

Attachment 5: Schedule

Introduction

This attachment provides detailed schedules for the six construction projects and Program Management (Project 7) included in the *Water-Energy Upgrades in Alameda County DACs Proposal*. An overall Proposal summary including a roll-up of all seven project schedules is provided, followed by detailed schedules for each project. For each project, a task summary is provided followed by a detailed Gantt chart schedule. The summaries describe how the project schedules are realistic, reasonable, and accomplishable. The schedules indicate start dates, end dates, and milestones for each task and linkages/dependencies between tasks. The tasks listed in the schedules align with the same tasks identified and described in the Work Plan (Attachment 3), and use May 1, 2015 as the assumed award date of the grant. Most of the projects will be ready to proceed beginning June 12, 2015 and will complete construction and implementation before December 31, 2016 (most will be completed by September 2016). The Proposal will extend through June 30, 2017; all final reports and invoicing will be complete by June 30, 2017.

In accordance with the PSP, each schedule includes the items listed in the table below. To support the review of the schedules in this chapter, the table below relates how PSP requirements are addressed by task categories, primary tasks, or subtasks.

Task	Sub-Task	PSP Requirement	Project Status
Task 1. Direct Project Administration	Task 1A. Project Administration	Project Administration	Ongoing
	Task 1B. Reporting	Quarterly progress reports, invoices, and draft and final project completion report	To start with the grant award
Task 2. Easement(s)	Task 2A. Easement(s)	Acquisition of rights-of-way, if required	Not applicable
Task 3: Project Evaluation/ Design/ Engineering	Task 3A. Assessment and Evaluation	Project feasibility studies and project design development	Complete, projects have been vetted and committed
	Task 3B. Preliminary and Final Designs	Final project plans and specifications	To be completed during final construction bid
	Task 3C. Preliminary and final construction cost estimates	Final construction cost estimates	To be completed during final construction bid
Task 4: Environmental Documentation	Task 4A. Environmental Compliance Documentation	Completion of environmental documentation and CEQA/NEPA compliance	Project will have no negative environmental impacts; will complete a negative declaration for CEQA compliance
Task 5: Permitting	Task 5A. Permitting	Identification and acquisition of all necessary permits	Projects will comply with permit requirements
Task 6: Proposal Monitoring Plan	Task 6A. Project Monitoring Plan	Identification of how the project will be monitored to verify water and energy savings and GHG reduction	Project monitoring plan will be completed throughout the grant term
Task 7: Project Construction/ Implementation	Task 7A. Construction Contracting	Contractor bid documentation	To be completed during final construction bid
	Task 7B. Project Construction/ Implementation	Construction/implementation start and end dates, including significant milestones	To be completed during final construction bid

Proposal Schedule Summary

The *Water-Energy Upgrades in Alameda County DACs* Proposal consists of residential, commercial and institutional efficiency projects with multiple water savings, energy savings, and GHG reduction benefits for Disadvantaged Communities in Alameda County. Projects have already been reviewed for water and energy savings and for implementation feasibility, and project partners have committed to implementing the measures identified in this grant application. All projects in this proposal have completed Task 3A, and are poised to finalize designs and begin final construction bids as soon as the grant is awarded.

These projects are currently in progress or will be ready to proceed to construction/implementation by June 12, 2015 (including time necessary for construction contracting). Construction tasks for all projects in the Proposal will be complete before December 31, 2016. Project completion end dates include preparation time for the Final Reports and last DWR invoice, and thus extend past the end date for the construction task (Task 7).

In accordance with the DWR Water Energy Grant Guidelines, no grant funding (reimbursement) will be claimed for project work conducted prior to July 1, 2014.

The overall Proposal Gantt chart schedule on the next page includes a summary of each of the seven project schedules with start and end dates for each task included in the project work plans. For all projects, except Project 7 (Program Management), the schedules for Task 1 *Direct Project Administration and Reporting* starts on June 12, 2015, a month and a half after the assumed grant award date (May 1, 2015).

Tasks that do not apply to a particular project are indicated with "N/A" at the end of the project title.

Project management by StopWaste (Project 7) will begin on the assumed grant award date (May 1, 2015) and extend through June 30, 2017. This schedule includes time needed to prepare final reports and invoicing. Details of the grant administration schedule are shown under Task 7 *Project Construction/Implementation*.

Overall, the *Water-Energy Upgrades in Alameda County DACs* Proposal will result in water and energy savings and GHG reduction for a variety of industrial, residential and commercial uses in a realistic, reasonable, and accomplishable manner. Again, the projects included in the Proposal will be complete and project benefits realized by June 30, 2017. The Proposal will be administered by StopWaste.

StopWaste Water-Energy Upgrades in Alameda County DACs Proposal
 2014 Water-Energy Grant Application
 Overall Proposal Schedule

ID	Task Name	Duration	Start	Finish	2015				2016				2017				
					Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3			
1	Water-Energy Upgrades in Alameda County DACs Proposal Schedule	740 days	Mon 9/1/14	Fri 6/30/17													
2	Task 1. Direct Project Administration and Reporting																
3	Project 7: Program Management	740 days	Mon 9/1/14	Fri 6/30/17													
4	Task 2. Easement(s) - N/A																
5	Task 3. Project Evaluation/Design/Engineering - N/A																
13	Task 4: Environmental Documentation - N/A																
21	Task 5. Permitting - N/A																
29	Task 6. Proposal Monitoring Plan	20 days	Fri 5/15/15	Thu 6/11/15													
37	Task 7: Project Construction/Implementation	561 days	Fri 5/8/15	Fri 6/30/17													
38	Project 1: Multifamily Housing EBALDC Upgrades	320 days	Fri 6/12/15	Thu 9/1/16													
39	Project 2: Eden Housing Multifamily Upgrades	320 days	Fri 6/12/15	Thu 9/1/16													
40	Project 3: Industrial Laundry Upgrades in Oakland and San Leandro	41 days	Fri 7/3/15	Fri 8/28/15													
41	Project 4: Oakland USD School Upgrades	305 days	Fri 6/12/15	Thu 8/11/16													
42	Project 5: San Leandro USD School Upgrades	310 days	Fri 6/12/15	Thu 8/18/16													
43	Project 6: San Leandro Park Upgrades	296 days	Fri 6/12/15	Fri 7/29/16													
44	Project 7: Program Management	561 days	Fri 5/8/15	Fri 6/30/17													

Project Schedules

Project schedule summaries and detailed Gantt charts are presented in this section for the seven projects listed below.

Project ID#	Project Proponent	Project Title
1	East Bay Asian Local Development Corporation (EBALDC)	Multifamily Housing EBALDC Upgrades
2	Eden Housing	Eden Housing Multifamily Upgrades
3	Total Ozone Solutions	Industrial Laundry Upgrades in Oakland and San Leandro
4	Oakland Unified School District (OUSD)	Oakland USD School Upgrades
5	San Leandro Unified School District (SLUSD)	San Leandro USD School Upgrades
6	City of San Leandro	San Leandro Park Upgrades
7	StopWaste	Program Management

Project 1 – Multifamily Housing EBALDC Upgrades

Eden Housing anticipates installing all toilet upgrades, showerhead and faucet aerator upgrades, building leak repairs, lawn conversions, and central water heating system upgrades within one year. Work will start on September 1, 2015 and extend through September 1, 2016. Once awarded, Eden Housing will immediately request final construction bid estimates and then commence construction of the project.

Given that Eden Housing has conducted similar water saving measures in many other multi-family units that they own, this 1-year timeframe is considered reasonable.

To ensure adequate time is available to prepare the draft and final project reports for StopWaste to submit to DWR, the project end date is assumed to be December 31, 2016.

StopWaste Water-Energy Upgrades in Alameda County DACs Proposal
 2014 Water-Energy Grant Application
 Project 1: Multifamily Housing EBALDC Upgrades

ID	Task Name	Duration	Start	Finish	Predecessors	2016				2017			
						Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1
1	Project 2: Multifamily Housing EBALDC Upgrades	426 days	Fri 5/15/15	Fri 12/30/16									
2	Task 1: Direct Project Administration and Reporting	406 days	Fri 6/12/15	Fri 12/30/16									
3	Contract Management	406 days	Fri 6/12/15	Fri 12/30/16	11								
4	Quarterly Reports	406 days	Fri 6/12/15	Fri 12/30/16	3SS								
5	Draft Final Report	46 days	Fri 9/2/16	Fri 11/4/16	14								
6	Final Report	40 days	Mon 11/7/16	Fri 12/30/16	5								
7	Task 2: Easement(s) - N/A												
8	Task 3: Project Evaluation/Design/Engineering - N/A												
9	Task 4: Environmental Documentation -N/A												
10	Task 5: Permitting - N/A												
11	Task 6: Proposal Monitoring Plan	20 days	Fri 5/15/15	Thu 6/11/15									
12	Task 7: Project Construction/Implementation	320 days	Fri 6/12/15	Thu 9/1/16									
13	Subtask 7.1 Construction Contracting	57 days	Fri 6/12/15	Mon 8/31/15	3SS								
14	Subtask 7.2 Project Construction/Implementation	263 days	Tue 9/1/15	Thu 9/1/16	13								

Project 2 – Eden Housing Multifamily Upgrades

Eden Housing anticipates installing all toilet upgrades, showerhead and faucet aerator upgrades, building leak repairs, lawn conversions, and central water heating system upgrades within one year. Work will start on September 1, 2015 and extend through September 1, 2016. Once awarded, Eden Housing will immediately move into final construction bid estimates and then construction.

Given that Eden Housing has conducted similar water saving measures in many other multi-family units that they own, this 1-year timeframe is considered reasonable.

To ensure adequate time is available to prepare the draft and final project reports for StopWaste to submit to DWR, the project end date is assumed to be December 31, 2016.

StopWaste Water-Energy Upgrades in Alameda County DACs Proposal
 2014 Water-Energy Grant Application
 Project 2: Eden Housing Multifamily Upgrades

ID	Task Name	Duration	Start	Finish	2016				2017				
					Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	
1	Project 2: Eden Housing Multifamily Upgrades	426 days?	Fri 5/15/15	Fri 12/30/16	[Gantt bar spanning from Qtr 2 2016 to Qtr 4 2017]								
2	Task 1: Direct Project Administration and Reporting	406 days	Fri 6/12/15	Fri 12/30/16	[Gantt bar spanning from Qtr 2 2016 to Qtr 4 2017]								
3	Contract Management	406 days	Fri 6/12/15	Fri 12/30/16	[Gantt bar spanning from Qtr 2 2016 to Qtr 4 2017]								
4	Quarterly Reports	406 days	Fri 6/12/15	Fri 12/30/16	[Gantt bar spanning from Qtr 2 2016 to Qtr 4 2017]								
5	Draft Final Report	44 days	Fri 9/2/16	Wed 11/2/16	[Gantt bar in Qtr 3 2016]								
6	Final Report	41 days	Thu 11/3/16	Thu 12/29/16	[Gantt bar in Qtr 4 2016]								
7	Task 2: Easement(s) - N/A												
8	Task 3: Project Evaluation/Design/Engineering - N/A												
9	Task 4: Environmental Documentation - N/A												
10	Task 5: Permitting - N/A												
11	Task 6: Proposal Monitoring Plan	20 days	Fri 5/15/15	Thu 6/11/15	[Gantt bar in Qtr 2 2016]								
12	Task 7: Project Construction/Implementation	320 days	Fri 6/12/15	Thu 9/1/16	[Gantt bar spanning from Qtr 2 2016 to Qtr 4 2017]								
13	Subtask 7.1 Construction Contracting	57 days	Fri 6/12/15	Mon 8/31/15	[Gantt bar in Qtr 2 2016]								
14	Subtask 7.2 Project Construction/Implementation	263 days	Tue 9/1/15	Thu 9/1/16	[Gantt bar spanning from Qtr 2 2016 to Qtr 4 2017]								

Project 3 – Industrial Laundry Upgrades in Oakland and San Leandro

The ozone laundry system upgrades associated with this project would be implemented at the five laundry facilities simultaneously.

Typically, each ozone laundry system requires two to four days for installation. Two weeks are required to monitor and calibrate the system after installation. Installation of the five ozone system upgrades is expected to take one month total.

Assuming that installation work would begin on July 1, 2015, all installation work will likely be complete by August 2015 (no later than December 31, 2015).

A draft and final project report for DWR will be prepared shortly after the installations are complete. However, to ensure adequate time is available to prepare the draft and final project reports and for coordination with StopWaste, the end date of the project is December 31, 2015.

StopWaste Water-Energy Upgrades in Alameda County DACs Proposal
 2014 Water-Energy Grant Application
 Project 3: Industrial Laundry Upgrades in Oakland and San Leandro

ID	Task Name	Duration	Start	Finish	Predecessors	2016			
						Qtr 2	Qtr 3	Qtr 4	Qtr 1
1	Project 3: Industrial Laundry Upgrades in Oakland and San Leandro	165 days	Fri 5/15/15	Thu 12/31/15					
2	Task 1: Direct Project Administration and Reporting	145 days	Fri 6/12/15	Thu 12/31/15					
3	Contract Management	145 days	Fri 6/12/15	Thu 12/31/15	11				
4	Quarterly Reports	145 days	Fri 6/12/15	Thu 12/31/15	3SS				
5	Draft Final Report	44 days	Mon 8/31/15	Thu 10/29/15	12				
6	Final Report	45 days	Fri 10/30/15	Thu 12/31/15	5				
7	Task 2: Easement(s) - N/A								
8	Task 3: Project Evaluation/Design/Engineering - N/A								
9	Task 4: Environmental Documentation - N/A								
10	Task 5: Permitting - N/A								
11	Task 6: Project Monitoring Plan	20 days	Fri 5/15/15	Thu 6/11/15					
12	Task 7: Construction/Implementation	41 days	Fri 7/3/15	Fri 8/28/15	11FS+15 days				

Project 4 – Oakland USD School Upgrades

This project would be implemented in 2 phases over the summer of 2015 and 2016, while school is not in session. Oakland USD anticipates installing all upgrades after two summers. Work will start in July 2015 and be completed by September 2016.

Given that Oakland USD has conducted similar energy and water saving measures in many schools that they manage, this timeframe is considered reasonable.

To ensure adequate time is available to prepare the draft and final project reports for StopWaste to submit to DWR, the project end date is assumed to be December 31, 2016.

StopWaste Water-Energy Upgrades in Alameda County DACs Proposal
 2014 Water-Energy Grant Application
 Project 4: Oakland USD School Upgrades

ID	Task Name	Duration	Start	Finish	Predecessors	2016				2017			
						Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1
1	Project 4: Oakland USD School Upgrades	419 days	Fri 5/15/15	Wed 12/21/16									
2	Task 1: Direct Project Administration and Reporting	406 days	Fri 6/12/15	Fri 12/30/16									
3	Contract Management	406 days	Fri 6/12/15	Fri 12/30/16	11								
4	Quarterly Reports	406 days	Fri 6/12/15	Fri 12/30/16	3SS								
5	Draft Final Report	44 days	Fri 8/12/16	Wed 10/12/16	14								
6	Final Report	57 days	Thu 10/13/16	Fri 12/30/16	5								
7	Task 2: Easement(s) - N/A												
8	Task 3: Project Evaluation/Design/Engineering - N/A												
9	Task 4: Environmental Documentation - N/A												
10	Task 5: Permitting - N/A												
11	Task 6: Project Monitoring Plan	20 days	Fri 5/15/15	Thu 6/11/15									
12	Task 7: Construction/Implementation	305 days	Fri 6/12/15	Thu 8/11/16									
13	Subtask 7.1 Construction Contracting	10 days	Fri 6/12/15	Thu 6/25/15	3SS								
14	Subtask 7.2 Construction/Implementation	295 days	Fri 6/26/15	Thu 8/11/16	13								

Project 5 – San Leandro USD School Upgrades

This project would be implemented in two phases over the summers of 2015 and 2016, while school is not in session. San Leandro USD anticipates installing all upgrades at the five schools over two summer seasons (June-August), with the pool upgrades at San Leandro High School installed during the summer of 2016. Work will start in June 2015 and be completed by August 2016.

Given that San Leandro USD has conducted similar energy and water saving measures in many schools that they manage, this timeframe is considered reasonable.

To ensure adequate time is available to prepare the draft and final project reports for StopWaste to submit to DWR, the project end date is assumed to be December 31, 2016.

StopWaste Water-Energy Upgrades in Alameda County DACs Proposal
 2014 Water-Energy Grant Application
 Project 5: San Leandro USD School Upgrades

ID	Task Name	Duration	Start	Finish	Predecessors	2016				2017					
						Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1		
1	Project 5: San Leandro USD School Upgrades	687 days	Thu 5/15/14	Fri 12/30/16											
2	Task 1: Direct Project Administration and Reporting	406 days	Fri 6/12/15	Fri 12/30/16											
3	Contract Management	406 days	Fri 6/12/15	Fri 12/30/16	11										
4	Quarterly Reports	406 days	Fri 6/12/15	Fri 12/30/16	3SS										
5	Draft Final Report	44 days	Fri 8/19/16	Wed 10/19/16	14										
6	Final Report	52 days	Thu 10/20/16	Fri 12/30/16	5										
7	Task 2: Easement(s) - N/A														
8	Task 3: Project Evaluation/Design/Engineering - N/A														
9	Task 4: Environmental Documentation - N/A														
10	Task 5: Permitting - N/A														
11	Task 6: Project Monitoring Plan	20 days	Fri 5/15/15	Thu 6/11/15											
12	Task 7: Construction/Implementation	310 days	Fri 6/12/15	Thu 8/18/16											
13	Subtask 7.1 Construction Contracting	10 days	Fri 6/12/15	Thu 6/25/15	3SS										
14	Subtask 7.2 Construction/Implementation	300 days	Fri 6/26/15	Thu 8/18/16	13										

Project 6 – San Leandro Park Upgrades

This project would be implemented between July 1, 2015 and July 30, 2016.

San Leandro Parks anticipates installing all upgrades by the end of July 2016. Given that San Leandro Parks has conducted similar lawn replacement and water saving measures in many parks that they manage, this timeframe is considered reasonable.

To ensure adequate time is available to prepare the draft and final project reports for StopWaste to submit to DWR, the project end date is assumed to be December 31, 2016.

StopWaste Water-Energy Upgrades in Alameda County DACs Proposal
 2014 Water-Energy Grant Application
 Project 6: San Leandro Park Upgrades

ID	Task Name	Duration	Start	Finish	Predecessors	2016				2017			
						Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1
1	Project 6: San Leandro Park Upgrades	426 days	Fri 5/15/15	Fri 12/30/16									
2	Task 1: Direct Project Administration and Reporting	406 days	Fri 6/12/15	Fri 12/30/16									
3	Contract Management	406 days	Fri 6/12/15	Fri 12/30/16	11								
4	Quarterly Reports	406 days	Fri 6/12/15	Fri 12/30/16	3SS								
5	Draft Final Report	44 days	Mon 8/1/16	Thu 9/29/16	14								
6	Final Report	66 days	Fri 9/30/16	Fri 12/30/16	5								
7	Task 2: Easement(s) - N/A												
8	Task 3: Project Evaluation/Design/Engineering - N/A												
9	Task 4: Environmental Documentation - N/A												
10	Task 5: Permitting - N/A												
11	Task 6: Project Monitoring Plan	20 days	Fri 5/15/15	Thu 6/11/15									
12	Task 7: Construction/Implementation	296 days	Fri 6/12/15	Fri 7/29/16									
13	Subtask 7.1 Construction Contracting	15 days	Fri 6/12/15	Thu 7/2/15	3SS								
14	Subtask 7.2 Construction/Implementation	281 days	Fri 7/3/15	Fri 7/29/16	13								

Project 7 – Program Management

This project schedule for program management of the *Water-Energy Upgrades in Alameda County DAC* Proposal begins in September 2014 and is complete when the last Local Project Sponsor completes their final project report. Preliminary analysis, projects evaluation, and preliminary cost estimates have all been conducted prior to the Proposal submittal. The anticipated schedule, based upon DWR's schedule noted in the Proposal Solicitation Package is as follows:

- Project partner solicitation, project evaluation and cost preliminary cost estimates: September to December 2014
- Negotiate contract with DWR: May to June 2015
- Coordination with Local Project Partners on final construction bids: May to June 2015
- Negotiate Project Sponsor Agreements with Local Project Sponsors: June to July 2015
- Quarterly Reports: Submitted 45 days following the end of the quarter (i.e., March, June, September, December)
- Final Project Reports: Submitted 90 days following the conclusion of individual projects, and signed off by DWR
- Invoicing: Submitted 90 days following the end of the quarter (i.e., March, June, September, December)
- Reimbursement of Local Project Sponsors: Submitted within 30 days of receipt of payment from DWR
- Bookkeeping and auditing: Throughout the term of the grant
- Field Verification: As projects are completed and/or as needed to assure that projects are on schedule
- Program Management: Throughout the term of the grant

StopWaste Water-Energy Upgrades in Alameda County DACs Proposal
 2014 Water-Energy Grant Application
 Project 7: Program Management

ID	Task Name	Duration	Start	Finish	Predecessors	2015				2016				2017						
						Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3		
1	Project 7: Program Management	740 days	Mon 9/1/14	Fri 6/30/17																
2	Task 1: Direct Project Administration and Reporting	740 days	Mon 9/1/14	Fri 6/30/17																
3	Grant Application Expenses	75 days	Mon 9/1/14	Fri 12/12/14																
4	Contracting with DWR	30 days	Fri 5/1/15	Thu 6/11/15																
5	Invoicing and Reimbursements	536 days	Fri 6/12/15	Fri 6/30/17	4															
6	Bookkeeping and Auditing	536 days	Fri 6/12/15	Fri 6/30/17	4															
7	Quarterly Reports and Final Reports	536 days	Fri 6/12/15	Fri 6/30/17	4															
8	Task 2: Easement(s) - N/A																			
9	Task 3: Project Evaluation/Design/Engineering - N/A																			
10	Task 4: Environmental Documentation - N/A																			
11	Task 5: Permitting - N/A																			
12	Task 6: Proposal Monitoring Plan	25 days	Fri 5/8/15	Thu 6/11/15	4SS+5 days															
13	Task 7: Project Construction/Implementation	561 days	Fri 5/8/15	Fri 6/30/17																
14	Coordinate with Local Project Sponsors on Final Construction Bids	25 days	Fri 5/8/15	Thu 6/11/15	4SS+5 days															
15	Negotiate Project Sponsor Agreements with Local Project Sponsors	30 days	Fri 6/12/15	Thu 7/23/15	4,14															
16	Coordination and Field Verification	536 days	Fri 6/12/15	Fri 6/30/17	4															
17	Project Management	536 days	Fri 6/12/15	Fri 6/30/17	4															