

**DRAFT Table 6-1 - Management Components and Recommended Actions - Plans for Years 1 to 5 DRAFT**

Action No.	Recommended Actions	Year					Relative Cost
		1	2	3	4	5	
<b>5.1.1 Stakeholder Involvement</b>							
<b>5.1.1 Involving the Public</b>							
1	1) Circulate copies and publish the adopted Plan and updates	√	√	√	√	√	\$
2	2) Develop informational flyer and distribute	√	√	√	√	√	\$
3	3) Develop and execute a Pubic Outreach Plan for Plan implementation	√	√	√	√	√	\$
4	4) Develop outreach information for the public	√	√	√	√	√	\$
5	5) Conduct public forums at key milestones	√	√	√	√	√	\$
6	6) Maintain email and postal mail lists to announce meetings and other information	√	√	√	√	√	\$
7	7) Invite interested parties to participate in Panel meetings	√	√	√	√	√	\$
8	8) Meet with interested organization representatives periodically to receive input	√	√	√	√	√	\$
9	9) Meetings, coordination, and communication	√	√	√	√	√	\$
<b>5.1.2 Advisory Groups</b>							
10	1) Review Panel & TAC membership	√	√	√	√	√	\$
11	2) Conduct TAC monthly meetings	√	√	√	√	√	\$*
12	3) Conduct Panel Quarterly Meetings	√	√	√	√	√	\$*
<b>5.1.3 Informing Stakeholders &amp; Public Agencies</b>							
13	1) Continue to maintain and further develop relationships	√	√	√	√	√	\$
14	2) Coordinate and inform land use and water resources planning	√	√	√	√	√	\$
15	3) Conduct briefings with elected officials who have adopted the Plan	√	√	√	√	√	\$
16	4) Provide information to increase public awareness of water supplies	√	√	√	√	√	\$
<b>5.1.4 Partnerships &amp; Coordination</b>							
17	1) Continue to promote partnerships	√	√	√	√	√	\$
18	2) Coordinate Plan implementation activities and collaborate with local groups	√	√	√	√	√	\$
19	3) Coordinate efforts to seek grant funding for Plan recommended actions	√	√	√	√	√	\$
<b>5.2.1 Monitoring Program &amp; Modeling</b>							
<b>5.2.1.1 Groundwater Level Monitoring</b>							
20	1) Conduct systematic, coordinated groundwater elevation monitoring of existing programs and assess groundwater elevations on an annual basis	√	√	√	√	√	\$*
21	2) Develop an outreach program to obtain groundwater level data from volunteer private well owners, private producers, and mutual water companies	√	√	√	√	√	\$
22	3) Coordinate with local, state and federal agencies to investigate opportunities to develop better information on groundwater level monitoring	√	√	√	√	√	\$
23	4) Expand existing groundwater level monitoring network to establish an expanded long-term monitoring well network	√	√	√	√	√	\$S*
<b>5.2.1.2 Groundwater Quality Monitoring</b>							
24	1) Assess water quality on an annual or biennial basis for trends, conditions and adequacy of the groundwater quality monitoring network	√	√	√	√	√	\$*
25	2) Identify opportunities to capture and integrate existing water quality data for areas where current data is insufficient	√	√	√	√	√	\$
26	3) Integrate other monitoring programs established through efforts such as the NCRWQCB Dairy Program, recycled water and the Salt and Nutrient Management Plan	√	√	√	√	√	\$
27	4) Establish and fund a basin-wide, standardized, coordinated, long-term groundwater quality monitoring network in conjunction with groundwater level monitoring	√	√	√	√	√	\$S\$*
<b>5.2.1.3 Land Subsidence Monitoring</b>							
28	1) Identify the available data related to potential inelastic land subsidence due to groundwater extraction in the Plan Area	√	√	√	√	√	\$
29	2) Evaluate potential benchmark locations for periodic monitoring of land subsidence related to groundwater extraction in the Plan Area	√	√	√	√	√	\$
30	3) Develop an outreach program for City, County and other institutions responsible for infrastructure to provide information regarding likely indicators of subsidence	√	√	√	√	√	\$
31	4) Develop monitoring program and network for assessing the potential for inelastic land subsidence due to groundwater extraction	√	√	√	√	√	\$S*
<b>5.2.1.4 Surface Water-Groundwater Interaction Monitoring</b>							
32	1) Continue to compile available stream gauge data and information on tributary flows in the Plan Area	√	√	√	√	√	\$*
33	2) Determine current surface water quality sampling being conducted in the Plan Area	√	√	√	√	√	\$
34	3) Project to analyze and as necessary re-activate existing stream gauges and install new gauges in the Plan Area	√	√	√	√	√	\$S*
35	4) Project to install new shallow monitoring wells along major watercourses	√	√	√	√	√	\$S\$*
36	5) Project to conduct seepage runs along major watercourses	√	√	√	√	√	\$
37	6) Project to study stable isotope study to understand surface water-groundwater flow	√	√	√	√	√	\$S
<b>5.2.1.5 Hydrometeorological Monitoring</b>							
38	1) Develop inventory of existing hydrometeorological stations including sensors, data collection and management protocols, and plans for future expansion	√	√	√	√	√	\$
39	2) Develop a protocol and work plan for compiling rainfall data on a water-year basis to develop isohyetal maps as warranted	√	√	√	√	√	\$*
40	3) Evaluate rainfall data distribution and determine the need for additional data	√	√	√	√	√	\$
41	4) Identify and develop strategies for collecting hydrometeorological data needs for the surface water-groundwater flow model	√	√	√	√	√	\$
<b>5.2.1.6 Monitoring &amp; Reporting Protocols</b>							
42	1) Develop a schedule to coordinate the time of sampling and the sampling interval (time between samples) to ensure consistent data collection frequency	√	√	√	√	√	\$
43	2) Use a Standard Operating Procedure (SOP) for the collection of groundwater level data for wells	√	√	√	√	√	\$
44	3) Provide DPH guidelines on the collection, pretreatment, storage, and transportation of water samples intended for water quality analyses	√	√	√	√	√	\$
45	4) Develop field and office quality assurance practices for the program	√	√	√	√	√	\$
46	5) At the onset of the GMP monitoring program, prepare and distribute a stand-alone Sampling and Analysis Plan	√	√	√	√	√	\$
47	6) Provide training on water level sampling to volunteer well owners as needed	√	√	√	√	√	\$
48	7) Coordinate the various existing and planned monitoring efforts to ensure uniform, standard water quality data collection protocols are followed	√	√	√	√	√	\$
<b>5.2.1.7 Data Management</b>							
49	1) Maintain and update the central GIS data management system including GIS layers and other data formats	√	√	√	√	√	\$*
50	2) Work with cooperating agencies, and any other non-governmental entity, to provide data for updating the database periodically	√	√	√	√	√	\$*
51	3) Adopt flexible, standard formats for data collection, transfer protocols, reporting, and quality assurance-quality control checks for regular data updates	√	√	√	√	√	\$
52	4) Use the GIS data management system to assist in periodic data evaluations and prepare the Periodic Plan report summarizing groundwater conditions	√	√	√	√	√	\$*
53	5) Project to compile, screen and review State Department of Public Health, DWR Well Logs and PRMD records as an additional data source	√	√	√	√	√	\$S
54	6) Make data in the GIS data management system data publically available to Plan Area stakeholders and the wider public, while protecting any confidential information	√	√	√	√	√	\$S*
55	7) Project to develop and coordinate related data including GIS layers and other data formats on topics	√	√	√	√	√	\$S*
<b>5.2.2 Groundwater Modeling</b>							
56	1) Develop and run groundwater management scenarios using the model to assess the benefits of different recommended actions and options	√	√	√	√	√	\$
57	2) Periodically update the integrated surface water-groundwater flow model (GSFLOW) including GIS layers and other data formats .	√	√	√	√	√	\$S*
<b>5.3 Groundwater Protection</b>							
<b>5.3.1 Maintain Groundwater Levels</b>							
58	1) Should monitoring data indicate persistent groundwater level declines, provide notifications to groundwater users regarding declining trends	√	√	√	√	√	\$
59	2) Support and enhance water conservation goals for reducing groundwater demands, with local and region-wide incentive programs	√	√	√	√	√	\$
60	3) Evaluate historical groundwater level trends in the Plan Area, and identify subareas and scenarios that are more vulnerable to groundwater level declines	√	√	√	√	√	\$
61	4) Provide information to the public on the importance of groundwater monitoring, maintaining groundwater levels and promote voluntary groundwater level monitoring	√	√	√	√	√	\$*
62	5) Where feasible, promote and support small- and large-scale groundwater recharge, water conservation and increased recycled water use	√	√	√	√	√	\$
<b>5.3.2 Prevent Adverse Interactions Between Surface Water and Groundwater</b>							
63	1) Encourage activities that protect surface water quality with a particular focus on areas where surface water recharges groundwater	√	√	√	√	√	\$
64	2) Support a surface water-groundwater interaction monitoring program to better understand the potential for adverse interactions and identify vulnerable areas	√	√	√	√	√	\$*
65	3) Where reductions in streamflow related to shallow groundwater level declines may be identified, inform local stakeholders and encourage adaptive activities	√	√	√	√	√	\$S
<b>5.3.3 Well Construction, Maintenance, Protection, Abandonment and Destruction</b>							
66	1) Review Chapter 25B and provide suggestions to PRMD on the well permit application requirements to improve the collection of hydrogeologic information	√	√	√	√	√	\$
67	2) Identify management approaches that can be used to protect the water supply from potentially contaminating activities	√	√	√	√	√	\$
68	3) Conduct an inventory and survey of active and inactive wells in the Plan Area to identify potential abandoned wells, & develop an approach for possible grant funding	√	√	√	√	√	\$S*
69	4) Distribute the Wellness Guide to local well owners within the Plan Area	√	√	√	√	√	\$*
70	5) Provide recommendations, as appropriate, to Sonoma County on well construction and destruction for well owners, operators, well drillers and service providers	√	√	√	√	√	\$
71	6) Review the USGS report on the Santa Rosa Plain (USGS, 2013) and provide information and maps on groundwater conditions to the County	√	√	√	√	√	\$
72	7) Conduct a study to obtain better information during well installations by designing a program to obtain better hydrogeologic information on new well completions	√	√	√	√	√	\$
<b>5.3.4 Mapping and Protecting Groundwater Recharge Areas</b>							
73	1) Provide the groundwater recharge area map to and meet with PRMD, the County and local planning agencies	√	√	√	√	√	\$

