Merced Integrated Regional Water Management
Merced Region Grant Proposal

Attachment 5:
Schedule

Attachment 5 consists of the following items:

- ✓ **Project Schedules**

  This attachment includes a schedule for implementation of the projects showing the sequence and timing of each of the proposed projects.

- ✓ **Proposal Schedule**

  This attachment includes a schedule that briefly summarizes the Proposal's overall schedule.

Project Schedules

Atwater-McSwain Regulating/Recharge Basin Project

Figure 5-1 below provides a more detailed breakdown of the project schedule.

Project Schedule Description

The project duration associated with the *Highlands Groundwater Conservation Project is* 358 days. The Atwater-McSwain Regulating/Recharge Basin Project construction award date would occur no later than April 1, 2016. Given the short duration of the project, this project would complete construction March 2017, two and half years before the October 31, 2019 deadline listed in the PSP.

This breakdown per Budget Category is as follows:

(a) - Direct Project Administration: 358 days

(b) - Land Purchase/Easement: 24 days

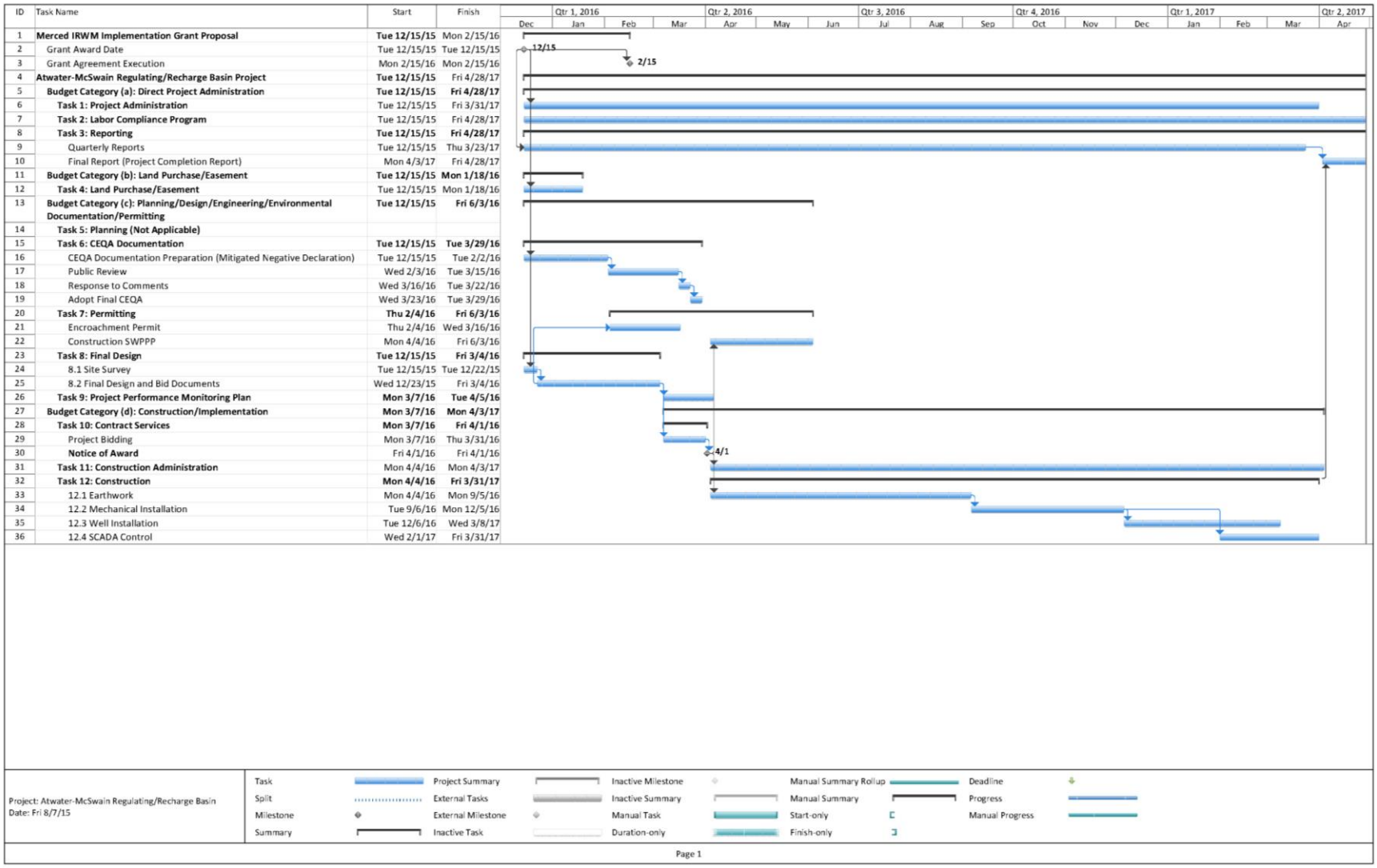
(c) - Planning / Design / Engineering / Environmental Documentation: 122 days

(d) - Construction/Implementation: 284 days

The conceptual design has been completed for the Atwater/McSwain Regulating/Recharge Basin Project. Upon the grant award, the project would be ready to proceed, and MID would complete the design and environmental compliance quickly so that a Notice of Award would be issued to the selected contractor by April 1, 2016. The Atwater/McSwain Regulating/Recharge Basin Project is a simple design project involving minimal infrastructure (inlet/outlet gates and minimal piping). As such, completion of the design and bid documents within approximately 3 months is feasible.

Because the project will be excavating an existing basin, minimal physical environmental impacts are anticipated at the site. A CEQA Initial Study/Mitigated Negative Declaration (IS/MND) would likely be the appropriate level of environmental documentation. An IS/MND can be completed within three and a half months, including the public review process.

Negotiations for the property (title or easement) have already begun between the County of Merced and MID and it is anticipated to take one month to finalize the ownership arrangement and complete the necessary paperwork. Task 12 (Construction) would extend approximately 261 days, with approximately 111 days for the excavation of the basin, 65 days for the construction of the pipelines and gates, 67 days for the installation of the monitoring wells, and 43 days for SCADA control configuration.



ID	Task Name	Start	Finish
1	**Merced IRWM Implementation Grant Proposal**	**Tue 12/15/15**	Mon 2/15/16
2	Grant Award Date	Tue 12/15/15	Tue 12/15/15
3	Grant Agreement Execution	Mon 2/15/16	Mon 2/15/16
4	**Atwater-McSwain Regulating/Recharge Basin Project**	**Tue 12/15/15**	Fri 4/28/17
5	**Budget Category (a): Direct Project Administration**	**Tue 12/15/15**	**Fri 4/28/17**
6	**Task 1: Project Administration**	Tue 12/15/15	Fri 3/31/17
7	**Task 2: Labor Compliance Program**	Tue 12/15/15	Fri 4/28/17
8	**Task 3: Reporting**	**Tue 12/15/15**	**Fri 4/28/17**
9	Quarterly Reports	Tue 12/15/15	Thu 3/23/17
10	Final Report (Project Completion Report)	Mon 4/3/17	Fri 4/28/17
11	**Budget Category (b): Land Purchase/Easement**	**Tue 12/15/15**	**Mon 1/18/16**
12	**Task 4: Land Purchase/Easement**	Tue 12/15/15	Mon 1/18/16
13	**Budget Category (c): Planning/Design/Engineering/Environmental Documentation/Permitting**	**Tue 12/15/15**	**Fri 6/3/16**
14	**Task 5: Planning (Not Applicable)**		
15	**Task 6: CEQA Documentation**	**Tue 12/15/15**	**Tue 3/29/16**
16	CEQA Documentation Preparation (Mitigated Negative Declaration)	Tue 12/15/15	Tue 2/2/16
17	Public Review	Wed 2/3/16	Tue 3/15/16
18	Response to Comments	Wed 3/16/16	Tue 3/22/16
19	Adopt Final CEQA	Wed 3/23/16	Tue 3/29/16
20	**Task 7: Permitting**	**Thu 2/4/16**	**Fri 6/3/16**
21	Encroachment Permit	Thu 2/4/16	Wed 3/16/16
22	Construction SWPPP	Mon 4/4/16	Fri 6/3/16
23	**Task 8: Final Design**	**Tue 12/15/15**	**Fri 3/4/16**
24	8.1 Site Survey	Tue 12/15/15	Tue 12/22/15
25	8.2 Final Design and Bid Documents	Wed 12/23/15	Fri 3/4/16
26	**Task 9: Project Performance Monitoring Plan**	**Mon 3/7/16**	**Tue 4/5/16**
27	**Budget Category (d): Construction/Implementation**	**Mon 3/7/16**	**Mon 4/3/17**
28	**Task 10: Contract Services**	**Mon 3/7/16**	**Fri 4/1/16**
29	Project Bidding	Mon 3/7/16	Thu 3/31/16
30	**Notice of Award**	Fri 4/1/16	Fri 4/1/16
31	**Task 11: Construction Administration**	Mon 4/4/16	Mon 4/3/17
32	**Task 12: Construction**	**Mon 4/4/16**	**Fri 3/31/17**
33	12.1 Earthwork	Mon 4/4/16	Mon 9/5/16
34	12.2 Mechanical Installation	Tue 9/6/16	Mon 12/5/16
35	12.3 Well Installation	Tue 12/6/16	Wed 3/8/17
36	12.4 SCADA Control	Wed 2/1/17	Fri 3/31/17

Figure 5-1: Project Schedule –*Atwater-McSwain Regulating/Recharge Basin Project*

UC Merced Surface Water Augmentation Project

Figure 5-2 below provides a more detailed breakdown of the project schedule.

Project Schedule Description

The *UC Merced Surface Water Augmentation Project* is expected to take 192 days to implement. Given the short duration of the project, this project would complete construction in October 2016, three years before the October 31, 2019 deadline listed in the PSP.

This breakdown per Budget Category is as follows:

(a) - Direct Project Administration: 192 days

(b) - Land Purchase/Easement: Not Applicable

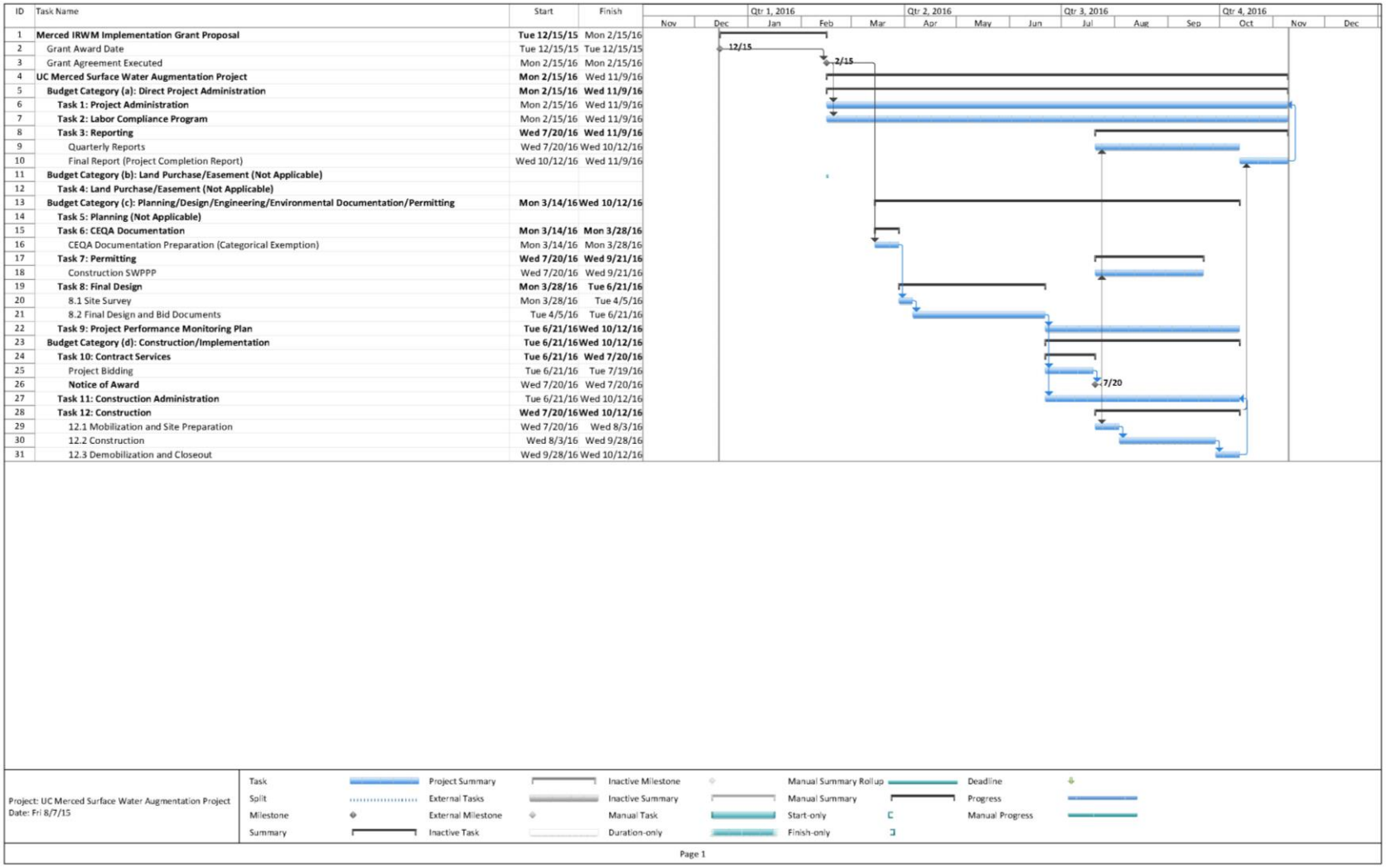
(c) - Planning / Design / Engineering / Environmental Documentation: 152 days

(d) - Construction/Implementation: 81 days

The conceptual design has been completed. Upon the grant agreement execution date, the project would be ready to proceed, and UC Merced would complete the design and environmental compliance quickly. The UC Merced Surface Water Augmentation Project is a streamlined project that involves upsizing and upgrading of existing infrastructure. As such, completion of the design and bid documents within approximately 3 months is feasible.

A CEQA Categorical Exemption would likely be the appropriate level of environmental documentation, which can be completed within two weeks.

No land purchase or easement acquisition is required for the proposed project. Task 12 (Construction) would require approximately 60 days, with approximately 2 weeks for mobilization and site preparation, 8 weeks to install/upgrade the pipeline, gates, and pump station, and 2 weeks for demobilization and project closeout.



ID	Task Name	Start	Finish
1	**Merced IRWM Implementation Grant Proposal**	**Tue 12/15/15**	Mon 2/15/16
2	Grant Award Date	Tue 12/15/15	Tue 12/15/15
3	Grant Agreement Executed	Mon 2/15/16	Mon 2/15/16
4	**UC Merced Surface Water Augmentation Project**	**Mon 2/15/16**	Wed 11/9/16
5	**Budget Category (a): Direct Project Administration**	**Mon 2/15/16**	**Wed 11/9/16**
6	**Task 1: Project Administration**	Mon 2/15/16	Wed 11/9/16
7	**Task 2: Labor Compliance Program**	Mon 2/15/16	Wed 11/9/16
8	**Task 3: Reporting**	**Wed 7/20/16**	**Wed 11/9/16**
9	Quarterly Reports	Wed 7/20/16	Wed 10/12/16
10	Final Report (Project Completion Report)	Wed 10/12/16	Wed 11/9/16
11	**Budget Category (b): Land Purchase/Easement (Not Applicable)**		
12	**Task 4: Land Purchase/Easement (Not Applicable)**		
13	**Budget Category (c): Planning/Design/Engineering/Environmental Documentation/Permitting**	**Mon 3/14/16**	**Wed 10/12/16**
14	**Task 5: Planning (Not Applicable)**		
15	**Task 6: CEQA Documentation**	**Mon 3/14/16**	**Mon 3/28/16**
16	CEQA Documentation Preparation (Categorical Exemption)	Mon 3/14/16	Mon 3/28/16
17	**Task 7: Permitting**	**Wed 7/20/16**	**Wed 9/21/16**
18	Construction SWPPP	Wed 7/20/16	Wed 9/21/16
19	**Task 8: Final Design**	**Mon 3/28/16**	**Tue 6/21/16**
20	8.1 Site Survey	Mon 3/28/16	Tue 4/5/16
21	8.2 Final Design and Bid Documents	Tue 4/5/16	Tue 6/21/16
22	**Task 9: Project Performance Monitoring Plan**	**Tue 6/21/16**	**Wed 10/12/16**
23	**Budget Category (d): Construction/Implementation**	**Tue 6/21/16**	**Wed 10/12/16**
24	**Task 10: Contract Services**	**Tue 6/21/16**	**Wed 7/20/16**
25	Project Bidding	Tue 6/21/16	Tue 7/19/16
26	**Notice of Award**	Wed 7/20/16	Wed 7/20/16
27	**Task 11: Construction Administration**	Tue 6/21/16	Wed 10/12/16
28	**Task 12: Construction**	**Wed 7/20/16**	**Wed 10/12/16**
29	12.1 Mobilization and Site Preparation	Wed 7/20/16	Wed 8/3/16
30	12.2 Construction	Wed 8/3/16	Wed 9/28/16
31	12.3 Demobilization and Closeout	Wed 9/28/16	Wed 10/12/16

Figure 5-2: Project Schedule – *UC Merced Surface Water Augmentation Project*

Grant Administration Project

Figure 5-3 below provides a more detailed breakdown of the project schedule.

Project Schedule Description

The *Grant Administration Project Project* is expected to take 353 days to implement. This breakdown per Budget Category is as follows:

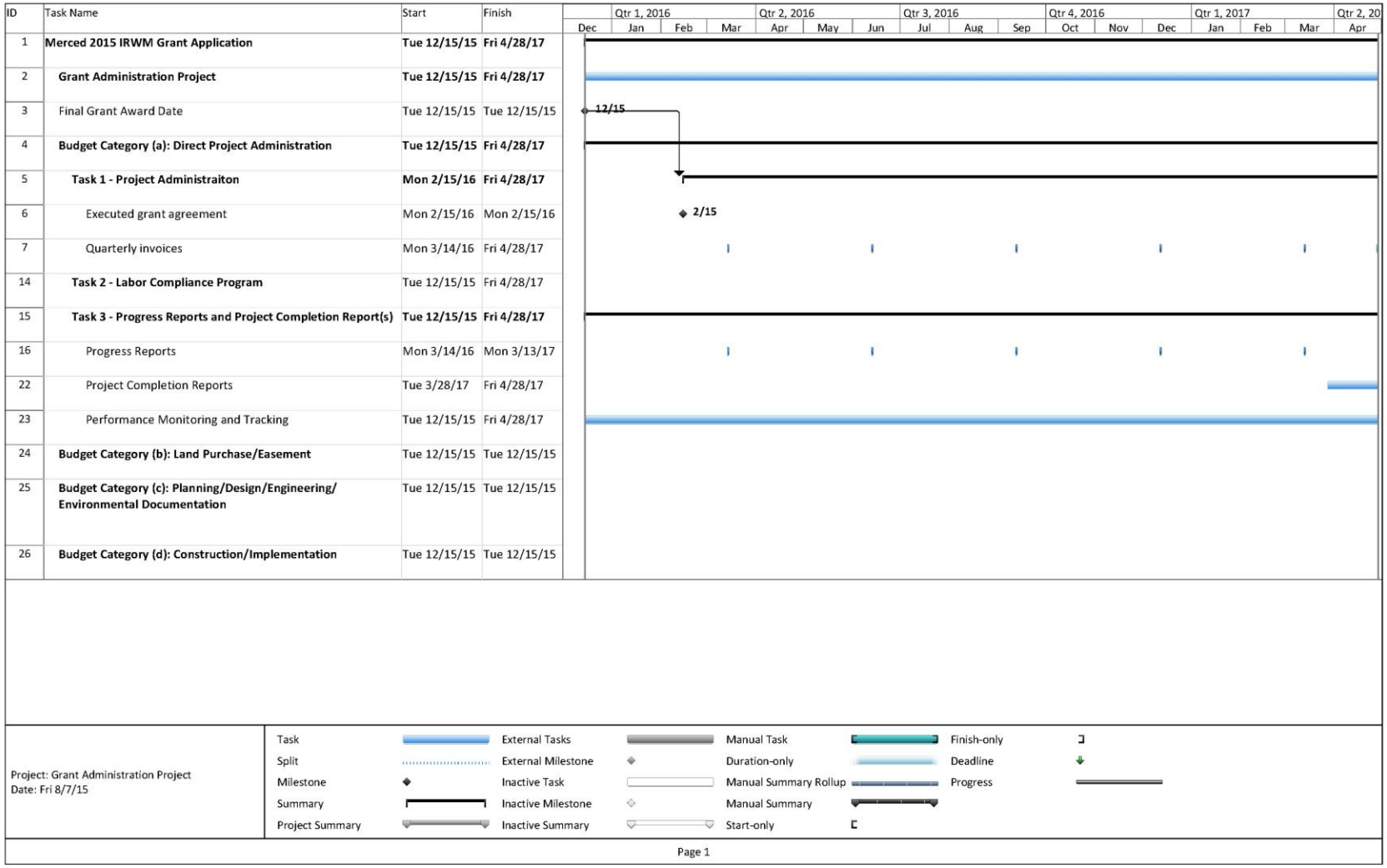
(a) - Direct Project Administration: 358 days

(b) - Land Purchase/Easement: Not Applicable

(c) - Planning / Design / Engineering / Environmental Documentation: Not Applicable

(d) - Construction/Implementation: Not Applicable

The schedule presented for the Grant Administration Project is based on an approximation of the final grant award date, time required for drafting and executing the funding agreement, and on the schedules for the two other projects contained in this application. This schedule focuses solely on meeting the terms and requirements that will be included in the grant agreement with MID. As such, this schedule is considered to be realistic, reasonable and accomplishable based on the states of the two projects contained in this application.



ID	Task Name	Start	Finish
1	**Merced 2015 IRWM Grant Application**	**Tue 12/15/15**	**Fri 4/28/17**
2	**Grant Administration Project**	**Tue 12/15/15**	**Fri 4/28/17**
3	Final Grant Award Date	Tue 12/15/15	Tue 12/15/15
4	**Budget Category (a): Direct Project Administration**	**Tue 12/15/15**	**Fri 4/28/17**
5	**Task 1 - Project Administraiton**	**Mon 2/15/16**	**Fri 4/28/17**
6	Executed grant agreement	Mon 2/15/16	Mon 2/15/16
7	Quarterly invoices	Mon 3/14/16	Fri 4/28/17
14	**Task 2 - Labor Compliance Program**	Tue 12/15/15	Fri 4/28/17
15	**Task 3 - Progress Reports and Project Completion Report(s)**	**Tue 12/15/15**	**Fri 4/28/17**
16	Progress Reports	Mon 3/14/16	Mon 3/13/17
22	Project Completion Reports	Tue 3/28/17	Fri 4/28/17
23	Performance Monitoring and Tracking	Tue 12/15/15	Fri 4/28/17
24	**Budget Category (b): Land Purchase/Easement**	Tue 12/15/15	Tue 12/15/15
25	**Budget Category (c): Planning/Design/Engineering/ Environmental Documentation**	Tue 12/15/15	Tue 12/15/15
26	**Budget Category (d): Construction/Implementation**	Tue 12/15/15	Tue 12/15/15

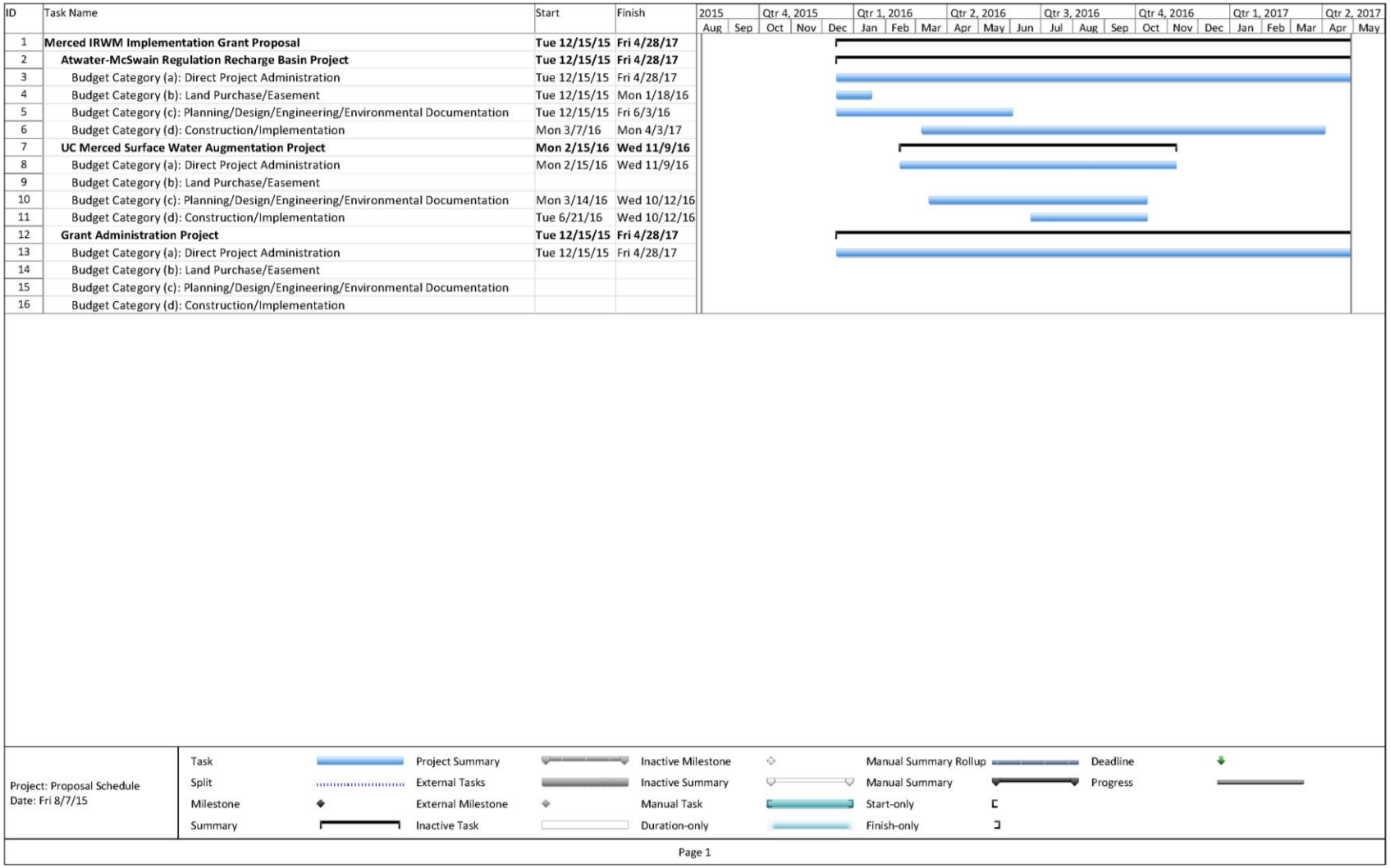
Figure 5-3: Project Schedule – *Grant Administration*

Proposal Schedule

The proposal schedule shown in **Figure 5-4** summarizes the schedule for each proposed project that would be implemented as part of this proposal. The following projects are summarized in the figure below:

- Atwater-McSwain Regulating/Recharge Basin Project
- UC Merced Surface Water Augmentation Project
- Grant Administration Project

Implementation of the entire proposal would be expected to be complete within approximately one and a half years.



ID	Task Name	Start	Finish
1	**Merced IRWM Implementation Grant Proposal**	**Tue 12/15/15**	**Fri 4/28/17**
2	**Atwater-McSwain Regulation Recharge Basin Project**	**Tue 12/15/15**	**Fri 4/28/17**
3	Budget Category (a): Direct Project Administration	Tue 12/15/15	Fri 4/28/17
4	Budget Category (b): Land Purchase/Easement	Tue 12/15/15	Mon 1/18/16
5	Budget Category (c): Planning/Design/Engineering/Environmental Documentation	Tue 12/15/15	Fri 6/3/16
6	Budget Category (d): Construction/Implementation	Mon 3/7/16	Mon 4/3/17
7	**UC Merced Surface Water Augmentation Project**	**Mon 2/15/16**	**Wed 11/9/16**
8	Budget Category (a): Direct Project Administration	Mon 2/15/16	Wed 11/9/16
9	Budget Category (b): Land Purchase/Easement		
10	Budget Category (c): Planning/Design/Engineering/Environmental Documentation	Mon 3/14/16	Wed 10/12/16
11	Budget Category (d): Construction/Implementation	Tue 6/21/16	Wed 10/12/16
12	**Grant Administration Project**	**Tue 12/15/15**	**Fri 4/28/17**
13	Budget Category (a): Direct Project Administration	Tue 12/15/15	Fri 4/28/17
14	Budget Category (b): Land Purchase/Easement		
15	Budget Category (c): Planning/Design/Engineering/Environmental Documentation		
16	Budget Category (d): Construction/Implementation		

Figure 5-4: Proposal Schedule