Water Master Plan Update

City of Colusa

Estimated Project Labor Hours and Fees

Task Description	Principal Engineer II	Principal Engineer I	Principal GIS I	Senior Geologist II	Project Geologist II	Project GIS II	Project Engineer I	Engineer II	Project Coordinator	TOTAL HOURS BY TASK	Subconsultant (Lump Sum)	SUB Mark-up (10%)	DIRECT COST(S)	TOTAL COST
2022 Hourly Rates	$ 275.00	$ 245.00	$ 245.00	$ 225.00	$ 205.00	$ 205.00	$ 195.00	$ 185.00	$ 150.00					
Task 1: Project Management, Meetings, Workshops and Presentations	50	0	0	8	8	0	0	8	0	74	$ -	$ -	$ 1,000	$ 19,670
Task 1.1: Project Management	24									24	$ -	$ -	$ -	$ 6,600
Task 1.2: Meetings and Workshops	10			4	4					18	$ -	$ -	$ 600	$ 5,070
Task 1.3: Council Presentations	16			4	4			8		32	$ -	$ -	$ 400	$ 8,000
Task 2: Document Review	4	0	0	0	0	2	0	24	0	30	$ -	$ -	$ -	$ 5,950
Task 2.1: Review Existing Documents	2					2		16		20	$ -	$ -	$ -	$ 3,920
Task 2.2: Data Collection	2							8		10	$ -	$ -	$ -	$ 2,030
Task 3: Land Use Analysis	4	0	2	0	0	12	0	36	0	54	$ -	$ -	$ -	$ 10,710
Task 3.1: Existing Land Use Data	2					4		16		22	$ -	$ -	$ -	$ 4,330
Task 3.2: Proposed Land Use	2		2			8		20		32	$ -	$ -	$ -	$ 6,380
Task 4: Water Demand Projections	8	0	0	0	0	4	0	72	0	84	$ -	$ -	$ -	$ 16,340
Task 4.1: Determine Existing Demand Conditions	2							16		18	$ -	$ -	$ -	$ 3,510
Task 4.2: Develop Updated Demand & Peaking Factors	2					4		24		30	$ -	$ -	$ -	$ 5,810
Task 4.3: Determine Future Demand Conditions	2							20		22	$ -	$ -	$ -	$ 4,250
Task 4.4: Evaluate Supply and Demand to Determine Water Loss	2							12		14	$ -	$ -	$ -	$ 2,770
Task 5: Water Supply Evaluation	2	24	0	28	56	0	0	0	0	110	$ 3,200	$ 320	$ 5,000	$ 32,730
Task 5.1: Hydrogeology / Well Analysis				18	40					58	$ 3,200	$ 320	$ 5,000	$ 20,770
Task 5.2: Supply Analysis				6	12					18	$ -	$ -	$ -	$ 3,810
Task 5.3: Water Treatment Analysis	2	24		4	4					34	$ -	$ -	$ -	$ 8,150
Task 6: Hydraulic Model	8	4	0	0	0	12	0	120	0	144	$ -	$ -	$ -	$ 27,840
Task 6.1: Develop Water Model	4					12		80		96	$ -	$ -	$ -	$ 18,360
Task 6.2: Calibrate Water Model	4	4						40		48	$ -	$ -	$ -	$ 9,480
Task 7: Distribution System Analysis	10	12	0	0	0	0	0	56	0	78	$ -	$ -	$ -	$ 16,050
Task 7.1: Identify System Deficiencies	4							48		52	$ -	$ -	$ -	$ 9,980
Task 7.2: Identify System Efficiencies	4	12								16	$ -	$ -	$ -	$ 4,040
Task 7.3: Reservoir Capacity Analysis	2							8		10	$ -	$ -	$ -	$ 2,030
Task 8: Water Master Plan Update	36	6	2	0	0	24	16	128	8	220	$ -	$ -	$ 4,000	$ 48,780
Task 8.1: Preliminary Draft Master Plan Update	12	4	2			16	16	80	8	138	$ -	$ -	$ 750	$ 27,920
Task 8.2: Draft Master Plan Update	8	2				4		24		38	$ -	$ -	$ 1,750	$ 9,700
Task 8.3: Final Master Plan Update	8					4		24		36	$ -	$ -	$ 1,250	$ 8,710
Task 8.4: Public Outreach Support	8									8	$ -	$ -	$ 250	$ 2,450
Task 9: Capital Improvement Program	12	4	0	0	0	8	0	64	0	88	$ -	$ -	$ -	$ 17,760
Task 9.1: Draft CIP	8	4				8		40		60	$ -	$ -	$ -	$ 12,220
Task 9.2: Final CIP	4							24		28	$ -	$ -	$ -	$ 5,540
Task 10: Funding / Financial Evaluation	4	0	0	0	0	0	0	0	0	4	$ 35,000	$ 3,500	$ -	$ 39,600
Task 10.1: Evaluation of Connection Fees and Rates	2									2	$ 20,000	$ 2,000	$ -	$ 22,550
Task 10.2: Funding Alternatives	2									2	$ 15,000	$ 1,500	$ -	$ 17,050
TOTAL HOURS	138	50	4	36	64	62	16	508	8	886				
TOTAL DIRECT COSTS											$ 38,200	$ 3,820	$ 10,000	
													TOTAL FEE	**$ 235,430**