ORIGINAL

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Attorneys for Arizona Water Company

BEFORE THE ARIZONA CORPORATION COMMISSION

IN THE MATTER OF THE APPLICATION OF ARIZONA WATER COMPANY, AN ARIZONA CORPORATION, FOR ADJUSTMENTS TO ITS RATES AND CHARGES FOR UTILITY SERVICE FURNISHED BY ITS WESTERN GROUP AND FOR CERTAIN RELATED APPROVALS	**DOCKET NO. W-01445A-04-0650** **CERTIFICATE OF FILING CAP WATER USE PLAN**

Decision No. 68302 of the Arizona Corporation Commission in the above-captioned docket provides, among other things, that Arizona Water Company (the "Company") shall develop and submit for Staff approval a Central Arizona Project Water Use Plan which is attached hereto as Attachment "A" and incorporated herein by reference.

IT IS HEREBY CERTIFIED THAT on the day 29th of December, 2006, Arizona Water Company filed with the Arizona Corporation Commission, Docket Control Division, at its main office located at 1200 West Washington Street, Phoenix, Arizona, an original and thirteen (13) copies of a Central Arizona Project Water Use Plan.

ORIGINAL

RESPECTFULLY SUBMITTED this 29th day of December, 2006.

ARIZONA WATER COMPANY

By: Robert W. Geake

Robert W. Geake
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Arizona Water Company
P. O. Box 29006
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AN ORIGINAL and thirteen (13) copies of the foregoing filed this 29th day of December, 2006 with:

Docket Control
Arizona Corporation Commission
1200 W. Washington
Phoenix, AZ 85007

And copies of the foregoing, mailed/delivered this 29th day of December, 2006, to:

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A copy of the foregoing was delivered/mailed this 29th day of December, 2006, to:

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Hearing Division
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1200 West Washington
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Mr. Ernest G. Johnson, Director
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December 29, 2006

Mr. Steve Olea
Assistant Director, Utilities Division
Arizona Corporation Commission
1200 West Washington
Phoenix, AZ 85007-2996

Re: Central Arizona Project Water Use Plan – Docket No. W-01445A-04-0650
ACC Decision No. 68302

Dear Mr. Olea:

We are submitting for approval the Arizona Water Company ("AWC") Central Arizona Project ("CAP") Water Use Plan as required by Arizona Corporation Commission ("Commission") Decision No. 68302. The CAP Water Use Plan addresses how CAP water will be used within AWC's Pinal Valley water systems and within its White Tank water system; and all of the other issues that Decision directed us to address.

We met with representatives from the cities of Casa Grande and Coolidge ("Cities") on numerous occasions during the preparation of the CAP Water Use Plan and received their input. Specifically we discussed all aspects of the CAP Water Use Plan, including water demand planning projections, planned CAP water treatment facilities, CAP water use integration, the impact on arsenic treatment, and cost projections. The Cities' representatives voiced general support for the CAP Water Use Plan. We will have further meetings with the Cities' representatives concerning the availability of reclaimed water for use by AWC to supplement the existing water supplies of AWC's Pinal Valley Water System.

We would appreciate Staff's prompt review and approval of the CAP Water Use Plan. If you have any questions on the CAP Water Use Plan, please let me know. Thank you.

Very truly yours,

William M. Garfield

William M. Garfield
President

jrc

ARIZONA WATER COMPANY

Central Arizona Project Water Use Plan

Casa Grande, Coolidge, Stanfield, and White Tank Systems

Submitted by: William M. Garfield
Date: December 29, 2006

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CHAPTER 1

PLAN OBJECTIVES AND OVERVIEW

1.1 Plan Objectives

Arizona Water Company ("AWC") prepared this Central Arizona Project Water Use Plan ("Water Use Plan" or "Plan") pursuant to the Arizona Corporation Commission (the "Commission") Decision No. 68302. The Commission required AWC to develop this Water Use Plan to show how Central Arizona Project Water ("CAP") will be used to supply AWC's Casa Grande, Coolidge, Stanfield and White Tank service areas. This Plan also reviews steps already taken toward direct use of CAP water, and examines other current and future water sources potentially available to meet future customer water service needs in AWC's service areas. Pursuant to Decision No. 68302, the Company also met and conferred with and had input from the cities of Casa Grande and Coolidge in the development of this Water Use Plan.

1.2 Plan Scope and Overview

In Decision No. 68302, the Commission directed that this Water Use Plan address the following:

- Existing water supplies and demand patterns for the last two years (such information as required on the Water Use Data Sheet).

- Future water supplies and demand patterns demonstrating how and when CAP water will be used in each area through the year 2025. All future water sources that the Company plans to use other than CAP water should be discussed. All assumptions used to make projections should be clearly explained.

- All major infrastructure components required to use CAP water through the year 2025 should be listed and described in as much detail as possible. These would include such items as, but not be limited to treatment plants, transmission mains, storage tanks, pumping stations, etc.

- Projected capital and Operation and Maintenance costs for all future water supplies (including CAP water) through the year 2025 should be listed in as much detail as possible. All assumptions used to make these projections should be clearly explained.

- How CAP water will be used to address the arsenic issue (if it will be).

The Plan also provides an overview of assumptions used to make projections related to planning and provides preliminary cost estimates for existing and future supplies potentially

available to the AWC service areas. Preliminary engineering design for the Pinal Valley CAP Water Treatment Plant, which will treat the Company's Casa Grande and Coolidge CAP water allocations, is planned in 2007. When completed, the preliminary engineering design will provide detailed and accurate data on facility costs and water treatment methods. As with any long-range water supply plan, many assumptions are necessary to project future growth, water demands and infrastructure costs. The assumptions included in this Plan are the best estimates available.[1]

1.3 Background

AWC holds the following CAP water allocations that are the subject of this plan:

Water System	CAP Water Allocation (AF/Yr)	Annual Use For 2006 (AF/Yr)	Summary of Direct Uses (AF/Yr)
Casa Grande	8,884	2,966	SRP Desert Basin Generating Station (2,000)
			Casa Grande Golf Course (56)
			Francisco Grande Golf Course (910)
Coolidge	2,000	0	0
White Tank	968	0	0

This Plan assumes that within five years, AWC will deliver reclaimed water to these existing customers obtained from wastewater facilities operated by the City of Casa Grande or others, to replace CAP water use, freeing up the full CAP water allocation amount for treatment and potable delivery to other AWC customers.

AWC's plans call for construction of a new CAP water treatment plant ("CAP Treatment Plant") to treat AWC's Casa Grande and Coolidge CAP water allocations for direct potable use within a fully integrated water system serving Casa Grande, Coolidge, Tierra Grande, Arizona City and Stanfield (referred to herein as the Pinal Valley Water System ("Pinal Valley Water System"). AWC purchased a 60-acre site near the CAP canal in 2005 for the purpose of constructing the first phase of the CAP Treatment Plant, a surface water treatment plant, to be completed, placed in service, and capable of delivering 10 million gallons per day ("MGD") to the Pinal Valley Water System by 2012. Along with construction of the CAP Treatment Plant, AWC will construct the necessary pump stations and water transmission mains to deliver treated CAP water to the Pinal Valley Water System.

AWC plans to begin preliminary engineering design for the first phase of the CAP Treatment Plant in 2007. A detailed schedule of activities related to plant design and construction is provided later in this Plan. AWC will design and construct future phases of the CAP Treatment Plant as additional CAP or other surface water allocations are obtained or become available when agricultural lands receiving surface water supplies convert from agricultural uses to municipal and industrial uses.

[1] This Plan does not include AWC's Ajo Water System since it lies outside of the CAP service territory, does not have a CAP water allocation, and has not had significant customer growth over the past forty years.

AWC has also been actively pursuing alternatives for obtaining delivery and treatment of its White Tank water system CAP water allocation. In 2005, AWC representatives met with Arizona American Water Company ("Arizona-American") representatives regarding AWC securing treatment capacity in Arizona-American's planned White Tank Water Treatment Plant. Also, as an alternative to securing such treatment plant capacity with Arizona-American, AWC is investigating the possibility of obtaining capacity in the water treatment plant the Maricopa Water District ("MWD") is now planning to construct just north of AWC's White Tank water system to provide treated water to cities and private water companies located within or near MWD lands. AWC will continue to evaluate both of these projects as a viable means of using its White Tank water system CAP water allocation. This Plan provides updated cost estimates and projected schedules for both of these water treatment plant projects.

Groundwater is the primary source of supply currently in use and it will continue to be a principal reliable source of supply for meeting future customer water supply needs. But this Plan also discusses the availability and estimated costs of other current and future water supplies for AWC, which become available or have the potential to become available, and which AWC plans to use to meet customer water supply needs in the future. Other potential future sources of supply discussed in this Plan include:

- Additional CAP water allocations
- Gila River surface water available through the San Carlos Irrigation and Drainage District for lands located within its service area which convert from agricultural uses to municipal and industrial uses.
- Reclaimed water available from wastewater treatment facilities operated by entities such as the cities of Casa Grande and Coolidge.

CHAPTER 2
SERVICE AREA WATER DEMANDS – PAST AND PROJECTED

2.1 Casa Grande, Coolidge, Stanfield Systems

2.1.1 Water Demand Planning Assumptions

AWC plans to fully integrate the Casa Grande, Coolidge and Stanfield water systems into the Pinal Valley Water System prior to treated CAP water becoming available in 2012 as part of its regional planning and system consolidation efforts. Therefore, the water demand projections presented in this Plan are presented as an integrated service area water demand projection for the Pinal Valley Water System planning area.

Future water demands for the Pinal Valley Water System planning area are based on the following assumptions:

- Residential zoning will comprise 80.4 percent of the planning area and non-residential zoning will comprise 19.6 percent of the planning area. The overall housing unit density projections from the General Land Use Plans for Coolidge and Casa Grande were used to calculate the number of housing units expected in the integrated Pinal Valley Water System at build out of the planning area (Figure 2.1). An average of 2.8 dwelling units per acre are assumed through buildout.

- 3.0 persons per household average.

- Residential water use will average 125 gallons per capita per day (gpcd) for new housing units.

- In 2005, non-residential use was approximately 65 percent of residential use, however, non-residential use as it relates to residential use is assumed to decline at an even rate over the 2007 to 2019 period from 65 percent of residential use to 30 percent of residential use as residential use increases at a higher rate than non-residential use.

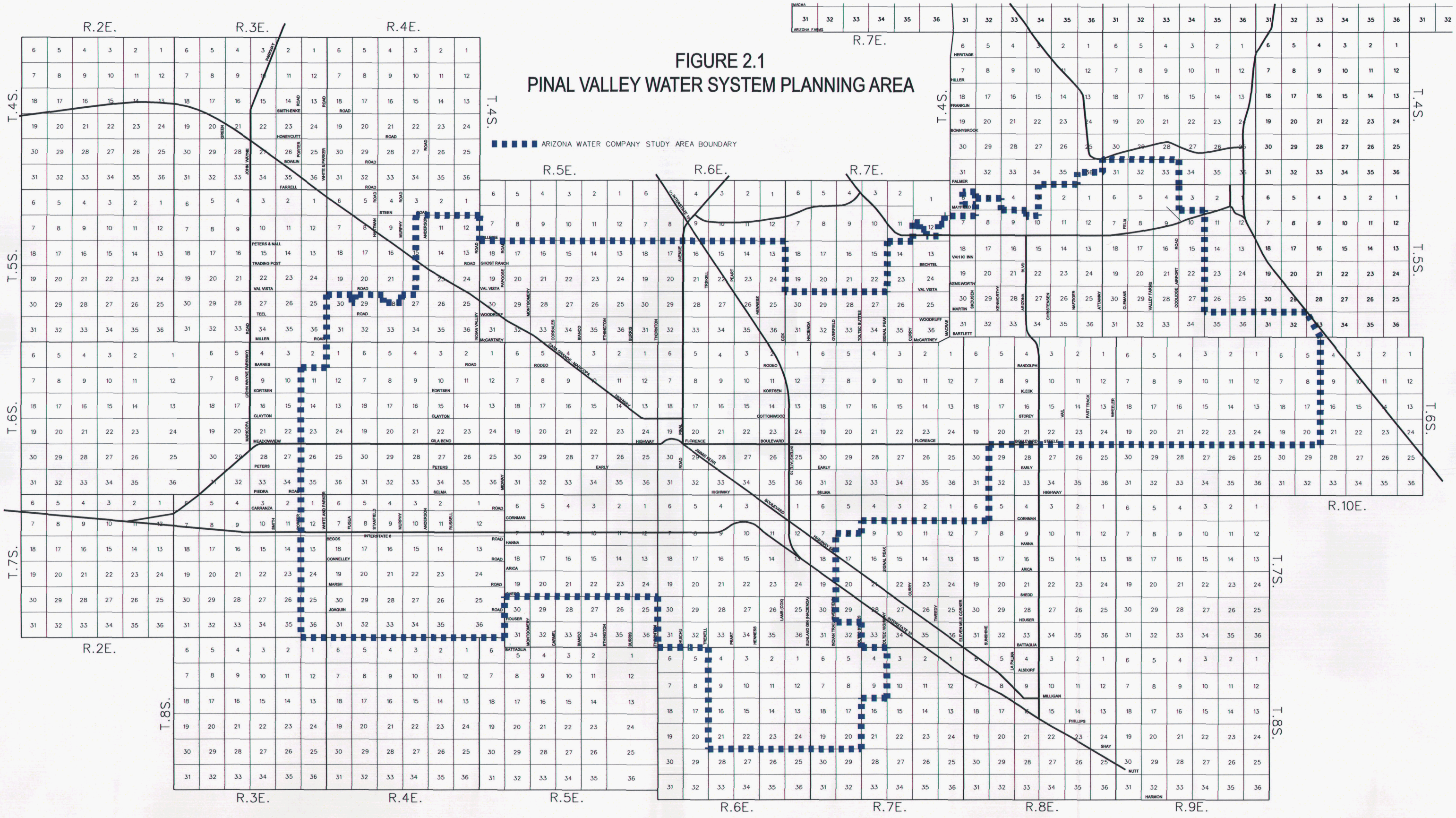
- Lost and unaccounted-for water will not be more than 10 percent of total water produced.

- The distribution of annual demand by month for the planning area in the future will follow approximately the same pattern exhibited in 2005 for the Casa Grande and Coolidge systems.

- The number of residential customers will grow at a rate of 10 percent annually for the time period from 2007 through 2025. For 2006, the actual rate of growth in the number of customers through August was extrapolated to the end of the year. This 10 percent growth rate is based on the growth rate within the Pinal Valley

Water System as a whole during the 2003-2006 time period. In addition, historical growth rates in the nearby cities of Gilbert and Chandler during the time period from 1980 through 2005 were researched to provide a historical perspective. These utilities had a 10.4 percent annual growth rate in new housing units and population during this period, which represents a growth rate similar to the Pinal Valley Water System and supports the assumptions used in preparing this Plan.

FIGURE 2.1
PINAL VALLEY WATER SYSTEM PLANNING AREA



2.1.2 Historical Demand – Casa Grande, Coolidge, and Stanfield Systems

An annual summary of water demands for the Pinal Valley Water System sub-systems for the time period from 2001 through 2005 are shown in Tables 2.1 through 2.3 below. Water Use Data Sheets are also provided for years 2004 and 2005 in Appendix 1. As shown by water sales and customer counts, the Casa Grande and Coolidge water systems are experiencing rapid development and higher customer growth than shown in historic averages. Growth in residential customers and water use through August 2006 has kept pace with growth rates in 2004 and 2005. Rapid residential customer growth is expected to continue within these areas for the foreseeable future. This is discussed in more detail in Section 2.2.

Table 2.1
Casa Grande Water System Historical Water Use*

	2001	2002	2003	2004	2005
			(thousand gallons)		
Casa Grande					
Res. Sales	1,836,497.1	1,981,908.4	2,034,520.3	2,062,070.2	2,201,807.7
(Percent of Total)	57.7	58.3	59.2	58.9	58.8
Comm. Sales	753,952.1	834,185.2	846,776.3	855,988.5	865,986.4
(Percent of Total)	23.7	24.5	24.6	24.4	23.1
Ind. Sales	541,794.7	511,866.3	500,126.2	502,277.9	541,225.1
(Percent of Total)	17.0	15.1	14.6	14.3	14.5
Other Sales	52,762.4	71,117.5	54,275.2	83,394.7	135,203.6
(Percent of Total)	1.7	2.1	1.6	2.4	3.6
Total Sales	3,185,006.3	3,399,077.4	3,435,698.0	3,503,731.3	3,744,132.8
Total Production	3,467,214.6	3,661,463.2	3,750,381.4	3,808,270.7	4,100,200.4
Unsold	263,618.2	246,547.7	294,706.6	280,481.0	327,501.3
Percent Unsold	7.6	6.7	7.9	7.4	8.0
Customers					
Residential	11658	12612	13760	15190	17718
Commercial	996	984	1012	1055	1089
Industrial	27	27	27	26	29
Fire	123	130	145	163	171
Other	36	36	37	49	82
Total Customers	12840	13789	14981	16483	19089

*Includes Tierra Grande Water System

Table 2.2
Coolidge Water System Historical Water Use

	2001	2002	2003	2004	2005
			(thousand gallons)		
Coolidge					
Res. Sales	348,616.6	358,411.0	353,919.0	341,954.3	357,386.1
(Percent of Total)	79.4	77.9	75.1	75.9	73.9
Comm. Sales	83,850.7	94,169.0	103,403.0	96,535.3	107,602.5
(Percent of Total)	19.1	20.5	21.9	21.4	22.3
Ind. Sales	2,592.8	2,138.8	1,881.7	1,478.5	2,681.3
(Percent of Total)	0.6	0.5	0.4	0.3	0.6
Other Sales	3,730.9	5,579.6	12,305.3	10,361.3	15,891.1
(Percent of Total)	0.9	1.2	2.6	2.3	3.3
Total Sales	438,791.0	460,298.4	471,509.0	450,329.4	483,561.0
Total Production	535,458.3	547,080.1	550,871.6	521,655.9	546,872.2
Unsold	80,516.5	65,428.0	57,945.7	52,947.6	47,151.7
Percent Unsold	15.0	11.9	10.5	10.2	8.6
Customers					
Residential	2696	2710	2730	2856	3591
Commercial	277	281	280	291	299
Industrial	8	7	7	7	7
Fire	15	16	20	21	21
Other	7	4	12	20	26
Total Customers	3003	3018	3049	3195	3944

Table 2.3
Stanfield Water System Historical Water Use

	2001	2002	2003	2004	2005
			(thousand gallons)		
Stanfield					
Res. Sales	19,991.5	20,917.2	20,915.4	19,457.0	19,034.0
(Percent of Total)	64.6	65.7	67.2	70.1	68.7
Comm. Sales	6,472.0	6,348.7	5,871.7	4,705.8	4,819.2
(Percent of Total)	20.9	19.9	18.9	17.0	17.4
Ind. Sales	0.0	0.0	0.0	0.0	0.0
(Percent of Total)	0.0	0.0	0.0	0.0	0.0
Other Sales	4,478.8	4,559.0	4,360.1	3,588.6	3,842.5
(Percent of Total)	14.5	14.3	14.0	12.9	13.9
Total Sales	30,942.3	31,824.9	31,147.2	27,751.4	27,695.7
Total Production	35,424.6	35,423.3	33,437.1	30,074.1	31,646.6
Unsold	3,964.3	3,262.9	341.5	1,878.2	3,471.4
Percent Unsold	11.3	9.2	5.8	6.3	11.0
Customers					
Residential	172	178	180	175	174
Commercial	37	36	37	36	34
Industrial	0	0	0	0	0
Fire	0	0	0	0	0
Other	1	1	1	1	1
Total Customers	210	215	218	212	209

2.1.3 Monthly Distribution of Annual Demand

The following monthly distribution percentages were used to distribute the annual demand projections in this Plan to monthly levels for use in planning for treated CAP water use. This distribution is based on a composite of the 2005 monthly distribution for the Casa Grande and Coolidge water systems shown in Table 2.4 below. This distribution was applied to projected demands for the Pinal Valley Water System planning area.

Table 2.4

Monthly Distribution of Annual Demand

	Percent of Annual Demand
Jan	5.5
Feb	5.0
Mar	6.4
April	7.8
May	9.8
June	10.5
July	11.4
Aug	9.5
Sept	10.0
Oct	9.0
Nov	8.1
Dec	7.0

2.1.4 Pinal Valley Water System Planning Area Water Demand Projections Through 2025

In order to plan for future use of CAP water in the Pinal Valley Water System planning area, annual and monthly water demand projections were developed. These projections are presented in Table 2.5 for the time period from 2005 to 2025. The monthly distribution of demand in selected planning years is presented in Chapter 5 of this CAP Water Use Plan.

Pinal County is in the beginning stage of accelerated long-term development activity similar to that in southeastern Maricopa County which began in 1980 and which has continued over the past 26 years. The projections of future housing units, population and water demands presented below assume that service area population and water demand in the Pinal Valley Water System planning area will, in a similar fashion, increase significantly over the planning period of this Plan. AWC projects water demand will rise from approximately 18,000 acre feet per year ("AF/YR") in 2006 to almost 90,000 AF/YR by 2025. This level of growth in water demand underscores the importance of designing and constructing water treatment transmission facilities to treat and deliver AWC's current CAP water allocations and other surface water supplies obtained in the future.

Table 2.5

Annual Housing Unit, Population, and Water Demand Projections (2)

In The Pinal Valley Water System Planning Area

Year	Residential Units	Population	Residential Deliveries AF/YR	Non-Res. Deliveries AF/YR (3)	Total Deliveries AF/YR	Total Demand AF/YR (1)
2005	21,483	64,449	7,912	5,149	13,059	14,618
2006	24,491	73,472	10,287	6,430	16,717	18,389
2007	26,940	80,819	11,316	6,790	18,106	19,916
2008	29,634	88,901	12,448	7,157	19,605	21,566
2009	32,597	97,791	13,693	7,531	21,223	23,346
2010	35,857	107,570	15,062	7,907	22,969	25,266
2011	39,442	118,327	16,568	8,284	24,852	27,337
2012	43,387	130,160	18,225	8,657	26,881	29,570
2013	47,725	143,176	20,047	9,021	29,068	31,975
2014	52,498	157,493	22,052	9,372	31,424	34,566
2015	57,748	173,243	24,257	9,703	33,960	37,356
2016	63,522	190,567	26,683	10,006	36,689	40,358
2017	69,875	209,624	29,351	10,273	39,624	43,586
2018	76,862	230,586	32,286	10,493	42,779	47,057
2019	84,548	253,645	35,515	10,654	46,169	50,786
2020	93,003	279,009	39,066	11,720	50,786	55,865
2021	102,303	306,910	42,973	12,892	55,865	61,451
2022	112,534	337,601	47,270	14,181	61,451	67,596
2023	123,787	371,361	51,997	15,599	67,596	74,356
2024	136,166	408,497	57,197	17,159	74,356	81,792
2025	149,782	449,347	62,917	18,875	81,792	89,971

(1) Includes 10 percent lost and unaccounted-for water

(2) 2005 Delivery and Demand figures are actual

(3) 2005 Non-Residential percentage of Residential adjusted to 30 percent over 2005 to 2025 time period

2.2 White Tank System Water Demand Planning Projections

The White Tank water system, located in a fast-growing area of western Maricopa County, is comprised of 6,513 acres. This area is also on the cusp of a significant increase in development activity. At the end of 2005, the White Tank water system had 1,555 customers and added 111 new residential units from the end of 2004. However, eleven subdivisions totaling 2,830 acres are already under construction or are currently in various stages of development planning with AWC's Engineering Department. The developers of these subdivisions expect to add over 6,900 new residential units over the next 10 to 15 years. An additional 1,420 acres of undeveloped, unplanned land within the White Tank service area is

expected to support new residential customer growth through 2025 and beyond. Table 2.6 presents a summary of projected new housing units within the White Tank service area.

2.2.1 White Tank Service Area - Water Demand Planning Assumptions

- Build out housing unit projections are based on housing densities planned for 11 new subdivisions totaling 2,830 acres and 6,853 units. The density and housing unit assumptions are shown in Table 2.6 below. The average housing density of 2.6 units per acre in new subdivisions is assumed in the future for currently undeveloped and unplanned areas.

- 3.0 persons per household

- Overall residential water use will average 128 gpcd in the future. In 2005, residential use averaged about 145 gpcd. New housing units are assumed to be a mix with some units using 125 gpcd and others using the current 145 gpcd. At buildout, 13.7 percent of housing units are assumed to be one-acre lots having the higher water use rate of 145 gpcd. Overall gpcd rates are projected to decrease from the current rate of 145 gpcd to 128 gpcd (weighted average) over the 2007 to 2025 time period.

- Future non-residential water use is expected to increase to 20 percent of residential use over the 2007 to 2025 time period from the 2005 non-residential use of 13.6 percent of residential use.

- The lost and unaccounted-for water percentage will not be more than 10 percent of total water produced.

- The distribution of annual demand by month in the future is based on the pattern exhibited in 2005 for the White Tank water system.

Table 2.6

White Tank Water System Buildout Housing Unit Projections

	Acres	Avg. Density	Total Units	Existing Units	Potential New Units
Area of Existing Mains	1,760	1.0	1,760	1164	596
Area of Proposed New Develop.	2,830	2.6	7,358	456	6,902
Area Not Planned or Subdivided	1,420	2.6	3,692	0	3,692
ADOT I-10 R.O.W	183	0.0	0	0	0
Area Not Planned Commercial	320				
Total	**6,513**		**12,810**	**1,620**	**11,190**

2.2.2 Historical Demand – White Tank System

An annual summary of water demands for the White Tank water system for years 2001 through 2005 is shown in Table 2.7 below. Annual residential customer growth has ranged between 8 percent and 11 percent over this time period. However, as discussed above, several large, medium-density subdivisions are now breaking ground and AWC expects a significant increase in the number of new units constructed annually. Water Use Data Sheets for 2004 and 2005 are also provided in Appendix 2.

Table 2.7
White Tank Water System Historical Water Use

	2001	2002	2003	2004	2005
			(thousand gallons)		
Res. Sales	167,541.0	184,943.4	192,187.2	213,762.5	234,247.3
(Percent of Total)	90.2	92.6	89.6	87.7	88.0
Comm. Sales	12,397.5	12,089.7	16,109.1	17,035.4	22,967.0
(Percent of Total)	6.7	6.1	7.5	7.0	8.6
Ind. Sales	1,533.8	2,183.3	3,118.1	2,482.2	3,686.1
(Percent of Total)	0.8	1.1	1.5	1.0	1.4
Other Sales	4,266.5	410.9	3,079.0	10,419.2	5,190.7
(Percent of Total)	2.3	0.2	1.4	4.3	2.0
Total Sales	185,738.8	199,627.3	214,493.4	243,699.3	266,091.1
Total Production	199,319.5	210,067.9	225,867.2	259,829.4	294,241.3
Unsold	13,269.7	9,700.1	10,765.3	15,407.1	27,606.2
Percent Unsold	6.7	4.6	4.8	5.9	9.4
Customers					
Residential	1,137	1,188	1,316	1,444	1,555
Commercial	17	16	17	19	23
Industrial	1	2	2	2	3
Fire	2	2	2	2	4
Other	2	5	0	7	7
Total Customers	1,159	1,213	1,337	1,474	1,592

2.2.3 White Tank Water System Water Demand Projections Through 2025

The annual water demand projections presented in Table 2.8 assume that the residential customer growth rate in the White Tank water system beginning in 2007 will be significantly higher than recent years. Demand projections are based on the following residential growth assumptions:

- 10-year buildout of 6,853 units in currently planned subdivisions.
- 20-year buildout of 4,288 units in unplanned areas and residential infill areas.
- Increased non-residential use expressed as a percentage of residential use as the service area matures from 13.6 percent to 20 percent from 2007 to 2025.

Table 2.8

Annual Housing Unit, Population, and Water Demand Projections (2)

White Tank Water System

Year	Residential Units	Population	Residential Deliveries (Ac-Ft)	Non-Res. Deliveries (Ac-Ft)(3)	Total Deliveries. (Ac-Ft)	Total Demand. (1) (Ac-Ft)
2005	1,555	4,665	719	98	817	903
2006	1,621	4,863	790	103	893	982
2007	2,521	7,563	1,220	165	1,385	1,523
2008	3,421	10,263	1,644	230	1,874	2,061
2009	4,321	12,963	2,062	299	2,361	2,597
2010	5,221	15,663	2,474	371	2,845	3,129
2011	6,121	18,363	2,880	446	3,326	3,659
2012	7,021	21,063	3,280	525	3,804	4,185
2013	7,921	23,763	3,673	606	4,279	4,707
2014	8,821	26,463	4,061	690	4,751	5,227
2015	9,721	29,163	4,443	777	5,220	5,742
2016	10,621	31,863	4,818	867	5,686	6,254
2017	10,831	32,493	4,877	902	5,779	6,357
2018	11,041	33,123	4,935	938	5,872	6,459
2019	11,251	33,753	4,991	973	5,964	6,560
2020	11,461	34,383	5,045	1,009	6,054	6,660
2021	11,671	35,013	5,099	1,020	6,118	6,730
2022	11,881	35,643	5,150	1,030	6,180	6,798
2023	12,091	36,273	5,201	1,040	6,241	6,865
2024	12,301	36,903	5,291	1,058	6,349	6,984
2025	12,511	37,533	5,381	1,076	6,458	7,103

Notes:

1. Includes 10% lost and unaccounted for water
2. 2005 Delivery and Demand figures are actual
3. Non-Residential demand assumed to be 20 percent of residential demand in the long-term. 2005 non-residential demand of 13.6% of residential demand adjusted to 20% over the 2007 to 2025 period.

CHAPTER 3
EXISTING WATER SUPPLIES

3.1 Existing Water Supplies - Pinal Valley Water System

3.1.1 Groundwater

AWC currently provides water to customers in the Pinal Valley Water System service areas from groundwater pumped from 22 wells with a total production capacity of 19,410 gallons per minute ("gpm") (27.7 MGD). More detailed information can be found on wells in each Pinal Valley Water System sub-system in the Water Use Data Sheets for 2004 and 2005 provided in Appendix 1. With the largest well (1,620 gpm) out of service, there currently exists 17,790 gpm of production capacity within those sub-systems. In 2005, peak day demand for the Pinal Valley Water System sub-systems was estimated to be 14,700 gpm. Existing well capacity was sufficient to meet peak-day demand through the summer 2006. In 2007 and 2008, to keep pace with growing demands in the service area, AWC plans to drill and equip six new wells. At the assumed annual new customer growth rate of 10 percent, peak day demand within the Pinal Valley Water System planning area is expected to increase by approximately 1,500 gpm (2.1 MGD) per year. Assuming an average new well production rate of 1,000 gpm, an average of two new wells per year will be required to meet demands until the CAP Treatment Plant is placed in service in 2012.

3.1.2 Arsenic Treatment Facilities

In 2005 and 2006, AWC contracted for the construction of arsenic treatment facilities having a total treatment capacity of 15,050 gpm to treat groundwater to comply with the new arsenic drinking water standard of 10 parts per billion ("ppb"). All of the supply wells in service in Coolidge and Tierra Grande comply with the new standard, but because of pervasive arsenic concentrations above the standard in groundwater around Casa Grande and neighboring areas, AWC must assume conservatively for planning purposes that all new wells in the Pinal Valley Water System Planning Area will require treatment facilities for arsenic removal. Planning assumptions and cost estimates for future groundwater treatment facilities are discussed in Chapter 6.

3.2 Existing Water Supplies – White Tank Water System

3.2.1 Groundwater

AWC currently provides water to customers in the White Tank service area from groundwater pumped from 4 wells. These wells have a total production capacity of 850 gpm (1.22 MGD) and provide water to the system. More detailed information can be found on wells in the system in the Water Use Data Sheets for 2004 and 2005 provided in Appendix 2. In addition, an inter-connection with Arizona-American is available to provide approximately 350 gpm of supplemental supply during peak summer demand periods. In 2005, peak-day demand for the system was estimated to be about 900 gpm, based on a 1.2 peak-day to peak-month ratio.

Existing well capacity was sufficient to meet peak-day demand through the summer of 2006. Beginning with 2006, and continuing through 2008, three new wells are planned or under construction to meet growing demands in the service area. In addition, AWC is arranging for the design and construction of two water treatment plants for arsenic removal to increase current equipped well capacity to 1,200 gpm (1.73 MGD). Over the next 10 years, at the projected growth rate of 690 new residential customers per year, peak-day demand within the service area is expected to increase by approximately 500 gpm (0.7 MGD) per year. Assuming an average new well production rate of 500 gpm, an average of one new well per year will be required to meet demands until the CAP water treatment plant is placed in service in 2009 or 2010.

3.2.2 Arsenic Blending and Treatment Plant

White Tank Well #8 exceeds the arsenic standard of 10 ppb. Water from Well #8 will be combined with water from other White Tank wells with lower concentrations of arsenic, transported to, and processed at, a centralized arsenic blending and treatment plant.

CHAPTER 4
CAP TREATMENT PLANT AND OTHER FACILITIES

4.1 CAP Treatment Plant and Other Facilities

4.1.1 CAP Treatment Plant and Other Facilities Overview

In 2005, AWC purchased a 60-acre parcel of land on which to construct its CAP Treatment Plant. The plant site location is shown in Figure 4.1a and Figure 4.1b. The site is located east of Coolidge on the north side of Storey Road, west of Wheeler Road, and is approximately 3500 feet west of the CAP canal. It is also adjacent to the Casa Grande-Florence Canal, a major surface water supply canal owned by the San Carlos Irrigation and Drainage District. This site was selected because of its close proximity to the canals and because it is well located to enable delivery of treated water to the Pinal Valley Water System. The 60-acre site is sufficiently large to support future plant phases as discussed in Chapter 7.

A canal turnout structure and a 36-inch gravity flow raw water transmission main from the CAP canal to the CAP Treatment Plant are planned for construction with the first phase of the CAP Treatment Plant. This line size is conceptual and may change during the preliminary engineering study to be conducted in 2007. A 15.5-mile long, 24-inch treated water transmission main is planned in the Kleck Road alignment to convey treated water from the CAP Treatment Plant to the existing Casa Grande distribution system. A 12-inch or larger main will branch north from the 24-inch main in the La Palma Road alignment to convey treated water to the Coolidge distribution system (Figure 4.1.).

4.1.2 CAP Treatment Plant Design and Construction Schedule

AWC is planning to design and construct the CAP Treatment Plant with a Phase 1 treatment capacity of 10 MGD. This CAP Treatment Plant will enable AWC to treat its combined 10.884 AF of CAP water allocations in compliance with surface water treatment rules, recently adopted by the U.S. Environmental Protection Agency and the Arizona Department of Environmental Quality. The schedule for plant design and construction is as follows:

	Start Date	End Date
Pre-Design Treatment Process/Planning Study	Q1-2007	Q3-2007
Detailed Plant and Transmission System Design	Q1-2008	Q4-2008
Plant Construction	Q2-2009	Q2-2011
Plant Commissioning, Regulatory Agency Permit Approval and Start-up	Q2-2011	Q4-2011

FIGURE 4.1a

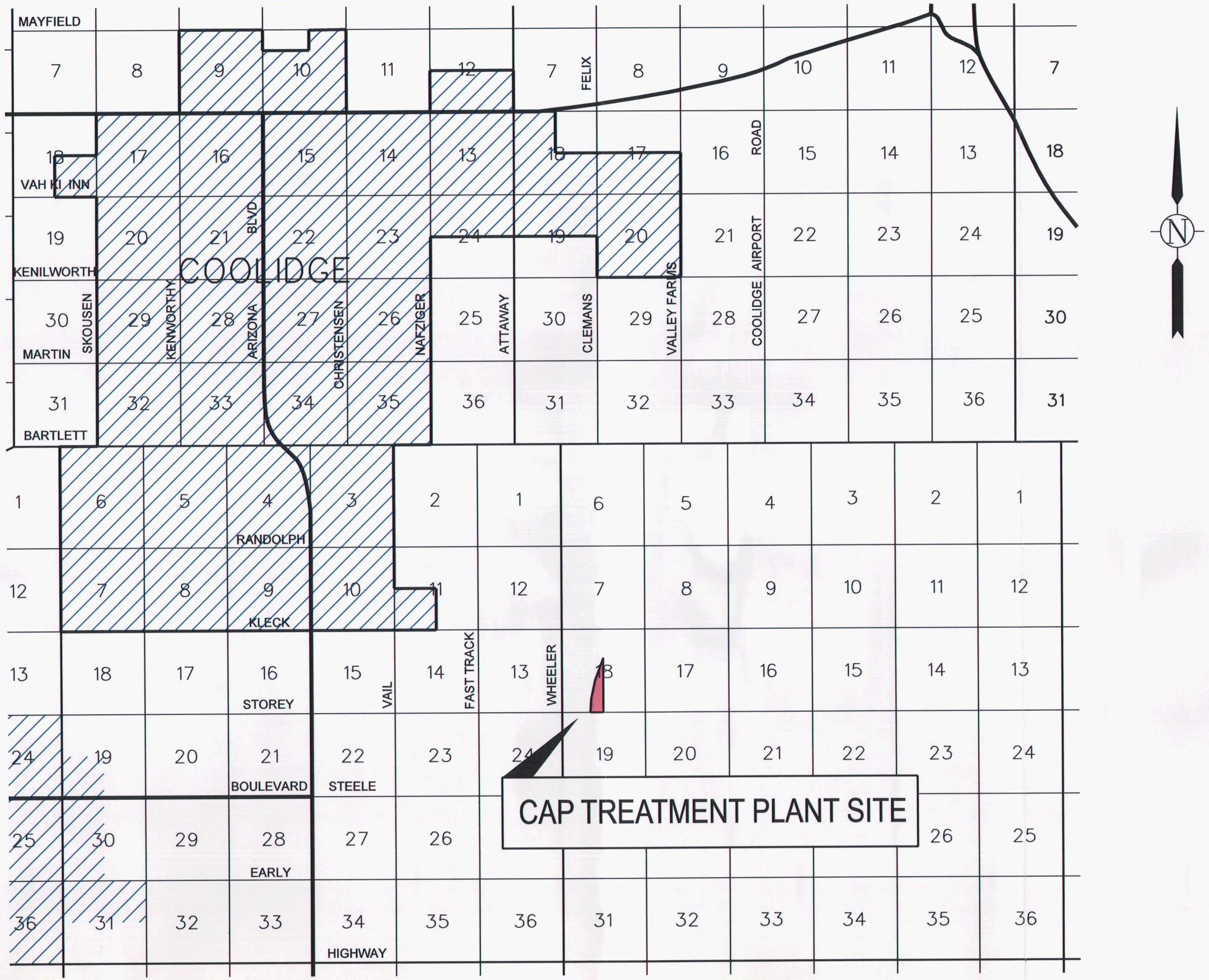
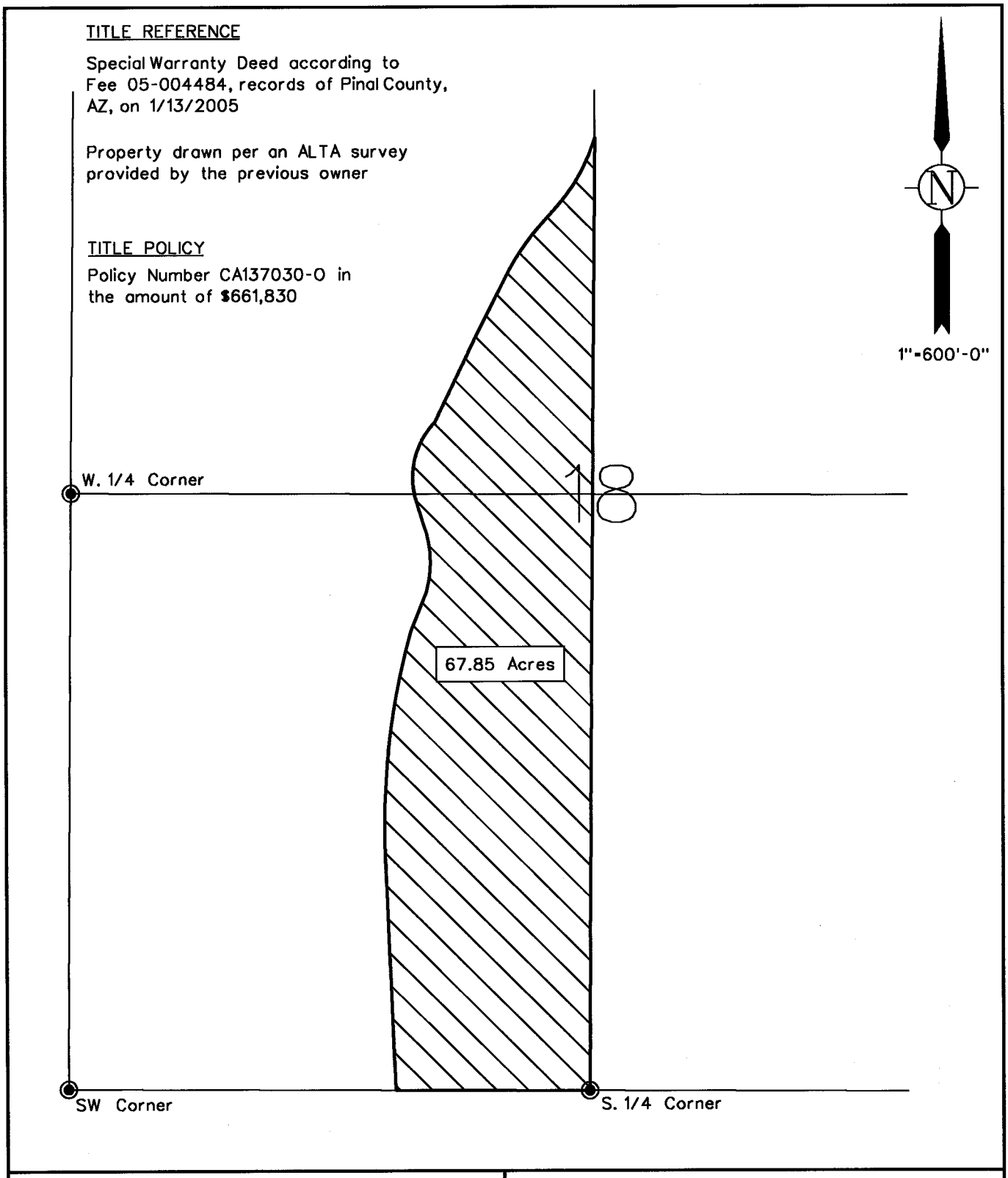

MAYFIELD
FELIX
VAH KI INN
ROAD
BLVD
COOLIDGE
KENILWORTH
AIRPORT
SKOUSEN
KENWORTHY
ARIZONA
CHRISTENSEN
NAFZIGER
ATTAWAY
CLEMANS
VALLEY FARMS
COOLIDGE
MARTIN
BARTLETT
RANDOLPH
KLECK
VAIL
FAST TRACK
WHEELER
STOREY
BOULEVARD
STEELE
EARLY
HIGHWAY
CAP TREATMENT PLANT SITE
N

FIGURE 4.1b



DESIGNATION	CAP Treatment Plant
INDENTURE No.	20.12
PLEDGED TO BOND SERIES	
TAX ASSESSMENT No.	400-01-006C
Drawn CB	Checked / Approved MW

ARIZONA WATER COMPANY

PROPERTY PLAT

PART OF	West half of Section 18, T.6S.,R.9E.
COUNTY OF	Pinal
SCALE	1"=600'-0"
DATE	10.25.2005

4.1.3 CAP Treatment Plant Preliminary Construction Cost Estimates

The objective of the preliminary engineering design study to be completed in 2007 will be to analyze treatment process alternatives, determine selected treatment processes, and develop preliminary cost estimates for the CAP Treatment Plant and water transmission system. An Engineer's Cost Estimate will be developed as part of a detailed design in 2008. Final costs will not be known until project bids are obtained in early 2009.

In order to provide a range of estimated construction costs for this Plan, information was gathered on actual costs of surface water treatment plants built in Arizona within the last 6 years, or for which detailed design and engineer's estimates are available. This data shows that the range of cost per gallon of daily treatment capacity in 2006 dollars is expected to be $1.50 to $4 per gallon for membrane or conventional process treatment plants. For a 10 MGD plant, this results in a cost range of from $15 million to $40 million. Plant costs vary depending on raw water quality characteristics, treatment sub-process type and to what degree raw water and treated water storage and pumping are included in the project. The construction cost estimates for the CAP Treatment Plant provided in this Plan do not include treated water pumping or water transmission costs, which are provided separately.

4.1.4 CAP Treatment Plant and Transmission and Pumping Facilities Cost Estimates

Planning level design and construction cost estimates for the facilities needed to treat and deliver the current CAP water allocations are shown below in Table 4.1.

Table 4.1
CAP Treatment Plant
Range of Estimated Capital Costs

	Low Estimate	High Estimate
Land		
WTP Land - Purchase Price	$670,000	$670,000
Pipeline R.O.W (ASLD Lease)	$300,000	$350,000
CAP Canal Turnout Structure	$422,000	$506,400
Plant Construction Cost	$15,000,000	$40,000,000
Design, Bidding, Const. Mgmt., Internal Costs @18%	$2,700,000	$7,291,152
Transmission Mains		
Raw Water - CAP canal to plant (3500 ft, 36")	$525,000	$630,000
Finished Water - Plant to Casa Grande (81,840 ft., 24")	$10,639,200	$12,767,040
Finished Water - Coolidge Line (3960 ft., 12")	$237,600	$285,120
Design, Bidding, Const. Mgmt., Internal Costs @18%	$2,052,324	$2,462,789
Treated Water Pump Station		
Construction Cost	$1,000,000	$1,200,000
Design, Bidding, Const. Mgmt., Internal Costs @18%	$180,000	$216,000
Total Phase I Estimated Project Costs	$33,725924	$66,378,501
Cost Per Gallon of Capacity	$3.40	$6.60

4.2 White Tank Water System – CAP Treatment Plant and Other Facilities

4.2.1 CAP Treatment Plant and Other Facilities Overview

The White Tank water system is located adjacent to Arizona-American's Agua Fria District and is partially within the boundaries of MWD. MWD is an agricultural water district (a municipal entity of the State of Arizona) whose boundaries include 37,614 acres of land in western Maricopa County. MWD owns and operates the Beardsley Canal, which is connected to the CAP canal near Lake Pleasant. MWD currently takes delivery of CAP water into its system and delivers the water to agricultural and urban irrigation customers in its operation of a Groundwater Savings Facility. MWD controls Agua Fria River water rights that are appurtenant to lands within MWD. This water is captured in storage space MWD controls in Lake Pleasant. Long-term records of MWD's Agua Fria River water deliveries show that the average annual amount of water available to MWD lands is approximately 0.85 AF/Acre. Agua Fria River water could potentially provide an additional 816 AF/YR of surface water supply for treatment and delivery to the White Tank water system customers (960 acres x 0.85 AF/Acre). A water supply and use agreement between AWC and MWD would be needed to enable AWC to have MWD treat and deliver the water for potable use within the White Tank service area. AWC plans to initiate discussions with MWD regarding this potential supply in the near future.

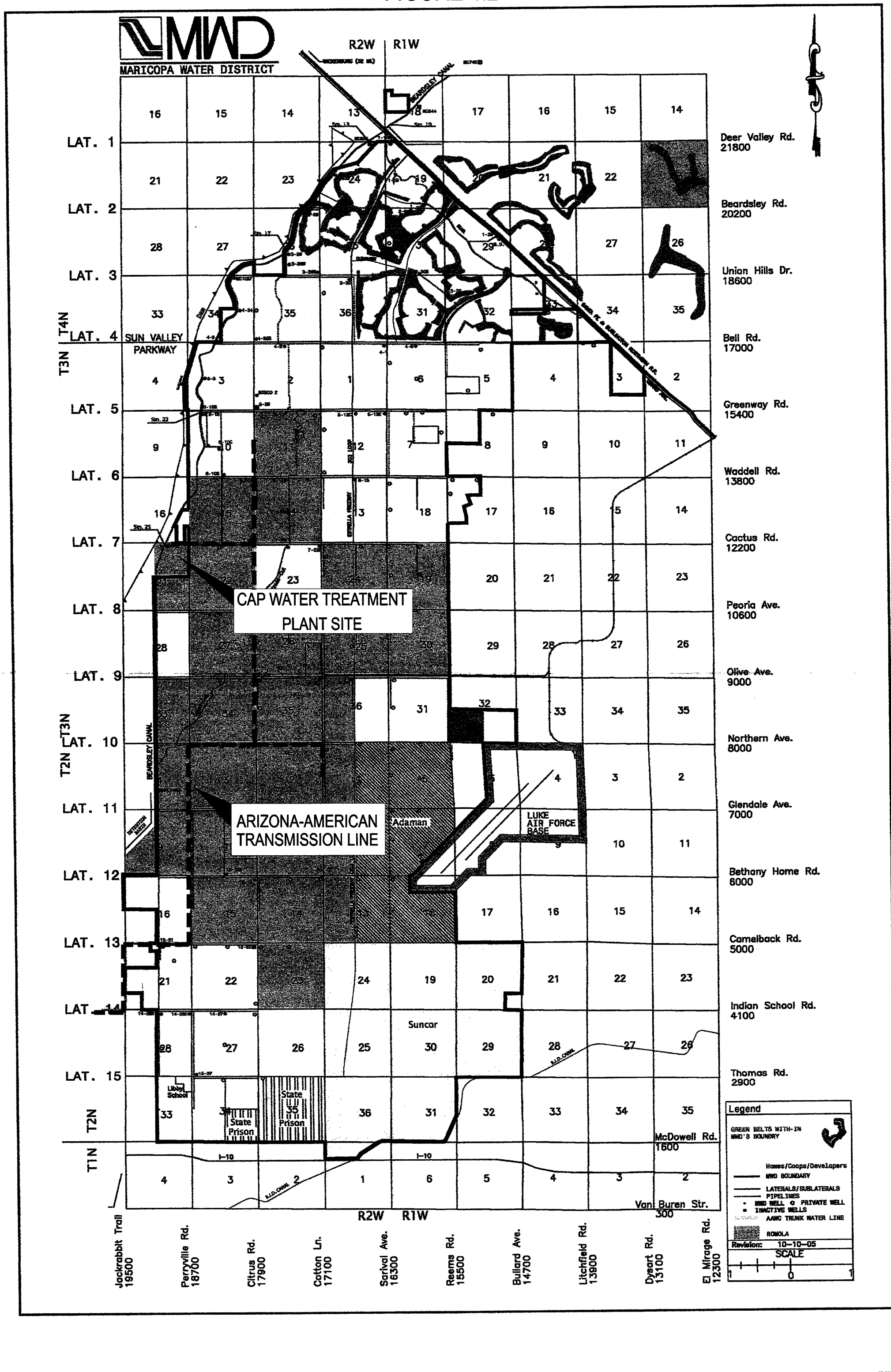
Arizona-American and MWD are each developing plans to construct regional surface water treatment plants located on the Beardsley Canal to provide service to nearby water companies and municipalities. It is AWC's intention to enter into a long-term agreement with either Arizona-American or MWD that would provide approximately 1.0 MGD of CAP water treatment capacity for AWC's White Tank service area's CAP water allocation. Each entity's project is discussed below, including a design and construction schedule and current project cost estimates as provided by Arizona-American and MWD. AWC's decision on which water treatment plant to participate in will likely be made in 2007 or 2008, depending in large part on the progress of each entity in moving toward plant construction.

4.2.2 Arizona-American - White Tank Treatment Plant

Arizona-American has completed the detailed design plans and specifications for a 13.5 MGD water treatment plant located at Cactus and Perryville Road. Arizona-American also recently filed with the Commission for a hook-up fee tariff to fund construction of the plant. In 2006, Arizona-American completed construction of 9 miles of the CAP treated water transmission main that could be used to convey AWC's treated CAP water allocation from the plant to AWC's White Tank water system. This transmission main is capable of delivering treated CAP water throughout Arizona-American's service area and to those entities partnering with Arizona-American on the White Tank Water Treatment Plant. A 24" main is located adjacent to AWC's White Tank water system in the Indian School and Jackrabbit Road alignments. The location of the White Tank Water Treatment Plant and the alignment of the treated water main are shown in Figure 4.2. In partnering with Arizona-American, AWC would construct a connection to the 24-inch main along the Indian School Road alignment west of Jackrabbit Road to deliver water to AWC's White Tank water system.

AWC staff met with Arizona-American staff in 2005 to discuss the terms of a 40-year water supply agreement. Arizona-American plans to begin construction of the plant in 2005 were deferred pending Arizona-American's execution of a funding agreement with MWD. A meeting was held with Arizona-American representatives in November 2006 to discuss the schedule of the White Tank Water Treatment Plant construction and to resume contractual discussions regarding AWC's need for 1.0 MGD of plant capacity. Arizona-American expressed a desire to resume discussions toward a long-term water supply agreement with AWC. In November 2006, Arizona-American issued a request for bids that are due in January 2007. Arizona-American plans to begin construction in 2007 and complete construction by May of 2009. A long-term lease or wholesale water supply contract with Arizona-American would be for 1.0 MGD of treatment and treated water transmission capacity. Contractual discussions will be under way in early 2007.

FIGURE 4.2


MWD
MARICOPA WATER DISTRICT
R2W
R1W
T4N
T3N
T2N
T1N
LAT. 1
LAT. 2
LAT. 3
LAT. 4
LAT. 5
LAT. 6
LAT. 7
LAT. 8
LAT. 9
LAT. 10
LAT. 11
LAT. 12
LAT. 13
LAT. 14
LAT. 15
SUN VALLEY PARKWAY
CAP WATER TREATMENT PLANT SITE
ARIZONA-AMERICAN TRANSMISSION LINE
BEARDSLEY CANAL
NEW RIVER
AGUA FRIA
RETENTION BASIN
303 LOOP
ESTRELLA FREEWAY
Adaman
Suncor
LUKE AIR FORCE BASE
Libby School
State Prison
State 35 Prison
I-10
SANTA FE & SOUTHERN PACIFIC R.R.
A.D.O.W.N.
Deer Valley Rd. 21800
Beardsley Rd. 20200
Union Hills Dr. 18600
Bell Rd. 17000
Greenway Rd. 15400
Waddell Rd. 13800
Cactus Rd. 12200
Peoria Ave. 10600
Olive Ave. 9000
Northern Ave. 8000
Glendale Ave. 7000
Bethany Home Rd. 6000
Camelback Rd. 5000
Indian School Rd. 4100
Thomas Rd. 2900
McDowell Rd. 1600
Van Buren Str. 300
Jackrabbit Trail 19500
Perryville Rd. 18700
Citrus Rd. 17900
Cotton Ln. 17100
Sarival Ave. 16300
Reems Rd. 15500
Bullard Ave. 14700
Litchfield Rd. 13900
Dysart Rd. 13100
El Mirage Rd. 12300
Legend
GREEN BELTS WITH-IN MWD'S BOUNDRY
Homes/Coops/Developers
MWD BOUNDARY
LATERALS/SUBLATERALS
PIPELINES
MWD WELL
PRIVATE WELL
INACTIVE WELLS
AAWC TRUNK WATER LINE
ROMOLA
Revision: 10-10-05
SCALE
-1
0
1

4.2.2.1 Arizona-American - White Tank Water Treatment Plant – Cost Estimates

The plant cost estimates provided in Table 4.2 are from Arizona-American recent filing with the Commission. Costs are based on engineering estimates made in 2005 adjusted to 2006 dollars. Actual bid and construction costs may be higher due to inflation. Arizona-American's water transmission main will not have sufficient pressure to convey the treated water for use in AWC's White Tank water system; therefore the cost estimate includes costs for a pump station to boost the treated CAP water to AWC's White Tank water system. The treated CAP water will then be blended with groundwater to meet customer demands.

Table 4.2

Arizona-American - White Tank Water Treatment Plant and Treated Water Transmission Cost Estimate

	Low Estimate	High Estimate
Arizona-American Plant/ Transmission Proportional Cost (1)	$4,939,500	$5,927,400
Treated Water Transmission Connecting Mains	$782,000	$938,400
Pump Station	$200,000	$240,000
Meter Installation	$50,000	$60,000
Total Capital Cost	$5,971,500	$7,165,800
Cost Per Gallon of Capacity	$6.00	$7.20

(1) Based on 1MGD/13.5 MGD proportion of $66,682,573 Arizona-American Cost Estimate

High Estimate for Arizona-American cost-share based on 1.2 x Original Low Estimate

Also, these costs do not include Arizona-American AFUDC costs

4.2.2.1.1 Arizona-American – White Tank Water Treatment Plant Raw Water Transmission Costs Arizona-American

In order to transport its CAP water allocation to the White Tank Water Treatment Plant, AWC would need to negotiate a water wheeling contract with MWD for use of the Beardsley canal. Arizona-American has already executed such a wheeling contract with MWD at an initial rate of $25/acre-foot. This rate is subject to increase by MWD in the future to account for general inflation and future increases in canal operation and maintenance costs. MWD's position is that wheeling contracts should be standardized. Therefore, it is anticipated that AWC could negotiate a similar wheeling contract with MWD at the same cost per acre-foot.

4.2.3 MWD Water Treatment Plant

In 2006, MWD contracted with a national engineering firm to conduct a preliminary engineering study for the MWD Water Treatment Plant. The study, completed in August 2006, indicates MWD intends to construct a 20 MGD capacity plant by 2010 to provide treatment services to nearby municipalities and private water companies, like AWC, that hold CAP water allocations. While, the project is similar in scope to Arizona-American's White Tank Water Treatment Plant project, MWD intends to only treat AWC's CAP water. AWC would be responsible to convey water from the treatment plant to its White Tank water system. As a result, AWC would be required to construct the necessary pipelines and pumping stations to convey the treated CAP water from the MWD Water Treatment Plant to AWC's White Tank water system.

Ultimately, plans call for the MWD Water Treatment Plant to be expanded in several phases up to an ultimate capacity of 80 MGD as the contracting entities' demand for water grows. MWD's study recommended two potential 160-acre plant sites adjacent to the Beardsley Canal. One site is located between Northern and Glendale Avenues and the other is located between Olive and Northern Avenues. A final site selection will be made pending the completion of a public involvement process and further site investigations. The study also evaluated possible treatment processes and developed recommended process alternatives and preliminary plant cost estimates.

AWC representatives met with MWD staff in November 2006 to discuss the MWD project and to determine the feasibility of obtaining 1.0 MGD of treatment plant capacity. MWD intends to enter into long-term wholesale water treatment contracts with entities like AWC that hold CAP water allocations. Possible contracting entities in addition to AWC include Arizona-American and the cities of Avondale, Goodyear, Surprise and El Mirage.

MWD's schedule for Water Treatment Plant design and construction is as follows:

Pre-Design Treatment Process/Planning Study	2007
Detailed Plant Design	2008
Plant Construction	Q4-2008 to Q2-2010
Plant Commissioning and Start-up	Q4-2010

A more detailed project schedule is to be developed by MWD in early 2007.

4.2.3.1 MWD Water Treatment Plant - Cost Estimate

MWD's capital cost estimates for a 20 MGD Phase I water treatment plant range between $2.29 and $3.07 per gallon of treatment capacity (not including land), depending on the combination of treatment processes selected (see Table in Appendix 3). Final bid costs will not be obtained until 2008 so it is likely that costs will be on the higher end of this range, or could exceed the higher cost, due to inflation. MWD intends to price wholesale water deliveries to customers at a unit rate per 1000 gallons. MWD's preliminary estimates of unit prices for water treatment service ranges from $1.32 to $1.84 per 1000 gallons (not including costs of raw water, raw or treated water transmission mains).

4.2.3.2 MWD Water Treatment Plant - Cost of Raw and Treated Water Transmission

As with the Arizona-American alternative, AWC would need to negotiate a water-wheeling contract with MWD for transport of AWC's White Tank water system CAP water allocation to the MWD Water Treatment Plant (see section 4.2.2.1.1).

Transmission of treated CAP water from the MWD Water Treatment Plant to AWC's White Tank water system would likely be accomplished through a treated water wheeling contract with another entity contracting with MWD for treatment services, such as Arizona-American, the City of Goodyear, or the City of Avondale. As discussed in Section 4.2.2, Arizona-American has already constructed a large diameter transmission main that could be used to transport AWC's treated CAP water. This could prove to be a cost-effective alternative if a treated water wheeling agreement could be reached with Arizona-American. It is unknown at this time whether the City of Goodyear or the City of Avondale will construct their own treated water transmission mains, partner on a joint use main, or attempt to obtain treated water wheeling services from Arizona-American. In 2007, AWC will explore all feasible wheeling and partnering alternatives with these entities in order to identify a cost-effective wheeling arrangement. For planning purposes, it is assumed that treated water wheeling costs for the MWD Water Treatment Plant alternative would be similar to those shown in Section 4.2.2.1.

CHAPTER 5
CAP WATER OPERATING PLAN

5.1 CAP Water Operating Plan Overview

For both the Pinal Valley Water System and the White Tank water system, treated CAP water will be used as the primary source of water supply during all months of the year except during one month (assumed January) when treatment plants and/or canal systems are out of service for routine annual maintenance. Existing and future wells will be used to supplement CAP water supplies and meet peak summer demands. CAP water will be pumped to existing and future water storage tanks within the distribution system. From there, a blend of CAP water and groundwater will be boosted from the tanks at distribution system pressure.

5.1.1 Potential Arsenic Treatment Cost Reduction with CAP Water Use

Use of CAP water to blend with groundwater at storage tank sites to comply with the new 10 ppb safe drinking water standard for arsenic will likely enable AWC to reduce operation of its arsenic treatment facilities at some storage tanks and wells during the lower demand months, thus reducing overall arsenic treatment and water production costs. A detailed analysis of blending potential at each storage tank and booster station location in both the Pinal Valley Water System and White Tank water system is planned prior to treated CAP water becoming available. Available testing data show that CAP water contains approximately 3 ppb arsenic while the level of arsenic in existing AWC groundwater supplies is as high as 20 ppb. For example, at a groundwater concentration of 15 ppb, a 2 to 1 blend of CAP water and groundwater would be required to achieve a 7 ppb blend and thereby comply with the new safe drinking water standard of 10 ppb. The degree to which CAP water use will result in lower arsenic treatment operation and maintenance costs cannot be quantified at this time due to the variables of specific actual or planned blending operations. Even so, selection of which storage tanks CAP water will be delivered to under a variety of water demand conditions will take into account the potential for arsenic treatment cost reduction in order to maximize potential cost savings.

5.2 Pinal Valley Water System - Projected CAP Water Operating Plan By Month - 2011 to 2025

The mix of treated CAP water and groundwater projected in each month for the years 2012 (year of plant start-up), 2015, 2020, and 2025 is shown in Figures 5.1 to 5.4. As these figures show, the Pinal Valley Water System supply will rely on treated CAP water as the primary source of water supply and wells will be operated to supplement the supply as needed. This mode of operation will: 1) minimize the size of and capital costs associated with CAP water treatment and transmission facilities, 2) maximize the opportunity to reduce arsenic treatment costs through blending, and 3) maximize groundwater savings to aid in AWC's compliance with the requirements of the Groundwater Management Act.

The monthly demand and water use distributions in Figures 5.1 to 5.4 show that in 2012 at plant start-up, treated CAP water will comprise about 55 percent of the supply in the low

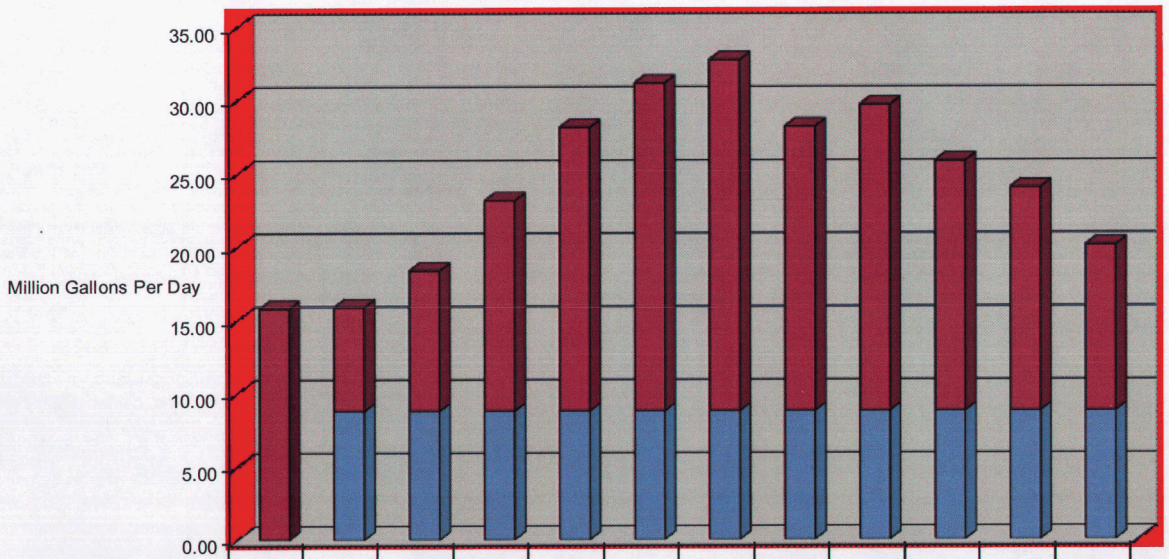
demand months and 27 percent of the supply in July. By 2025, with the rapid increase in projected water demands due to new development, the existing CAP allocation of 10,884 AF will represent a lower proportion of customer water demands throughout the year (17 percent in February and 8 percent in July). As a result AWC will need to obtain additional CAP water or other surface water supplies in the future to continue to minimize groundwater use and ensure that water use remains consistent with the state's water supply goals for the Pinal Active Management Area. Additional water supplies and future CAP water treatment plant expansions are discussed in Chapter 6.

5.3 White Tank Water System - Projected CAP Water Operating Plan by Month - 2010 to 2025

The mix of treated CAP water and groundwater planned in each month for the years 2010, 2015, 2020, and 2025 is shown in Figures 5.5 to 5.8. As in the case of the Pinal Valley Water System, the White Tank water system will rely on treated CAP water as the primary source of water supply and wells will be operated to supplement the supply as needed. This mode of operation will: 1) minimize the size of and capital costs associated with CAP water treatment and transmission facilities, 2) maximize the opportunity to reduce arsenic treatment costs through blending, and 3) maximize groundwater savings to aid in AWC's compliance with the requirements of the Groundwater Management Act.

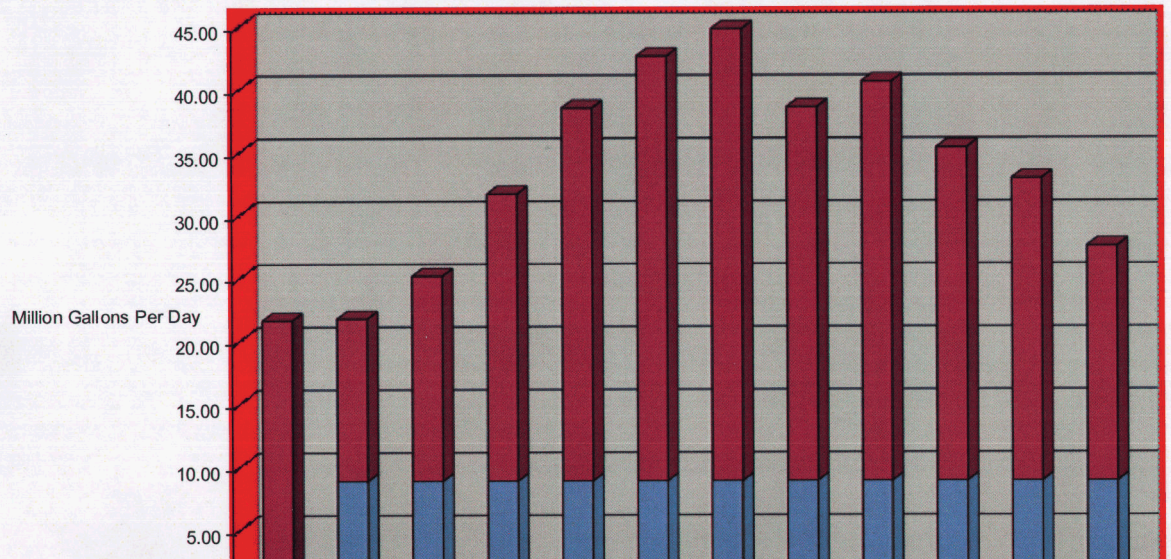
At plant start-up, assumed to be 2010, treated CAP water will comprise about 59 percent of the supply in the low demand months and 25 percent of the supply in July. By 2025, with the increase in projected water demands due to new development, the existing CAP allocation of 968 AF will provide 25 percent in February and 11 percent in July.

Figure 5.1 - PVWS
Monthly Use of Treated CAP and Groundwater - 2012



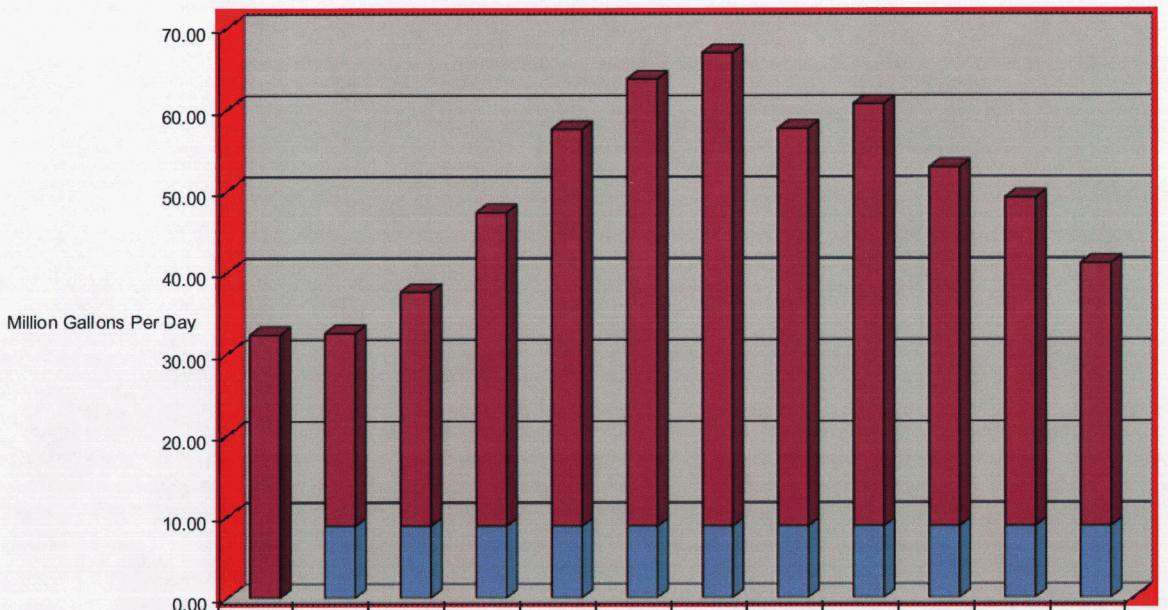
	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Groundwater	15.80	7.11	9.59	14.36	19.36	22.38	23.96	19.41	20.89	17.06	15.25	11.31
CAP Water	0.00	8.80	8.80	8.80	8.80	8.80	8.80	8.80	8.80	8.80	8.80	8.80

Figure 5.2 - PVWS
Monthly Use of Treated CAP and Groundwater - 2015



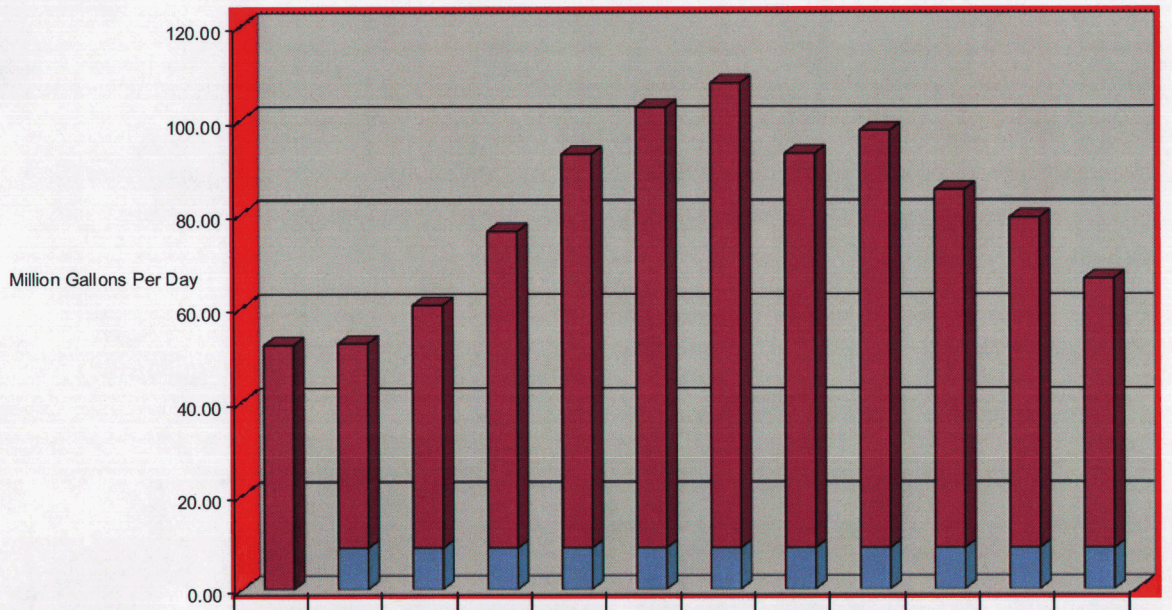
	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Groundwater	21.6	12.9	16.3	22.8	29.7	33.8	36.0	29.7	31.8	26.5	24.1	18.7
CAP Water	0.00	8.80	8.80	8.80	8.80	8.80	8.80	8.80	8.80	8.80	8.80	8.80

Figure 5.3 - PVWS
Monthly Use of Treated CAP and Groundwater - 2020



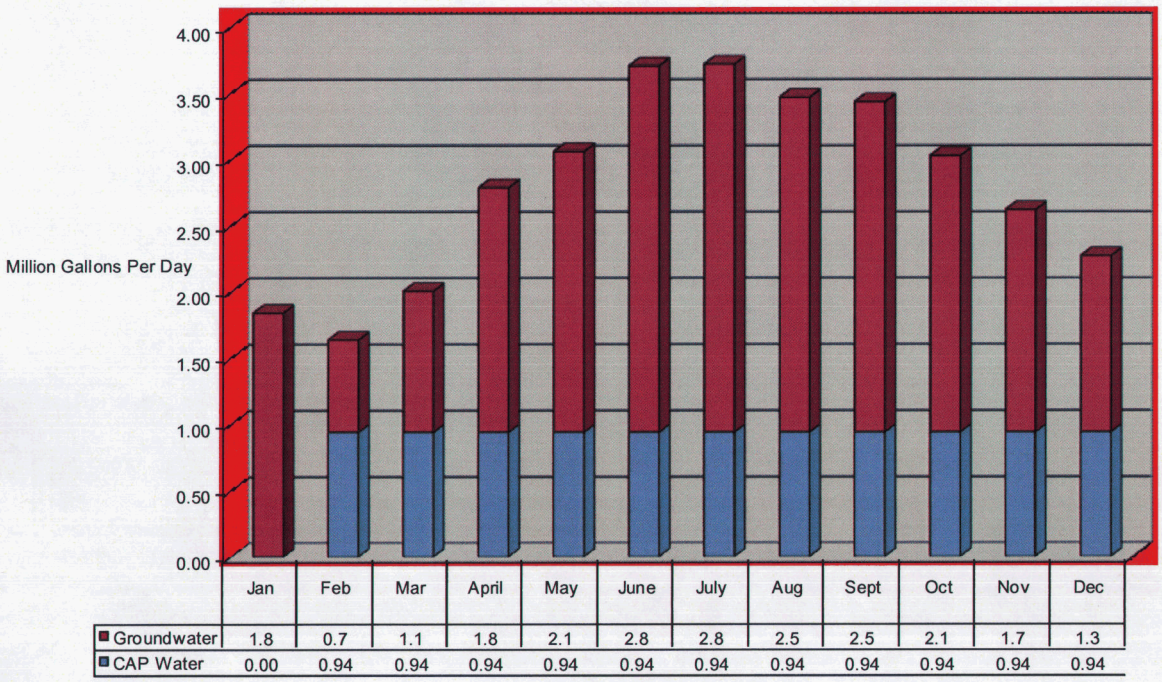
	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Groundwater	32.3	23.7	28.8	38.5	48.7	54.9	58.1	48.8	51.9	44.0	40.3	32.3
CAP Water	0.00	8.80	8.80	8.80	8.80	8.80	8.80	8.80	8.80	8.80	8.80	8.80

Figure 5.4 - PVWS
Monthly Use of Treated CAP and Groundwater - 2025



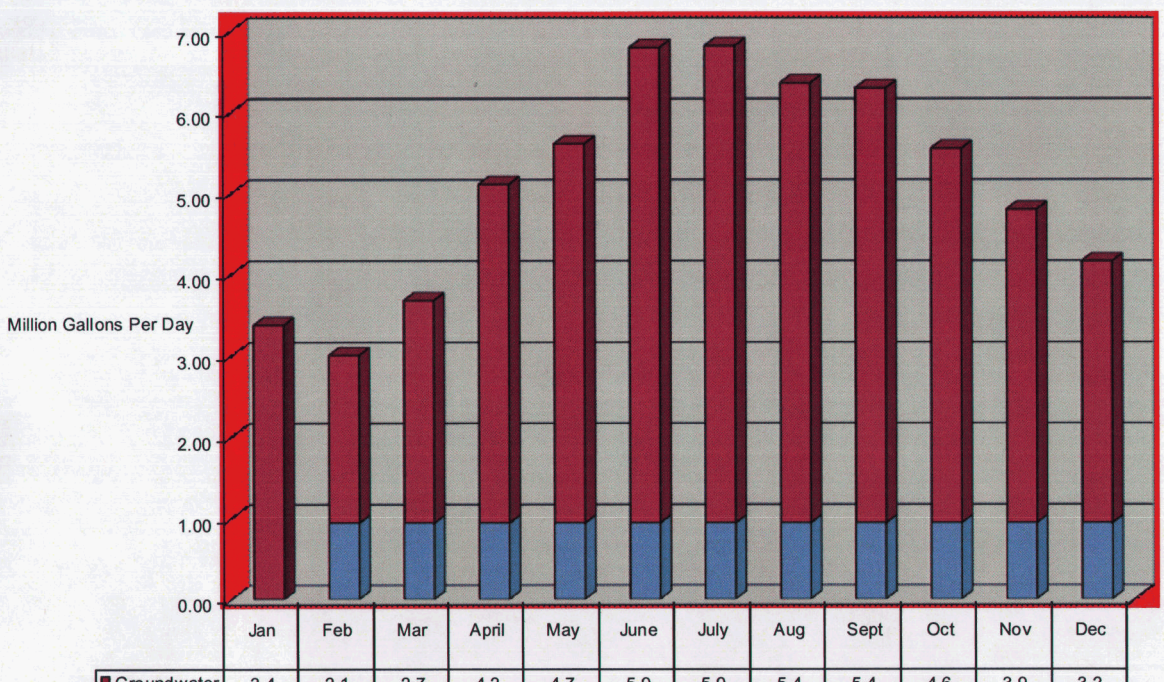
	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Groundwater	52.0	43.6	51.7	67.4	83.9	93.8	99.0	84.0	88.9	76.3	70.4	57.4
CAP Water	0.00	8.80	8.80	8.80	8.80	8.80	8.80	8.80	8.80	8.80	8.80	8.80

Figure 5.5 - White Tank Water System
Monthly Use of CAP Water and Groundwater - 2010



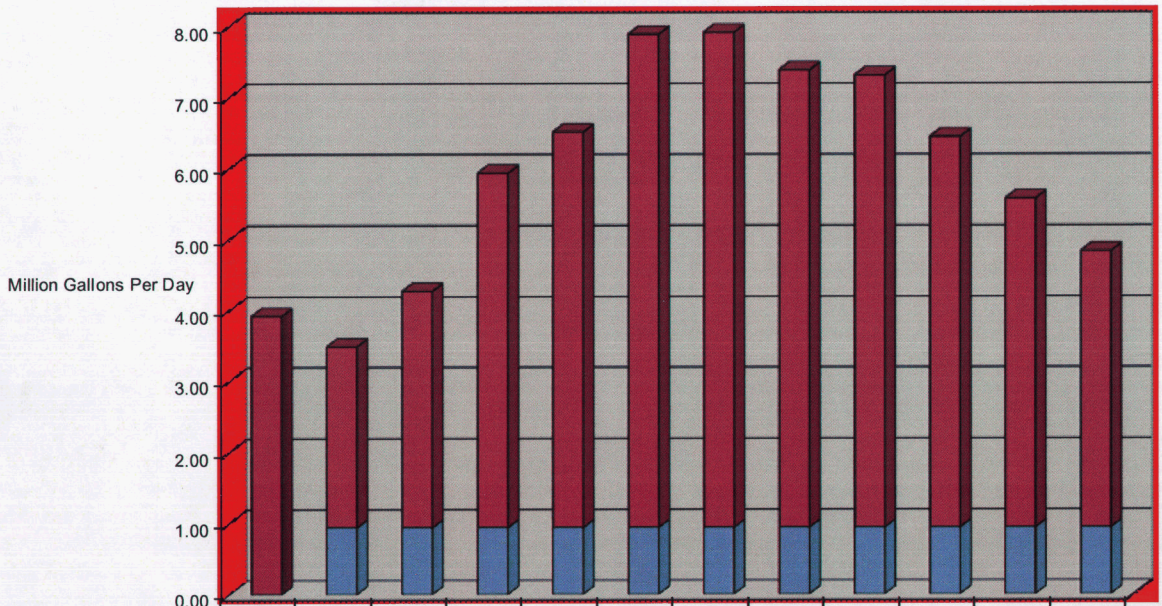
	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Groundwater	1.8	0.7	1.1	1.8	2.1	2.8	2.8	2.5	2.5	2.1	1.7	1.3
CAP Water	0.00	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94

Figure 5.6 - White Tank Water System
Monthly Use of CAP Water and Groundwater - 2015



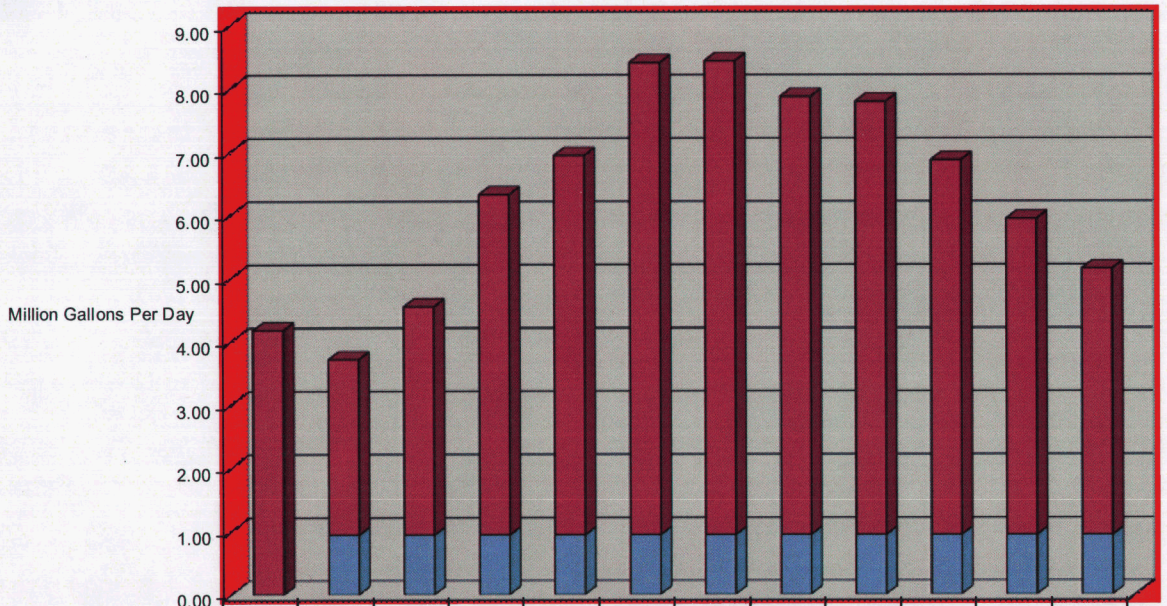
	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Groundwater	3.4	2.1	2.7	4.2	4.7	5.9	5.9	5.4	5.4	4.6	3.9	3.2
CAP Water	0.00	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94

Figure 5.7 - White Tank Water System
Monthly Use of CAP Water and Groundwater - 2020



	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Groundwater	3.9	2.5	3.3	5.0	5.6	6.9	7.0	6.4	6.4	5.5	4.6	3.9
CAP Water	0.00	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94

Figure 5.8 - White Tank Water System
Monthly Use of CAP Water and Groundwater - 2025



	Jan	Feb	Mar	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Groundwater	4.2	2.8	3.6	5.4	6.0	7.5	7.5	6.9	6.9	5.9	5.0	4.2
CAP Water	0.00	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94

CHAPTER 6
CAPITAL AND OPERATION AND MAINTENANCE COSTS OF FUTURE WATER SUPPLIES

6.1 Overview of Future Water Supplies – Pinal Valley Water System

The water demand projections presented in Chapter 2 show that additional water supplies will be needed beyond AWC's current CAP water allocations to moderate the projected rise in groundwater production. This chapter describes: 1) potential new water supplies that may be available to meet demands through 2025, and 2) the projected capital and operations costs of existing and new water supplies.

Potential new supplies for the Pinal Valley Water System include but are not limited to:

- Additional CAP water allocations and additional treatment facilities.
- Gila River surface water through the San Carlos Irrigation and Drainage District.
- Direct and indirect use of reclaimed water through agreements with local wastewater entities such as the cities of Casa Grande and Coolidge.
- Additional groundwater production facilities. New wells may lawfully pump groundwater or recover storage credits accrued through underground storage of effluent or CAP water.

6.2 Additional CAP Water Allocations

Additional CAP water for treatment and direct delivery to AWC customers in the future could be obtained through: 1) Long-term leases with Indian Communities that hold CAP allocations, 2) Additional allocations made by the State of Arizona of a portion of the remaining 97,000 AF Non-Indian Agricultural Water Pool, 3) Water Allocation purchase and transfer agreements with entities that hold CAP allocations, 4) Purchase or lease of Colorado River water from irrigation districts or Indian Communities located along the Colorado River, 5) Use of excess CAP water on a year-to-year basis, and 6) Future agreements with the Central Arizona Groundwater Replenishment District ("Replenishment District") providing for direct delivery of water in lieu of replenishing groundwater.

AWC will conduct an analysis of CAP water alternatives in 2007. The key objective of the water supply strategy is to maintain a reliable and cost-effective water supply for AWC customers. AWC intends to seek additional CAP water allocations to enable future expansion of the planned CAP Treatment Plant as the need for additional renewable supplies increases. AWC will acquire additional water supplies and expand the planned CAP Treatment Plant in conjunction with expansion of groundwater production facilities and development of other supplies as part of a balanced water supply strategy.

6.2.1 Cost of Direct Treatment and Delivery of CAP Water – Pinal Valley Water System

The estimated range of capital costs for the 10 MGD initial phase of the CAP Treatment Plant and related facilities was provided in Table 4.1. The capital cost is currently estimated to be in the range of $3.40 to $6.60 per gallon of treatment capacity. The method of funding this capital cost is not the subject of this Plan, but will be addressed in the Company's 2008 General Rate Case and other Commission filings.

Estimated CAP Treatment Plant operation and maintenance costs are based on detailed annual operating cost estimates made by Arizona-American for its proposed White Tank Water Treatment Plant in 2006. It is assumed that the CAP Treatment Plant will be similar in process design and size to the White Tank Water Treatment Plant. Therefore the Arizona-American cost estimates, detailed in Appendix 3, provide reliable estimates of future operating costs. The Arizona-American cost estimate of $0.39 per 1,000 gallons was reduced by removing outside management and overhead costs, resulting in a cost estimate of $0.31 per 1,000 gallons or $101 per AF of treated water. This cost does not include CAP water purchase costs. Currently, CAP capital and operation and maintenance ("O&M") charges are $106 per AF ($0.33 per 1,000 gallons). In 2012, when the CAP Treatment Plant start-up will occur, CAP capital and O&M charges are projected to be $123 per AF ($0.38 per 1,000 gallons) based on projections published by CAP.

Additional CAP water allocations that AWC could obtain in the future are assumed to have similar water treatment plant capital and operation and maintenance costs to those shown here. However, future plant expansions are likely to cost less per gallon of capacity than the initial Phase I plant because certain plant and water transmission system costs will already have been incurred. The capital costs built into Phase I would include land, administration building, CAP water turnout, and raw water mains, and certain plant piping and structures. However, since detailed design has not yet occurred, future plant expansion cost differential from initial plant costs cannot be determined at this time.

6.3 Future Use of Groundwater

Groundwater will continue to provide a key water supply for the Pinal Valley Water System planning area following construction of the CAP Treatment Plant. This is shown in the monthly operating plans presented in Chapter 5. However, Arizona Groundwater Management Act constraints on future groundwater use for new development may limit the use of groundwater in the future or may require greater quantities of groundwater replenishment through the Central Arizona Groundwater Replenishment District ("Replenishment District"). Compliance with Arizona Department of Water Resources ("ADWR") 100-year Assured Water Supply Rules is a condition of AWC's future use of groundwater to meet the needs of new developments. These rules require that future groundwater pumping not deplete the aquifer to a level more than 1,100 feet below land surface within a 100-year period of time. ADWR is now in the process of revising the rules for the Pinal Active Management Area and should be completed in 2007. The revisions will significantly reduce the amount of groundwater that water

providers like AWC are allowed to pump and require that much of the groundwater pumped by providers be replenished either by the provider or the Replenishment District.

In 2002, AWC filed with ADWR a hydrology study as part of an application for a Physical Availability Determination for the Pinal Valley Water System service areas. A Physical Availability Determination is used to determine how much groundwater a provider may produce over a 100 year period of time (taking into account other groundwater users in the basin) without causing water levels to decline to more than 1,100 feet below land surface. The Physical Availability Determination, which was approved by ADWR, allows AWC to pump up to 57,507 AF/YR of groundwater to meet future customer needs within the Casa Grande system, 13,510 AF/YR in the Coolidge system, and 4,786 AF/YR in the Tierra Grande system, for a total of 75,803 AF/YR. Based on the annual water demand projections presented in Table 2.5, this level of groundwater use, when coupled with the current CAP water allocations of 10,884 AF, could support the issuance of Assured Water Supply Certificates for all projected new developments in the integrated Pinal Valley Water System planning area through the year 2024.

The 2002 study was based on relatively conservative assumptions regarding aquifer characteristics and future pumping by other entities, including agriculture in Pinal County. AWC is presently working with a professional hydrologic consulting firm to update the Physical Availability Determination to include current information. AWC will resubmit an application to ADWR in early 2007 for a revised Physical Availability Determination that would apply to the entire Pinal Valley Water System planning area. AWC anticipates that the updated study will show that significantly more than 75,803 AF/YR of groundwater will be available to AWC under the Assured Water Supply Rules.

6.3.1 Central Arizona Groundwater Replenishment District Issues

To date, developers in many areas within the AWC Pinal County service areas have obtained Certificates of Assured Water Supply without enrolling the subdivisions as Member Lands of the Replenishment District. However, under the revised Assured Water Supply rules, new subdivisions on desert lands without Irrigation Grandfathered Rights will be required to enroll in the Replenishment District to provide groundwater replenishment services. Subdivisions on lands with a history of irrigation may be able to extinguish established Irrigation Grandfathered Rights to meet the Assured Water Supply Rules in the near-term, but under the new rules the availability of Extinguishment Credits will be phased out during the 2007 to 2025 period. Enrollment in the Replenishment District results in an annual replenishment tax being levied on the homeowner through the County to pay for groundwater recharge by the Replenishment District using CAP water or other renewable water supplies. In 2006, the cost to homeowners within member lands in Pinal County for this service was $192 per acre foot, or about $75 per year for the average homeowner. The CAP projects these costs to rise to $242 per acre foot by 2011.

While the Replenishment District provides a viable means today for new subdivisions in the Pinal Valley Water System planning area to meet the Assured Water Supply Rules, future enrollment of new subdivisions in the Replenishment District is not unlimited. The Replenishment District's current Plan of Operation identifies water supply acquisitions needed to

meet the future replenishment needs of new enrollment projected through the year 2015. ADWR requires that the plan be updated by 2015. The continued availability of Replenishment District replenishment services will play an important role in future AWC decisions regarding water supply acquisitions and future expansion of the CAP Treatment Plant.

6.3.2 Cost of Future Groundwater Supplies

The cost of future groundwater supplies includes the cost to acquire land, drill and equip new wells, construct advanced water treatment systems to reduce levels of arsenic or other contaminants, and water mains to convey water from the wells to storage tanks for boosting to the distribution system. The range of estimated future groundwater supply costs is shown in Table 6.1 below.

Table 6.1
New Wells with Advanced Treatment (Arsenic)
Estimated Range of Capital Costs with Design

	Low Estimate	High Estimate
Land	$15,000	$20,000
Drill/Equip New Wells	$750,000	$1,000,000
Connecting Mains (Avg. 2000 ft 8-inch)	$90,000	$108,000
Arsenic Water Treatment Facility (Cost per 1000 gpm)	$500,000	$900,000
Design, Bidding, Const. Mgmt., Internal Costs @18%	$241,200	$361,440
Total Capital Cost	$1,596,200	$2,389,440
Cost Per Gallon of Capacity	$1.1	$1.7

Notes: Assumes average well output of 1000 gpm
Low well treatment cost based on centralized treatment cost of $500,000/1000 gpm
High treatment cost based on individual wellhead treatment system for a 1000 gpm well

Well operation and maintenance costs consist of electrical costs to operate well pumps and water treatment systems, chemicals and treatment media replacement, well site maintenance, and maintenance of well pump equipment and treatment equipment. AWC anticipates these costs will remain similar to costs provided to the Commission for AWC's 2004 Western Group Rate Case (Decision No. 68302).

6.4 San Carlos Irrigation and Drainage District – Gila River Surface Water

The San Carlos Irrigation and Drainage District (the "Irrigation District") is an agricultural water district that encompasses approximately 50,000 acres in the Pinal Valley. Irrigation District delivers Gila River surface water to agricultural and urban irrigation customers through a 250-mile network of canals. The Pinal Valley Water System planning area overlays the majority of Irrigation District land. Approximately 90 percent of Irrigation District land is within the Pinal Valley Water System planning area.

Surface water deliveries to Irrigation District lands have averaged approximately 2 acre feet per acre ("AF/AC") over the past 25 years. In some years, when water surface water supplies are plentiful, deliveries have been as much as 3 AF/AC of Irrigation District land. The Irrigation District also maintains a system of wells to supplement surface water deliveries and typically delivers between 0.4 and 1.0 AF/AC of groundwater each year to its customers, depending on surface water availability. As agricultural lands within the Irrigation District continue to develop into urban uses, the Irrigation District surface water supply will play an increasingly prominent role in providing renewable water supplies for the Pinal Valley Water System planning area. A preliminary calculation of the amount of surface water potentially available for treatment and potable use by the Irrigation District lands within the Pinal Valley Water System planning area at build out shows that as much as 80,000 to 90,000 AF/YR of water could be available on an average annual basis.

AWC plans to continue its discussions with the Irrigation District in 2007 regarding the terms of a water delivery and use agreement that would allow AWC to become the delivery agent for Gila River water within AWC's Pinal Valley Water System planning area and the Irrigation District service area. Pursuant to such an agreement, Gila River water would be delivered by the Irrigation District to the CAP Treatment Plant for treatment. The cost of raw water deliveries by the Irrigation District to the CAP Treatment Plant is expected to be less than delivery charges for CAP water based on past the Irrigation District water delivery charges. CAP Treatment Plant capital and operation and maintenance costs to treat Irrigation District water would be the same as that for CAP water.

6.5 Future Use of Reclaimed Water

AWC does not provide wastewater treatment services within the Pinal Valley Water System planning area. Future direct or indirect use of reclaimed water to meet the needs of AWC's water customers would be achieved through cooperative agreements with entities that operate wastewater facilities in Pinal County, such as the cities of Casa Grande and Coolidge. AWC believes future use of reclaimed water will play an important role in the overall water supply portfolio of the Pinal Valley Water System planning area. The future generation of wastewater flows within the Pinal Valley Water System planning area by the year 2025, assuming a future service area population of 449,347 and 80 gallons per capita per day wastewater flow generation, is 40,267 acre feet per year ("AF/YR"). This water may be used for direct irrigation use by golf courses, parks, and schools, and other non-potable uses by power plants and others; and for groundwater recharge and recovery by AWC.

Entities that currently operate wastewater facilities within the Pinal Valley Water System planning area include the cities of Casa Grande, Coolidge and Eloy, and the Arizona City Sanitary District. In 2007, the Company plans to meet with these providers regarding each provider's plans for future wastewater treatment capacities and opportunities to maximize the beneficial use of reclaimed water. AWC will explore ways to partner with wastewater providers on projects that maximize the use of reclaimed water. Of particular importance in maximizing the use of AWC's existing CAP water allocation will be expediting use of reclaimed water by the SRP Desert Basin Generating Station and local golf courses that currently use untreated CAP water. This will free up the supply of CAP water for treatment at the CAP Treatment Plant.

Another feasible reuse alternative for wastewater providers is to construct underground water storage facilities for recharge of effluent for long-term water storage credits and sale or exchange of those long-term water storage credits to AWC for beneficial use by AWC's customers. Underground storage of reclaimed water will provide a significant benefit to the aquifer and allow AWC to develop additional groundwater production capacity under the state's Assured Water Supply Rules. AWC will include a component of effluent reuse in its upcoming application to ADWR for a revised Physical Availability Determination (see Section 6.3). The future cost of projects for direct or indirect use of reclaimed water is difficult to project at this point in time. The cost of these supplies will be specific to individual projects and wastewater providers.

6.6 White Tank Water System Cost of Direct Treatment and Delivery of CAP Water

Arizona-American's White Tank Water Treatment Plant represents the most likely option for direct treatment and delivery of AWC's existing 968 AF CAP water allocation. Projected capital costs for a 1.0 MGD proportional share of the 13.5 MGD of the White Tank Water Treatment Plant was provided Table 4.2. The estimated range of capital costs is $6.00 to $7.20 per gallon of treatment capacity. AWC intends to seek a long-term lease of capacity or wholesale water delivery agreement with Arizona-American. The detailed financial terms of this agreement are yet to be developed, but will be based on the actual costs incurred by Arizona-American to construct the facilities. The estimated operation and maintenance costs for delivery of water from Arizona-American's plant to AWC's White Tank water system are presented in Section 6.2.1.

6.7 White Tank Water System Cost of Future Groundwater Supplies

The estimated capital cost of future groundwater supplies for the White Tank water system is approximately twice that shown in Table 6.1. The reason is that expected well yields in the White Tank area are only 500 gpm instead of 1000 gpm in the Pinal Valley Water System planning area. Therefore, the range of estimated future capital costs in the White Tank water system is $2.20 to $3.40 per gallon of capacity, including costs for advanced treatment required for arsenic or other contaminants. For the same reasons, operation and maintenance costs per gallon of capacity for wells are expected to be proportionally higher as well.

CHAPTER 7
FUTURE EXPANSIONS OF THE CAP TREATMENT PLANT WATER TREATMENT CAPACITY

7.1 CAP Treatment Plant – Future Expansions

The 60-acre parcel purchased by AWC for the CAP Treatment Plant can potentially support a conventional water treatment plant with a capacity to meet AWC's projected needs. AWC purchased the site to enable future plant expansion beyond the initial 10 MGD plant, as the need to treat additional surface water supplies for the Pinal Valley Water System planning area develops. The parcel is also sufficiently large to provide water treatment services for other municipalities and private water companies in the region.

The need for and timing of future CAP Treatment Plant expansions will depend on: 1) the growth of customer water demands, 2) the availability and costs of additional groundwater production capacity to meet new demands, and 3) the availability and cost of acquiring additional allocations of long-term surface water supplies.

The water demand projections for the Pinal Valley Water System planning area presented in Chapter 2, and shown in Figures 5.1 to 5.4, show that between 2012 and 2020, average day water demand is expected to increase each year. By 2020 the peak-day demand will go up by more than 4 MGD per year. Those figures show that average peak day water demands in the Pinal Valley Water System planning area will increase to more than 30 MGD in 2012, 45 MGD in 2015, 65 MGD in 2020, and more than 100 MGD in 2025. These projections are based on a peak-day to peak-month ratio of 1.2. The initial capacity, 10 MGD, of the CAP Treatment Plant will provide for about 5 years of projected growth in average day demand. Based only on the projected increase in peak-day and average day demand, an additional CAP Treatment Plant module would be required by 2016. However, because additional groundwater well capacity will also be needed between now and 2012 to meet peak-day demands, well production capacity could be available to allow the next CAP Treatment Plant expansion to be deferred to approximately 2020. At that time, a 20-MGD plant expansion module would provide for approximately 5 years of projected growth in average-day demand between 2020 and 2025. It should be emphasized however, that the timing of the first CAP Treatment Plant expansion would depend on the availability and cost of additional groundwater production capacity, and the availability of additional long-term surface water supplies.

When the first CAP Treatment Plant expansion is constructed, the treated water transmission main system will need to be expanded beyond the 24" main to be constructed with Phase I of the CAP Treatment Plant. The sizing and alignment of future transmission systems will be evaluated during future planning studies. In 2007 AWC plans to further its study of water resources for the Pinal Valley Water System planning area. The objective of that study will be to: 1) identify the most cost-effective and viable long-term water resource strategies for the area, 2) develop an action plan for acquiring additional surface water and groundwater supplies, and 3) develop a projected schedule for the CAP Treatment Plant expansion phasing.

7.2 White Tank Service Area – CAP Water Treatment Plant Future Phases

The initial 1.0 MGD capacity commitment AWC plans to acquire in either the Arizona-American White Tank Water Treatment Plant or the proposed MWD Water Treatment Plant will be sufficient to treat AWC's current CAP water allocation of 968 AF. Any future expansions of AWC's surface water treatment capacity would be secured through additional capacity agreements with one of these entities. Both entities' plans call for constructing water treatment plants that are expandable to 80 MGD. The need for and timing of future water treatment plant capacity agreements for AWC's White Tank service area will depend on: 1) the growth of customer water demands, 2) the availability and costs of additional groundwater production capacity to meet new demands, and 3) the availability and cost of acquiring additional allocations of long-term surface water supplies. The most likely next source of surface water supply is from the Agua Fria River which could be obtained through an agreement with MWD (described in Section 4.2.1). This potential supply of up to 816 AF per year could require slightly less than 1 MGD of additional surface water treatment plant capacity. AWC intends in the future to explore the necessary delivery agreement with MWD. Additional CAP water allocations for the White Tank service area will also be explored in the future.

APPENDIX 1

WATER USE DATA SHEET

NAME OF COMPANY →	ARIZONA WATER COMPANY - Casa Grande *
ADEQ Public Water System No. →	11-009 - 11-076 2005

*Includes Tierra Grande

MONTH/YEAR (LAST 13 MONTHS)	NUMBER OF CUSTOMERS	GALLONS SOLD (Thousands)	GALLONS PUMPED	GALLONS PURCHASED
January-06	19,213	269,149	305,254	0
December-05	19,089	285,407	280,927	0
November-05	18,895	327,561	330,540	0
October-05	18,670	375,638	383,468	0
September-05	18,314	398,883	412,325	0
August-05	18,181	366,708	384,751	0
July-05	18,006	441,704	469,839	0
June-05	17,707	368,906	432,347	0
May-05	17,432	305,825	398,079	0
April-05	17,225	263,983	312,576	0
March-05	16,945	193,240	261,175	0
February-05	16,737	198,930	211,109	0
January-05	16,645	217,348	223,065	0

STORAGE TANK CAPACITY (Gallons)	NUMBER OF EACH	ARIZONA DEPT. OF WATER RESOURCES WELL I.D. NUMBER	WELL PRODUCTION (Gallons per Minute)
Burgess Peak 2,000,000	1	D(6-6)21bbc - Casa Grande #10	1,040
Casa Grande Mtn 5,000,000	1	D(6-6)23cbb – Casa Grande #19	1,560
Cottonwood 1,000,000	1	D(6-6)22ddd – Singh/Quaid #22	1,000
Golf Course 115,000	1	D(6-6)22bda – Casa Grande #25	1,320
Indian Hills 100,000	1	D(6-6)21bbb – Cottonwood Lane #14	250
North Park 650,000	1	D(6-6)22bad – Casa Grande #20	1,110
North Park 35,000	1	D(6-6)22baa – Casa Grande #23	1,550
Scott Drive 110,000	1	D(6-6)15cdd – Casa Grande #26	1,400
Scott Drive 5,000,000	1	D(7-6)35ddd – AZ City/Battaglia #28	1,620
Tierra Grande #1 10,000	1	D(6-6)15ccb – Casa Grande #17	850
Tierra Grande #1 250,000	1	D(6-6)22cdc – Casa Grande #21	740
		D(6-6)22cdd – Casa Grande #24	950
		D(6-7)5baa – Lake-in-the-Desert #27	550
		D(6-6)25dcd - Casa Grande #29	1,380
		D(6-7)36add - Tierra Grande #1	420
		D(6-7)36add - Tierra Grande #3	95

Other Water Sources in Gallons per Minute (Non-Potable CAP Water) →	GPM 1583
Fire Hydrants on System →	(YES) NO
Total Water Pumped Last 13 Months (Gallons in Thousands) →	4,405,455

APPENDIX 1

WATER USE DATA SHEET

NAME OF COMPANY →	ARIZONA WATER COMPANY - Casa Grande *
ADEQ Public Water System No. →	11-009 - 11-076 2004

*Includes Tierra Grande

MONTH/YEAR (LAST 13 MONTHS)	NUMBER OF CUSTOMERS	GALLONS SOLD (Thousands)	GALLONS PUMPED	GALLONS PURCHASED
January-05	16,645	217,348	233,065	0
December-04	16,483	228,443	234,177	0
November-04	16,371	266,273	277,570	0
October-04	16,208	326,011	306,643	0
September-04	16,129	349,118	354,934	0
August-04	15,901	362,086	380,803	0
July-04	15,850	417,421	411,243	0
June-04	15,653	353,436	460,882	0
May-04	15,575	306,946	343,629	0
April-04	15,473	269,118	279,158	0
March-04	15,284	189,937	303,751	0
February-04	15,185	212,036	212,775	0
January-04	15,074	222,907	242,706	0

STORAGE TANK CAPACITY (Gallons)	NUMBER OF EACH	ARIZONA DEPT. OF WATER RESOURCES WELL I.D. NUMBER	WELL PRODUCTION (Gallons per Minute)
Burgess Peak 2,000,000	1	D(6-6)21bbc - Casa Grande #10	1,040
Casa Grande Mtn 5,000,000	1	D(6-6)23cbb – Casa Grande #19	1,560
Cottonwood 1,000,000	1	D(6-6)22ddd – Singh/Quaid #22	1,000
Golf Course 115,000	1	D(6-6)22bda – Casa Grande #25	1,320
Indian Hills 100,000	1	D(6-6)21bbb – Cottonwood Lane #14	250
North Park 650,000	1	D(6-6)22bad – Casa Grande #20	1,110
North Park 35,000	1	D(6-6)22baa – Casa Grande #23	1,550
Scott Drive 110,000	1	D(6-6)15cdd – Casa Grande #26	1,400
Scott Drive 5,000,000	1	D(7-6)35ddd – AZ City/Battaglia #28	1,620
Tierra Grande #1 10,000	1	D(6-6)15ccb – Casa Grande #17	850
Tierra Grande #1 250,000	1	D(6-6)22cdc – Casa Grande #21	740
		D(6-6)22cdd – Casa Grande #24	950
		D(6-7)5baa – Lake-in-the-Desert #27	550
		D(6-6)25dcd - Casa Grande #29	1,380
		D(6-7)36add - Tierra Grande #1	420
		D(6-7)36add - Tierra Grande #3	95

Other Water Sources in Gallons per Minute (Non-Potable CAP Water) →	GPM 1583
Fire Hydrants on System →	(YES) NO
Total Water Pumped Last 13 Months (Gallons in Thousands) →	4,041,336

APPENDIX 1

WATER USE DATA SHEET

NAME OF COMPANY →	ARIZONA WATER COMPANY - Coolidge
ADEQ Public Water System No. →	11-014 2004

MONTH/YEAR (LAST 13 MONTHS)	NUMBER OF CUSTOMERS	GALLONS SOLD (Thousands)	GALLONS PUMPED	GALLONS PURCHASED
January-05	3,241	30,529	32,012	0
December-04	3,195	27,706	30,576	0
November-04	3,188	30,797	35,949	0
October-04	3,175	43,800	41,776	0
September-04	3,156	48,108	53,650	0
August-04	3,145	46,848	53,809	0
July-04	3,138	54,128	55,434	0
June-04	3,110	45,281	63,474	0
May-04	3,105	40,799	47,142	0
April-04	3,098	34,389	40,276	0
March-04	3,065	24,388	38,802	0
February-04	3,048	25,652	29,772	0
January-04	3,059	28,433	30,996	0

STORAGE TANK CAPACITY (Gallons)	NUMBER OF EACH	ARIZONA DEPT. OF WATER RESOURCES WELL I.D. NUMBER	WELL PRODUCTION (Gallons per Minute)
Valley Farms 15,000	1	D(5-8)22 caa - Coolidge #7	1,625
Well 7 100,000	1	D(5-9)17-1 cdc - Valley Farms #1	240
Well 7 500,000	1	D(5-8)10-1 bca - Coolidge #9	1,300
Well 7 1,000,000	1	D(5-9)17-2 cdc - Valley Farms #1	312
Well 9 & 10 35,500	1	D(5-8)10-2 bca - Coolidge #10	1,200
Well 9 & 10 116,000	1		

Other Water Sources in Gallons per Minute →	GPM 0
Fire Hydrants on System →	(YES) NO
Total Water Pumped Last 13 Months (Gallons in Thousands) →	553,668

APPENDIX 1

WATER USE DATA SHEET

NAME OF COMPANY →	ARIZONA WATER COMPANY - Coolidge
ADEQ Public Water System No. →	11-014 2005

MONTH/YEAR (LAST 13 MONTHS)	NUMBER OF CUSTOMERS	GALLONS SOLD (Thousands)	GALLONS PUMPED	GALLONS PURCHASED
January-06	3,962	32,388	57,319	0
December-05	3,944	38,244	38,557	0
November-05	3,922	41,480	45,177	0
October-05	3,871	46,877	49,354	0
September-05	3,840	51,344	54,272	0
August-05	3,785	43,414	51,794	0
July-05	3,745	58,721	59,903	0
June-05	3,635	49,291	57,514	0
May-05	3,545	41,603	54,956	0
April-05	3,436	36,650	42,226	0
March-05	3,330	22,435	34,345	0
February-05	3,267	22,975	26,763	0
January-05	3,241	30,529	32,012	0

STORAGE TANK CAPACITY (Gallons)	NUMBER OF EACH	ARIZONA DEPT. OF WATER RESOURCES WELL I.D. NUMBER	WELL PRODUCTION (Gallons per Minute)
Valley Farms 15,000	1	D(5-8)22 caa - Coolidge #7	1,625
Well 7 100,000	1	D(5-9)17-1 cdc - Valley Farms #1	240
Well 7 500,000	1	D(5-8)10-1 bca - Coolidge #9	1,300
Well 7 1,000,000	1	D(5-9)17-2 cdc - Valley Farms #1	312
Well 9 & 10 35,500	1	D(5-8)10-2 bca - Coolidge #10	1,200
Well 9 & 10 116,000	1		

Other Water Sources in Gallons per Minute →	GPM 0
Fire Hydrants on System →	(YES) NO
Total Water Pumped Last 13 Months (Gallons in Thousands) →	604,192

APPENDIX 1

WATER USE DATA SHEET

NAME OF COMPANY →	ARIZONA WATER COMPANY - Stanfield
ADEQ Public Water System No. →	11-012 2004

MONTH/YEAR (LAST 13 MONTHS)	NUMBER OF CUSTOMERS	GALLONS SOLD (Thousands)	GALLONS PUMPED	GALLONS PURCHASED
January-05	214	1,727	1,777	0
December-04	212	1,539	1,793	0
November-04	218	1,823	1,946	0
October-04	217	2,469	2,268	0
September-04	214	2,648	2,705	0
August-04	213	2,945	3,115	0
July-04	214	3,512	3,392	0
June-04	214	2,846	3,758	0
May-04	213	2,612	2,756	0
April-04	214	2,343	2,500	0
March-04	215	1,483	2,386	0
February-04	217	1,607	1,601	0
January-04	218	1,926	1,855	0

STORAGE TANK CAPACITY (Gallons)	NUMBER OF EACH	ARIZONA DEPT. OF WATER RESOURCES WELL I.D. NUMBER	WELL PRODUCTION (Gallons per Minute)
Stanfield 100,000	1	D(6-4)20ccc – Stanfield #1	340
Stanfield 20,000	1	D(6-4)19adc – Tabletop #2	175
Tabletop 16,000	1		

Other Water Sources in Gallons per Minute →	GPM 0
Fire Hydrants on System →	(YES) NO
Total Water Pumped Last 13 Months (Gallons in Thousands) →	30,075

APPENDIX 1

WATER USE DATA SHEET

NAME OF COMPANY →	ARIZONA WATER COMPANY - Stanfield
ADEQ Public Water System No. →	11-012 2005

MONTH/YEAR (LAST 13 MONTHS)	NUMBER OF CUSTOMERS	GALLONS SOLD (Thousands)	GALLONS PUMPED	GALLONS PURCHASED
January-06	211	2,146	2,118	0
December-05	209	2,043	2,178	0
November-05	209	2,164	2,434	0
October-05	212	2,822	2,922	0
September-05	211	3,087	3,199	0
August-05	210	2,730	3,225	0
July-05	218	3,501	3,575	0
June-05	214	2,852	3,453	0
May-05	214	2,170	2,934	0
April-05	215	2,213	2,591	0
March-05	218	1,096	1,929	0
February-05	214	1,292	1,429	0
January-05	214	1,727	1,777	0

STORAGE TANK CAPACITY (Gallons)	NUMBER OF EACH	ARIZONA DEPT. OF WATER RESOURCES WELL I.D. NUMBER	WELL PRODUCTION (Gallons per Minute)
Stanfield 100,000	1	D(6-4)20ccc – Stanfield #1	340
Stanfield 20,000	1	D(6-4)19adc – Tabletop #2	175
Tabletop 16,000	1		

Other Water Sources in Gallons per Minute →	GPM 0
Fire Hydrants on System →	(YES) NO
Total Water Pumped Last 13 Months (Gallons in Thousands) →	33,764

APPENDIX 2

WATER USE DATA SHEET

NAME OF COMPANY ⟶	ARIZONA WATER COMPANY - White Tank
ADEQ Public Water System No. ⟶	07-128 2004

MONTH/YEAR (LAST 13 MONTHS)	NUMBER OF CUSTOMERS	GALLONS SOLD (Thousands)	GALLONS PUMPED	GALLONS PURCHASED
January-05	1,482	11,776	12,357	0
December-04	1,474	19,594	20,772	0
November-04	1,439	20,011	15,958	0
October-04	1,434	24,578	21,814	0
September-04	1,430	26,523	27,882	0
August-04	1,410	27,402	29,964	0
July-04	1,405	27,280	29,500	0
June-04	1,405	28,523	33,318	0
May-04	1,380	19,110	22,325	0
April-04	1,372	15,093	17,700	0
March-04	1,367	12,174	16,512	0
February-04	1,340	10,639	11,834	0
January-04	1,342	12,772	12,252	0

STORAGE TANK CAPACITY (Gallons)	NUMBER OF EACH	ARIZONA DEPT. OF WATER RESOURCES WELL I.D. NUMBER	WELL PRODUCTION (Gallons per Minute)
Beautiful AZ Estates 500,000	1	B(2-2)33 cbd – White Tank #2	165
Beautiful AZ Estates 1,000,000	1	B(2-2)33 cbd – White Tank #4	460
Monte Vista 50,000	1	B(2-2)32 abb – Pasqualetti #8	175
Monte Vista 100,000	1	B(1-2)3 bbb – Golightly #7	60

Interconnect w/Arizona American Water Co. ⟶	GPM 150
Fire Hydrants on System ⟶	(YES) NO
Total Water Pumped Last 13 Months (Gallons in Thousands) ⟶	272,188

APPENDIX 2

WATER USE DATA SHEET

NAME OF COMPANY ⟶	ARIZONA WATER COMPANY - White Tank
ADEQ Public Water System No. ⟶	07-128 2005

MONTH/YEAR (LAST 13 MONTHS)	NUMBER OF CUSTOMERS	GALLONS SOLD (Thousands)	GALLONS PUMPED	GALLONS PURCHASED
January-06	1,586	18,247	20,792	0
December-05	1,592	20,471	19,688	0
November-05	1,588	23,252	23,145	0
October-05	1,580	28,138	28,109	0
September-05	1,573	29,957	30,730	0
August-05	1,563	29,094	30,363	0
July-05	1,547	33,472	33,241	0
June-05	1,536	30,032	34,998	0
May-05	1,525	21,772	31,982	0
April-05	1,519	16,352	23,203	0
March-05	1,487	10,653	16,048	0
February-05	1,490	11,122	10,377	0
January-05	1,482	11,776	12,357	0

STORAGE TANK CAPACITY (Gallons)	NUMBER OF EACH	ARIZONA DEPT. OF WATER RESOURCES WELL I.D. NUMBER	WELL PRODUCTION (Gallons per Minute)
Beautiful AZ Estates 500,000	1	B(2-2)33 cbd – White Tank #2	165
Beautiful AZ Estates 1,000,000	1	B(2-2)33 cbd – White Tank #4	460
Monte Vista 50,000	1	B(2-2)32 abb – Pasqualetti #8	175
Monte Vista 100,000	1	B(1-2)3 bbb – Golightly #7	60

Interconnect w/Arizona American Water Co. ⟶	GPM 350
Fire Hydrants on System ⟶	(YES) NO
Total Water Pumped Last 13 Months (Gallons in Thousands) ⟶	315,033

APPENDIX 3

Arizona-American Water Company - Agua Fria District **Schedule B-4**
Comparison of Water Supply Options
White Tanks Regional Water Treatment Plant
Operating Cost Estimate
Prepared by ARICOR Water Solutions
9/12/2005

Annual Operating Cost Estimate				
Constructed Capacity		20.00	MGD	
Plant Utilization Factor		80%		
Annual Average Daily (AAD) Flow		16.00	MGD	
Annual Average Daily (AAD) Flow		5,840,000,000	gallons	
				Arizona American Cost Estimate
Fixed Costs				
Labor				$ 644,741
Vehicle Expense				2,996
Leased Auto				25,656
Telephone and Telemetery				20,662
Misc. Expense				49,324
Safety Supplies				4,250
Misc. Contract Services				96,445
Contract Lab				39,015
Replacements				118,854
Maintenance				106,755
Total Fixed Cost				$ 1,108,699
Variable Costs	Unit Cost per 1,000 gallon			
Treatment Chemicals	$	0.0530		$ 309,236
UV Royalty	$	0.0150		87,600
Sludge Chemicals	$	0.0012		7,175
Sludge Hauling	$	0.0128		74,867
Electric Power	$	0.0426		248,525
Total Variable Costs				$ 727,403
Management and Overhead Costs				
Contract Operator			15.0%	$ 275,415
Maricopa Water District			10.0%	183,610
Total Management and Overhead Costs				$ 459,026
Total Estimated Operating Costs				$ 2,295,128
Total Cost per 1,000 gallons				$ 0.3930