

**TABLE 6-1
COST BENEFIT ANALYSIS FOR RECOMMENDED SOLUTIONS TO DATA GAPS**

Recommended Investigation, Study or Plan	Data Gap										Approximate Cost ^c
	Monitoring Coverage	Groundwater Flow	Supply Alternatives	Database Expansion	Present Water Use	Future Water Use	Water Quality	Water Chemistry	Water Storage	Water Exploration	
Conduct NIMA Survey	✓			✓	✓						1-2
Install Pressure Transducers in Existing Wells	✓	✓	✓	✓		✓			✓	✓	2
Install Flow Meters/Gauging Stations in Sierra Nevada Drainages or Washes	✓	✓	✓	✓	✓	✓			✓	✓	1-2
Install Unsaturated/Saturated Zone Monitoring System ^a	✓	✓	✓	✓							2-3
Install Velocity Sensors	✓	✓	✓	✓							2-3
Install New Wells - Southwest Area ^b	✓	✓	✓	✓		✓	✓	✓	✓	✓	5
Conduct Aquifer Testing - Southwest Area		✓	✓	✓							1-2
Conduct Pilot Testing of GW Injection		✓	✓	✓		✓	✓	✓	✓		3-5
Develop Preliminary Regional GW Flow Model		✓	✓	✓	✓	✓			✓	✓	3-4
Develop Calibrated Regional GW Flow Model		✓	✓	✓	✓	✓			✓	✓	2-3
Develop Disaster Plan/Water Shortage Plan			✓		✓	✓			✓		1-2
Prepare Annual Water Survey Report		✓	✓	✓	✓	✓	✓	✓	✓	✓	1-2
Prepare Groundwater Monitoring Plan	✓	✓		✓	✓	✓	✓	✓	✓	✓	1-2
Collect and Analyze Water Samples for General Water Quality Parameters	✓	✓	✓	✓	✓	✓	✓	✓		✓	2-4
Collect GW Samples for Isotopic Analysis	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	2-4
Initiate Wellhead Protection Plan	✓	✓	✓	✓	✓	✓	✓		✓		2-4

Notes:

^a System would consist of soil moisture monitoring stations coupled with groundwater piezometers.

^b Assumes three piezometers per monitoring well location.

^c Approximate cost correlation:

1 = \$10,000

2 = \$10,000 - \$50,000

3 = \$50,000 - \$100,000

4 = \$100,000 - \$200,000

5 = \$200,000

GW = Groundwater

NIMA = National Imagery and Mapping Agency