



### Goal 3: Public Infrastructure

**Desired Community Condition: A reliable water system meets health and safety standards.**



**Indicator: Peak Water Demand vs. Reserve Capacity by Water Trunk**

**Progress Rating: Local Trend: STABLE National Comparison: NOT APPLICABLE**

#### Indicator Description

This indicator shows the amount of water estimated to be available for unscheduled or unanticipated needs. Seven individual service area “trunks” or sub-systems, each supplied by several wells, comprise the system today. Total capacity represents production capabilities of all wells in a trunk; firm capacity represents the portion of total capacity considered reliable and available to meet demand, calculated as total capacity minus the capacity of the largest well from each facility. Reserve capacity is the amount considered reliable and available in excess of anticipated peak daily demands in the trunk. Capacities are measured in millions of gallons per day (MGD). Although interconnected, each trunk is a virtual stand-alone system, so each is evaluated separately. Both total and standby water supply capacity of each trunk are measured.

#### Why is this indicator important?

An efficient water system is required for the continued health and prosperity of Albuquerque area residents. Part of maintaining an efficient system is to provide a reserve for new development and to meet unanticipated needs, such as when weather is unusually hot or dry, for example, or for higher than expected fire protection needs. The extent to which the system provides appropriate reserve capacity reflects the extent to which the supply is adequate for projected needs. Growth management decisions and economic development opportunities can be assessed relative to existing capacity. Planning for increased water system capacity can be focused in those areas anticipated to see greater development activity, and reflected in long-term City plans. Water conservation measures can help minimize peak daily demands, and new wells can help offset reserve capacity deficiencies. When the surface water treatment facility is completed, the water system re-engineered, and surface water becomes a major source of Albuquerque water, this indicator will require significant adjustment.

#### Data Sources

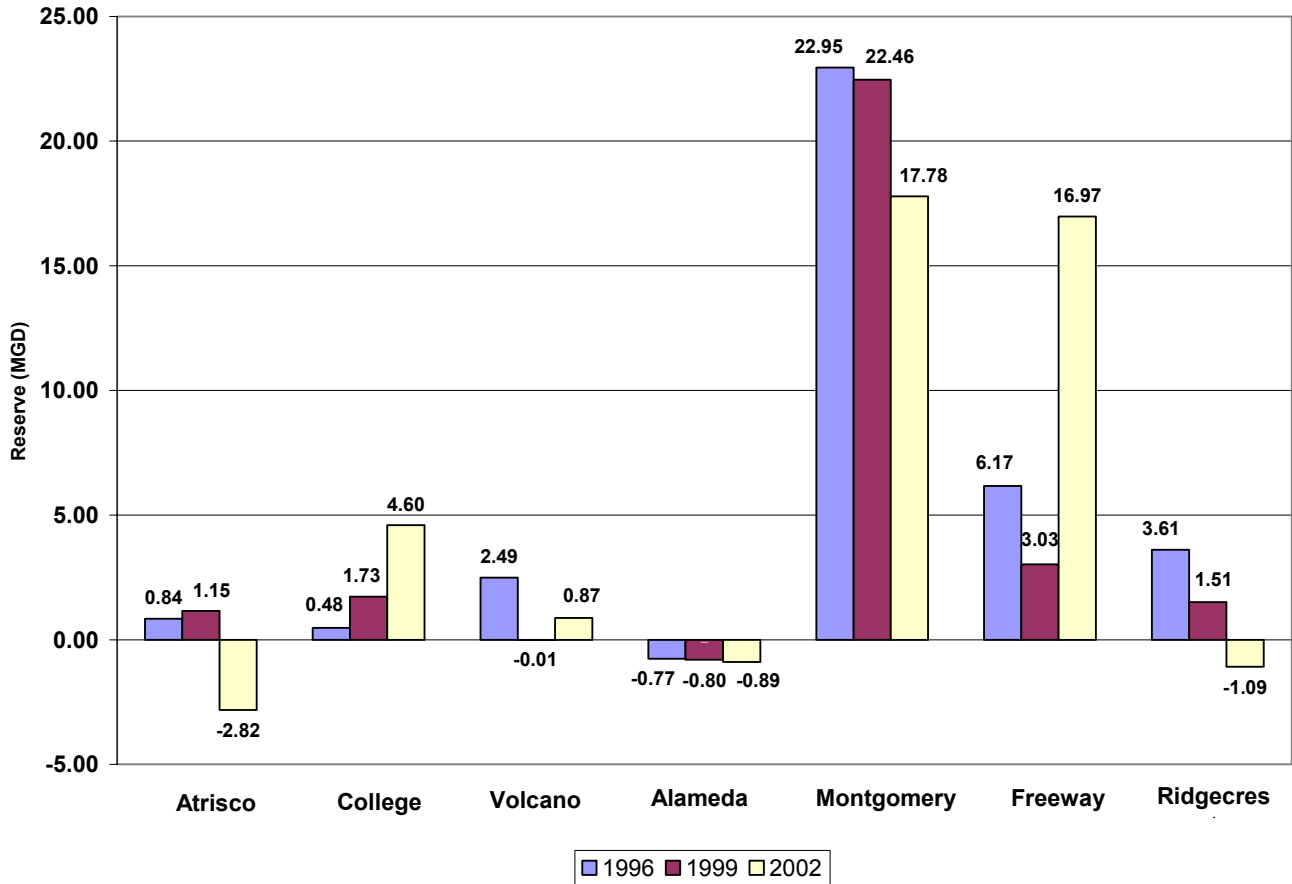
City of Albuquerque Public Works Department, Water Utility Division

#### What can we tell from the data?

- Peak Day Consumption in 2002 is 160.14 MGD, down 8.2% from 1999. This Peak Day Consumption is also below the 1996 level of 177.62 MGD.

- In 2002, Total Firm Capacity and Total Capacity were both below 1996 and 1999 levels, which means the City does not have the supply capacity it did in past years. This will change when San Juan/Chama water becomes available.
- Even though the Total Reserve Capacity is 35.42 MGD, there are three trunks with negative values; Atrisco, Alameda, and Ridgecrest.

### Water Reserve by Trunk 1996, 1999, and 2002



### Albuquerque Water Supply Capacities by Trunk 1996, 1999, and 2002

	Total Capacity (MGD)			Firm Capacity (MGD)			Peak Day Consumption (MGD)			Reserve Capacity (MGD)		
	1996	1999	2002	1996	1999	2002	1996	1999	2002	1996	1999	2002
<b>Atrisco</b>	21.97	22.26	23.85	14.29	12.66	10.46	13.45	11.51	13.28	0.84	1.15	-2.82
<b>College</b>	9.58	13.18	16.37	6.30	9.17	9.17	5.82	7.44	4.57	0.48	1.73	4.60
<b>Volcano</b>	13.32	16.63	17.94	9.79	9.50	9.50	7.30	9.51	8.63	2.49	-0.01	0.87
<b>Alameda</b>	27.26	30.69	26.83	15.28	15.67	14.88	16.05	16.47	15.77	-0.77	-0.80	-0.89
<b>Montgomery</b>	84.53	81.10	78.78	65.56	62.29	60.78	42.61	39.83	43.00	22.95	22.46	17.78
<b>Freeway</b>	85.48	85.46	77.03	65.13	60.58	58.05	58.96	57.55	41.08	6.17	3.03	16.97
<b>Ridgecrest</b>	49.29	49.29	44.74	37.04	33.62	32.72	33.43	32.11	33.81	3.61	1.51	-1.09
<b>Total</b>	291.43	298.61	285.54	213.39	203.49	195.56	177.62	174.42	160.14	35.77	29.07	35.42