Enhancing the Role of Water Districts in Groundwater Management and Surface Water Utilization in Arkansas

by

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I. INTRODUCTION

A. General

Groundwater is a critical resource in Arkansas. This resource provides almost one-half of the drinking water for the people in the state. Rural residents are almost totally dependent on wells for drinking water. Irrigation is responsible for the greatest use of groundwater, and this use alone accounts for about eighty-six percent of the total use of groundwater in the state.[1] In the twenty-five eastern agricultural counties, where most of the irrigation occurs, groundwater supplies about ninety-six percent of the water used for irrigation purposes. Industry in many parts of the state depends heavily on groundwater for manufacturing, processing, and other industrial processes.[2]

With such a heavy utilization of a single resource for health and well-being, food production, and the general economy, one might assume that the state and its citizens would be particularly concerned with preserving this valuable resource. Unfortunately, the approach in Arkansas has been one of benign neglect at best. Efforts to offer legislative programs that might provide some protection of the resource have been met with disinterest and even hostility.

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1. LEAGUE OF WOMEN VOTERS OF ARKANSAS, ARKANSAS GROUND WATER, FACT SHEET (1984).

2. ARKANSAS SOIL AND WATER CONSERVATION COMMISSION, ARKANSAS WATER PLAN: EXECUTIVE SUMMARY 21 (1990)[hereinafter ARKANSAS WATER PLAN].

Users have feared loss of control over the resource and increased costs; those who profit from the extraction of groundwater (well-drillers) have feared loss of income and reduced usage of groundwater; legislative timidity has resulted in delay in implementation of an effective program for management and protection of the resource. Finally, because of public apathy, the potential problems resulting from overuse, depletion, and contamination of the groundwater supply have only recently led to any clear efforts to address this most critical resource issue.

After several abortive efforts, in 1991, the legislature adopted a groundwater protection and management act that offers some potential for addressing the continued depletion of water from underground sources and establishes a mechanism for some management of the resource.[3] The Arkansas Ground Water Protection and Management Act also provides some incentives for conversion from groundwater to surface water sources for major uses, particularly irrigation. While many may feel this legislation is inadequate for long range protection, it is an important first step. It does provide for the implementation of controls on groundwater usage in the future in those areas of the state where the problems are the greatest. It also gives, however, adequate protection of vested rights and adequate time for voluntary efforts to reduce groundwater usage before controls are implemented.

This article will review the extent and nature of the problems related to the resource, the traditional legal approach for groundwater allocation, and the recent efforts to implement a system for regulatory control culminating with the Arkansas Groundwater Protection and Management Act of 1991. Additionally, it will offer some modest suggestions for coordination of groundwater allocation and the policy of encouraging conversion to surface water use, a matter not yet adequately addressed in state legislation or in regulatory programs currently in place. An important aspect of the conversion from groundwater to surface water is

3. Arkansas Ground Water Protection and Management Act, 1991 Ark. Acts 342.

the institutional framework in place for the creation and operation of entities that might actually carry out this function: water districts.

B. Nature of the Resource

Groundwater supplies in Arkansas have been regarded as abundant and of high quality. The abundance has historically resulted from recharge both from rainfall and from the interconnection of some groundwater to streams and other surface water sources. However, with increased withdrawals for agricultural, industrial, and municipal uses, the rate of recharge in many areas of the state is significantly less than the rate of depletion resulting in "mining" of the resource. In other areas, the contamination of the supply has made it less desirable as a source of drinking water.[4]

In the Interior Highlands area (the land north of the Arkansas River and west of the White River), groundwater is an important source of drinking water for small towns and rural residents. The hydrogeology of the region is such that groundwater does not come from major aquifers (individual water-bearing beds of materials, usually consisting of gravel and sand, and sometimes thought of as "groundwater reservoirs") in the region, but from water that occurs in fractures and joints of rocks and in the few shallow aquifers that do exist. Major water uses are from surface sources, but the importance of groundwater in the region for those dependent on it for drinking water cannot be overlooked. The only high yielding aquifers are along the Ozark Plateau and the alluvial aquifer along the Arkansas River. Similarly, the West Central and Central West areas of the state are outside the area of principal aquifers and have insufficient groundwater supplies for any major municipal or industrial usage. Nor is irrigation significant in these areas.[5]

The Gulf Coastal Plain of southern and eastern Arkansas consists of several layers of clay, silt, sand, and gravel which function as high-yielding aquifers. The two most significant aquifers in this region are the Mississippi Alluvial

4. ARKANSAS WATER PLAN, *supra* note 2, at 17-20.
5. ARKANSAS WATER PLAN, *supra* note 2, at 11-12.

Aquifer and the Sparta Sand Aquifer, both of which are high-yielding and of generally high quality. The alluvial aquifer can yield from 1,000 to 2,000 gallons per minute to wells and is of greatest importance as a source of irrigation water for agriculture. The Sparta Sand Aquifer yields from 500 to 1,500 gallons per minute and is the main source of water for industrial and municipal uses in the southern and southeastern parts of the state. Other aquifers supply municipalities in parts of the Coastal Plain region.[6]

Serious depletion of underground sources of irrigation water is a major concern in those areas of the state where most of the irrigated cropland is located. Serious water level declines have resulted from large withdrawals for industrial and municipal supplies in some areas. As a result of heavy pumping, salt water intrusion into some wells is an emerging problem.[7]

In a 1955 landmark decision on water rights, *Harris v. Brooks*,[8] the Arkansas Supreme Court adopted the riparian rights reasonable use doctrine as the basis for resolving conflicts between water users in the state. The crux of the doctrine, as applied in Arkansas, is that the rights of all riparian landowners (those who have land bordering on streams and lakes) are "mutual, common and correlative" and that all uses other than for domestic purposes are equal. Each riparian landowner has a right, incident to ownership of the land, to make reasonable use of the water having due regard for the rights of other riparians.[9]

The right to use water is not fixed in magnitude, and the questions of whether a particular use or level of use is reasonable can only be determined by resort to litigation, and then only after all the circumstances surrounding a given use are evaluated.[10] The right is always subject to modification by the implementation of new uses by other owners. The traditional "reasonable use" concept for water

6. ARKANSAS WATER PLAN, *supra* note 2, at 12, 19-20.

7. ARKANSAS WATER PLAN, *supra* note 2, at 21-22.

8. 283 S.W.2d 129 (Ark. 1955).

9. For a detailed explanation of the development of this doctrine in Arkansas, see J. W. Looney, *Modification of Arkansas Water Law: Issues and Alternatives*, 38 ARK. L. REV. 221 (1984).

10. Jones v. Oz-Ark-Val Poultry Co., 306 S.W.2d 111 (Ark. 1957).

allocation, when applied to resolve groundwater disputes, creates uncertainty.

Concerning flexibility, the groundwater rule as interpreted in Arkansas would apparently permit the transfer of water from the overlying land if such use does no injury to the common supply of all riparian owners.[11] In Arkansas, the water supply in many areas is so inadequate that any transportation of the water could be considered an injury to the common supply and would be prohibited by application of the reasonable use test.

The public's interest is, of course, affected by unrestrained groundwater development. It is for this reason—and to reduce potential conflicts between users of groundwater—that several states, including Arkansas, have evaluated their groundwater regulatory mechanisms and have made significant changes either by administrative rulings or by legislation.[12]

In contrast to the situation regarding groundwater, total surface water supplies in Arkansas are generally abundant with an estimated 280 billion gallons of surface water

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11. Lingo v. City of Jacksonville, 522 S.W.2d 403 (Ark. 1975).

12. For example, in 1980, Arizona adopted the most extensive groundwater management statute in the country. ARIZ. REV. STAT. ANN. §§ 45-401 to -407 (1994). *See* James W. Johnson, *The 1980 Arizona Groundwater Management Act and Trends in Western States Groundwater Administration and Management: A Minerals Industry Perspective*, 26 ROCKY MT. MIN. L. INST. 1031 (1980). Nebraska, which follows a combination of the reasonable use rule and statutory preferences, adopted a Ground Water Management Act in 1976 which established controls on groundwater use by irrigators. NEB. REV. STAT. §§ 46-601 to -655 (1993). *See* J. David Aiken, *Nebraska Ground Water Law and Administration*, 59 NEB. L. REV. 917, 925 (1980). These changes have not been confined to western states. Georgia provided for the regulation of the use of groundwater in certain situations in 1972. GA. CODE ANN. §§ 12-5-95 to -422 (1992 & Supp. 1994). Virginia adopted a Ground Water Management Act in 1973 which provides for state regulation of the critical groundwater areas. VA. CODE ANN. §§ 62.1-44.36 to 62.1-44.44 (Michie 1992). In water management legislation adopted in Florida, the most comprehensive of any eastern state, the regulation of groundwater as well as surface water is included. FLA. STAT. ANN. §§ 373.201-.4595 (West 1988 & Supp. 1995). In addition, Delaware, Indiana, Iowa, Kentucky, Maryland, Minnesota, New Jersey, North Carolina, South Carolina, and Wisconsin have all established permit systems for groundwater withdrawals. The legislation in these states is summarized by Richard Ausness, *Water Rights Legislation in the East: A Program for Reform*, 24 MD. L. REV. 547 (1983), and citations to the specific statutes may be found therein.

flowing through the state's rivers each day.[13] While specific areas may encounter surface water supply problems during certain times of the year and under adverse climatic conditions, the total available surface supply is adequate to meet current and projected future demands. The problem is that the surface water is not necessarily available in the locations most in need of water. In other words, the areas where groundwater is critically short are not readily supplied by surface water sources. For this reason, the Arkansas Water Plan calls for conversion from groundwater to surface water and for enhanced authority for local entities to manage excess surface water.[14]

In Arkansas, the steps toward conversion to surface water are in place with Act 1051 of 1985. This Act began the movement away from the riparian rights system and included specific authorization for nonriparian transfers, which are transfers and uses of water on land that is not adjacent to the stream.[15] Prior to this change, the Arkansas Water Resources Development Act of 1981 authorized the Soil and Water Conservation Commission to issue bonds for the development of water resources for domestic, agricultural, industrial, and other essential purposes.[16] This Act was designed specifically to provide financial assistance for projects which would make surface water available in areas dependent on groundwater.

However, the conversion to surface water will not occur rapidly. Projects for interbasin, nonriparian transfer will be costly and take time to develop. Even nonriparian transfers of an intrabasin nature will require financial resources beyond that of many individuals who might benefit from such transfers.[17] For this reason, continued emphasis

13. ARKANSAS WATER PLAN, *supra* note 2, at 6.

14. ARKANSAS WATER PLAN, *supra* note 2, at 29.

15. For a detailed review of Act 1051 of 1985 and its changes in traditional riparian rights law, see J.W. Looney, *An Update on Arkansas Water Law: Is the Riparian Doctrine Dead?*, 43 ARK. L. REV. 573 (1990).

16. ARK. CODE ANN. §§ 15-22-601 to -622 (Repl. 1994).

17. Interbasin transfers would involve movement of water from a watershed or basin of one stream to a completely different watershed or basin. Nonriparian transfers could also be intrabasin. The high cost and difficulty is illustrated by tentative plans for the Grand Prairie Irrigation Project which would divert water from the White River for irrigation in four counties, all within the White River basin. The

must be placed on groundwater pumping strategies that may serve to achieve some level of reduction in the groundwater depletion rates.[18] This likely means that additional regulatory authority will be necessary to address effectively these problems. Such authority was proposed in the Water Code Study Commission proposals in the 1983 legislative session but was deleted after objections from the agricultural community and well-drillers.[19]

In the 1991 legislative session, the General Assembly attempted to address some of the deficiencies in the law with regard to groundwater. The result was the "Arkansas Groundwater Protection and Management Act," which puts in place a potential regulatory scheme for groundwater. This regulatory program, which may apply only in areas designated as "critical groundwater areas," is designed in such a way that controls on groundwater may be implemented at some point in the future primarily through a permitting scheme (called "water rights" in the legislation). The details of this program will be discussed below. This legislation represents a major movement away from the traditional case-by-case adjudication of groundwater disputes toward an administrative system to address groundwater depletion problems in the state.

C. Water Distribution

One of the primary objectives of a water allocation system is to facilitate application of water to its highest and best use. Beneficial uses of water may be desired at some point other than at a riparian location. Thus, the watershed limitation and the riparian land limitation of the traditional riparian rights doctrine contribute to the inefficient use of groundwater in riparian doctrine states.[20] Diversions to

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United States Army Corps of Engineers estimates the project's cost at $176 million. David F. Kern, *Water Levels Dipping Fast in 2 Areas*, ARKANSAS DEMOCRAT-GAZETTE, April 5, 1994, at 1B.

18. ARKANSAS WATER PLAN, *supra* note 2, at 24-25.

19. *See*, J. W. Looney, *Modification of Arkansas Water Law: Issues and Alternatives*, 38 ARK. L. REV. 221, 247 (1984).

20. Donald R. Levi and Kenneth C. Schneeberger, *The Chain and Unity of Title Theories for Delineating Riparian Land: Economic Analysis as an Alternative to Case Precedent*, 21 BUFF. L. REV. 439, 443-47 (1972).

nonriparian lands, even within the same watershed, and interbasin transfers would be subject to challenge under the riparian rights system as applied by the Arkansas Supreme Court.[21]

The legislature has put in place mechanisms for expanding availability of water through transfers by public suppliers. Current law permits municipal suppliers to divert and take water for public use by acquiring lands by eminent domain for waterworks purposes.[22] The Arkansas Supreme Court has indicated that, in the absence of such an eminent domain proceeding, a city's riparian rights "are the same as any other riparian owner and no greater."[23] Provisions exist for the formation and operation of irrigation districts under the Arkansas Irrigation, Drainage and Watershed Improvement District Act of 1949,[24] which, among other things, authorizes "the acquisition by purchase, lease, gift or condemnation of water rights and all other properties, . . . and all other rights helpful in carrying out the purposes of the organization of the district."[25] The governing boards of such districts are authorized to make regulations for "the delivery of water owned or acquired by it to users . . . ."[26]

The 1957 Regional Water Distribution District Act permits nonprofit, regional water distribution districts to be organized for the purpose (among others) of acquiring water "from wells, lakes, rivers, tributaries, or streams of or bordering this state" and the "transportation and delivery of the water to persons furnished it by the water district."[27] The Arkansas Supreme Court has interpreted the provisions of this Act to include distribution not only for municipal and industrial uses but also for agricultural water supply purposes.[28] The court has also ruled that the "powers" section of the act gives such districts the authority to acquire

21. Harrell v. City of Conway, 271 S.W.2d 924 (Ark. 1954).
22. ARK. CODE ANN. § 18-15-601 (1987).
23. *Harrell*, 271 S.W.2d at 927.
24. ARK. CODE ANN. §§ 14-117-101 to -427 (1987 & Supp. 1993).
25. ARK. CODE ANN. § 14-117-304 (Supp. 1993).
26. *Id.*
27. ARK. CODE ANN. § 14-116-102 (1987).
28. Lyon v. White River-Grand Prairie Irrigation District, 664 S.W.2d 441 (Ark. 1984).

title to water from sources other than federal impoundments.[29] Presumably, such districts may exercise the power of eminent domain for acquiring water rights because the authorization for eminent domain power includes the purpose of acquiring rights of way "and other properties" necessary for the operation of the district.[30] There is some indication that the legislature wished to preserve existing rights of riparian owners while giving such districts broad powers. This is evident in the section authorizing such districts to use the beds of streams in the operation of its transportation systems if such use can be made "without adversely affecting existing riparian rights."[31]

The 1957 Act has been the legislation of choice for the establishment of water districts designed for the purpose of providing irrigation water to agricultural producers.[32] While this legislation originally was used for the creation of water districts that supply water for municipal and industrial uses, in recent years, a number of districts have been created for the specific purpose of supplying irrigation water. The first of these, originally called the "White River-Grand Prairie Irrigation District," but subsequently renamed the "White River Regional Irrigation Water Distribution District," was the subject of litigation ultimately reaching the Arkansas Supreme Court.[33] In that case, the court ruled that Act 114 of 1957 "clearly anticipates agricultural irrigation purposes."[34] Following the resolution of that case, four additional districts have been formed for the purpose of supplying irrigation water.[35]

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29. *Lyon*, 664 S.W.2d at 443 (construing ARK. CODE ANN. § 14-116-402 (1987)).

30. ARK. CODE ANN. § 14-116-402(10) (Supp. 1993).

31. ARK. CODE ANN. § 14-116-402(9) (Supp. 1993).

32. The reason for the use of this legislation rather than the 1949 Act goes to the number of landowners who must petition for creation of the district. Under the 1949 Act, a majority is necessary; under the 1957 Act, 100 landowners may petition for district creation.

33. *Lyon*, 664 S.W.2d at 441.

34. *Id.* at 442.

35. These are the Bayou Meto Regional Irrigation Water District; the Boeuf-Tensas Regional Irrigation Water District; the Little Red River Regional Irrigation Water District; and the North Prairie County Regional Irrigation Water Distribution District.

The White River Regional Irrigation Water Distribution District has the most ambitious program for transfer of surface water to areas within Arkansas, Prairie, Lonoke, and Monroe counties. The District has cooperated with the United States Army Corps of Engineers, the Soil Conservation Service, the United States Fish and Wildlife Service, and the Arkansas Soil and Water Conservation Commission to develop plans for a major water transfer and distribution project. This project would locate a pumping station on the White River and move water through a network of new canals, existing channels, and pipelines to areas within the Grand Prairie where groundwater is being depleted.[36]

II. THE 1991 GROUNDWATER PROTECTION AND MANAGEMENT ACT

The 1991 Arkansas Groundwater Protection and Management Act (the AGPMA)[37] suggests that limitation of groundwater withdrawals "through the use of water rights" may become necessary in critical groundwater areas. The concept appears in the purpose statement of the AGPMA,[38] but there is some question as to how effectively the remainder of the AGPMA accomplishes this purpose. In order to implement any type of regulatory program affecting groundwater, which the purpose statement suggests are to apply only in critical groundwater areas, it is necessary for the Arkansas Soil and Water Conservation Commission (ASWCC) to define such areas under its authority to develop the Arkansas Water Plan.[39] Under the 1985 legislation, the ASWCC was required to define critical water areas and to delineate areas now critical or which will be critical within the next thirty years.[40]

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36. UNITED STATES ARMY CORPS OF ENGINEERS, INFORMATION PAMPHLET, EASTERN ARKANSAS REGION COMPREHENSIVE STUDY, GRAND PRAIRIE AREA DEMONSTRATION PROJECT (February 1994).

37. 1991 Ark. Acts 154 (codified at ARK. CODE ANN. §§ 15-22-901 to -914 (Repl. 1994)).

38. ARK. CODE ANN. § 15-22-902 (Repl. 1994).

39. ARK. CODE ANN. §§ 15-22-903(6), -503 (Repl. 1994). *See also* ARK. CODE ANN. § 15-22-301(9) (Repl. 1994).

40. 1985 Ark. Acts 1051 (codified at ARK. CODE ANN. § 15-22-301(9) (Repl. 1994)).

The ASWCC did this in the Arkansas Water Plan by identifying critical groundwater areas as those in which the "quantity of groundwater is rapidly becoming depleted or the quality is being degraded."[41] The areas identified include the alluvial aquifer in Lonoke, Prairie, Craighead, Poinsett, Drew, and Ashley counties. In addition, irrigation withdrawals in the Memphis Sand Aquifer have caused areas of Poinsett and Cross counties to be considered critical, as have industrial and public water supply withdrawals from the Sparta Sand Aquifer in Union and Columbia counties. Quality problems in Lee and Phillips counties and migration of saltwater in Lincoln, Desha, Monroe, Chicot, Miller, and Lafayette counties have created critical situations in these areas as well.

The AGPMA's requirements go beyond mere definition of critical areas in the Arkansas Water Plan. The AGPMA requires, however, that before any regulatory program is implemented, the areas must be *designated as* such, following public hearings in each county within the proposed critical areas. Prior to these hearings, the ASWCC must describe the proposed action, the reasons for the designation, and the recommended boundaries of the critical area.[42] Presumably, the notice and comment procedure for rule-making would be required before final designation since there is reference to the Arkansas Administrative Procedure Act. The ASWCC has not yet concluded all the procedures necessary to designate critical areas. They have been working toward this goal in what is called the Eastern Arkansas Region Study Area, which includes all of the land within the White River Regional Irrigation Water Distribution District.

Even when the area is formally designated as a critical groundwater area, this designation alone does not provide the ASWCC with the authority to implement immediately a regulatory program affecting groundwater withdrawal in the designated area. A second determination by the ASWCC is required; in other words, the initiation of regu-

41. ARKANSAS WATER PLAN, *supra* note 2, at 21.
42. ARK. CODE ANN. § 15-22-908 (Repl. 1994).

latory authority within a critical area is necessary.[43] This declaration also must be made in accordance with procedures outlined in the Arkansas Administrative Procedures Act and must follow public hearings in each county within the proposed area.[44] Any difference in boundaries from the previously designated critical areas must be described in the proposal, as well as the reasons for any such changes.[45]

Because the ASWCC has not yet designated critical groundwater areas, it has not made any required declaration under this section of the AGPMA. Thus, no regulatory program may be initiated until this procedure for declaration of necessity has been followed. Once the ASWCC has made the critical area designation and the declaration of necessity, a regulatory program may be implemented through a system based on the issuance of "water rights."[46] It is apparently through the use of a water rights program that the primary limitation of groundwater withdrawals is to occur. Presumably, this would be accomplished primarily through the limitations imposed on the issuance of *new* water rights in these areas: the legislation carefully preserves the rights of users of groundwater who have wells existing at the time the regulatory program is put in place in addition to those who construct wells within the first year of initiation of the program ("grandfathered" rights).

The ASWCC's authority, however, is not limited to the operation of a water rights program. In fact, the AGPMA specifically requires that the ASWCC develop a comprehensive groundwater protection program. This program shall include among its elements "the classification of groundwater and establishment of groundwater criteria and standards" and the "management of groundwater pursuant to this subchapter," which may *include* the issuance of water rights.[47]

This broad authority of the ASWCC to protect groundwater, read in conjunction with the powers enumerated in

43. ARK. CODE ANN. § 15-22-909 (Repl. 1994).
44. ARK. CODE ANN. § 15-22-909(3) (Repl. 1994).
45. ARK. CODE ANN. § 15-22-909(2) (Repl. 1994).
46. ARK. CODE ANN. §§ 15-22-902, -909(a) (Repl. 1994).
47. ARK. CODE ANN. § 15-22-906 (Repl. 1994).

the Act to "[p]romulgate rules and regulations for groundwater classification and aquifer use, well spacing, issuance of groundwater rights . . ."[48] implies that the legislature did not intend for this authority to be limited to the water rights program *per se.* The section that limits the powers of the ASWCC also places some restrictions on when the ASWCC could reduce or limit the withdrawal from existing wells, suggesting that such power otherwise exists.[49] For example, the ASWCC may not reduce or limit the withdrawal of water from existing wells with "grandfathered" rights unless alternative supplies are available or could be made available at a cost no greater than the operating costs of the wells (including depreciation).[50] No such limitation or reduction in withdrawal can be made for any holder of a water right who has either reduced use of groundwater (after 1986) by twenty percent with water conservation measures or conversion to surface water supplies or has implemented a water conservation plan employing generally accepted water conservation practices approved by the ASWCC.[51] Likewise, no regulation of withdrawal is authorized for either low volume wells (fewer than 50,000 gallons per day) or individual household wells used exclusively for domestic use.[52]

Subject to these specific limitations on the powers of the ASWCC and the "grandfathered" rights provisions, a groundwater protection program developed by the ASWCC could regulate and/or restrict withdrawals of groundwater. While these limitations on the powers of the ASWCC would certainly affect the ASWCC's ability to restrict withdrawals, the greater impediment to any effective regulatory program may be the "grandfathered" rights provisions themselves. Once a regulatory program is implemented, the AGPMA requires withdrawals from existing wells or construction of new wells to be under a "water

48. ARK. CODE ANN. § 15-22-904(1) (Repl. 1994).
49. ARK. CODE ANN. § 15-22-905 (Repl. 1994).
50. ARK. CODE ANN. § 15-22-905(1) (Repl. 1994).
51. ARK. CODE ANN. § 15-22-905(2) (Repl. 1994).
52. ARK. CODE ANN. § 15-22-905(3)-(4) (Repl. 1994).

right," which is essentially a permit.[53] The process for issuance of water rights requires that users of groundwater from wells existing at the time the regulatory program is implemented apply within one year for the issuance of a "water right." Such a right is fully recognized based on the average quantity withdrawn, applied to beneficial use, and reported during the past three years. Some flexibility exists to allow earlier reports to be used in calculating the three year average where the reported use levels are "significantly below normal use levels."[54]

In addition, any new wells constructed during the first year of initiation of the regulatory program are likewise "grandfathered" based on the amount requested.[55] These "grandfathered rights" provisions, read in conjunction with the limitations on the ASWCC's powers, indicate that reduction or limitation of withdrawals by users of wells existing at the time the regulatory program is implemented could occur only in limited circumstances; in fact, none at all may occur unless alternative surface supplies are available or can be made available at a cost no greater than the operating costs of the person's wells. Furthermore, a reduction or limitation on withdrawals cannot be required in the following circumstances: (1) if the user demonstrates a reduction of twenty percent in the use of groundwater by implementation of water conservation measures or conversion to surface supplies or (2) if the user has implemented a water conservation plan employing generally accepted water conservation practices approved by the ASWCC.[56] These latter limitations on regulatory authority would also apply to new applicants and those who were "grandfathered," because the wells were constructed within one year of implementation of regulatory authority. These limitations on any regulatory program are tempered somewhat by the concluding language in the section on issuance of groundwater rights, which suggests that any water rights issued are "subject to review and modification by the

53. ARK. CODE ANN. § 15-22-909(4) (Repl. 1994).
54. ARK. CODE ANN. § 15-22-910(a)(1) (Repl. 1994).
55. ARK. CODE ANN. § 15-22-910(a)(2) (Repl. 1994).
56. ARK. CODE ANN. § 15-22-905 (Repl. 1994).

[ASWCC]."[57] Any such modification would apparently be subject to the limitations or reductions in withdrawals described above.

III. AUTHORITY TO TRANSFER SURFACE WATER

A. Elimination of "Place of Use" Restrictions

To encourage the conversion of water use from groundwater to surface water, legal and institutional arrangements must be in place to facilitate the policy. The traditional riparian rights doctrine stands as an impediment to allowing transfer of surface water to nonriparian land. In limiting the right to use water to those who are defined as riparian, the transfer and utilization of surface water is severely limited.

To allow for more efficient utilization of surface water in Arkansas, Act 1051 of 1985 allows transfers of water to nonriparian land under specified conditions.[58] The legislation permits "transportation of excess surface water to nonriparians."[59] No restrictions are placed on transfers outside the watershed. One of the factors to be considered by the ASWCC in determining whether excess surface water is available for transportation to nonriparians is the "future water needs of the *basin of origin.*"[60] In addition, the definition of "excess surface water" refers to "that amount of water available on an average annual basis *from any watershed* . . . ."[61] Clearly, the legislature considered interbasin transfers in the authorization of transportation to nonriparian land. This authorization is consistent with the recommendation of the 1981 Water Code Study Commission, which based much of its work on the premise that interbasin transfers should be allowed.[62]

The implementing rules of the ASWCC explicitly recognize the two possible types of nonriparian uses and set out separate but parallel procedures for approval of in-

57. ARK. CODE ANN. § 15-22-910(d) (Repl. 1994).
58. 1985 Ark. Acts 1051.
59. ARK. CODE ANN. § 15-22-304(a) (Repl. 1994).
60. ARK. CODE ANN. § 15-22-304(b)(5) (Repl. 1994)(emphasis added).
61. ARK. CODE ANN. § 15-22-304(b) (Repl. 1994)(emphasis added).
62. *See* Minutes of the Arkansas Water Code Study Commission (Nov. 5, 1981).

terbasin and intrabasin transfers.[63] For purposes of the interbasin transfer rules, the state is divided into five basins: Arkansas River Basin, White River Basin, Delta Basin, Ouachita River Basin, and Red River Basin.[64] The interbasin rules apply to transfers from one of these basins to another. The intrabasin transfer rules apply to any transfers within these basins. This administrative determination of the physical limits of a basin resolves a problem that courts must confront in considering the watershed restriction of the riparian doctrine. For purposes of the riparian doctrine, a transfer from one tributary of a major stream to another is usually considered as "beyond the watershed."[65] Designating in advance which transfers are considered interbasin transfers alleviates the difficulty of resolving this question as disputes arise.

Nonriparian intrabasin transfers may be approved under a procedure similar to that for interbasin transfers.[66] The rules provide that approval is to be granted only after a determination that the water to be used is "excess" surface water. "Excess" means that it is for a reasonable and beneficial use and that the transfer "will cause no significant adverse environmental impact."[67] A provision is included for special conditions to protect the environment of the watershed of origin and to insure against an unacceptable adverse impact on other lawful water users.[68]

The use restrictions of the riparian rights system contribute to inefficient resource use in riparian states.[69] To avoid challenge of transfers to nonriparian land, legislative modification of the riparian rights system was necessary. The 1985 Act did this by specifically authorizing nonriparian use under agency control. The legislation established general guidelines under which these transfers could occur.

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63. Rules of the Arkansas Soil and Water Conservation Commission §§ 304.1-.16 (intrabasin), 305.1-.20 (interbasin) (1993)[hereinafter Rules].

64. Rules, *supra* note 63, § 305.1.

65. Corwin W. Johnson & Larry D. Knippa, *Transbasin Diversion of Water*, 43 TEXAS L. REV. 1035 (1965).

66. Rules, *supra* note 63, §§ 304.1-.16.

67. Rules, *supra* note 63, § 304.2.

68. Rules, *supra* note 63, § 304.6.

69. Levi & Schneeberger, *supra* note 20.

The ASWCC rules detail a procedure for approval of proposals for both intrabasin and interbasin transfers which appears to offer protection against environmental impacts and for lawful uses of water in the originating basin. By using an agency approval process, the necessity of a procedure for adjudicating claims of holders of riparian rights affected by the transfers is avoided. This procedure should eliminate the possibility of a multitude of lawsuits from those whose property interests would be infringed.

B. Administrative Allocation of Water

Another basic tenet of the riparian rights system is that riparian landowners can implement a reasonable use at any time. This basic concept has meant that courts must allocate available water in disputes between riparian owners regardless of when their uses commenced. In Arkansas, *Harris v. Brooks*[70] illustrates the necessity of such determinations. There a conflict arose between a lessee of riparian land who conducted a commercial boating and fishing enterprise on a privately owned nonnavigable lake and a rice farmer who used water from the lake for irrigation purposes. Because of the unusually dry conditions in the early 1950s, the water level of the lake was below normal. Continued pumping by the irrigator was found to interfere unreasonably with another lawful use, even though the irrigation use had been underway for over twenty years before the boat docks were constructed.

When competitive overuses occur, as in *Harris*, the resolution through adjudication is generally inefficient and costly. Moreover, because of the delay inherent in the resolution of conflicts through the courts, this method is particularly unsuited to situations involving water use. As a result, one of the first steps away from the riparian rights system is the adoption of an alternative decision-making process for water allocation. Arkansas's initial movement away from the riparian rights doctrine occurred in 1957 with the adoption of legislation authorizing the ASWCC to allocate available stream water during periods of

70. 283 S.W.2d 129 (Ark. 1955).

shortage.[71] For many years the ASWCC did not find it necessary to use this statutory authority, perhaps because severe shortages were rare. In recent years, however, disputes over water use appear to be more common, especially in unusually dry years such as 1980 or 1988. The ASWCC has adopted allocation rules compatible with the 1985 legislation and subsequent amendments.[72]

The procedure for allocation may be instituted either by any person affected by the shortage or by the ASWCC on its own initiative.[73] The rules outline a detailed notification procedure[74] that complies with the statutory requirement of "notice and hearing."[75] After proper notice and a hearing and once it has been established that the allocation is appropriate, the amount to be allocated is expressed as a percentage of available water on a daily basis under varying levels of flow.[76] A streamflow staff gauge may be used at the point of diversion to indicate permissible levels. This includes an indication of the minimum streamflow below which diversions may not continue except for domestic or municipal-domestic use.[77] In cases of emergency, the ASWCC may shorten the time frame for determination of allocation and may modify predetermined allocations for nonriparian transfers to minimize the effects on public health, safety, or welfare.[78]

The ASWCC included in the rules a provision for a "predetermined allocation plan." The purpose is to determine in advance what allocations should be made if a water shortage occurs so that allocations could be implemented immediately. This is apparently intended to be developed on a trial basis in one watershed.[79] The White River is the selected study area for development of such a program.

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71. 1957 Ark. Acts 81 (codified at ARK. CODE ANN. §§ 15-22-205(3), -217 (Repl. 1994)). *See* Looney, *supra* note 15.

72. Rules, *supra* note 63, §§ 307.1-313.2.

73. Rules, *supra* note 63, §§ 308.1-310.1.

74. Rules, *supra* note 63, §§ 308.1-309.8.

75. ARK. CODE ANN. § 15-22-217(a) (Repl. 1994).

76. Rules, *supra* note 63, § 311.1.

77. Rules, *supra* note 63, § 311.1, .4, .5.

78. Rules, *supra* note 63, §§ 311.1, 313.2.

79. Rules, *supra* note 63, §§ 304.14, 305.18.

Agency administered allocation systems for water have the potential to resolve conflicts in a timely and cost-effective manner. However, agency decision-making mechanisms must offer requisite constitutional safeguards, such as due process. Additionally, an appeals process ultimately is necessary to subject agency decisions to judicial review. This right is recognized in the rules where the agency appeals process is incorporated by reference.[80] The allocation legislation specifies that any person affected by rule, regulation, or order of the ASWCC may obtain review pursuant to the Arkansas Administrative Procedure Act.[81]

IV. LIMITATIONS ON TRANSFER OF SURFACE WATER

The 1985 legislation authorized the ASWCC to allow the transportation of excess surface water to nonriparian land (intrabasin or interbasin) in cases where a determination is made that excess surface water exists.[82] For purposes of this legislation, "excess surface water" from a watershed means twenty-five percent of that amount of water available on an average annual basis above the amount necessary to satisfy the following: (1) existing riparian rights as of June 28, 1985; (2) water needs of federal water projects existing on June 28, 1985; (3) the firm yield of all reservoirs in existence on June 28, 1985; (4) maintenance of instream flows for fish and wildlife, water quality, and aquifer recharge requirements; and (5) future water needs of the basin of origin as projected in the State Water Plan developed pursuant to sections 15-20-207 and 15-22-503 of the Arkansas Code.[83] In addition, the legislation places restrictions on the transportation and use of water outside the state by requiring a study by the ASWCC and a recommendation to the General Assembly as to whether the transfer

80. Rules, *supra* note 63, § 309.8.

81. ARK. CODE ANN. § 15-22-209 (Repl. 1994).

82. ARK. CODE ANN. § 15-22-304 (Repl. 1994).

83. ARK. CODE ANN. § 15-22-304(b) (Repl. 1994). Section 8 of Act 838 of 1995 amends item (4) to include "navigation" as one of the needs which must be protected. 1995 Ark. Acts 838, § 8 (amending ARK. CODE ANN. § 15-22-304(b) (Repl. 1994)). This is already included in the establishment of minimum streamflows, *see supra* text accompanying notes 93-98.

would be in the public interest. The General Assembly's approval and an interstate compact are required in order to carry out such transfers.[84]

Following the adoption of the legislation in 1985, the ASWCC has developed new rules for the utilization of excess surface water. In the process, the ASWCC developed rules that would incorporate the rules for allocation of surface water during periods of shortage with the overall surface water diversion and transfer authorization rules.

Under these rules, a nonriparian owner may divert excess surface water to nonriparian land upon approval of the ASWCC if the water will be applied to reasonable and beneficial use and if the diversion will cause no significant adverse environmental impact.[85] When the transfer is interbasin, the ASWCC also must take into account the protection of the watershed of the basin of origin and insure against an adverse impact of the transfer on other lawful water users.[86] Surface water transfer permits may be issued for a fixed period of up to fifty years.[87] The permit may be canceled if the water is used for purposes other than that stated in the permit or if more water than authorized is diverted.[88] The applicant may be given up to two years from the date of the issuance of the permit to develop the ability to make the water transfer.[89] When the use is for irrigation, the permits are considered to run with the land and can be assigned only to a subsequent owner or lessee of the land. The permits also may not be sold separate and apart from the land itself.[90]

As a part of the Arkansas Water Plan the ASWCC has calculated "excess surface water" for each of the five major basins of the state. In doing so, the agency projected existing riparian uses, instream flow requirements for fish and wildlife, and navigation to the year 2030. These needs were subtracted from the average annual flow, and the mandated

84. ARK. CODE ANN. § 15-22-303 (Repl. 1994).
85. Rules, *supra* note 63, §§ 304.2—.16 (intrabasin), 305.1—.20 (interbasin).
86. Rules, *supra* note 63, § 305.6.
87. Rules, *supra* note 63, §§ 304.7, 305.10.
88. Rules, *supra*, note 63, §§ 304.11, 305.15.
89. Rules, *supra* note 63, §§ 304.12, 305.16.
90. Rules, *supra* note 63, §§ 304.13, 305.17.

twenty-five percent figure was used to calculate the "excess." Using that procedure, the Ouachita Basin has some 725,000 acre feet per year of excess water; the Red River Basin 1,100,000 acre feet; the White River Basin 1,700,000 acre feet; the Arkansas River Basin 2,700,000 acre feet; and the Delta Basin 4,100,000 acre feet.[91]

The ASWCC also designated certain areas of the state as "critical surface water areas," or those which presently have serious surface water supply problems. These problems are the result of off-stream water withdrawals, water quality degradation, or water management constraints.[92] Designation of excess surface water and critical surface water areas is the first step in implementing a system to permit transfers of water to nonriparian land. The rules of the ASWCC detail the procedures for authorizing either an intrabasin or interbasin transfer and an interstate transfer.

The most controversial part of the ASWCC's authority surrounds its mandate to establish minimum streamflows. In its rules, the ASWCC has defined "minimum streamflow" as "[t]he quantity of water required to meet the largest of the following in-stream needs as determined on a case-by-case basis: (1) aquifer recharge, (2) fish and wildlife, (3) interstate compacts, (4) navigation, and (5) water quality."[93] The 1985 legislation, as amended in 1989, specifically provided that the ASWCC is to "establish and enforce minimum streamflows."[94] In making determinations of whether excess surface water is available to be transferred to nonriparians, the ASWCC is to consider "[m]aintenance of instream flows for fish and wildlife, water quality and aquifer recharge requirements . . . ."[95] In establishing minimum streamflows, the ASWCC is to notify the Arkansas Game and Fish Commission, the Arkansas Pollution Control and Ecology Commission and "any other interested state boards and commissions" prior to the es-

91. ARKANSAS WATER PLAN, *supra* note 2, at 25.
92. *Id.* at 20-21.
93. Rules, *supra* note 63, § 301.3(W).
94. ARK. CODE ANN. § 15-22-222 (Repl. 1994).
95. ARK. CODE ANN. § 15-22-304(b)(4) (Repl. 1994).

tablishment of minimum streamflows.[96] Both the Game and Fish Commission and the Pollution Control and Ecology Commission must file written comments. The ASWCC is to follow procedures for rule-making, including notice and public hearings.[97]

The 1989 legislation added "navigation" and "interstate compacts" to the list of instream uses considered part of the definition of "minimum streamflow."[98] Although this amendment changes the definition section of the allocation statute, the addition must be intended to apply to all areas of water policy. Further, the rules indicate that maintenance of minimum streamflows for the major river basins is included in determining what constitutes excess surface water.[99] In the Arkansas Water Plan, the ASWCC indicates that because of significant differences between streams in the different eco-regions,[100] the same procedures for determining instream flow requirements would not be applicable to all streams. Likewise, a given percentage of flow would not be appropriate for all streams.[101]

The designated minimum streamflow levels in the Arkansas Water Plan come from recommendations of agency staff from the Department of Parks and Tourism, Game and Fish Commission, and the Department of Pollution Control and Ecology. These agencies were particularly concerned that the Arkansas Water Plan should recognize and protect instream uses before withdrawals for offstream uses occur. The ASWCC adopted the recommended levels to deter-

96. ARK. CODE ANN. § 15-22-222(b)(1) (Repl. 1994).

97. ARK. CODE ANN. § 15-22-222(b)(2), (c) (Repl. 1994).

98. ARK. CODE ANN. § 15-22-202(6) (Repl. 1994).

99. Rules, *supra* note 63, § 301.3(R).

100. The Arkansas Water Plan references the definition of "eco-region" provided in Regulation Number 2 of the Arkansas Department of Pollution Control and Ecology Division of Water Pollution Control. Regulation Number 2 defines "eco-region" as "[a] large area of landscape with relatively homogenous physical, chemical and biological characteristics." ARKANSAS DEPARTMENT OF POLLUTION CONTROL AND ECOLOGY, DIVISION OF WATER POLLUTION CONTROL, *Regulation No. 2, Regulation Establishing Water Quality Standards for Surface Waters for the State of Arkansas*, § 2 (1991).

101. ARKANSAS WATER PLAN, *supra* note 2, at 17. Fish and wildlife requirements were computed using 60% of mean monthly flow for November through March; 70% for April through June and 50% for July through October. *Id.*

mine whether excess surface water exists for purposes of nonriparian transfers.

The allocation rules classify instream use ("minimum stream flow") as a reserved use, along with domestic and municipal-domestic uses, and federal water rights, prior to allocations for other uses and needs.[102] This would appear to meet the objectives of the concerned agencies to protect those minimum levels before any allocation occurs. However, the utilization rules make no effort to develop specific minimum instream flow levels.[103] These will apparently be developed on a case-by-case, site-specific basis as indicated in the Arkansas Water Plan.

The importance of the establishment of minimum streamflows to agricultural irrigation interests may be exhibited in two ways. First, minimum streamflow maintenance is one element that must be considered in determining whether excess surface water is available for the purpose of nonriparian transfer. Second, minimum streamflow uses are considered a "reserved use" which must be recognized before allocations are made during a period of shortage.

Under the ASWCC's authority to permit the transfer of excess surface water to nonriparians, only twenty-five percent of the excess on an average annual basis may be available for transfer.[104] Flows for fish and wildlife, water quality, aquifer recharge, navigation, and interstate compacts must be taken into account.[105] While the apparent intent was to deal with interbasin transfers in making this determination, the legislation refers to transfers from "any watershed" and both the interbasin transfer rules and the

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102. Rules, *supra* note 63, § 307.4.

103. *See* Rules, *supra* note 63, "Subtitle III Minimum Stream Flow [Reserved]."

104. ARK. CODE ANN. § 15-22-304(b) (Repl. 1994). Section 9 of Act 838 of 1995 adds a new subdivision as follows:

> (e) For purposes of transfer of the excess surface water as defined above in the White River Basin, the transfer amount shall not exceed on a monthly basis an amount which is fifty percent (50%) of the monthly average of each individual month of excess surface water.

1995 Ark. Acts 838, § 9 (amending ARK. CODE ANN. § 15-22-304 (Repl. 1994) by adding ARK. CODE ANN. § 15-22-304(e)).

105. ARK. CODE ANN. § 15-22-304(b)(4) (Repl. 1994); Rules, *supra* note 63, § 301.3(R).

intrabasin transfer rules refer to minimum streamflow monitoring.[106]

Under the monitoring procedure, a staff gauge is to be placed in the stream at the point of diversion. While the water level is in a "green zone" or the normal diversion level, riparian and nonriparian permittees may divert water. When the water is at or below the "red zone" or the minimum streamflow level, all diversions except those for domestic and municipal-domestic uses are to cease.[107] An intermediate zone, the "yellow zone" or allocation level, indicates a level at which water usable without allocation[108] or water allocated under the allocation procedure may be diverted.[109] This monitoring is to aid in coordinating the allocation of water during periods of shortage. Once the allocation procedure is implemented, either by petition by any person eligible to receive an allocation or upon the ASWCC's own initiative, an allocation plan will be implemented by ASWCC orders to the affected persons.[110]

The allocation plan will express each individual allocation as a percentage of available water under varying levels of flow on a daily basis. Each diverter will be assigned an

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106. ARK. CODE ANN. § 15-22-304 (Repl. 1994); Rules, *supra* note 63, §§ 304.15, 305.19.

107. Rules, *supra* note 63, § 304.15.

108. The rules include a detailed list of what water is usable without allocation. This includes the following:

A. Diversions by any persons of less that 325,900 gallons (1 acre-foot) of water in any water year.
B. Water captured by tailwater recovery systems.
C. Water diverted from lakes, ponds, reservoirs, or springs in the exclusive ownership of one person.
D. Water previously captured whether transmitted by ditch, channel or pipe.
E. Water diverted from intermittent streams.
F. Diffused surface water.
G. Water captured by instream pit reservoirs, dams constructed pursuant to a lawful permit, or low water weirs and water stored in federal impoundments.
H. Non-consumptive usage.

Rules, *supra* note 63, § 307.2.

109. Rules, *supra* note 63, § 304.15. The rules also refer to another category, ambiguously called "water lawfully diverted that has not yet become subjected to reduction by allocation" as available during this stage. Rules, *supra* note 63, § 304.15.

110. Rules, *supra* note 63, § 309.6.

allocation based on allowable daily pumping expressed both as a percentage and as a quantitative measure with appropriate reference to the staff gauge reading.[111] If minimum daily pumping allocations are not exceeded, no restrictions apply to the time or rate of pumping.[112]

The allocation rules place agriculture in the highest "priority of water use" category, above industry, hydropower, and recreation. Nonriparian intrabasin transfers are subordinate to riparian diversions but have a higher preference than nonriparian interbasin transfers. Out-of-state transfers are last in the order of preference. All such uses are subject to reserved uses and water usable without allocation.[113] While it is the apparent intent of the ASWCC to make allocations within categories (*e.g.*, nonriparian intrabasin transfers) on a "first in time, first in right" basis, this is not stated explicitly in the rules.

V. WATER DISTRICTS AS A VEHICLE FOR TRANSFER OF WATER

A. Nature of Water Districts

Special governmental districts have been used for a variety of public purposes for over 100 years. Their use has proliferated, particularly as a means of supplying water for both urban and agricultural uses. Improvement districts have been among the most commonly used of such entities in Arkansas to provide basic services to citizens. These districts flourished in the late 19th century in part due to limitations placed on county and local governments in the Arkansas Constitution of 1874 (prior to the adoption of Amendment 55). The districts, described as "quasi-governmental," have special or limited powers. One of the earliest uses of the concept for water supply purposes was California's Wright Act, adopted in 1887, which provided for the formation of special water districts with the authority to issue bonds and to include a compulsory property assessment

111. Rules, *supra* note 63, § 311.1.
112. Rules, *supra* note 63, § 311.7.
113. Rules, *supra* note 63, § 307.4.

against property in the district that benefited, directly or indirectly, from the function of the district.

This act was challenged on constitutional grounds in *Fallbrook Irrigation District v. Bradley*.[114] The challenge focused on the compulsory taxation feature of the district. In upholding the legislation in all respects, the United States Supreme Court deferred to state legislatures in determining that such districts benefited the agricultural economy and, thus, the public generally. (The Wright Act allowed assessment against town lots that received no water but benefited indirectly by the development of agricultural irrigation.) The Court stated:

> To irrigate and thus bring into possible cultivation these large masses of otherwise worthless lands would seem to be a public purpose and a matter of public interest, not confined to the landowners, or even to any one section of the state. The fact that the use of the water is limited to the landowner is not therefore a fatal objection to this legislation. It is not essential that the entire community or even any considerable portion thereof should directly enjoy or participate in an improvement in order to constitute a public use.[115]

The use of irrigation districts was further encouraged by federal reclamation law. In a period of twenty years, special districts became the primary contracting entity between farmers and the federal government. In 1926, special water districts were recognized as the exclusive method of participation in federal reclamation projects.[116] The concept of contracting with such special districts as a means of supplying water was carried forward in the federal Watershed Protection and Flood Prevention Act.[117] This Act became the impetus for Arkansas to adopt two versions of special districts: those authorized by Act 329 of 1949, the Arkansas Irrigation, Drainage and Watershed Improve-

114. 164 U.S. 112 (1896).

115. 164 U.S. at 161.

116. Comment, *Desert Survival: The Evolving Western Irrigation District*, 1982 ARIZ. ST. L.J. 377.

117. 16 U.S.C. §§ 1001-07 (1988).

ment District Act,[118] and those in Act 114 of 1957, the Regional Water Distribution District Act.[119]

The nature of special types of districts was described by the Eighth Circuit in *Drainage District Number 2 v. Mercantile-Commerce Bank & Trust Company*,[120] which dealt with an Arkansas local improvement district:

> [In Arkansas], 'local improvement districts and their commissioners are governmental agencies created as *quasi* public corporations deriving their powers directly from the Legislature and exercising them as the agent of the property owners in the district whose interests are affected by the duties they perform. They exercise no governmental powers except those expressly or impliedly granted by the Legislature. They are not political or civil divisions of the state like counties and municipal corporations created to aid in the general administration of the government.'[121]

The question was previously addressed by the Arkansas Supreme Court in *Drainage District Number 7 of Poinsett County v. Hutchins*.[122] In evaluating the nature of a drainage district, the court emphasized that such districts have only such powers as are expressly or impliedly conferred on them by the statute authorizing their formation. They were called governmental agencies created as "quasi-public corporations." These entities exercised their powers as agents of the property owners whose interests are affected by the duties performed by the district.

B. Acquisition of Water by Districts

How do special water districts acquire water for distribution? This question has been addressed by a variety of approaches. Some states provide that districts may hold formal title to water rights with the users holding only an equitable interest in the water itself. Others deem the landowners to hold the actual rights with the districts designed

118. ARK. CODE ANN. §§ 14-117-101 to -427 (1987 & Supp. 1993).
119. ARK. CODE ANN. §§ 14-116-101 to -406 (1987 & Supp. 1993).
120. 69 F.2d 138 (8th Cir. 1934).
121. *Id.* at 140 (quoting Drainage Dist. No. 7 of Poinsett County v. Hutchins, 42 S.W.2d 996, 1000 (Ark. 1931)).
122. 42 S.W.2d 996 (Ark. 1931).

to deliver the water while holding title to the diversion and distribution facilities. Some states give the districts considerable power to allocate and distribute water. The important consideration is the purpose for which the legislation permits formation and operation of the district and the powers granted by the basic legislation.[123]

Under the Arkansas Regional Water Distribution District Act a public nonprofit water district is authorized to fulfill broad purposes. These purposes include the acquisition of water not only from reservoirs created by dams constructed "by or under the direction" of the United States Army Corps of Engineers but also from wells, lakes, rivers, tributaries, or streams of or bordering the state.[124] Acquisition of water, water storage facilities, and storage of water are also authorized in either projects of the United States Army Corps of Engineers or by the water district itself under the Watershed Protection and Flood Prevention Act "or other federal law."[125] This authorization may be accomopanied by financing from the United States Department of Agriculture (USDA). In addition, the district may be involved in purification, treatment, and processing of water; furnishing water to persons desiring it; installation and operation of transportation facilities; and the transportation and delivery of water itself.[126]

In *Lyon v. White River-Grand Prairie Irrigation District*,[127] the Arkansas Supreme Court interpreted the purposes section of the legislation to include the establishment of such districts for agricultural or other purposes as well. According to the court, the furnishing of irrigation water is clearly contemplated by the legislation. In fact, the court order creating what is now called the White River Regional Irrigation Water Distribution District includes specific reference to irrigation water. Furthermore, the name of the

123. Comment, *supra* note 116, at 409-10.

124. ARK. CODE ANN. § 14-116-102(1) (1987).

125. ARK. CODE ANN. § 14-116-102(2) (1987).

126. ARK. CODE ANN. § 14-116-102(3)-(6) (1987).

127. 664 S.W.2d 441 (Ark. 1984).

district was changed, upon recommendation of the ASWCC, to reflect the irrigation purpose.[128]

The "powers" section of this Act is quite broad and was amended in 1989 to strengthen the authority of a district to carry out the purposes for which it was formed.[129] Among the powers important in carrying out the water distribution function are those allowing such districts (1) to acquire absolute title to water from reservoirs or other water sources created by or under the direction of the United States Army Corps of Engineers or by the district with financial assistance of the USDA and to use this water for any purpose; (2) to acquire water storage and withdrawal rights in the same manner; (3) to transport, distribute, sell, furnish, and dispose of the water from whatever source desired to any person at any place; (4) to regulate, define and control the rate and location of any withdrawal or transfer of water, in natural or man-made channels, which is "owned, acquired, or developed by the district;" (5) to construct, erect, purchase, lease as lessee and in any manner acquire, own, hold, maintain, operate, sell, dispose of, lease as lessor, exchange and mortgage any facilities (and "property rights") as "necessary, convenient, or useful."[130]

A district also has broad powers to assist customers in preparation of their premises for the use of water and to deal with both real and personal property, including easements and rights-of-way.[131] In addition, in connection with the acquisition, construction, improvement, operation, or maintenance of its transportation and distribution facilities, a district is authorized to use the bed of any stream, "without adversely affecting existing riparian rights."[132] This right also extends to public property such as highways, rights-of-way or easements, and tax-forfeited land.[133]

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128. *See* Report of the Arkansas Soil and Water Conservation Commission (June 11, 1984), *filed in* In the Matter of the Establishment of the White River—Grand Prairie Irrigation Dist., Civil No. 80-63, Circuit Court of Arkansas County, Arkansas.

129. ARK. CODE ANN. § 14-116-402 (Supp. 1993).

130. ARK. CODE ANN. § 14-116-402(3)-(4) (Supp. 1993).

131. ARK. CODE ANN. § 14-116-402(4)-(6) (Supp. 1993).

132. ARK. CODE ANN. § 14-116-402(9) (Supp. 1993).

133. *Id.*

The Regional Water Distribution District Act[134] anticipated that such districts would be organized and created to contract with the United States to make use of water supply from multipurpose reservoirs constructed by the Corps of Engineers.[135] These districts were empowered to acquire title to water in such reservoirs or other water sources created by the construction of multipurpose dams to "transport, distribute, sell, furnish, and dispose" of this water to any person at any place.[136]

Because the primary purpose of this Act was water distribution, it was anticipated that the districts would generate revenue from "rates, fees, rents or other charges" for water and services of the district.[137] These districts, unlike those authorized by the "Arkansas Irrigation, Drainage and Watershed Improvement District Act of 1949," Act 329 of 1949,[138] were given neither the authority to levy assessments on the basis of benefits derived by lands within the district nor to levy taxes on the amount of the assessment of benefits thereon. The only authorized source of revenue appears to be from the sale and distribution of water.

C. Transfers of Water by Water Districts

The ASWCC may authorize the transfer of excess surface water to nonriparians through a permit procedure developed by the ASWCC. One of the major changes in Arkansas law in the 1985 legislation was to provide for nonriparian use of water by granting the ASWCC the power to authorize the transportation of excess surface water to nonriparians for their use.[139] The ASWCC has adopted detailed regulations to carry out this authority including separate procedures for interbasin and intrabasin transfer of water. For example, the proposal for transfer of water from the White River to the Grand Prairie area is within the designated Delta Basin. Therefore, the rules relating to *in-*

134. ARK. CODE ANN. §§ 14-116-101 to -406 (1987 & Supp. 1993).
135. ARK. CODE ANN. § 14-116-102 (1987).
136. ARK. CODE ANN. § 14-116-402(3) (1987).
137. ARK. CODE ANN. §§ 14-116-402(13), -404 (1987 & Supp. 1993).
138. ARK. CODE ANN. §§ 14-117-101 to -427 (1987 & Supp. 1993).
139. ARK. CODE ANN. § 15-22-304(a) (Repl. 1994).

trabasin transfer are applicable.[140] A "person" shall be authorized to divert excess surface water for nonriparian use.[141] Under these rules a "person" is defined to include not only natural persons but "partnership[s], firm[s], association[s], cooperative[s], municipalit[ies], count[ies], public or private corporation[s], and any federal, state or local governmental agenc[ies]."[142] Thus, a water district qualifies as a "person" for this purpose. The permit application requires detailed information on the proposed transfer including the following:

1. The quantity of water to be diverted for direct use.
2. The quantity of water to be stored away from the point of diversion.
3. The total amount of water to be diverted.
4. The proposed time or times of diversion.
5. The purpose for which the water is to be diverted.
6. The location of the land on which the water is to be used.
7. The proposed conservation plan.
8. If for irrigation:

   (a) The area and legal description of the lands irrigated.

   (b) The types of crops to be cultivated under irrigation during the water year.
9. Any other reasonable information requested by the Director.[143]

The permit, when issued, will include the amount of water permitted, the authorized use, the point of approved diversion, the legal description of the land of intended use, and approval of the conservation plan.[144] The period is fixed by the Director based on consideration of the investment by the permittee and the period usually required to amortize the investment not to exceed fifty years.[145] The permit also "runs with the land" and cannot be sold sepa-

140. Rules, *supra* note 63, § 304.1-.16.
141. Rules, *supra* note 63, § 304.1.
142. Rules, *supra* note 63, § 301.3(DD).
143. Rules, *supra* note 63, § 304.3.
144. Rules, *supra* note 63, § 304.5.
145. Rules, *supra* note 63, § 304.7.

rate from the land described in the permit and "can only be assigned to a subsequent owner or lessee of the land."[146]

It must be noted that this permit procedure refers to the *use* of water, not the acquisition of title to the water itself. Neither the legislation nor the ASWCC rules contemplates that a permittee is to become the owner of the water. However, while it would appear that a district would have to comply with the permit procedure to obtain the right to transfer the water, the authority of a district to acquire absolute title to water from federally financed projects would seemingly take precedence over any questions related to ownership that might arise under the permitting scheme. Act 81 of 1957 makes specific reference to title to water in reservoirs created by the federal government.[147] Furthermore, the "powers" section of the water district legislation gives water districts the power to acquire absolute title to water stored in such reservoirs or other water sources.[148] This authority is strengthened by language in the 1957 Act which states explicitly that "[t]his chapter is complete in itself and shall be controlling. The provisions of any other law of this state, except as provided in this chapter, shall not apply to a water district organized under this chapter."[149]

The legislative intent seems to be clear. The provisions of the distribution district act would control giving water districts the authority to acquire absolute title to water in federally financed impoundments. The permitting rules, read in conjunction with the powers of a water distribution district, raise the question of whether a district requesting a permit may actually become the owner of the water from sources *other* than from federally financed impoundments. The "powers" section of the water distribution district legislation suggests that such districts may obtain water not only from reservoirs but also from other water sources as well. However, if the water is to be transferred to nonriparian land, authority must be obtained through the permitting

146. Rules, *supra* note 63, § 304.13.
147. This provision is codified at ARK. CODE ANN. § 15-22-218 (Repl. 1994).
148. ARK. CODE ANN. § 14-116-402(3)(A) (Supp. 1993).
149. ARK. CODE ANN. § 14-116-104 (1987).

process outlined above. In such cases, it would appear that the water is not "owned" by the district but only that its use on nonripairian land is authorized for the permit period. While it is not specifically addressed in the rules, the district would be allowed to impose rates and charges for the distribution of the water to the lands described in the permit even if it is not owned as such.

While it appears that the rules contemplate permit applications from organizations such as water districts, the rules do not precisely indicate how the water so permitted is to be administered. Presumably, if the quantity of water to be diverted and if the location of land on which it is to be used is identified both in the application and in the permit itself, the district could then transfer water within the identified area to individual users. However, if use is restricted to specified parcels in specified amounts, the permitting process would impose considerable difficulty in administration and it may be necessary to seek an amendment of ASWCC rules for clarification.

The surface water rules of the ASWCC address the question by specifying that a permit of a period greater than three years may be canceled if the permittee fails to take "reasonable steps" to obtain the ability to utilize the water permitted within two years from the date of issuance of the permit.[150] No indication is given as to what is intended by "reasonable steps" to utilize the water. Western states with highly developed distribution and water rights systems usually impose similar requirements. In these cases, the steps necessary for preservation of the right usually involve some physical activities toward development of the resource such as surveying, planning, or initial construction. By analogy, similar efforts would seem reasonable under these rules.

D. Ability to Use Dams

Arkansas has legislation dating to the late 1800s governing the erection of dams in streams. The legislation declares "dams, stoppages and obstructions" not made

150. Rules, *supra* note 63, § 304.12.

according to law to be public nuisances.[151] A procedure is set out for approval of the erection of dams in nonnavigable streams where the landowner owns the land on both sides.[152] This procedure requires a petition in circuit court if the dam is likely to overflow lands of other persons.[153] A jury is to be impaneled to visit the site and to determine the amount of damage by "reason of inundation consequent upon the erection of the dam as proposed."[154] The jury is also to consider to what extent ordinary navigation and the passage of fish will be obstructed and whether the "health of the neighborhood" will be "materially endangered" by the erection of the dam.[155]

Furthermore, the jury is to determine if any proprietor's "dwelling" or "outhouses, curtilages, or gardens" or "orchard" will be overflowed by the dam.[156] If so, the court "shall not permit the dam to be erected."[157] The court is to refuse permission if the health of the neighborhood will be "materially annoyed by the stagnation of the waters . . . ."[158] If the dam is authorized, authorization may be conditional on passage of fish and payment of all damages and valuations made and assessed by the jury.[159] While this procedure contemplates construction of milling equipment, the general provisions are broad enough that they might be applicable in other situations as well.

In 1957, the legislature granted the ASWCC the authority to issue permits for dam construction within

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151. ARK. CODE ANN. § 18-15-703 (1987).

152. ARK. CODE ANN. § 18-15-704 (1987). Even owners with land on one side may use a procedure to obtain one acre of land across the stream for the dam or for "his mill or other machinery in connection with his dam." ARK. CODE ANN. § 18-15-712 (1987). This procedure is clearly applicable to mills on streams whereas the general erection procedure is broader.

153. ARK. CODE ANN. § 18-15-706 (1987).

154. ARK. CODE ANN. § 18-15-706(b)(1) (1987).

155. ARK. CODE ANN. §§ 18-15-706(b)(3)-(4) (1987).

156. ARK. CODE ANN. § 18-15-706(b)(2) (1987).

157. ARK. CODE ANN. § 18-15-708 (1987). Interestingly, this section also refers to overflow of "fields" as a basis for refusal, although it is not mentioned as part of the jury inquest procedure. *Id.*

158. *Id.*

159. ARK. CODE ANN. § 18-15-709 (1987).

streams.[160] The original legislation only applied if the dam impounded fifty acre feet or more of water or was of a height of fifteen feet or more. The permissible height was changed to twenty-five feet or more in 1989.[161] The construction permit is not required if the dam height is at or below the high water mark on any stream.[162] However, the 1989 amendment provided that upon petition by persons affected and after notice and hearing, if the ASWCC determines that a dam otherwise exempt would pose a significant threat to life or property, a construction permit would be required.

The importance of the requirement of a dam construction permit is that it can only be granted if specified conditions are met. First, it can only be constructed to impound "surplus surface waters" and to operate in such a way as to discharge a quantity of water (as fixed by the ASWCC) necessary to preserve the flow below the dam to protect the rights of any lower riparian owner and fish and wildlife dependent on the flow. Further, as the "lives and property" of persons downstream must be adequately protected, the dam must be constructed and maintained in such a way as to preserve the dam and reservoir for the permit period.[163] Second, the dam must be constructed and operated in such a way as to impound water only on land owned or occupied by the permit applicant or on beds of streams owned by the state.[164]

Third, permits may be issued for a period necessary to permit amortization (cost recovery) of reasonable indebtedness incurred in connection with construction of the dam. This period, however, is limited to fifty years. This period may be extended up to an additional fifty years, for good cause shown, in a proceeding held within five years of permit expiration.[165] Permits are issued only after proper application, payment of the fee, and notice and public hearing

160. 1957 Ark. Acts 81 (codified at ARK. CODE ANN. §§ 15-22-210 to -214 (Repl. 1994)).
161. ARK. CODE ANN. § 15-22-214(a) (Repl. 1994).
162. ARK. CODE ANN. § 15-22-214(b) (Repl. 1994).
163. ARK. CODE ANN. § 15-22-210(1) (Repl. 1994).
164. ARK. CODE ANN. § 15-22-210(3) (Repl. 1994).
165. ARK. CODE ANN. § 15-22-210(4) (Repl. 1994).

(if requested).[166] Permits may be canceled or modified, after notice and hearing, upon failure to maintain the dam adequately or to comply with conditions for dam operation.[167] ASWCC representatives have a right of entry to inspect construction work, maintenance, and operation.[168]

Because dams in areas where transfer projects are most likely to occur probably would not meet the height requirement for permits, this procedure would likely come into play only if the dams meet the impoundment limit or if they pose a significant threat to life or property, as determined by the ASWCC. Thus, the major restrictions on construction and operation would be those imposed by other legal rules. For example, any holder of a riparian right would be entitled to object if harmed by the impoundment of the water and the obstruction of flow. If the dam were constructed under an ASWCC permit, this objection would be made first to the ASWCC.[169] However, if the dam were exempt from the permit requirements, the lower riparians could petition the ASWCC to exercise its allocation authority to allocate available water among users affected by the shortage.[170] If the lower riparian is affected by the obstruction and impoundment itself instead of an actual shortage, an action in court for interference with the riparian rights presumably is possible. Despite these protections, though, the extent of ASWCC involvement in such conflicts is not entirely clear, especially in light of the categories of water that are "usable without allocation" under ASWCC rules.[171]

Under the ASWCC rules on water allocation, water captured by instream pit reservoirs, dams constructed pursuant to a lawful permit, or low water weirs and water stored on federal impoundments present interesting amalgamations of types of water usable without allocation. Diversions from these forms of capture could result in

166. ARK. CODE ANN. §§ 15-22-211 to -212 (Repl. 1994).
167. ARK. CODE ANN. § 15-22-215 (Repl. 1994).
168. ARK. CODE ANN. § 15-22-210(2) (Repl. 1994).
169. Styers v. Johnson, 720 S.W.2d 334 (Ark. Ct. App. 1986).
170. ARK. CODE ANN. § 15-22-217 (Repl. 1994).
171. Rules, *supra* note 63, § 307.2.

conflicts between riparian users. It would appear that these rules would reward some riparians at the expense of others. However, this "exclusion" from the allocation procedures must be read in light of the dam construction permit legislation. This legislation requires a permit to impound water for any purpose. One of the conditions required before a dam permit can be issued is that it not affect downstream riparians or instream flow requirements.

The original dam construction permit legislation gave an exclusive right to the person constructing the dam to take water from the reservoir created, subject to the obligation to discharge water as specified in the permit. The rules, however, go beyond permitted dams and federal impoundments: they grant a superior position to those taking water from streams where the water is captured by "instream pit reservoirs" and "low water weirs."[172] These types of water capture can be constructed without a permit for dam construction. Although the rules for allocation allow use of such water without allocation, these uses could be construed as an interference with other riparian owners' rights to receive an equitable share of the water in a given stream. In a recent chancery court case involving a low water weir, the court ordered the person who had constructed the weir either to lower it or cut through it to allow a reasonable share of the water to move downstream. The ASWCC declined to exert authority in that case under allocation rules similar to the present ones.[173]

As was mentioned previously, the permit legislation allows impoundment of water only on land owned or occupied by the applicant or on beds of streams owned by the state.[174] If a permitted dam impounds water unlawfully on land not owned or occupied by the permit holder, the owner whose land is affected has an action at law for trespass damages and has the right to take water from the impoundment at a point on his land so long as the water is

172. *Id.* § 307.2. "Low water weirs" apparently refers to small dams, perhaps even temporary ones, designed to catch or divert relatively small amounts of water.

173. Arkansas Land & Cattle Co. v. Pickens, Civil No. CH-85-74-2(AC), slip op. (Ark. Ch. Ct. of Chicot County July 20, 1985).

174. ARK. CODE ANN. § 22-22-210(3) (Repl. 1994).

unlawfully impounded.[175] Similarly, a person whose land was affected by impounded water from a dam that was exempt from permit would have a cause of action for damages. The original legislation on dams indicates that a person whose land was "materially injured" by overflow from a dam is entitled to recover double damages in a civil action.[176] The Arkansas Supreme Court has interpreted the provision on double damages as applying only in cases of willful wrongdoing.[177]

Another problem in the construction of dams is related to land ownership and impoundment area. Beds of streams in navigable waters belong to the state, and, under the authority specified in the permit construction legislation, could be covered by impounded water. However, beds of nonnavigable streams belong to the riparian landowners and are subject to control by such landowners. The procedures outlined above would be applicable to any construction of impoundments in those streams.

E. Protection of Riparian Rights

The question of which land is "riparian" under the traditional riparian rights doctrine is relevant to whether a district can qualify as a riparian user. Under the traditional rule, water use was limited to that which is reasonable on riparian land within the same, narrowly defined, watershed. Lower riparian owners who were adversely affected by an unreasonable use could take action in court to enjoin such uses. This would include the enjoining of nonriparian uses that might be considered unreasonable if harm resulted to riparian users. Under this system it was not unusual for nonriparian transfers to be made and to continue for long periods of time. This occurred because no harm could be shown to riparian users, particularly in times of plentiful water. In effect, this system would allow the use of water by nonriparians or on nonriparian land so long as no harm resulted to riparians. These uses by nonriparians could be effectuated by use of "easements" or other agreements

175. ARK. CODE ANN. § 15-22-216 (Repl. 1994).
176. ARK. CODE ANN. § 18-15-702 (1987).
177. Turner v. Smith, 231 S.W.2d 110, 113 (Ark. 1950).

which provided access to the water. A nonriparian could, of course, obtain even greater security of right by obtaining such uses from a lower riparian through "easements" in the form of covenants not to sue. If the nonriparian use was by a governmental or public agency with the power of eminent domain, this power could be exercised against the rights of riparians (with compensation) to secure the right to continue to use water for purposes that otherwise might violate the reasonable use doctrine.

The 1985 surface water legislation makes an important change in this system by authorizing the ASWCC to permit nonriparian uses for reasonable and beneficial purposes. Lower riparians' rights are still protected even in the exercise of this authority because the ASWCC must determine whether excess surplus water exists in a given basin and is available for transfer to nonriparian uses. In addition, it is clear that the rights of existing riparian uses must be taken into account in any allocation of water by the ASWCC during a period of shortage.

Even with the implementation of administrative control of nonriparian transfers, riparian owners—or at least those who use water—would retain their rights and could complain if any transfer interfered with those rights. If, for example, members of a water distribution district wished to be assured that water from a riparian source such as the White River would be available in most circumstances, the members have two sources of protection: it would still be possible either to obtain agreement from lower riparians not to sue for any such uses or to obtain rights by the exercise of the power of eminent domain. The section of Act 114 granting the power of eminent domain to water distribution districts is broadly written to include the exercise of the power to acquire not only rights-of-way but also "other properties necessary in the construction or operation of its property or business . . . ."[178] In addition, the powers section specifically authorizes such districts to "acquire, own, hold, maintain, operate, sell, dispose of, lease as lessor, exchange, and mortgage" various types of facilities and "prop-

178. ARK. CODE ANN. § 14-116-402(10) (Supp. 1993).

erty rights."[179] Further, such districts may "[a]cquire, own, hold, use, exercise" rights, privileges, licenses, rights-of-way, and easements,[180] and may "acquire, own, hold, maintain, sell, exchange, and use any and all real and personal property, or any interest therein."[181]

It should be emphasized that under the nonriparian transfer procedure now authorized by the 1985 legislation, the necessity of obtaining or acquiring rights from lower riparians would seldom be necessary unless a district wished to be secure even during periods of shortage. Additionally, the district may need to acquire rights of existing riparian users to eliminate competing uses arising from those who might otherwise continue to take their reasonable share from natural watercourses in the project area. Because it is possible for landowners to be excluded from the district by showing they have adequate water available, riparian landowners within the district boundaries might choose this option and compete with the uses made by district. One way to eliminate these potential conflicts is by exercise of the power of eminent domain to acquire the existing rights of such riparians.

VI. LIMITATIONS ON THE AUTHORITY OF WATER DISTRICTS

A. Limits on Groundwater Regulation

The groundwater legislation designates the ASWCC as the agency with authority to conduct any regulatory program. However, the purpose statement indicates that if regulatory provisions are implemented in the future, the ASWCC should make "every effort" to delegate water management powers to qualified local districts, including day-to-day water management.[182] Local districts are defined to include either a "conservation district or a regional water district".[183] A "conservation district or a regional water district" is, in turn, defined to mean a "regional water

179. ARK. CODE ANN. § 14-116-402(3)(D) (Supp. 1993).
180. ARK. CODE ANN. § 14-116-402(5) (Supp. 1993).
181. ARK. CODE ANN. § 14-116-402(6) (Supp. 1993).
182. ARK. CODE ANN. § 15-22-902 (Repl. 1994).
183. ARK. CODE ANN. § 15-22-903(7) (Repl. 1994).

distribution district created under the Regional Water Distribution Act."[184] In the "powers" section, the ASWCC is authorized to delegate *any* of its powers to a district within a critical groundwater area and is to provide technical assistance and establish guidelines which "shall be followed" by districts granted powers under this Act.[185] In addition, the ASWCC is to "resolve disputes between, approve regulations of, and hear appeals from decisions of districts to which the commission has delegated powers." Obviously, such delegation of authority may occur only after the ASWCC has gone through the procedure outlined earlier regarding both the designation of critical areas and the implementation of a regulatory program.[186] The issue of what may be included in a regulatory program once developed is not clearly outlined in the legislation. The legislation discusses "well spacing," "issuance of groundwater rights," and "groundwater classification and aquifer use" but little guidance is provided as to what may be included in a regulatory program.[187]

This lack of detail may be contrasted with that provided by states with more advanced groundwater protection programs. Kansas, for example, provides for the establishment of Groundwater Management Districts which are designed to "establish the right of local water users to determine their destiny with respect to the use of groundwater . . . ."[188] Such districts may petition for designation of specifically defined land as an "intensive groundwater use control area."[189] If it is so designated, corrective control measures may be implemented which may include one or more of the following:

> (1) A provision closing the intensive groundwater use control area to any further appropriation of groundwater . . . ; (2) a provision determining the permissible total withdrawal of groundwater in the intensive groundwater use control area each day, month or year,

184. ARK. CODE ANN. § 15-22-903(11) (Repl. 1994).
185. ARK. CODE ANN. § 15-22-904(8)-(9) (Repl. 1994).
186. ARK. CODE ANN. § 15-22-904(10) (Repl. 1994).
187. ARK. CODE ANN. § 15-22-904(1) (Repl. 1994).
188. KAN. STAT. ANN. § 82a-1020 (1989).
189. KAN. STAT. ANN. § 82a-1036 (1989).

> and, insofar as may be reasonably done, the chief engineer shall apportion such permissible total withdrawal among the valid groundwater right holders . . . ; (3) a provision reducing the permissible withdrawal of groundwater by any one or more appropriations thereof, or by wells in the intensive groundwater use control area; (4) a provision requiring and specifying a system of rotation of groundwater use in the intensive groundwater use control area; (5) any one or more other provisions making such additional requirements as are necessary to protect the public interest.[190]

Similar provisions in Nebraska allow the designation of a "control area," and if so designated, a natural resource district (a local entity) may adopt one or more controls on groundwater use.[191] Even in areas that are not "control areas" but are established as "management areas," the district is authorized to manage the use of water for water quantity or quality purposes by the following:

> (1) Allocating the total permissible withdrawal of groundwater;
> (2) Rotation of use of groundwater;
> (3) Well-spacing requirements . . . ;
> (4) Best management practices;
> (5) Education programs designed to protect water quality.[192]

B. Limits on Surface Water Regulation

The 1985 legislation specifically required the ASWCC to establish minimum streamflows.[193] In 1989 additional statutory references to this authority were enacted by requiring the ASWCC to "establish *and enforce* minimum streamflows for the protection of instream water needs."[194] By definition, "minimum streamflow" was the "quantity of water required to meet the largest of the following instream flow needs as determined on a case-by-case basis:"

(A) Interstate Compacts;

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190. KAN. STAT. ANN. § 82a-1037 (1989 & Supp. 1993).
191. NEB. REV. STAT. §§ 46-658, -666 (1988).
192. NEB. REV. STAT. § 46-673.09 (1989).
193. ARK. CODE ANN. § 15-22-301(4) (Repl. 1994).
194. ARK. CODE ANN. § 15-22-222 (Repl. 1994)(emphasis added).

(B) Navigation;
(C) Fish and Wildlife;
(D) Water quality;
(E) Aquifer recharge.[195]

This definition is carried forward to the ASWCC rules for utilization of surface water.[196] However, the ASWCC has reserved the decision of establishing minimum streamflows for particular streams for the future, and these are not included in the present rules.

The Arkansas Water Plan indicates that instream flow requirements must be established on a site specific flow basis. Because of differences between streams in different eco-regions of the state, the plan indicates that a "given procedure or percentage" is not applicable to determining minimum streamflows on all streams. The plan recognizes the need to reserve some of the streamflow "to maintain fish and wildlife habitat, water quality standards, and aesthetic qualities of the streams."[197]

The designated levels come from recommendations from the Department of Parks and Tourism, the Game and Fish Commission, and the Department of Pollution Control and Ecology. These agencies were particularly concerned that the Arkansas Water Plan should recognize and protect instream uses before withdrawals for offstream uses occur. The ASWCC used recommended levels for fish and wildlife instream requirements to determine whether excess surface water exists for purposes of nonriparian transfers. These were computed as sixty percent of mean monthly flow for November through March, seventy percent for April through June, and fifty percent for July through October.[198]

The allocation rules include instream uses ("minimum streamflow") as a reserved use. The rules also include domestic and municipal-domestic uses and federal water rights prior to allocations for other uses and needs.[199] This would appear to meet the concerned agencies' objectives

195. ARK. CODE ANN. § 15-22-202(6) (Repl. 1994).
196. Rules, *supra* note 63, § 301.3(W).
197. ARKANSAS WATER PLAN, *supra* note 2, at 16-17.
198. *Id.*
199. Rules, *supra* note 63, § 307.3.

regarding the protection of those minimum levels before any allocation occurs. However, the utilization rules make no effort to develop specific minimum instream flow levels. These will apparently be developed on a case-by-case and site specific basis as indicated in the Arkansas Water Plan.

No statutory authority exists for the ASWCC to delegate the establishment and enforcement of minimum streamflows. However, the ASWCC may delegate its allocation authority to conservation districts and regional water districts.[200] As was outlined earlier, this procedure involves considerable direction to users relating to flow levels, especially when the flow level is above the minimum instream flow level but below a level where it can be used without restriction. Thus, flow levels and pool levels could be regulated during times of shortage, once the ASWCC establishes minimum flows for a given stream and if the allocation authority has been delegated to a district.

If a water district obtains the right to transfer a permitted amount of water to nonriparian land, the district would have the authority to administer this water in accordance with the permit terms through the permit process with the ASWCC; in other words, the district could distribute it to the identified land in the amounts permitted. This water would not be *owned* by the district, but it would be available for use. Thus, the district should be free to distribute the water and regulate the withdrawal (amount and rate) from the delivery system.

The powers of the district refer to its ability to use the beds of existing streams for distribution purposes. However, this use must not adversely affect existing riparian rights. The existing water in streams where the bed is to be used as a part of the delivery system would not be controlled by the district unless withdrawal of that water was covered by separate permits issued to the district. Through the same permit application process, the ASWCC could authorize the district to divert this water to nonriparian uses if it was found to be "excess surface water" in a particular watershed. Any such authority would have to follow a

200. ARK. CODE ANN. § 15-22-221 (Repl. 1994).

ASWCC determination that "excess surface water" exists.[201] This procedure recognizes the possibility that riparian rights (as of June 28, 1985) would have to be taken into account in the determination. In addition, language dating to 1969 requires that in any "adjudication of rights to divert" water, a nonriparian use of water cannot "supersede, subordinate, or otherwise take priority or precedence over a riparian right to divert water . . . ."[202] Thus, where a riparian has established a history of use (through registration of the diversion as required since 1969),[203] this use would be entitled to recognition.

Under the Regional Water Distribution District Act, a water district may "[a]cquire absolute title to and use for any purpose and at any place water stored in a reservoir or other water source created by construction of a multipurpose dam by or under the direction of the United States Army Corps of Engineers" or constructed by the water district with federal assistance under federal law.[204] Likewise, a water district may "[a]cquire water storage and withdrawal rights" in these reservoirs and water sources.[205] Furthermore, a water district is authorized to "transport, distribute, sell, furnish, and dispose of water" from whatever source derived.[206]

The powers section additionally allows districts to "regulate, define and control the rate and location of any withdrawal or transfer of water" from water channels (natural or man-made) "owned, acquired *or developed* by the district."[207] This Act permits the district to use the bed of any stream for the transportation and distribution of water. However, this can only be done if existing riparian rights are not adversely affected.[208] Under this broad authority, the district would have absolute control of water developed as a part of the project, assuming federal assistance is given.

201. ARK. CODE ANN. § 15-22-304 (Repl. 1994).
202. ARK. CODE ANN. § 15-22-215(f) (Repl. 1994).
203. ARK. CODE ANN. § 15-22-215 (Repl. 1994).
204. ARK. CODE ANN. § 14-116-402(3)(A) (Supp. 1993).
205. ARK. CODE ANN. § 14-116-402(3)(B) (Supp. 1993).
206. ARK. CODE ANN. § 14-116-402(3)(C) (Supp. 1993).
207. ARK. CODE ANN. § 14-116-402(3)(E) (Supp. 1993)(emphasis added).
208. ARK. CODE ANN. § 14-116-402(9) (Supp. 1993).

This would include control over withdrawals and transfers from project water sources "developed" by the district. However, it appears the legislature intended to continue to protect existing riparian rights (presumably those existing at any time).

Regarding a district's general authority to regulate withdrawals (as opposed to the specific authority outlined previously), the only statutory basis for such authority is through the ASWCC's allocation authority during shortages, which may be delegated to conservation districts and regional water districts.[209] It would appear that all riparian diversions would take priority during an allocation over all nonriparian diversions, even if the nonriparian use was of a higher category in the "order of uses." For example, a riparian recreational use would apparently be of higher priority than a nonriparian agricultural use, even though "agriculture" is designated as first in the "order of uses."

The ASWCC is authorized to delegate this allocation authority to conservation districts and regional water districts.[210] The ASWCC is to establish "guidelines" which *shall* be followed by the districts. It is likely that any such delegation of authority and relevant guidelines would require regulations similar to those now outlined in the ASWCC's own rules. The ASWCC retains the authority to approve or disapprove regulations of districts to which the ASWCC has delegated power.[211]

C. Effect on Existing Riparians

Under the traditional riparian rights doctrine, any riparian rights adhering to land by virtue of location pass with the land upon a sale or transfer. Thus, any land acquired by a water district would carry riparian rights. These rights would, under the traditional view, allow use of water from the stream *on the riparian land* itself. Any transfers to nonriparian use would be subject both to the more recent au-

209. ARK. CODE ANN. § 15-22-221 (Repl. 1994).
210. *Id.*
211. ARK. CODE ANN. § 15-22-221(c) (Repl. 1994).

thority of the ASWCC to permit such uses and to the "order of preferences" during an allocation procedure if shortages occur. As to canals, the riparian rights doctrine is inapplicable to artificial structures; thus, no riparian rights would attach to land adjacent to new canals by virtue of location.

The question of exclusion of certain land from a regional water distribution district was specifically addressed in the original legislation. An owner of land within the district's boundaries may petition at any time (before or after the district is established) for exclusion of his property for agricultural irrigation water purposes, if the owner can show that the land is adequately supplied by irrigation water from surface sources or other sources existing at the time the district is created "or at any time thereafter."[212] In addition, the landowner would have to show the property is not and will not be benefited in the future by improvements of the district.[213] Thus, a landowner could argue that historical use of groundwater or of surface water (presumably properly registered with the ASWCC) is sufficient to allow exclusion. The riparian right to surface water (previously used and registered) is entitled to recognition even during a surface water allocation proceeding. Additionally, a historical use of groundwater (registered) is entitled to be "grandfathered" if a regulatory scheme is implemented.

The broad exclusion ability poses a major obstacle to the operation of a regional water distribution district. By contrast, the traditional general rule for improvement districts would allow mandatory inclusions of any land benefiting from the district. For example, a district organized under the Arkansas Irrigation, Drainage and Watershed Improvement District Act of 1949 may assess lands beyond the boundaries of the district and may petition for their inclusion. The district's limits may be extended to embrace these lands if it is found that these lands will be benefited.[214] The only procedure for inclusion of additional lands in a water distribution district is by petition of land-

212. ARK. CODE ANN. § 14-116-207(b) (1987).
213. ARK. CODE ANN. § 14-116-207(a) (1987).
214. ARK. CODE ANN. § 14-117-209 (1987).

owners themselves. This petition is handled in the same way as the original petition for formation of a water district.[215]

The creation of a district would in no way affect the existing riparian rights of farmers who do not participate in the project. Their rights are specifically recognized in all the legislative efforts to revise Arkansas water law and, in particular, their rights are provided for in the allocation scheme if their use is properly registered. While failure to register may not deprive them of their right, the ASWCC does not have to make an allocation to them during shortage. Additionally, such persons would be entitled to make their own applications for transfer of stream water to nonriparian land on the same basis as any other person.

D. Financing of Projects

As mentioned above, regional water distribution districts have no power to impose taxes or assessments. Interestingly, the 1991 groundwater legislation authorizes the ASWCC to "[p]romulgate rules and regulations for groundwater classification and aquifer use, well spacings, issuance of groundwater rights within critical groundwater areas, and assessment of fees."[216] The legislation requires the ASWCC to assess annual fees for withdrawal of groundwater (and surface water) payable at the time of water use reporting.[217] The ASWCC may delegate any and all powers to districts within critical groundwater areas. Conceivably this could include the authority to assess the annual withdrawal fee, although "fees" referred to in the legislation were set at $10.00 per registered well (or per registered withdrawal point).[218] This fee level would not be sufficient to serve as a "preservation fee" and would require a legislative amendment to increase it.

Again, the experiences of other states are useful in this regard. For example, Groundwater Management Districts in Kansas are authorized to impose an "annual water user

215. ARK. CODE ANN. § 14-116-406 (1987).
216. ARK. CODE ANN. § 15-22-904(1) (Repl. 1994).
217. ARK. CODE ANN. § 15-22-913(a)-(b) (Repl. 1994).
218. ARK. CODE ANN. § 15-22-913(a) (Repl. 1994).

charge against every person who withdraws groundwater from within the boundaries of the district."[219] This charge is, by statute, not to exceed .60¢ per acre foot of groundwater.

A water district is specifically authorized to issue tax exempt bonds (exempt from state, county, and municipal taxes) to generate financing for the project. The bonds are to be negotiable coupon bonds which may mature at various times up to forty years from the date of issuance.[220] The exact nature of the bonds is quite flexible and may contain "such terms, covenants and conditions" as the board may provide by resolution. They may bear interest at rates authorized by the board, be payable where and how the board designates, and may be subject to a trust indenture entered with a bank or trust company.[221] The bonds may be sold at a price determined by the board.[222] A water district may also simply borrow money.

Given this limited ability to finance projects, it may become necessary for water districts to be given additional assessment and taxing authority. In order for a water district to become an improvement district with taxing authority, amendment of the original act would be required to incorporate such authority as is now provided for districts organized under the 1949 Irrigation, Drainage and Watershed Improvement District Act. Presumably, this additional authority could extend to previously organized districts, especially if the legislation so specifies. This type of amendment would seemingly be required because the act specifies that no other law of the state applies to districts organized under this act.[223] Thus, the general provisions relating to public improvement districts would not be applicable.

However, the extension of assessment and taxing authority to a previously organized district could pose potential legal difficulties if landowners within the boundaries objected. At the very least, many might choose to ask that

219. KAN. STAT. ANN. § 82a-1030(a) (1989).
220. ARK. CODE ANN. § 14-116-402(7)(B) (Supp. 1993).
221. ARK. CODE ANN. § 14-116-402(7)(B)-(C) (Supp. 1993).
222. ARK. CODE ANN. § 14-116-402(7)(E) (Supp. 1993).
223. ARK. CODE ANN. § 14-116-104 (1987).

they be excluded from the district. For this reason, other options should be explored. One such option would be the creation of a number of sub-districts under the 1949 Irrigation, Drainage and Watershed Improvement District Act. Each new sub-district would have the desired authority and could then contract with the water district for water distribution services. Such inter-local cooperation is contemplated by the Interlocal Cooperation Act,[224] although only regional water distribution districts are mentioned in that act. Amendment of both the Interlocal Cooperation Act and the distribution district legislation would be necessary to assure that such agreements are valid. A more logical approach would be to amend the distribution district legislation to allow property owners within the district at some future time to adopt assessment and taxing authority.

The only reference to voting in the distribution district legislation includes election of board members "as a part of the general election and under the laws governing it."[225] Nomination is by "qualified electors residing in the area of the district . . . ."[226] While this statutory method applies to the elections of board members, it is not typical of the legislation in many states, which provides for voting on the basis of land ownership. In two separate cases before the United States Supreme Court, special purpose districts organized primarily to obtain and distribute irrigation water were not considered bound by the "one person, one vote" principle of the constitutional equal protection clause. In *Salyer Land Company v. Tulare Lake Basin Water Storage District*,[227] the Court upheld a California provision that allowed district elections to be limited to those who owned land in the district and votes to be apportioned according to the assessed value of the included land. The Court considered the district to be a special purpose district not engaging in general governmental activities. Similarly, in *Ball v. James*,[228] a district organized under Arizona law limited

224. ARK. CODE ANN. §§ 25-20-101 to -108 (1987).
225. ARK. CODE ANN. § 14-116-303(b) (1987).
226. ARK. CODE ANN. § 14-116-303(a) (1987).
227. 410 U.S. 719 (1973).
228. 451 U.S. 355 (1981).

voting to landowners, and votes were apportioned according to the number of acres owned. Although this district engaged in activities well beyond water distribution (*e.g.*, power generation and distribution) the Court upheld the voting scheme based on the relatively narrow water functions.

These decisions show that legislation authorizing a vote within the district to permit the board to adopt assessment and taxing authority could be limited to landowners whose land would be subject to such assessment and tax. Additionally, the voting rights could be apportioned according to either acreage or assessed value.

E. Interrelationship With Other Types of Districts

The mere fact that various types of districts are located within the same jurisdictional boundary does not, of itself, pose a particular legal problem. The generally accepted view is that so long as the purposes differ, such districts may exist concurrently, each serving the territory described at its formation or as subsequently modified. Furthermore, if it can be shown that each provides benefits to property owners, they may exist concurrently, even if the purposes overlap.

The Arkansas Supreme Court evaluated the question of overlapping districts in *Pendleton v. Stuttgart & King's Bayou Drainage and Irrigation District.*[229] The court indicated that the inclusion of lands already in an existing district has been approved several times in the past so long as the land is benefited by both districts. The court also indicated that even *indirect* benefits are sufficient for approval of inclusion of lands. The districts involved were old inactive drainage districts that were to be overlaid by a new drainage and irrigation district formed under Act 329 of 1949. However, the court's decision did not hinge on the question of inactivity of the old districts, but rather focused on the question of whether the land benefits from both districts.

229. 360 S.W.2d 750 (Ark. 1962).

Any problems arising from potential territorial overlap are likely to be resolved during the district formation process. First, the petition for district establishment must describe the benefits to be received by the residents and property owners in the territory of the proposed district.[230] Second, the water distribution district legislation calls for review of the petition by the ASWCC and, in its report, the ASWCC must indicate how the proposed boundaries of the district conflict with the boundaries of any existing district.[231] In addition, the ASWCC must make findings as to whether the organization of the district would be "conducive" to the purposes of the Regional Water Distribution District Act and whether the statement of purposes in the petition conforms to the "intent and purposes" of the Act as applied to the area within the proposed boundaries.[232] The ASWCC may, in effect, modify the petition by including in the report any "conditions, revisions, including revisions of area, or limitations" which the AWSCC deems necessary.[233]

As a matter of practice, the AWSCC has pointed out boundary conflicts in districts of the same type (*e.g.*, regional water distribution districts), and these have been considered by the courts to be amendments to the petitions. To date, the AWSCC's revisions have been approved without question by the appropriate courts. For example, when the Circuit Court of Lonoke County received a petition to establish the Bayou Meto Irrigation District,[234] the initial report of the ASWCC indicated that the boundaries would conflict with those of the White River Regional Irrigation Water Distribution District, and the overlap was described.[235] A subsequent report indicated that the overlapping area had been removed from the boundaries of White

230. ARK. CODE ANN. § 14-116-202(3) (1987).

231. ARK. CODE ANN. § 14-116-204(c)(1) (1987).

232. ARK. CODE ANN. § 14-116-204(c)(1)-(2) (1987).

233. ARK. CODE ANN. § 14-116-204(c)(4) (1987).

234. In the Matter of the Bayou Meto Irrigation District, Civil No. 91-56 (Ark. Cir. Ct. of Lonoke County Feb. 4, 1991).

235. Report of the Arkansas Soil and Water Conservation Commission, (April 17, 1991), *filed in* In the Matter of the Bayou Meto Irrigation Dist., Civil No. 91-56, Circuit Court of Lonoke County Arkansas.

River Regional Irrigation Water Distribution District by order of the Circuit Court of Prairie County. The report also provided a revised description which then became the basis for the approval of the Bayou Meto Regional Irrigation Water District.[236]

The ASWCC has also considered potential overlap in functions as well. In the report to the Circuit Court of Arkansas County regarding the formation of what became the White River Regional Irrigation Water Distribution District, the ASWCC noted that the area of the proposed irrigation district was contained in the boundaries of the Grand Prairie Regional Water Distribution District. The ASWCC suggested that limitations should be placed upon the proposed district to avoid "conflicts and competitions that may arise in the management of the region's water resources."[237] The limitation was that the White River Regional Irrigation Water Distribution District refrain from any activity that would conflict with the existing district and "shall not distribute water for any purpose other than agricultural irrigation."[238]

The Regional Water Distribution District Act also specifically authorizes water districts created under the Act to undertake and carry out jointly and cooperatively projects and purposes authorized for a district acting alone.[239] This includes the power to enter into agreements for joint or cooperative exercise of any power or authority to undertake projects contemplated by the Act.[240] Specific reference is made to the Interlocal Cooperation Act[241] for guidance in such agreements.[242] It should be noted that this section refers only to agreements between two or more water districts formed under the Regional Water Distribution District Act.

236. Letter from J. Randy Phillips, Executive Director, Arkansas Soil and Water Conservation Commission, to the Hon. Judge Lance L. Handshaw, Cir. Ct. Judge, Lonoke County, Arkansas (November 19, 1991).

237. Report of the Arkansas Soil and Water Conservation Commission (June 11, 1984), *filed in* In the Matter of the Establishment of the White River—Grand Prairie Irrigation Dist., Civil No. 80-63, Circuit Court of Arkansas County, Arkansas.

238. *Id.*

239. ARK. CODE ANN. § 14-116-106(a) (1987).

240. ARK. CODE ANN. § 14-116-106(b) (1987).

241. ARK. CODE ANN. §§ 25-20-101 to -108 (1987).

242. ARK. CODE ANN. § 14-116-106(a), (c) (1987).

It does not refer to agreements between these water districts and improvement districts, nor are improvement districts mentioned in the Interlocal Cooperation Act.[243]

Since the Regional Water Distribution District Act itself limits the application of "any other law of this state, except as provided in this chapter" to water districts, only two or more water districts created under the Act would seem to be authorized to carry out joint and cooperative projects.[244] This is reinforced by the omission of any other types of irrigation or drainage districts from the provision of the Interlocal Cooperation Act.

Water districts have broad authority to "make any and all contracts necessary or convenient for the exercise of the powers granted *in this subchapter.*"[245] "Subchapter" in this section refers only to Subchapter 4 of the Regional Water Distribution District Act, whereas the "joint project" authority is included in Subchapter 1 of the Act. Thus, unless the authority to enter joint projects and similar arrangements with other types of districts could be implied from the broad grant of authority to exercise "all powers as may be necessary, convenient, or appropriate to effectuate the purpose for which the water district is organized,"[246] a water district's authority to reach agreements with other types of districts may be limited. Furthermore, irrigation, drainage and watershed districts formed under Act 329 of 1949[247] are given no specific authority to cooperate with other districts, nor are drainage and levee improvement districts.[248]

F. Rules for Water Development Project Compliance

The ASWCC has adopted rules related to water development project compliance. The objective of the compliance rules is to assure that any proposed project complies

243. *See e.g.*, ARK. CODE ANN. § 25-20-104 (1987)(defining "public agency").
244. ARK. CODE ANN. § 14-116-104 (1987).
245. ARK. CODE ANN. § 14-116-402(12) (Supp. 1993).
246. ARK. CODE ANN. § 14-116-402(16) (Supp. 1993).
247. Codified at ARK. CODE ANN. §§ 14-117-101 to -427 (1987 & Supp. 1993).
248. ARK. CODE ANN. §§ 14-120-101 to -705 (1987 & Supp. 1993) or ARK. CODE ANN. §§ 14-121-101 to -1009 (1987 & Supp. 1993).

with and implements the goals of the Arkansas Water Plan and "adequately coordinates the use of water resources within the region in which the project is located, and within the state as a whole."[249] The ASWCC may approve an application only if it meets these criteria. It then becomes an amendment to the Arkansas Water Plan. The authority for the compliance rules is the legislation requiring the development of the Arkansas Water Plan. Under that legislation, no agency may engage in a water development project until a preliminary survey and report is submitted to the ASWCC. This report must set forth "the purpose of the project, the benefits to be expected, the general nature of the works of improvement, the necessity, feasibility, and the estimated cost." The ASWCC must approve the report as in compliance with the Arkansas Water Plan.[250] In this case, since one of the major goals of the Arkansas Water Plan is to promote the conversion of water use from critical groundwater resources to alternatives utilizing surface water where it is available, the project should be consistent with the Arkansas Water Plan. The Plan specifically recommends that excess water from the White River and the Arkansas River be provided for use in the Grand Prairie region.

The Rules of the ASWCC call for a detailed application and a preliminary engineering report.[251] Once the application and report are filed, the ASWCC staff ascertains the accuracy of the data in the application and recommends approval or disapproval of the application.[252] Public notice and a public hearing are required because the approval or disapproval is considered an adjudication under the Arkansas Administrative Procedure Act.[253]

VII. PROPOSED CHANGES: A SUMMARY

In spite of changes in the general law regarding groundwater and surface water utilization, some major im-

249. Rules, *supra* note 63, § 604.5.
250. ARK. CODE ANN. § 15-22-503(e) (Repl. 1994).
251. Rules, *supra* note 63, § 602.1-.2.
252. Rules, *supra* note 63, § 603.3.
253. Rules, *supra* note 63, § 604.1-.4.

pediments to a successful water transfer project involving water districts' operations still exist. These relate to the authority of special water distribution districts created under Act 114 of 1957. Some items may be addressed by change in the ASWCC regulations rather than by legislation; others require amendment of the original legislation. These are summarized separately.

A. Revision in Rules

1. Definition of Applicants for Transfer Permits

In the Rules implementing the transfer provision to nonriparian land, a "person" may be authorized to divert and transfer excess surface water. "Person" is broadly defined and includes associations as well as governmental agencies. Water distribution districts were, no doubt, contemplated to qualify for transfer authority. However, the Rules implementing the transfer authority are more narrowly written, seemingly with individual applicants in mind. For example, the legal description of lands to be irrigated must be included in the permit application,[254] and the irrigation permit "runs with the land."[255] If a water distribution district is to be the entity authorized to divert and transfer surface water, these requirements would be particularly cumbersome.

2. Permit Cancellation

Under the Rules, a nonriparian permit may be canceled if the permittee fails to take "reasonable steps" to obtain the ability to utilize the water within two years from the date of issuance.[256] Because project construction might commence several years after the permit is issued, the Rules should be expanded to indicate the types of activities qualifying as "reasonable steps" toward utilization of the water.

254. Rules, *supra* note 63, § 304.3.
255. Rules, *supra* note 63, § 304.13.
256. Rules, *supra* note 63, § 304.12.

3. Allocation Order

In the allocation procedures during periods of shortage, the apparent intent is to make allocations within categories of uses (*e.g.*, nonriparian intrabasin transfers) on a "first in time, first in right" basis. This is not detailed in the Rules and some clarification would be helpful to assure water districts of their allocated share.

B. District Authority: Legislative Recommendations

The Regional Water Distribution District Act[257] confers much more limited authority on districts organized under that legislation than that given to districts organized under the Arkansas Irrigation, Drainage and Watershed Improvement District Act.[258] This is, in part, because of the difference in organization requirements. It is a rock bottom principle that special districts only have such power and authority as is specified in—or can be implied from—the legislation authorizing their creation. Thus, some amendment of the original legislation is necessary to facilitate the use of water districts as the vehicle for water transfers.

1. Contracts with the United States

The Regional Water Distribution District Act gives broad authority to a district to acquire water, water storage and withdrawal rights, and to enter into contracts to carry out the powers of the district.[259] By contrast, the 1949 Act has a detailed section related to contracts between districts and the United States.[260] The Regional Water Distribution District Act should also have a detailed grant of authority specifically allowing contracts between districts and the United States.

2. Appropriations from the State

The 1949 Act gives districts authority to accept appropriations from the state.

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257. 1957 Ark. Acts 114.
258. 1949 Ark. Acts 329.
259. ARK. CODE ANN. § 14-116-402(3)(A)-(B), (12) (Supp. 1993).
260. ARK. CODE ANN. § 14-117-402 (1987).

> The board may also accept appropriations from the state upon such terms and conditions as may be imposed by law or regulation to be used in the furtherance of the purposes for which the district was authorized.[261]

No similar authority exists for regional water distribution districts.

3. Entry on Private Land

The 1949 Act empowers the district board to enter land within the district to make surveys and for other purposes.

> The board, its agents, and its employees shall have the right to enter upon any land within the district to make surveys and for other purposes.[262]

No similar authority exists for regional water distribution districts.

4. Exclusion of Land

The Regional Water Distribution Act contains a specific method by which land may be excluded from the district.[263] A related provision appears in the 1949 Act, but it also provides a method by which additional land may be *included* in the district.[264] No similar provision exists for the regional water distribution district once established. The only method is by petition of landowners themselves. The 1949 Act provision appears to be more complete.

5. Agreements With Other Districts

Neither the Regional Water Distribution Act nor the Interlocal Cooperation Act specifically authorizes water distribution districts to enter into agreements with drainage districts, irrigation districts, or other districts organized under separate legislation. This authority should be explicitly stated in both acts.

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261. ARK. CODE ANN. § 14-117-304(c) (Supp. 1993).
262. ARK. CODE ANN. § 14-117-304(b) (Supp. 1993).
263. ARK. CODE ANN. § 14-116-207 (1987).
264. ARK. CODE ANN. § 14-117-208 (1987).

6. Authority to Control Developed Water

The district's authority to deal with water developed by the district but being transported in natural streams should be clarified. The district's powers suggest that such water is to be controlled and regulated by the district. Existing riparian uses, however, would apparently have to be recognized. If the district is to control this water, the power to regulate withdrawals is probably sufficient, but it should be expressly stated in the legislation that the placing of such developed water in natural streams in no way makes it available to existing riparian users who are not receiving water from the system and paying its rates and charges.

7. Authority to Impose Charges for Groundwater Use

If the power to regulate groundwater is to be delegated to a water distribution district, as provided in the groundwater legislation, not only should the types of regulatory authority be more clearly spelled out as suggested above, but also the district may wish to have the authority to impose user charges for groundwater similar to the Kansas groundwater legislation.

8. Taxing Authority

The 1949 Act allows drainage and irrigation districts considerable assessment authority[265] as well as taxing authority.[266] No similar authority exists for districts organized as regional water distribution districts. They are apparently limited to the generation of revenues from "rates, fees, rent, or other charges for water and other facilities, supplies, equipment, or services furnished by the water district."[267] This limitation may pose the most serious obstacle to future operation of a district. Legislation simply to add such authority would be questionable. However, one approach might be to amend the legislation to establish a procedure whereby property owners included within the district could adopt assessment and taxing authority.

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265. ARK. CODE ANN. §§ 14-117-403, -209 (1987).
266. ARK. CODE ANN. §§ 14-117-413, -420 (1987).
267. ARK. CODE ANN. §§ 14-116-404, -402(13) (1987 & Supp. 1993).

C. 1995 Legislation

In an attempt to deal with some of the major impediments to using existing and future water districts as the vehicle for surface water transfers, a multipurpose bill was introduced in the 1995 General Assembly, House Bill 1701, which amends various sections of the 1957 Regional Water Distribution District Act. This proposal addresses a number of the major items outlined above. This legislation is

> to allow the Board of Directors of a Regional Water Distribution District to adopt a proposed improvement plan for a project area, including the ability to assess benefits, to clarify the districts' authority to enter into contracts with the United States; to give a district authority to accept appropriations from the state; to allow a district to enter land within the district to make surveys; to clarify the districts' authority relating to existing riparian users; and for other purposes.[268]

1. Exclusion of Land from a District

One of the concerns in operation of a water district, especially one with taxing authority, is the problem that could result if dissatisfied landowners choose to "opt-out" of the district. Both the 1949 Arkansas Irrigation, Drainage and Watershed Improvement District Act[269] and the Regional Water Distribution Act of 1957[270] contain specific provisions for exclusion of land from a district. Such an exclusion, at the time of district formation, appears to be not only desirable but necessary to allow specific landowners to show that their land would not benefit from inclusion in the district. For example, if they have an adequate supply of water and do not need the services of the district, exclusion might be appropriate. However, once the district is formed, allowing dissatisfied landowners to opt-out could result in financing problems for projects necessary to carry out district purposes.

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268. 1995 Ark. Acts 838, Purpose Statement.
269. 1949 Ark. Acts 329.
270. 1957 Ark. Acts 114.

The 1995 legislation addresses this problem. This legislation would amend the Regional Water Distribution District Act to eliminate all reference to the exclusion of land once the district is formed. Owners would continue to have a method of excluding land at the time of formation if they could show that the property was supplied by adequate irrigation water and would not benefit in the future from the improvements of the proposed water district.[271]

2. Entry on Private Land

In order to carry out any improvement project, the district would find it necessary to enter private land for the purpose of conducting surveys. To carry out the purposes of the district it would need similar authority to inspect diversion and distribution facilities, pumping stations, or other project related property. For some reason, this authority was not included in the original legislation. The 1995 legislation remedies this by adding this authority in the section on "district powers."[272]

3. Control of Developed Water

The act allowing for creation of water districts provides that such districts could use the beds of streams in connection with the distribution of water.[273] This authority is of importance in order to allow the transfer of water through existing stream channels where feasible. The existing provision clearly states that this has to be done without affecting existing riparian rights. What is less clear is what might occur should existing riparian landowners remove water from such streams when the water present is, in part, water being transported by the district. The 1995 Act clarifies this point by stating explicitly that this provision does not entitle riparian users to receive water "owned, acquired or developed"

271. 1995 Ark. Acts 838, § 2 (amending ARK. CODE ANN. § 14-116-207 (1987)).

272. 1995 Ark. Acts 838, § 3 (amending ARK. CODE ANN. § 14-116-402 (Supp. 1993) by adding § 14-116-402(18)).

273. ARK. CODE ANN. § 14-116-402(9) (Supp. 1993).

by a water district without paying the district water user charges.[274]

4. Contracts with the United States

Because of the major expense involved in any water transfer project, it is likely that such projects will be carried out with assistance from the federal government. For example, the proposed White River project to supply water to the Grand Prairie contemplates United States Army Corps of Engineers assistance, and much of the preliminary planning for the proposal has involved Corps funding through the Grand Prairie Demonstration Project. While the Regional Water Distribution District Act gives broad authority to such districts to acquire water, water storage and withdrawal rights, and to enter into contracts to carry out the powers of the district,[275] the authority for contractual relationships between such districts and the United States was not detailed as it was in the 1949 Act.[276] The 1995 legislation adopts the language of the 1949 Act in this regard and provides the necessary detail for such contracts.[277] The districts may, under this amendment, contract with or give assurances to the federal government for the construction, operation, and maintenance of facilities in which the federal government has cooperated. The contract or assurance may provide for repayment of costs of works of improvement through revenue generated by the district either through various charges for services or through assessments levied by the district.

5. Taxing Authority

The major constraint on water districts organized under the Regional Water Distribution Act in developing transfer projects is that such districts were given no assessment and taxing authority; instead, they were limited to the generation of revenues from rates and charges for serv-

274. 1995 Ark. Acts 838, § 3 (amending ARK. CODE ANN. § 14-116-402(9) (Supp. 1993)).

275. ARK. CODE ANN. § 14-116-402(3)(A)-(B), (12) (Supp. 1993).

276. ARK. CODE ANN. § 14-117-402 (1987).

277. 1995 Ark. Acts 838, § 4 (adding ARK. CODE ANN. § 14-116-407).

ices.[278] Because such districts may be formed upon petition of only 100 landowners, it would raise major questions if the legislation were amended to give districts such authority retroactively.

The 1995 legislation addresses this problem by establishing a procedure whereby property owners within such a district could petition for the approval of an "improvement project plan" to benefit lands within the district.[279] One-half of the owners of the benefited lands and the owners of one-half of the value of benefited lands within the improvement project area could petition for circuit court approval of the improvement plan. The circuit court to which this petition would be submitted is the court that ordered the creation of the water district pursuant to the original legislation.[280]

The improvement plan would detail the nature of the proposed improvements and the territory benefited and, if approved by the court, would allow for assessment of benefits and the levying of a tax against all parcels within the project area on the basis of benefits accruing to the land.[281] A procedure is detailed for complaints against assessment, and the court is to enter an order regarding the assessment.[282] Taxes are levied against the land in proportion to the amount of the assessment of benefits sufficient to pay the cost of the improvement. Taxes are also levied for preliminary expenses if the project is not to proceed immediately and for operation and maintenance of the works of improvement.[283]

The legislation allows the water district to borrow money, issue notes and bonds, and pledge or assign all assessments and revenues relating to the improvement project area for repayment.[284] Such bonds may be secured by a lien on the lands if payable from the proceeds of assess-

278. ARK. CODE ANN. §§ 14-116-404, -402(13) (1987 & Supp. 1993).
279. 1995 Ark. Acts 838 (adding ARK. CODE ANN. §§ 14-116-501 to -704).
280. 1995 Ark. Acts 838 (adding ARK. CODE ANN. §§ 14-116-501, -502; amending ARK. CODE ANN. § 14-116-103(4) (1987)).
281. 1995 Ark. Acts 838 (adding ARK. CODE ANN. § 14-116-601).
282. 1995 Ark. Acts 838 (adding ARK. CODE ANN. § 14-116-602).
283. 1995 Ark. Acts 838 (adding ARK. CODE ANN. §§ 14-116-608 to -610).
284. 1995 Ark. Acts 838 (adding ARK. CODE ANN. §§ 14-116-701 to -704).

ments. However, the water district board retains existing authority to sell bonds payable out of revenues only.[285]

VIII. CONCLUSION: WHAT REMAINS TO BE DONE?

The 1995 legislation, along with some minor amendments in the Rules, will enhance the role of water districts as vehicles for facilitating the conversion from groundwater to surface water sources for irrigation purposes. However, some changes in the general law regarding surface water utilization and groundwater management may become necessary before the policy objectives can be fully met. The 1985 surface water legislation and the 1991 groundwater legislation greatly enhanced the administrative authority of the ASWCC to deal with the allocation and use of water resources. However, in some cases the legislation and the implementing rules create uncertainties in the current state of the law that could be substantially eliminated by legislative amendment. The major problems identified are summarized here.

A. Limitation on Transfer to Twenty-Five Percent of "Excess"

The limitation of authorization to transfer only twenty-five percent of "excess" surface water appears unduly restrictive, given all the uses that must be taken into account in determining whether "excess" surface water exists in a given basin. This is particularly true if the transfer is *intrabasin*, rather than interbasin. Perhaps the legislation should authorize a greater transfer when the transfer is intrabasin as recommended in the Arkansas Water Plan. A possible transfer amount could be seventy-five percent.

B. Authority to Delegate Regulatory Authority

To facilitate the conversion from groundwater to surface water sources, Act 1051 of 1985 gave the ASWCC the authority to authorize transportation of excess surface water to nonriparians. Much of the detail was left to implementing regulations. In those regulations the ASWCC indi-

285. 1995 Ark. Acts 838 (adding ARK. CODE ANN. § 14-116-704).

cates that it may delegate its authority to a local district.[286] While the ASWCC has specific authority to delegate power to allocate water during times of shortage,[287] no similar delegation provision is included in the legislation related to nonriparian use otherwise. If the goal is to allow more local control, then broader delegation authority is necessary.

The registration legislation requires those who divert surface water to register that diversion with the ASWCC or a "local conservation district."[288] Similarly, withdrawals of groundwater must be reported to the ASWCC or the local conservation district.[289] If allocation authority for surface water or operation of groundwater regulatory programs are to be delegated to water distribution districts, it seems logical that registration and reporting should be delegable to such districts as well. The question of who is to receive the appropriate fees in such cases should likewise be addressed.

C. Groundwater Regulatory Programs

The groundwater legislation contemplates the possibility of future regulatory programs in critical areas. A complicated scheme exists for protection of existing uses and uses to be implemented within one year of initiation of a regulatory program. Exactly what may be included in such a regulatory program, if implemented, is not set out in detail in either the statute or the Rules. Limitations on annual withdrawals, duration of rights, cancellation of rights, well spacing, and groundwater classification and use are all specifically mentioned. Perhaps these regulations are broad enough for a comprehensive regulatory program, if necessary, but they do not mention a number of techniques that might be essential to actual implementation of a regulatory program. For example, rotational pumping, seasonal withdrawals, and required conservation measures are not referenced. The kind of authority given Groundwater Management Districts in Kansas or Natural Resource Districts in Nebraska is needed.

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286. Rules, *supra* note 63, § 301.5.
287. ARK. CODE ANN. § 15-22-221 (Repl. 1994).
288. ARK. CODE ANN. § 15-22-215 (Repl. 1994).
289. ARK. CODE ANN. § 15-22-302 (Repl. 1994).

One of the greatest weaknesses in the 1991 groundwater legislation is the provision that if a groundwater regulatory program is implemented, new wells will be "grandfathered" (automatically granted "rights") if completed within one year of the implementation of the regulatory program. Furthermore, no restrictions or limitations may be imposed on these wells for a period of four years. If the situation is serious enough for the designation of an area as a "critical groundwater area" and the implementation of a regulatory program, this "grandfathering" provision is counter-productive and will encourage the exact behavior the regulatory program will be designed to prevent.