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The Great and Growing Cities Doctrine Imperiled: An Objective Look from a Biased Perspective

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PAGOSA

THE GREAT AND GROWING CITIES DOCTRINE IMPERILED: AN OBJECTIVE LOOK FROM A BIASED PERSPECTIVE

CASEY S. FUNK AND DANIEL J. ARNOLD*

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INTRODUCTION

In *Pagosa Area Water & Sanitation District v. Trout Unlimited* ("*Pagosa II*"), the Colorado Supreme Court rejected the argument that governmental entities act in a legislative capacity when they make conditional water right appropriations; thus, the courts do not owe deference to these governmental agencies for the claimed amounts of water the agencies deem reasonably necessary for their future use.[1] Prior decisions acknowledged that courts should defer to a municipality's "managerial judgment" and the courts "should not intrude their own opinions to override the studied good-faith opinions of governmental agencies as to future needs of the public for facilities or commodities."[2] Despite this longstanding recognition for the need for flexibility in municipal water supply planning, the Colorado Supreme Court narrowly construed the limited governmental agency exception to the anti-speculation doctrine in order to meet Colorado's "maximum utilization and optimum beneficial use goals."[3] The court concluded that governmental agencies' conditional appropriations are not immune from judicial review under the proceedings and standards of the Water Rights Determination and Administration Act.[4] However, the court's conclusion arguably clashes with the General Assembly's statutory exemption from the anti-speculation statute.[5] Furthermore, the conclusion clashes with a governmental agency's legislative discretion, which law-makers recognize in a wide range of other matters, including ratemaking, annexation, and the exercise of police powers, such as decisions related to public safety, zoning, and the promotion of aesthetic values. Courts should be sensitive so as not to

1. Pagosa Area Water & Sanitation Dist. v. Trout Unlimited (*Pagosa II*), 219 P.3d 774, 788 (Colo. 2009). *Pagosa II* is the second in a series of two consecutive cases with Pagosa Area Water & Sanitation Dist. v. Trout Unlimited (*Pagosa I*), 170 P.3d 307 (Colo. 2007) (en banc) as the first. In *Pagosa I*, the Colorado Supreme Court addressed the question of whether a one hundred year planning horizon for a new conditional appropriation is inherently speculative. *Id.* at 313. The court held that a one hundred year planning horizon period was speculative and adopted a three-part test for determining whether a governmental agency has an intent to make a non-speculative conditional appropriation of unappropriated water. *Id.* at 313, 320. The court remanded the case to the water court, which, after additional fact-finding, entered a modified decree. *Pagosa II*, 219 P.3d at 776–77. This decree gave rise to an appeal to the Colorado Supreme Court, resulting in *Pagosa II*. *Id.*

2. City & County of Denver v. Sheriff, 96 P.2d 836, 840 (Colo. 1939); Metro. Suburban Water Users Ass'n v. Colo. River Water Conservation Dist., 365 P.2d 273, 289 (Colo. 1961).

3. *Pagosa I*, 219 P.3d at 317.

4. *See id.* at 314 n.6, 320.

5. COLO. REV. STAT. § 37-92-103(3)(a)(I) (2009).

"inappropriately infringe on the water management decisions of . . . municipal water officials;"[6] these decisions are just as or more important than other decisions that governmental agencies make for which they exercise legislative discretion.

This article examines whether the Colorado Supreme Court usurped the discretion that governmental agencies exercise when the court held, *in Pagosa II*, that governmental agencies must prove specific elements and factors when adjudicating new municipal water right appropriations. Examining the development of the great and growing cities doctrine as adopted in *City & County of Denver v. Sheriff* (*"Sheriff"*), this article next explores the evolution of Colorado's anti-speculation doctrine and its growing tension with the great and growing cities doctrine. The article then reviews the Colorado Supreme Court's decisions in *Pagosa Area Water & Sanitation Dist. v. Trout Unlimited* ("*Pagosa I*") and *Pagosa Area Water & Sanitation Dist. v. Trout Unlimited* ("*Pagosa II*") and the new municipal planning standards the court adopted. Ultimately, against this extensive background, the article argues that the Colorado Supreme Court has infringed on the legislative discretion of governmental agencies by specifically requiring the water courts to assess the reasonableness of certain "factors" historically reserved for government decision-making.

I. GREAT AND GROWING CITIES DOCTRINE

A. THE DENVER WATER BOARD AND THE MOFFAT WATER TUNNEL

Pursuant to the 1919 conditional water right statute,[7] the Denver Water Board filed a petition with the Grand County District Court to adjudicate its claim for the maximum amount of water (1,280 cubic feet per second ("cfs")) that could be carried from a collection system on the Fraser River through the 10.5 foot pioneer bore of the Moffat Railroad Tunnel for municipal and irrigation purposes.[8]

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6. City of Thornton v. Bijou Irrigation Dist., 926 P.2d 1, 52–53 (Colo. 1996) (en banc).

7. In 1919, the General Assembly required adjudication of all water rights in order to establish the rights' priorities and enforce them. HAROLD H. ELLIS & MEYER J. PETER DEBRAAL, WATER RIGHTS IN THE NINETEEN WESTERN STATES 472 (2004). An uncompleted appropriation was styled a "conditional" decree. City & County of Denver v. Colo. River Water Conservation Dist., 696 P.2d 730, 745 (Colo. 1985) (en banc).

8. Amended Statement of Claim at 3, Fraser River Diversion Project, No. 657 (Dist. Ct. Colo., July 13, 1937). Denver's 1937 amended statement of claim described the Moffat Water Tunnel as a constructed tunnel with a diameter of 10.5 feet and a carrying capacity of 1,280 cfs. *Id.* The amount claimed for beneficial use was also 1,280 cfs even though only 600 cfs had been diverted. *Id.* at 10. Denver claimed that the City and County of Denver had a population of 300,000 persons and was constantly growing. *Id.* at 14. In order to provide sufficient water for its growing needs, Denver asserted that it was necessary that the construction of the Denver Municipal Water System provide a greater supply of water than needed for immediate use by its inhabitants. *Id.* at 15–16. Consequently, it was the custom of the City and County of Denver to lease water it did not need for immediate use to other water users including irrigation. *Id.* at 16.

Through the decree, the trial court imposed restrictive conditions to prevent any sale, lease, or alienation of Denver's South Platte River water.[9] This guarded "against the City of Denver going into the business of selling water or disposing of a part or all of her present water rights and substituting the water acquired or to be acquired in this proceeding for her present water supply."[10]

On appeal, the Colorado Supreme Court struck this provision. It confirmed that Denver's South Platte River water rights are property rights and held:

> If the city, for some legitimate reason, desired to abandon or sell any of its Eastern Slope water, it would, by so doing, and under these restrictions, jeopardize its water rights on the Western Slope. The furnishing of an adequate supply of water to 350,000 people requires managerial judgment and involves an ever-changing problem. To so freeze and straight-jacket the city's Eastern Slope water rights, by the restrictions involved here, would be an arbitrary invasion of vested property rights of the city.[11]

Further, the Colorado Supreme Court determined that only courts that had originally adjudicated Denver Water Board's South Platte River water rights have jurisdiction to construe or modify Denver Water Board's South Platte decrees.[12] Thus, the court concluded that a trial court on the western slope of Colorado did not have jurisdiction to impose the restrictions on Denver's South Platte River water rights.[13] Finally, the court held:

> [a]fter the water had been applied beneficially by the city, as the court found relative to the 335 cubic feet, it became the property of the city of Denver, and any such water for which there may at any given time in the future be no immediate need, may be temporarily leased by the city, in accordance with [section 31-35-201 of the Colorado Revised

9. *See* City & County of Denver v. Sheriff, 96 P.2d 836, 839 (Colo. 1939). The offending provision stated: "Any waters decreed herein, whether decreed therefore [sic] to be for direct flow or for storage, and whether the said decree be absolute or conditional, be diverted, taken and used as supplemental to the decreed water rights now belonging to claimant, which said decrees are from the waters of the natural streams of the State of Colorado and that the said claimant be required to satisfy its needs for waters from said existing decrees owned by it before it shall be held to require or need waters herein decreed or shall be entitled to take the same. That the waters herein decreed shall be held by the said claimant as a water supply supplemental to its present supply of water available under water decrees which the said claimant now holds and to be used only to the extent necessary to fill the needs and requirements of the claimant for municipal purposes, after it has made full and economical use of the waters available to it under water decrees now owned by it." *Id.*

10. *Id.* at 840.

11. *Id.*

12. *Id.* at 841.

13. *Id.*

Statutes].[14]

As to the contention that Denver Water Board had no immediate need for the water, the Colorado Supreme Court established what became the "longstanding"[15] great and growing cities doctrine:

> The concern of the city is to assure an adequate supply to the public which it serves. In establishing a beneficial use of water under such circumstances the factors are not as simple and are more numerous than the application of water to 160 acres of land used for agricultural purposes. *A specified tract of land does not increase in size, but populations do, and in short periods of time. With that flexibility in mind, it is not speculation but the highest prudence on the part of the city to obtain appropriations of water that will satisfy the needs resulting from a normal increase in population within a reasonable period of time.*[16]

Inherent in this doctrine is the principle of economies of scale. Rather than continually building new pipes and conduits each time a demand comes on the system, one may size the pumps and pipelines at the time of design to accommodate future growth.[17] As *State Deptartment of Ecology v. Theodoratus* describes the doctrine:[18]

> The growing communities doctrine serves important functions. It allows communities to secure a source of water to meet growing needs. It also allows a community to construct a properly scaled water system at the start rather than constantly expanding the system on a piecemeal basis to meet growing population. The realities of business life and common sense come into play as well. The pumps and pipes method "serves important purposes: it allows municipalities to rationally plan and provide for future requirements."
>
> . . . As a practical reality, it is impossible for a municipality simply to tack on infrastructure and water rights year by year as its needs grow. Instead, municipalities typically plan one or two decades ahead, or more. The infrastructure required to serve a city cannot gradually be sized up. Pipes, treatment facilities and other components must be sized at the time of design to meet growing needs over time. Likewise, in order to carry out its responsibility to its citizens, the city must acquire water rights of sufficient size to meet those growing demands. Waiting until the last minute to acquire water rights for a growing community would be the height of irresponsibility.[19]

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14. *Id.* at 843.

15. Pagosa Area Water & Sanitation Dist. v. Trout Unlimited (*Pagosa I*), 170 P.3d 307, 314 n.6 (Colo. 2007) (en banc) (Coats, J., concurring).

16. *Sheriff*, 96 P.2d at 841 (emphasis added).

17. State Dep't of Ecology v. Theodoratus, 957 P.2d 1241, 1258 (Wash. 1998) (Saunders, J., dissenting) (discussing the "growing communities doctrine").

18. *Id.*

19. *Id.* at 1258. In *Theodoratus*, the issue was whether a vested water right could be

B. THE DENVER WATER BOARD AND THE BLUE RIVER DIVERSION PROJECT

In the 1942 Blue River adjudication in Summit County, Colorado, the Denver Water Board claimed 1600 cfs of water from the Blue River and its tributaries both for storage in Dillon Reservoir and direct diversion through the twenty-three mile Roberts Tunnel, which conveys water underneath the continental divide to the Denver Metropolitan Area.[20] That water diversion discharges into the North Fork of the South Platte River at the town of Grant, where the water flows to the Denver Water Board's municipal intakes.[21]

Despite Denver Water Board's claim for 1600 cfs with a priority date of March 21, 1914, the trial court awarded a conditional decree with an appropriation date of June 24, 1946, for only 788 cfs.[22] The Denver Water Board appealed, and on appeal the Colorado River Water Conservation District ("River District")[23] protested Denver's appropriation claiming that the Denver Water Board had an adequate supply of water and did not have an immediate need for the amount claimed.[24] In *City & County of Denver v. Northern Colorado Water Conservancy District* ("*Blue River*"), the Colorado Supreme Court held:

> We cannot hold that a city more than others is entitled to decree for water beyond its own needs. However, an appropriator has a reasonable time in which to effect his originally intended use as well as to complete his originally intended means of diversion, and when appropriations are sought by a growing city, *regard should be given* to its reasonably anticipated requirements.... Particularly is this true in

awarded based upon the capacity of a private developer's water delivery system, or whether a vested water right could be obtained only in the amount of water actually put to beneficial use. *Id.* at 1243. The Washington Supreme Court upheld the trial court's determination that a final certificate of water right must be based upon actual application of water to beneficial use, not upon system capacity. *Id.* The supreme court noted, however, that the appellant was a private developer with a finite development and not a municipality. *Id.* at 1247. Yet, the same court also noted that the Governor had vetoed 1997 legislation that would have allowed for a system capacity measure of a water right for public water supplies that fulfill municipal water supply purposes. *Id.* This decision resulted in uncertainty to cities that held water certificates based upon system capacity rather than actual use. In reaction to this decision, Washington's General Assembly passed a comprehensive bill clarifying the nature of water rights for municipal supply purposes that, in part, grandfathered existing water certificates based upon system capacity and did not limit the measure of a municipal water right if it had an approved municipal water plan. *See* WASH. REV. CODE § 90.03.330 (2009). In 2006, the statute was challenged as unconstitutional. Lummi Indian Nation v. State of Washington, No. 06-2-40103-4 (Sup. Ct. Wash., June 11, 2008) *petition for cert. filed* (No. 81809-6). The trial judge determined that certain provisions were unconstitutional and the appeal is pending. *Id.*

20. City & County of Denver v. N. Colo. Water Conservancy Dist. (*Blue River*), 276 P.2d 992, 995–97 (Colo. 1954).

21. *See* Denver Water, Dillon Reservoir, http://www.denverwater.org/Recreation/Dillon/ (last visited Jan. 30, 2010).

22. *Blue River*, 276 P.2d at 996.

23. A water conservation district created under COLO. REV. STAT. § 37-46-101 (2009).

24. *Blue River*, 276 P.2d at 997.

considering claims for conditional decrees.[25]

Dismissing the River District's argument, the court found that both parties presented witnesses "as to Denver's future water requirements," and although they "were not in agreement, there was substantial evidence to support a finding of future need for water from the Blue River within a reasonable time."[26] The court concluded that "[t]his [was] amply confirmed by the City's rapid subsequent growth."[27]

C. THE EAGLE RIVER APPROPRIATIONS

In the 1950s, the Colorado Supreme Court adhered strictly to the great and growing cities doctrine in cases regarding governmental agencies appropriating future water supplies. In *Metropolitan Suburban Water Users Ass'n. v. Colorado River Water Conservation District* (*"Metropolitan Suburban"*), the Colorado Supreme Court found that the trial court inappropriately overrode the "studied good-faith opinions of governmental agencies as to future needs. . . ." when it denied various governmental agencies' claims for water for future use.[28]

In September of 1956, the Metropolitan Suburban Water Users Association ("Association"),[29] the cities of Aurora and Colorado Springs which are located adjacent to and south of Denver respectively, petitioned the District Court of Eagle County to adjudicate pending claims for water rights in Water District 37.[30] These parties all claimed conditional water rights to divert waters of the Eagle River through the Homestake Tunnel to the Arkansas River Basin.[31] After the supplemental general adjudication commenced, the River District filed a claim on November 14, 1956, for the Red Cliff Project, which consisted of a system of reservoirs, ditches, power conduits, and other facilities that would divert water on the Eagle River and its tributaries, including Homestake Creek.[32] In January 1957, the Denver Water Board filed a claim to divert waters of the Eagle River through the proposed Vail-Pass Tunnel to Dillon Reservoir, a storage reservoir that is

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25. *Id.* (emphasis added).

26. *Id.*

27. *Id.*

28. Metro. Suburban Water Users Ass'n v. Colo. River Water Conservation Dist., 365 P.2d 273, 289-90 (Colo. 1961).

29. The Metropolitan Suburban Water Users Association was a private nonprofit corporation formed by John P. Elliott to acquire, own, purchase and sell water rights associated with his original filings for the proposed Homestake Project. *See* DAVID F. LAWRENCE, JOHN P. ELLIOTT, OWEN MOORE, ARTICLES OF INCORPORATION OF METROPOLITAN WATER USERS ASSOCIATION (May 16, 1956); Test. John. P. Elliott, In the Matter of the Adjudication of Water Rights in District 37, No. 1193 (Sept. 24, 1956) (recounting John P. Elliott's involvement with water diversions for the Homestake Water Project).

30. *Metro. Suburban*, 365 P.2d at 275. Former Water District 37 consisted of all lands lying in the state of Colorado irrigated by water taken from the Eagle River and its tributaries. COLO. REV. STAT. §148-13-38 (1963).

31. *Metro. Suburban*, 365 P.2d at 275.

32. *Id.* at 276.

part of the Roberts Tunnel Collection System.[33] Additionally, in 1956, the City of Pueblo filed a claim to divert Eagle River water to the Arkansas River via the Otero Tennessee Pass Ditch.[34]

The River District opposed the claims of the Association, Colorado Springs, Aurora, and Denver Water Board claiming that the appropriations were speculative and not based on any reasonably anticipated needs.[35] With the exception of the City of Pueblo's claim, the trial court denied the claims of the Association, Colorado Springs, Aurora, the Denver Water Board, and the River District in part because the projects were speculative.[36]

As to the Association's claim for the Homestake Project, the Colorado Supreme Court reversed the trial court based upon Section 6, Article XVI of the Colorado Constitution[37] and the 1919 conditional water right statute.[38] The Colorado Supreme Court found that in planning for a reasonable municipal water supply, municipalities should make provisions for an adequate supply in years of minimum runoff and maximum consumption, which was the case during the drought of 1954.[39] As to the trial court's apprehension that the projects were speculative, the Colorado Supreme Court again referred to the safeguards in the 1919 conditional water right statute and *Taussig v. Moffat Tunnel Development Co.*,[40] that no final decree can be awarded until the water is actually put to beneficial use.[41] Based on the record before it, the court further found that Aurora's current water supply was "wholly inadequate to meet its present needs, most of which are being supplied on a year-to-year basis by Denver."[42] The court reasoned that:

> Denver can at any time refuse to renew its one-year contract and can,

33. *Id.* at 277.
34. *Id.* at 277–78.
35. *Id.* at 278.
36. *Id.* at 279–80.
37. *Id.* at 281. The Court relied on Section 6 art. XVI of the Colorado Constitution, which provides in relevant part: "The right to divert the unappropriated waters of any natural stream to beneficial uses *shall never be denied.*" COLO. CONST. art. XVI, § 6 (emphasis added).
38. *Metro. Suburban*, 365 P.2d at 281–82, 284. The 1919 conditional water right statute provides in relevant part: "if it shall appear that any claimant at said proceedings, or his predecessors in title and claim, has prosecuted his claims of appropriation and the financing and construction of his enterprise with reasonable diligence under all the facts and circumstances surrounding and bearing upon such claim of appropriation, the district court *shall* enter a decree fixing and determining the priority of right of each such partially completed appropriation as of the date from which such reasonable diligence shall be shown to have been exercised, and fixing the *maximum* amount of water which such claimant shall be entitled to divert under said priority for the purpose of perfecting his said appropriation..." Id. at 281–82 (emphasis added). *See also* Ellis & DeBraal, *supra* note 7, at 472.
39. *Metro. Suburban*, 365 P.2d at 283.
40. *See* Taussig v. Moffat Tunnel Water & Development Co., 106 P.2d 363 (Colo. 1940).
41. *Metro. Suburban*, 365 P.2d at 285
42. *Id.* at 283..

> even during the term of its contract, limit Aurora's supply if needed in Denver. Aurora is at the mercy of Denver for its present water needs. Testimony as to its probable enhanced future needs due to population growth and increased per capita uses is convincing and uncontradicted.[43]

The court gave the City of Colorado Springs even greater leeway in defining its need:

> It is true that evidence with reference to the water needs of Colorado Springs does not disclose as bleak a picture as that of Aurora. However, it does disclose good reason for adding to its supply to guard against shortages arising in dry years and in contemplation of increased future needs.[44]

On the River District's appeal regarding the trial court's denial of the Red Cliff Project, the Colorado Supreme Court reversed the trial court and determined that the River District's act of filing a claim for the Red Cliff Project and the River District's opposition to other claims was sufficient due diligence to initiate the appropriation.[45] As to the speculative nature of the River District's project, the Colorado Supreme Court admonished the trial court for substituting its judgment for that of those charged with the duty of supplying adequate water for municipalities and other public bodies.[46]

Finally, the Colorado Supreme Court reversed the trial court on the Denver Water Board's claim for the extension of its Roberts Tunnel Collection System. The court concluded that the trial court's findings concerning the absence of proof of need and the speculative nature of the project "are all matters of opinion and concerning which there must be definite proof in the future."[47] Having stated this, the court reiterated "courts should not intrude their own opinions to override the studied good-faith opinions of governmental agencies as to future needs of the public for facilities or commodities."[48]

In sum, a governmental agency could: (1) make an appropriation based upon the maximum amount for its reasonably anticipated needs including areas outside it boundaries; (2) lease surplus waters in excess of its immediate needs outside its municipal boundaries; and (3) base its need for an appropriation on the need for an adequate supply in a dry year such as 1954. In addition, courts gave deference to the managerial judgment of these governmental agencies in their operation of municipal water system. Then in 1969, things began to change.

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43. *Id.*
44. *Id.*
45. *Id.* at 287–88.
46. *Id.* at 288.
47. *Id.* at 289.
48. *Id.*

II. THE PRIVATE ANTI-SPECULATION DOCTRINE

A. THE WATER RIGHT DETERMINATION AND ADMINISTRATION ACT OF 1969.

In 1968, the Colorado Legislative Council directed the state division of natural resources to study and draft legislation concerning the following water matters:

> To investigate relationships in the areas where intermingled surface and ground water are commonly used in conjunction with each other on the same lands, or lands immediately adjoining, for the same purpose of irrigation; to determine the need for and content of legislation that would provide for integrated administration of all diversions and uses of water within the state; protect all vested water rights, conserve water resources for maximum beneficial use, and permit full utilization of all waters in the state...[49]

The draft legislation was to be ready when the General Assembly convened in January of 1969 because "the maximum use of water in the state is the dominant factor for the future development of Colorado and the solution of water matters is crucial to this end."[50]

In 1969, the General Assembly adopted the Water Right Determination and Administration Act of 1969 ("1969 Act").[51] The 1969 Act modified the method of adjudicating water rights,[52] created water courts,[53] expanded the involvement of the state engineer in the establishment and administration of water rights,[54] and most importantly, articulated new policies to encourage the maximum utilization of the state's scarce resources.[55]

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49. COLO. LEGISLATIVE COUNCIL, EXPLANATION OF PROPOSED WATER LEGISLATION 1, Research Publication No. 143 (1968).

50. *Id.* at 5.

51. Water Rights and Determination and Administration Act of 1969, ch. 373, § 1 (1969 Colo. Sess. Laws 1200) (*1969 Act*) (current version at COLO. REV. STAT. §§ 37-92-101 to -602 (2009).

52. *See id.* at 1207–08.

53. *Id.* at 1204.

54. *Id.* at 1216–18.

55. *Id.* at 1200. In *Pagosa I*, the Colorado Supreme Court described the importance of maximum utilization under the 1969 Act: "The public's water resource is subject to maximum utilization, a doctrine intended to make water available for as many decreed uses as there is available supply." Pagosa Area Water & Sanitation Dist. v. Trout Unlimited (*Pagosa I*), 170 P.3d 307, 313-14 (Colo. 2007) (en banc); COLO .REV. STAT. § 37-92-102(1)(a) (2009); *see also* Farmers Reservoir & Irrigation Co. v. City of Golden, 44 P.3d 241, 245 (Colo. 2002). "Within the priority system, maximum utilization spreads the benefit of the public's water resources to as many uses as possible, within the limits of the physically available water supply, the constraints of interstate water compacts, and the requirements of United States Supreme Court equitable apportionment decrees. In turn, the objective of maximum use administration, under the prior appropriation system, is to achieve "optimum use" in every appropriator's utilization of the water." § 37-92-501(2)(e). "[A]ll rules and regulations shall have as their objective the optimum use of water consistent with preservation of the priority system of water rights." *Id.* "Maximum utilization does not mean that every ounce of

Under the 1969 Act, the General Assembly defined appropriation as "the diversion of a certain portion of the waters of the state and the application of the same to a beneficial use."[56] It defined beneficial use as "the use of that amount of water that is reasonable and appropriate under reasonably efficient practices to accomplish without waste the purpose for which the appropriation is lawfully made . . . ."[57] The 1969 Act made no reference to "speculation," nor did it require proof of specific factors for a municipal conditional water right.

B. THE *HUSTON* CASE: A PRECURSOR TO THE ANTI-SPECULATION DOCTRINE.

In *City of Thornton v. Bijou Irrigation Co.*,[58] the Colorado Supreme Court cited to *Colorado River Water Conservation District v. Vidler Tunnel Company ("Vidler")*, as the seminal case defining the anti-speculation doctrine.[59] Interestingly, the *Vidler* anti-speculation doctrine could also have been named the *Huston* doctrine as the Court issued both opinions within a span of one week.[60]

At the end of the year 1978, John Huston, Allan Leaffer and Wallace Yaffe ("Joint Venturers") and Nedlog Technological Group, Colorado Pacific Energy and Colorado Pacific Aztec, and Bob Johnston, Jr. filed over 100 separate applications involving claims for thousands of wells and over twenty million acre-feet of underground water rights in all seven water divisions in the state.[61] The Southeastern, Northern, and Southwestern Water Conservation Districts, along with the State Engineer, successfully petitioned the Colorado Supreme Court to consolidate the applications for determination of common questions of law.[62] The court assigned a special water judge to determine the common questions of law including the threshold question of whether non-tributary waters in Colorado are subject to appropriation.[63] Another question before the court was whether non-tributary waters outside the boundaries of designated ground water basins could be appropriated by persons having no property interest in the surface, or

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Colorado's natural stream water ought to be appropriated; optimum use can be achieved only through proper regard for all significant factors, including environmental and economic concerns." Pagosa I, 170 P3d. at 314. *See* Alamosa-La Jara Water Users Prot. Ass'n v. Gould, 674 P.2d 914, 935 (Colo. 1983); *see also* James N. Corbridge, Historical Water Use and the Protection of Vested Rights: A Challenge for Colorado Water Law, 69 U. COLO. L. REV. 503, 506 (1998) ("Part III reviews some of the principles of water measurement in the context of maximum utilization of Colorado's water resources.").

56. *1969 Act*, at 1201.

57. *Id.*

58. City of Thornton v. Bijou Irrigation Co., 926 P.2d 1, 37 (Colo. 1996).

59. Colo. River Water Conservation District v. Vidler Tunnel Co., 594 P.2d 566 (Colo. 1979).

60. *See* Se. Colo. Water Conservancy Dist. v. Huston (*Huston*), 593 P.2d 1347, (Colo. 1979) (issued April 16, 1979). *See infra* Part III.C

61. *Huston*, 593 P.2d at 1348–49.

62. *Id.* at 1348.

63. *Id.* at 1349.

for use by persons other than the claimant or those whom the claimant is authorized to represent.[64]

As to the question whether the applications were speculative, the Colorado Supreme Court remarked:

> This court has held that a claim to surface water rights cannot be predicated solely upon speculative purposes.... This court shortly will announce its opinion in *Colorado River Water Conservation District v. Vidler Tunnel Co.*, 594 P.2d 566, (1979), which deals with the question. The water judge will have the guidance of those cases in addressing the related question of whether non-tributary waters outside the boundaries of a designated ground water basin can be appropriated except for use by the respondents or others whom the respondents are authorized to represent.[65]

One week later, the Colorado Supreme Court issued the *Vidler* decision.

C. THE *VIDLER* DOCTRINE.

In 1975, Herbert T. Young's[66] Vidler Tunnel Water Company ("Vidler") filed an application under the 1969 Act for a 156,238 acre-feet storage right for Sheephorn Reservoir on the Colorado River in Gore Canyon near the Town of Kremmling.[67] Vidler planned to use 2,000 acre-feet to irrigate lands it owned or leased; the City of Golden

64. *Id.* at 1349. In Colorado, there are four classes of water: (1) surface water and hydraulically connected ground water, COLO. REV. STAT. § 37-92-103(13) (2009); (2) water within designated ground water, § 37-90-103(6)(a); (3) not-non tributary groundwater, § 37-90-103(10.7); and (4) non-tributary groundwater, § 37-90-103(10.5). Designated ground water is a statutory class of water that in its "natural course would not be available to and required for the fulfillment of decreed surface rights, or ground water in areas not adjacent to a continuously flowing natural stream wherein ground water withdrawals have constituted the principal water usage for at least fifteen years preceding the date of the first hearing on the proposed designation of the basin, and which in both cases is within the geographic boundaries of a designated ground water basin." COLO. REV. STAT. § 37-90-103(6)(a) (2009).

65. *Huston*, 593 P.2d at 1354 (emphasis added).

66. In the late forties, Herbert T. Young, geologist, miner and water entrepreneur, discovered a partially completed but abandoned railroad tunnel that ran from the headwaters of Leavenworth Creek above Georgetown to the headwaters of Peru Creek, a tributary to the Snake River, in Summit County. HERBERT C. YOUNG, UNDERSTANDING WATER RIGHTS AND CONFLICTS, About the Author (2d ed. 2003). He bought the mining claims, completed construction of the tunnel in 1968, and built a water collection system on tributaries of Peru Creek to import water through the Vidler Tunnel to the Front Range. *Id.* In 1973, Vidler Tunnel Water Company received a conditional water right for importations through the tunnel into the headwaters of Clear Creek for domestic, agricultural, industrial and municipal uses in the Front Range. Colo. River Water Conservation District v. Vidler Tunnel Co. (*Vidler*), 594 P.2d 566, 566-67 (Colo. 1979). In 1979, notwithstanding the "longstanding view" against speculation, Water Court Judge Lohr approved and decreed this claim. *Id.* at 567. In 2000, the City of Golden acquired the Vidler Tunnel water rights. City of Golden, Vidler Tunnel and Collection System, http://www.ci.golden.co.us/Page.asp?NavID=680 (last visited Feb. 8, 2010). Yet, the Company's application in 1975 for Sheephorn Reservoir on the Colorado River made Vidler a familiar name.

67. *Vidler*, 594 P.2d at 567; YOUNG, *supra* note 66, at About the Author.

had an option to purchase 2,000 acre-feet with a right of first refusal for an additional 3,000 acre-feet, all conditioned on the success of the project. Vidler planned to sell the remainder of the yield to various Front Range municipalities based upon studies of future need in the Front Range.[68] Notwithstanding the lack of any committed end use for the water on the Front Range, Water Division No. 5 District Court Judge George Lohr granted a conditional water storage decree for the appropriation.[69]

On appeal, however, except for the amount needed to irrigate lands Vidler owned, the Colorado Supreme Court reversed and held:

> Our constitution guarantees a right to appropriate, not a right to speculate. The right to appropriate is for use, not merely for profit. As we read our constitution and statutes, they give no one the right to preempt the development potential of water for the anticipated future use of others not in privity of contract, or in any agency relationship, with the developer regarding that use. To recognize conditional decrees grounded on no interest beyond a desire to obtain water for sale would—as a practical matter—discourage those who have need and use for the water from developing it. Moreover, such a rule would encourage those with vast monetary resources to monopolize, for personal profit rather than for beneficial use, whatever unappropriated water remains.[70]

This holding established the *Vidler* anti-speculation doctrine. Under this doctrine, the element of intent to appropriate cannot be satisfied if there is no intent to place the water to an actual beneficial use.[71]

Vidler stood out as a new Colorado Supreme Court judicial precedent and a turning point in Colorado water law insofar as private water speculators were concerned. Nevertheless, several decades later, in *City of Thornton v. Bijou*, the Colorado Supreme Court attempted to firm up the underpinning of the *Vidler* decision.[72] Justice Lohr, whose decision to grant *Vidler* its appropriation was overturned by the Colorado Supreme Court, cited *City & County of Denver v. Colorado River Water Conservation District* ("*Denver v. CRWCD*") and *Rocky Mountain Power Co. v. Colorado River Water Conservation District ("Rocky Mountain")*, for the proposition that the anti-speculation doctrine was not a new legal requirement but rather that it followed "longstanding" principles of Colorado water law.[73] Both cases, however,

68. *Vidler*, 594 P.2d at 567.

69. *Id.* at 566, 568.

70. *Id.* at 568–70.

71. Pagosa Area Water & Sanitation Dist. v. Trout Unlimited (*Pagosa I*), 170 P.3d 307, 314 (Colo. 2007) (en banc); High Plains A & M, LLC v. Se. Colo. Water Conservancy Dist., 120 P.3d 710, 719 (Colo. 2005); *see generally* Scott A. Clark and Alix L. Joseph, *Changes of Water Rights and the Anti-Speculation Doctrine: The Continuing Importance of Actual Beneficial Use*, 9 U. DENV. WATER L. REV. 553, 555–556 (2006).

72. City of Thornton v. Bijou Irrigation Co., 926 P.2d 1, 37 (Colo. 1996).

73. City & County of Denver v. Colo. River Water Conservation Dist., 696 P.2d 730, 757 (Colo. 1985); Rocky Mountain Power Co. v. Colo. River Water Conservancy Dist.,

were decided after *Vidler*. Circularly, *Denver v. CRWCD* cited to *Rocky Mountain*, and *Rocky Mountain* also quoted *Vidler* for the "longstanding view that conditional decrees will not be granted to those who cannot show more than a speculative or conjectural future beneficial use."[74] This discrepancy may lead some to wonder, whether the "longstanding" view of the anti-speculation doctrine prior to *Vidler* was that expressed by Judge Lohr when he granted Vidler the decree for Sheephorn Mountain Reservoir, or whether the "longstanding" view of anti-speculation changed after the enactment of the 1969 Act as the Colorado Supreme Court noted in *Rocky Mountain*?[75]

D. 1979 AMENDMENT TO THE 1969 ACT.

In 1979, on the heels of *Vidler* and *Huston I*, the General Assembly amended the definition of "appropriation" in the 1969 Act.[76] The General Assembly amended the definition of appropriation in 1979 to endorse the *Vidler* intent requirement.[77] However, the "legislation also recognized the need for a more flexible anti-speculation requirement that would allow government agencies planning flexibility, the 'great and growing cities' concept that had earlier been recognized in *City & County of Denver v. Sheriff*. . . . and *City & County of Denver v. Northern Colorado Water Conservancy District*. . ."[78] The 1979 Amendment to the 1969 Act revised the definition of "appropriation" to provide:

> (3)(a) "Appropriation" means the application of a specified portion of the waters of the state to a beneficial use pursuant to the procedures prescribed by law; but no appropriation of water, either absolute or conditional, shall be held to occur when the proposed appropriation is based upon the speculative sale or transfer of the appropriative rights to persons not parties to the proposed appropriation, as evidenced by either of the following:
>
> (I) The purported appropriator of record does not have either a legally vested interest or a reasonable expectation of procuring such interest in the lands or facilities to be served by such appropriation, unless such appropriator is a governmental agency or an agent in fact for the persons proposed to be benefited by such appropriation.

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646 P.2d 383, 388–89 (Colo. 1982); *Bijou*, 926 P.2d at 1, 37. George Lohr was appointed to the Colorado Supreme Court on December 14, 1979. *See* Lohr, George E., Colorado Supreme Court Library, http://www.state.co.us/courts/sctlib/77.htm (last visited on February 2, 2010).

74. *Colo. River Water Conservation Dist.*, 696 P.2d at 757; *Rocky Mountain*, 646 P.2d at 388.

75. *Rocky Mountain*, 646 P.2d at 389.

76. COLO. REV. STAT § 37-92-103(3) (2009); COLORADO LEGISLATIVE DRAFTING OFFICE, DIGEST OF BILLS ENACTED BY THE FIFTY-SECOND GENERAL ASSEMBLY, 1979 FIRST REGULAR SESSION, 162–63 (1979).

77. *See* § 37-92-103(3)(a)(II).

78. Pagosa Area Water & Sanitation Dist. v. Trout Unlimited (*Pagosa I*), 170 P.3d 307, 314 n.6 (Colo. 2007) (en banc); *see* § 37-92-103(3)(a)(II).

(II) The purported appropriator of record does not have a specific plan and intent to divert, store, or otherwise capture, possess, and control a specific quantity of water for specific beneficial uses.79

"By amending the definition of appropriation, the General Assembly reaffirmed the anti-speculation holding of *Vidler* to respond to the *Huston* filings."[80] However, the Amendment also exempted governmental agencies from the requirement of having a legally vested interest in the lands or facilities that the appropriation serves.[81] This change had the effect of creating a distinction between private appropriators and governmental agencies. Under the statutory definition, a private appropriator must have a legally vested interest or a reasonable expectation of procuring such interest in the lands or facilities the appropriation serves, but there is no such requirement for a governmental agency.[82] The statute only requires a governmental agency to have a specific plan and intent to divert, store, or otherwise capture, possess, and control a specific quantity of water for specific beneficial uses.[83] The governmental exception is not conditioned upon whether the government acts in a proprietary function, whether it has a conservation plan, whether its per capita consumption is reasonably attainable, whether the amount of consumptive use is reasonably necessary to serve the increased population, or when the water must be placed to beneficial use.[84] Thus, under the 1979 amendment, the General Assembly exempted governments unconditionally from the requirement of having either a legally vested interest or a reasonable expectation of procuring such interest in the lands or facilities the appropriation serves, notwithstanding the doctrine of maximum utilization.[85] So theoretically, as long as a governmental agency has a specific plan of providing service, it should not need firm contractual commitments with those it intends to serve, even if its future customers are outside its governmental boundaries.[86]

79. § 37-92-103(3) (2009) (emphasis added).

80. Bd. of County Comm'rs of Arapahoe v. United States, 891 P.2d 952, 960 (Colo. 1995).

81. § 37-92-103(3)(a)(I); *see Pagosa I*, 170 P.3d at 314, n.6.

82. *Id.* § 37-92-103(3)(a)(I).

83. *See id.* § 37-92-103(3)(a)(II).

84. *Id.* § 37-92-103(3)(a)(I).

85. *Id.* § 37-92-103(3)(1)(I); Pagosa Area Water & Sanitation Dist. v. Trout Unlimited (*Pagosa I*), 170 P.3d 307, 317 (Colo. 2007) (en banc) (citing City of Thornton v. Bijou Irrigation Co., 926 P.2d 1, 7 (Colo. 1996).) (holding that the limited governmental agency exception to the anti-speculation doctrine for conditional water rights should be construed narrowly in order to meet Colorado's maximum utilization goals).

86. § 37-92-103(3)(a)(II); *see also Pagosa I*, 170 P.3d at 315 (citing *Bijou*, 926 P.2d at 38–39) (holding government agencies need not be certain of future needs and thus may conditionally appropriate within a reasonable planning period, but the agencies bear to burden to prove the plan is not speculative, and not conjectural future population growth becoming a self-fulfilling prophecy).

E. HUSTON II.

To complete the story of the attempted water grab by the entrepreneurs John H. Huston, Wallace Yaffe, and Allan Leaffer, the special water judge that the Colorado Supreme Court appointed held that:

> [n]ontributary ground water outside designated ground water basins can be appropriated for the use of persons other than the claimant so long as the claim is not speculative under the guidelines of our prior cases, notably *Colorado River Water Conservation District v. Vidler Tunnel Water Co.* . . . *Bunger v. Uncompahgre Valley Water Users Ass'n* . . . and *Taussig v. Moffat Tunnel Water & Development Co.* . . .[87]

On appeal, however, the court determined that nontributary ground water was not subject to appropriation under the Colorado Constitution or under the 1969 Act and dismissed the applications.[88] As to the trial judge's ruling regarding the *Vidler* test, the Colorado Supreme Court declined to offer an advisory opinion "because of the impossibility of foreseeing and providing for every possible type of arrangement between applicants and landowners or between applicants and users of the water."[89]

The Colorado Supreme Court later applied the *Vidler* anti-speculation test to nontributary water in a designated groundwater basin,[90] and to designated basin ground waters in the aquifers of the Denver Basin.[91] However, in *East Cherry Creek Valley Water & Sanitation District v. Rangeview Metropolitan District*, the Colorado Supreme Court determined that since the appropriation doctrine did not apply to nontributary ground waters outside designated basins, neither did the anti-speculation doctrine.[92] The court concluded that under Senate Bill 5, the legislature specifically intended "to permit adjudications for future uses without a corresponding obligation to develop them,"[93] unlike the statutory scheme for designated ground water, which did "not evince any intent to permit adjudication of a use right without plans for development and use of the resource."[94]

87. State Dep't of Natural Res. v. Sw. Colo. Water Conservation Dist., 671 P.2d 1294, 1302 (Colo. 1983) (en banc) *cert. denied*, 466 U.S. 944 (1984).

88. *Id.* at 1310, *superseded by* 1983 COLO. SESS. LAWS 2080 (codified as amended at COLO. REV. STAT. § 37-92-203(1), (2009)) *as recognized in* Qualls, Inc. v. Berryman, 798 P.2d 1095, 1098 (Colo. 1990) (en banc).

89. *State Dep't.*, 671 P.2d at 1319.

90. Jaeger v. Colo. Ground Water Comm'n, 746 P.2d 515, 523 (Colo. 1987).

91. Colo. Ground Water Comm'n v. N. Kiowa-Bijou Groundwater Mgmt. Dist., 77 P.3d 62, 78–79 (Colo. 2003).

92. E. Cherry Creek Valley Water & Sanitation Dist. v. Rangeview Metro. Dist., 109 P.3d 154, 157-58 (Colo. 2005).

93. *Id.* at 158-59 (citing SB 5, ch. 285, sec. 3 § 37-90-137 (July 1, 1985), 1985 COLO. SESS. LAWS 1160 (codified as amended at section 37-90-137, COLO. REV. STAT. (2009))).

94. *Id.*

III. POST *VIDLER* MUNICIPAL EXCEPTION TO THE ANTI-SPECULATION DOCTRINE

A. DENVER WATER BOARD'S PINEY, STRAIGHT CREEK AND EAGLE-COLORADO PROJECTS

In *City & County of Denver v. Colorado River Water Conservation District,* Justice Lohr again applied the *Vidler* doctrine to a governmental agency application in apparent disregard of the 1979 statutory exemption.[95] In *Denver v. CRWCD,* the Denver Water Board filed statements of claim in 1968 and 1971 for conditional water rights for Straight Creek (a tributary to the Blue River), Piney River, and the Eagle-Colorado Collection System.[96] In 1972, the Denver Water Board put on evidence that it anticipated that it would serve a 1,000 square mile area in the Denver Metropolitan Area.[97] The water court appointed a referee who made extensive factual findings, including ones that the appropriation was solely for use outside the municipal boundaries of Denver; that such use is of some benefit to the residents of Denver; and the claimed amounts come from projected future population growth in the Denver Metropolitan Area.[98] However, the referee entered an interlocutory decree denying the Denver Water Board's claims concluding that the Denver Water Board was without legal authority or capacity to appropriate water solely for use outside its municipal boundaries.[99] Thus, the Denver Water Board could not have formed the requisite intent for a valid appropriation.[100] Accordingly, the water judge approved and confirmed the interlocutory decree.[101]

On appeal, the Colorado Supreme Court reversed the water court and held that the Denver Water Board did have the constitutional and statutory authority to make an appropriation for use outside the city boundaries.[102] As a matter of local concern, Denver's Charter under section 6 Article XX of the Colorado State Constitution authorized the Denver Water Board to provide water outside its boundaries.[103] The court determined, however, that Denver acts in its "proprietary capacity" when providing water outside its boundaries, thus triggering

95. City & County of Denver v. Colo. River Water Conservation Dist., 696 P.2d 730, 756-57 (Colo. 1985).

96. *Id.* at 734–36.

97. MICHAEL D. WHITE, REPORT OF THE SPECIAL MASTER REFEREE, 27, Civil Action Nos. 2371, 1529 and 1548 (April 3, 1978) (including testimony of James L. Oglivie, Secretary Manager of the Denver Water Department, who on April 24, 1972 described the borders of a 1,000 square mile service area which he anticipated that Denver would eventually supply).

98. *Colo. River Water Conservation Dist.*, 696 P.2d at 737, 741, 757.

99. *Id.* at 737.

100. *Id.* at 757.

101. *Id.* at 737–38.

102. *Id.* at 742, 745.

103. *Id.* at 744–45.

review of whether, as a matter of statewide concern, the state had authorized such appropriations.[104] Nonetheless, the Colorado Supreme Court concluded the General Assembly had expressly authorized this extraterritorial water service by statute and reversed the water court.[105]

Based on its finding that Denver acts in a proprietary capacity when it serves water extraterritorially,[106] the Colorado Supreme Court held evidence of firm contractual commitments was missing and remanded the case back to the water court to take evidence on the 1979 *Vidler* doctrine.[107] The court noted there was no evidence that the water court, the parties, or the amicus considered the application of *Vidler* to the claims.[108] However, the opinion did not explain why the court did not consider the application of the statutory exemption. That would come later from Justice Lohr in *Bijou.*

Thus, disregarding section 37-92-103 of the Colorado Revised Statutes, the Colorado Supreme Court formulated the following anti-speculation test specifically for the Denver Water Board:

> Denver could not have formed the necessary intent to appropriate any particular amount of water for use until it had plans to use that water within its own boundaries, firm contractual commitments to supply that water to users outside its boundaries, or agency relationships with such users, evidence must be taken and a finding made as to the amount of the claimed water, if any, that is committed by contract or agency agreement and on what dates those commitments came into existence.[109]

B. CITY OF THORNTON'S NORTHERN PROJECT.

In 1986, the City of Thornton filed for conditional water rights for a water supply project that would yield up to 67,000 acre-feet in three phases over 70 years.[110] Thornton provided evidence that its supply was 26,000 acre-feet, and it anticipated needing 93,000 acre-feet[111] to serve a projected population of 379,000 by the year 2056.[112] Thornton's projections of growth included areas not within its present city limits.[113] The water court confirmed Thornton's projections were "optimistic"

104. *Id.* at 742.

105. *Id.*

106. *Id.*

107. *Id.* at 757.

108. *Id.* at 757 n.18.

109. *Id.* at 757.

110. City of Thornton v. Bijou Irrigation Co., 926 P.2d 1, 19-21 (Colo. 1996).

111. Thornton based its projected need, in part, on a 10% safety factor and 15% factor accounting for distribution losses. Testimony of Walid Hajj, Case No. 86CW401, 86CW402, 86CW403 and 87CW332, March 31, 1992, p. 90, 91.

112. *Id.* at 19, 40.

113. *Id.* at 40. ("A municipality may take into consideration facts indicating that its physical area is likely to expand in the course of growth. Planning need not be limited to current geographic limits if there is reasonable expectation that those limits will expand.") *Id.*

but not speculative.[114] Northern Colorado Water Conservancy District and the City of Fort Collins appealed on numerous grounds. On the issue of need, they argued Thornton's plan violated the anti-speculation doctrine because it failed to prove it had firm contractual commitments or agency relationships for water service outside its boundaries.[115]

Because *Vidler* involved a private corporation, the Colorado Supreme Court re-examined *Sheriff* and *Blue River* to determine if the anti-speculation doctrine applied to municipalities.[116] The court concluded that *Sheriff* "clearly counsels against a strict application of the anti-speculation doctrine to municipalities seeking to provide for the future needs of their constituents," and under *Blue River*, "a city may appropriate water for its future needs without violating the prohibition on speculation so long as the amount of the appropriation is in line with the city's 'reasonably anticipated requirements.'"[117] Since *Vidler* involved a private corporation, the requirement of firm contractual commitments or agency relationships did not apply with equal force to municipalities.[118] The General Assembly's action in 1979 supported this limited exception to the *Vidler* requirements but did not completely immunize municipal applicants from speculation challenges.[119] Thus, the Colorado Supreme Court offered this construction of the municipal anti-speculation doctrine:

> [U]nder section 37-92-103(3)(a), a municipality may be decreed conditional water rights based solely on its projected future needs, and without firm contractual commitments or agency relationships, but a municipality's entitlement to such a decree is subject to the water court's determination that the amount conditionally appropriated is consistent with the municipality's reasonably anticipated requirements based on substantiated projections of future growth.[120]

The court explained that this construction of the municipal anti-speculation doctrine was consistent with cases decided after the enactment of section 37-92-103 of the Colorado Revised Statutes; however, the doctrine was not consistent with the holding in *Denver v. CRWCD*, which brings us to the Not Non-Non-Speculation Doctrine.[121]

C. THE EXCEPTION TO THE EXCEPTION TO THE ANTI-SPECULATION DOCTRINE.

In *Bijou*, the Northern Colorado Water Conservancy District ("Northern") argued that the City of Thornton, under *Denver v. CRWCD*, must comply with the *Vidler* test even though the City of

114. *Id.* at 41.
115. *Id.* at 36, 39.
116. *Id.* at 37–38.
117. *Id.*
118. *Id.* at 38.
119. *Id.*
120. *Id.* at 39.
121. *Id.*

Thornton was a governmental entity entitled to the municipal exception.[122] Northern argued that the word "boundaries," as *Denver v. CRWCD* applied it, meant the city's boundaries at the time of the application, rather than the reasonably anticipated future boundaries of the municipal applicant.[123] Thus, Northern contended that the holding in *Denver v. CRWCD* precludes municipalities from appropriating water based on projected requirements for future growth areas outside the current municipal boundaries.[124] The Colorado Supreme Court noted that if a city could only plan for use within existing boundaries, it would remove municipal flexibility to plan for future water needs and undercut its previous decisions in *Sheriff* and *Blue River*.[125] So the court backtracked in *Bijou,* and distinguished *Denver v. CRWCD* as unique to the facts in that case, deciding the Denver Water Board sought to appropriate water to sell for profit to parties outside its own boundaries.[126] The court explained that the Denver Water Board acted "in the capacity of a water supplier on the open market rather than as a governmental entity seeking to ensure future water supplies for its citizens."[127] The municipal planning exception was therefore unavailable to the Denver Water Board, which was "required to comply with the full range of requirements applicable to private parties under *Vidler*."[128] Thus, the court established the exception to the exception to the anti-speculation doctrine that would apply to any governmental agency that "profits" from the sale of water outside its boundaries.

However, the unique facts of *Denver v. CRWCD,* as the court in *Bijou* described them, were not quite accurate. In *Denver v. CRWCD,* the Colorado Supreme Court characterized the Denver Water Board's lease of water outside its boundaries as "proprietary" to determine whether the General Assembly had authorized extraterritorial water service.[129] But neither the special master referee, trial court, nor the Colorado Supreme Court in *Denver v. CRWCD* considered evidence, or made a finding that the Denver Water Board sold water for "profit" as *Vidler* used that term. The Denver Water Board's rates and revenues derive from the city's charter obligation to recover the full cost of service.[130] Denver's city charter requires the Denver Water Board to charge an additional amount for water leased outside the city,[131] but

122. *Id.*
123. *Id.*
124. *Id.*
125. *Id.*
126. *Id.* at 40.
127. *Id.*
128. *Id.*
129. Bennett Bear Creek Farm Water & Sanitation Dist. v. City & County of Denver, 928 P.2d 1254, 1266 (Colo. 1996).
130. *Id.* at 1270.
131. Charter of the City & County of Denver art. X, § 10.1.13 "Water Leases," *available at* http://www.denverwater.org/OperatingRules/OperRulesArticleX/ ("The Board shall have power to lease water and water rights for use outside the territorial limits of the City and County of Denver, but such leases shall provide for limitations of delivery of water to whatever extent may be necessary to enable the Board to provide an

such charges simply reimburse the citizens of Denver for the use of its system.[132] The Denver Water Board, as a governmental entity, does not "profit" as that term was used in *Vidler,* and certainly no member of the Denver Water Board *personally* profits.[133] Further, when the Denver Water Board supplies water in its proprietary capacity outside its boundaries, it remains a public utility for public use.[134]

In addition, the Colorado Supreme Court in *Denver v. CRWCD* did not consider the statutory governmental exemption of 1979.[135] Because the claims were filed prior to the enactment of 1969 Act, the provisions of the 1969 Act, including the governmental exemption to the anti-speculation doctrine of 1979, did not apply and *Denver v. CRWCD* did not consider them.[136] The Denver Water Board, as a governmental agency, should have been given wide latitude under the 1919 conditional water right statute and cases (including *Sheriff, Blue River,* and *Metropolitan Suburban*) decided under the 1919 Act, to determine its reasonable needs outside its municipal boundaries, rather than the private speculator test that the court applied in *Vidler.*

The City and County of Denver could still annex property outside of its boundaries. Even though the1974 Poundstone Amendment[137]

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adequate supply of water to the people of Denver. Every such lease shall contain terms to secure payment of sufficient money to fully reimburse the people of Denver for the cost of furnishing the water together with an additional amount to be determined by the Board.").

132. *Bennett,* 928 P.2d at 1272 n.27 (The additional amount recovers the costs that Denver citizens incur for the capital they have invested in utility assets used to provide service to outside city customers).

133. Charter of the City and County of Denver art. X, §§ 10.1.2-3 *available at* http://www.denverwater.org/OperatingRules/OperRulesArticleX/ (The Denver Water Board created under the Denver City Charter has no shareholders. The Mayor of Denver appoints the Board Members, who are compensated $600.00 per year).

134. *See* Bd. of County Comm'rs of Arapahoe v. Denver Bd. of Water Comm'rs, 718 P.2d 235, 244-46 (Colo. 1986) (holding that the Denver Water Board is a non-regulated public utility when supplying water to customers inside and outside of Denver's territorial limits); City of Thornton v. Farmers Reservoir & Irrigation Co., 575 P.2d 382, 391 (1978).

135. COLO. REV. STAT. § 37-92-103(3) (2009).

136. *See* City & County of Denver v. Colo. River Water Conservation Dist., 696 P.2d 730, 739-40 (Colo. 1985). In *Bijou* the Supreme Court gave a partial explanation of the inapplicability of the governmental exemption, stating that the exemption "was enacted in 1979, more than ten years after the City of Denver applied" for a decree for the conditional water rights. City of Thornton v. Bijou Irrigation Dist., 926 P.2d 1, 40 n.27 (Colo. 1996). While this statement is accurate, the more encompassing reason is that the 1943 and 1919 Acts, as opposed to the 1969 Act, governed the entire original proceeding.

137. To address the federal court's plan to integrate the tri-ethnic area through bussing and other programs, the City and County of Denver attempted to extend its boundaries through annexation. In response, Greenwood Village Mayor Freda Poundstone drafted an amendment to the Colorado Constitution that required any annexation by one county of land in another county to be voted on by all citizens in the county giving up the land. Effectively, the amendment prevented Denver from annexing surrounding neighborhoods to be included in the desegregation effort. *See* COLO. CONST. art. XIV, § 3; COLO. CONST. art. XX, § 1; *see generally* Keyes v. School Dist. No. 1, Denver, Colo., 380 F. Supp. 673, 684, 690-91 (D. Colo. 1974); *see generally* Tom I. Romero, II, *Uncertain Waters and Contested Lands: Excavating the Layers of*

constrained Denver's ability to annex areas outside its boundaries, it did not prohibit Denver from annexing land, as when Denver annexed forty-five square miles for the Denver International Airport in 1988.[138]

Finally, the Denver Water Board's proprietary actions of leasing water outside its boundaries did not seem to trouble the Colorado Supreme Court in *Sheriff, Blue River,* or *Metropolitan Suburban.* None of these cases applied a *Vidler* type common law test; rather, the court confirmed Denver Water Board's appropriations based upon its anticipated needs, including amounts necessary to serve adjacent areas in the metropolitan area without a requirement of firm contractual commitments.[139]

So, with *Bijou,* despite a clear statutory exception from the General Assembly limiting governmental agencies' burden of proof in demonstrating a non-speculative appropriation, the Colorado Supreme Court created an exception to the exception to the anti-speculation doctrine, essentially applicable to a single water user within the state.[140]

IV. CIRCUMSTANCES LEADING UP TO PAGOSA

A. DROUGHT OF 2002

In the years preceding the Court's decision in *Pagosa I and Pagosa II,* Colorado experienced a severe hydrologic drought which precipitated the enactment of several pieces of legislation considered by the Court in its Pagosa decisions. In 2002, Colorado experienced one of the worst single-year droughts in its recorded history.[141] Storage reserves in Lake Powell dropped dramatically, triggering anxieties in the upper Colorado River basin that downstream states would place a compact call.[142] Denver Water Board's storage reserves dropped to

Colorado's Legal Past, 73 U. COLO. L. REV. 521, 579-84 (2002).

138. In May 1988, voters in Adams County approved the City and County of Denver's annexation of approximately 45 square miles for an international airport. CATHERINE KRAFT, ELECTIONS ADMIN., ABSTRACT OF VOTES CAST AT THE SPECIAL ELECTION ON THE AIRPORT AGREEMENT, May 17, 1988.

139. Colo. River Water Conservation Dist. v. Vidler Tunnel Water Co., 594 P.2d 566, 568 (Colo. 1979); Metro. Suburban Water Users Ass'n v. Colo. River Water Conservation Dist., 365 P.2d 273, 283, 287-88 (Colo. 1961); City & County of Denver v. N. Colo. Water Conservancy Dist., 276 P.2d 992, 999 (Colo. 1954); City & County of Denver v. Sheriff, 96 P.2d 836, 840-41 (Colo. 1939).

140. COLO. REV. STAT. § 37-92-103(3)(a) (2009); City of Thornton v. Bijou Irrigation Dist., 926 P.2d 1, 39-40 (Colo. 1996).

141. COLO. DIV. OF WATER RES., 2002 ANN. REP., *available at* http://water.state.co.us/pubs/annualreport/annlrpt_2002.PDF (last visited on Feb. 1, 2010); *see also* Connie A. Woodhouse, *A Paleo Perspective on Hydroclimatic Variability in the Western United States,* 66 AQUATIC SCI. 346, 349 (2004) (stating that the severity of the Colorado 2002 drought was matched or exceeded about eight times during the 300 year study period).

142. Bureau of Reclamation, *Drought in the Upper Colorado River Basin,* Mar. 17, 2010, http://www.usbr.gov/uc/feature/drought.html (last visited March 31, 2010).

approximately 45% of capacity.[143] The dilemma for most governing bodies is how to plan for the unknown. In 2002, the governing bodies had to grapple with the unknowns of drought severity and duration.[144] Droughts test the accuracy of previous planning departments' determinations of an adequate water supply, the failure of which can spell disaster for any community –large or small.

B. THE STATE JUMPS INTO WATER SUPPLY PLANNING.

Beginning in 2003, the General Assembly enacted various water related legislation in reaction to the 2002 drought. In 2003, the General Assembly authorized three million dollars for the Colorado Water Conservation Board ("CWCB") to investigate all aspects of water supply and water demand through the year 2030 in each river basin of the state.[145] The overall objective of the Statewide Water Supply Initiative ("SWSI") was to help Colorado "maintain an adequate water supply for its citizens and the environment."[146] Because of the divisive nature of water issues in the West and in Colorado in particular, the study established certain ground rules including the acknowledgement that SWSI was "not [to] take the place of local water planning."[147]

In 2004, the General Assembly amended the Water Conservation Act of 1991 by an act concerning water planning by retail water providers to promote wise water use, conservation, and drought planning by public and private agencies, as well as encourage and support execution of this act that relates to the development and into the statewide water supply initiative.[148] The statute still allows water providers to determine the manner in which they develop, adopt, make publicly available, and implement a conservation plan.[149]

Following the momentum initiated by SWSI, the General Assembly enacted the Colorado Water for the 21st Century Act in 2005.[150] Intending to "facilitate discussion and negotiations between basins on water management issues, and to encourage locally driven collaborative solutions to water supply challenges . . . ," the General Assembly created an interbasin compact committee and nine basin roundtables.[151] The

143. *See* Denver Water, Comprehensive Annual Financial Report C-12 (2002) *available at* http://www.denverwater.org/docs/assets/E6522765-BCDF-1B42-D942C93720CC0ED0/AnnualReport20021.pdf.

144. National Drought Mitigation Center, *Monitoring Drought*, http://drought.unl.edu/monitor (last visited Feb. 1, 2010).

145. Act of May 19, 2003, ch. 269, 2 Colo. Sess. Laws 1768.

146. Colo. Dep't of Natural Res., *SWSI & Technical Resources*, http://cwcb.state.co.us/IWMD/SWSITechnicalResources/ (last visited Feb. 1, 2010).

147. Colorado Water Conservation Board, *Statewide Water Supply Initiative Executive Summary*, Nov. 2003, at ES 3, *available at* http://cwcb.state.co.us/NR/rdonlyres/7D87609A-1CE6-4E16-ABF4-DD34878F0E33/0/ExecSummaryReport111504.pdf [hereinafter Colorado Water Conservation Board, *Executive*].

148. Act of June, 4, 2004, ch. 373, 2 Colo. Sess. Laws 1777.

149. COLO. REV. STAT. § 37-60-126(3) (2009).

150. Act of June, 4, 2004, ch. 314, 2 Colo. Sess. Laws 1472.

151. COLO. REV. STAT. § 37-75-104(1)(a) (2009).

General Assembly authorized each roundtable to use the data and information derived from SWSI to develop a basin-wide consumptive and non- consumptive water supply needs assessment, to quantify the amount of available unappropriated water within each basin, and to propose projects or methods for meeting the consumptive and non-consumptive water supply needs identified in the assessment.[152] However, the General Assembly did not authorize the roundtables to construct or operate water supply systems or remove water from the streams to supply its water needs, leaving those activities to municipalities and other governmental entities.[153]

Then in 2008, apparently concerned that local governments were granting land development permits based upon inadequate water supplies, the General Assembly added a section to the Local Government Regulation of Land Use to require consideration of the adequacy of water supply before granting development.[154] The General Assembly found that securing an adequate supply of water to serve a land development can have a broad regional impact within and between river basins. Thus, it was imperative that local governments receive reliable information concerning the adequacy of the proposed developers' water supply.[155] So, the General Assembly declared that "while land use and development approval decisions are matters of local concern," the local governments must consider certain information in its determination of whether the water supply for the proposed developer is adequate under its sole discretion.[156] The General Assembly also required:

> [I]f the water for the proposed development is to be provided by a water supply entity that has a water supply plan that: (a) Has been reviewed and updated, if appropriate, within the previous ten years by the governing board of the water supply entity; (b) Has a minimum twenty-year planning horizon; (c) Lists conservation measures, if any, that may be implemented within the service area; (d) Lists the water demand management measures, if any, that may be implemented within the service area; (e) Includes a general description of water supply entity's water obligations; (f) Includes a general description of the water supply entity's water supplies; and (g) Is on file with the local government.[157]

In June 2009, the CWCB issued a draft study extending the SWSI study to the year 2050, pursuant to a request by the Western Slope basin

152. *Id.* § 37-75-104(2)(c).

153. Instead, the General Assembly authorized local entities to develop water supply systems. *See* § 31-35-402.

154. *Id.* § 29-20-304(1)(a).

155. *Id.* § 29-20-301(1)(a).

156. *Id.* §§ 29-20-301(1)(b), 29-20-305(1).

157. *Id.* § 29-20-304(3).

roundtables.[158] The study extended the population and water use projections to 2050, updated the per capita use estimates, and revised the Self-Supplied Industrial forecast.[159] However, SWSI acknowledged that providing water for municipal and agricultural users is the purview of local water providers and that SWSI does not take the place of local water planning.[160] In the land use statute, the General Assembly left the determination of a sufficient water supply to the sole discretion of the local government.[161]

V. *PAGOSA*

A. *PAGOSA I*: THE COURT'S FIRST FORAY INTO JUDICIAL WATER SUPPLY PLANNING

Remember *Pagosa?* This is a song about *Pagosa.*[162]

In *Pagosa I* the Colorado Supreme Court faced the questions of whether, as a matter of law, a government agency may obtain water rights in amounts premised on growth 100 years into the future;[163] whether the applicants, the Pagosa Water & Sanitation District ("Pagosa") and San Juan Water Conservancy District ("San Juan") (collectively referred to as the "Districts"), put on sufficient evidence to substantiate their reasonably anticipated requirements for their appropriation, including population projections and per capita water usage;[164] and whether Pagosa and San Juan demonstrated a sufficient intent necessary to appropriate water rights in the amounts and for the uses it sought.[165]

In 2003, Pagosa's water resource engineer recommended that Pagosa apply for conditional water rights sufficient to fill the proposed Dry Gulch Reservoir to the maximum possible size of 35,000 acre-feet.[166] Pagosa's engineer testified it was a "no brainer" to go for the maximum site capacity based upon economies of scale.[167] To make the engineer's "no brainer" recommendation fit the *Bijou* standard, Pagosa put on evidence that this supply of water would meet a need based upon a 100-

158. Colorado Water Conservation Board, *State of Colorado 2050 Municipal and Industrial Water use Projections* ES-1 (draft 2009), http://cwcb.state.co.us/NR/rdonlyres/C28C7E0F-0374-4982-8B0E-138C8851BD2F/0/2050MIDemands2050DraftReportFull.pdf [hereinafter *Projections*].

159. *Id.* at ES-2.

160. Colorado Water Conservation Board, *Projections, supra* note 158, at ES-1.

161. § 29-20-303(1).

162. *See* ARLO GUTHRIE, *Alice's Restaurant, on* ALICE'S RESTAURANT (Appleseed Music Inc. 1966) ("Remember Alice? It's a song about Alice.").

163. Pagosa Area Water & Sanitation Dist. v. Trout Unlimited (*Pagosa I*), 170 P.3d 307, 309 (Colo. 2007) (en banc).

164. *Id.*

165. *Id.*

166. *Id.* at 311.

167. *Id.*

year planning period.[168] The water court then confirmed an appropriation for Pagosa and San Juan for a water storage right at Dry Gulch Reservoir in the amount of 29,000 acre-feet and an eighty cfs direct flow right from the San Juan River.[169] Trout Unlimited ("TU") appealed,[170] claiming the amount awarded was more than Pagosa or San Juan could reasonably anticipate using over a reasonable period of time in violation of the anti-speculation doctrine.[171] The Colorado Supreme Court agreed.[172]

Writing for the majority, Justice Hobbs held that "[b]ased on Colorado's statutory requirements and *Bijou*, the limited governmental agency exception to the anti-speculation doctrine should be construed narrowly, in order to meet the state's maximum utilization and optimum beneficial use goals."[173] He continued, "Although the fifty year planning period . . . we approved in *Bijou* is not a fixed upper limit, and each case depends on its own facts, the water court should closely scrutinize a governmental agency's claim for a planning period that exceeds fifty years."[174] Concerned that a municipality's long term planning horizon could preclude other legitimate water uses and avoid the state's maximum utilization and optimum beneficial use goals, the court established a municipal duty of water.[175] Rather than using the tunnels, reservoirs, pipes and pipelines designed by the municipality, the municipal duty of water is now measured by the following ***elements***:[176]

(1) what is a reasonable water supply planning period;

(2) what are the substantiated population projections based on a normal rate of growth for that period; and

(3) what amount of available unappropriated water is reasonably necessary to serve the reasonably anticipated needs of the governmental agency for the planning period, above its current water supply.[177]

"In addition, [a governmental agency] must show under the "can and will" test that it can and will put the conditionally appropriated

168. *Id.* at 310-11.

169. *Id.* at 312.

170. *Id.*

171. *Id.*

172. *Id*

173. *Id.* at 317.

174. *Id.*

175. *Id.* at 315. As to agricultural irrigation "duty of water" is "that measure of water, which, by careful management and use, without wastage, is reasonably required to be applied to any given tract of land for such period of time as may be adequate to produce therefrom a maximum amount of such crops as ordinarily are grown thereon. It is not a hard and fast unit of measurement, but is variable according to conditions." Farmers Highline Canal & Reservoir Co. v. City of Golden, 272 P.2d 629, 634 (Colo. 1954).

176. An element is a required part of where the non-establishment of that fact to the required burden of proof is fatal to the case. Thus, if the Applicant fails to put on proof of the Pagosa elements, then the applicant failed to meet its burden of proof and the application must be dismissed. Bd. of County Comm'rs of Arapahoe v. United States, 891 P.2d 952, 961 n.9 (Colo. 1995).

177. *Pagosa I*, 170 P.3d at 313.

water to beneficial use within a reasonable period of time."[178] The court also articulated four **factors** to assist the court in its determination of the elements:[179]

(1) implementation of reasonable water conservation measures for the planning period;

(2) reasonably expected land use mixes during that period;

(3) reasonably attainable per capita usage projections for indoor and outdoor use based on the land use mixes for that period; and

(4) the amount of consumptive use reasonably necessary for use through the conditional appropriation to serve the increased population.[180]

With this holding, the majority narrowly construed the limited governmental agency exception to the anti-speculation doctrine by inferring that a planning period longer than 50 years was unreasonable.[181] In doing so, the court effectively fashioned a new planning standard allowing its opinion to "override the studied good-faith opinions" of Pagosa and San Juan "as to future needs of the public for facilities or commodities."[182]

Reluctantly concurring in the judgment, Justice Coats took exception with the majority on the issue of the planning period. He pointed out the "can and will" standard still requires a reasonable time frame to develop the facilities necessary to place the waters to beneficial use.[183] He expressed concern that the majority derived the fifty year planning period from a very complex project and that courts should not presumptively apply the same planning period to less complicated projects.[184] Justices Eid and Rice, on the other hand, concurred in the result but were troubled that the majority's "narrow construction" of *Bijou* would deprive municipalities of the "longstanding recognition" of the need for flexibility to plan for future water needs.[185] They even suggested that it may be necessary to modify or reconsider the *Bijou* framework.[186] The court then remanded the case back to the water

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178. *Id.* "No claim for a water right may be recognized or a decree therefore granted except to the extent that it is established that the waters can be and will be diverted, stored, or otherwise captured, possessed, and controlled and will be beneficially used and that the project can and will be completed with diligence and within a reasonable time." COLO. REV. STAT. § 37-92-305(9)(b) (2009).

179. Factors are facts that are not required to prove the case but which courts can consider in determining whether the applicant has established the amount of available water that is reasonably necessary to serve the reasonably anticipated needs of the governmental agency for the planning period above its current supply. Failure of the applicant to present evidence concerning such factors can be considered by the court in determining whether the elements have been met, but such failure is not in themselves dispositive. *See Arapahoe*, 891 P.2d at 961 n.9.

180. *Pagosa I*, 170 P.3d at 317.

181. *Pagosa I*, 170 P.3d at 318.

182. Metro. Suburban Water Users Ass'n v. Colo. River Water Conservation Dist., 365 P.2d 273, 289 (Colo. 1961).

183. *Pagosa I*, 170 P.3d at 320 (Coats, J., concurring).

184. *Id.* at 321.

185. *Id.* at 322-323 (Eid, J., concurring).

186. *Id.* at 323.

court with instructions that it:

> [S]hould examine the evidence utilizing the elements applicable to determining whether the districts have met their burden for a non-speculative conditional appropriation, accompany its judgment with sufficient findings of fact based on the evidence, and fashion appropriate decree provisions, which may include "reality checks" and volumetric limitations provisions for the districts' conditional appropriation.[187]

B. *PAGOSA II*: THE JUDICIARY'S SECOND FORAY INTO MUNICIPAL PLANNING

On remand, Pagosa and San Juan did not offer any additional evidence, and the court refused TU's request to present additional evidence.[188] In considering the evidence from *Pagosa I* and the instructions from the Colorado Supreme Court, the water court:

(1) entered a decree based upon a fifty year planning horizon;[189] (2) reduced the conditional storage right to 19,300 acre-feet with a refill right for an additional 6,000 acre-feet;[190] (3) confirmed an appropriation for a direct right of fifty cfs to meet instantaneous demands;[191] and

(4) imposed reality checks in subsequent diligence proceedings to monitor actual growth in equivalent units, actual per capita usage, federal bypass requirements, and effects of climate change.[192] Again TU appealed, claiming that Pagosa and San Juan failed to (1) substantiate population projections based upon a normal rate of growth; (2) establish the reasonableness of the fifty year planning horizon period; and (3) establish that the decreed amounts of water are reasonably necessary to serve the projected population through 2055.[193]

On appeal, the Colorado Supreme Court upheld the fifty year planning period because of findings of the lengthy lead time for land acquisition, environmental field studies, design and engineering, permitting, financing, constructing, and filling the reservoir; the court further held that the state's statewide water supply planning process extended to the year 2050.[194] However, the court determined that the existing record did not contain sufficient evidence to justify (1) recreational in-channel, instream flow and hypothetical federal bypass flow requirements; (2) fifty cfs direct flow diversion; and (3) a storage

187. *Id.* at 320.

188. Pagosa Area Water & Sanitation Dist. v. Trout Unlimited (*Pagosa II*), 219 P.3d 774, 777-79 (Colo. 2009).

189. Judgment and Decree, Case No. 2004CW085, 7 (Colo. Dist. Court, Water Division 7, 2008).

190. *Id.* at 10.

191. *Id.*

192. *Id.* at 13-14.

193. *Pagosa II*, 219 P.3d at 776.

194. *Id.* at 780-81.

right of 25,300 acre-feet.[195]

On remand, the Colorado Supreme Court directed the trial court to take additional evidence that, when considering the 2055 planning period, it can justify (1) a recreational in-channel, instream flow, and/or a bypass flow; (2) and independent direct flow diversion water right; and (3) a storage right of 25,300 acre-feet.[196] The court provided guidance that based the direct flow right upon the "amount of water reasonably necessary . . . to meet seasonal peak demand and potential outages impeding Dry Gulch Reservoir deliveries into the District's water system," unless other evidence justified a different amount.[197] The court concluded the record contained evidence supporting the 2055 planning period, the 200 gallons per capita usage number, and that carryover storage may be necessary to meet their reasonably anticipated needs including a safety supply margin, recreation, piscatorial and wildlife uses; but that the remand decree did not address the projected land use mix of the City of Pagosa Springs or of Archuleta County.[198] Because the projected land use mix affects the per capita water usage in the long term, it affects the calculation of the reasonable amounts of water necessary for the applicants in the study period.[199]

In support of its land use factor, the court referenced the 2008 land use legislation as complementing the elements and factors referenced in *Pagosa I*.[200] Then, the court went outside the record and considered the 2009 *draft* of 2050 population and municipal and industrial use projections of the General Assembly's statewide planning process even though the original study was "not to take the place of local water planning."[201] The Colorado Supreme Court directed the water court on remand to make a finding on the amount of annual dry year yield available from the District's existing water rights.[202] During its instruction at trial, the court instructed the water court to address the methodology and results of the 2009 draft SWSI study along with all other evidence of population projections and water supply needs for the District's 2055 water needs.[203]

Finally, the court rejected the amici and District's arguments that governmental agencies act in a legislative capacity when they make conditional water appropriations and thus are entitled to deference to the claimed amounts of water the suppliers deem reasonably necessary for their future use.[204] According to the Colorado Supreme Court, the only accommodation the General Assembly made to governmental

195. *Id.* at 781, 784-85.
196. *Id.* at 788.
197. *Id.* at 784.
198. *Id.* at 785.
199. *Id.* at 785-86.
200. *Id.* at 786; *see* COLO. REV. STAT. §§ 29-20-301 to -306 (2009).
201. *Pagosa II*, 219 P.3d at 786; Colorado Water Conservation Board, *Executive, supra* note 147 at 3.
202. *Pagosa II.* 219 at 788.
203. *Id.*
204. *Id.*

water suppliers is to allow "conditional appropriations to be made and decreed for a future reasonable water supply period in reasonably anticipated amounts[.]"[205]

C. THE *PAGOSA* FACTORS INTRUDE UPON GOVERNMENTAL DECISION MAKING.

In most areas of the law, courts defer under the theory of separation of powers to the policy determinations of the legislative and executive branches of government.[206] In Colorado, courts have been reluctant to substitute their judgment for that of the municipal decision maker in zoning matters,[207] annexations,[208] rate making,[209] and condemnation.[210] Prior to the 1969 Act, the courts would not intrude upon governmental agencies' decisions in matters that related to water planning.[211] Even after the 1969 Act, *Bijou* cautioned courts to be sensitive not to "inappropriately infringe on the water management decisions of... municipal water officials."[212]

By suggesting the trial court make findings on the reasonableness of conservation, land use mixes, per capita use, and the anticipated consumptive use, the court entwined itself in municipal planning functions.[213] Fundamentally, the factors intrude upon governmental decision making and give rise to judicial legislation, which prior decisions discouraged.[214]

The first pertinent factor, whether the applicant implemented reasonable water conservation measures for the planning period,[215] is

205. *Id.*

206. *See* Chevron U.S.A., Inc. v. Natural Res. Def. Council, 467 U.S. 837, 866 (1984).

207. Nelson v. Farr, 354 P.2d 163, 165-66 (Colo. 1960).

208. City & County of Denver v. Holmes, 400 P.2d 901, 904 (Colo. 1965).

209. Bennett Bear Creek Farm Water & Sanitation Dist. v. City & County of Denver, 928 P.2d 1254, 1265 (Colo. 1996).

210. COLO. REV. STAT. § 38-6-105 (2009); City of Thornton v. Farmers Reservoir & Irrigation Co., 575 P.2d 382, 394 (Colo. 1978). According to the dissent, the majority allowed home rule municipalities to condemn water rights and water facilities regardless of necessity as projected over a reasonable period of time, subject only to review for fraud or bad faith.

211. City & County of Denver v. Sheriff, 96 P.2d 836, 841 (Colo. 1939).

212. City of Thornton v. Bijou Irrigation Dist., 926 P.2d 1, 52-53 (Colo. 1996).

213. *See Pagosa I*, 170 P.3d 307, 317-318 (Colo. 2007).

214. *See Holmes*, 400 P.2d at 904 (dissenting, Justice Frantz remarked "[a] vigilant, dutiful judiciary should recognize its sphere of operation and readily restrain itself from any inchmeal intrusion on that which properly belongs to another branch of government."); Metro. Suburban Water Users Ass'n v. Colo. River Water Conservation Dist., 365 P.2d 273, 288 (Colo. 1961) (holding that courts should not substitute its judgments for that of the government's in water supply determinations); *Sheriff*, 96 P.2d at 840, 844 (holding that "[t]he furnishing of an adequate supply of water . . . requires managerial judgment . . . . [T]he restrictions involved here, would be an arbitrary violation of vested property rights of the city.").

215. § 37-60-126(1)(g) (providing that "'Water conservation' means water use efficiency, wise water use, water transmission and distribution system efficiency, and supply substitution. The objective of water conservation is a long-term increase in the productive use of water supply in order to satisfy water supply needs without compromising desired water services.").

troubling for a number of reasons.[216] Apparently, conservation measures are pertinent because beneficial use requires "use of that amount of water that is reasonable and appropriate under reasonably efficient practices to accomplish without waste the purpose for which the appropriation is lawfully made . . ."[217] Thus, a municipality must show its use is reasonably efficient, which a conservation plan can demonstrate. Further, the State of Colorado requires governmental entities providing more than 2,000 acre-feet to implement a water conservation plan encouraging its customers to use water more efficiently.[218] The plan must include a description of the water-saving measures and programs, the role of the conservation plan in its water supply planning, the steps used to develop and implement the water conservation plan, the time period the entity will review and update its conservation plan and an estimate of the amount of water that the conservation plan has and will save.[219]

A conservation plan is a strategy to conserve water.[220] If the water user is a governmental entity, it must adopt that strategy pursuant to its governmental process.[221] Normally, an elected council or Board passes a conservation plan, acting in a legislative capacity that is subject to public input and review.[222] However, when the court must determine the reasonableness of a conservation plan, the court then substitutes its judgment for that of the governing body. This comes at the expense of government agencies' legislative discretion, as different governmental entities may desire different conservation objectives.

The minimum water saving measures and programs that the state requires include: water efficient fixtures and appliances low water use landscapes, water efficient industrial and commercial water using processes, water reuse systems, distribution system leak repairs, education, rate structures designed to discourage water use, billing systems, regulatory measures, and incentives including rebates.[223] Most conservation plans do not include drought mitigation or response plans.[224] Further, a municipality's conservation plan must be balanced with its goal to develop a reliable water supply that will meet peak demands under efficient practices without mandatory water use

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216. *See Pagosa I*, 170 P.3d at 317.

217. § 37-92-103(4).

218. *Id.* § 37-60-126(1)(b), (2)(a).

219. *Id.* § 37-60-126(4)(a)-(e).

220. Colorado Water Conservation Board, *Drought Mitigation Planning*, http://cwcb.state.co.us/Conservation/DroughtPlanning/DroughtMitigationPlanning/DroughtMitigationPlanning.htm [hereinafter Colorado Water Conservation Board, *Drought*] (stating that "[a]. Water Conservation Plan can be defined as a strategy or combination of strategies for reducing the volume of water withdrawn from a water supply source, for reducing the loss or waste of water, for maintaining or improving the efficiency in the use of water, and for increasing the reuse of water") (last visited Jan. 31, 2010).

221. § 37-60-126(5).

222. *See id.*

223. § 37-60-126(4)(a).

224. Colorado Water Conservation Board, *Drought*, *supra* note 220.

restrictions because those restrictions can cause economic injury.[225] Compounding matters, the court's conservation factors leave the door open to a host of issues:

- What constitutes a reasonable conservation plan?
- What if another governmental entity has a stricter conservation plan than the appropriator—does that mean the court can pass judgment and deny an application because the conservation plan could be different?
- What sanction should be imposed if the conservation plan is changed, or is not strictly implemented or enforced?

The next pertinent factor, requiring a governmental applicant to show its reasonably expected land use mixes during that period, also presents a host of questions and problems.[226] To satisfy this factor, the applicant must present evidence of undeveloped land and its zoning.[227] Land zoned for residential use may have different per capita demand than land zoned for commercial, governmental, or industrial uses.[228] This is a reasonable method to forecast demands but it is not the *only* method to forecast demands, particularly if the service area is "built out."[229] An examination of reasonable land use mixes in an already developed metropolitan area does not allow for an accurate prediction of future demands within the area. Property uses and zoning can easily change over a fifty-year period. Areas that were once used for industrial purposes can give way to new residential uses and vice versa. Further, a land use based water demand projection does not take into account the potential for an increase in density over the years. Econometric demand models and simple trend spreadsheets, which are based on anticipated regional economic and demographic growth rather than projected land use mixes, are other planning methods, which can more accurately predict future demand for a developed metropolitan area.[230]

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225. For example, in 2002, Denver Water Board imposed drought restrictions that precluded the watering of new sod and restricted watering of golf courses to only tees and greens. The landscaping industry suffered economic harm and in some cases golf courses had to replace fairways. *See* Tom Kensler, *Dirt-Poor Condition Water Restrictions Deny Golf Course Operators Chance to Save Fairways*, THE DENVER POST, May 1, 2003, at D-10 (asserting the Denver Water Board's restriction on watering "all areas except tee boxes and greens . . . . And . . . total water usage . . . limited to 50 percent of the amount the course used in 2001" resulted in the loss of several golf fairways in the Denver area); Jerd Smith, *Tough Choices*, ROCKY MOUNTAIN NEWS, Apr. 17, 2003, at 12A (reporting on the Denver Water Board's decisions on "plea after plea from landscapers, sod growers, and golfers.").

226. Pagosa Area Water & Sanitation Dist. v. Trout Unlimited (*Pagosa I*), 170 P.3d 307, 317-19 (Colo. 2007) (en banc).

227. *See generally id.* at 317-319.

228. *See* WILLIAM Y. DAVIS, WATER DEMAND FORECAST METHODOLOGY FOR CALIFORNIA WATER PLANNING AREAS 1-2 (2003) (showing that commercial activity, industrial activity, and urban water efficiency are all factors affecting water demand).

229. *Id.* "Built out" is a future event when all undeveloped land is fully developed. However, even fully developed lands can accommodate future growth and additional water supplies with increased density.

230. E-mail from Doug L. Jeavons, Managing Director BBC Research & Consulting, to Casey S. Funk, Denver Water (Jan. 4, 2010, 10:30:00 MST) (on file with author).

When a court assesses the reasonableness of the expected land use mixes, the court again substitutes its judgment for that of the elected officials, who are responsible for the quality of life decisions that a governmental entities should make.

In addition, too many confounding factors affect or influence the attainability of reasonable per capita usage projections for indoor and outdoor use based on the land use mixes for a planning period, with weather being the most significant of these factors. If it rains, then per capita use goes down.[231] If it is hot and dry, per capita use goes up.[232] So should a governmental agency assume hot and dry per capita usage without restrictions to be prudent and conservative? Most governmental entities design their systems to meet a peak instantaneous demand, which usually occurs when the climate is hot and dry.[233] But should the court impose hypothetical restrictions to ascertain reasonably efficient practices? Further, people who live outside the service area but have jobs inside the service area may not be factored in a per capita calculation. Remember, the court in *Sheriff* and *Metropolitan Suburban* deferred to the government□s need for flexibility and its exercise of managerial judgment.[234] By assessing the reasonableness of the per capita use in the governmental service area, the court once again becomes the decision maker.

With regard to the consumptive use factor, a governmental applicant must now present evidence of "the amount of consumptive use reasonably necessary for use through the conditional appropriation to serve the increased population."[235] For this pertinent factor, the Colorado Supreme Court cited an article, which concluded a municipality need only to "replace" the amount consumed in an augmentation plan.[236] Thus, the authors of the article concluded that the "size of the required water supply is usually determined by the amount of water that will be physically consumed, not actually diverted from a water source." [237] But this factor can be misleading. For example, of one acre-foot of water used in a home, less than 10% of the water may be permanently lost to the stream due to evaporation, human consumption, other consumption associated with household uses, or losses occurring as part of the wastewater treatment process.[238] The remaining 90% of the water not consumed returns to its source.[239]

231. *See* John Bougadis, Kaz Adamowski & Roman Diduch, *Short-Term Municipal Water Demand Forecasting*, 19 HYDROLOGICAL PROCESSES 137, 143-47 (2005).

232. *See id.*

233. *See id.*

234. City & County of Denver v. Sheriff, 96 P.2d 836, 840 (Colo. 1939); Metro. Suburban Water Users Ass'n v. Colo. River Water Conservation Dist., 365 P.2d 273, 288 (1961).

235. Pagosa Area Water & Sanitation Dist. v. Trout Unlimited (*Pagosa I*), 170 P.3d 307, 318 (Colo. 2007) (en banc).

236. *Id.* at 318 n.10; Daniel S. Young & Duane D. Helton, *Developing a Water Supply in Colorado: The Role of an Engineer*, 3 U. DENV. WATER L. REV. 373, 377 (2000).

237. *Id* at 377.

238. *See id.* at 377-378.

239. *Id.*

In determining the amount of water needed to serve its customers, municipalities do not base their determination of need solely on the 10% of water a single home will consumptively use, but also on the entire acre-foot of water that a home will "use" while the 10% is being consumed.[240] In other words, a municipality needs to be able to provide the ten gallons that a homeowner will use in taking the shower, not just the single gallon the towel will "consume". The "one size fits all" application of a consumptive use factor is not pertinent for many water users, and it has limited applicability in determining total municipal demands.

Further, while many municipalities operate significant portions of their systems under an augmentation plan, many others do not.[241] Some municipalities developed their water systems before the 1969 Act and base their requirements the old fashioned way – by satisfying diversion demands in accordance with the priority system.[242] For example, the Denver Water Board diverts under its direct flow rights when it is in priority and exchanges water or releases water from storage when it is out of priority to meet its fluctuating demands.[243] The Denver Water Board does not to any significant degree, operate its municipal system under an augmentation plan; thus, its consumptive use does not drive major portions of its decision making.[244] Instead, the Denver Water Board predicts its future diversion demands based upon historical use data[245] and various factors of water use including population, employment, household size, precipitation, and lawn size.[246]

In *Pagosa,* the Colorado Supreme Court did not foreclose the water court from considering other factors in determining the reasonableness of the particular governmental agency's anticipated needs.[247] Other factors could include flood control, water administration requirements, distribution losses, safety factors, operational emergencies, permit requirements, climate variability, recreational uses, piscatorial uses, and aesthetic uses. These additional needs may not involve a determination

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240. *See id.* at 378.

241. *See, e.g.*, Upper Eagle Reg'l Water Auth. v. Simpson, 167 P.3d 729, 731-34 (Colo. 2007) (involving municipality which operates its system through an augmentation plan).

242. City & County of Denver v. Sheriff, 96 P.2d 836, 841 (Colo. 1939) (stating that a senior water right holder may not confer his senior water rights to a junior user out of priority without justifying his actions).

243. E-mail from Robert G. Steger Manager of Raw Water Supply, to Casey S. Funk, Denver Water (Mar. 4, 2010, 5:37:00 MST) (on file with author).

244. *Id.*

245. DENVER WATER, AN INTEGRATED WATER RESOURCE PLAN 40 (2002), http://www.denverwater.org/docs/assets/DDA6502B-BCDF-1B42-D6B27D086AD6731A/MasterDocIRPOnline1.pdf.; *see also* Young & Helton, *supra* note 236 at 381 ("Many larger municipalities have historical water use data that are used to develop more accurate water use estimates, which can also be used to project future municipal water needs.").

246. *Id.* at 14, 42.

247. Pagosa Area Water & Sanitation Dist. v. Trout Unlimited (*Pagosa I*), 170 P.3d 307, 318 (Colo. 2007) (en banc).

of consumptive use, land use mixes, or population projections.

In *Pagosa II*, the court held that carryover storage equal to the water system's annual demand may be necessary to meet the District's reasonably anticipated 2055 water needs.[248] However, possession of a safety reserve is also prudent from a governing body's perspective in case droughts are worse than what historical gage data has recorded.[249] But a governing body may not place safety factor or strategic reserve water to an actual beneficial use unless there is an emergency. Is this speculation, or prudent municipal planning? Currently, the Denver Water Board has a policy to reserve 30,000 acre-feet of yield in its system for catastrophic events: larger than unexpected build-out demands, lower than expected yield from its water rights and facilities, and longer than anticipated droughts.[250] For example, the gauged data during a critical dry period in the 1950s influences Denver Water Board's yield.[251] If a drought occurs that is more severe than the critical period, then Denver Water Board's yield will be less. Even with mandatory restrictions, a safety factor or strategic reserve is prudent to protect from droughts more severe than the historical gauged data reflects.

Where the people and the General Assembly have authorized local governments to develop and operate water works systems and facilities, the courts should defer to the exercise of that legislative decision making unless it is fraudulent, abuses discretion, or is inherently unsound.[252] The doctrine of maximum utilization under the 1969 Act did not take away any of these powers provided to governmental

248. Pagosa Area Water & Sanitation Dist. v. Trout Unlimited (*Pagosa II*), 219 P.3d 774, 785 (Colo. 2009).

249. Tree ring studies have confirmed occurrences of drought conditions more severe than the past 100 years of gauged data. *See* Woodhouse, supra note 141 at 354; Connie A. Woodhouse & Jeffrey J. Lukas, *Multi-Century Tree-Ring Reconstructions of Colorado Streamflow for Water Resource Planning*, 78 CLIMATIC CHANGE 293, 293-94 (2006); David M. Meko et al., *Medieval Drought in the Upper Colorado River Basin*, GEOPHYSICAL RESEARCH LETTERS (2007), https://portal.azoah.com/oedf/documents/08A-AWS001-DWR/Omnia/20070524%20Meko%20et%20al%20Medieval%20Drought%20CO%20River.pdf.

250. Currently, eight percent of Denver Water Board's current estimated firm yield. DENVER WATER, AN INTEGRATED WATER RESOURCE PLAN 9, 7, 69 (2002), http://www.denverwater.org/docs/assets/DDA6502B-BCDF-1B42-D6B27D086AD6731A/MasterDocIRPOnline1.pdf.

251. Yield has various meanings. Firm/dry/reliable yield is the amount of water that the water rights and facilities of a municipality can produce in a dry hydrologic period. Average yield is the amount of water that water rights and facilities in a normal hydrologic period can produce. All things being equal, average hydrologic conditions will yield more water than dry hydrologic conditions but average yield will be less reliable than firm yield. *See generally* W. B. LANGBEIN & KATHLEEN T.ISERI, GENERAL INTRODUCTION & HYDROLOGIC DEFINITIONS (1995) *available at* http://water.usgs.gov/wsc/glossary.html (defining "Water Yield"); B. Srdjevic, Y. D. P. Medeiros & A. S. Faria, *An Objective Multi-Criteria Evaluation of Water Management Scenarios*, 18 WATER RESOURCES MANAGEMENT 35, 42 (2004) (discussing how to calculate "firm yield.").

252. COLO. REV. STAT. § 31-15-708 (2009).

agencies.[253] Rather, the doctrine simply encouraged distribution of waters for different beneficial purposes such as augmentation plans, instream flows, and recreational instream channel diversions.[254]

In making that determination of deference, the court should consider whether the governmental agencies determined their water supply needs in an open public process by which the public and interested stakeholders could have scrutinized the reasons for the water supply period and the basis for the governmental agencies' need for additional water. The courts should consider:

(1) Does the municipality have a process to determine its water supply needs?

(2) Has it followed its process?

(3) Who was involved in the process?

(4) What information was considered?

(5) What assumptions were made? and

(6) Is there a record of that decision making.

Unless there is evidence of fraud or abuse of discretion, the judiciary should then defer to the decisions the governmental body's decisions in its legislative or quasi-legislative capacity.

CONCLUSION

In *Pagosa I* and *Bijou*, the Colorado Supreme Court applied the chicken or the egg principle when it observed:

> The conditional appropriation must not be based on a conjectural population projection that becomes a self-fulfilling prophecy of growth. Most Front Range municipalities in Colorado could conjecture growth in the next few decades at exponential rates. To some extent, that growth is directly related to the ability of the municipality to supply water. Hence, the projection becomes a self-fulfilling prophecy if the municipality secures a right to the water necessary to sustain the growth. We do not view such conjecture as sufficient substantiation to support a conditional decree for water. Municipalities must do more than represent to the water court that if they had water, they would be able to grow.[255]

But will communities continue to thrive if their water supplies are insufficient to sustain the community, and will communities' water supply needs cease at end of the planning horizon? A simple test exists at Mesa Verde National Park. Many believe the Park is the abandoned home of an indigenous people who left their community during a

253. *See generally* § 37-92-102(1)(a) (not altering governmental powers of appropriation set forth in Colorado's constitution).

254. Ironically, the General Assembly only authorized governmental agencies to make such appropriations. §§ 37-92-102(3), (5).

255. Pagosa Area Water & Sanitation Dist. v. Trout Unlimited (*Pagosa I*), 170 P.3d 307, 315 (Colo. 2007) (en banc); City of Thornton v. Bijou Irrigation Dist., 926 P.2d 1, 39 n.25 (Colo. 1996).

period of severe and prolonged drought and cooler temperatures.[256] So we offer the *Pagosa* question: are municipalities merely conjecturing growth, or are they developing an adequate water supply capable of sustaining their populations and economies into the future so that they, too, do not become a piece of history like Mesa Verde?

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256. MESA VERDE – THE FIRST 100 YEARS, 37 (Rose Houck & Faith Marcovecchio eds., Mesa Verde Museum Ass'n) (2006); Woodhouse, *supra* note 141 at 351.