WRDC Power Sector Water Consumption Forecast Results (February 2011)
State Water Consumption Forecast

Year	State Forecast Summary Range of Results (Acre Feet)
2010	230,000
2035	298,000 - 409,000
2060	361,000 - 517,000
2110	414,000 - 632,000

Scenario A
Lower Power Plant Water Consumption Forecast
Modest Increase: Energy Production Per Person
Significant Decrease: Power Plant Water Consumption Per Unit of Energy

	Statistic	Unit of Measurement	2010	2035	2060	2110
1	Population	People	6,600,000	10,500,000	13,300,000	18,300,000
2	Energy Production Per Person	mwh/Person	18.5	18.5	19.4	20.0
3	Total Projected Energy Production	mwh	122,000,000	198,158,834	266,276,759	382,113,655
4	Electric Power Plant Water Consumption Per Unit of	Gallons/mwh	613.0	490.4	441.4	353.1
5	Total Electric Power Plant Water Consumption	Acre Feet	229,510	298,225	360,667	414,053

Scenario B
Higher Power Plant Water Consumption Forecast
Sustained Increase: Energy Production Per Person
Delayed Decrease: Power Plant Water Consumption Per Unit of Energy

	Statistic	Unit of Measurement	2010	2035	2060	2110
1	Population	People	6,600,000	10,500,000	13,300,000	18,300,000
2	Energy Production Per Person	mwh/Person	18.5	20.3	22.4	24.6
3	Total Projected Energy Production	mwh	122,000,000	217,567,925	305,612,517	466,512,700
4	Electric Power Plant Water Consumption Per Unit of	Gallons/mwh	613.0	613.0	551.7	441.4
5	Total Electric Power Plant Water Consumption	Acre Feet	229,510	409,294	517,433	631,883

WRDC Power Sector Water Consumption Forecast Results (February 2011)
County Water Consumption Forecast

Scenario A
Lower Power Plant Water Consumption Forecast
Modest Increase: Energy Production Per Person
Significant Decrease: Power Plant Water Consumption Per Unit of Energy

	Arizona Counties	2010 Water Consumption (Acre Feet)	2035 Water Consumption (Acre Feet)	2060 Water Consumption (Acre Feet)	2110 Water Consumption (Acre Feet)	2010 Water Consumption (%)	2035 Water Consumption (%)	2060 Water Consumption (%)	2110 Water Consumption (%)
1	Maricopa	114,625	147,741	177,964	203,327	49.9	49.5	49.3	49.1
2	Coconino	40,297	51,287	61,391	69,604	17.6	17.2	17.0	16.8
3	Apache	33,239	42,304	50,637	57,411	14.5	14.2	14.0	13.9
4	Navajo	14,752	18,776	22,474	25,481	6.4	6.3	6.2	6.2
5	Mohave	14,296	18,360	22,076	25,168	6.2	6.2	6.1	6.1
6	Cochise	5,231	6,657	7,969	9,035	2.3	2.2	2.2	2.2
7	Pinal	3,408	4,338	5,193	5,887	1.5	1.5	1.4	1.4
8	Pima	2,153	2,741	3,281	3,719	0.9	0.9	0.9	0.9
9	Yuma	1,308	2,192	2,942	3,779	0.6	0.7	0.8	0.9
10	La Paz	156	3,775	6,675	10,569	0.1	1.3	1.9	2.6
11	Santa Cruz	30	38	46	52	0.0	0.0	0.0	0.0
12	Yavapai	13	16	19	22	0.0	0.0	0.0	0.0
13	Gila	-	-	-	-	0.0	0.0	0.0	0.0
14	Graham	-	-	-	-	0.0	0.0	0.0	0.0
15	Greenlee	-	-	-	-	0.0	0.0	0.0	0.0
	Total	229,510	298,225	360,667	414,053	100.0	100.0	100.0	100.0

Scenario B
Higher Power Plant Water Consumption Forecast
Sustained Increase: Energy Production Per Person
Delayed Decrease: Power Plant Water Consumption Per Unit of Energy

	Arizona Counties	2010 Water Consumption (Acre Feet)	2035 Water Consumption (Acre Feet)	2060 Water Consumption (Acre Feet)	2110 Water Consumption (Acre Feet)	2010 Water Consumption (%)	2035 Water Consumption (%)	2060 Water Consumption (%)	2110 Water Consumption (%)
1	Maricopa	114,625	202,912	255,717	311,252	49.9	49.6	49.4	49.3
2	Coconino	40,297	70,520	88,432	107,076	17.6	17.2	17.1	16.9
3	Apache	33,239	58,167	72,942	88,320	14.5	14.2	14.1	14.0
4	Navajo	14,752	25,817	32,374	39,199	6.4	6.3	6.3	6.2
5	Mohave	14,296	25,225	31,744	38,581	6.2	6.2	6.1	6.1
6	Cochise	5,231	9,154	11,479	13,899	2.3	2.2	2.2	2.2
7	Pinal	3,408	5,965	7,480	9,057	1.5	1.5	1.4	1.4
8	Pima	2,153	3,768	4,726	5,722	0.9	0.9	0.9	0.9
9	Yuma	1,308	2,949	4,058	5,375	0.6	0.7	0.8	0.9
10	La Paz	156	4,744	8,389	13,289	0.1	1.2	1.6	2.1
11	Santa Cruz	30	52	66	80	0.0	0.0	0.0	0.0
12	Yavapai	13	22	28	33	0.0	0.0	0.0	0.0
13	Gila	-	-	-	-	0.0	0.0	0.0	0.0
14	Graham	-	-	-	-	0.0	0.0	0.0	0.0
15	Greenlee	-	-	-	-	0.0	0.0	0.0	0.0
	Total	229,510	409,294	517,433	631,883	100.0	100.0	100.0	100.0

WRDC Power Sector Water Consumption Forecast Results (February 2011)
Groundwater Basin Water Consumption Forecast

Scenario A
Lower Power Plant Water Consumption Forecast
Modest Increase: Energy Production Per Person
Significant Decrease: Power Plant Water Consumption Per Unit of Energy

	Arizona Groundwater Basins	2010 Water Consumption (Acre Feet)	2035 Water Consumption (Acre Feet)	2060 Water Consumption (Acre Feet)	2110 Water Consumption (Acre Feet)	2010 Water Consumption (%)	2035 Water Consumption (%)	2060 Water Consumption (%)	2110 Water Consumption (%)
1	Phoenix AMA	100,030	127,311	152,391	172,777	43.6	42.7	42.3	41.7
2	Little Colorado River	80,956	103,034	123,332	139,831	35.3	34.5	34.2	33.8
3	Gila Bend	14,266	18,787	22,868	26,456	6.2	6.3	6.3	6.4
4	Lake Mohave	11,076	14,097	16,874	19,131	4.8	4.7	4.7	4.6
5	Paria	7,332	9,332	11,171	12,665	3.2	3.1	3.1	3.1
6	Willcox	5,229	6,656	7,967	9,033	2.3	2.2	2.2	2.2
7	Pinal AMA	3,263	4,153	4,972	5,637	1.4	1.4	1.4	1.4
8	Sacramento Valley	3,220	4,263	5,202	6,037	1.4	1.4	1.4	1.5
9	Tucson AMA	2,298	2,925	3,502	3,970	1.0	1.0	1.0	1.0
✓10	Yuma	1,308	1,929	2,468	3,019	0.6	0.6	0.7	0.7
11	Salt River	330	420	502	569	0.1	0.1	0.1	0.1
12	Parker	156	3,775	6,675	10,569	0.1	1.3	1.9	2.6
13	Santa Cruz AMA	30	38	46	52	0.0	0.0	0.0	0.0
14	Prescott AMA	13	16	19	22	0.0	0.0	0.0	0.0
15	Douglas	1	1	2	2	0.0	0.0	0.0	0.0
16	Coconino Plateau	0	0	0	0	0.0	0.0	0.0	0.0
17	Agua Fria	-	-	-	-	0.0	0.0	0.0	0.0
18	Aravaipa Canyon	-	-	-	-	0.0	0.0	0.0	0.0
19	Big Sandy	-	-	-	-	0.0	0.0	0.0	0.0
20	Bill Williams	-	-	-	-	0.0	0.0	0.0	0.0
21	Bonita Creek	-	-	-	-	0.0	0.0	0.0	0.0
22	Butler Valley	-	-	-	-	0.0	0.0	0.0	0.0
23	Clenega Creek	-	-	-	-	0.0	0.0	0.0	0.0
24	Detrital Valley	-	-	-	-	0.0	0.0	0.0	0.0
25	Donnelly Wash	-	-	-	-	0.0	0.0	0.0	0.0
26	Dripping Springs	-	-	-	-	0.0	0.0	0.0	0.0
27	Duncan Valley	-	-	-	-	0.0	0.0	0.0	0.0
28	Grand Wash	-	-	-	-	0.0	0.0	0.0	0.0
✓29	Harquahala	-	612	1,101	1,762	0.0	0.2	0.3	0.4
30	Hualapai Valley	-	-	-	-	0.0	0.0	0.0	0.0
31	Kanab Plateau	-	-	-	-	0.0	0.0	0.0	0.0
32	Lake Havasu	-	-	-	-	0.0	0.0	0.0	0.0
✓33	Lower Gila	-	875	1,576	2,521	0.0	0.3	0.4	0.6
34	Lower San Pedro	-	-	-	-	0.0	0.0	0.0	0.0
35	McMullen Valley	-	-	-	-	0.0	0.0	0.0	0.0
36	Meadview	-	-	-	-	0.0	0.0	0.0	0.0
37	Morenci	-	-	-	-	0.0	0.0	0.0	0.0
38	Peach Springs	-	-	-	-	0.0	0.0	0.0	0.0
39	Ranegras Plain	-	-	-	-	0.0	0.0	0.0	0.0
40	Safford	-	-	-	-	0.0	0.0	0.0	0.0
41	San Bernardino Valley	-	-	-	-	0.0	0.0	0.0	0.0
42	San Rafael	-	-	-	-	0.0	0.0	0.0	0.0
43	San Simon Wash	-	-	-	-	0.0	0.0	0.0	0.0
44	Shivwits Plateau	-	-	-	-	0.0	0.0	0.0	0.0
45	Tiger Wash	-	-	-	-	0.0	0.0	0.0	0.0
46	Tonto Creek	-	-	-	-	0.0	0.0	0.0	0.0
47	Upper Hassayampa	-	-	-	-	0.0	0.0	0.0	0.0
48	Upper San Pedro	-	-	-	-	0.0	0.0	0.0	0.0
49	Verde River	-	-	-	-	0.0	0.0	0.0	0.0
50	Virgin River	-	-	-	-	0.0	0.0	0.0	0.0
51	Western Mexican Drainage	-	-	-	-	0.0	0.0	0.0	0.0
	Total	229,510	298,225	360,667	414,053	100.0	100.0	100.0	100.0

WRDC Power Sector Water Consumption Forecast Results (February 2011)
Groundwater Basin Water Consumption Forecast

Scenario B
Higher Power Plant Water Consumption Forecast
Sustained Increase: Energy Production Per Person
Delayed Decrease: Power Plant Water Consumption Per Unit of Energy

	Arizona Groundwater Basins	2010 Water Consumption (Acre Feet)	2035 Water Consumption (Acre Feet)	2060 Water Consumption (Acre Feet)	2110 Water Consumption (Acre Feet)	2010 Water Consumption (%)	2035 Water Consumption (%)	2060 Water Consumption (%)	2110 Water Consumption (%)
1	Phoenix AMA	100,030	175,052	219,516	265,795	43.6	42.8	42.4	42.1
2	Little Colorado River	80,956	141,672	177,657	215,112	35.3	34.6	34.3	34.0
3	Gila Bend	14,266	25,753	32,725	40,176	6.2	6.3	6.3	6.4
4	Lake Mohave	11,076	19,383	24,307	29,431	4.8	4.7	4.7	4.7
5	Paria	7,332	12,832	16,091	19,484	3.2	3.1	3.1	3.1
6	Willcox	5,229	9,152	11,476	13,896	2.3	2.2	2.2	2.2
7	Pinal AMA	3,263	5,711	7,161	8,671	1.4	1.4	1.4	1.4
8	Sacramento Valley	3,220	5,841	7,437	9,150	1.4	1.4	1.4	1.4
9	Tucson AMA	2,298	4,022	5,044	6,107	1.0	1.0	1.0	1.0
10	Yuma	1,308	2,619	3,464	4,426	0.6	0.6	0.7	0.7
11	Salt River	330	577	723	876	0.1	0.1	0.1	0.1
12	Parker	156	4,744	8,389	13,289	0.1	1.2	1.6	2.1
13	Santa Cruz AMA	30	52	66	80	0.0	0.0	0.0	0.0
14	Prescott AMA	13	22	28	33	0.0	0.0	0.0	0.0
15	Douglas	1	2	3	3	0.0	0.0	0.0	0.0
16	Coconino Plateau	0	0	0	0	0.0	0.0	0.0	0.0
17	Agua Fria	-	-	-	-	0.0	0.0	0.0	0.0
18	Aravaipa Canyon	-	-	-	-	0.0	0.0	0.0	0.0
19	Big Sandy	-	-	-	-	0.0	0.0	0.0	0.0
20	Bill Williams	-	-	-	-	0.0	0.0	0.0	0.0
21	Bonita Creek	-	-	-	-	0.0	0.0	0.0	0.0
22	Butler Valley	-	-	-	-	0.0	0.0	0.0	0.0
23	Cienega Creek	-	-	-	-	0.0	0.0	0.0	0.0
24	Detrital Valley	-	-	-	-	0.0	0.0	0.0	0.0
25	Donnelly Wash	-	-	-	-	0.0	0.0	0.0	0.0
26	Dripping Springs	-	-	-	-	0.0	0.0	0.0	0.0
27	Duncan Valley	-	-	-	-	0.0	0.0	0.0	0.0
28	Grand Wash	-	-	-	-	0.0	0.0	0.0	0.0
29	Harquahala	-	765	1,377	2,202	0.0	0.2	0.3	0.3
30	Hualapai Valley	-	-	-	-	0.0	0.0	0.0	0.0
31	Kanab Plateau	-	-	-	-	0.0	0.0	0.0	0.0
32	Lake Havasu	-	-	-	-	0.0	0.0	0.0	0.0
33	Lower Gila	-	1,094	1,970	3,152	0.0	0.3	0.4	0.5
34	Lower San Pedro	-	-	-	-	0.0	0.0	0.0	0.0
35	McMullen Valley	-	-	-	-	0.0	0.0	0.0	0.0
36	Meadview	-	-	-	-	0.0	0.0	0.0	0.0
37	Morenci	-	-	-	-	0.0	0.0	0.0	0.0
38	Peach Springs	-	-	-	-	0.0	0.0	0.0	0.0
39	Ranegras Plain	-	-	-	-	0.0	0.0	0.0	0.0
40	Safford	-	-	-	-	0.0	0.0	0.0	0.0
41	San Bernardino Valley	-	-	-	-	0.0	0.0	0.0	0.0
42	San Rafael	-	-	-	-	0.0	0.0	0.0	0.0
43	San Simon Wash	-	-	-	-	0.0	0.0	0.0	0.0
44	Shivwits Plateau	-	-	-	-	0.0	0.0	0.0	0.0
45	Tiger Wash	-	-	-	-	0.0	0.0	0.0	0.0
46	Tonto Creek	-	-	-	-	0.0	0.0	0.0	0.0
47	Upper Hassayampa	-	-	-	-	0.0	0.0	0.0	0.0
48	Upper San Pedro	-	-	-	-	0.0	0.0	0.0	0.0
49	Verde River	-	-	-	-	0.0	0.0	0.0	0.0
50	Virgin River	-	-	-	-	0.0	0.0	0.0	0.0
51	Western Mexican Drainage	-	-	-	-	0.0	0.0	0.0	0.0
	Total	229,510	409,294	517,433	631,883	100.0	100.0	100.0	100.0