CITIZENS WATER ADVOCACY GROUP

REVIEW OF THE

PRESCOTT ACTIVE MANAGEMENT AREA

THIRD MANAGEMENT PLAN

October 2004
Revised March 2005

ACKNOWLEGEMENTS

Citizens Water Advocacy Group (CWAG) members Bill Meyer, John Zambrano, Ed Wolfe and Howard Mechanic undertook a review and analysis of the Third Management Plan with regard to the scenario to achieve safe yield. Bill Meyer and Ed Wolfe prepared most of the information in the tables in this report, and Bill Meyer presented the information on October 4, 2004 at a meeting of the Governor's Groundwater Users Advisory Council, using PowerPoint software. John Zambrano prepared this report using the information previously prepared. This report is available in PDF format at www.cwagaz.org

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FINDINGS AND RECOMMENDATIOS

Significant findings include:

1. Actual overdrafts for years 2001, 2002 and 2003 substantially exceed Third Management Plan (TMP) projections (without imported water) for all years through 2025;

2. The TMP contains an error in addition that understates demand by 900 acre-feet;

3. Actual municipal pumpage for year 2003 exceeds TMP projected pumpage for the year 2005;

4. Population projections by the three municipalities indicate that the projections used in the TMP may be significantly under estimated;

5. TMP projections of agricultural demand ignore potential increased demand from retired Irrigation Grand Fathered Rights (IGFRs) and from Flex Credits;

6. TMP projections of industrial demand of 300 acre feet for 2025 are greatly below the full allotment of 5,250 acre feet and the 2003 demand of 1,359 acre-feet;

7. Reported pumpage for exempt wells in 2001and 2003 is substantially greater than the TMP projections for their respective years, and exempt well pumpage is likely to increase above current values;

8. Actual total pumpage for the year 2003 exceeds the TMP projected pumpage for the year 2015;

9. ADWR's (2002) hydrologic model predicts that some locations within the PAMA will go dry, and that as a result the model could not accommodate the entire projected pumpage;

10. The amount of effluent projected in the TMP for reuse and recharged (65% of pumpage) greatly exceeds the amount based on using actual ratios of effluent to pumpage (54%);

11. The potential need for using effluent for mitigation of the effect of importing water has not been considered;

12. An overdraft for 2025 of about 15,000 acre-feet would result if the TMP included: correction of the error in addition, conversion of IGFRs to assured water supply credits, use of available industrial water rights, use of actual ratios of effluent to demand and a three percent growth rate in exempt-well demand; and

13. The overdraft would further increase to about 18,000 acre feet if the TMP used an exempt-well growth rate of 5%.

Recommendations include:

1. The TMP should be revised to consider the findings presented in this report;

2. ADWR needs to more actively manage the PAMA to reach safe yield;

3. New or revised management plans should use the 2002 hydrologic model;

4. ADWR needs enforcement tools through new legislation to manage the PAMA;

5. Annual hydrologic reports should be readily comparable to Management Plans;

6. IGFRs need to be included in safe-yield calculations;

7. Exempt wells need to be regulated;

8. To encourage conservation and efficiency, more stringent per capita water use levels should be established, and all or a large part of the savings from this conservation should be required to go to permanent recharge;

9. All or a large part of alternative waters should be used to achieve safe yield; and

10. The Yavapai County Board of Supervisors should pass a resolution to encourage the legislature to enact laws that will mandate safe yield, regulate exempt wells and provide enforcement mechanisms for the Prescott AMA.

INTRODUCTION

The water supply for the Prescott Tri-cities area is primarily groundwater pumped from the aquifer system that underlies the Prescott Active Management Area (PAMA). A state-mandated goal of the PAMA is to achieve safe yield by the year 2025. The state describes a scenario for achieving safe yield through a series of Management Plans. The Third Management Plan (TMP) is currently in effect and covers the period 2000-2010.

The Citizens Water Advocacy Group (CWAG) has followed the issue of safe-yield and does not believe that the water users in the PAMA are on track to meet it. CWAG wrote a letter to Herb Guenther, Director of the Arizona Department of Water Resources, (Appendix 1) to that effect and asked that the TMP be reopened to include new provisions to achieve safe yield. The Director replied (Appendix 2) that he appreciated CWAG's concerns and asked CWAG to present its analysis and suggestions to the Department at a special meeting of the Governor's Groundwater Users Advisory Council (GUAC).

CWAG made its presentation at a GUAC meeting on October 4, 2004 in the form of a PowerPoint presentation. That presentation included a segment on water conservation and a segment on concerns with the Department's scenario to achieve safe yield. This report describes the segment on safe yield, using the slides from the October 4 presentation with some modifications and updates.

Further correspondence between CWAG and ADWR subsequent to the presentation is presented in Appendix 3 and Appendix 4.

PAMA OVERDRAFT

Table 1 compares the overdraft (without imported water) projected in the TMP with actual overdraft determinations for recent years.

Table 1
PAMA OVERDRAFT, Acre-Feet

Year	2000	2001	2002	2003	2005	2010	2015	2020	2025
TMP	-9,137				-7,314	-5,844	-7099	-7899	-8819
Actual		-11,510	-15,450	-11,300					

As shown in Table 1, the actual overdraft for the years 2001 through 2003 substantially exceeds the projected deficits for every year from 2002 to 2025. The increased overdraft in 2002 may be a result of very low precipitation that year.

TMP WATER DEMAND PROJECTIONS

Table 2 presents the TMP projections for water demand from 2000 to 2025 by categories and for the total. The information is taken from Table 11-5 of the TMP.

Table 2
TMP PROJECTIONS FOR WATER DEMAND, Acre-Feet

Demand/Year	Baseline	2000	2005	2010	2015	2020	2025
Municipal	10,300	11,100	12,900	14,700	16,600	18,400	20,100
Municipal Effluent	900	1,600	1,900	2,100	2,400	2,600	2,800
Agricultural	6,800	4,400	3,500	4,100	4,100	4,100	4,100
Agricultural Effluent	0	1,500	1,500	0	0	0	0
Industrial	700	300	300	200	300	300	300
Exempt Well	1,100	1,200	1,300	1,300	1,400	1,400	1,500
Total	18,900	19,200	20,500	21,500	23,900	25,900	27,900
Corrected Total	19,800	20,100	21,400	22,400	24,800	26,800	28,800

A check of the sum of the categories to the total listed reveals an error in addition that understates the overdraft by 900 acre-feet. CWAG-corrected values are shown.

In addition to this error in addition, CWAG will show below that municipal, agricultural and exempt-well demands in recent years exceed the above projections. We will show that population trends also exceed projections and that industrial demand has the potential to exceed projections.

Municipal Pumpage

Table 3 presents a comparison of the TMP projected pumpage with the actual pumpage in recent years.

Table 3
MUNICIPAL PUMPAGE, Acre-Feet

	Baseline	2000	2003	2005	2010	2015	2020	2025
TMP	10,300	11,100		12,900	14,700	16,600	18,400	20,100
Actual			13,796					

Table 3 shows that the actual pumpage in 2003 exceeds the 2005 projection.

Population

A major reason why current pumpage exceeds future projected municipal demand is that population growth is exceeding ADWR projections. Table 4 presents population projections used by the state in the TMP and projections obtained by CWAG from more recent municipal reports.

Table 4
POPULATION PROJECTIONS

ADWR (2025)…….	147,680[1]
City of Prescott (2025) ……..71,136[2]	
Prescott Valley……..…63,250[3]	
Chino Valley (2008)…...…21,835[4]	
Total…….……156,221	

[1]ADWR, 1997, Population Projections (1997-2050) For Use in Statewide Water Planning.
[2]City of Prescott, Application for Designation of Assured Water Supply, September 1, 2004 (3 % growth through 2013; 2.5 % growth 2014 through 2025).
[3]Town of Prescott Valley, 2002, General Plan 2020; value is 2.5 times the number of Certificates of Assured Water Supply (approximately 25,300 lots; p. 127).
[4]Town of Chino Valley, 2003, General Plan; value is 2.5 times total lots identified in five-year plan.

This partial population projection of 156,221, which is for only the three incorporated communities, is greater than ADWR's of 147,680 for 2025 for the entire PAMA. Furthermore, the partial projection of 156,221 does not include: population supplied by private water providers or exempt wells outside of the three incorporated communities; growth in Chino Valley after 2008; and an expected additional population of 28,000 in Prescott Valley supported by 4,000 ac-ft/yr of imported Big Chino water; probable accelerated growth in the newly incorporated Dewey-Humboldt community.

Agricultural Pumpage

Table 5 presents a comparison of TMP projections with actual agricultural pumpage in recent years.

Table 5
AGRICULTURAL PUMPAGE, Acre-Feet

	Baseline	2000	2001	2002	2003	2005	2010	2015	2020	2025
TMP	6,800	4,400				3,500	4,100	4,100	4,100	4,100
Actual	6,800		4,520	6,220	4037					

There are two agriculture-related problems. Approximately 5,600 acres that retain irrigation-grandfathered rights (IGFRs) existed when the TMP became effective. Retirement of these rights represents as much as 210,000 acre-feet of assured water rights, equivalent to 2,100 acre-feet per year demand or 16,800 acre-feet of Type 1 rights. Neither right is considered as a potential demand in the TMP.

A second potential problem is that flex credits of approximately 158,000 acre-feet are not addressed in the TMP calculations.

Industrial Demand

Table 6 presents the Industrial demand from Table 11-5 of the TMP.

Table 6
TMP INDUSTRIAL DEMAND, Acre-Feet

Year	Baseline	2000	2003	2005	2010	2015	2020	2025
TMP	700	300		300	200	300	300	300
Actual			1,359					

As shown in Table 6, actual industrial demand in 2003 greatly exceeded the demand projected for 2025. Moreover, the allotment for industrial water rights in 2000 equaled 5,250 acre-feet. As stated in the TMP "if industrial water use increases to a volume close to the full allotment of industrial water rights (5,250 acre-feet), the Prescott AMA would be moved that much further away from the achievement of its safe yield goal by the year 2025."

Exempt Well Pumpage

Table 7 presents a comparison of projected exempt-well pumpage with reported pumpage in recent years.

Table 7
EXEMPT-WELL PUMPAGE, Acre-Feet

	Baseline	2000	2001	2003	2005	2010	2015	2020	2025
TMP	1,100	1,200			1,300	1,300	1,400	1,400	1,500
Reported			3,100[1]	3,255[1]					

[1] Includes mountain pumpage, which is not included in TMP projections.

As shown in Table 7, the reported exempt-well use in 2001 and 2003 exceeds projections for all years and exceeds the 2025 projection by 1,600 acre-feet. More importantly, the TMP allows virtually no growth in exempt wells even though the growth between 1985 and 2003 averaged just over five (5) percent per year. Furthermore, it is highly probable that as water restrictions on municipal supply limit growth inside the PAMA, exempt-well usage will accelerate far beyond TMP projections and previous growth rates.

Table 8 expands Table 7 to include exempt-well pumpage at growth rates of three (3) and five (5) percent per year.

Table 8
EXEMPT-WELL PUMPAGE GROWTH, Acre-Feet

	Baseline	2000	2001	2003	2005	2010	2015	2020	2025
TMP	1,100	1,200			1,300	1,300	1,400	1,400	1,500
Reported			3,100[1]	3,255[1]					
3% Growth[2]					3,453	4,003	4,641	5,380	6,237
5% Growth[2]					3,589	4,580	5,848	7,460	9,522

[1] Includes mountain pumpage, which is not included in TMP projections.
[2] CWAG projections are from year 2003 reported pumpage

As shown in Table 8, exempt-well demand increases in the year 2025 to 6,237 and 9,522 acre-feet at three (3) and five (5) percent growth rates, respectively. These are increases of about 4,700 and 8,000 acre-feet, respectively, above the amounts projected in the TMP. If potential growth in exempt-well pumpage is not controlled, it may be impossible to bring the PAMA into safe yield.

Total Pumpage

Table 9 presents a comparison of the TMP projection for the sum of exempt and non-exempt pumpage with actual pumpage.

Table 9
EXEMPT AND NON-EXEMPT PUMPAGE, Acre-Feet

	Baseline	2000	2001	2002	2003	2005	2010	2015	2020	2025
TMP	10,300	17,000	*17,200*[1]	*17,400*[1]	*17,600*[1]	18,000	20,300	22,400	24,200	26,000
Actual			21,270	24,900	22,500					

[1] Interpolated values

As shown in Table 9, total pumpage is growing much faster than TMP projections. Actual pumpage in 2001 exceeded the projected pumpage for that year by about 4,000 acre-feet and for the year 2010 by about 1,000 acre-feet. Pumpage in 2003 exceeded projected pumpage in that year by 4,900 acre-feet and for 2015 by 100 acre-feet. The high pumpage in 2002 was likely a result of very low rainfall that year.

TMP PROJECTED RENEWABLE SUPPLIES

Table 10 presents the TMP projections for renewable supplies from 2000 to 2025 by categories and for the total. The information is taken from Table 11-5 of the TMP, but does not include imported water.

Table 10
TMP PROJECTIONS FOR RENEWABLE SUPPLIES**, Acre-Feet**
EXCLUDING IMPORTATION OF WATER

Supplies/Year	Baseline	2000	2005	2010	2015	2020	2025
Net Natural Recharge	3,041	3,041	3,041	3,041	3,041	3,041	3,041
Incidental Recharge	1,735	1,490	1,265	1,035	1,040	1,040	1,040
COP Effluent	900	1,000	1,200	1,300	1,400	1,500	1,600
PV Effluent	0	600	700	900	1,000	1,100	1,200
Recovered Effluent Credits	2,993	1,532	4,580	6,980	7,920	8,920	9,800
Recovered Surface Water Credits	0	1,500	1,500	1,500	1,500	1,500	1,500
Agricultural Surface Water	900	900	900	900	900	900	900
Total Renewable Supplies	9,569	10,063	13,186	15,656	16,801	18,001	19,081

Net Natural Recharge

Since the issuance of the TMP, the ADWR has constructed a new model of the PAMA, described in Modeling Report No. 12, September 2002, by Keith Nelson. This model should be used in future projections. It is noted that this model predicts that Del Rio Springs will dry up. The model also predicts that nodes (locations) will go dry, and it therefore could not accommodate the entire projected pumpage in the PAMA. Dry nodes, which are likely to be locations where pumping currently takes place, need to be considered in future projections.

Incidental Recharge

Values for incidental recharge need to be reevaluated.

Municipal Effluent and Recovered Effluent Credits

The amount of municipal effluent that is available relative to groundwater pumpage is important because much of that effluent can be used to recharge the aquifer and help achieve safe yield. Pumpage that is not captured by sewers, such as for watering vegetation, is lost to the atmosphere.

Table 11 presents the TMP projections for the year 2025 for available municipal effluent and recovered-effluent credits.

Table 11
TMP YEAR 2025
MUNICIPAL EFFLUENT AND RECOVERED-EFFLUENT CREDITS, Acre-Feet

City of Prescott Effluent	1,600
Prescott Valley Effluent	1,200
Recovered Effluent Credits	9,800
Total Effluent	12,600
Municipal Demand	20,100
Effluent/Demand Ratio	63%
Effluent/Demand Ratio Adjusted	65%[1]
City of Prescott Actual Ratio	54%[2]

[1] Includes an additional 2% based on a loss factor of 4.7% of effluent to account for underground storage-project evaporation loss.

[2] Based on data from 1994 to 2003

Table 11 shows that for the Cities of Prescott and Prescott Valley, the TMP assumes that a total of 2,800 acre-feet of effluent will be used to satisfy the municipal effluent demands for reuse in 2025 (see Table 2). Reuse includes such activities as watering of golf courses. It also shows that 9,800 acre-feet will be recharged to the aquifer. This results in an effluent need of 12,600 acre-feet or 63% of the demand (groundwater pumpage) in 2025. As explained in the table footnote an additional 2% of effluent is needed to account for system losses, bringing the needed effluent to 65% of demand.

Table 11, however, shows that the actual effluent to demand ratio for the City of Prescott is 54%. Prescott Valley's actual ratio is substantially less than 54%, but is affected by uncollected sewage for a substantial portion of its water-service population.

In view of the actual ratios, 65% appears optimistic. Achieving 65% would necessitate very stringent restrictions on outside uses of water, which do not appear in the plans of either municipality. If the City of Prescott actual figure of 54% were used in the TMP for both municipalities, a shortfall of 2,211 acre feet would result.

DEMAND VERUS SUPPLY

Table 12 presents the TMP demand and supply projections from prior Tables 2 and 10, respectively.

Table 12
TMP DEMAND VERSUS SUPPLY**, Acre-Feet**
EXCLUDING IMPORTATION OF WATER

Year	Baseline	2000	2005	2010	2015	2020	2025
Demand	18,900	19,200	20,500	21,500	23,900	25,900	27,900
Corrected Demand	19,800	20,100	21,400	22,400	24,800	26,800	28,800
Renewable Supplies	9,569	10,063	13,186	15,656	16,801	18,001	19,081
Overdraft	-9,331	-9,137	-7,314	-5,844	-7,099	-7,899	-8,819
Corrected Overdraft[1]	-10,231	-10,037	-8,214	-6,744	-7,999	-8,799	-9,719

[1] Not in TMP; corrected for arithmetic error.

As shown in Table 12, demand exceeds supply in every year and by 8,819 acre-feet for 2025 as calculated in the TMP and by 9,719 acre-feet as corrected by CWAG for the error in addition.

IMPORTATION OF WATER FROM THE BIG CHINO AQUIFER

The overdraft is hypothetically eliminated by the TMP by the importation of water from the Big Chino aquifer. Table 13 presents a comparison of projected with actual importation water.

Table 13
IMPORTED WATER**, Acre-Feet**

	Baseline	2000	2005	2010	2015	2020	2025
TMP	0	0	0	5,884	7,099	7,899	8,819
Actual	0	0	0	?	?	?	?

As previously discussed, imported water needs to be increased by 900 acre-feet from that shown in the TMP because of the error in addition. This would bring the total required from the Big Chino to 9,719 acre-feet by 2025, which is 1,000 acre-feet more than the currently planned importation of 8,717 acre-feet.

It is also important to note that effluent may be needed to help mitigate the effect on the Verde River of pumping from the Big Chino aquifer. Any effluent that is transported out of the PAMA will not be available for recharge and will result in an equivalent deficit. The TMP calculation of safe yield does not consider water or effluent needed for mitigation.

The City of Prescott has purchased the JWK Ranch in the Big Chino Valley to allow the pumping and transport of Big Chino water to the PAMA. The timeframe for delivery of water is not clear. Prescott's pumpage combined with existing withdrawals will substantially exceed historic net withdrawals from the Big Chino Valley. Legal challenges to Prescott's pumping could delay or prevent this importation. Loss of all or part of this water would lead to a large deficit for existing and projected population.

POTENTIAL OVERDRAFT

The TMP scenario, Table 11-5, shows the elimination of the overdraft by the year 2010 and through 2025. The analyses in this report indicate that the TMP scenario is not realistic. A summary of the unrealistic demands and renewable supplies that would result in an overdraft are presented in Table 14.

Table 14
POTENTIAL OVERDRAFT IN 2025, Acre-Feet

Item	Report Reference	Exempt Well Growth at 3%	Exempt Well Growth at 5%
Arithmetic Error	Table 2	900	900
IGFRs to Certificates of Assured Water	Agricultural Pumpage	2,100	2,100
Industrial Water Rights	Industrial Demand	4,950	4,950
Exempt-Well Growth	Table 8	4,737	8,022
Available Effluent	Table 11	2,211	2,211
Total		**14,898**	**18,183**

The above table indicates that even with importation of 8700 acre feet of Big Chino water, the overdraft in the year 2025 may be about 15,000 to 18,000 acre feet. This estimate does not include the TMP's apparent underestimate of population and the potential need for effluent to be diverted to maintain flow in the Verde River.

APPENDIX 1
LETTER FROM CWAG TO ADWR

June 10, 2004

Mr. Herb Guenther, Director,
Arizona Department of Water Resources
500 North Third Street
Phoenix, Arizona 85004

Dear Mr. Guenther:

The Citizens Water Advocacy Group (CWAG) is an organization concerned with water supply in the Prescott Active Management Area (PAMA). CWAG has followed your Department's regulation of the PAMA and is concerned that the responsible jurisdictions are not on track to achieve the goal of safe yield by the year 2025. The purpose of this letter is to request the Department to reopen the Third Management Plan to include provisions that we believe are necessary to achieve that goal.

The provisions we suggest are:

1. Interim and long-term goals for each jurisdiction as well as for the entire PAMA;
2. Enforcement mechanisms including reasonable penalties for non-compliance;
3. A requirement to use a significant portion of imported water and recharge to permanently address overdraft conditions; and
4. More stringent conservation requirements.

CWAG believes that interim goals are needed to enable all parties to evaluate before it is too late whether it is likely that safe yield will be achieved by 2025. Failure to meet interim goals will enable the Department to make adjustments to its regulatory programs.

Currently each jurisdiction is acting independently in developing plans for safe yield. To some extent, each is looking to the other local jurisdictions to solve existing and future problems. Because there has been no voluntary agreement as what each jurisdiction must do, ADWR should promulgate rules specifying what is required of each jurisdiction to achieve interim and long–term quantitative safe-yield goals. Also, the ADWR should develop a plan on how to deal with the portion of the overdraft caused by the withdrawals from exempt wells.

Safe yield must become a requirement and not just a goal. Enforcement mechanisms including penalties are needed to accomplish that.

Currently there is no requirement that imported water be dedicated to achieving safe yield. It appears that the three municipal suppliers intend to use water imported from the Big Chino aquifer to fuel new development. The Department should require some or all of new imported water be used to reduce the overdraft of the aquifer.

The conservation requirements in the Third Management Plan are inadequate. We need significantly reduced Gallons Per Capita Per Day (GPCPD) levels. There must be an increased emphasis on conservation, particularly on reducing outside water uses and increasing recharge of the aquifer with treated effluent.

CWAG realizes that reopening the Third Management Plan is a major undertaking and that some of the provisions we are suggesting will not be acceptable to all jurisdictions. We believe, however, that these types of provisions are essential if we expect to achieve safe yield. Waiting for the Fourth Management Plan in 2010 to institute new requirements will not leave sufficient time to achieve the goal by 2025.

On a related matter, CWAG would like you to be aware that as we all try to achieve safe yield, we believe the current definition is inadequate because it does not provide for protection of ground-water discharge to springs and streams. The unavoidable consequence of safe yield as now defined is eventual elimination of all natural ground-water discharge from the aquifer. In other words, perennial flow of springs and streams supplied from the aquifer will inevitably be reduced to zero.

We would greatly appreciate your consideration of our suggestions and are willing to work with you and the PAMA staff to achieve our mutual goal of a sustainable water supply.

Sincerely,

Kay Lauster, President

Enclosure: Brochure

APPENDIX 2
LETTER FROM ADWR TO CWAG
July 9, 2004

ARIZONA DEPARTMENT OF WATER RESOURCES
500 North Third Street, Phoenix, Arizona 85004
Telephone 602 417-2410
Fax 602 417-2415

July 9, 2004

Kay Lauster, President
Citizens Water Advocacy Group
P0 Box 13145
Prescott AZ 86304

Janet Napolitano
Governor

Herbert R. Guenther
Director

Re: Water Management in the Prescott AMA

Dear Ms. Lauster:

Thank you for your letter of June 12, 2004. I understand your concerns and welcome your active participation in efforts to manage the Prescott Active Management Area (AMA) to meet the long-term water management goal of safe-yield. I am pleased to have a community citizen group raising some of the difficult issues relative to long-term sustainability of the region. While I believe implementation of many of your recommendations are currently beyond the authority of the Department, I also believe your suggestions can serve as the basis for broader consideration and insightful discussion.

Toward that end I have requested that Jim Holt, our Prescott Active Management Area Director, schedule a discussion of your recommendations at the next meeting of the Prescott AMA Groundwater Users Advisory Council (GUAC). He will invite your group to attend and present your views. It is my understanding, given vacation schedules, that the next meeting of the Prescott GUAC will likely not occur until mid August 2004.

I have also requested that Jim Holway of my office join Mr. Holt at that meeting to participate in the discussion and to respond to your recommendations. Mr. Holway, Assistant Director for Water Management, in addition to other activities oversees the Department's five active management areas. Mr. Holway also managed the Department's activities that resulted in the January 1999 final determination that the Prescott AMA was no longer at safe-yield. I will also instruct a member of my legal staff to join Mr. Holway.

Thank you again for your concern and interest in the important water management issues facing the Prescott Active Management Area. I look forward to having a productive discussion at the next GUAC meeting. A healthy debate on the issues you raised should, in the long run, benefit our efforts as well as create a better understanding among all the water users in the AMA.

Sincerely,

Herbert R. Guenther
Director

CC: Jim Holt
Jim Holway
Patrick Schiffer

APPENDIX 3
Letter from CWAG to ADWR
October 26, 2004

Mr. Herb Guenther, Director,
Arizona Department of Water Resources
500 North Third Street
Phoenix, Arizona 85004

October 26, 2004

Dear Mr. Guenther:

We would like to thank you for giving us an opportunity to make our presentation to the Prescott AMA Groundwater Users Advisory Committee (GUAC), and thank Jim Holway and your other staff members for attending and providing their input.

When we first wrote to you, we told you we were concerned that the AMA would not reach safe yield by 2025. However, it wasn't until we completed the detailed analysis of the Third Management Plan (TMP) that we realized just how serious our problem is. Enclosed is a copy of our written report as presented verbally to the GUAC on October 4th. The report is also available at www.cwagaz.org/GUACtalk-04-10-04.pdf

Our major finding is that the Prescott AMA is likely to have an overdraft of over 17,000 acre feet per year by 2025. This contrasts with the TMP's scenario showing our AMA in safe yield from 2010 on through 2025.

We hope ADWR agrees that this is a serious problem that must be addressed. We had previously asked that the TMP be reopened for modifications; and we believe our report presents an overwhelming case to modify the plan. However, we understand your department has substantial funding and staffing deficits; and also that work on the Fourth Management Plan should be commencing soon.

We are therefore reducing our request and are asking you for only one very limited thing at this time: We would like ADWR staff to develop a realistic estimate of the range of the expected overdraft in 2025. This estimate could include anticipated importation from Big Chino. A future projection of this type does not require exactness – but we would like to see an official report stating that the overdraft in 2025 is likely to be in a specific range (such as 17,000 to 23,000 acre feet per year). Your report should substantially follow the format of Table 11-5 of the TMP.

In addition to the realistic estimate of the range of the expected overdraft, we also believe a specific range table should be prepared that reports the "Reasonable Legally Allowable

Worst Case" which would include the use of all allowable industrial and Irrigation Grandfathered Rights.

We would be happy to assist ADWR by participating in the work for such a report. Indeed, the information in our enclosed report will go a long way toward developing your projections.

We believe that if your staff put in a relatively short amount of time on this project, ADWR and the public would have important information that is necessary to go forward. Whether this report would be considered initial work on the Fourth Management Plan, or just preliminary information that is necessary in considering the next plan – ADWR and the public need to know where we are expected to stand regarding our overdraft. Only then will we have the accurate information that is necessary to make future public policy decisions.

The Prescott AMA is the only AMA that is in a state of groundwater mining. We are an important test case, and our state's citizens will be looking to see how ADWR will deal with such a serious problem. We hope ADWR will address our overdraft is a forthright and resolute manner.

Sincerely,

Kay Lauster
President

Enclosure

APPENDIX 4
Letter from ADWR to CWAG

ARIZONA DEPARTMENT OF WATER RESOURCES
Water Management Division
500 North Third Street, Phoenix, Arizona 85004
Telephone 602 417-2440
Fax 602 417-2415

February 24, 2005

Janet Napolitano
Governor

Herbert R. Guenthe
Director

Kay Lauster, President
Citizens Water Advocacy Group
P.O. Box 13145
Prescott, AZ 86304

Re: Prescott Active Management Area Third Management Plan

Dear Ms. Lauster:

First I want to thank you and the Citizens Water Advocacy Group for all your efforts. I, like you, am also concerned about the ability of the communities and water users within the Prescott Active Management Area (AMA) to achieve the safe yield goal by 2025.

Further, it is quite possible that assumptions used in the Prescott AMA Third Management Plan (TMP) need to be revised. The presentation prepared by your organization highlights many of these issues.

I will direct Department staff to revisit the assumptions used in the development of water budgets contained within the TMP. Further, we will update the water budgets with assumptions that we feel today are more likely or reasonable than the assumptions developed in the early to mid 1990s.

I anticipate including, among others, your organization in the discussions regarding the revisions to the TMP water budgets. Thank you again for your efforts and please continue to work with Jim Holt and the Prescott AMA staff on your concerns.

Sincerely,

Jim Holway
Assistant Director

JH/gw

c: Jim Holt, Prescott AMA