



August 11, 2008

VIA ELECTRONIC DELIVERY AND HAND DELIVERY

Doug Dunham
Arizona Department of Water Resources
3550 North Central Ave.
Phoenix, AZ 85012

**Re: Comments of W Holdings on Proposed 6/18/08 Draft Groundwater Transportation Rule,
A.A.C. §§R12-15-1401 et seq.**

Dear Doug:

I am writing on behalf of the W Holdings Group, a group of affiliated investment and land development companies with projects and holdings throughout central Arizona. These land holdings include approximately 24,000 acres of historically irrigated lands in the Harquahala Valley. W Holdings currently farms the vast majority of these lands; however, we are also exploring the potential to provide for future groundwater transportation under A.R.S. 45-554 while making continued productive use of Valley lands.

As you know, the Arizona Department of Water Resources ("ADWR" or "Department") is currently considering the adoption of administrative rules on groundwater transportation. Although ADWR has not yet formally issued draft rules for public comment, ADWR has initiated a stakeholder meeting process and provided a proposed draft rule dated 6/18/08, proposing the addition of a new Title 12, Chapter 15, Article 14 to the Arizona Administrative Code ("A.A.C.") entitled "Transportation of Groundwater to an Active Management Area." *See proposed 6/18/08 draft rule, A.A.C. §§R12-15-1401 - 1410.*

We greatly appreciate the opportunity to review and comment on the proposed draft rule. As discussed further below, we believe that several modifications to the proposed rule are both necessary and desirable to ensure compliance of water export activities with the statute and avoid undue economic impacts on landowners in the Harquahala Valley. Our proposed modifications are summarized in the attached exhibit, which provides our proposed amended version of two proposed sections of the rule: R12-15-1407 and R12-15-1410.

I. The Groundwater Export Statutes

The groundwater transportation statutes provide a key exception to the statewide ban on interbasin groundwater transfers and the transfer of groundwater resources to AMAs, *see* A.R.S. §§45-551, 45-552, 45-553, 45-554, and 45-555. These statutes, which allow water imports into AMAs from the McMullen Valley, Butler Valley, Big Chino Valley, and the Harquahala Irrigation Non-Expansion Area into Arizona's AMAs, represent an important future water supply for Arizona that is anticipated in water plans for many Central Arizona water users as a means of meeting both assured water supply requirements. Imported groundwater, including Harquahala Valley water, also features prominently in the future water supply plans of the Central Arizona Groundwater Replenishment District ("CAGRDR") and the Arizona Water Bank ("AWBA"). Perhaps most importantly, these groundwater basins could play a significant role in the future to mitigate the impacts of either localized droughts or Colorado River shortages.

Pursuant to A.R.S. §45-554, there are two primary methods by which groundwater can be transferred from the Harquahala INA into an AMA:

(1) The statute permits a *groundwater replenishment district* to lease water from an *irrigation district* in the INA (i.e., the Harquahala Valley Irrigation District), *see* A.R.S. §45-554(A).

(2) The statute permits the state or a political subdivision that owns irrigation land in the INA to withdraw groundwater to a depth of one thousand feet for transport to an AMA for its own use or for use by the AWBA for Indian farming, *see* A.R.S. §45-554(B) and §45-2491(A)(5). In the event that 80% or more of the irrigation lands are owned by the state or its political subdivisions, ADWR can approve essentially unrestricted withdrawals to a depth of up to twelve hundred feet.

Absent any further changes in the groundwater transportation statutes, the leasing provision is unlikely to be utilized, since this scenario allows leasing only by the Phoenix Groundwater Replenishment District ("Phoenix GRD"). Although the enabling statute for the Phoenix GRD was passed, the GRD is not currently in existence and its essential purpose has been largely eclipsed by the operations of CAGRDR. As such, the second method of groundwater transportation is the most relevant provision for purposes of evaluating the draft transportation rules, and is the only method that we have addressed in this comment letter. We presume that the Department will subsequently modify the rule if and when the statute is modified to provide for broader leasing or the former provision became otherwise effective.

II. Major Differences Between the Export Statutes

Many of our concerns with the proposed rule relate to the fact that the rule seems to blur the distinctions between the requirements of the different groundwater export statutes. Although all four of the groundwater export statutes authorize export to an AMA, we believe that there are substantial differences between these statutes that also imply different approaches to groundwater transport permitting.

For example, of the four basins, the Butler Valley statute imposes by far the least statutory restrictions on the export of water; in essence, the statute limits exports only by requiring that exports occur from lands

“owned by this state or by a political subdivision of this state” (essentially all of the non-federal lands in Butler Valley). *See* A.R.S. §45-553(A). Although lands within the Butler Valley that are used for export can only be transferred to the state or a political subdivision (they cannot be conveyed into either private or federal ownership), *see* A.R.S. §45-553(B), the actual export of water is not otherwise restricted to any total volume, to historically irrigated lands, or to any particular depth below ground surface.

By contrast, the McMullen Valley statute imposes by far the greatest restrictions on water export, limiting exports based upon (1) the character of land ownership as of January 1, 1988 (since only lands purchased by a city or certain persons prior to that date are eligible); (2) the character of use (since only a city, town, private water company, or groundwater replenishment district is eligible to use transported water);¹ (3) historically irrigated acreage (since the volume of export is a function of the number of historically irrigated acres); (4) an annual limit on exports; (5) a ten-year limit on exports; and (6) a total volumetric limit of 6 million acre-feet. *See generally* A.R.S. §45-552. The first and third limitations identify a set of export-eligible lands for which an “annual transportation allotment” can be defined. This “annual transportation allotment” is equal to the sum of the historically-irrigated acres times 3 acre-feet per acre, A.R.S. §45-552(B); authorized groundwater transportation is then limited to no more than two times the “annual transportation allotment” in any one year, ten times the allotment in any ten years (in other words, an average of 3 acre-feet per acre), and no more than 6 million acre-feet in total. A.R.S. §45-552(A)(1)-(3).

In addition to defining an “annual transportation allotment” for the eligible lands, the McMullen Valley statute also provides specific requirements on the use of McMullen Valley water for assured water supply purposes, providing that water can only be used for AWS purposes above a depth of 1200 feet below ground surface, if it will not cause groundwater declines above 10 feet per year over one hundred years, and if it does not exceed 40 percent of the water that can be withdrawn from the basin. The volume of water that can be used for this purpose is then reduced by the amount of water previously dedicated for this purpose or exported for other purposes. A.R.S. §45-552(C).

While less prescriptive than the McMullen Valley statute, the Big Chino statute also requires ADWR to define an “annual transportation allotment” for export-eligible lands, and limits the export of water to eligible lands owned by a “city or town,” A.R.S. §45-555(A). In addition, the Big Chino statute is the only transportation statute that imposes a direct linkage between the retirement of lands for irrigation use and the authorization of groundwater transportation. To determine the annual transportation allotment for export lands in the Big Chino (other than permitted under Prescott’s 14,000 acre-foot exemption), A.R.S. §45-555(B) requires ADWR to identify the number of historically irrigated acres that are owned by the city or town *and that are retired from irrigation*. These retired acres are then multiplied by three acre feet to determine the annual transportation allotment. Similar to McMullen Valley, exports are then limited to twice the annual allotment in any one year, and ten times the allotment in any ten years (i.e., an average of 3 acre-feet per acre). A.R.S. §45-555(A)(1),(2).

Given general irrigation demands within the state, it seems likely that historic irrigation use (and even consumptive use) would have exceeded three acre-feet per acre per year on many of these irrigated lands; as such, the Big Chino statute imposes an overall reduction in groundwater use in connection with

¹ The Arizona Water Bank can also use the water under certain conditions.

groundwater export that apparently compromises between the interests of parties seeking to export water from the basin and the interests of groundwater users within the basin or parties who benefit from surface flow in the Verde (which is at least partially derived from Big Chino groundwater discharges).

III. The Harquahala Statute

In substantial contrast to both the McMullen and Big Chino statutes, the Harquahala statute does not refer to any “annual transportation allotment.” Although groundwater exports are only available to the “state or a political subdivision of this state” where these entities own notice-of-irrigation-authority (NIA) certificated lands within the Harquahala Irrigation Non-Expansion Area (INA), the volume of these exports is not limited to an “annual transportation allotment” as it is in the other two basins. To the contrary, as discussed above, the statute defines the *amount* of groundwater that a political subdivision may “withdraw” and “transport” to an AMA as follows:

- (a) Up to 6 acre-feet per acre per year, with no more than 30 acre-feet in any ten year period (i.e., an average of 3 acre-feet per acre); or
- (b) A larger amount established by ADWR, provided that ADWR determines that the larger withdrawal “will not unreasonably increase damage to residents of surrounding land and other water users in the irrigation non-expansion area, or that one or more of the entities withdrawing the groundwater will mitigate the damage to the residents and other water users.”

A.R.S. §45-554(B)(1),(2). It is critical to note that this second provision is unique to the Harquahala transport statute. The Harquahala statute thus does not impose the 6 acre-foot/3 acre-foot average as a fixed *maximum* as it is under the Big Chino and McMullen statutes; rather, this figure is established as a *minimum* presumptive volume available for transport, which can be exceeded upon an appropriate demonstration to ADWR.

The unique nature of this provision is further reinforced by the fact that, instead of imposing both an annual limit and an overall volumetric limit on withdrawals (such as the 6 million acre-foot limit in McMullen) or no limit on withdrawals (such as in Butler), the Harquahala statute instead (1) defines a floor of 1000’ below ground surface above which groundwater can be exported, and (2) limits the rate of extraction *at each extraction point* to at a rate that does not cause the groundwater table to decline more than an average of 10 feet per year over a 100-year period. *See* A.R.S. §45-554(B)(1).

This approach is plainly designed to provide a mechanism by which a party seeking to export water can work with ADWR to define a *total volume of groundwater* (greater than the 3 acre-foot per acre minimum) that is available above 1000’ bgs and which is available for export either because there will be no unreasonably increased damage to other water users or because the party is working with Valley water users to mitigate that damage. There are several obvious means by which this could occur, including (1) collective agreements as to the siting of extraction wells; (2) obtaining replacement supplies for other landowners or engaging in recharge activities; (3) collective agreements as to the future use of water on other NIA-certificated lands (or other Valley lands) which would otherwise have been subject to transportation or continued groundwater pumping for irrigation purposes.

As such, by allowing a party to define (via appropriate modeling and/or mitigation) a larger overall volume of water that can be exported from the Valley, the Harquahala statute represents a sort of compromise between the more restrictive McMullen and Big Chino approaches (based on the identification of an “annual transportation allotment”) and the completely unrestricted withdrawals allowed by the Butler Valley statute.

IV. Comments on ADWR’s Proposed Rule

ADWR’s draft A.A.C. §R12-15-1407 incorporates the various statutory requirements of A.R.S. §45-554 into a proposed permitting process, in which an entity seeking to transport water would apply to ADWR to obtain a “permit to transport groundwater.” To obtain this permit, the applicant is required to submit a variety of information to the Department for evaluation. This includes the following, in relevant part:

- Identification of the eligible irrigation acres that are to be included in the application, together with NIA certificates;
- A certification that the eligible acres will not be irrigated when transportation is occurring;
- The number of years that groundwater is to be withdrawn for transportation, not to exceed 100 years, and the annual amount of withdrawals;
- A well-by-well analysis providing well information, specifying volumes of water to be withdrawn, identifying any non-transportation uses of the well with annual volumes, providing well ownership information, and demonstrating that the well spacing rules are satisfied;
- A hydrologic study or studies demonstrating depth-to-static water levels at the end of the withdrawal period, incorporating projected declines from previous adequate water supply designations;
- If the 80% provision does not apply, (2) average annual rates of decline during the period that the applicant proposes to withdraw groundwater, incorporating projected declines from previous adequate water supply designations; and (3) if the applicant seeks to withdraw more than the statutory minimum, either (a) no unreasonably increasing damage to residents of surrounding land and other water users, as defined by the well spacing criteria, or (b) measures to mitigate damage.
- If the 80% provision applies, the hydrologic study is to include demonstration of no unreasonably increasing damage and/or mitigation for withdrawals between 1000 and 1200 bgs.

See generally R12-15-1407(A). The Department is then required to grant the application if it determines that:

- If the 80% provision does not apply: (1) that depth-to-static water levels won’t exceed 1,000 feet at the end of the withdrawal period; (2) the withdrawals will not cause declines averaging more

than 10 feet per year over the period of withdrawal; and (3) if the applicant is seeking additional water, that no unreasonably increasing damage and/or adequate mitigation has been demonstrated.

- If the 80% provision does apply, that depth-to-static water levels will not exceed either (1) 1,000 feet bgs at the end of the withdrawal period, or (2) 1200 feet bgs if no unreasonably increasing damage and/or adequate mitigation is demonstrated.

See generally R12-15-1407(B). Once the application is approved, the Department then issues a permit containing the salient requirements associated with the groundwater transportation, *see* R12-15-1407(C); this permit can then be subsequently renewed or modified by the Department pursuant to R12-15-1407(D).

Although ADWR's proposed rule generally represents a reasonable approach to administrative implementation of the Harquahala statute, we feel that it is critical for ADWR to recognize that its interpretation of the statute imposes significant additional restrictions on landowners who would seek to export water from the Harquahala Valley. These restrictions substantially exceed the rather minimal requirements of the statute, including the requirements for hydrologic studies and other documentation, not to mention the requirement for a permit. While we do not object to most of these additional restrictions as a means of regulating and rationalizing groundwater transportation from the Harquahala Valley, we do feel that it is critical that ADWR adhere closely to both the letter and the intent of the statute when imposing these new restrictions – and carefully consider the economic interests of Valley landowners who have relied heavily on the terms of the existing statute.

In this regard, several specific provisions of the proposed rule either inappropriately deviate from the requirements of the statute or else change the emphasis of the statute in a manner that neither comports with the intent of the legislature nor meets the legitimate expectations of Valley landowners and the owners of historically irrigated lands. We are particularly concerned that, although ADWR's rule does continue to provide for the demonstration of additional pumping beyond the 3 acre-foot per acre minimum pursuant to proposed R12-15-1407(A)(9)(b) and (B)(1)(c), the proposed rule substantially limits the ways in which this demonstration could be accomplished, which ultimately limits opportunities for mitigation arrangements and could increase the damage to Valley water users from groundwater exports.

(A) Comment #1: Retirement of Eligible Irrigation Acres – R12-15-1407(A)(4)

Under the proposed R12-15-1407(A)(4), a groundwater transportation permit applicant is required to certify that “the eligible irrigation acres identified in the application *shall not be irrigated with any water* in a year in which groundwater is withdrawn for transportation...” In a related provision, R12-15-1410(C), the proposed rule further provides that “[e]ligible irrigation acres in the Harquahala INA that are identified in a permit to transport groundwater from the INA issued pursuant to R12-15-1407 *shall not be irrigated with any water* in a year in which groundwater is withdrawn from the INA for transportation to an initial AMA pursuant to the permit.” These provisions raise several major concerns.

First, nowhere in the statute is there any requirement that the applicant not irrigate eligible lands during years that groundwater transport is occurring. A.R.S. §45-554 is an enabling statute that provides for a permissive use of water which would otherwise violate the statewide interbasin transport restrictions. Aside from establishing limitations on the overall volumes and rates of withdrawal from eligible lands for *transportation* purposes, nothing in the statute restricts the use of water for other purposes on eligible lands, including for irrigation purposes.

We recognize that identifying the future use of water on eligible lands from which transportation is occurring may be a critical part of identifying how much water can be transported from particular wells. As such, the proposed rule appropriately requires the applicant to identify whether wells will be used to withdraw groundwater for “other, non-transportation uses,” and to identify the types of other uses and annual amounts of water withdrawn, *see* R12-15-1407(A)(8)(d)-(f). These withdrawal values would also presumably be included in the hydrological model, given the existing statutory requirements to include declines from existing withdrawals in the evaluation of rates of decline at the site or sites of withdrawal. However, it is critical to recognize that, under the statute, the limitations on groundwater use are not and should not be linked to the historic irrigation of eligible lands.

As noted in Section II above, the Big Chino statute is the *only* groundwater transportation statute which links the retirement of irrigated lands to the transport of water pursuant to the statute. This explicit requirement could easily have been included in the Harquahala statute, but it was not. This creates a clear negative implication that the legislature intended to allow the potential for continued irrigation of lands where transportation is occurring.

What the legislature instead provided for was a 1000’-1200’ floor above which extractions should occur, limits on the rates of groundwater decline, and a limit on the volume of withdrawals absent a further hydrologic demonstration with regard to increasing harm and/or mitigation of harm. *See discussion* in Section III, above. As such, the limits on groundwater withdrawals in Harquahala are clearly intended to proceed not from the use or non-use of water on export-eligible lands, but rather from a demonstration of availability using hydrological modeling. In other words, the transport limits are intended to be based on whether the applicant can demonstrate that the statutory restrictions on depth-to-static water level, the limits on rates of groundwater decline, and the requirements with regard to unreasonably increased harm and/or mitigation are successfully met *given the proposed use of groundwater for transportation and/or for other purposes* identified in the application. This approach clearly does not preclude irrigation of the eligible land, even if the results of modeling impose limits on either the *amount* of future use for irrigation (or another purpose) or on the amount of water that is simultaneously available for transportation.

This is entirely consistent with the special status of NIA lands within an INA and the purpose of INAs themselves. The adoption of an INA does not restrict the use of the NIA-certificated lands for irrigation; rather, it restricts the use of all *other* lands within the INA area for irrigation in order to preserve the continued viability of farming on those lands in the future. *See* A.R.S. §45-437. Given the location of the state’s INAs and the relative paucity of demand for land in these areas for uses other than farming, this means that NIA-certificated lands are substantially more valuable than other INA lands due to their historic irrigation use. The rights to continued irrigation that are associated with these lands are not tied to any particular depth-to-static water levels; while the owners of non-NIA lands are restricted (against irrigation use), the owners of NIA lands enjoy a continuing privilege to the reasonable use of groundwater

for *any* purpose. In the Harquahala INA, this includes the use of groundwater for transportation, so long as the applicant can demonstrate that this use will fall within the modeling parameters when added to existing or planned uses for other purposes.

Secondly, these provisions' deliberate restriction against the use of "*any water*" for irrigation (and not just groundwater) during times when water is transported would appear to eliminate the potential for the continued use of CAP water for irrigation of eligible lands. The irrigation of Harquahala NIA lands with CAP water over the past decade has been responsible for significant amounts of incidental recharge that have helped the Harquahala aquifer recover from significant over-pumping and resulting depletion during the 1950's and 1960's. It is not clear why groundwater transportation by a landowner should prevent a lessee or other water user from utilizing renewable water supplies on the overlying lands.

Finally, the restriction of irrigation on eligible lands works against the current economic interests of Harquahala Valley landowners. Under the proposed rule, an applicant could transfer water while continuing to pump water for industrial, commercial, or residential purposes (uses which are currently relatively scarce in the Valley), so long as the applicant did not irrigate the land. This arbitrary restriction on irrigation strips the owner of an existing NIA-certificated right to continue a viable and sustainable use of land that plays a key role, if not the critical role, in the economic well-being of Harquahala Valley residents – and may in fact incentivize the sale of lands to entities that will use the lands (and Harquahala water) for purposes other than farming. As discussed in comment #4 below, the legislative history of these statutes clearly indicates that the legislature intended the statute to protect the interests of local landowners; by foreclosing this option, this provision of the rule goes directly against the intent of the Harquahala statute.

This restriction also would substantially limit the potential for continuing to irrigate NIA lands to a limited extent as part of a larger mitigation program. While A.R.S. §45-554 does require that the applicant own eligible acres as a precondition to transportation, this does not preclude the applicant from entering into agreements involving acreage that is not owned by the applicant as part of a mitigation program designed to approve a larger volume of water for transportation pursuant to A.R.S. §554(B)(2)(b). As noted above, one of the most obvious methods of demonstrating the availability of additional water for export above the 3 acre-foot minimum would be through a collective agreement among the owner(s) of export-eligible NIA lands and the owners of other NIA lands that would restrict the future use of groundwater on those other NIA lands for irrigation and/or future groundwater transportation. One highly effective approach might be an agreement which continues irrigation on a large enough area of land that the Valley's farming economy can be protected, but at a lower level of water use in order to facilitate groundwater transportation. Another approach might be to deliberately recharge some of the water used for transportation through recharge of CAP water (either via direct recharge, in-lieu recharge, or incidental recharge via use on overlying lands).

Given these substantial concerns, we strongly suggest that the proposed rule should be revised to delete the certification provision in R-12-15-1407(A)(4) and the restriction against irrigation contained in R12-15-1410(C). Alternatively, these provisions should be drafted to allow for continued irrigation use so long as that irrigation use is identified in the modeling assumptions for the hydrologic study provided pursuant to R12-15-1407(A)(9),(10), and (11). At an absolute minimum, the proposed rule should substitute the

term “groundwater” for the term “any water” in both provisions and allow for the continuation of limited water use for irrigation as part of a mitigation proposal.

(B) Comment #2: Specification of Annual Amounts of Withdrawals

Pursuant to R12-15-1407(A)(6), the applicant is required to identify “[t]he number of years after the date the application is filed in which the applicant proposes to withdraw groundwater from the INA, not to exceed one hundred years, *and the annual amount of groundwater* proposed to be withdrawn during that time.” While this provision would not seem to necessarily prohibit the use of water on a non-annual basis, as written this provision places undue emphasis on the potential use of groundwater for assured water supply purposes; in fact, this water likely has the greatest overall value for *drought protection* purposes (i.e., non-annualized use).

A review of water plans and planning documents available from various water users and water providers suggests that imported groundwater, including Harquahala groundwater, has indeed been contemplated for annualized use by some entities. These include, in particular, annualized use by municipal providers to meet assured water supply requirements (assuming that CAP wheeling capacity was available and usable for this purpose), and use by CAGRD to meet its growing replenishment obligations; imported groundwater is expressly identified in water plans as a future water source by many municipal water providers as well as CAGRD.

However, imported groundwater is also needed (and may well be needed more in the future) for non-annualized use. Among other things, this includes planned use by the AWBA, which has explicitly identified Harquahala groundwater as a means of meeting Indian firming obligations; Harquahala Valley groundwater was also one of the sources of water recommended to AWBA by the Indian Firming Commission. More broadly, Harquahala Valley groundwater (and other sources of imported groundwater) could play a significant role in the future in mitigating the impacts of either localized droughts on the SRP system or Colorado River shortages by supplementing or replacing normal CAP water deliveries. Because imported groundwater would not be needed on an annual basis for these purposes, a relatively small volume of export-authorized groundwater could help to guarantee the availability of hundreds of thousands of acre-feet of water use not currently protected through other means.

A review of the legislative history of these statutes demonstrates that the legislature fully intended imported groundwater to be used not only for annualized, assured water supply purposes, but also for non-annualized, drought protection purposes. For example, Representative Herb Guenther (at that time a prominent legislator) explicitly noted in the legislative record that the bill was intended to structure water transfers in such a manner so that “water is provided for drought mitigation and augmentation.” *See Hearing on S.B.1055 Before the House Comm. On Natural Resources & Agriculture*, 40 Leg., 1 Reg. Sess. 3 (Ariz. 1991) at p. 4.

Of course, any proposed non-annualized use of water should also be disclosed in the application for a transport permit, and would need to be included in the hydrologic modeling to ensure that the requirements of the statute are met for both annualized and non-annualized uses. As such, we would suggest that the language of proposed R12-15-1407(A)(6) be revised to more explicitly provide for both annualized and non-annualized use, as follows:

6. The number of years after the date the application is filed in which the applicant proposes to withdraw groundwater from the INA, not to exceed one hundred years, and the ~~annual~~ TOTAL amount of groundwater proposed to be withdrawn during that time, AS FOLLOWS:

(a) THE AMOUNT OF WATER PROPOSED TO BE USED ON AN ANNUAL BASIS AND THE PERIOD OF PROPOSED ANNUAL USE; AND

(b) THE AMOUNT OF WATER PROPOSED TO BE USED ON AN INTERMITTENT OR OTHER NON-ANNUAL BASIS, INCLUDING USE FOR DROUGHT OR SHORTAGE MITIGATION PURPOSES, IDENTIFYING THE CONDITIONS UNDER WHICH WATER WOULD BE USED, THE MAXIMUM AMOUNT OF WATER THAT WOULD BE USED IN ANY ONE YEAR, AND THE TOTAL VOLUME OF WATER RESERVED FOR THIS PURPOSE. IF AN INTERMITTENT OR OTHER NON-ANNUAL USE OF WATER IS PROPOSED, THE APPLICANT SHALL IDENTIFY THE ASSUMPTIONS USED WITH REGARD TO THE TIMING AND VOLUME OF SUCH USE FOR PURPOSES OF THE HYDROLOGIC STUDY REQUIRED BY SUBSECTIONS (A)(9), (A)(10), AND (A)(11) OF THIS SECTION AND THE REASONABLE BASIS FOR THOSE ASSUMPTIONS.

(C) Comment #3: Permissible Rate of Decline

Pursuant to R12-15-1407(A)(10)(a), the applicant is required to demonstrate in its hydrologic study “the average annual rate at which the groundwater table will decline at the site or sites of the withdrawals *during the period in which the applicant proposes to withdraw groundwater* for transportation...” This information is then used to meet the requirements for ADWR approval of the transportation permit under R12-15-1407(B)(1)(b), which include (as a condition of approval) that ADWR determine that “[t]he groundwater table at the site or sites of the withdrawals will not decline more than an average of ten feet per year *during the period in which the applicant proposes to withdraw groundwater* for transportation...”

These provisions are not consistent with the requirements of the statute, which states that groundwater withdrawals must be limited at the site or sites of withdrawals to a rate that, “when added to the existing rate of withdrawals in the area, does not cause the groundwater table at the site or sites of the withdrawals to decline more than an average of ten feet per year *during the one hundred year evaluation period.*” The statute thus expressly allows for withdrawals that occur during a shorter interval of groundwater withdrawals to be averaged over a one-hundred year for purposes of demonstrating compliance with the ten foot-per-year limitation. The proposed rule in R12-15-1407(A)(10)(a) and R12-15-1407(B)(1)(b) should be revised to reflect the statutory wording.

(D) Comment #4: Incorporation of AWS Reserves

Pursuant to R12-15-1407(A)(9), the proposed rule requires the applicant to submit “[a] hydrologic study, using a method of analysis approved by the director, demonstrating the depth-to-static water level at the locations where the groundwater will be withdrawn at the end of the period in which the applicant

proposes to withdraw groundwater for transportation as identified in the application. *The hydrologic study shall take into account the projected declines described in R12-15-716(B)(3)[.]*” The referenced provision, R12-14-716(B)(3), requires the cumulative evaluation of projected declines not only from existing uses, but also from estimated water demands associated with issued certificates, water reports, and designations that will be met with groundwater or “stored water recovered outside the area of impact of the stored water,” as well as groundwater reserved for developments for which the Director has issued an analysis.

Since the Harquahala INA is not within an AMA, these requirements would presumably be those associated with Adequate Water Supply (AWS) certificates, designations, reports, and analyses. The same requirements also appear in the proposed rule for purposes of demonstrating the average annual rate of groundwater decline at withdrawal sites pursuant to R12-15-1407(A)(10)(a), as well as appearing in ADWR’s approval criteria for both depth-to-static water levels and average annual rates of decline in R12-15-1407(B)(1)(a), (B)(1)(b), and B(2)(a).

The proposed rule’s incorporation of the additional requirement that the hydrologic study back out all previous AWS certificates, designations, reports, and analyses from the available water for transport substantially exceeds the obligations imposed by the statute. Although the Harquahala statute’s reference to a 100 year evaluation period can reasonably be construed to require a hydrologic study, *see* A.R.S. § 45-554(A)(1)(b), there is no reasonable construction that incorporates these additional elements into the calculation of static water levels and average annual rates of decline *unless they are associated with actual existing withdrawals*.

The rules governing the adequate water supply program correctly require the consideration of both existing uses *and* estimated future water demands from other water users. *See* A.A.C. R12-15-716(B)(3). However, A.R.S. §45-554 merely requires that the evaluation of withdrawals for groundwater transportation account for existing water use, and only in the context of evaluating the overall rate of groundwater declines: “at a rate that, *when added to the existing rate of withdrawals in the area*, does not cause the groundwater table at the site or sites of the withdrawals to decline more than an average of ten feet per year during the one hundred year evaluation period.” A.R.S. §45-554(A)(1)(b). It is also notable that *no* requirements are imposed in this regard for the calculation of static water levels under the Harquahala statute, although consideration of existing withdrawals is fairly implied by the fact that water levels are not supposed to drop below the given 1000’ or 1200’ limitation as a result of transportation withdrawals.

Incorporating requirements that back out hypothetical or even predicted (future) withdrawals from AWS documentation would frustrate the water transfer statute by allowing owners of non-eligible, non-NIA lands to tie up water that would otherwise be eligible for transfer from certified NIA lands. Under the Department’s formulation, non-NIA landowners could effectively “reserve” water for their future use that is clearly made available by the statute for transportation (by obtaining certificates, designations, reports, and analyses that would limit the amount of water that could be transported from eligible land above 1000’ bgs and/or the rate of withdrawal at specific sites).

This deprives NIA landowners of the transportation potential associated with their lands and is entirely inconsistent with the terms of the statute, which expressly requires consideration only of “existing”

withdrawals. AWS applicants in the Harquahala INA are already entitled to withdraw to 1200' bgs for purposes of their physical availability demonstration, which is a full 200' lower than the transportation surface presumptively authorized under A.R.S. §45-554(B)(1); this already provides future AWS applicants with a substantial buffer of water below that made available for transportation under the statute. ADWR's incorporation of AWS reserves also makes little sense when the use of water on NIA lands is otherwise essentially unrestricted (as compared to use on non-NIA lands); regardless of these requirements, NIA landowners can continue to pump water for irrigation even if this prevents another landowner from receiving an AWS.

Taken together with the provisions of the INA statute, the transportation statute represents a deliberate legislative policy decision to designate at least the first 1000' bgs of Harquahala groundwater for use on existing, NIA-certificated lands for irrigation and transportation, and to allocate this preferential use to landowners who have historically used their lands for irrigation. This hardly represents a significant imposition on non-NIA landowners seeking a future AWS. The Harquahala groundwater basin is known to extend to depths well in excess of 1000' bgs, and in excess of 8000' in some portions of the basin; in addition to the 200' buffer noted above, R12-15-716(C) provides an existing mechanism by which ADWR can extend physical availability to depths below 1200' if the applicant demonstrates the availability of water and the capability to extract it.

As such, we suggest that proposed R12-15-1407(A)(10)(a) and R12-15-(B)(1)(b) should each be revised to delete the reference to R12-15-716(B)(3), instead incorporating the correct statutory requirement that the applicant's evaluation of projected groundwater declines should "take into account the existing rate of withdrawals in the area." Although not expressly required by the statute, we recognize that existing withdrawals should also be considered for practical purposes in the consideration of end-of-period static water levels under proposed R12-15-1407(A)(9), R12-15-1407(B)(1)(b) and R12-15-716(B)(3). As such, we suggest that R12-15-1407(A)(9), R12-15-1407(B)(1)(b) and R12-15-716(B)(3) each be revised to delete the reference to R12-15-716(B)(3), instead incorporating the implied statutory requirement that the applicant's evaluation of projected static depth-to-water levels should "take into account the existing rate of withdrawals in the area."

V. Conclusion

In closing our comments, we would like to highlight the fact that our comments all revolve around one basic concern – ensuring that groundwater transportation from the Harquahala Valley is implemented in a manner that protects both the legitimate interests of Harquahala landowners in future groundwater transportation and the long-term economic future of Harquahala landowners and residents. In this regard, our largest single concern is that the proposed rule not emphasize one potential approach to groundwater transportation – the purchase and permanent retirement of irrigated lands by political subdivisions – over alternative approaches (allowed under the terms of the current statute) that would potentially allow for both greater amounts of water available for transportation and better mitigation and protection for Valley landowners.

Ensuring that the proposed rule meets these dual objectives is entirely consistent with the intent of not only the Harquahala transportation statute, but the other groundwater transportation statutes as well. A review of the legislative history of these statutes shows that the Arizona legislature struggled with how

best to reconcile the interests of obtaining adequate water supplies for the state's Active Management Areas with the needs of the rural areas that would be affected by groundwater transportation. *See generally Omnibus Water Code Revisions: Hearing on S.B.1055 Before the Senate Comm. On Natural Resources & Agriculture*, 40 Leg., 1 Reg. Sess. 5 (Ariz. 1991).

By the time these statutes were enacted, growing Central Arizona municipalities had already begun purchasing "water farms" in rural Arizona; these included Phoenix's \$32 million investment into property in the McMullen Valley, which was undertaken with the intention of transferring approximately 6 million acre-feet of the 15 million acre feet believed to be available in the basin. *See id.* at 4 (statement of Mr. Jim Derouin, attorney for Phoenix). However, as the legislature recognized, unrestricted rural groundwater mining would place the interests of rural Arizona on a crash course with those of urban Arizona; the inherent conflict between the growth of Arizona's urban areas and the growth and economic viability of its rural areas would be unavoidable. *See id.* at 2 (statement of Senator Arzberger).

The groundwater transportation statutes were ultimately intended to strike a balance between these two competing objectives by minimizing the potential impacts that groundwater transportation would have on landowners in the basin. *Id.*; *see also Hearing on S.B.1055 Before the House Comm. On Natural Resources & Agriculture*, 40 Leg., 1 Reg. Sess. 3 (Ariz. 1991). According to a statement at the time by Mr. Guenther, the goal of the transportation bill "has been, in all the years this legislation has been considered, to find some way to provide water for development of the cities in an organized, orderly, realistic fashion while, at the same time, protecting the interest of the rural water users." *Id.* at 3-4.

In this context, we feel that it is important to recognize that the greatest economic benefits for local landowners and water users in the Harquahala Valley are not likely to be derived from a situation in which the vast majority of the Valley's irrigation lands are purchased by political subdivisions for groundwater transportation, and are then retired and dried out for the benefit of distant cities. Not only is this not the preferable result, it is not the result required by the statute. Unlike any of the other groundwater transportation statutes, the Harquahala statute deliberately allows for arrangements in which the parties seeking to export water can work with local water users and surrounding residents to increase the amount of water potentially available for transportation while mitigating the harm associated with those withdrawals. Taking advantage of this flexibility, it is easy to envision creative solutions that meet transportation objectives while leaving water behind on the ground to meet local economic objectives.

Harquahala Valley has immense future potential not just for groundwater transportation, but also for continued, sustainable farming, for the development of solar energy, and even for limited residential development. Together with the State Land Department and other private landowners, W Holdings has made substantial investments in the Valley's NIA-certificated lands to help the Valley achieve this potential. We are therefore greatly concerned that these opportunities are not inadvertently limited or foreclosed to the detriment of Harquahala landowners and residents.

We greatly appreciate your consideration of our comments on the proposed rule. Please do not hesitate to contact Peter Culp at (602) 528-4063 or Chad Baker at (602) 528-4107 should you have any questions or concerns.

Very truly yours,

A handwritten signature in black ink, appearing to be a combination of the initials 'PC' and 'CB', written in a cursive style.

Peter W. Culp
Chad C. Baker
Squire, Sanders & Dempsey, L.L.P.

Attachment

W Holdings Proposed Revisions to R12-15-1407 and R12-15-1410

R12-15-1407. Application to Withdraw Groundwater from the Harquahala INA for Transportation to an Initial AMA; Determination by Director; Permit; Modification

- A. Before withdrawing groundwater from the Harquahala INA for transportation to an initial AMA, an entity eligible to transport groundwater shall apply to the director for a permit to transport groundwater from the INA. The application shall be on a form prescribed by the director and shall include the following information:
1. The name and address of the applicant.
 2. The point of contact for the applicant, including fax and telephone numbers and an email address.
 3. The number and legal location of eligible irrigation acres owned by the applicant that the applicant requests to be included in the calculation of the amount of groundwater that the applicant may transport from the INA pursuant to A.R.S. § 554(B)(2)(a) and a copy of the certificate of irrigation authority issued by the Department for those acres;
 4. ~~Certification by the applicant that the eligible irrigation acres identified in the application shall not be irrigated with any water in a year in which groundwater is withdrawn for transportation to an initial AMA pursuant to the permit issued under subsection (C) of this section~~
 5. Whether this state or one or more political subdivisions of this state own eighty percent or more of the eligible irrigation acres in the INA;
 6. The number of years after the date the application is filed in which the applicant proposes to withdraw groundwater from the INA, not to exceed one hundred years, and the ~~annual~~ TOTAL amount of groundwater proposed to be withdrawn during that time, AS FOLLOWS:
 - (a) THE AMOUNT OF WATER PROPOSED TO BE USED ON AN ANNUAL BASIS AND THE PERIOD OF PROPOSED ANNUAL USE; AND
 - (b) THE AMOUNT OF WATER PROPOSED TO BE USED ON AN INTERMITTENT OR OTHER NON-ANNUAL BASIS, INCLUDING USE FOR DROUGHT OR SHORTAGE MITIGATION PURPOSES, IDENTIFYING THE CONDITIONS UNDER WHICH WATER WOULD BE USED, THE MAXIMUM AMOUNT OF WATER THAT WOULD BE USED IN ANY ONE YEAR, AND THE TOTAL VOLUME OF WATER RESERVED FOR THIS PURPOSE. IF AN INTERMITTENT OR OTHER NON-ANNUAL USE OF WATER IS PROPOSED, THE APPLICANT SHALL IDENTIFY THE ASSUMPTIONS USED WITH REGARD TO THE TIMING AND VOLUME OF SUCH USE FOR PURPOSES OF THE HYDROLOGIC STUDY REQUIRED BY SUBSECTIONS (A)(9), (A)(10), AND (A)(11) OF THIS SECTION AND THE REASONABLE BASIS FOR THOSE ASSUMPTIONS.
 7. The purposes for which the groundwater will be used.
 8. For each well to be used to withdraw the groundwater from the INA:
 - a. Whether the well is in existence or is proposed to be drilled;

- b. If the well is in existence, the well registry number and the date the well was constructed;
 - c. The volume of groundwater proposed to be withdrawn for transportation purposes;
 - d. If the well will be used to withdraw groundwater for other, non-transportation uses:
 - (i) The annual amount of groundwater that will be withdrawn for such uses and whether the amount is an estimated volume or a measured volume; and
 - (ii) A description of the non-transportation uses from the well.
 - e. Whether the well is owned by the applicant or used pursuant to a contractual agreement;
 - f. If the well was constructed after September 21, 1991 or is a proposed new well, evidence that the director approved an application to use the well to withdraw groundwater for transportation to an AMA pursuant to A.R.S. § 45-559 and R12-15-1305 in the amount specified in subsection (B)(8)(c) of this section;
9. A hydrologic study, using a method of analysis approved by the director, demonstrating the depth-to-static water level at the locations where the groundwater will be withdrawn at the end of the period in which the applicant proposes to withdraw groundwater for transportation as identified in the application. The hydrologic study shall take into account the ~~projected declines described in R12-15-716(B)(3)~~ EXISTING RATE OF WITHDRAWALS IN THE AREA;
10. If this state or one or more political subdivisions of this state do not own eighty percent or more of the eligible irrigation areas in the Harquahala INA:
- a. A hydrologic study, using a method of analysis approved by the director, demonstrating the average annual rate at which the groundwater table will decline at the site or sites of the withdrawals during ~~the period in which the applicant proposes to withdraw groundwater for transportation as identified in the application~~ A ONE HUNDRED YEAR EVALUATION PERIOD, taking into account the ~~projected declines described in R12-15-716(B)(3)~~ EXISTING RATE OF WITHDRAWALS IN THE AREA; and
 - b. If the applicant proposes to withdraw and transport more groundwater than the amount allowed by A.R.S. § 45-554(B)(2)(a), a hydrologic study, using a method of analysis approved by the director, demonstrating that the withdrawals in excess of that amount will not cause unreasonably increasing damage to residents of surrounding land and other water users in the Harquahala INA under the criteria set forth in R12-15-1305(B) or that actions taken or proposed to be taken by the applicant will mitigate the damage.
11. If this state or one or more political subdivisions of this state own eighty percent or more of the eligible irrigation acres in the Harquahala INA and the depth-to-static water level at the locations where the groundwater will be withdrawn will be between 1,000 and 1,200 feet below land surface at the end of the period in which the applicant proposes to withdraw groundwater for transportation as

identified in the application, a hydrologic study, using a method of analysis approved by the director, demonstrating that the withdrawals from a depth between, 1,000 and 1,200 feet below land surface will not cause unreasonably increasing damage to residents of surrounding land and other water users in the Harquahala INA under the criteria set forth in R12-15-1305(B) or that actions taken or proposed to be taken by the applicant will mitigate the damage.

- B.** The director shall grant an application filed pursuant to subsection (A) for a permit to transport groundwater from the Harquahala INA if the director determines the following:
1. If this state or one or more political subdivisions of this state do not own more than eighty per cent of the eligible irrigation acres in the INA, all of the following apply:
 - a. The depth-to static water level at the locations where the groundwater will be withdrawn will not exceed 1,000 feet below land surface at the end of the period in which the applicant proposes to withdraw groundwater for transportation as identified in the application, taking into account the ~~projected declines described in R12-15-716(B)(3)~~ EXISTING RATE OF WITHDRAWALS IN THE AREA;
 - b. The groundwater table at the site or sites of the withdrawals will not decline more than an average of ten feet per year during the ~~period in which the applicant proposes to withdraw groundwater for transportation as identified in the application~~ A ONE HUNDRED YEAR EVALUATION PERIOD, taking into account the ~~projected declines described in R12-15-716(B)(3)~~ EXISTING RATE OF WITHDRAWALS IN THE AREA; and
 - c. If the applicant proposes to withdraw more groundwater than allowed by A.R.S. § 45-554(B)(2)(a), the withdrawals in excess of that amount will not cause unreasonably increasing damage to residents of surrounding land and other water users in the Harquahala INA under the criteria set forth in R12-15-1305(B) or that the applicant has demonstrated that actions taken or proposed to be taken by the applicant will mitigate the damage.
 2. If this state or one or more political subdivisions of this state owns more than eighty percent of the eligible irrigation acres in the Harquahala INA, the depth-to-static water level at the locations where the groundwater will be withdrawn will not exceed the following maximum depth-to-static water level limits:
 - a. Except as provided in subsection (B)(2)(b) of this section, 1,000 feet below land surface at the end of the period in which the applicant proposes to withdraw groundwater for transportation as identified in the application, taking into account the projected declines described in R12-15-716(B)(3).
 - b. One thousand two hundred feet below land surface at the end of the period in which the applicant proposes to withdraw groundwater for transportation as identified in the application if the hydrologic study submitted by the applicant demonstrates that the withdrawals from a depth between 1,000 and 1,200 feet below land surface will not cause unreasonably increasing damage to residents of surrounding land and

other water users in the Harquahala INA under the criteria set forth in R12-15-1305(B) or that actions taken or proposed to be taken by the applicant will mitigate the damage.

- C. If the director grants an application filed pursuant to subsection (A), the director shall issue a permit to transport groundwater to the applicant. The permit shall contain the following information:
1. The name of the entity to which the permit is issued;
 2. An identification of the eligible irrigation acres used to determine the volume of groundwater that may be withdrawn pursuant to the permit;
 3. The point or points of withdrawal of groundwater pursuant to the permit;
 4. The amount of groundwater that may be withdrawn from each point of withdrawal;
 5. The term of the permit; which shall not exceed one hundred years; and
 6. Any conditions on the permit authorized by law and determined by the director to be appropriate, including, if applicable, any requirement to mitigate damage to residents of surrounding land and other water users in the Harquahala INA.
- D. An entity eligible to transport groundwater from the Harquahala INA may apply to the director for a modification or renewal of a permit issued under this section. An application for modification or renewal of a permit shall be subject to the criteria listed in subsection (B) of this section.

R12-15-1410. Irrigation of HIA Land in the Big Chino Sub-basin Prohibited After Land has been Retired from Irrigation; Irrigation of HIA Land in the McMullen Valley Basin and Irrigation of Eligible Irrigation Acres in the Harquahala INA Prohibited in Any Year in Which Groundwater is Withdrawn for Transportation Pursuant to Permit in which Acres are Identified

- A. HIA Land in the Big Chino sub-basin shall not be irrigated with any water at any time after the land has been retired from irrigation pursuant to R12-15-1405(B)(4)(b).
- B. HIA Land in the McMullen Valley basin that is identified in a permit to transport groundwater from the basin issued pursuant to R12-15-1403 shall not be irrigated with any water in a year in which groundwater is withdrawn from the basin for transportation to an initial AMA pursuant to the permit.
- C. ~~Eligible irrigation acres in the Harquahala INA that are identified in a permit to transport groundwater from the INA issued pursuant to R12-15-1407 shall not be irrigated with any water in a year in which groundwater is withdrawn from the INA for transportation to an initial AMA pursuant to the permit.~~