

Table 2-35. Metric Comparison of Recycled Water Strategies

Criteria	Strategy No. and Primary Goals						
	No. 1 <i>Recycle all effluent produced</i>	No. 2 <i>Recycle enough to meet permit requirements</i>	No. 3 <i>Maximize use of existing storage, deliver water to largest users</i>	No. 4 <i>Maximize use of existing storage, least pipeline cost</i>	No. 5 <i>Deliver water quickly to the MST area</i>	No. 6 <i>Deliver water quickly to the Carneros area</i>	No. 7 <i>Maximize use of existing storage, augment water supply</i>
Total Volume of Recycled Water Delivered (acre-ft/yr)	9,800	3,590	4,540	4,280	3,780	3,780	4,260
Total Volume of Recycled Water Provided to Water-Short Areas (acre-ft/yr)	2,110 (Carneros) 420 (MST)	0	730 (Carneros) 420 (MST)	2,040 (Carneros)	420 (MST)	590 (Carneros)	1,400 (Carneros) 420 (MST)
Total Volume of Effluent Discharged to the Napa River (acre-ft/yr) [mgal/yr]	0	6,200 [2,020]	5,260 [1,710]	5,520 [1,800]	6,010 [1,960]	6,010 [1,960]	5,520 [1,800]
Total Capital Costs (\$, million)	91.8	1.91	64.0	34.9	30.9	16.3	62.9
Additional O&M Costs (\$/yr)	3,040,000	39,400	424,000	431,000	157,000	134,000	482,000

Table 2-37. Baseline Comparison of Recycled Water Strategies

Category	Summary Data													
	Strategy No. 1 <i>Recycle All Water Produced</i>		Strategy No. 2 <i>Recycle Enough to Meet Permit Reqs.</i>		Strategy No. 3 <i>Maximize Use of Existing Storage (Largest Users)</i>		Strategy No. 4 <i>Maximize Use of Existing Storage (Least Pipeline Cost)</i>		Strategy No. 5 <i>Deliver Recycled Water to MST Area</i>		Strategy No. 6 <i>Deliver Recycled Water to Carneros Area</i>		Strategy No. 7 <i>Maximize Use of Existing Storage (Augment Water Supply)</i>	
<i>Irrigated Area</i>														
District Reclamation Sites ¹ (acres)	746		746		266		266		596		596		266	
<i>Change from Strategy No. 2</i>		0		0		(480)		(480)		(150)		(150)		(480)
Customer Irrigation Sites (acres)	9,190		952		5,100		7,309		1,784		3,410		7,396	
<i>Change from Strategy No. 2</i>		8,238		0		4,148		6,357		832		2,458		6,444
Total Irrigated Area	9,936		1,698		5,366		7,575		2,380		4,006		7,662	
<i>Change from Strategy No. 2</i>		8,238		0		3,668		5,877		682		2,308		5,964
<i>District Reclamation</i>														
District Recycled Water Use (acre-ft/yr)	2,060		2,060		720		720		1,640		1,640		720	
<i>Change from Strategy No. 2</i>		0		0		(1,340)		(1,340)		(420)		(420)		(1,340)
<i>Customer Reuse</i>														
Recycled Water Use for Irrigation (acre-ft/yr)	5,300		1,530		3,820		3,560		2,140		2,140		3,540	
<i>Change from Strategy No. 2</i>		3,770		0		2,290		2,030		610		610		2,010
Recycled Water Use for Industry (acre-ft/yr)	2,440		0		0		0		0		0		0	
<i>Change from Strategy No. 2</i>		2,440		0		0		0		0		0		0
Total Customer Reuse² (acre-ft/yr)	7,740		1,530		3,820		3,560		2,140		2,140		3,540	
<i>Increase/Decrease from Strategy No. 2</i>		6,210		0		2,290		2,030		610		610		2,010
<i>Recycled Water Use Summary</i>														
Total Recycled Water Use ³ (acre-ft/yr)	9,800		3,590		4,540		4,280		3,780		3,780		4,260	
<i>Change from Strategy No. 2</i>		6,210		0		950		690		190		190		670
<i>Cost Summary⁴</i>														
Capital Costs (\$, millions)	91.8		1.91		64.1		34.9		30.9		16.3		62.9	
Operations & Maintenance Costs (\$/yr)	3,040,000		39,400		424,000		431,000		157,000		133,000		482,000	

¹Strategies No. 1 and No. 2 include all District Reclamation Sites (Airport, Fagundes, Somky, Jameson Canyon, and Eagle Vines). No District sites were removed because the strategies involve recycling as much water as possible. Strategies No. 3, No. 4, and No. 7 do not include use of the Airport, Fagundes, and Jameson Canyon Reclamation Sites. Somky and Eagle Vines were included because they will be leased for irrigated golf course development. Strategies No. 5 and No. 6 do not include use of the Airport and Fagundes Reclamation Sites. These sites were removed because they are not connected to the existing distribution system and are used infrequently for reclamation.

²Total Customer Reuse = Irrigation Use + Industry Use

³Total Recycled Water Use = District Use + Total Customer Use

⁴Costs of implementing a recycled water distribution strategy over and above operation of the existing (2005) system.