Phoenix Lake IRWM Retrofit

Attachment 5 - Schedule

This Attachment presents the schedule for the Phoenix Lake IRWM Retrofit showing the sequence and timing of the proposed projects comprising the Retrofit. Since all the projects are located at Phoenix Lake and are interconnected in several ways, such as function, design, environmental review and permitting, and operation, they will generally be implemented in concert. For example, the design, environmental review and permitting, and construction phases of all the projects will be the same.

The total grant period is anticipated to last from September 1, 2011 to February 28, 2016.

Initial work will focus on the Memorandum of Agreement between FZ9 and MMWD and additional technical studies needed to complete Assessment and Evaluation (Tasks 1 and 4). Upon completion of these tasks, work will proceed on preparing the 60% designs for all projects. This level of design will be suitable for supporting environmental documentation and permitting. Upon completion of the 60% design, work will proceed on the technical studies needed to support environmental review and permitting.

As explained in Attachment 3, Workplan, environmental documentation will consist of a single combined CEQA/NEPA document covering the whole Phoenix Lake IRWM Retrofit, including all five component projects. Permitting will proceed concurrently with environmental review. Environmental review and permitting are expected to take nearly two years.

Final design for all projects will proceed upon completion of environmental review and permitting. Based on the results of environmental review and permitting process, any necessary modifications to the projects' designs will be made, and the 90% and 100% designs will be completed.

Construction contracting will follow final design. In addition to project facilities and improvements, construction will also include mitigation measures. For example, it is anticipated that new fringe wetlands along the lake shoreline will be required as mitigation for the potential loss of wetlands as a result of project construction and future lake operations. It is logical that these new mitigation wetlands be built in conjunction with the other construction work.

Installation of the lake circulation devices under the Water Quality Project will be done in the ensuing late winter-early spring following completion of construction of the other projects to give the lake enough time to fill and stabilize. SCHEDULE

Phoenix Lake IRWM Retrofit

1 Ta		MAMJJASONDJFMAM	0 8 V F	NDJFMAM	JJASONDJFMAMJJ	ASONDJF	C N O N O N O N	I E M
	Task 1: Administration							
	Grant Award (September 1, 2011)							
	Memorandum of Agreement (MOA)							
	Prepare							
	Approval by FZ9 and MMWD Boards	21, \$ 175						
7	Task 2: Labor Compilance Program							
	Prepare							
	Submit	♦ 10/31						
	Task 3: Reporting	.						P
9	Quarterly Reports							
7	Annual Reports		-0		0		G	
12	Final Report							0
13 Ta	Task 4: Assessment and Evaluation							
44	(FDR) Geotechnical Pre-Design Report							
15	(WS) Long-Term Hydrologic Analysis							
16	(FDR/WS) Coordinated Operations Plan							
17	(WQ) Phoenix Lake Baseline Water Quality Study							
	(ER) Ross Ck/Corte Madera Ck Baseline Water Quality Study	ality Study						
19 Ta	Task 5: Final Design						P	
I	(FDR, ER) 60% Design	treat (constituting to the property of the pro		6				
21	(FDR, ER) 90% Design							
22	(FDR, ER) 100% Design							
23	(FDR, ER) DSOD Approval of 100% Design						D-4/1	
24	(WS) 60% Design							
25	(WS) 90% Design							
26	(WS) 100% Design							
27	(WS) DSOD Approval of 100% Design						\$ 147	
28	(WQ) 60% Design							
59	(WQ) 90% Design							
30	(WQ) 100% Design							
31	(RPA) 60% Design							
32	(RPA) 90% Design							
	(RPA) 100% Design							
	Task 6: Environmental Documentation			Ь		P		
35	Prepare							
	Approval by FZ9, USACE					♦ 10/31		
	Task 7: Permitting			Ъ		P		
38	lechnical Studies			b		P		
33	Waters/Wetlands delineations							
40	Vegetation Surveys							
41	Wildlife Surveys					Ì		
45	Instream Flow Study							
43	Cultural Resources Survey							
44	Biological Assessment							
45	Applications			Ь		7		
46	USACE 404					Í		
141	NOAA/UST-WS Section / Consultation							
48	Regional Board 401							
	Task	Summary 💝	Rolled Up Progress =	1	Project Summary			
Project: Project1	Progress Progress	Rolled Up Task			Group By Summary			
ale. III		Rolled Up Milestone ♦	nal Tasks	ca	Deadline			

SCHEDULE Phoenix Lake IRWM Retrofit

15 Makusa	_1				*****	FINCELLA DAME TRUE LECTOLIC	د	The second second			
The State of the s		ne	2	2		- C	2013	2014	N	<	N V N U
And Andrews An		DFS 1200	Σ	z 2		Z Z	D A B C C	A A B A A A A A A A A A A A A A A A A A	Σ	∢	A A M
Principal Agricolation Principal Agricolat		OWR-DSOD (initial)						and house house he can be considered to the consistence of the consist			
Construction contraction con	1000	Sounty Grading/Building/Watercourse						# # # # # # # # # # # # # # # # # # #			
Expression		Permits Approved/Issued							₹10/31		
Control Cont	1	Construction Contracting									
Take the first transfer of the first transfe		Construction									P
Task Rolled to Mileston Extra command Compliance/Mileston/Enhancement Construction Administration Construction Administration Figure Rolled Up Fogress Rolled Up Task Rolled Up Milestone Rolle	1	t, ER)									
Environmental Compliance/Mitigation/Enhancement Construction Modificial Magainon and Restoration Construction Administration Construction Administration Construction Administration Construction Administration Task Rolled Up Progress Rolled Up Progress Rolled Up Progress Rolled Up Milestone External Task Rolled Up Milestone Formany Progress Rolled Up Milestone Formany Progress Page 2											
Environmental Compliance Mitigation/Enhancement romental Compliance Wickpain romental Compliance romental Complia											
Construction Administration Construction Administration Task Summary Construction Administration Frages Summary Construction Administration Frages Summary											
Construction Mainistration C	333.00	Environmental Compliance/Mitigation/Enh	hancement								
Construction (Miles Discovered Progress Summary Rolled Up Progress Rolled Up Milestone Task Summary Rolled Up Progress Rolled Up Milestone		onmental Compliance Workplan	İ								
Task Summay Rolled Up Progress Rolled Up Migestone Rolled Up Mi		construction Biological Survey									
Construction (finite) Milgation and Restoration Construction Administration Task Rolled Up Progress Rolled Up Task Rolled Up Milestone	-	truction Monitoring									
Construction Administration Task Summary Progress Rolled Up Task Soft Milestone Rolled Up Milestone Spift Milestone Progress Rolled Up Milestone Page 2		construction (initial) Mitigation and Restoratio	uc								
Task Progress Progress Rolled Up Fask Rolled Up Fask Folled Up Fask Rolled Up Milestone ♦ Rolled Up Milestone ♦ External Tasks		Construction Administration									
Task Summary Rolled Up Progress Rolled Up Progress Rolled Up Milestone ♦ External Tasks External Tasks											
Milestone ♦ Rolled Up Milestone ♦ External Tasks Page 2	Project: Project1	Task			Rolled Up Pro		Project Summary Group By Summary	D D			
Page 2	Date: Thu 4/14/11			Rolled Up Milestone ♦	External Task	CSI	Deadline 🕀	•			
			i i			Page 2					