

Alternative Number and Title

5. Bevirt - North Coast Water

Cost Estimate

Ad			200
Reliability Over Time (seasonal and inter-annual variability)			
Costs	Best Estimate	Likely Range	Comments
650-MG Liddell alternative:			
Capital	\$25M	\$20M to \$50M	
Annual	\$0	\$0	
Present Value	\$0	\$0	
Capital cost/MG	\$125,000	\$125,000 to \$250,000	
PV Cost/MG	\$0	\$0	
Energy (KWh/MG)	\$0	\$0	

6. McKinney - Expanded Treatment Capacity

Estimated Annual Yield (million gallons [MG]): Up to 977 MGY if City perfects its right to SLR diversion with about 560 MGY in new water. Availability of water may decrease substantially in drier years.

Reliability Over Time (seasonal and inter-annual variability)			
Costs; see pages 7 and 8 of the "McKinney: Expanded Treatment Capacity" document			
Costs	Best Estimate	Likely Range	Comments
Capital	\$86M	\$57M to \$129M	
Annual	\$0	\$0	
Present Value	\$0	\$0	
Capital cost/MG	\$154,000	\$103,000 to \$231,000	
PV Cost/MG	\$0	\$0	
Energy (KWh/MG)	\$0	\$0	

7. McKinney Ranney Collectors SLR

Estimated Annual Yield (million gallons [MG]): Up to 977 MGY if City perfects its right to SLR diversion with about 560 MGY in new water. Availability of water may decrease substantially in drier years.

Reliability Over Time (seasonal and inter-annual variability)			
Costs	Best Estimate	Likely Range	Comments
Capital	\$16M	\$11M to \$24M	
Annual	\$0	\$0	
Present Value	\$0	\$0	
Capital cost/MG	\$30,000	\$20,000 to \$45,000	
PV Cost/MG	\$0	\$0	
Energy (KWh/MG)	\$0	\$0	

8. Paul-Lochquifer

Estimated Annual Yield (million gallons [MG])			640
Reliability Over Time (seasonal and inter-annual variability)			
Costs	Best Estimate	Likely Range	Comments
Capital	\$30M	\$20M to \$45M	Requires that the City implement either Alternative 6 or Alternative 7, in order to deliver required water reliably.
Annual	\$0	\$0	
Present Value	\$0	\$0	
Capital cost/MG	\$50,000	\$33,000 to \$75,000	
PV Cost/MG	\$0	\$0	
Energy (KWh/MG)	\$0	\$0	

9. Ripley - Reuse for Agriculture

Estimated Annual Yield (million gallons [MG])			Up to 780
Reliability Over Time (seasonal and inter-annual variability)			
Costs	Best Estimate	Likely Range	Comments
Capital	\$88M	\$70M to \$140M	
Annual	\$0	\$0	
Present Value	\$0	\$0	
Capital cost/MG	\$113,000	\$75,000 to \$170,000	
PV Cost/MG	\$0	\$0	
Energy (KWh/MG)	\$3,300	\$3,200 to \$3,500	

10. SCDA - Regional Aquifer Restoration

Estimated Annual Yield (million gallons [MG])			78
Reliability Over Time (seasonal and inter-annual variability)			
Costs	Best Estimate	Likely Range	Comments
Capital	\$0	\$0	Costs would be similar to Alternative 8. Lochquifer but unit cost higher owing to projected reduced extraction and return.
Annual	\$0	\$0	
Present Value	\$0	\$0	
Capital cost/MG	\$0	\$0	
PV Cost/MG	\$0	\$0	
Energy (KWh/MG)	\$0	\$0	

11. SCWD - Water Reuse

Estimated Annual Yield (million gallons [MG])			Up to 1350
Reliability Over Time (seasonal and inter-annual variability)			
Costs	Best Estimate	Likely Range	Comments
Capital	\$105M	\$72M to \$162M	
Annual	\$0	\$0	
Present Value	\$0	\$0	
Capital cost/MG annual capacity	\$80,000	\$60,000 to \$120,000	
PV Cost/MG	\$3,600	\$2,400 to \$6,000	
Energy (KWh/MG)	\$0	\$0	

12. SWC - Desalination

Estimated Annual Yield (million gallons [MG])			915
Reliability Over Time (seasonal and inter-annual variability)			
Costs	Best Estimate	Likely Range	Comments
Capital	\$105M	\$70M to \$160M	
Annual	\$0	\$0	
Present Value	\$0	\$0	
Capital cost/MG annual capacity	\$115,000	\$77,000 to \$172,000	
PV Cost/MG	\$0	\$0	
Energy (KWh/MG)	\$0	\$0	

13. Trevi - Forward Osmosis Desalination

Estimated Annual Yield (million gallons [MG]) assuming that a new facility would produce 2.5 mgd			915
Reliability Over Time (seasonal and inter-annual variability)			
Costs	Best Estimate	Likely Range	Comments
Capital	\$0	\$0	Costs would be similar to RO desalination. Technology is not proven and required low grade heat source unidentified. City could swap out RO desalting for FO
Annual	\$0	\$0	
Present Value	\$0	\$0	
Capital cost/MG	\$0	\$0	
PV Cost/MG	\$0	\$0	
Energy (KWh/MG)	\$0	\$0	