

ATTACHMENT 7: SCHEDULE

Provide a detailed realistic schedule showing the timeline for each task shown on the work plan and budget. If awarded a LGA grant, assume a realistic start date for your proposed project of no sooner than April 2013, and anticipate a maximum 2-year performance period. The work plan, budget, and schedule must be consistent throughout the proposal. Explain how the proposed work will be ready to proceed when funding is secured including time to obtain environmental and other permits and complete any CEQA documentation. Explain how obstacles would be resolved to keep on schedule, such as obtaining land owner access. Work must start and progress toward completion during the term of the grant agreement. Explain how the schedule was derived. Show appropriate subtasks.

Pursuant to CWC Section 10753.4(a) the local agency shall prepare a GWMP within two years of the date of the adoption of the resolution of intention. Therefore, for a proposal to complete or update a GWMP the completion date must be within two years of the local agency's governing board adoption of the resolution for initiation of work on the GWMP.

The proposed schedule for this project is presented below. Several key dates have influenced the planned start and dates for this proposal:

- The PSP expects a start date no sooner than April 2013. DWR is expected to approve the grants in Jan 2013. Our experience shows that contract negotiation and review of 3 months is optimistic. A July 2013 start date would seem realistic given the decision timeline for this PSP. The PSP calls for a maximum performance period of 2 years.
- The DWR Flood Corridor Project (McMullin On-Farm Flood Capture and Recharge) is expected to be contracted between Jan and April 2013. Contract negotiations are currently ongoing between DWR and KRC for that project.
- A July 2013 start date will allow the project to overlay two flood flow seasons.
- All other related KRC projects (e.g. KRC Remote Telemetry Project, CASGEM, GWMP) will be ongoing by July 2013.

As discussed in the Work Plan, CEQA review is expected to be a relatively simple process. The lands where the wells would be located are already considered to be disturbed. A previous cultural impact survey indicated that some activity may have occurred within the Fresno Slough/James Bypass, but it is not anticipated that any other impacts will be seen. The normal precautions will be taken should any artifacts be encountered. Wildlife habitat disturbance should be minimal, and would only occur during drilling operations. KRC Environmental staff will be included in the Site survey process. Each site will be photo surveyed prior to any drilling work beginning to confirm that no wildlife habitat of concern is present.

Finally, this work is expected to be conducted on Terranova Ranch, the location of the McMullin On-Farm Flood Capture and Recharge project. Terranova Ranch has provided a letter affirming their support and ensuring their cooperation, including the installation of wells on the ranch.

Thus, a July 2013 start date would represent full readiness for the initiation of this project with respect to coordination with other related projects, permitting requirements and logistics.

The table below shows the planned schedule for this project assuming a July 2013 start date.

Task 1, Root zone characterization, will begin with the initiation of the grant and continue for one year. Instrumentation installation and determination of soil physics and chemistry characteristics will occur in the 4th quarter of 2013, after harvest and before soil preparation for the next year. Field management practices will be documented for a year, beginning in the 4th quarter of 2013. Leveraging and mining data from the NRCS CIG grant will occur early during this study to inform model development and calibration. Laboratory studies will be conducted if flood conditions have not occurred in order to simulate those conditions in the lab and still collect relevant and useful data for model calibration and validation.

Task 2, Upper Vadose Zone Characterization, will require the collection of deep cores by the GeoProbe before and after flood flow conditions. This work is an extension of work conducted under the NRCS CIG grant in which cores were collected to 20 feet for vineyards under different hydrologic management. Initial cores will be collected in the 4th quarter of 2013. Coring will be repeated in 3rd quarter of 2014 if flood flow conditions have occurred. If they do not occur in 2014, then they will be collected in the 2nd quarter of 2015. If flood flows do not occur during the performance period of this project, we will rely upon the NRCS CIG grant soil samples that were collected and archived. Soils from Task 3, Groundwater monitoring wells, will be used for this task as well.

Task 3, Groundwater well installation and monitoring, will be conducted during the 3rd and 4th quarters of 2013. Permitting is expected to be simple, access will be secured, and methods have been determined for installing the monitoring wells and their associated telemetry equipment. Groundwater will be sampled through the duration of the project.

Task 4, deep unsaturated modeling, will begin in January 2014. The initiation of the modeling effort will occur after collection of necessary soil characteristics through the different field sampling efforts. The models to be used for this study have already been selected and have previously been used by project team members. Thus, there will be no learning curve required for implementing these models. Work on the modeling will occur (not continuously) through the duration of the project as data become available.



Task 5, Outreach, is planned for 2nd quarters of 2014 and 2015. This period is a good time for workshops as it represents the transition from winter to irrigation season, and flood flows are most likely at this time as well.

Task 6, Project Administration, will occur over the duration of the project.

Table 1. Project Schedule

Year Quarter	2013				2014				2015	
	1	2	3	4	1	2	3	4	1	2
Key Dates										
Expected Period for Project			Jul 2013						Jun 2015	
Expected Start Date of Flood Corridor Project	Between Jan 2013 and April 2013									
Likely Flood Seasons	Jan - June				Jan - June				Jan - June	
Tasks Description										
1	Root Zone Characterization									
1.1	Agronomic Practices Instrumenting for shallow soil processes									
1.2	Soil physics and chemistry									
1.3	Supplemental Field/Laboratory Studies and CIG project data mining									
1.4	Anticipated Analyses and Coupling with Vadose Zone Models									
2	Upper Vadose Zone Characterization									
3	Groundwater Well Installation and Sampling									
3.1	Site Selection									
3.2	Well Construction and Development									
3.3	Telemetry system installation									
3.4	Groundwater sampling									
4	Deep Unsaturated Zone Modeling									
5	Outreach									
6	Administration									