

TABLE 2.1
SUMMARY OF WATER RIGHTS CALL DATA

<i>Call Date</i>	<i>Percent of Time in Priority ¹⁾</i>
March, 1867	100. ²⁾
May 15, 1874	99.
March 1, 1887	78.
January 6, 1890	50.
August 1, 1896	42.
March 1, 1910	33.
December 31, 1948	4.
Free River	1.5

- 1) Based on District 10 call data for the period 1967-1995.
- 2) Due to location in headwaters of Monument Creek, this call does not affect most of District 10.

**TABLE 3.1
SUMMARY OF CURRENTLY-OPERATING RESERVOIRS ¹⁾**

<i>Reservoir</i>	<i>Location</i>			<i>Capacity (ac-ft)</i>	<i>Use ²⁾</i>
	<i>Township</i>	<i>Range</i>	<i>Section</i>		
Bigtooth	14S	68W	14	648.	M
Bristlecone #2	11S	67W	27	1,140.	I, M
Crystal Creek	13S	68W	19	3,479.	M
Fountain Valley #2 ³⁾	15S	65W	7, 8, 17, 18	10,000.	I
Gold Camp	14S	67W	34	300.	M
Lake Moraine	14S	68W	22	824.	M, D
North Catamount	13S	67W	12	10,500.	M, D
Northfield #4	12S	68W	23	350.	I, D
Pikeview	13S	66W	30	152.	D
Pinon #1	11S	67W	27	120.	I, M
Rampart	12S	68W	26	40, 350.	I, M
South Catamount	13S	69W	12	2,604.	M
Woodmoor	15S	67W	14	936.	I, M

- 1) Based on District 10 Water Commissioner's Records for 1998.
- 2) I = irrigation, M = Municipal, D = Domestic
- 3) Also known as Big Johnson Reservoir.

**TABLE 4.1
SUMMARY OF TYPES OF WATER RIGHTS
FOR MEMBER WATER PROVIDERS**

Water Provider	Tributary Rights	Denver Basin Rights	Adjudicated Augmentation Plan	Storage Rights
Cherokee	✓			
Colorado Centre	✓		✓	✓
Donala		✓	✓	
Forest Lakes	✓	✓	✓	✓
Fountain	✓		✓	✓
Monument	✓	✓	✓	
Paint Brush Hills		✓		
Palmer Lake	✓	✓	✓	✓
Security	✓		✓	✓
Stratmoor Hills	✓		✓	✓
Sunset	1)	1)	1)	1)
Triview		✓	✓	
Widefield	✓		✓	✓
Woodmen Hills	2)	2)	2)	2)
Woodmoor		✓	✓	

- 1) Served by Cherokee.
- 2) Purchases water from Cherokee.

**TABLE 4.2
SUMMARY OF WATER RIGHTS OF
MEMBER WATER PROVIDERS**

Water Provider	Annual Volume (ac-ft) Available from		
	Tributary Sources	Denver Basin	Total
Cherokee	5,340.	0.	5,340.
Colorado Centre	600.	0.	600.
Donala	0.	2,466.6	2,466.6 ⁵⁾
Forest Lakes	600. ¹⁾	956.2	1,556.2
Fountain	5,666. ⁷⁾	0.	5,666.
Monument	815. ⁴⁾	1,633.0	2,448.0
Paint Brush Hills	0.	1,164.0	1,164.0
Palmer Lake	213. ⁴⁾	426.0	639.0
Security	4,688.	0.	4,688.0
Stratmoor Hills	1,871.	0.	1,871.0
Sunset	2)	2)	2)
Triview	0.	2,058.3 ⁵⁾	2,058.3 ⁵⁾
Widefield	4,100.	0.	4,100.0
Woodmen Hills	300 ³⁾	1,788.3 ³⁾	2,088.3 ³⁾
Woodmoor	1,127.	6,210.	7,337.0 ⁶⁾

- 1) By contract with Colorado Springs Utilities.
- 2) Served by Cherokee.
- 3) Purchased water from Cherokee.
- 4) Based on estimates of year-round return flows from nontributary sources (50%).
- 5) Net volume available after reservation for post-pumping depletion.
- 6) Available volume will be reduced to account for post-pumping depletions. Volume can not be quantified at this time.
- 7) Estimated from augmentation sources and assuming net 50 percent consumptive use on an average annual basis.

**TABLE 5.1
SUMMARY OF MEMBER CURRENT WATER
PRICING SCHEDULES**

Entity	Base Fee (\$)	Unit Price of Water (\$)
Cherokee	\$5.85/mo	\$1.17/748 gal up to 3,740 gal/mo \$1.47/748 gal from 3,740 gal/mo to 22,440 gal/mo \$1.84/748 gal for greater than 22,440 gal/mo
Colorado Centre	\$10.00/mo	\$2.25/1,000 gal up to 15,000 gal/mo \$2.50/1,000 gal from 15,000 to 20,000 gal/mo \$2.75/1,000 gal from 20,000 to 25,000 gal/mo \$3.00/1,000 gal for greater than 25,000 gal/mo
Donala	\$22.00/mo ¹⁾	\$3.00/1,000 gal from 6,000 gal/mo to 30,000 gal/mo \$3.50/1,000 gal from 30,000 gal/mo to 40,000 gal/mo \$4.00/1,000 gal for greater than 40,000 gal/mo
Fountain	\$15.70/mo ²⁾	\$2.06/1,000 gal from 3,000 gal/mo to 6,000 gal/mo \$2.37/1,000 gal from 6,000 gal/mo to 10,000 gal/mo \$2.48/1,000 gal from 10,000 gal/mo to 15,000 gal/mo \$2.78/1,000 gal for greater than 15,000 gal/mo
Monument	\$8.80/mo	\$4.99/1,000 gal up to 10,000 gal/mo \$5.99/1,000 gal for greater than 10,000 gal/mo
Palmer Lake	\$28.00/mo ³⁾	\$0.30/1,000 gal from 5,000 gal/mo to 10,000 gal/mo \$0.50-1.60/1,000 gal from 10,000 gal/mo to 20,000 gal/mo \$1.80-2.60/1,000 gal from 20,000 gal/mo to 30,000 gal/mo \$2.80-3.40/1,000 gal from 30,000 gal/mo to 40,000 gal/mo \$3.60-3.80/1,000 gal from 40,000 gal/mo to 44,000 gal/mo \$4.00/1,000 gal for greater than 44,000 gal/mo
Security	\$5.00/mo ⁴⁾	\$1.10/1,000 gal for greater than 7,500 gal/mo
Stratmoor Hills	\$3.00/mo	\$2.05/1,000 gal for all use
Triview	\$10.00/mo	\$2.00/1,000 gal up to 14,000 gal/mo \$2.50/1,000 gal for greater than 14,000 gal/mo
Widefield	\$5.91/mo	\$2.29/1,000 gal for all use
Woodmoor	\$22.03/mo ¹⁾	\$3.74/1,000 gal from 6,000 gal/mo to 12,000 gal/mo \$4.15/1,000 gal from 12,000 gal/mo to 20,000 gal/mo \$4.67/1,000 gal from 20,000 gal/mo to 35,000 gal/mo \$5.02/1,000 gal from 35,000 gal/mo to 75,000 gal/mo \$5.02/1,000 gal for greater than 75,000 gal/mo

1) Includes 6,000 gal/mo use.
2) Includes 3,000 gal/mo use.

3) Includes 5,000 gal/mo use.
4) Includes 7,500 gal/mo use.

**TABLE 6.1
SUMMARY OF MEMBER AUGMENTATION PLANS**

EPCWA Water Supply Entity	Augmentation Sources	Rights to be Augmented
Colorado Centre	Senior Surface water rights Storage rights	Junior tributary wells
Donala	Nontributary Denver Basin water rights	Not-nontributary Denver Basin wells
Forest Lakes ¹⁾	Nontributary Denver Basin water rights CSU Effluent Return Flows Releases from Storage	Junior storage rights Junior tributary wells Junior direct flow surface rights
Fountain	Senior surface water rights Storage rights Fry/Ark Project water rights	Junior tributary wells
Monument	Senior surface water rights Nontributary Denver Basin water rights	Junior tributary wells
Palmer Lake	Nontributary Denver Basin water rights	Direct flow surface water rights Storage rights Junior tributary wells
Security	Fry/Ark Project water rights Senior surface water rights Storage rights	Junior tributary wells
Stratmoor Hills	Senior surface water rights CSU Effluent Return Flows Fry/Ark Project water rights	Junior tributary wells
Triview	Nontributary Denver Basin water rights	Not-nontributary Denver Basin wells
Widefield	Senior Surface water rights Fry/Ark Project water rights CSU Effluent Return Flows	Junior tributary wells
Woodmoor	Nontributary Denver Basin water rights	Not-nontributary Denver Basin wells Junior tributary wells

1) Plan is not currently operating as development has not been initiated.

TABLE 7.1
SUMMARY OF EL PASO COUNTY INFRASTRUCTURE ALTERNATIVES
FOR THE NORTHERN WATER PROVIDERS

Alternative ¹⁾	Description
1A	Northern water providers continue to pump their individual wells at existing rates (2,410 ac-ft/yr). Regional water pumping, treatment, and conveyance system for ½ of the 2020 demand from a satellite well field (2,551 ac-ft/yr) and ½ of the 2020 demand from reuse (2,480 ac-ft/yr).
1B	Regional water pumping, treatment, and conveyance system for Northern providers 2020 demand from a satellite well field (4,961 ac-ft/yr) and the remaining demand from reuse (2,480 ac-ft/yr).
1C	Northern water providers continue to pump their individual wells at existing rates (2,410 ac-ft/yr). Regional water pumping and conveyance system for non-winter reuse demand (1,860 ac-ft/yr) with remainder of 2020 demand from a satellite well field (3,171 ac-ft/yr) with a regional water treatment plant for the satellite well field and reuse water at a Forest Lakes reservoir.
1D	Northern water providers continue to pump their individual wells at existing rates (2,410 ac-ft/yr). Regional water pumping and conveyance system for ½ of the 2020 demand from a satellite well field (2,551 ac-ft/yr) and ½ of the 2020 demand from reuse (2,480 ac-ft/yr) with a regional water treatment plant for the satellite well field and reuse water at a Forest Lakes reservoir.
1E	Regional water pumping and conveyance system for Northern providers 2020 demand from a satellite well field (4,961 ac-ft/yr) and the remaining demand from reuse (2,480 ac-ft/yr) with a regional water treatment plant for the satellite well field and reuse water at a Forest Lakes reservoir.
2A	Northern water providers continue to pump their individual wells at existing rates (2,410 ac-ft/yr). Regional water pumping, treatment, and conveyance system with ½ of the 2020 demand from Jimmy Camp Reservoir (2,551 ac-ft/yr) and ½ of the 2020 demand from reuse (2,480 ac-ft/yr).
2B	Northern water providers continue to pump their individual wells at existing rates (2,410 ac-ft/yr). Regional water pumping and conveyance system for ½ of the 2020 demand from Jimmy Camp Reservoir (2,551 ac-ft/yr) and ½ of the 2020 demand from reuse (2,480 ac-ft/yr) with a regional water treatment plant for the Jimmy Camp Reservoir and reuse water at a Forest Lakes reservoir.

TABLE 7.1 (Continued)
SUMMARY OF EL PASO COUNTY INFRASTRUCTURE ALTERNATIVES
FOR THE NORTHERN WATER PROVIDERS

Alternative ¹⁾	Description
2C	Regional water pumping and conveyance system for Northern providers 2020 demand from Jimmy Camp Reservoir (4,961 ac-ft/yr) and the remaining demand from reuse (2,480 ac-ft/yr) with a regional water treatment plant for the Jimmy Camp Reservoir and reuse water at a Forest Lakes reservoir.
3A	Regional water pumping, treatment, and conveyance system for Northern providers 2020 demand from Jimmy Camp Reservoir (4,961 ac-ft/yr each) and the remaining demand from reuse (2,480). An additional demand from Jimmy Camp Reservoir (1,152 ac-ft/yr) without reuse is provided for Paint Brush Hills, Park Forest, and Woodmen Hills.
4A	Northern water providers continue to pump their individual wells at existing rates (2410 ac-ft/yr). Regional water pumping, treatment and conveyance system with ½ of the 2020 demand from a Forest Lakes reservoir (2,551 ac-ft/yr) and ½ of the 2020 demand from reuse (2,480 ac-ft/yr).
4B	Regional water pumping, treatment, and conveyance system for Northern providers 2020 demand from a Forest Lakes reservoir (4,961 ac-ft/yr) and the remaining demand from reuse (2,480 ac-ft/yr).
5A	Regional water pumping, treatment, and conveyance system for 14,530 people on private wells from a satellite well field (1,300 ac-ft/yr).
5B	Regional water pumping, treatment, and conveyance system for 14,530 people on private wells from Jimmy Camp Reservoir (1,300 ac-ft/yr).
5C	Regional water pumping, treatment, and conveyance system for 14,530 people on private wells from a Forest Lakes reservoir (1,300 ac-ft/yr).

1) As shown on Figures 7-1 through 7-7.

TABLE 7.2
ASSUMPTIONS USED TO FORMULATE AND ANALYZE ALTERNATIVE
FOR THE NORTHERN WATER PROVIDERS

- Northern water providers include Donala, Forest Lakes, Monument, Palmer Lake, Triview, and Woodmoor.
- Other water providers included in selected alternatives are Park Forest, Paint Brush Hills, Woodmen Hills, and individuals on private wells.
- Alternatives were evaluated for Year 2020 demands.
- One-half of the water used within a municipal system, on an annual basis, returns to the wastewater treatment plant. Non-tributary, transbasin tributary, and consumptive use tributary water can be fully reused.
- Reuse water must be treated in a regional WTP prior to distribution.
- It is the responsibility of each Northern water provider to pump and/or convey their reuse water to a regional WTP.
- Jimmy Camp and new Forest Lakes reservoir water must be treated in a regional WTP prior to regional conveyance.
- Satellite well field water must be treated in a regional WTP prior to regional conveyance.
- Costs include well construction and interwell pipe, regional water treatment (non-conventional), water pumping, and water conveyance.
- Private well users are generally located in Townships 11 and 12 South, Ranges 65 and 66 West.

TABLE 7.3
SUMMARY OF TOTAL AND ANNUAL COSTS
REGIONAL WATER PUMPING, TREATMENT,
AND CONVEYANCE ALTERNATIVES ²⁾

Alternative	Capital Costs (\$1,000s)	Annual O&M Costs ¹⁾ (\$1,000s)
1A	\$30,909	\$4,540
1B	\$40,013	\$6,531
1C	\$33,958	\$4,286
1D	\$29,441	\$4,169
1E	\$49,242	\$6,219
2A	\$57,525	\$4,302
2B	\$30,768	\$3,855
2C	\$53,085	\$5,584
3A	\$82,192	\$6,880
4A	\$12,504	\$3,683
4B	\$16,023	\$5,262
5A	\$11,806	\$1,486
5B	\$9,137	\$1,307
5C	\$8,092	\$1,247

1) Assumes a 20-year planning horizon.

2) Does not include costs for water rights acquisitions and reservoir construction.

TABLE 7.4
SUMMARY OF TOTAL ANNUAL AND UNIT COSTS
REGIONAL WATER PUMPING, TREATMENT,
AND CONVEYANCE ALTERNATIVES ²⁾

Alternative	Total Annual Costs ¹⁾	Unit Costs	
	(\$1,000s)	(\$/ac-ft)	(\$/1,000 gal)
1A	\$7,369	\$1,465	\$4.50
1B	\$10,561	\$1,419	\$4.36
1C	\$7,401	\$1,471	\$4.51
1D	\$6,866	\$1,365	\$4.19
1E	\$10,735	\$1,443	\$4.43
2A	\$9,590	\$1,906	\$5.85
2B	\$6,676	\$1,327	\$4.07
2C	\$10,462	\$1,406	\$4.32
3A	\$14,434	\$1,680	\$5.16
4A	\$4,814	\$957	\$2.94
4B	\$6,709	\$902	\$2.77
5A	\$2,569	\$1,976	\$6.06
5B	\$2,143	\$1,649	\$5.06
5C	\$1,987	\$1,529	\$4.69

1) Assumes a 20-year planning horizon.

2) Does not include costs for water rights acquisitions and reservoir construction.