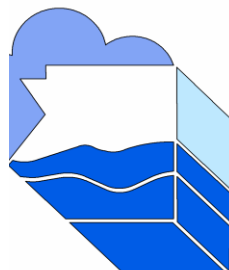


**IDENTIFICATION OF  
HISTORICALLY IRRIGATED ACRES  
IN THE BIG CHINO SUB-BASIN**

**and Discussion Regarding Transportation of Groundwater into the Prescott AMA**



**PREPARED BY THE  
PRESCOTT ACTIVE MANAGEMENT AREA**



**ARIZONA  
DEPARTMENT  
OF WATER  
RESOURCES**

# **IDENTIFICATION OF HISTORICALLY IRRIGATED ACRES IN THE BIG CHINO SUB-BASIN**

**and Discussion Regarding Transportation of Groundwater into the Prescott AMA**

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Picture Acknowledgement: Picture of abandoned irrigation conveyance system in the Big Chino Sub-basin taken by Jack McCormack.

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## List of Acronyms

A.A.C.	Arizona Administrative Code
ADWR	Arizona Department of Water Resources
AMA	Active Management Area
A.R.S	Arizona Revised Statutes
ASLD	Arizona State Land Department
HIA	Historically Irrigated Acres
NASA	National Aeronautics and Space Administration
NHAP	National High Altitude Photography
USFS	United States Forest Service
USGS	United States Geological Survey
WAC	Yavapai County Water Advisory Committee

## Glossary of Terms

Exemption Groundwater	Groundwater withdrawn and transported pursuant to A.R.S. § 45-555(E).
Historically Irrigated Acres or "HIA"	Acres of land overlying an aquifer that were irrigated with groundwater at any time between January 1, 1975 and January 1, 1990.
HIA Groundwater	Groundwater withdrawn and transported pursuant to A.R.S. § 45-555(A).
Irrigate	To apply water to two or more acres of land to produce plants or parts of plants for sale or human consumption, or for use as feed for livestock, range livestock or poultry.
Qualifying Time Period	January 1, 1975 through January 1, 1990.
Request for Determination	The ADWR form titled "Request for Determination of Presence of Historically Irrigated Acres on Specific Land(s) Located within the Big Chino Sub-basin".
Request for Transportation	The ADWR form titled "Request for Transportation of Groundwater withdrawn in the Big Chino Sub-basin to the Prescott Active Management Area (A.R.S § 45-555(A) only)".

## Chapter 1: Introduction

When the Arizona Legislature enacted the Groundwater Code in 1980, it included an article (Article 8) regulating the transportation of groundwater within and outside of active management areas (AMAs). As originally enacted, this article allowed groundwater to be transported away from a groundwater basin located outside of an AMA and into another groundwater basin, including an AMA, subject only to payment of damages. A.R.S. § 45-544(2) (1980).

In 1991, the Legislature significantly changed the law regarding the transportation of groundwater from basins outside of AMAs into AMAs with the enactment of Senate Bill (SB) 1055. SB 1055 added article 8.1 to the Groundwater Code. Article 8.1 prohibits the transportation of groundwater from a basin outside of an AMA into an AMA, with certain statutory exceptions. SB 1055 was essentially a compromise between urban and rural water users in the state. It recognized the need for rural areas to protect their water supplies for economic growth and preservation of property values, while also recognizing the potential need for additional water in urban areas.

Two of the exceptions to the general prohibition on transporting groundwater from a basin outside of an AMA into an AMA apply to the transportation of groundwater from the Big-Chino Sub-basin of the Verde River groundwater basin (Big Chino Sub-basin) to the Prescott AMA. Both exceptions are contained in A.R.S. § 45-555.

The first exception is in A.R.S. § 45-555(A), which authorizes a city or town that owns land consisting of historically irrigated acres (HIA) in the Big Chino Sub-basin, or a city or town with the consent of the landowner, to withdraw groundwater from the land in an amount specified in the statute and transport the groundwater to the Prescott AMA. HIA is defined in A.R.S. § 45-555(D)(3) as “acres of land overlying an aquifer that were irrigated with groundwater at any time between January 1, 1975 and January 1, 1990.” A.R.S. § 45-555(C) provides that in determining whether acres of land qualify as HIA, “the director shall rely only on credible documentary evidence submitted by the city or town or otherwise obtained by the department.” Documentary evidence is defined as “correspondence, contracts, other agreements, aerial photography, affidavits, receipts or official records.” A.R.S. § 45-555(D)(1).

The second exception allowing groundwater to be transported from the Big Chino Sub-basin into the Prescott AMA is in subsection E of A.R.S. § 45-555. That subsection provides that Article 8.1 does not apply to the withdrawal and transportation of up to 14,000 acre-feet per year of groundwater by the City of Prescott, or the United States in cooperation with the City of Prescott, from the Big Chino Sub-basin if the groundwater is withdrawn and transported either: (1) in exchange for or replacement or substitution of supplies of water from the CAP water allocated to Indian tribes, cities, towns or private water companies in the Prescott AMA or in the Verde River groundwater basin; or (2) for the purpose of directly or indirectly facilitating the settlement of the water rights claims of the Yavapai-Prescott Indian Tribe and the Camp Verde Yavapai-Apache Indian Community.

To date, more than a decade after the enactment of SB 1055, no groundwater has been transported into an AMA pursuant to any of the exceptions in Article 8.1. However, increasing population growth and demand for water in the Prescott AMA has resulted in a situation where municipal entities anticipate the need to transport groundwater from the Big Chino Sub-basin

into the Prescott AMA within the next few years. The transportation of groundwater into the Prescott AMA will be a precedent setting action in the state of Arizona requiring the development of new policies and procedures.

Since July 1, 2004, the Arizona Department of Water Resources (ADWR) has received five written requests from cities and towns in the Prescott AMA for official determinations regarding the presence of HIA on particular lands. These requests typically have been associated with the planned purchase or lease of the lands in question by a city or town for transportation of groundwater pursuant to A.R.S. § 45-555(A). ADWR responded to three of the requests with official determinations. However, it became apparent that, rather than determining all HIA lands on an individual request-by-request basis, it would be more efficient, and more beneficial to the cities and towns in the Prescott AMA, if ADWR were to conduct a review of the relevant documentary evidence available to ADWR and identify in a single report all lands in the Big Chino Sub-basin that ADWR determines qualify as HIA based on the documentary evidence. Cities and towns in the AMA could then rely on the report when evaluating whether to purchase or lease lands in the Big Chino Sub-basin.

This report contains the results of ADWR's review of the relevant documentary evidence and identification of HIA lands in the Big Chino Sub-basin. Chapter 2 of the report contains a general discussion of HIA, including a discussion of the statutory provisions relating to the withdrawal and transportation of groundwater from HIA lands to the Prescott AMA. Chapter 3 describes the methods used by ADWR to identify HIA lands for this report. Chapter 4 contains the actual identification of the HIA lands, including a table with a summary of information for the HIA lands and a reference to the maps in the report that show the HIA lands.

Except as provided in the next paragraph, the identification of a parcel of land in this report as HIA constitutes ADWR's final determination of the HIA status of that parcel of land and a city or town in the Prescott AMA can rely on the determination without the need to make a separate request to ADWR for a determination that the land qualifies as HIA. However, this report does not serve as a final determination of the HIA status of those lands not identified in the report as HIA lands. Any city or town within the Prescott AMA can request an official HIA determination for a particular parcel of land not identified as HIA in this report. A city or town submitting such a request must include documentary evidence demonstrating that the land qualifies as HIA.

To qualify as HIA, a parcel of land in the Big Chino Sub-basin must have been irrigated with groundwater at some time between January 1, 1975 and January 1, 1990. All parcels of land identified as HIA in this report were irrigated with water pumped from a well at some time during the 1975-1990 time period. ADWR's determination that these parcels were irrigated with groundwater is based on the legal presumption that water pumped from a well is groundwater. If it is later determined by a final administrative or judicial decision that a well used to irrigate a parcel of land identified as HIA is pumping appropriable surface water subflow and not groundwater, ADWR's determination that the parcel qualifies as HIA may be rescinded.

In addition to the identification of HIA lands in the Big Chino Sub-basin, this report also contains general guidelines that ADWR will follow in administering the transportation of groundwater from the Big Chino Sub-basin to the Prescott AMA under both exceptions in A.R.S. § 45-555. Those guidelines are contained in Chapter 5.

## Chapter 2: General Discussion Regarding Historically Irrigated Acres

### *What is HIA?*

A.R.S. § 45-555(D)(3) defines HIA as "acres of land overlying an aquifer that were irrigated with groundwater at any time between January 1, 1975 and January 1, 1990." The period between January 1 1975 and January 1, 1990 is referred to herein as the qualifying time period. The term irrigate is defined in A.R.S. § 45-402(18) as follows: "to apply water to two or more acres of land to produce plants or parts of plants for sale or human consumption, or for use as feed for livestock, range livestock or poultry ...." In some localized areas of the Big Chino Sub-basin, there has been extensive subdivision of land since the qualifying time period. Some lands that were irrigated with groundwater during the qualifying time period have been subdivided into parcels of less than two acres in size, and therefore are no longer capable of being irrigated by legal definition. This does not affect the status of such lands as HIA. Because HIA is defined as acres of land that were irrigated with groundwater at any time during the qualifying time period, ADWR will look to the qualifying time period to determine whether a parcel of land qualifies as HIA. A parcel of land that is currently less than two acres in size will qualify as HIA if at some time during the qualifying time period it was part of a farm that was two or more acres in size and was irrigated with groundwater.

For example, John Smith is the current owner of a parcel of land that has 1.5 acres. The application of groundwater to the land to grow crops does not qualify as "irrigation" because the land is less than two acres in size. However, in 1980, Mr. Smith's parcel was part of a farm covering 15 acres that was irrigated with groundwater. Mr. Smith's parcel would qualify as having 1.5 acres of HIA. Conversely, a parcel of land currently owned by Jim Brown has 1.8 acres. Groundwater was applied to the land in 1978 and 1980 to grow crops, but the land was not part of a larger farming operation. Mr. Brown's land would not qualify as HIA.

The definition of HIA refers to acres of land overlying an aquifer that were irrigated with groundwater at any time during the qualifying time period. The phrase "at any time" means that it is not necessary for HIA to have been irrigated with groundwater during the entire qualifying time period, or even during an entire calendar year during the qualifying time period. Evidence of irrigation with groundwater for one season is sufficient to qualify as HIA. It is necessary, however, that the lands were irrigated to grow plants for sale or human consumption, or for use as feed for livestock, range livestock or poultry. Land underlying a reservoir during the qualifying time period, even if the reservoir was an integral part of the irrigation operation for a large farm, will not qualify as HIA.

### *What is Required to Retire HIA from Irrigation Use?*

In order for groundwater to be withdrawn from HIA and transported into the Prescott AMA, A.R.S. § 45-555(B) requires that the HIA first be retired from irrigation. To comply with this requirement, ADWR will require the city or town that owns or leases the HIA to certify that the lands have been permanently retired from irrigation. In the case where the city or town does not own the land and withdraws water pursuant to a contractual agreement, ADWR will require that the contract specifically state that the land has been permanently retired from irrigation. In addition, ADWR will require that the landowner record a document with the county recorder imposing a restrictive covenant on the land prohibiting current and future owners of the land from irrigating the property, with ADWR listed as a third party beneficiary of the restrictive



covenant. Prescott AMA staff will conduct random field checks to ensure compliance. It should be noted that the statute requires that the land be retired only from irrigation. Water may be used on the land for non-irrigation uses, including domestic and stock watering, while groundwater is being transported from the land into the Prescott AMA, and any time thereafter.

Not all HIA is located on land that is under private ownership. This report identifies 109.57 acres that are located on state trust lands and 2.44 acres that are located on federal lands. Because of the requirement for HIA lands to be permanently retired from irrigation, it is unclear how the Arizona State Land Department or the federal government will address groundwater withdrawals from these lands under their current lease agreements. Nonetheless, all state and federal lands having HIA are identified in this report.

### *Who can Transport?*

A.R.S. § 45-555(A) states that "[a] city or town that owns land consisting of historically irrigated acres ... may withdraw from the land for transportation ...." Consequently, only a city or town has statutory authority to transport groundwater from HIA located in the Big Chino Sub-basin into the Prescott AMA. Therefore, only a city or town can request an ADWR determination regarding HIA land. Additionally, only a city or town can physically withdraw the groundwater and transport it into the Prescott AMA.

### *How much Groundwater can be Withdrawn from HIA for Transportation?*

A.R.S. § 45-555(A) provides that the amount of groundwater that a city or town may withdraw from HIA for transportation into the Prescott AMA shall not exceed the following: (1) in any year two times the annual transportation allotment for the land; and (2) for any period of ten consecutive years, computed in continuing progressive series beginning in the year that transportation begins, ten times the annual transportation allotment for the land. The director is required to determine the annual transportation allotment as follows: (1) determine each farm or portion of a farm owned or leased by the city or town in the sub-basin; (2) for each such farm or portion of a farm, determine the HIA retired from irrigation; and (3) multiply the sum of the HIA by three acre-feet per acre. A.R.S. § 45-555(B). The following example shows how this will be applied.

A city in the Prescott AMA owns and/or leases a total of 500 acres of land in the Big Chino Sub-basin. The director determines that 450 of the acres qualify as HIA and all of the HIA has been retired from irrigation. The annual transportation allotment for the HIA is 1,350 acre-feet ( $450 \times 3 = 1,350$ ). If the city begins transporting groundwater from the HIA into the Prescott AMA in 2010, the city can withdraw and transport up to 2,700 acre-feet in any one year (two times the annual transportation allotment), but the total amount that can be withdrawn for transportation during any period of ten consecutive years (i.e., 2010 through 2019, 2011 through 2020, 2012 through 2021, etc.) cannot exceed 13,500 acre-feet (ten times the annual transportation allotment).

### *Identification of HIA and Future Requests for Determination*

ADWR utilized the best resources available to it in identifying lands in the Big Chino Sub-basin that were irrigated with groundwater during the qualifying time period as described in Chapter 4. However, it is acknowledged that, due to limitations inherent in a process that attempts to

identify irrigation activities that took place between 1975 and 1990, it is unlikely that this report identifies all the HIA in the Big Chino Sub-basin. For that reason, although this report represents ADWR's best efforts to identify HIA lands, it is not a final determination with respect to lands not identified as HIA in the report. If a city or town believes that HIA exist on lands not included within this report, the city or town may request an HIA determination for the lands by submitting to ADWR the official form entitled "Request for Determination of Presence of Historically Irrigated Acres on Specific Land(s) Located within the Big Chino Sub-basin" (Request for Determination). This form is included as Appendix A to this report. Forms may also be obtained from the Prescott AMA office or from the ADWR website at [www.azwater.gov](http://www.azwater.gov).

A.R.S. § 45-555(C) mandates that the director consider credible documentary evidence when making a determination regarding HIA. The statute defines documentary evidence as "correspondence, contracts, other agreements, aerial photography, affidavits, receipts or official records." A.R.S. § 45-555(D)(1). A city or town that submits a Request for Determination for lands in the Big Chino Sub-basin must submit documentary evidence demonstrating that the lands were irrigated with groundwater during the qualifying time period. The most reliable documentary evidence is aerial photography or satellite imagery taken of the lands during the qualifying time period. Other sources include records (farm records, crop sale records, receipts, power receipts, irrigation district records, etc.) and affidavits, with higher credence given to affidavits from landowners and entities that actually applied groundwater on the land within the qualifying time period. Upon receipt of a Request for Determination, ADWR will review the documentary evidence submitted by the city or town, any additional documentary evidence available to ADWR, and, if necessary, conduct a field inspection.

ADWR's review of a Request for Determination is subject to licensing time frames as set forth in Arizona Administrative Code (A.A.C.) Rule R12-15-401. The overall licensing time frame is 150 days, consisting of a 45-day administrative completeness review time frame followed by a 105-day substantive review time frame. After reviewing a Request for Determination, ADWR will make an official determination regarding whether the lands identified in the Request qualify as HIA. This determination is an appealable agency action, and the city or town that submitted the Request for Determination will be entitled to appeal ADWR's decision.

### Chapter 3: Methods

A broad analysis of water use in the Big Chino Sub-basin was included within the 2000 ADWR Verde River Watershed Study. That report was followed by an investigation of historical and current water uses in the Big Chino Sub-basin completed by the Yavapai County Water Advisory Committee (WAC) and presented in draft form in 2004.<sup>1</sup> ADWR staff provided assistance to WAC staff in completing the 2004 study. Consequently, in preparing this report, ADWR staff utilized many of the same resources that were used in the 2004 study to avoid duplication of effort. The primary resource used to identify HIA lands in this report was aerial photography. Although a longer time period was examined in the WAC report, for this report the aerial photography was used to identify lands that were irrigated during the qualifying time period. ADWR staff also conducted field investigations and database searches and utilized satellite imagery for mapping purposes.

An extensive search was made to locate all aerial photography available to ADWR. The search included all state and federal agencies that could potentially have relevant aerial photography, including the Arizona State Land Department, the Natural Resources Conservation Service (formerly the Soil Conservation Service), ADWR, the United States Department of Agriculture, NASA, and the Arizona Department of Transportation. Additionally, in 2005, Yavapai County and ADWR contracted with a private vendor, IntraSearch, in an effort to acquire additional aerial photography. IntraSearch initially indicated that it had access to a large number of aerial photographs. However, they were ultimately only able to locate less than 20 individual photographs. Based on the inability of IntraSearch to locate additional aerial photography, it was determined that all photography available for purchase had been obtained. This does not mean that privately held aerial photographs do not exist. ADWR will review any additional aerial photography that is provided as documentary evidence by a city or town in future Requests for Determination.

Table 3-1 lists the aerial photography obtained and utilized for this report. In Chapter 4, there are tables that identify the specific photographs associated with specific properties. It should be noted that the 1973 and 1990 aerial photographs are outside of the qualifying time period. However, they are included in this report because, in some cases, these photographs were used to confirm historical irrigation within the qualifying time period evident on other photography. Additionally, it should be noted that ADWR obtained digital enlargements of the 1980 NHAP photography.

Table 3-1. Aerial Photography Utilized to Assist in Identifying Lands with HIA

Date Flown (year - month)	Agency	Date Flown (year - month)	Agency
1973 - June, Sept	USGS	1988 - Aug	ADWR
1977 - Oct	USDA	1989 - May	USDA
1979 - June	NASA	1990 - Nov	ADWR
1980 - June, July	NHAP		
1985 - Dec	ADWR		

<sup>1</sup> Yavapai County Water Advisory Committee. 2004. Big Chino Sub-basin: Historical and Current Water Uses and Water Use Projections (DRAFT).

In general, unless corrections are made to aerial photography, the photographs themselves are not useful for making accurate measurements of area. The error is even greater when the area being evaluated falls near the edges of the aerial photograph. Therefore, because of the general geographic location of the HIA, the nature of the photography available and the location of the HIA on the individual photographs, correction of the photography was not attempted. Instead, the boundaries of the HIA as identified on the aerial photographs were mapped on 2000 digital satellite imagery of Yavapai County using reference points apparent on both the photographs and the satellite imagery. An example of those reference points would be roads, fence lines, etc. ArcMap was then used to generate maps and acreage values for the HIA.

Intensive field investigations were not conducted specifically for preparation of this report. ADWR staff had participated with WAC staff in field investigations conducted in the summer and fall of 2003 for the WAC report. One goal of that report was identification of historic irrigation uses in order to calculate historic and current water use in the Big Chino Sub-basin for the 1940-2000 time frame, so the scope of the reports was somewhat overlapping. Consequently, this report incorporates the pertinent aspects of those earlier field investigations regarding irrigated acreage. For example, if the earlier field investigation or interview identified that no groundwater was used on a particular property, that property was omitted from this report without further evaluation.

Additionally, in preparing this report, experienced ADWR staff reviewed and discussed all areas initially identified as having been irrigated during the qualifying time period and conducted a field investigation in June of 2006 to reach agreement on questionable areas. On the basis of this field investigation and interview of the property owner, ADWR determined that one property initially identified as HIA was irrigated solely with surface water during the qualifying time period. As a result of the field investigation, this property was omitted.

All parcels of land identified as HIA in this report were visually inspected by ADWR staff, either as part of the field investigations conducted by WAC staff in 2003 or as part of the field investigations conducted by ADWR staff in June of 2006. From these inspections, which often included an interview of the landowner, ADWR determined that all of the parcels identified as HIA in this report were irrigated at some time during the qualifying time period with water pumped from a well. As stated in Chapter 1, ADWR's determination that these lands were irrigated with groundwater during the qualifying time period is based on the legal presumption that water withdrawn from a well is groundwater. If it is later determined by a final administrative or judicial decision that a well used to irrigate a parcel of land identified as HIA in this report is pumping appropriable surface water subflow and not groundwater, ADWR may rescind the HIA determination for that parcel.

In some cases, ADWR determined from aerial photography that a parcel of land was irrigated during the qualifying time period, but ADWR staff were unable to determine if the parcel was irrigated with water pumped from a well because permission to inspect the property was not granted by the landowner. In those cases, the parcel was not identified as HIA in this report. See Chapter 4 for further discussion.

## Chapter 4: HIA Maps and Summary Tables

There are 3,307.58 acres of HIA in the Big Chino Sub-basin identified by ADWR in this report.<sup>2</sup> Information associated with the HIA is presented in a series of maps and tables. Table 4-1 is a summary of information for the HIA delineated on the maps. All maps are included in Appendix B to this report. This report also identifies 274.47 acres of land irrigated in the qualifying time period in the Big Chino Sub-basin that are not identified as HIA (see Table 4-2). These irrigated lands were not identified as HIA because the source of the irrigation water was not known. Database searches showed both surface water rights/claims and wells associated with the properties. Absent field investigations or interviews with the property owners, it was not possible for ADWR to conclusively determine that the lands were irrigated with water withdrawn from a well. For most of these properties, ADWR staff were not granted access or interviews. Although these lands are not identified as HIA in this report, a city or town may file a Request for Determination with ADWR requesting a determination that all or a portion of the lands qualify as HIA. The city or town must submit documentary evidence that the water used to irrigate the land during the qualifying time period was groundwater.

The maps in this report are organized hierarchically in three groups on the basis of increasing scale. The first map (Figure B-1) is the smallest scale map that depicts all of the HIA identified in the Big Chino Sub-basin and provides an overview of the general geographic locations of the HIA. The HIA is delineated in green. This map also identifies the tributary watercourses within the Big Chino Sub-basin by name for orientation purposes and for reference to the second group of maps. The tributary watercourses are delineated in blue and major roadways are delineated in black.

The second group of maps (Figure B-2 through B-6) includes larger scale maps organized in alphabetical order by name of the tributary as that tributary was identified on Figure B-1. On these maps, HIA is delineated in various colors and identified in the legends by the primary landowners of HIA along that tributary or within the general geographic area. This provides an identifier for reference to the third group of maps. The individual landowner names that were used were obtained from the Yavapai County Assessor's office in May of 2006. It is recognized that land ownership is extremely dynamic in many of these areas, but ownership was selected for ease of identification and for general reference.

The one exception to this identification method is found on Figure B-2. On Figure B-2, the HIA delineated in pale green is identified as Wineglass Acres. The Wineglass Acres area is comprised of multiple parcels under separate land ownership. The term Wineglass Acres should be used for reference with the third group of maps.

The third group of maps is the largest scale maps (Figures B-7 through B-25) organized in alphabetical order by primary HIA landowner name as identified in the legends of Figures B-2 through B-6. The exception is, again, Wineglass Acres, which is alphabetized by the name Wineglass Acres. This group of maps provides the actual acreage for the delineated HIA. Table 4-1 contains a summary of the information included on these figures, specifically by

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<sup>2</sup> By letter dated December 22, 2004, ADWR issued a determination regarding 611.34 acres of HIA located in the Wineglass Acres area near Paulden. By letter dated March 22, 2006, ADWR issued a determination regarding 30.66 acres of HIA located in Section 22, Township 17N, Range 2W. The HIA identified in this report conforms to all previous determinations.

name of landowner, parcel identification number and number of HIA acres. As described in the previous paragraph, the summary information for Wineglass Acres is in Table 4-1A .

The following example is provided to guide the reader in utilizing the maps and summary tables provided in this report:

On Figure B-1, there is HIA delineated in green located in Township 19 North, Range 3 West. The pertinent tributary is identified as Big Chino Wash. Figure B-2 is the tributary scale map identified as Big Chino Wash. A review of Figure B-2 shows a number of HIA parcels with different landowners. The legend identifies Charney 1996 Trust as the landowner of the HIA located in Township 19 North, Range 3 West. Figure B-11 is the map for the Charney 1996 Trust. A review of Figure B-11 shows that there are 93.10 acres of HIA located on Yavapai County Assessor's Parcel 303-08-002 and 1.80 acres of HIA located on 800-20-022M. This information is also provided in Table 4-1 that also identifies the aerial photography used in making the HIA determination.

Table 4-1. Summary of Information for HIA Located in the Big Chino Sub-basin

Map	Landowner	Parcel #	HIA (acres)	Aerial Photography							
				1973	1977	1979	1980	1985	1988	1989	1990
B-12	ASLD	800-20-020L	95.36	-	477-101 477-102	-	64-32	-	-	-	13-22 14-23
B-11	ASLD	800-20-020M	1.80	2-52	-	-	64-33	-	-	-	15-19 16-20
B-16	ASLD	800-20-025E	12.41	5-172 5-173	377-258	-	70-146	4-21	4-21	-	21-2 21-3
B-6 B-7	Bar Triangle, LLC	300-37-003E	75.91	2-60	477-22	794	212-85	-	-	-	15-9 15-10 16-10 16-11
B-5 B-8	Blake, Jacky & Rebecca	300-28-014G	3.98	-	477-20 477-21	-	212-86 212-87	-	-	-	14-7 15-7
B-4 B-9	Bond Ranch at Del Rio Springs	306-40-028Q	30.66	5-228	-	-	70-146 70-147	4-19 4-20	5-19 5-20	-	22-1 22-2
B-6 B-10	Casa de Las Vegas, Ltd. Partnership	300-28-003J 300-28-089M	77.61	2-78	477-20 477-21	-	212-86 212-85	-	-	-	14-8 15-8
B-2 B-11	Charney 1996 Trust	303-08-002	93.10	2-52	-	-	64-32 64-33	-	-	-	15-19 16-19 16-20
B-2 B-12	City of Prescott/Big Chino Water Ranch	300-50-002D 300-50-002C 302-03-003A	1,161.26	2-68	477-46 477-47 477-101 477-102 477-103	-	64-31 64-32 64-66	-	-	-	13-23 13-24 14-21 14-22 15-20 15-21
B-2 B-13	Davis, Merwyn C. Trust/ CV-CF Ranch	302-03-002A 300-50-001	740.59	2-68	477-46 477-47 477-102	-	64-31 64-32	-	-	-	14-22 14-23 15-20 15-21
B-3 B-14	Hutchison, John & Robyn	300-29-005P	14.16	-	477-128	-	64-59 64-60	-	-	1289 -81	12-3

Table 4-1. Summary of Information for HIA Located in the Big Chino Sub-basin

Map	Landowner	Parcel #	HIA (acres)	Aerial Photography							
				1973	1977	1979	1980	1985	1988	1989	1990
B-5 B-15	Johnson, Paul & Leanna	300-28-015B	28.55	-	477-20	-	212-86 212-87	-	-	-	14-7 15-7
B-2 B-16	Larson, Kevan & Robbi	306-40-008D	36.17	5-173	377-258	-	70-146 70-209	4-21	4-21	-	21-2 21-3
B-5 B-17	Long Meadow Ranch, Inc.	300-28-070F	160.26	2-78	477-20 477-21	-	212-86 212-87	-	-	-	15-6 15-7
B-5 B-18	McElroy, Kimberly & Pawel, Dave	300-28-014H	8.24	-	477-20 477-21	-	212-86 212-87	-	-	-	14-7 15-7
B-6 B-19	Pierce, C. Michael	300-28-005A	9.10	-	477-22	794	212-85 212-86	-	-	-	15-8 15-9
B-3 B-20	Quarter Circle One Bar	300-29-003	4.59	-	477-128	-	64-59 64-60	-	-	1289 -81	12-3
B-5 B-21	Rancho Diamante, LLC	300-21-001W	77.70	-	477-62 477-63	-	212-87	-	-	1189 -15 -17 -33 -35 -64	13-2 13-3 13-4 14-3 14-4 14-5
B-5 B-22	Rancho San Pasquale, LLC	300-28-014M	48.91	-	477-20 477-21	-	212-85 212-86	-	-	-	14-8 15-7
B-5 B-23	Routson, Donald & Rebecca	300-28-15D	8.67		477-20	-	212-85 212-86	-	-	-	14-7 15-7
B-2 B-24	Stump, James & Mary	304-01-238A	4.77	5-171	377-258	-	70-145	-	-	-	21-4 21-5
B-5 B-8 B-23	USFS	800-01-008H	0.56 1.88	-	477-20 477-21	-	212-56 212-86	-	-	-	14-8 15-7
B-2 B-25	Wineglass Acres	See Table 4-1A	611.34	2-08	377-258 477-24		70-208 70-209	-	-	-	20-5 20-6



Table 4-1A. Summary of Information for Wineglass Acres Located on Map B-2

Map	Landowner	Parcel #	HIA (acres)
B-25	Arnold, Timothy & Lori	304-01-200D	4.72
B-25	Arnold, Timothy & Lori	304-01-200H	3.02
B-25	Ashcraft, Steven	304-01-185C	4.63
B-25	Big Chino Land Co, Inc	304-02-006B	0.09
B-25	Bulters, Scott	304-01-184G	0.59
B-25	Buntin, Deanna	304-02-041F	12.20
B-25	Burlington Northern & Santa Fe RW	306-40-053	1.05
B-25	Cameron, Ronald	304-02-028A	10.11
B-25	Cameron, Ronald	304-02-028B	9.83
B-25	Cameron, Ronald	304-02-033	9.27
B-25	Cameron, Ronald	304-02-034	9.39
B-25	Campbell, Robert & Mindy	304-01-018X	0.01
B-25	Catano, Jose	304-01-196C	0.36
B-25	Clark, Randy	304-02-014D	2.39
B-25	Clem, Billy	304-02-022D	2.48
B-25	Clem, Billy & Amanda	304-01-200C	4.85
B-25	Collins, James & Mindy	304-01-091D	11.08
B-25	Collins, James & Mindy	304-01-091G	9.42
B-25	Corbelli, Suzanne & Leo	304-02-017E	0.17
B-25	Crain, Stephen & Estela	304-01-018Y	4.73
B-25	Crain, Stephen & Estela	304-01-056	10.17
B-25	Crain, Stephen & Estela	304-01-056A	8.37
B-25	Dalton, Donald & Joan	304-02-013E	1.16
B-25	Domacz, Brian	304-02-002A	0.05
B-25	Durick, Robert	304-02-005B	4.76
B-25	Fahring, Patrick	304-01-185	4.71
B-25	Far West Builders	304-02-043F	9.48
B-25	Farlee, Wayne & Sharon	304-01-181	6.75
B-25	Farlee, Wayne & Sharon	304-01-102A	5.92
B-25	Forsberg, Lee & Ann	304-02-014A	4.74
B-25	Fulton, Austin & Carol	304-02-014C	2.27
B-25	Giare, Govinder & Anjali	304-02-021	6.35
B-25	Giare, Kamna	304-02-020F	3.99
B-25	Graham, Denis & Betty	304-01-035F	0.13
B-25	Graham, Karen	304-01-035E	0.06
B-25	Gray, Mark	304-02-044M	5.19
B-25	Hackett, Gary	304-02-032	4.83
B-25	Hansen, Dave	304-02-026B	10.10
B-25	Hayes, Carrie	304-02-008B	4.77
B-25	Hayes, Gary & Barbra	304-02-006A	5.96
B-25	Hill, Monte & Shelley	304-02-043B	36.58
B-25	Hollis, Nancy	304-02-025	9.35
B-25	Humboldt, Herbert	304-02-024B	4.87
B-25	Huston, Eldon & Ilona	304-02-040C	2.63
B-25	Janda, Mary	304-01-106A	8.97
B-25	Jaramillo, Thomas	304-02-016B	0.96

Table 4-1A. Summary of Information for Wineglass Acres Located on Map B-2

Map	Landowner	Parcel #	HIA (acres)
B-25	Jensen, Jay	304-02-005A	4.77
B-25	Jonielunas, Neil & Linda	304-02-004H	2.38
B-25	Khan, Sher & Marium	304-02-044N	4.87
B-25	Kingston, Norman	304-02-041J	12.51
B-25	Kool, David & Beverly	304-02-016C	2.54
B-25	Kool, David & Beverly	304-02-016G	2.45
B-25	Krumm, Larry & Judith	304-02-020A	9.40
B-25	Krumm, Larry & Judith	304-02-019	1.93
B-25	Krumm, Larry & Judith	304-02-029	5.23
B-25	Leavitt, Jo Ann	304-01-106	4.75
B-25	Leigh, Ned & Rita	304-01-185B	4.64
B-25	Lovejoy, Larry & Kimberly	304-01-205A	0.57
B-25	Lucero, John & Kathy	304-01-035C	0.01
B-25	Mallett, Troy	304-02-036	10.46
B-25	Mallett, Troy	304-02-008A	4.82
B-25	Mallett, Troy	304-02-039E	2.71
B-25	Mallett, Troy	304-02-039F	2.48
B-25	Mallett, Troy	304-02-039C	1.92
B-25	Malutin, Valentine	304-02-024A	4.52
B-25	Marquez, Albert & Phasit	304-02-004E	2.36
B-25	Marquez, Albert & Phasit	304-02-009A	4.89
B-25	Marquez, Jose	304-02-041L	5.38
B-25	Masters, Curtis & Mari	304-01-089A	< 0.01 acre
B-25	Mayhan, Raymond & Ellen	304-02-012C	0.76
B-25	Mc Kinney, John & Carol	304-02-016H	2.44
B-25	Millan-C, German	304-02-044B	0.77
B-25	Mizer, Daniel	304-02-027B	6.18
B-25	Mizer, Daniel	304-02-027G	12.50
B-25	Monroe, Dennis	304-02-041K	7.16
B-25	Mooch, Douglas	304-02-015D	4.94
B-25	Moxley, Theodore & Joanne	306-49-036	0.01
B-25	Moxley, Theodore & Joanne	306-49-037	0.01
B-25	Moxley, Theodore & Joanne	306-49-038	0.01
B-25	Moxley, Theodore & Joanne	306-49-039	0.01
B-25	Moxley, Theodore & Joanne	306-49-040	0.01
B-25	Moxley, Theodore & Joanne	306-49-041	0.01
B-25	Moxley, Theodore & Joanne	306-49-042	0.01
B-25	Moxley, Theodore & Joanne	306-49-043	0.01
B-25	Moxley, Theodore & Joanne	306-49-044	< 0.01 acre
B-25	Moxley, Theodore & Joanne	306-49-045	< 0.01 acre
B-25	Moxley, Theodore & Joanne	306-49-046	< 0.01 acre
B-25	Moxley, Theodore & Joanne	306-49-047	< 0.01 acre
B-25	Moxley, Theodore & Joanne	306-49-048	< 0.01 acre
B-25	Moxley, Theodore & Joanne	306-49-049	< 0.01 acre
B-25	Odegaard, Douglas & Shirley	304-02-039G	0.64
B-25	Onstott, Odus & Deborah	304-02-040D	2.51
B-25	Onstott, Odus & Deborah	304-02-040F	2.76

Table 4-1A. Summary of Information for Wineglass Acres Located on Map B-2

Map	Landowner	Parcel #	HIA (acres)
B-25	Paksi, Gabor	304-02-009B	1.39
B-25	Panwar, Sameer	304-02-022B	4.81
B-25	Panwar, Sameer	304-02-020E	< 0.01 acre
B-25	Pharis, Ron & Ileen	304-02-027F	5.29
B-25	Pharis, Terry & Joanne	304-02-027D	5.07
B-25	Pharis, Terry & Joanne	304-02-027E	5.65
B-25	Powell, Jerry & Judith	304-02-040E	2.70
B-25	Powell, Jerry & Judith	304-02-039K	1.46
B-25	Rhodes, Lorinda	304-02-020C	0.84
B-25	Robl, Ray & Nancy	304-02-017A	4.03
B-25	Roeth, Kathleen	304-01-200J	3.37
B-25	Roskopf, Donald & Jane	304-01-181A	4.29
B-25	Sanchez, Jose & Alva	304-02-044F	10.39
B-25	Sanchez, Richard	304-02-044E	0.72
B-25	Sanchez, Salvador & Eva	304-01-184	0.01
B-25	Sandell, Russell	304-02-043G	4.37
B-25	Schimke, Diane	304-01-200G	4.72
B-25	Schimke, Diane	304-01-200A	0.26
B-25	Scott, Kevin	304-01-018P	15.04
B-25	Sharp, Lloyd & Maryland	304-01-091C	6.93
B-25	Smith, Gary & Cynthia	304-02-022C	2.32
B-25	Stahl, Michael & Louise	304-02-013C	2.50
B-25	Stahl, Michael & Louise	304-02-013D	2.35
B-25	Stahl, Michael & Louise	304-02-013F	1.91
B-25	Stokes, Daniel & Darla	304-01-196E	3.33
B-25	Stokes Family Trust	304-01-196D	2.58
B-25	Strategic Placement Services, Inc.	306-40-013	9.53
B-25	Strategic Placement Services, Inc.	306-40-011	0.13
B-25	Strategic Placement Services, Inc.	306-40-010A	18.70
B-25	Strategic Placement Services, Inc.	306-40-014	4.03
B-25	Strategic Placement Services, Inc.	306-40-012	19.85
B-25	Thomas, Debbs	304-02-001	8.38
B-25	Thomas, John & Carla	304-02-016E	0.78
B-25	Thomas, Oliver & Linda	304-02-002C	1.08
B-25	Torres, Huberto & Maria	304-02-004G	1.26
B-25	Town of Chino Valley	304-02-023A	19.59
B-25	Town of Chino Valley	304-01-102	5.70
B-25	Tritz-Wade, Elizabeth	304-02-037	10.37
B-25	United Metro Materials, Inc.	304-01-089B	0.01
B-25	United Metro Materials, Inc.	304-01-018B	0.21
B-25	Vasquez, Ramon	304-02-015C	4.69
B-25	Welch, Miramae	306-40-010D	< 0.01 acre
B-25	Wells Family Trust	304-02-044H	5.18
B-25	Wells Family Trust	304-02-044K	2.67
B-25	Wells, W & Betty	304-02-044L	2.71

Table 4-2. Lands Identified as Irrigated within the Big Chino Sub-basin but not Determined to be HIA because Source of Irrigation Water is Unknown

Map	Landowner	Parcel #	HIA (acres)	Aerial Photography							
				1973	1977	1979	1980	1985	1988	1989	1990
n/a	City of Prescott	306-40-029D	45.67	5-227 5-228	-	-	70-146 70-147	4-19 4-20	5-19 5-20	-	22-1 22-2
n/a	Hunt, John & Mary	300-46-006E	17.47	-	477-189 477-190	-	60-266 64-63	-	-	-	8-8 9-9
n/a	Kieckhefer, John	300-45-004 300-45-003A	64.13	-	477-160 477-161	-	64-62 64-63	-	-	-	10-10 11-13
n/a	Matley Ranch/Crossroads Ranch	multiple parcels	77.77	2-60	377-284 477-22	794	212-84 212-85	-	-	-	16-10 16-11
n/a	Pierce, Steve	300-28-003G 300-28-003K	10.26	2-78	477-20 477-21	-	212-85 212-86	-	-	-	14-8 15-7
n/a	S&J Ranching and Grazing, LLC	300-46-007C	42.55	-	477-189 477-190	-	64-63 60-266	-	-	-	9-9 9-10
n/a	Yavapai Ranch Ltd. Partnership	300-46-002 300-45-002	16.62	-	477-186 477-187	-	60-267 64-64	-	-	-	10-12

## **Chapter 5: General Guidelines Regarding Transportation of Water**

The second objective of this report is to provide general procedural and policy guidelines that will be used by ADWR in the administration of the transportation of groundwater into the Prescott AMA pursuant to A.R.S. § 45-555, including ADWR's interpretation of several statutory provisions relating to the withdrawal and transportation of groundwater pursuant to that statute. While the first part of this report addresses only the withdrawal and transportation of groundwater by a city or town from HIA pursuant to A.R.S. § 45-555(A), it must be noted that groundwater may also be withdrawn and transported into the Prescott AMA by the City of Prescott, or the United States in cooperation with the City of Prescott, pursuant to A.R.S. § 45-555(E). The A.R.S. § 45-555(E) exemption is not based on HIA. For the purpose of differentiating between the two authorities under which groundwater may be withdrawn and transported, ADWR will hereinafter refer to groundwater transported pursuant to A.R.S. § 45-555(A) as HIA Groundwater and groundwater transported pursuant to A.R.S. § 45-555(E) as Exemption Groundwater.

ADWR has developed the following general procedural and policy guidelines with regard to the physical withdrawal and transportation of groundwater into the Prescott AMA and the annual reporting of the groundwater to ADWR. In some instances, the procedures and policies pertain to both types of transported groundwater, and in other instances, only to a particular type. It is recognized that further discussion regarding the complex issues associated with transporting groundwater into the Prescott AMA must take place. However, these initial general procedural and policy guidelines are presented in this report so that the cities and towns that will transport groundwater pursuant to A.R.S. § 45-555 will be aware of the policy decisions and statutory interpretations made thus far by ADWR. It should also be noted that transported groundwater must be considered separately from groundwater withdrawn in the Prescott AMA for accounting and reporting purposes.

### *Requirement to Notify ADWR Prior to Withdrawing HIA Groundwater*

A city or town that owns or leases HIA land in the Big Chino Sub-basin must notify ADWR in writing prior to initiating the withdrawal of HIA Groundwater from the land for transportation into the Prescott AMA. This is because the director is required by A.R.S. § 45-555(B) to determine an annual transportation allotment for the city or town. ADWR has established the following process that a city or town must follow to inform ADWR of its intent to withdraw HIA Groundwater for transportation into the Prescott AMA and to request the director's determination of the annual transportation allotment.

Prior to withdrawing HIA Groundwater for transportation into the Prescott AMA, a city or town must complete the form entitled "Request for Transportation of Groundwater Withdrawn in the Big Chino Sub-basin to the Prescott Active Management Area" (Request for Transportation) and submit the completed form to ADWR for approval. A copy of the Request for Transportation is included as Appendix C and is available from ADWR's web page at [www.azwater.gov](http://www.azwater.gov). Upon receipt of a Request for Transportation, ADWR will review the request to verify that ADWR previously determined that the lands identified qualify as HIA. If so, ADWR will determine the annual transportation allotment for the lands and, if applicable, determine whether the proposed withdrawals of HIA Groundwater from the wells identified in the Request for Transportation comply with ADWR's well spacing rules (see next section for further discussion of well spacing requirements).

ADWR's review of a Request for Transportation is subject to licensing time frames as described in A.A.C. Rule R12-15-401. The overall licensing time frame is 150 days consisting of a 45-day administrative completeness review time frame followed by a 105-day substantive review time frame. After ADWR completes its review, it will make an official determination regarding the annual transportation allotment and the wells from which the HIA Groundwater may be withdrawn. This determination is an appealable agency action, and the city or town submitting the Request for Transportation will be entitled to appeal the determination.

This process does not apply to the transportation of Exemption Groundwater by the City of Prescott (City) pursuant to A.R.S. § 45-555(E). Because the director is not required to determine an annual transportation allotment for Exemption Groundwater, and because the well spacing requirements in A.R.S. § 45-559 do not apply to the withdrawal of Exemption Groundwater, the City is not required to inform ADWR in advance of transporting such groundwater into the Prescott AMA. However, the City must provide an annual reporting of the transportation and use of Exemption Groundwater pursuant to A.R.S. § 45-632(H). Additionally, the City may not annually withdraw a volume of Exemption Groundwater that exceeds the maximum annual volume allowed by A.R.S. § 45-555(E). This volume will be established by an official determination of the director of ADWR upon request by the City.

Although there is no requirement for the City to complete a Request for Transportation form for Exemption Groundwater, if advance notice is given, the notice will be incorporated into the City's file for annual reporting and informational purposes.

### *Well Spacing Requirements*

A.R.S. § 45-559 provides that a person shall not use a well constructed after September 21, 1991 for the purpose of withdrawing groundwater for transportation to an AMA pursuant to Article 8.1 of the Groundwater Code unless the person applies to the director for approval and the director approves the application (see Appendix D). The director is required to approve the application if the director determines that the withdrawals for that purpose will not unreasonably increase damage to surrounding land or other water users from the concentration of wells under well spacing rules adopted by the director. While A.R.S. § 45-559 applies to withdrawals of HIA Groundwater from wells constructed after September 21, 1991, it does not apply to the withdrawal of Exemption Groundwater. Exemption Groundwater is not subject to A.R.S. § 45-559 because A.R.S. § 45-555(E) provides that Article 8.1 of the Groundwater Code, which includes A.R.S. § 45-559, does not apply to the withdrawal and transportation of Exemption Groundwater.

ADWR recently adopted a rule containing well spacing criteria for wells drilled after September 21, 1991 from which groundwater is proposed to be withdrawn for transportation into an AMA. This rule, A.A.C. R12-15-1305 (see Appendix E), addresses the following three categories of unreasonably increasing damage: (1) additional drawdown of groundwater levels at neighboring wells of record; (2) migration of contaminated groundwater to a neighboring well of record; and (3) additional regional land subsidence. A city or town proposing to withdraw HIA Groundwater from a well constructed after September 21, 1991 must indicate in the Request for Transportation form the annual volume of HIA Groundwater that it proposes to withdraw from the well. If the director determines that the proposed withdrawals of HIA Groundwater from the well will cause unreasonably increasing damage to surrounding land or other water

users under the criteria in the well spacing rule, the director will deny the city or town's request to use that well. If the director determines that the proposed withdrawals will not cause unreasonably increasing damage under the criteria in the rule, the director will approve the request to use the well. In that event, the city or town may not withdraw HIA Groundwater from the well in an amount that exceeds the annual volume as stated in either the Request for Transportation form or the Notice of Intent form.

It is important to note that A.R.S. § 45-559 does not provide an exception to the well spacing requirements for replacement wells in approximately the same location. Therefore, if a city or town withdrawing HIA Groundwater from a well drilled prior to September 21, 1991 decides to replace the well with a new well at approximately the same location, the city or town may not use the replacement well to withdraw HIA Groundwater unless the director determines that the withdrawals will comply with the well spacing rule. This is different than in AMAs, where replacement wells in approximately the same location are exempt from well spacing requirements under A.R.S. § 45-597.

### *Annual Reporting Requirements*

A.R.S. § 45-632(H) sets forth the annual reporting requirements for persons withdrawing groundwater for transportation into an AMA. Any city or town that withdraws groundwater in the Big Chino Sub-basin for transportation into the Prescott AMA pursuant to A.R.S. § 45-555 must comply with these annual reporting requirements. This applies to both HIA Groundwater and Exemption Groundwater. Additionally, there are annual reporting requirements for wells used to withdraw transported water that have other uses outside of the Prescott AMA. Among other things, the annual reports will be used by ADWR to determine whether a city or town withdrawing groundwater for transportation into the Prescott AMA complies with the statutory provisions limiting the volume of groundwater that may be withdrawn for that purpose.

### *Metering Requirements*

The volume limits set forth in A.R.S. § 45-555(A) for HIA Groundwater and A.R.S. § 45-555(E) for Exemption Groundwater apply to the volume of groundwater withdrawn for transportation into the Prescott AMA. Therefore, a city or town withdrawing groundwater for transportation into the Prescott AMA must meter the groundwater at the point of withdrawal and report that volume in its annual reports. The city or town must also meter the groundwater at the point at which it is delivered to any other water user. Because of the requirement to meter the amount of groundwater withdrawn for transportation at the point of withdrawal, all wells withdrawing groundwater for transportation to the Prescott AMA must utilize a water measuring device approved by ADWR pursuant to A.R.S. § 45-604(A).

Both HIA Groundwater and Exemption Groundwater may be withdrawn from the same well. In addition, HIA Groundwater and Exemption Groundwater may be withdrawn from a well that is used to withdraw groundwater for beneficial use in the Big Chino Sub-basin. In cases where HIA Groundwater or Exemption Groundwater is withdrawn from a well used to withdraw groundwater for another purpose, the city or town withdrawing the groundwater must separately measure the amount of HIA Groundwater or Exemption Groundwater withdrawn from the well and report that amount in the annual report required by A.R.S. § 45-632(H).

### *Groundwater Withdrawal Fees*

Groundwater withdrawal fees will not be levied on groundwater withdrawn in the Big Chino Sub-basin for transportation into the Prescott AMA. The groundwater withdrawal fees levied by the director pursuant to A.R.S. § 45-611 apply only to groundwater withdrawn in AMAs.

### *Disposition of Transported Groundwater*

A city or town that withdraws HIA Groundwater or Exemption Groundwater must physically bring the groundwater into the Prescott AMA before delivering the groundwater to another entity, including another water provider.

### *Maximum Volume of Exemption Groundwater and Distribution of Exemption Groundwater*

A.R.S. § 45-555(E) authorizes the City of Prescott, or the United States in cooperation with the City of Prescott, to withdraw and transport into the Prescott AMA up to 14,000 acre feet of groundwater under certain conditions. ADWR has issued an advisory opinion that the actual qualifying volume is currently 8,717 acre-feet per year. To date, ADWR has not issued a final opinion on the volume of groundwater that can be withdrawn and transported under this statutory provision. It should be noted that while only the City of Prescott, or the United States in cooperation with the City of Prescott, may withdraw and transport groundwater pursuant to this provision, once the groundwater is within the boundaries of the Prescott AMA, the groundwater may be distributed to other users.

### *Location of Wells Used to Withdraw HIA Groundwater*

A.R.S. § 45-555(A) provides that a city or town that owns or leases land consisting of HIA in the Big Chino Sub-basin may “withdraw from the land” for transportation to the Prescott AMA an amount of groundwater determined pursuant to the statute. The phrase “withdraw from the land” means that a city or town that owns or leases HIA in the Big Chino Sub-basin may withdraw the HIA Groundwater only from a well or wells located on the HIA lands. It is not necessary, however, that the HIA Groundwater be withdrawn from any particular location on the lands. A city or town that owns or leases multiple parcels of HIA land in the Big Chino Sub-basin may withdraw all of the HIA Groundwater allowed for those parcels from a well or wells located on any of the parcels.

Some have interpreted the phrase “withdraw from the land” more restrictively, stating that it means that if a city or town owns or leases multiple parcels of HIA land in the Big Chino Sub-basin, the director must calculate an annual transportation allotment for each parcel of HIA land and the city or town may withdraw the annual transportation allotment associated with a particular parcel only from a well or wells located on that parcel. ADWR does not agree with this interpretation for at least two reasons.

First, under A.R.S. § 45-555(B), the director is required to determine a single annual transportation allotment for all HIA owned or leased by a city or town in the Big Chino Sub-basin. The amount of groundwater that the city or town may “withdraw from the land” may not exceed: (1) in any year, two times the annual transportation allotment for the land; and (2) for any period of ten consecutive years, ten times the annual transportation allotment for the land. A.R.S. § 45-555(A). It seems clear from this language that the Legislature intended “the land”



to refer to all HIA lands owned or leased by a city or town in the Big Chino Sub-basin, and that it intended to allow the city or town to withdraw all of its HIA Groundwater from anywhere on that land. If it had intended to require a city or town to withdraw the portion of the annual transportation allotment associated with a particular parcel of land only from that parcel, it would have required the director to determine an annual transportation allotment for each parcel of HIA land, rather than a single allotment for all parcels owned or leased by a city or town in the sub-basin.

Second, interpreting the statutory language in a manner that requires HIA Groundwater to be withdrawn from each separate parcel of HIA land owned or leased by the city or town would lead to an unreasonable result. A city or town that leases multiple small parcels of HIA land adjacent to each other would be required to drill a well on each parcel. This would result in significant expense to the city or town for no good reason.

There are no restrictions on the location of wells used to withdraw Exemption Groundwater pursuant to A.R.S. § 45-555(E). The City of Prescott, or the United States in cooperation with the City of Prescott, may withdraw Exemption Groundwater anywhere within the Big Chino Sub-basin. However, if the Exemption Groundwater will be used to demonstrate an assured water supply pursuant to A.R.S. § 45-576, the location of the wells used to withdraw the groundwater must comply with the requirements in ADWR's assured water supply rules, A.A.C. R12-15-701, *et seq.* The same is true for any wells used to withdraw HIA Groundwater for assured water supply purposes.

#### *Effect of Pipelines Used to Transport Groundwater on Service Areas*

A pipeline used by a city or town to transport groundwater from the Big Chino Sub-basin into the Prescott AMA will not be considered to be part of the city or town's service area for purposes of the Groundwater Code until the pipeline reaches the city or town's municipal distribution system.

#### *Depths from Which Groundwater May be Withdrawn*

A.R.S. § 45-555 does not impose any restriction on the depth from which HIA Groundwater or Exemption Groundwater may be withdrawn. Therefore, such groundwater may be withdrawn at any depth below land surface. However, if the groundwater is withdrawn for the purpose of demonstrating an assured water supply, it may not be withdrawn from a depth greater than 1,000 feet below land surface. A.A.C. R12-15-716(D)(2).

#### *Enforcement of Transportation Statutes*

ADWR's enforcement authority for violations of statutes regulating the transportation of groundwater, including the transportation of groundwater from the Big Chino Sub-basin into the Prescott AMA, is set forth in A.R.S. §§ 45-633 through 45-636. Among other things, a person determined to be in violation of the transportation statutes may be assessed a civil penalty of up to ten thousand dollars per day of violation directly related to the illegal transportation of groundwater. A.R.S. § 45-635(A)(2).

### *Topics for Future Discussion and Action*

ADWR continues to discuss the complex issues associated with transportation of groundwater into the Prescott AMA. The following are topics for future discussion and action:

- Development of new annual report forms for transported groundwater.
- Development of Notice of Intent forms for the construction of new wells to be utilized to withdraw groundwater for transportation.
- Issues associated with transported groundwater and the Assured Water Supply program.

## Appendix A



**Arizona Department of Water Resources**  
 Prescott Active Management Area  
 2200 East Hillside Road  
 Prescott, Arizona 86301-4941  
 (928) 778-7202  
 www.azwater.gov

**Request for Determination of Presence  
 of Historically Irrigated Acres on  
 Specific Land(s) Located  
 within the  
 Big Chino Sub-basin**

Fill in each section completely and accurately. Please type or print using black or blue ink.

**Section 1. Requestor Information**

City or Town Submitting Request:		
Mailing Address:		
City/ State/ ZIP Code:		
Contact Person Name and Title:		
Telephone Number:	FAX Number:	E-mail Address:

**Section 2. Legal Location of Land(s)**

For additional lands, please provide the information on an attachment to this request.

Township (N/S)	Range (E/W)	Section	160 acre (1/4)	40 acre (1/4)	10 acre (1/4)
Yavapai County Assessor's Parcel ID Number					
Book	Map	Parcel	Claimed Historically Irrigated Acres (# of acres)		

Township (N/S)	Range (E/W)	Section	160 acre (1/4)	40 acre (1/4)	10 acre (1/4)
Yavapai County Assessor's Parcel ID Number					
Book	Map	Parcel	Claimed Historically Irrigated Acres (# of acres)		

**Section 3. Additional Information in Support of the Request**

1. Indicate if any of the following were used for irrigation of the property between January 1, 1975 and January 1, 1990:

- Lined ditches or pipes            yes                                            no  
 Sprinkler system                    yes                                            no  
 Land leveling                            yes                                            no

2. Well registry number and legal location of all wells utilized to irrigate the property between January 1, 1975 and January 1, 1990:

---



---

3. For each year of irrigation between January 1, 1975 and January 1, 1990, indicate the crop grown, the number of acres planted in each crop(s) and the irrigation method utilized, if known.

Year	Crop(s)	# of Acres	Irrigation Method
1975			
1976			
1977			
1978			
1979			
1980			
1981			
1982			
1983			
1984			
1985			
1986			
1987			
1988			
1989			

4. Indicate the documentary evidence that supports this request. All documentary evidence must be submitted with this request.

- Aerial photography       Satellite imagery       Farm records  
 Farm related receipts       Affidavits       Other (please specify)

5. Attach a map that identifies the lands for which this request is made.

*I hereby affirm that all information provided in this request is true and correct to the best of my knowledge.*

---

Signature

---

Date

---

Title

## Instructions for Completing Request

- Section 1. Fill in completely and accurately. Type or print in black or blue ink. Requests for determination of presence of historically irrigated acreage can only be made by a city or town.
- Section 2. Fill in completely and accurately. A copy of a deed or other ownership document that includes the legal description of the land in question may be attached.
- Section 3. Provide additional information that can be utilized by the Department in evaluating this request.
- Item 1. Indicate the type of irrigation system utilized on the property between January 1, 1975 and January 1, 1990.
- Item 2. Provide the well registry number and legal location of all wells utilized to irrigate the property between January 1, 1975 and January 1, 1990.
- Item 3. Indicate, by year, the approximate number of acres and crop(s) for the land(s) in question, if known. Also, indicate the type of irrigation utilized by year, if known.
- Item 4. Indicate the sources of documentary evidence that support of this request. All documentary evidence must be submitted with this request.
- Item 5. Attach a map with the claimed historically irrigated acreage clearly displayed.

The official representative of the city or town submitting the request must sign and date the form affirming that all information is true and correct to the best of their knowledge.

### Time Frames for Review of Your Request

Within one hundred and fifty (150) days after receipt of your request, the Department will determine whether your request should be granted or denied, unless this time is extended as described below. In processing your request, the Department will first determine whether the request is administratively complete (administrative completeness review), and then whether the request meets the substantive criteria established by statute or rule (substantive review). Each of these reviews will be completed within the times stated below. The time for the administrative completeness review plus the time for the substantive review is referred to as the overall time frame.

#### 1) Administrative Completeness Review Time Frame

Within forty-five (45) days after receipt of your request, the Department will determine whether your request is complete, and will issue a written notice of administrative completeness or deficiencies. After your request is complete, the Department will proceed with substantive review.

If the Department sends you a letter that your request is incomplete, the Department will include a comprehensive list of specific deficiencies. Until the missing information is received, both the administrative completeness review and the overall time frames will be suspended. When the Department receives the missing information, the administrative completeness review and overall time frames will resume. Your request will not be complete until all of the requested information is received. If you do not supply the missing information within forty-five (45) days, your request may be denied.

## 2) Substantive Review Time Frame

Within one hundred and five (105) days after the request is complete, the Department will review your request to determine whether it meets the substantive criteria required by statute or rule. By mutual written agreement between you and the Department, the time for substantive review may be extended by up to 15 days.

During the substantive review, the Department may make one written request for additional information. You may also agree in writing to allow the Department to submit supplemental requests for additional information. If the Department requests additional information, both the substantive review and overall time frames will be suspended. When the additional information is received, the substantive review and overall time frames will resume.

At the end of the Department's substantive review, the Department will send a written notice either granting or denying your request. If your request is denied, the notice will include the justification for the denial and an explanation of your right to appeal the denial.

## Appendix B



## Appendix C



Arizona Department of Water Resources  
 Prescott Active Management Area  
 2200 East Hillside Road  
 Prescott, Arizona 86301-4941  
 (928) 778-7202  
 www.azwater.gov

**Request for Transportation of  
 Groundwater Withdrawn in the  
 Big Chino Sub-basin to the Prescott  
 Active Management Area  
 (A.R.S § 45-555A only)**

DATE RECEIVED

**Section 1. Requestor Information**

City or Town Submitting Request:		
Mailing Address:		
City/ State/ ZIP Code:		
Contact Person Name and Title:		
Telephone Number:	FAX Number:	E-mail Address:

**Section 2. Information Regarding Historically Irrigated Acres (HIA) to be Included in Determining the Annual Transportation Allotment**

10 acre (1/4)	40 acre (1/4)	160 acre (1/4)	Section	Township (N/S)	Range (E/W)
Yavapai County Assessor's Parcel ID Number			Historically Irrigated Acres (# of Acres)		
Book	Map	Parcel			
<b>HIA Acres Obtained From</b>			<b>Ownership of Land</b>		
<input type="checkbox"/> ADWR Determination <input type="checkbox"/> ADWR Report			<input type="checkbox"/> Owned <input type="checkbox"/> Leased/ Per Contract		
<b>HIA Retired from Irrigation?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No					

The above information must be provided for all Historically Irrigated Acres that the requestor wants to have included in the Department's calculation of the annual transportation allotment. The requestor may utilize this form (and Attachment A for additional parcels) or may submit this information in an alternative form. If it is submitted in an alternative form, all information listed above must be included.

**Section 3. Information Regarding Wells Used for Withdrawal of Transported Groundwater**

Well Registry No. 55-\_\_\_\_\_ Proposed Volume to be withdrawn \_\_\_\_\_ AF

Well Ownership     Owned                     Used pursuant to contractual agreement

Existing Well Constructed     Prior to 9/21/1991 or     After 9/21/1991            or     New Well  
*See instructions for important information regarding well requirements.*

Will the well be used for other purposes?     Yes             No

If yes, please list the other uses \_\_\_\_\_

The above information must be provided for all wells that will be utilized to withdraw groundwater for transportation into the Prescott AMA. The requestor may utilize this form (and Attachment B for additional wells) or may submit this information in an alternative form. If it is submitted in an alternative form, all information listed above must be included.

*I hereby affirm that all information provided in this request is true and correct to the best of my knowledge.*

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Title

**Instructions for Completing Request**

The information provided on this request will assist the Department in determining the quantity of groundwater that can be transported into the Prescott AMA pursuant to A.R.S. § 45-555(A).

Section 1.    Fill in completely and accurately. Type or print in black or blue ink. Requests for transportation of water from the Big Chino Sub-basin to the Prescott Active Management Area can only be made by a city or town.

Section 2.    Fill in completely and accurately, identifying each parcel to be included in the Director's determination of the annual transportation allotment under 45-555 (B). The number of acres of HIA must be obtained from either the ADWR report "Identification of Historically Irrigated Acres in the Big Chino Sub-basin" or from some other official ADWR determination. Indicate the amount of HIA for each parcel and identify the source of the determination of that amount. Also identify whether the parcel in question is owned by the city or town or if the city or town has been granted consent to withdraw and transport water through a contractual agreement. The requestor must submit a copy of a deed or contractual agreement granting consent to withdraw and transport groundwater for each parcel. Finally, the requestor must indicate whether HIA has been retired from irrigation. For groundwater withdrawn per contractual agreement, the agreement must state that all irrigation uses on the parcel have been retired.

Section 3.    Fill in completely and accurately, identifying each well that will be used to withdraw groundwater for transportation into the Prescott AMA and the volume of water that is proposed to be withdrawn from each well. The requestor must either own the well or submit a copy of the contractual agreement for each well that will be utilized for withdrawing groundwater for transportation.

For existing wells drilled after September 21, 1991 and for new wells, approval of the Director is required for use of the well for transportation into the Active Management Area. That approval will be granted if it is determined that the proposed withdrawal of groundwater from the well does not cause unreasonable increasing damage pursuant to A.A.C. R12-15-305. Identify if the well will be utilized for other purposes. If so, please list the other uses of the well.

The official representative of the city or town submitting the request must sign and date the form affirming that all information is true and correct to the best of their knowledge.

### **Time Frames for Review of Your Request**

Within one hundred and fifty (150) days after receipt of your request, the Department will determine whether your request should be granted or denied, unless this time is extended as described below. In processing your request, the Department will first determine whether the request is administratively complete (administrative completeness review), and then whether the request meets the substantive criteria established by statute or rule (substantive review). Each of these reviews will be completed within the times stated below. The time for the administrative completeness review plus the time for the substantive review is referred to as the overall time frame.

#### **1) Administrative Completeness Review Time Frame**

Within forty-five (45) days after receipt of your request, the Department will determine whether your request is complete, and will issue a written notice of administrative completeness or deficiencies. After your request is complete, the Department will proceed with substantive review.

If the Department sends you a letter that your request is incomplete, the Department will include a comprehensive list of specific deficiencies. Until the missing information is received, both the administrative completeness review and the overall time frames will be suspended. When the Department receives the missing information, the administrative completeness review and overall time frames will resume. Your request will not be complete until all of the requested information is received. If you do not supply the missing information within forty-five (45) days, your request may be denied.

#### **2) Substantive Review Time Frame**

Within one hundred and five (105) days after the request is complete, the Department will review your request to determine whether it meets the substantive criteria required by statute or rule. By mutual written agreement between you and the Department, the time for substantive review may be extended by up to 15 days.

During the substantive review, the Department may make one written request for additional information. You may also agree in writing to allow the Department to submit supplemental requests for additional information. If the Department requests additional information, both the substantive review and overall time frames will be suspended. When the additional information is received, the substantive review and overall time frames will resume.

At the end of the Department's substantive review, the Department will send a written notice either granting or denying your request. If your request is denied, the notice will include the justification for the denial and an explanation of your right to appeal the denial.



**Arizona Department of Water Resources**  
 Prescott Active Management Area  
 2200 East Hillside Road  
 Prescott, Arizona 86301-4941  
 (928) 778-7202 (800) 352-8488 (in Arizona)  
 www.azwater.gov

**Request for Transportation of  
 Groundwater withdrawn in the  
 Big Chino Sub-basin to the Prescott  
 Active Management Area  
 (A.R.S § 45-555A only)**

**ATTACHMENT A**

10 acre (1/4)	40 acre (1/4)	160 acre (1/4)	Section	Township (N/S)	Range (E/W)
Yavapai County Assessor's Parcel ID Number			Historically Irrigated Acres (# of Acres)		
Book	Map	Parcel			
<b>HIA Acres Obtained From</b>			<b>Ownership of Land</b>		
<input type="checkbox"/> ADWR Determination <input type="checkbox"/> ADWR Report			<input type="checkbox"/> Owned <input type="checkbox"/> Leased/ Per Contract		
<b>Irrigation Retired from HIA?</b>			<input type="checkbox"/> Yes <input type="checkbox"/> No		

10 acre (1/4)	40 acre (1/4)	160 acre (1/4)	Section	Township (N/S)	Range (E/W)
Yavapai County Assessor's Parcel ID Number			Historically Irrigated Acres (# of Acres)		
Book	Map	Parcel			
<b>HIA Acres Obtained From</b>			<b>Ownership of Land</b>		
<input type="checkbox"/> ADWR Determination <input type="checkbox"/> ADWR Report			<input type="checkbox"/> Owned <input type="checkbox"/> Leased/ Per Contract		
<b>Irrigation Retired from HIA?</b>			<input type="checkbox"/> Yes <input type="checkbox"/> No		

10 acre (1/4)	40 acre (1/4)	160 acre (1/4)	Section	Township (N/S)	Range (E/W)
Yavapai County Assessor's Parcel ID Number			Historically Irrigated Acres (# of Acres)		
Book	Map	Parcel			
<b>HIA Acres Obtained From</b>			<b>Ownership of Land</b>		
<input type="checkbox"/> ADWR Determination <input type="checkbox"/> ADWR Report			<input type="checkbox"/> Owned <input type="checkbox"/> Leased/ Per Contract		
<b>Irrigation Retired from HIA?</b>			<input type="checkbox"/> Yes <input type="checkbox"/> No		



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**Request for Transportation of  
 Groundwater withdrawn in the  
 Big Chino Sub-basin to the Prescott  
 Active Management Area  
 (A.R.S § 45-555A only)**

**ATTACHMENT B**

Well Registry No. 55-\_\_\_\_\_ Proposed Volume to be withdrawn \_\_\_\_\_ AF

Well Ownership  Owned  Used pursuant to contractual agreement

Existing Well Constructed  Prior to 9/21/1991 or  After 9/21/1991 or  New Well  
*See instructions for important information regarding well requirements.*

Will the well be used for other purposes?  Yes  No

If yes, please list the other uses \_\_\_\_\_

Well Registry No. 55-\_\_\_\_\_ Proposed Volume to be withdrawn \_\_\_\_\_ AF

Well Ownership  Owned  Used pursuant to contractual agreement

Existing Well Constructed  Prior to 9/21/1991 or  After 9/21/1991 or  New Well  
*See instructions for important information regarding well requirements.*

Will the well be used for other purposes?  Yes  No

If yes, please list the other uses \_\_\_\_\_

Well Registry No. 55-\_\_\_\_\_ Proposed Volume to be withdrawn \_\_\_\_\_ AF

Well Ownership  Owned  Used pursuant to contractual agreement

Existing Well Constructed  Prior to 9/21/1991 or  After 9/21/1991 or  New Well  
*See instructions for important information regarding well requirements.*

Will the well be used for other purposes?  Yes  No

If yes, please list the other uses \_\_\_\_\_

Well Registry No. 55-\_\_\_\_\_ Proposed Volume to be withdrawn \_\_\_\_\_ AF

Well Ownership  Owned  Used pursuant to contractual agreement

Existing Well Constructed  Prior to 9/21/1991 or  After 9/21/1991 or  New Well  
*See instructions for important information regarding well requirements.*

Will the well be used for other purposes?  Yes  No

If yes, please list the other uses \_\_\_\_\_

## Appendix D

## **Article 8.1 Withdrawals of Groundwater for Transportation to Active Management Area**

### **45-551. Application of article; limitation on transportation to active management areas; definition**

- A. This article applies only to withdrawals of groundwater for transportation to active management areas.
- B. Unless specifically authorized by this chapter, groundwater that is withdrawn in a groundwater basin or sub-basin outside of an initial active management area may not be transported directly or indirectly to an initial active management area.
- C. Any transportation of groundwater that is authorized by this article is subject to payment of damages pursuant to section 45-545.
- D. For purposes of this article, "transported indirectly" means through exchange, indirect recharge or any other method of providing water through reciprocation.

### **45-552. Transportation of groundwater withdrawn in McMullen valley basin to an active management area; definitions** (Not applicable to Prescott AMA)

### **45-553. Transportation of groundwater withdrawn in Butler Valley groundwater basin to an initial active management area** (Not currently applicable to Prescott AMA)

### **45-554. Transportation of groundwater withdrawn in Harguahala irrigation non-expansion area to an initial active management area** (Not currently applicable to Prescott AMA)

### **45-555. Transportation of groundwater withdrawn in Big Chino sub-basin of the Verde River groundwater basin to initial active management area; exception; definitions**

A. A city or town that owns land consisting of historically irrigated acres in the Big Chino sub-basin of the Verde River groundwater basin, as designated by order of the director dated June 21, 1984, or a city or town with the consent of the landowner, may withdraw from the land for transportation to an adjacent initial active management area an amount of groundwater determined pursuant to this section. The amount of groundwater that may be withdrawn from the land pursuant to this section shall not exceed:

1. In any year two times the annual transportation allotment for the land determined pursuant to subsection B of this section.
  2. For any period of ten consecutive years computed in continuing progressive series beginning in the year transportation of groundwater from the land begins, ten times the annual transportation allotment for the land.
- B. The director shall determine the annual transportation allotment as follows:
1. Determine each farm or portion of a farm owned or leased by the city or town in the sub-basin.
  2. For each such farm or portion of a farm, determine the historically irrigated acres retired from irrigation. Multiply the sum of those historically irrigated acres by three acre-feet per acre.



C. In making the determination required by subsection B of this section, the director shall rely only on credible documentary evidence submitted by the city or town or otherwise obtained by the department.

D. For purposes of this section:

1. "Documentary evidence" means correspondence, contracts, other agreements, aerial photography, affidavits, receipts or official records.
2. "Farm" means an area of land in the sub-basin that is or was served by a common irrigation water distribution system.
3. "Historically irrigated acres" means acres of land overlying an aquifer that were irrigated with groundwater at any time between January 1, 1975 and January 1, 1990.

E. This article does not apply to the withdrawal and transportation of up to fourteen thousand acre-feet per year of groundwater by the city of Prescott, or the United States in cooperation with the city of Prescott, from the Big Chino sub-basin of the Verde River groundwater basin if the groundwater is withdrawn and transported either:

1. In exchange for or replacement or substitution of supplies of water from the central Arizona project allocated to Indian tribes, cities, towns or private water companies in the Prescott active management area or in the Verde River groundwater basin.
2. For the purpose of directly or indirectly facilitating the settlement of the water rights claims of the Yavapai-Prescott Indian tribe and the Camp Verde Yavapai-Apache Indian community.

**45-556. Transportation fee; annual adjustment; credits; enforcement**

A. Except as provided in subsection B of this section, a person who directly or indirectly transports groundwater, withdrawn in a groundwater basin or sub-basin as provided by this article or in the Pinal active management area, away from the county in which it was withdrawn to an initial active management area shall pay annually to the county a groundwater transportation fee determined by the director for each acre-foot of groundwater transported directly or indirectly away from the county, less any amount of central Arizona project water actually used on the property from which the groundwater is transported.

B. A person is not required to pay a transportation fee under this section for stored water withdrawn pursuant to recovery well permits issued by the director pursuant to this title.

C. Except as provided in subsection D of this section the director shall set the fee as follows for the cumulative amount of groundwater transported away from the county, less any amount of central Arizona project water actually used on the property from which the groundwater is transported:

Net Groundwater Transported	Fee Per Acre-Foot
0 - 1,000,000 acre-feet	\$3.00
1,000,001 - 2,000,000 acre-feet	\$5.00
2,000,001 - 3,000,000 acre-feet	\$7.50
3,000,001 - 4,000,000 acre-feet	\$10.00
4,000,001 - 5,000,000 acre-feet	\$15.00
over 5,000,000 acre-feet	\$30.00

D. The director shall annually adjust the dollar amount of the fee according to the annual changes in the GDP price deflator, as defined in section 41-563, using the 1993 calendar year as the base year. The director shall immediately notify all concerned parties of the fee adjustments under this subsection.

E. Credits are allowed against the fees imposed by this section as described and in the amounts provided under this subsection. If the amount of the credit exceeds the amount of the fee imposed for any year, the unused portion of the credit may be carried forward and applied to subsequent years' fees until the amount of the credit is exhausted. The allowable credits are as follows:

1. The amount of any increase in property tax revenues, including contributions in lieu of property taxes under title 9, chapter 4, article 3, derived from remote municipal property, as defined in section 42-15251, from which the groundwater is withdrawn. The credit shall account for increased revenues due to improvements to the property and increased revenues due to higher property tax valuations and assessment ratios resulting from changes in use of the property. The credit shall not account for increased revenues due to normal market or economic factors. The amount of the credit for any year is the sum of the amounts computed under subdivisions (a) and (b) as follows:

(a) Delete from consideration under this subdivision any property with respect to which an amount is computed under subdivision (b). Subtract the amount of property tax or in lieu revenues that would have been derived from the remaining property during the immediately preceding tax year if the use of and improvements to the property had remained unchanged since the date the city or town acquired the property from the amount of property tax or in lieu revenues actually derived from that property during the immediately preceding tax year. If a city or town conveys all or part of its interest in remote municipal property to another political subdivision, the political subdivision succeeds to the credit allowed under this section. The amount of credit computed under this subdivision shall be computed each year, beginning in the year groundwater is first transported, and, if not used to offset the fee under this section, shall be cumulated from year to year.

(b) This subdivision applies with respect to any portion of the remote municipal property that, before January 1, 1992, was classified at that time as class four property for purposes of property taxation under title 42 but was developed or improved at any time after December 31, 1991 and is not currently classified as class two property. Subtract the amount of property tax or in lieu revenues that would have been derived from that developed or improved portion of the remote municipal property during the immediately preceding tax year if the use of and improvements to the property had remained unchanged since the date the city or town acquired the property from the amount of property tax or in lieu revenues actually derived from that portion of the property during the immediately preceding tax year. If a city or town conveys all or part of its interest in remote municipal property to another political subdivision, the political subdivision succeeds to the credit allowed under this section. The amount of credit computed under this subdivision shall be computed each year, beginning in the year that the property is developed or improved and reclassified for tax purposes, and, if not used to offset the fee under this section, shall be cumulated from year to year.

2. An amount equal to the market value of land donated to the county if the county agrees in writing to prohibit or limit the withdrawal of groundwater from the land. The amount of the credit shall account for the reduced value of the land due to the groundwater withdrawal limitations.

3. An amount agreed to by intergovernmental agreement between the county in which the groundwater is withdrawn and the city, town or other person transporting the groundwater.

F. The board of supervisors of a county to which fees are due and payable under this section may request the county attorney to commence and prosecute any action or proceeding to enforce the collection of the fees.

**45-557. Requirements for transporting groundwater to an initial active management area; exception**

A. Except as provided in subsection B of this section:

1. The director shall not consider groundwater that is being or will be withdrawn in a groundwater basin or sub-basin pursuant to this article or the Pinal active management area and transported to an initial active management area for purposes of determining or providing an assured water supply pursuant to section 45-576 if the groundwater is being or will be used by a city, town or private water company that was offered but did not sign a central Arizona project water delivery subcontract.

2. A city, town or private water company that has signed a central Arizona project water delivery subcontract may not use groundwater withdrawn in a groundwater basin or sub-basin pursuant to this article or the Pinal active management area and transported to an initial active management area until it has both:

(a) Demonstrated that it has the physical capacity, including the water treatment plant and delivery system, to accept delivery of ninety-five per cent of its central Arizona project water entitlement under its central Arizona project water delivery subcontract.

(b) Accepted delivery of or exchanged eighty per cent or more of the central Arizona project water available to it under its central Arizona project water delivery subcontract in at least one of the three years immediately preceding the year it intends to begin using groundwater transported away from a groundwater basin or sub-basin pursuant to this article or the Pinal active management area.

B. Subsection A of this section does not apply to groundwater withdrawn in the Big Chino sub-basin of the Verde river groundwater basin and transported to an adjoining initial active management area pursuant to section 45-555.

**45-558. Weeds and dust**

A person shall maintain property owned by the person and from which groundwater is or will be transported pursuant to this article free of noxious weeds as defined in section 3-201, Russian thistles (salsola kali) and blowing dust that creates a threat to health or safety.

**45-559. Well spacing requirements for withdrawing groundwater for transportation to an active management area**

Except as provided in section 45-554, subsection A, a person may not use a well constructed after the effective date of this section [September 21, 1991] for purpose of withdrawing groundwater for transportation to an active management area pursuant to article 8.1 of this chapter unless the person wishing to use the well for that purpose applies to the director for approval and the director approves the application. The director shall approve the application if the director determines that the withdrawals for that purpose will not unreasonably increase damage to surrounding land or other water users from the concentration of wells. In making this determination, the director shall follow the criteria for proposed withdrawals in the rules adopted pursuant to section 45-598, subsection A.

## Appendix E

## **ARTICLE 13. WELL SPACING REQUIREMENTS; REPLACEMENT WELLS IN APPROXIMATELY THE SAME LOCATION**

### **R12-15-1301. Definitions**

In addition to the definitions in A.R.S. §§ 45-101, 45-402, and 45-591, the following words and phrases in this Article shall have the following meanings, unless the context otherwise requires:

1. “Abandoned well” means a well for which a well abandonment completion report has been filed pursuant to R12-15-816(E) or for which a notification of abandonment has been filed pursuant to R12-15-816(K).
2. “Additional drawdown” means a lowering in the water levels surrounding a well that is the result of the operation of the well and that is not attributable to existing regional rates of decline or existing impacts from other wells.
3. “Applicant” means any of the following:
  - a. A person who has filed an application for a permit to construct a new well or a replacement well in a new location under A.R.S. § 45-599;
  - b. A person who has filed an application for a recovery well permit under A.R.S. § 45-834.01 for a new well as defined in A.R.S. § 45-591 or, except as provided in A.R.S. § 45-834.01(B)(2) or (3), an existing well as defined in A.R.S. § 45-591;
  - c. A person who has filed an application for approval to use a well to withdraw groundwater for transportation to an active management area under A.R.S. § 45-559; or
  - d. A person, other than a city, town, private water company, or irrigation district, who has filed an application for a water exchange permit under A.R.S. § 45-1041.
4. “ADEQ” means the Arizona Department of Environmental Quality.
5. “Contaminated groundwater” means groundwater that has been contaminated by a release of a hazardous substance, as defined in A.R.S. § 49-201, or a pollutant, as defined in A.R.S. § 49-201.
6. “DOD” means the United States Department of Defense.
7. “EPA” means the United States Environmental Protection Agency.
8. “LCR plateau groundwater transporter” means a person transporting groundwater from the Little Colorado River plateau groundwater basin to another groundwater basin pursuant to A.R.S. § 45-544(B)(1).
9. “Notice of water exchange participant” means a person, other than a city, town, private water company, or irrigation district, named as a participant in a water exchange in a notice of water exchange filed under A.R.S. § 45-1051.
10. “Original well” means the well replaced by a replacement well in approximately the same location, except that if the replacement well is the latest in a succession of two or more wells drilled as replacement wells in approximately the same location under R12-15-1308 or temporary rule R12-15-840 adopted by the director on March 11, 1983, “original well” means the well replaced by the first replacement well in approximately the same location.
11. “Remedial action site” means any of the following:
  - a. The site of a remedial action undertaken pursuant to the comprehensive environmental response, compensation, and liability act (“CERCLA”) of 1980, as amended, 42 U.S.C. 9601, et seq., commonly known as a “superfund” site;
  - b. The site of a corrective action undertaken pursuant to A.R.S. Title 49, Chapter 6, commonly known as a leaking underground storage tank (“LUST”) site;
  - c. The site of a voluntary remediation action undertaken pursuant to A.R.S. Title 49, Chapter 1, Article 5;
  - d. The site of a remedial action undertaken pursuant to A.R.S. Title 49, Chapter 2, Article 5, commonly known as a water quality assurance revolving fund (“WQARF”) site;

- e. The site of a remedial action undertaken pursuant to the Resource Conservation and Recovery Act (“RCRA”), 42 U.S.C. 6901, et seq.; or
  - f. The site of remedial action undertaken pursuant to the Department of Defense Environmental Restoration Program, 10 U.S.C. 2701, et seq., commonly known as a “Department of Defense site” or a “DOD site.”
12. “Replacement well” means a well drilled for the purpose of replacing another well.
  13. “Replacement well in a new location” means a replacement well that does not qualify as a replacement well in approximately the same location under R12-15-1308.
  14. “Replacement well in approximately the same location” means a replacement well that qualifies as a replacement well in approximately the same location under R12-15-1308.
  15. “Well” has the meaning prescribed in A.R.S. § 45-402. An abandoned well is not a well.
  16. “Well of record” means, with respect to an applicant, an LCR plateau groundwater transporter, or a notice of water exchange participant, any well or proposed well not owned by the applicant, LCR plateau groundwater transporter, or notice of water exchange participant, or proposed to be drilled by the applicant, LCR plateau groundwater transporter, or notice of water exchange participant, to which any of the following apply:
    - a. The well is an existing well as defined in A.R.S. § 45-591 and the owner or operator has registered the well with the Department, unless the current well information on file with the Department identifies the sole purpose or purposes of the well as one or more of the following:
      - i. Cathodic protection;
      - ii. Use as a sump pump or heat pump;
      - iii. Air sparging;
      - iv. Injection of liquids or gasses into the aquifer or vadose zone, including injection wells that are part of an underground storage facility permitted under A.R.S. Title 45, Chapter 3.1;
      - v. Monitoring water levels or water quality, including a piezometer well;
      - vi. Obtaining geophysical, mineralogical, or geotechnical data;
      - vii. Grounding;
      - viii. Soil vapor extraction;
      - ix. Electrical energy generation pursuant to a temporary permit for electrical energy generation issued under A.R.S. § 45-517;
      - x. Dewatering pursuant to a dewatering permit issued under A.R.S. § 45-513 or a temporary dewatering permit issued under A.R.S. § 45-518;
      - xi. Drainage pursuant to a drainage water withdrawal permit issued under A.R.S. § 45-519; or
      - xii. Hydrologic testing pursuant to a hydrologic testing permit issued under A.R.S. § 45-519.01.
    - b. The well is a new well as defined in A.R.S. § 45-591 for which a notice of intention to drill was not filed pursuant to A.R.S. § 45-596 and for which a permit was not issued pursuant to A.R.S. §§ 45-599 or 45-834.01, and the owner or operator has registered the well with the Department, unless the current well information on file with the Department identifies the sole purpose or purposes of the well as one or more of the purposes in subsection (16)(a)(i) through (xii) of this Section;
    - c. A filing has been made for the well pursuant to A.R.S. § 45-596(A) or (B), unless any of the following apply:
      - i. The filing has expired pursuant to A.R.S. § 45-596(E);
      - ii. The filing identifies the sole purpose or purposes of the well as one or more of the purposes in subsection (16)(a)(i) through (xii) of this Section; or
      - iii. The well is an exempt well and the director is prohibited by A.R.S. § 45-454(D)(4) from considering impacts on the well when determining

whether to approve or reject a permit application filed under A.R.S. § 45-599.

- d. An application for a permit to drill the well has been received by the Department pursuant to A.R.S. § 45-599, unless the application has been rejected after exhaustion of all administrative and judicial appeals or the permit issued pursuant to the application has been revoked or has expired according to its terms or for failure to complete the well in a timely manner pursuant to A.R.S. § 45-599(G);
- e. An application for a permit pursuant to A.R.S. §§ 45-514 or 45-516 has been received by the Department pursuant to A.R.S. § 45-521, unless the application has been rejected after exhaustion of all administrative and judicial appeals or the permit issued pursuant to the application has been revoked or has expired according to its terms or for failure to complete the well before expiration of the drilling authority; or
- f. An application for a permit to drill a recovery well has been received by the Department pursuant to A.R.S. § 45-834.01, unless the application has been rejected after exhaustion of all administrative and judicial appeals or the permit issued pursuant to the application has been revoked or has expired according to its terms or for failure to complete the well in a timely manner pursuant to A.R.S. § 45-834.01(F).

**R12-15-1305. Well Spacing Requirements - Applications to Use a Well to Withdraw Groundwater for Transportation to an Active Management Area Under A.R.S. § 45-559**

- A. The director shall not approve an application to use a well or wells constructed after September 21, 1991 to withdraw groundwater for transportation to an active management area under A.R.S. § 45-559 if the director determines that the withdrawals for that purpose will cause unreasonably increasing damage to surrounding land or other water users from the concentration of wells under subsection (B) of this Section.
- B. The director shall determine that the withdrawals of groundwater will cause unreasonably increasing damage to surrounding land or other water users from the concentration of wells if any of the following apply:
  - 1. Except as provided in subsection (C) of this Section, the director determines that the probable impact of the groundwater withdrawals on any well of record in existence as of the date of receipt of the application will exceed 10 feet of additional drawdown after the first five years of the withdrawals. To assist the director in making a determination under this subsection, the applicant may submit a hydrological study delineating those areas surrounding the proposed well or wells in which the projected impacts of the groundwater withdrawals on water levels will exceed 10 feet of additional drawdown after the first five years of the withdrawals. The director may require the applicant to submit such a hydrological study if the director determines that the study will assist the director in making a determination under this subsection;
  - 2. The director determines that the proposed well or wells will be located in an area of known land subsidence and the groundwater withdrawals will likely cause unreasonably increasing damage from additional regional land subsidence. To assist the director in making a determination under this subsection, the applicant may submit a hydrological study, which may include a geophysical evaluation, demonstrating the impact of the groundwater withdrawals on regional land subsidence. The director may require the applicant to submit such a hydrological study if the director determines that the study will assist the director in making a determination under this subsection; or
  - 3. Except as provided in subsection (D) of this Section, the director determines, after consulting with ADEQ, that the groundwater withdrawals will likely cause the migration of contaminated groundwater from a remedial action site to a well of

record in existence as of the date of receipt of the application, resulting in a degradation of the quality of the water withdrawn from the well of record so that the water will no longer be usable for the purpose for which it is currently being used without additional treatment, and that the damage to the owner of the well of record will not be prevented or adequately mitigated through the implementation of a program regulated under Title 49 of the Arizona Revised Statutes, or a program regulated by EPA or DOD. To assist the director in making a determination under this subsection, the applicant may submit a hydrological study demonstrating whether the groundwater withdrawals will have the effect described in this subsection. The director may require the applicant to submit such a hydrological study if the director determines that the study will assist the director in making a determination under this subsection.

- C. If the director determines under subsection (B)(1) of this Section that the probable impact of the groundwater withdrawals on any well of record in existence as of the date of receipt of the application will exceed 10 feet of additional drawdown after the first five years of the withdrawals, the director shall notify the applicant in writing of the location of the wells of record and the names and addresses of the owners of the wells as shown in the Department's well registry. The director shall not determine that the groundwater withdrawals will cause unreasonably increasing damage to surrounding land or other water users from the concentration of wells under subsection (B)(1) of this Section if within 60 days after the date on the notice, or a longer time period approved by the director, the applicant submits one of the following for each well of record identified in the notice:
1. A signed and notarized consent form from the owner of the well of record consenting to the withdrawals. The applicant shall use the consent form furnished by the director; or
  2. Evidence satisfactory to the director that the address of the owner of the well of record as shown in the Department's well registry records is inaccurate and that the applicant made a reasonable attempt to locate the current owner of the well of record but was unable to do so.
- D. If the director determines that the groundwater withdrawals will have the effect described in subsection (B)(3) of this Section on one or more wells of record in existence as of the date of receipt of the application, the director shall notify the applicant in writing of the location of the wells of record and the names and addresses of the owners of the wells as shown in the Department's well registry. The director shall not determine that the groundwater withdrawals will cause unreasonably increasing damage to surrounding land or other water users from the concentration of wells under subsection (B)(3) of this Section if within 60 days after the date on the notice, or a longer time period approved by the director, the applicant submits one of the following for each well of record identified in the notice:
1. A signed and notarized consent form from the owner of the well of record consenting to the withdrawals. The applicant shall use the consent form furnished by the director; or
  2. Evidence satisfactory to the director that the address of the owner of the well of record as shown in the Department's well registry records is inaccurate and that the applicant made a reasonable attempt to locate the current owner of the well of record but was unable to do so.
- E. At any time before a final determination under this Section, the applicant may:
1. Amend the application to change the location of the proposed well or wells or the amount of groundwater to be withdrawn from the proposed well or wells to lessen the degree of impact on wells of record or regional land subsidence; or
  2. Agree to construct or operate the proposed well or wells in a manner that lessens the degree of impact on wells of record or regional land subsidence. The director shall indicate in the permit that compliance with the agreement is a condition of



the permit to use the well or wells to withdraw groundwater for transportation to an active management area under A.R.S. § 45-559.