have assumed that the contract with DWR will be finalized 4 months after the Grant Award.

**Category (b) – Land Purchase/Easement**

No easements or land need to be obtained for the Project.

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

Although the grant contract is anticipated to be executed in December, to provide adequate time to prepare the necessary documents and perform surveys, environmental work for The Palms GRRP Recharge Basin and Recovery Pipeline Project has already begun. The IS/MND for the Recharge Basin and Recovery Pipeline Project is expected to be completed for adoption in January 2016. Environmental work for the Well Equipping Project is planned to begin in October 2015. Three months has been allotted for this task, and the Notice of Exemption (NOE) is anticipated to be filed in December 2015.

Project well equipping design is anticipated to begin in November 2015 and will be completed in mid December 2015. Development of the well equipping bid and permit documents will be completed before January 2016. The District will proceed with the survey and utility investigation and subsequent recharge basin and recovery pipeline design phases after the Grant Award. Three months is allotted to the recharge basin and recovery pipeline design, and is expected to be completed in March 2016. Development of the recharge basin and recovery pipeline bid and permit documents is anticipated to take one month, and will be completed in April 2016.

Required permitting for the Project is minimal and permitting issues are anticipated to be routine. Approximately 1.5 months towards the end of the design, permitting (SWPPP/DCP/ISR preparation) will be initiated to have the permits completed and approved prior to beginning the bid process. One and a half months has been allotted for the preparation, submittal, and receipt of the PG&E service applications, which is concurrent with the well pump, motor, pump controls and electrical, and discharge design. Six months has been allotted for the development and approval of the DWR License Agreement between BVWSD, Kern County Water Agency, and DWR. The DWR License Agreement task begins with the Project final design and a final agreement will be developed by June 2016.

**Category (d) – Construction / Implementation**

The Well Equipping Construction Bid Process will begin in late December 2015. The bid will be awarded on February 17, 2016 at the District's regularly scheduled Board of Directors meeting. Construction will begin in February 2016 and last approximately 5 months. Concurrent with the well equipping construction task is the Construction Administration task. The Well Equipping Project is expected to be completed and closed out by early July 2016.

The Recharge Basin and Recovery Pipeline Construction Bid Process will begin in April 2016. The bid will be awarded on June 15, 2016 at the District's regularly scheduled Board of Directors meeting. Construction will begin in June 2016 and last approximately 7 months. Concurrent with the recharge basin and recovery pipeline construction task is the SWPPP and ISR Compliance, CEQA Mitigation Measures (if applicable), and Construction Administration Tasks. The Recharge Basin and Recovery Pipeline Project is expected to be completed and closed out by December 2016.

In summary, the schedule is considered realistic, reasonable and accomplishable for the following reasons:

1. Environmental documentation work has already begun on the project
2. No major permitting or regulatory hurdles are anticipated
3. CEQA for well equipping can be accomplished through an exemption
4. The project will be completed well in advance of the grant deadline, providing a significant buffer in case of unforeseen circumstances.

**5.1.3 Project 3: GHCS D Antelope Conjunctive Use Project – Steuber Phase**

Figure 5.1-3 includes a Gantt chart schedule for the Antelope Conjunctive Use Project – Steuber Phase. The following should be noted regarding the schedule:

- The project is not expected to involve a lengthy process for easement acquisition.
- The work could be performed any time of the year, and only minor weather delays would occur in the rainy season (generally the winter).
- The remaining permits are expected to be easily acquired based on the proposed work. GHCS D and their engineering consultant have extensive experience obtaining similar permits.
- No time will be needed to develop financing since the District already has funds to provide the 28% cost share.
- The schedule includes buffer allowances to ensure that the project stays on track for meeting deadlines.
- The applicant considers the schedule reasonable based on their experience constructing similar projects, including:
  - Abajo Avenue Transmission Pipeline, GHCS D (2013, \$0.5M)
  - Antelope Conjunctive Use Project – Morris Park Phase, GHCS D (2005-2006, \$1.4M with 50% grant funding through Proposition 13)

**Project Milestones**

Major project milestones are shown in Table 5.1-2. Refer to the schedule for more details.

**Table 5.1-2: Major Project Milestones**

Task	Date
Grant Award (assumed)	December 2015
Complete Design	January 2016
Award Contract / Begin Construction	March 2016
Complete Construction	April 2017
Submit Final Project Report	June 2017

The project completion date of June 2017 is 28 months before the contractual deadline of October 31, 2019. This provides a large buffer in case of unforeseen circumstances, and will help ensure that the project is completed within the grant agreement period.

**Description of Schedule Categories**

A description of the schedule by several broad categories is provided below:

**Category (a) – Direct Project Administration (Tasks 1-3)**

Project administration occurs throughout the entire project. Initial grant milestones such as the required quarterly reports will provide feedback to DWR regarding the project’s progress. Five Quarterly Reports are anticipated for this project. The Labor Compliance Program will be prepared as part of this task, to ensure that the Department of

Industrial Relations approves the Program before construction begins. The Project Completion Report will be completed within 60 days after the construction project closeout.

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

GHCSO has already begun negotiation on use of a pipeline easement currently held by the Tehachapi-Cummings County Water District. Tehachapi has already signed a Letter of Intent to participate, and the two agencies have prepared a Draft Joint Agencies Agreement, that is being finalized and is expected to be signed within the next 3 months.

**Category (c) - Planning / Design / Engineering / Environmental Documentation (Task 5-9)**

California Environmental Quality Act compliance is complete, with the adoption of a Mitigated Negative Declaration on April 18, 2014. With this task complete the uncertainty related to many regulatory and permitting issues, as well as CEQA consultation and review periods that can take considerable time is eliminated. Significant progress has already been made on the project design, including a 100% complete well design with plans, specifications and bidding documents. Completing the remaining design effort will only take a few months, and will begin as soon as the draft funding recommendations are announced.

**Category (d) - Construction / Implementation (Tasks 10-13)**

A contract will be awarded at the District's board meeting in mid-March 2016, before the April 1, 2016 date designated in the the grant requirements. Well drillers in the area are currently in very high demand, due to the multi-year drought. The construction contract will be made flexible and attractive to drillers so they can fit it into their busy schedule. This will include a 45-day bidding period, and nine months to construct the well. In the past, well construction could be completed more quickly. However, providing a longer construction window is considered a prudent and logical step, and is necessary to help ensure that reasonable bids are received from well drillers.

In summary, the schedule is considered realistic, reasonable and accomplishable for the following reasons:

1. CEQA Initial Study and Well Design are already 100% complete
2. No major permitting or regulatory hurdles are anticipated
3. The construction contract will allow a large window for well construction to accommodate a high demand for well drillers
4. The schedule is based on the District's experience constructing similar projects, which are listed above.

**5.1.4 Project 4: LOWMWC Water Main & Meter Installation Project**

Figure 5.1-4 includes a Gantt chart schedule for the LOWMWC Project. The following should be noted regarding the schedule:

- No land or easement acquisition is required as the water mains will be constructed within the County Right-of-Ways.
- Generally, the construction work will start in April and end in September and would not be affected by the periodic snowfall in the winter. The snow doesn't stay for long periods of time in the area and would not affect construction, though.
- The remaining permits are expected to be easily acquired based on the proposed work. The Water Company's engineering consultant has extensive experience obtaining similar permits. The County encroachment permit does not take much time to obtain (a week or so).
- As the Water Company is a DAC with limited financial resources it will obtain a bridging loan for construction costs. Self Help Enterprises has been assisting the District and would be able to assist with a loan (typical for these DAC projects). The loan can be secured rapidly after Grant Award (w/in 1-2 months).
- In general, the project is projected to proceed rapidly as the community is in a water supply emergency. The Water Company's engineering consultant recognizes the needs of the community and has extra resources available to meet deadlines. Additionally, the schedule includes buffer allowances to ensure that the project stays on track for meeting deadlines.

**Project Milestones**

Major project milestones are shown in **Table 5.1-3**. Refer to the schedule for more details.

**Table 5.1-3: Major Project Milestones**

<b>Task</b>	<b>Date</b>
Grant Award (assumed)	December 2015
Complete Design	January 2016
Award Contract / Begin Construction	March 2016
Rate Study Complete	March 2016
Complete Construction	October 2016
Submit Final Project Report	December 2017

The project completion date of December 2017 is well before the contractual deadline of October 31, 2019. This provides a large buffer in case of unforeseen circumstances, and will help ensure that the project is completed within the grant agreement period.

**Description of Schedule Categories**

A description of the schedule by several broad categories is provided below:

**Category (a) - Direct Project Administration**

Project administration occurs throughout the entire project from grant contract completion to final report documentation. The labor compliance task has been completed as previously mentioned. Initial grant Milestones such as the required quarterly reports will provide feedback to DWR regarding the project's progress. Three quarterly reports are anticipated for the project.

**Category (b) - Land Purchase / Easement**

No easements or land purchases are required for the Project.

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

The Water Company will contract with an engineer to begin work with the Feasibility Study and Survey & Utility Investigation in September 2015. Once the basemap is created with the surveyed data, Project Design will proceed for approximately 4 months (completion by end of January 2016). In regards to environmental documentation, a Notice of Exemption will be prepared and filed with the County Clerk at the beginning of the project. About one month towards the end of design, permitting will be initiated to have it completed prior to starting the bid process.

Included in the Assessment and Evaluation Task is the preparation of a rate study, conducting outreach to the community regarding the project and expected rates, and the implementation of said rates. This subtask will be conducted over 5 months to ensure the public is well aware of the proposed changes. Once the meters are installed and properties connected; the new rates will be put into effect. A Mutual Water Company is not required to go through a lengthy Proposition 218 election process to raise rates.

**Category (d) - Construction / Implementation**

The Construction Bid Process will begin in February 2016. The bid will be awarded at the March Board of Directors meeting. Construction will begin in April 2016 and go for approximately 5 months (meter installation will be given higher priority in order to implement metered rates sooner). Concurrent with Construction Task is SWPPP/DCP monitoring and reporting in accordance with SWRCB/SJVAPCD requirements, as well as Construction Administration Tasks. The Project is expected to be completed and closed out by October 2016. Schedule contingencies have been included in the chart to allow for delays.

In summary, the schedule is considered realistic, reasonable and accomplishable for the following reasons:

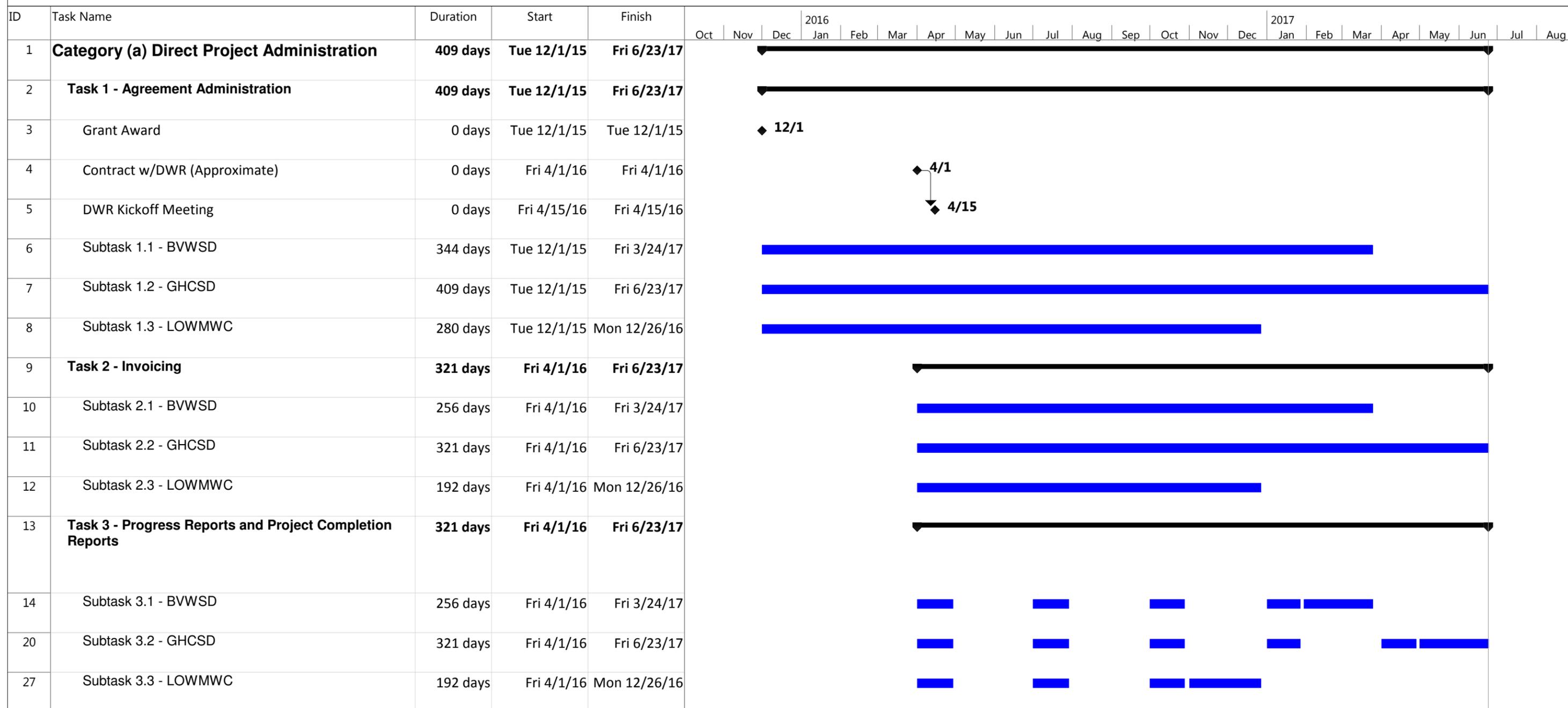
1. CEQA can be easily accomplished through a categorical exemption
2. No major permitting or regulatory hurdles are anticipated
3. The design schedule has been determined to be realistic based on the Water Company's engineering consultant's experience with multiple past water main replacement and meter installation projects.
4. The community currently has a water supply emergency. The project team recognizes the need to address the problem quickly, and is dedicated to making this project a high priority.

**5.2 Proposal Schedule**

The Overall Proposal Schedule is shown in **Figure 5.2-1**. The full Project timelines have been overlaid on to the Gantt Chart along with Grant Agreement milestones and Grant Administration Tasks (Project 1).

**Figure 5.1-1 - Project 1 Schedule**

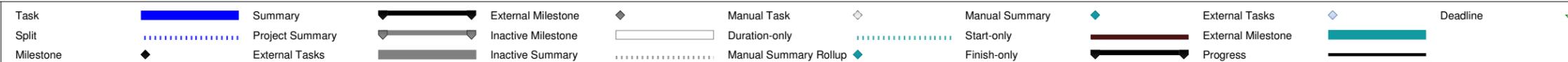
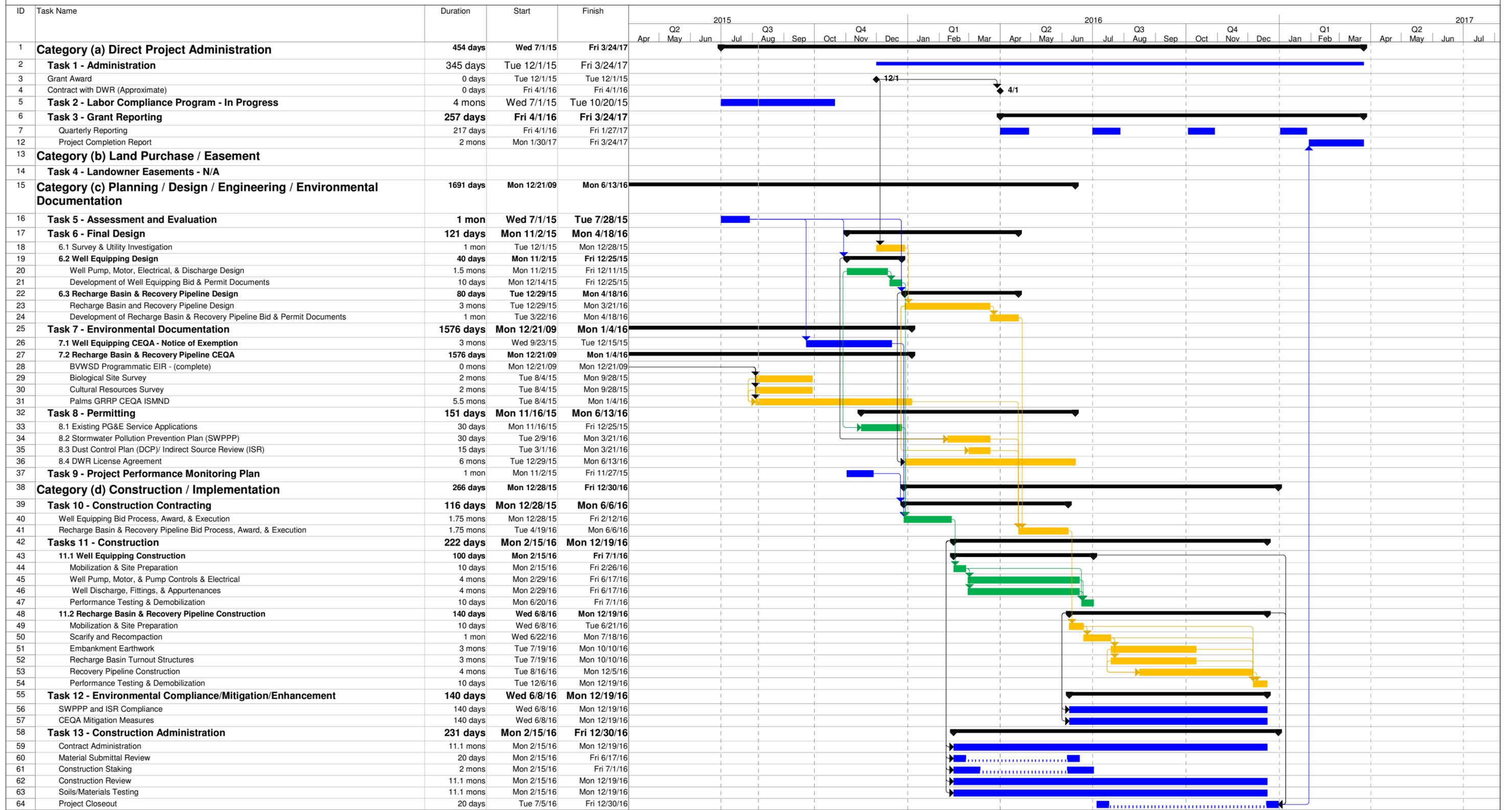
Grant Administration



Task		Project Summary		Manual Task		Start-only		Deadline	
Split		Inactive Task		Duration-only		Finish-only		Progress	
Milestone		Inactive Milestone		Manual Summary Rollup		External Tasks		Manual Progress	
Summary		Inactive Summary		Manual Summary		External Milestone			

Figure 5.1-2 - Project 2 Schedule

BVWSD The Palms Groundwater Recharge and Recovery Project



**Figure 5.1-3 - Project 3 Schedule**

**Golden Hills CSD  
Antelope Conjunctive Use Project - Steuber Phase**

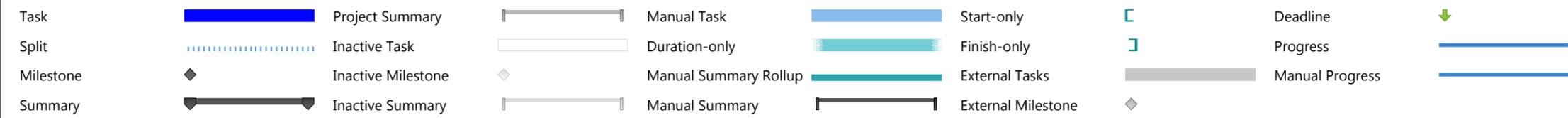
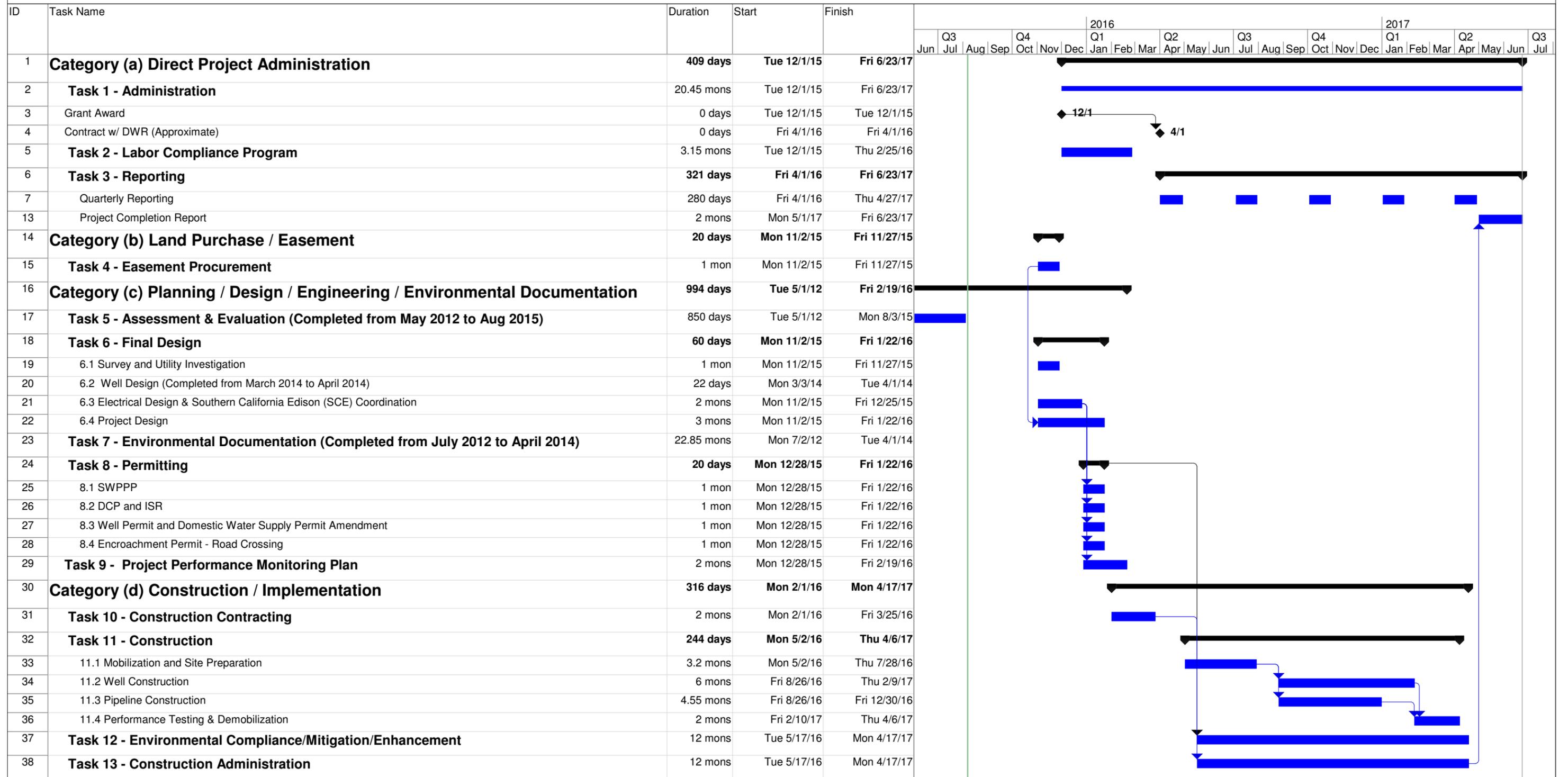


Figure 5.1-4 - Project 4 Schedule

Lake of the Woods Mutual Water Company  
Water Main Replacement and Meter Installation Project

