

Conceptual Model – Tasks and Budget

The purpose of this memorandum is to provide (1) an overview of the original Workplan elements associated with development of the CV-SALTS Conceptual Model; and (2) how these original elements compare to the revised Workplan currently under review. In addition, comparative information is provided for the Basin Plan Amendment step in the Workplan, which was captured under “Documentation for Approval” section of the original Workplan (now labeled as Documentation Basin Plan Amendment in the revised budget). The basis for this evaluation is the original Workplan tasks and costs (Attachments 3 and 4) to the approved March 9, 2012 Workplan and the Workplan budget discussed at the June 12, 2013 Executive Committee administration meeting.

The original Workplan divided Conceptual Model/SNMP development into three phases (Phase I - Initial Conceptual Model [ICM]; Phase II - SNMP Conceptual Model; and Phase III - Final SNMP Model). Table 1 below summarizes the original tasks included in the 2012 approved Workplan for each of these phases and compares them to the tasks as currently recommended in the proposed revised budget. While tasks can be readily compared, budgets are not as easily comparable because the 2012 Workplan provided budget information as ranges and the new proposed budget recommends a not to exceed budget. Table 2 provides the budget comparison by phase comparing the 2012 range and midpoint with the current not to exceed proposed budget (only top level budgets are compared; not individual task budgets). Following are some observations based on this background:

- **Phase I (ICM)** – The original Workplan was prepared before scoping began for the ICM project; as a result of continued discussions with the TAC and Executive Committee, additional elements were included in the scope of work that were not included in the original Workplan. In particular, there are two key areas of difference: (1) development of management zone planning concepts (resulted in the initial analysis zones memorandum); and (2) completion of higher resolution modeling analyses in two subareas (Merced/Stanislaus and Kings River). In addition, the outputs from Phase I go beyond the original Workplan in that the report will include a preliminary prioritization based on salt/nitrate concentrations and assimilative capacity. As noted in the June 20 Executive Policy meeting, sufficient information was developed in Phase I to complete a basic S/N characterization for the Central Valley floor (however, as was also noted in the meeting, there is a need to go further from a management standpoint).
- **Phase II** - The ICM is nearing completion and scoping has begun for Phase II, which is equivalent to “SNMP Conceptual Model” in the revised budget. The proposed budget revision includes textual revisions to the Phase II task names; however, they are intended to be generally equivalent to the original Workplan (Table 1). Specifically:
 - Task IDs 22-24 (from original Workplan) relate to gathering additional data, assessing sustainability and refining the model based on stakeholder input (see “Scope Abstract” column in Workplan Attachment 3). Table 1 shows the equivalent tasks in the revised budget. In particular, the need to develop assimilative capacity (AC) and antidegradation analysis (AA) methods will be important elements for assessing sustainability. Some of this work has begun through the ICM project; however, as both AC and AA methods are ongoing Executive Committee policy discussions, more work is needed for the SNMP with regards to establishing the methodology for calculating AC and conducting an AA.
 - Task IDs 25-26 relate to the use of archetypes/projects/management practices to assess sustainability in collaboration with stakeholders (which provide real world examples). The equivalent tasks in Table 1 are intended to capture these tasks elements more succinctly.
 - Task ID 27 involves preparing a draft SNMP; the task in the revised budget is essentially equivalent.

- **Phase III** - There are some differences between how the Final SNMP Conceptual Model tasks (original Workplan) and Phase III tasks (revised budget) are defined, but this is due largely to a need to be more clear between what is budgeted in Phase III and what is included in the CV-SALTS budget for “Documentation Basin Plan Amendment”. Original Workplan task descriptions suggest some duplication of effort, in particular with regards to economic analysis and SNMP documentation. The revised Workplan budget more clearly shows that Phase III involves developing specific elements needed for the SNMP adoption and the BPA Basin Plan Amendment (BPA) process. The Documentation Basin Plan Amendment section of the revised budget shows the remaining elements to complete the BPA process (e.g., staff report and SED).

Table 1 – Workplan Task Comparison: Original Workplan vs. Current Proposed Revision

ID No.	Task Name – Original Workplan	Revised Budget Task Description
15	Initial Conceptual Model	Phase I
16	Outreach and engage stakeholders for Conceptual Model data	<ul style="list-style-type: none"> Task 1 – Project Management includes interaction with Executive Policy Committee and TAC Task 3 – Data Development
17	Gather existing water balance sources and quality info and data for Initial Conceptual Model	Task 3 – Data Development
18	Assess data and format for model	
19	Develop conceptual model and estimate initial salt and nitrate loads (i.e., initial studies)	<ul style="list-style-type: none"> Task 4 – Establish Initial Analysis Zones Task 5 –Establish Methods for Salt and Nitrate Water Quality Analyses. Task 6 – Complete High-Level Salt and Nitrate Analyses for Central Valley.
20	Develop additional data needs for SNMP level	Task 8 – Report
--	Not in original Workplan	<ul style="list-style-type: none"> Task 7 – Salt and Nitrate Analyses in Selected Subareas of the Central Valley
21	SNMP Conceptual Model	Phase II
22	Gather additional sources and quality info/data	<ul style="list-style-type: none"> Prioritization & Refine Model from Phase 1 Assimilative Capacity and Antidegradation Methods
23	Assess sustainable salt/nitrate balance/accumulation	
24	Refine conceptual model and salt and nitrate loads based on stakeholder input	
25	Model potential large-scale management practices and projects	<ul style="list-style-type: none"> Potential Implementation Archetypes Effectiveness and Sustainability Demonstration
26	Incorporate Information from Archetypes and other proposed basin plan changes	
27	Prepare Initial Draft CV-SNMP including implementation Plan	Prepare CV-SNMP Element Documentation
28	Final SNMP Conceptual Model	Phase III
29	Economics evaluation support	Conduct Economic Analysis
30	CEQA evaluation support	<ul style="list-style-type: none"> Surveillance and Implementation Perform Antidegradation Analysis
31	Basin Plan support	
32	Draft Central Valley SNMP with program of implementation	
33	Prepare Final CV-SNMP with program of implementation	
112	CEQA Equivalent Documentation for Central Valley SNMP	
113-114	CEQA scoping sessions in Sacramento and Fresno	CEQA Equivalent (SED) and Basin Plan Staff Report
115	Conduct economic analysis of program of implementation alternatives	
116	Hold public meetings and workshops	
117	Complete Substitute Environmental Documentation	
118	Amendments and Documentation	Final SNMP Documentation and Changes (2016)
119	Prepare Regional Board staff report describing proposed Basin Plan amendments	
120	Conduct peer review of staff report and proposed Basin Plan amendments	
121	Circulate staff report and proposed Basin Plan amendments for public comment	
122	Obtain necessary approvals of Basin Plan amendments adopted by Regional Board	

Table 2 – Budget Comparison - Original Workplan vs. Current Proposed Revision

SNMP Phase	Original Budget		Actual (A) or Proposed (P) SNMP Phase Budget	Comments
	Budget Range	Budget Midpoint		
Phase I (ICM)	\$150,000 to \$250,000	\$200,000	\$495,918 (A)	Budget increased to accommodate additional work identified during scoping process
Phase II	\$500,000 to \$1,100,000	\$800,000	\$575,000 (P)	Work anticipated for Phase II (e.g., Subarea analyses, incorporated into Phase I; scope fine-tuned per needs given Phase I outcomes. Note similarity between combined Phase I & II budgets (midpoint vs. not to exceed)
Phase III	\$300,000 to \$700,000	\$500,000	\$500,000 (P)	Original some overlap in the proposed scopes, e.g., economics analysis which may have resulted in some double counting.
CEQA & BPA	\$475,000 to \$950,000	\$712,500	\$500,000 (P)	
Total	\$1,425,000 to \$3,000,000	\$2,212,500	\$2,070,918	Original midpoint budget and proposed budgets very similar.