

GSP Implementation – draft cost analysis

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ASSOCIATES



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Scott - Monitoring Network Estimated Costs

DRAFT

Network	Frequency	GSA Responsibility	Installation Costs	O&M Cost	Sampling and Lab Analysis Cost	Total/year <small>(Not including data analysis & management, post-processing, etc.)</small>
GWE	2/year or continuous	~16 CASGEM Freq 8-10 Instrumented	All costs are covered through TSS and planning grants	~\$8,000	~\$18,000	~\$26,000
WQ	1/year or 1/3-year	~10 samples per year	-	-	~\$1,000 (Lab Cost) ~\$3,000 (Sampling of at least 5 more WQ wells)	~\$4,000
Depletion of SW	Wells: Covered by GWE Gages: As needed O&M	10-11 wells covered by GWE 1-2 stream transects (installation covered by Scott GW recharge)		~\$15,000	-	~\$15,000
GDE	1-2/year (spring and fall)		Satellite images analysis		~\$5,000	~\$5,000
Storage	Covered by GWE	Monitoring covered by GWE Model maintenance	-	Covered under modeling cost (~\$40,000/year)	-	Modeling cost (~\$40,000/year)
Land Subsidence	Annually	Data analysis for Annual Reports	-	Covered by Annual reporting costs (\$10-\$15k/year)	-	Covered by Annual reporting costs (\$10-\$15k/year)

Shasta - Monitoring Network Estimated Costs **DRAFT**

Network	Frequency	GSA Responsibility	Installation Costs	O&M Cost	Sampling and Lab Analysis Cost	Total/year <small>(Not including data analysis & management, post-processing, etc.)</small>
GWE	2/year or continuous	~16 CASGEM Freq 8-10 Instrumented	All costs are covered through TSS and planning grants	~\$8,000	~\$18,000	~\$26,000
WQ	1/year or 1/3-year	~10 samples per year	-	-	~\$1,000 (Lab Cost) ~\$3,000 (Sampling of at least 5 more WQ wells)	~\$4,000
Depletion of SW	Wells: Covered by GWE Gages: As needed	10-11 wells through GWE 2-3 stream transects (SVRCD transects) 1 stream gage (Water Wheel)		\$15-\$20k/year	-	\$15-\$20k
GDE	1-2/year (spring and fall)		Satellite images analysis		~\$5,000	~\$5,000
Storage	Covered by GWE	Monitoring covered by GWE Model maintenance	-	Covered under modeling cost (~\$60,000/year)	-	Modeling cost (~\$60,000/year)
Land Subsidence	Annually	Data analysis for Annual Reports	-	Covered by Annual reporting costs (\$10-\$15k/year)	-	Covered by Annual reporting costs (\$10-\$15k/year)

Butte - Monitoring Network Estimated Costs

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Network	Frequency	GSA Responsibility	Installation Costs	O&M Cost	Sampling and Lab Analysis Cost	Total/year <small>(Not including data analysis & management, post-processing, etc.)</small>
GWE	2/year or continuous	~16 CASGEM Freq 8-10 Instrumented	All costs are covered through TSS and planning grans	~\$8,000	~\$18,000	~\$26,000
WQ	1/year or 1/3-year	~10 samples per year	-	-	~\$1,000 (Lab Cost) ~\$3,000 (Sampling of at least 5 more WQ wells)	~\$4,000
Depletion of SW	N/A				-	
GDE	1-2/year (spring and fall)		Satellite images analysis		~\$5,000	~\$5,000
Storage	Covered by GWE	Monitoring covered by GWE Model maintenance	-	Covered under modeling cost (~\$40,000/year)	-	Modeling cost (~\$60,000/year)
Land Subsidence	Annually	Data analysis for Annual Reports	-	Covered by Annual reporting costs (\$10-\$15k/year)	-	Covered by Annual reporting costs (\$10-\$15k/year)

Summary of preliminary expected costs per basin

	Yearly cost
GSA administration	\$10,000 – 31,250
Response to DWR comments on GSP plan	TBD
Reporting	\$15,000 – 31,250
Monitoring	\$45,000 – 75,000
Model maintenance	\$40,000 – 100,000 (it might be slightly higher for Shasta)
Grant writing	\$15,000 – 25,000
Stakeholder Engagement	\$10,000 – 25,000