

Gantt Chart on Preliminary Plan for Implementation*

ID	Activity	Capital Cost \$M	Dependencies	Duration (quarters)	2016-2027																																															
					2016 Year 1				2017 Year 2				2018 Year 3				2019 Year 4				2020 Year 5				2021 Year 6				2022 Year 7				2023 Year 8				2024 Year 9				2025 Year 10				2026 Year 11				2027 Year 12			
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4								
Element 0 - Implement Existing CIP & Secure Water Rights																																																				
0	Demand management	1	1yr		0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25												
1	Existing CIP																																																			
2	Evaluation/Upgrade of Felton Diversion (Dam and PS)	1.5	Feasibility Analysis	14	0.3																																															
3	Rehab of Newell Creek Pipeline	12.7	Feasibility Analysis	16		0.7																																														
4	Maintenance Upgrades, GHWTP	14.3	Studies	14	0.8																																															
5	Replace Tail Street Wells	1.9	In progress	6	0.3																																															
6	HCP Negotiation and Resolution	0.3	Ongoing Negotiations	6	0.2																																															
7	Water Rights Negotiation		Ongoing Negotiations					0.1																																												
8	Pre 1914 water to Soquel Creek	0.1		2	0.1																																															
9	Changing place of use-San Lorenzo River Water to Soquel Creek	0.1		14	0.1	Time required unknown; assume ~3.5 years																																														
10	Felton Diversion-change from diversion to storage-to-direct diversion	0.1		14	0.1	Time required unknown; assume ~3.5 years																																														
Element 1 - In lieu Soquel Creek & Scotts Valley																																																				
12	Near term In Lieu with Soquel Creek using North Coast Water		Agreement w/SqCWD																																																	
13	In lieu planning	0.1		0	2	0.1																																														
14	Soquel Agreement (terms, volumes, costs...)	0.1		0	1	0.1																																														
15	CEQA for in lieu. (Categorical Exemption or Neg Dec?)	0.1		0	2	0.1																																														
16	Begin In lieu to Soquel Water District with existing infrastructure	0		18	>46																																															
17	Longer term In Lieu with Soquel Creek & Scotts Valley		ID 62-67																																																	
18	In lieu planning (establish available water, infrastructure, ...)	0.1	ID 15	10	Delayed due to	0.02	0.04	0.04																																												
19	Water Rights Discussions/Resolutions, North Coast & SLR?	0.1		10	due to	0.02	0.04	0.04																																												
20	Soquel Agreement	0.1	ID9	4	current																																															
21	Scotts Valley Agreement	0.1		4																																																
22	CEQA for in lieu. (Categorical Exemption or Neg Dec?)	0.1		4																																																
Element 2 - ASR (City, SqCWD and/or SVWD; i.e., Purisima & SM)																																																				
23	ASR High-level Feasibility, Purisima & SM		Studies																																																	
24	Use GW Model to determine locations, rates, volumes	0.3	Completion of GW Mod	8	0.2																																															
25	Site Specific injection capacity analysis (paper study)	1.3		0	1	1.3																																														
26	Geochemical interaction modeling	2.3		0	1	2.3																																														
27	Develop Pilot Program including sites	3.3		0	2			3.3																																												
28	ASR Pilot Testing, Purisima and/or SM		ID 23-27																																																	
29	Modify Well(s) for pilot testing, assume 3	3.1		0	2																																															
30	Design needed infrastructure	0.2		0	6																																															
31	CEQA & Permits	0.2		0	6																																															
32	Construct	1.9		0	3																																															
33	Perform injection well hydraulic testing	0.1		0	1																																															
34	Develop & implement ASR testing program	0.5		0	8																																															
35	Basis of Design for full scale	0.23		0	2																																															
36	ASR Project Implementation, Purisima and/or SM		ID 28-35																																																	
37	Santa Cruz (4 wells)			0	4																																															
38	Procure sites, ~\$1M/acre	0.1		0	4																																															
39	CEQA, permits, agreements	1.2		0	3																																															
40	Design	1.2		0	3																																															
41	Construct	9.9		0	5																																															
42	Operate/develop operational parameters/etc			0	8	>>40																																														
43	SqCWD (6 wells)			0																																																
44	Procure sites, ~\$1M/acre	0.2		0	4																																															
45	Agreement(s)	0.1		0	3																																															
46	CEQA & Permits	1.9		0	4																																															
47	Design	1.9		0	3																																															
48	Construct	14.9		0	5																																															
49	Operate/develop operational parameters/etc			0	8	>>40																																														
50	SVWD (6 wells)			0																																																
51	Procure sites, ~\$1M/acre	0.2		0	4																																															
52	Agreement(s)	0.1		0	3																																															
53	CEQA & permits	1.9		0	4																																															
54	Design	1.9		0	3																																															
55	Construct	14.9		0	5																																															
56	Operate/develop operational parameters/etc																																																			

