

# Attachment 5. Budget Summary

## 5.1 PROJECT BUDGET

### Project 1: Cerritos/Forest Lawn Cypress Recycled Water System Extension

<b>Table 7a – Project Budget</b>					
<b>Proposal Title: Gateway Region Priority Drought Projects Initiative</b>					
<b>Project Title: Cerritos/Forest Lawn Cypress Recycled Water System Extension</b>					
Project serves a need of a DAC?: Yes					
Funding Match Waiver request?: No					
Category		(a)	(b)	(c)	(d)
		Requested Grant Amount	Cost Share: Non-State Fund Source* (Funding Match)	Cost Share: Other State Fund Source*	Total Cost
(a)	Direct Project Administration	\$ 103,000	\$ 47,000	N/A	\$ 150,000
(b)	Land Purchase/Easement	N/A	N/A	N/A	N/A
(c)	Planning/Design/Engineering/ Environmental Documentation	\$ 167,000	\$ 83,000	N/A	\$ 250,000
(d)	Construction/Implementation	\$ 1,319,900	\$ 650,100	N/A	\$ 1,970,000
(e)	Grand Total (Sum rows (a) through (d) for each column)	\$ 1,589,900	\$ 780,100	N/A	\$ 2,370,000

\*Sources of funding: Cerritos Water Fund

Direct Project Administration was estimated based on the duration of the project and the estimated time to develop reports, administer the contract, and process invoices. The table below provides a cost breakdown for construction and indicates the estimated costs are reasonable. Labor is built into the construction cost estimates. Conversion cost refers to the fee that the Forest Lawn Cemetery will be paying for the loss of supplied potable water not purchased from Golden State Water Company.

**Project 1 Engineering Cost Estimate**

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
1	Mobilization, demobilization, and cleanup	1	LS		\$ 20,000
2	Excavation and Safety Measures	1	LS		\$ 10,000
3	NPDES Conformance/Best Management Practices (BMP's)	1	LS		\$ 5,000
4	10" Waterline Connection at the booster pump: Construct piping, fittings, and valves To 10" waterline includes testing, and tie-in to existing piping.	1	LS		\$ 6,000
5	Booster Pump Station: Furnish and install pump and suction header, concrete vault, connections, and suction piping mechanical piping, electrical wiring, complete and operational	1	LS		\$ 50,000
6	12" DIP attached to existing bridge over Moody Creek	65	LF	\$ 200	\$ 13,000
7	Excavation and shoring	1	LS		\$ 25,000
8	12" DIP attached to existing bridge over Coyote Creek	230	LF	\$ 300	\$ 69,000
9	12" DIP attached to flood channel at Cerritos Sport Complex	65	LF	\$ 200	\$ 13,000
10	16" Waterline connection at Cerritos Sport Complex: Construct piping, fittings, and valves to existing waterline - includes testing, and tie-in to existing piping.	1	LS		\$ 10,000
11	16" PVC C905 pipe and installation	8000	LF	\$ 140	\$1,120,000
12	Traffic controls for construction	1	LS		\$ 35,000
13	Cold mill (grind) existing pavement and repaved existing street to full lane	93840	SF	\$ 0.25	\$ 23,460
<b>Construction Subtotal</b>					<b>\$1,399,460</b>
Construction Contracting (5% of Construction/Implementation)					\$ 70,000
Conversion cost		250	AFY	\$ 2,000	\$ 500,000
<b>Construction Total</b>					<b>\$1,970,000</b>

**Project 2: Miles Avenue Well Site Nitrate Blending Improvements**

<b>Table 7b – Project Budget</b>					
<b>Proposal Title: Gateway Region Priority Drought Projects Initiative</b>					
<b>Project Title: Miles Avenue Well Site Nitrate Blending Improvements</b>					
Project serves a need of a DAC?: Yes					
Funding Match Waiver request?: No					
Category		(a)	(b)	(c)	(d)
		Requested Grant Amount	Cost Share: Non-State Fund Source* (Funding Match)	Cost Share: Other State Fund Source*	Total Cost
(a)	Direct Project Administration	\$ 23,500	\$ 11,500	N/A	\$ 35,000
(b)	Land Purchase/Easement	N/A	N/A	N/A	N/A
(c)	Planning/Design/Engineering/ Environmental Documentation	\$ 33,500	\$ 16,500	N/A	\$ 50,000
(d)	Construction/Implementation	\$ 167,000	\$ 82,900	N/A	\$ 249,900
(e)	Grand Total (Sum rows (a) through (d) for each column)	\$ 224,000	\$ 110,900	N/A	\$ 334,900
*Sources of funding: Huntington Park Water Fund					

Direct Project Administration was estimated based on the duration of the project and the estimated time to develop reports, administer the contract, and process invoices. The table below provides a cost breakdown for construction and indicates the estimated costs are reasonable. Labor is included in the construction cost estimates.

**Project 2 Engineering Cost Estimate**

ITEM	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	AMOUNT
1	Mobilization, demobilization, and cleanup	1	LS		\$ 20,000
2	NPDES Conformance /Best Management Practices (BMP's), Provide Temporary Holding Tank for Water Diverted to Waste	1	LS		\$ 10,000
3	Construct Piping Modifications and Fittings to Existing Waterline includes testing, and tie-in to existing piping	1	LS		\$ 30,000
4	Furnish and install nitrate analyzers include electrical wiring, complete and operational	2	Ea.	\$ 50,000	\$ 100,000
5	Furnish and install flow monitors	2	Ea.	\$ 5,000	\$ 10,000
6	Furnish and install sampling stations	2	Ea.	\$ 3,000	\$ 6,000
7	Furnish and install 6-inch valve	2	Ea.	\$ 5,000	\$ 10,000
8	Furnish and install 10-inch valve	1	Ea.	\$ 7,000	\$ 7,000
9	Update SCADA System	1	LS		\$ 35,000
10	Cutting and patching pavement as necessary	1	LS		\$ 10,000
<b>Construction Subtotal</b>					<b>\$ 238,000</b>
Construction Contracting (5% of Construction/Implementation)					\$ 11,900
<b>Construction Total</b>					<b>\$ 249,900</b>

**Project 3: Signal Hill Advanced Groundwater Wellhead Treatment**

<b>Table 7c – Project Budget</b>					
<b>Proposal Title: Gateway Region Priority Drought Projects Initiative</b>					
<b>Project Title: Signal Hill Advanced Groundwater Wellhead Treatment</b>					
Project serves a need of a DAC?: No					
Funding Match Waiver request?: No					
Category		(a)	(b)	(c)	(d)
		Requested Grant Amount	Cost Share: Non-State Fund Source* (Funding Match)	Cost Share: Other State Fund Source*	Total Cost
(a)	Direct Project Administration	\$ 100,382	N/A	N/A	\$ 100,382
(b)	Land Purchase/Easement	N/A	N/A	N/A	N/A
(c)	Planning/Design/Engineering/ Environmental Documentation	\$ 260,040	\$ 484,330	N/A	\$ 744,370
(d)	Construction/Implementation	\$ 4,480,578	\$ 2,515,670	N/A	\$ 6,996,248
(e)	Grand Total (Sum rows (a) through (d) for each column)	\$ 4,841,000	\$ 3,000,000	N/A	\$ 7,841,000
*Sources of funding: Signal Hill Water Fund					

Direct Project Administration was estimated based on the duration of the project and the estimated time to develop reports, administer the contract, and process invoices. Four well flow rates (1,800 gpm, 1,200 gpm, 900 gpm, and 600 gpm) were considered in the design and cost analysis for this project. The flow rate of 1,200 gpm was chosen for the design and the cost was calculated with the following assumptions:

Plant Operation	65%
Energy	0.129/kWh
WRD RA	\$205/AF Extracted
Concentrate Disposal Connection Fee (one time)	\$560,000
Disposal Fee	\$326/AF Disposed

The table below provides a cost breakdown for construction and indicates the estimated costs are reasonable. Labor is included in the construction cost estimates.

**Project 3 Engineering Cost Estimate**

Item	Description	Amount	Item	Description	Amount
1.1	Membrane Equipment	\$991,130	2.1	Well Pump Installation	\$7,500
1.2	Membranes (420 Total)	\$210,000	2.2	Site Work & Earthwork	\$52,000
1.3	NF1 Feed Pumps & Motors (3 Total)	\$115,250	2.3	Buried Piping	\$148,970
1.4	NF2 Feed Pump & Motor	\$ 7,680	2.4	Building & Structures	\$977,150
1.5	Cartridge Filters (2 Total)	\$ 57,620	2.5	Mechanical Piping & Equipment Installation	\$820,200
1.6	Degasifier	\$36,900	2.6	Underground & Exposed Conduit	\$97,540
1.7	Scale Inhibitor Tank	\$10,000	2.7	Wire, terminations & Grounding	\$75,370
1.8	Aqua Ammonia Tank	\$14,000	2.8	Install MCC, Switchboard, Instruments & PLC Panels	\$26,600
1.9	Antifoam Tank	\$9,000	2.9	Lighting	\$13,300
1.1	Scale Inhibitor Dosing System	\$30,000	2.1	Switches, Receptacles, Misc. Electrical Items	\$13,300
1.11	Aqua Ammonia Dosing System	\$25,000	2.11	Programming	\$177,340
1.12	Antifoam Dosing System	\$30,000	2.12	Insurance & Bonds	\$106,400
1.13	Chlortech On-site Generation System	\$103,720		<b>Subtotal</b>	<b>\$2,515,670</b>
1.14	Well Pump & Motor	\$59,160	3.1	Soil & Material Testing	\$50,000
1.15	Product Water Pumps & Motors (3 Total)	\$61,470	3.2	Construction Management	\$199,510
1.16	Engine Generator Set w/ Diesel Tank	\$384,160	3.3	Inspection	\$133,000
1.17	MCC/Switchboard	\$57,620	3.4	Start-up, Training	\$44,340
1.18	Well Pump VFD	\$38,420	3.5	Close-out	\$44,340
1.19	NF1 Pump VFDs	\$45,000		<b>Subtotal</b>	<b>\$471,190</b>
1.2	NF2 Pump VFD	\$ 6,100		Contingency	\$1,306,770
1.21	Product Pump VFDs	\$36,000			
1.22	Instrumentation & PLC Panels	\$180,000			
	Taxes @ 7.75%	\$194,388			
	<b>Subtotal</b>	<b>\$2,702,618</b>	<b>Total</b>		<b>\$6,996,248</b>

## **5.2 PROPOSAL BUDGET**

The proposal budget is shown in Table 8 below. In addition to a roll-up of the project budgets, the proposal budget includes the amount estimated for the administration of the Gateway Region Priority Drought Projects Initiative Program by the Gateway Water Management Authority. Program administration will include staff time to administer the contract with DWR, project tracking, invoicing, and submitting monthly and annual progress reports, as well as final reporting.

<b>Table 8 – Summary Budget</b>						
<b>Proposal Title: Gateway Region Priority Drought Projects Initiative</b>						
<b>Individual Project Title</b>		<b>(a)</b>	<b>(b)</b>	<b>(c)</b>	<b>(d)</b>	<b>(e)</b>
		<b>Requested Grant Amount</b>	<b>Cost Share: Non-State Fund Source (Funding Match)</b>	<b>Cost Share: Other State Funding Sources</b>	<b>Total Cost</b>	<b>% Funding Match (Col b/Col d)</b>
(a)	Project 1: Cerritos/Forest Lawn Cypress Recycled Water System Extension	\$ 1,589,900	\$ 780,100	N/A	\$ 2,370,000	<b>33%</b>
(b)	Project 2: Miles Avenue Well Site Nitrate Blending Improvements	\$ 224,000	\$ 110,900	N/A	\$ 334,900	<b>33%</b>
(c)	Project 3: Signal Hill Advanced Groundwater Wellhead Treatment	\$ 4,841,000	\$ 3,000,000	N/A	\$ 7,841,000	<b>38%</b>
(d)	Program Administration	\$ 50,000	N/A	N/A	\$ 50,000	<b>0%</b>
(e)	Proposal Total Sum rows (a) through (d) for each column	\$ 6,704,900	\$ 3,891,000	N/A	\$ 10,595,900	<b>37%</b>
(f)	DAC Funding Match Waiver Total Sum column (d) only for projects seeking DAC funding match waiver in rows (a) through (d)	N/A	N/A	N/A	N/A	N/A
(g)	<b>Grand Total</b> Subtract row (f) from row (e) for column (d) and recalculate column (e)	<b>\$ 6,704,900</b>	<b>\$ 3,891,000</b>	<b>N/A</b>	<b>\$ 10,595,900</b>	<b>37%</b>