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CASE NOTE: THE "THIRD ACT" IN COLORADO WATER LAW: THE COLORADO SUPREME COURT AFFIRMS THE CONCEPT OF SUSTAINABLE OPTIMUM USE IN SIMPSON V. COTTON CREEK CIRCLES, LLC

NAME: Peter C. Johnson

#### **SUMMARY:**

... First, the water court found that the hydrology and geology of the Valley are highly complex, and that all available water in the Valley is overappropriated, including its surface streams, the confined aquifer, and the unconfined aquifer. ... Rather, the state engineer continued to administer wells from both the confined and unconfined aquifer "to ensure that all groundwater users comply with the restrictions of their well permits and/or their groundwater rights' decrees." ... Legislation Mandating Rules: House Bill 98-1011 and Senate Bill 04-222 In light of the water users' dissatisfaction with the administration of water within the San Luis Valley, and the need to increasingly curtail diversions and well pumping to meet Colorado's obligations under the Rio Grande Compact, the General Assembly mandated that the state engineer promulgate new rules governing water use in the Valley. ... In rejecting the opposition's argument, the court noted that the state engineer based the Rules on a factual finding that a new withdrawal from the confined aquifer would cause injury unless the water user properly augmented the withdrawal.

TEXT: [\*241]

## I. INTRODUCTION

Throughout the historical development of Colorado water law, a select number of doctrines and principles have reigned supreme. The first principle is the doctrine of prior appropriation found in the Colorado Constitution. <sup>n1</sup> After the Colorado Supreme Court's 1968 decision in Fellhauer v. People, <sup>n2</sup> the principle of maximum utilization and the challenges inherent in integrating this principle into a system of vested water rights added another layer of complexity. <sup>n3</sup> With the enactment [\*242] of Senate Bill 222 in 2004, <sup>n4</sup> the Colorado Legislature has now developed the doctrine of maximum utilization further, requiring the state engineer to consider the sustainability of optimum or maximum use. <sup>n5</sup>

In light of this new principle, and pursuant to the legislative mandates in House Bill 98-1011 <sup>n6</sup> and Senate Bill 04-222, <sup>n7</sup> the state engineer promulgated the Rules Applying to Groundwater Withdrawals in the San Luis Valley ("the Rules") on June 30, 2004. <sup>n8</sup> When Cotton Creek Circles, LLC challenged the Rules' validity in the Division Three Water Court and subsequently appealed to the Colorado Supreme Court, <sup>n9</sup> the Court had its first chance to review both the constitutionality of the legislation's sustainability mandates and the state engineer's specific application of this concept in the Rules.

## II. THE SAN LUIS VALLEY

## A. The San Luis Valley Hydrologic System

Located between the San Juan and the Sangre de Cristo mountain ranges, the San Luis Valley ("Valley") encompasses Colorado's entire Water Division Three. <sup>n10</sup> The Valley's highly complex hydrologic and geologic systems are "unique when compared to other river basins within the state." <sup>n11</sup> Though the high-altitude Valley has a short growing season and average annual precipitation of only 7.5 inches, the traditional irrigation practices have sustained a productive agricultural economy. <sup>n12</sup>

Colorado's obligations under the Rio Grande Compact command substantial surface water flows from the Rio Grande and Conejos rivers, [\*243] the two major rivers in the Valley. n13 In addition to these surface waters, the Valley contains both a confined aquifer and an unconfined aquifer. n14 The unconfined aquifer lies above the confined aquifer, and "relatively impermeable beds of clay and basalt" separate them. n15 These impermeable beds are not present around the perimeter of the Valley, so surface flows recharge the confined aquifer system in those areas. n16 The higher elevation of these recharge areas produces artesian pressure in the confined aquifer, "resulting in the free flow of water from some artesian wells and springs at natural breaks in the confining layer." n17 "In some places . . . water from the confined aquifer will leak upward through the confining clay layers into the unconfined aquifer." n18 As a result, there are varying hydrological connections between the unconfined aquifer, the confined aquifer, and the surface streams. n19

# B. Historical Water Use in the San Luis Valley

Because of the Valley's agricultural history, water has been a vital resource for well over one hundred and fifty years. <sup>n20</sup> Water users decreed their uses in the area as early as 1852. <sup>n21</sup> These water users also rapidly developed the Valley's surface streams for irrigation use during the mid-to-late 1800s, resulting in the over-appropriation of all streams in the Valley by 1900. <sup>n22</sup> "High spring runoff and low summer flows in the valley streams, coupled with years of severe drought, resulted in undependable water supplies for irrigation," so water users began to look for new ways to supplement their water supply. <sup>n23</sup>

As a result, water users began to rapidly develop the Valley's groundwater. Water users first discovered the confined aquifer in 1887; by 1891 there were approximately 2,000 artesian wells in the Valley. <sup>n24</sup> By 1958, the number of wells had risen to 7,500. <sup>n25</sup> By contrast, users did not significantly develop the unconfined aquifer until the 1930s. <sup>n26</sup> The advent of modern technologies such as powerful large [\*244] capacity pumps and center pivot sprinkler irrigation systems, coupled with the state's increasing curtailments of surface diversions to meet Rio Grande Compact requirements, led to water users increasing use of both the confined and unconfined aquifer. <sup>n27</sup> As a result, the level of artesian pressure in the confined aquifer has declined for many years, and "the dramatic effect of the record low snowpack and stream flow in 2002 [] significantly worsened the condition of the confined aquifer." <sup>n28</sup>

# C. Historical Water Regulation in the San Luis Valley

The discrete water supply and irrigation-dependent economy in the Valley has produced much controversy regarding the state engineer's administration of water rights. In 1972, pursuant to the 1969 Water Right Determination and Administration Act, <sup>n29</sup> the state engineer imposed a moratorium on well permits for new appropriations from the confined aquifer and from the unconfined aquifer outside of the Closed Basin Division ("Closed Basin"). <sup>n30</sup> In 1981, the state engineer expanded the moratorium to include well permits for new appropriations from the unconfined aquifer within the Closed Basin, "effectively ending new appropriations of groundwater in the Valley." <sup>n31</sup>

The state engineer has strictly administered surface water in the Valley ever since 1966, when Texas and New Mexico sued Colorado in the United States Supreme Court for violations of the Rio Grande Compact. <sup>n32</sup> As part of a settlement agreement, the parties stipulated that the litigation "would be stayed if Colorado met its delivery obligation on an annual basis going forward, and used all available administrative and legal powers to assure compliance." <sup>n33</sup> Pursuant to this stipulation, the state engineer has increasingly curtailed diversions from the Rio Grande and Conejos

rivers to meet the Rio Grande Compact obligations. n34

In 1975, the state engineer promulgated rules for administration of the Rio Grande Compact and regulation of groundwater within the Valley. <sup>n35</sup> After numerous appeals and remands between the Division [\*245] Three Water Court and the Colorado Supreme Court, the Colorado Supreme Court eventually remanded the rules back to the state engineer for reconsideration in light of the principles of reasonable means of diversion and maximum utilization. <sup>n36</sup>

However, the state engineer did not promulgate new rules regulating existing groundwater use in the Valley. <sup>n37</sup> Rather, the state engineer continued to administer wells from both the confined and unconfined aquifer "to ensure that all groundwater users comply with the restrictions of their well permits and/or their groundwater rights' decrees." <sup>n38</sup> Additionally, the state engineer and water users took further steps to "address issues relating to the overappropriation of both aquifers, the protection of senior surface rights, and the Rio Grande Compact obligations." <sup>n39</sup>

During this same period, the Federal Bureau of Reclamation began the Closed Basin Project to help Colorado fulfill its obligations under the Rio Grande Compact. <sup>n40</sup> The Closed Basin Project aimed to salvage shallow groundwater that would otherwise be lost to evaporation or evapotranspiration and deliver the water to the Rio Grande River. <sup>n41</sup> In addition to the development of the Closed Basin Project, nearly all of the major water users in the Valley entered into what is known as the "60/40 Agreement." <sup>n42</sup> The agreement called for water users to provide supplemental water necessary "to allow existing users to maintain their current levels of production and usage without injuring senior users," thereby addressing water users' concerns regarding the impacts of groundwater well production on surface waters within the Valley. <sup>n43</sup> However, because the Closed Basin Project has consistently produced less than fifty percent of the expected amount of supplemental water, water users were dissatisfied with the 60/40 Agreement as a solution to groundwater issues in the Valley, and deemed it insufficient "to protect [\*246] senior vested water rights from injury caused by groundwater pumping." <sup>n44</sup>

### III. LEGISLATIVE AND ADMINISTRATIVE BACKGROUND

A. Legislation Mandating Rules: House Bill 98-1011 and Senate Bill 04-222

In light of the water users' dissatisfaction with the administration of water within the San Luis Valley, and the need to increasingly curtail diversions and well pumping to meet Colorado's obligations under the Rio Grande Compact, the General Assembly mandated that the state engineer promulgate new rules governing water use in the Valley. <sup>n45</sup> The General Assembly mandated these rules in different bills.

The first mandate came in House Bill 98-1011 ("HB 98-1011"). n<sup>46</sup> HB 98-1011 recognized the need for more comprehensive information regarding the hydrologic relationship between the confined aquifer and the surface streams within Water Division Three. n<sup>47</sup> The Bill stated that the state engineer should promulgate new rules that were "based upon specific study of the confined aquifer system." n<sup>48</sup> Despite insufficient knowledge of the aquifer system, the Bill provided that "new withdrawals of groundwater from the aquifer system in Division Three could materially injure vested water rights." n<sup>49</sup> The Bill also required "a plan for augmentation for any application in Water Division 3 that involves new withdrawals of groundwater that will affect the rate or direction of movement of water in the Confined Aquifer System." n<sup>50</sup> Any such augmentation plan must "recognize that unappropriated water is not made available and injury is not prevented as a result of the reduction of water consumption by nonirrigated native vegetation." n<sup>51</sup>

Following HB 98-1011's mandate for a specific study of the confined aquifer system, the state engineer and the Colorado Water Conservation Board undertook the Rio Grande Decision Support System study (the "RGDSS Study"), a comprehensive analysis of the San Luis [\*247] Valley's geology and hydrology. <sup>n52</sup> The state engineer and the Colorado Water Conservation Board performed the RGDSS study from 1998 to 2004, expending some five million dollars in state funds. <sup>n53</sup> In the course of this study, the state engineer developed a computerized groundwater model ("the RGDSS Model") "to simulate, among other things, the flow of groundwater in the confined aquifer." <sup>n54</sup>

The second legislative mandate came in 2004, when the General Assembly enacted Senate Bill 04-222 ("SB

04-222"). <sup>n55</sup> SB 04-222 required the state engineer to consider the sustainability of the underground water supply, based largely on maintaining the traditional range of artesian pressure levels in the aquifer systems in the Valley. <sup>n56</sup> SB 04-222 also required the state engineer to recognize that the reduction of water consumption by phreatophytes is not a valid method of creating "new" water, whether that water is to be used "as a source of replacement water for new water uses or to replace existing depletions, or as a means to prevent injury from new water uses." <sup>n57</sup>

#### B. The Rules

Pursuant to the legislative mandates of both HB 98-1011 and SB 04-222, and based on the results of the RGDSS Study, the state engineer promulgated and adopted the Rules in 2004. <sup>n58</sup> The Rules applies to any new withdrawals from the confined aquifer in Division Three that affect the rate or direction of movement of water in that aquifer system. <sup>n59</sup> The state engineer uses the RGDSS Model to determine if a new withdrawal will affect the rate or direction of movement of water. <sup>n60</sup> In accordance with general water law principles, Rule 6 requires that any new withdrawal of water from the confined aquifer "must prevent in [\*248] jury to the vested water rights of others that would be caused by the new withdrawal." <sup>n61</sup>

Some of the Rules' requirements are particularly relevant to the Simpson case. First, Rule 6.B.2 requires an applicant to make a one-for-one replacement of the proposed new withdrawal in order to prevent injury to vested rights. n62 However, this provision also gives applicants the opportunity to show that "recharge or injection of water into the confined aquifer system can prevent injury to the vested water rights of others." n63 Second, the Rules provide that any new withdrawals "shall not be allowed to cause fluctuations in artesian pressures in the Confined Aquifer to fall outside of the ranges that occurred" between 1978 and 2000, and average artesian pressure levels must remain similar to those that occurred during the same time period. n64 Third, the Rules state that any nonirrigated native vegetation water usage reductions do not make available unappropriated water or prevent injury to vested water rights, and water users may not use this water to offset new withdrawal depletions. n65

## IV. LITIGATION

## A. Initial Trial

Cotton Creek Circles, LLC, the San Luis Valley Water Co., and the Colorado Association of Home Builders (jointly, "opposition"), filed statements of opposition to the Rules in the Division Three Water Court ("water court"). <sup>n66</sup> After a twenty-six-day trial from January until March of 2006, the water court issued a lengthy opinion denying the opposition's protests and affirming the validity of the Rules "in what may well be the most comprehensive decision ever issued by a Colorado water court." <sup>n67</sup>

### B. The Parties

The proponents of the Rules were the state engineer, the Rio Grande Water Conservation District, the Rio Grande Water Users Association, and the Conejos Water Conservancy District. <sup>n68</sup> The primary party of opposition to the Rules was Gary Boyce, the owner of Cotton [\*249] Creek Circles, LLC and the San Luis Valley Water Co. <sup>n69</sup> Cotton Creek Circles is a 4,700-acre cattle ranch in the northeastern San Luis Valley. <sup>n70</sup> The name Cotton Creek Circles comes from the ranch's several center pivot irrigation systems, and Cotton Creek, which flows westward onto the property from the Sangre de Cristo mountain range. <sup>n71</sup> The ranch's decreed surface water rights can control the entire flow of Cotton Creek, and nine decreed wells that draw water from the confined aquifer supplement the ranch's water supply. All of these water rights existed before the promulgation of the Rules, which means they are exempt from the Rules. However, Cotton Creek Circles claimed at trial that it might be interested in water development opportunities in the future - projects that would likely require new withdrawals from the aquifer system. <sup>n72</sup>

## C. The Water Court's Decision

During pretrial conference, the opposition stipulated to the withdrawal of many of its objections to the Rules. n73

On its remaining claims, the opposition argued that the Rules violated both the Colorado Constitution and the state engineer's statutory authority. <sup>n74</sup> The opposition also claimed that the state engineer's failure to adequately regulate existing wells was a "key component in the overappropriation of water in the aquifers and invalidates the assumptions of the RGDSS Model." <sup>n75</sup>

Based on several key findings, the water court upheld the validity of the Rules and denied the opposition's various challenges. First, the water court found that the hydrology and geology of the Valley are highly complex, and that all available water in the Valley is overappropriated, including its surface streams, the confined aquifer, and the unconfined aquifer. <sup>n76</sup> Second, the water court found the current rate of withdrawal from the aquifers exceeds the recharge rate, resulting in [\*250] groundwater mining. <sup>n77</sup> Thus, any new withdrawals would exacerbate an already dire situation. <sup>n78</sup>

Next, the water court found that the Rules' requirements for replacement water, including a one-for-one replacement in most situations, were "necessary to prevent injury to senior water rights, to comply with standards and principles in section 37-92-501(4) (including the maintenance of a sustainable water supply), and to avoid interfering with Colorado's ability to meet its Rio Grande Compact obligations." n79 Lastly, the water court found the RGDSS Model to be "reasonably accurate and reliable, and sufficient for its intended uses under the rules." n80 In fact, the water court even commended the wisdom of the General Assembly in mandating the requirement of decision support systems such as the RGDSS, calling the RGDSS an "enormous step forward in understanding the hydrogeology of the Rio Grande Basin." n81

Based on these findings, the water court reached several legal conclusions. First, the water court upheld the provisions of SB 04-222, which mandate sustainability of the aquifers and provide for a baseline period to measure artesian pressure as a means of evaluating sustainability. <sup>n82</sup> The court further concluded that the evidence presented at trial supported the legislative mandate regarding phreatophyte water consumption as a source of additional water and that this mandate was within the authority of the General Assembly. <sup>n83</sup> Second, the water court held that the Rules complied with state statutory requirements, and that neither the Rules, nor the provisions of HB 98-1011 or SB 04-222, violated the Colorado or United States Constitutions. <sup>n84</sup> Based on these legal conclusions, the water court found that the opponents had not met their requisite burden of proof to demonstrate that the water court should disapprove the Rules. <sup>n85</sup> Thus, the water court approved the Rules. <sup>n86</sup> The opposition then appealed to the Colorado Supreme Court.

## D. Appeal to the Colorado Supreme Court

On appeal to the Colorado Supreme Court, the opposition renewed several of its challenges to both the Rules and the underlying statutes. The opposition argued that the Rules, HB 98-1011, and SB [\*251] 04-222 violated the Colorado Constitution by denying the right to appropriate. <sup>n87</sup> Specifically, the opposition claimed that the Rules' artesian pressure provision, one-for-one replacement provision, and nonirrigated native vegetation provision denied the right to appropriate water, and thus were unconstitutional and contrary to established Colorado water law. <sup>n88</sup>

The court first addressed the opposition's argument that the artesian pressure provisions in the Rules and SB 04-222 violated the Colorado Constitution by denying the right to appropriate, thus "locking up unappropriated water." n89 The court rejected this argument on two grounds. First, the court found that the constitutional right to appropriate only applies in situations where there is unappropriated water available for appropriation. n90 Because there was no unappropriated water in either the confined or the unconfined aquifers, limiting new groundwater withdrawals did not deny the constitutional right to appropriate. n91 Second, the court found that several rational bases justify the Rules' artesian pressure provision, including the protection of vested water rights, maintenance of a sustainable water supply in the confined aquifer, and prevention of groundwater use interfering with Colorado's ability to fulfill its obligations under the Rio Grande Compact. n92 Thus, the court upheld the artesian pressure provisions of the Rules and SB 04-222.

Similarly, the opposition argued that the Rules' replacement provision, which essentially requires a one-for-one replacement for new withdrawals from the confined aquifer, also denied the constitutional right to appropriate water. <sup>n94</sup>

The court rejected this argument on the same basis as the opposition's first argument, reasoning that because the constitutional right to appropriate only applies to unappropriated water, requiring one-for-one replacements in an overappropriated system does not deny the constitutional right to appropriate. <sup>n95</sup>

The court then analyzed the opposition's claim that the Rules' and HB 1011's provisions regarding the reduction of water use by phreatophytes "radically altered Colorado water law." <sup>n96</sup> The court found that several rational bases justified these provisions, including public policy and environmental considerations such as balancing "the potential [\*252] environmental consequences of encouraging eradication of phreatophytes against the potential benefits of salvaging water." <sup>n97</sup>

The opposition also argued that the Rules created an irrebuttable presumption of injury in the instance of every new withdrawal from the confined aquifer, and "eliminated any possibility of showing that a particular diversion will not in fact cause injury to vested water rights." <sup>n98</sup> Though the Colorado Supreme Court previously held in Alamosa La-Jara Water Protective Ass'n v. Gould that a general aquifer-wide presumption of injury was permissible, it upheld the rules at issue in that case because they preserved the right of individuals to rebut this presumption. <sup>n99</sup> In rejecting the opposition's argument, the court noted that the state engineer based the Rules on a factual finding that a new withdrawal from the confined aquifer would cause injury unless the water user properly augmented the withdrawal. <sup>n100</sup> Further, the court found that the Rules preserved the individual right to rebut the presumption of injury, as in Alamosa La-Jara, <sup>n101</sup> by providing an opportunity to rebut the presumptions of the RGDSS Model regarding the effect of a new withdrawal on artesian pressure. <sup>n102</sup>

The court next analyzed the opposition's arguments regarding the failure of the state engineer to adequately regulate existing water users. The opposition first claimed that "by failing to regulate existing wells, the state engineer was abdicating his responsibility." <sup>n103</sup> The court roundly rejected this argument, noting that the state engineer enjoys wide discretion in regulating the use of groundwater, and that "nothing in the rules precludes further regulation of existing wells." <sup>n104</sup>

Lastly, the opposition argued that two of the Rules' distinctions violated the Equal Protection clause of both the Colorado Constitution and the United States Constitution. n105 First, the opposition argued that the Rules violated Equal Protection by regulating potential future water users, but not existing water users. n106 Second, the opposition argued that the Rules also violated Equal Protection by regulating withdrawals from the confined aquifer, but not the unconfined aquifer. n107 The court found that rational bases supported both distinctions. n108 The different physical characteristics of the two aquifers rationally supported [\*253] the distinction between the confined and unconfined aquifer. n109 The fact that "there are fewer, if any, due process issues with regulating potential users who do not have any existing water rights as compared with those who have perfected a water right by actual beneficial use" rationally supported the different treatment afforded to new versus existing water users. n110 Therefore, the court found that both distinctions in the Rules and the underlying legislative mandates do not violate equal protection under either Constitution. n111

### V. CONCLUSION

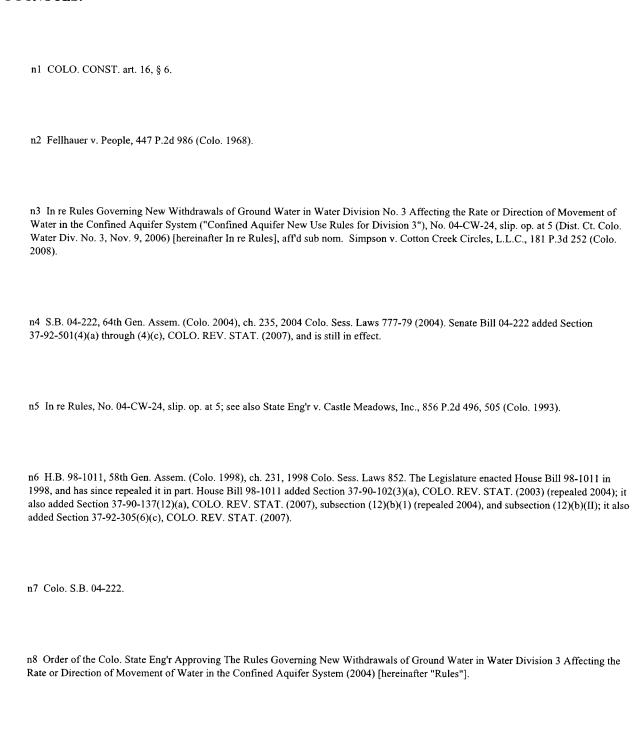
In this case, the Colorado Supreme Court made it clear that the General Assembly may properly require the state engineer to consider sustainable use principles when promulgating water rules, particularly in overappropriated water systems. Therefore, even in areas with agricultural economies, Colorado courts will likely uphold administrative rules that may result in little or no new water development, so long as these rules are constitutional, within the statutory power of the state engineer, and in accord with the principle of sustainable use.

## **Legal Topics:**

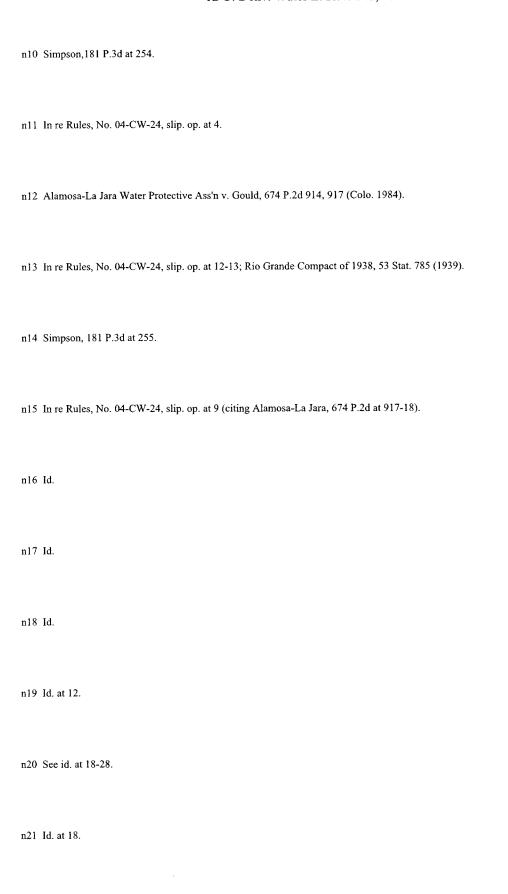
For related research and practice materials, see the following legal topics:
GovernmentsState & Territorial GovernmentsWater RightsReal Property LawWater RightsGroundwaterReal Property

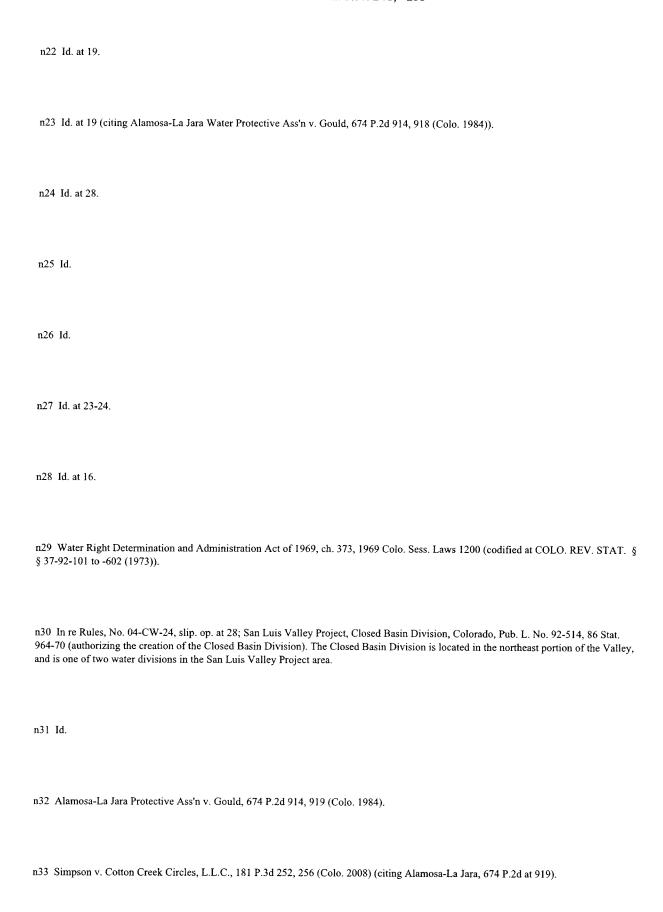
## LawWater RightsProcedure

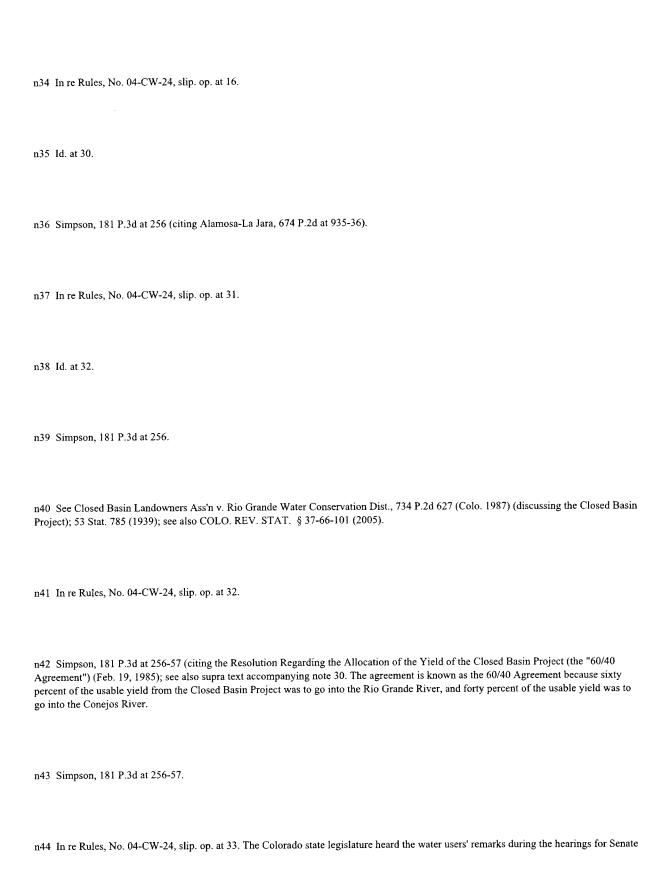
### FOOTNOTES:



n9 In re Rules, No. 04-CW-24, slip. op., aff'd, Simpson, 181 P.3d 252.



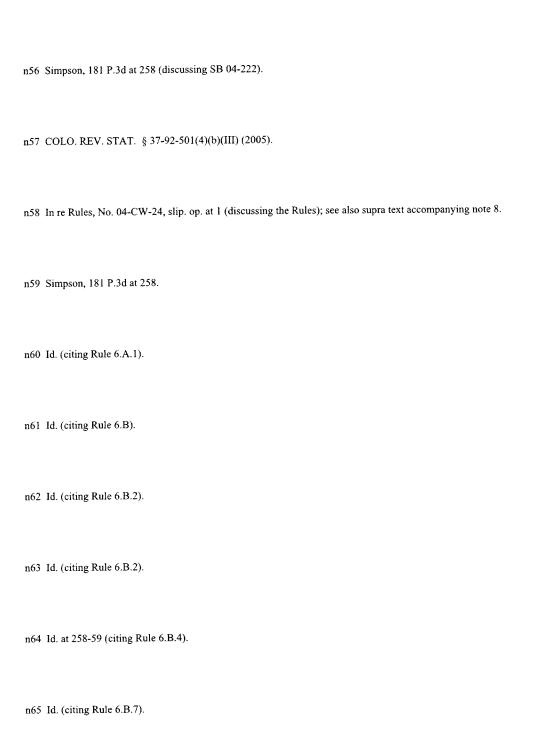


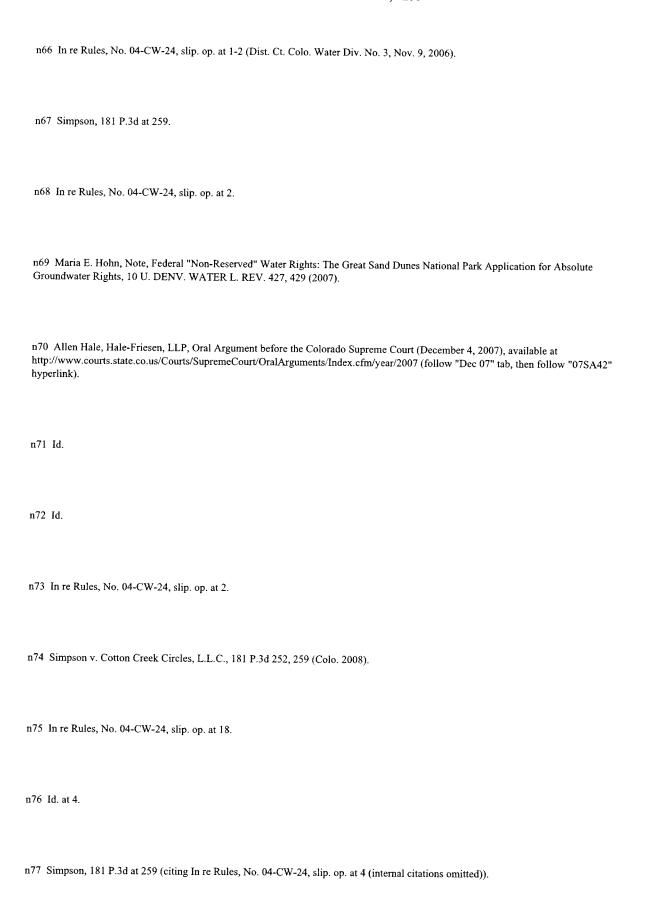


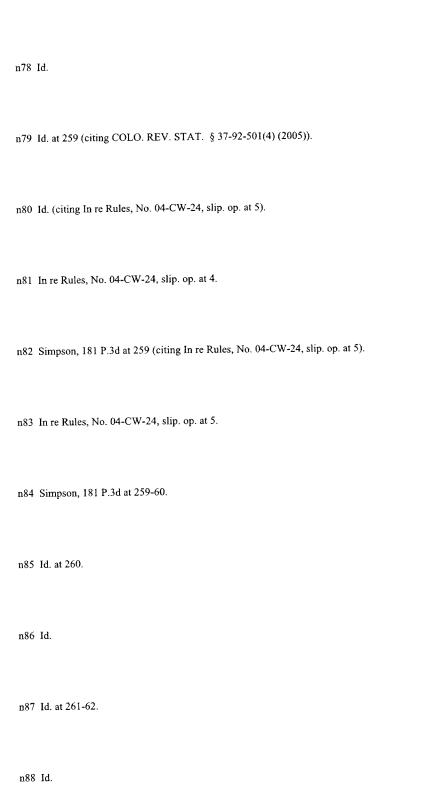
Bill 04-222. See also Simpson, 181 P.3d 257 n.6. n45 See generally Simpson, 181 P.3d at 257. n46 H.B. 98-1011, 58th Gen. Assem. (Colo. 1998), ch. 231, 1998 Colo. Sess. Laws 852. n47 In re Rules, No. 04-CW-24, slip. op. at 40 (citing COLO. REV. STAT. § 37-90-102(3)(a) (2005)). n48 Simpson, 181 P.3d at 257 (citing COLO. REV. STAT. § 37-90-137(12)(b)(I) (2003) (repealed 2004)). n49 Id. at 257 (citing COLO. REV. STAT. § 37-90-102(3)(a) (2003) (repealed 2004)). n50 In re Rules, No. 04-CW-24, slip. op. at 40 (discussing HB 98-1011). n51 Id. (quoting COLO. REV. STAT. § 37-90-305(6)(c) (2005)). n52 Simpson, 181 P.3d at 257 (citing COLO. REV. STAT. § 37-90-137(12)(b)(I) (repealed 2004)); see also In re Rules, No. 04-CW-24, slip. op. at 41. n53 In re Rules, No. 04-CW-24, slip. op. at 41. n54 Simpson, 181 P.3d at 257.

n55 S.B. 04-222, 64th Gen. Assem. (Colo. 2004), ch. 235, 2004 Colo. Sess. Laws 777-79 (2004), discussed in Simpson, 181 P.3d at 258; see also In re Rules, No. 04-CW-24, slip. op. at 41. In its opinion, the trial court stated:

"If Fellhauer v. People, 167 Colo. 320, 447 P.2d 986 (1968) opened the curtain on 'the new drama of maximum utilization and how constitutionally that doctrine can be integrated into the law of vested rights,' the 1969 Water Right Determination and Administration Act would represent the 'second act' of administration and creative augmentation. SB 04-222 begins the 'third act' with a guiding principle that an optimum or maximum use must be sustainable." In re Rules, No. 04-CW-24, slip. op. at 5 (citation omitted).









n101 Alamosa-La Jara, 674 P.2d at 931.	
n102 Simpson, 181 P.3d at 263.	
n103 Id. at 263.	
n104 Id.	
n105 Id. at 263-64.	
n106 Id. at 263.	
n107 Id.	
n108 Id. at 264.	
n109 Id. n110 Id. at 264.	
n110 Id. at 204.	
1111 10.	