

# Uncertainty Below: A Deeper Look Into California’s Groundwater Law

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*California groundwater pumpers have relied solely on the courts to enforce their water rights for over a century. However, in 2015, California enacted new groundwater legislation, creating a comprehensive framework for sustainably managing the state’s groundwater resources. While the new law seeks merely to enforce rather than alter existing groundwater rights, such sudden and sweeping regulation will likely lead to water right takings litigation.*

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## I. INTRODUCTION

Water law is a system of rules that regulate the use and quality of both surface water and groundwater.<sup>1</sup> Unlike ownership rights in real property law, water law is primarily focused on usufructuary rights, which grant the right to *use* a resource or other property.<sup>2</sup> A water right is a usufructuary right that is often subject to limitations and conditions.<sup>3</sup> For example, a water right holder does not actually own water in a stream, but instead has a right to use the water.<sup>4</sup>

While water itself is a simple substance, the law regulating it is often a complex collection of legal principles that attempt to balance private property rights, public ownership, environmental protection, and—in some cases—foreign relations.<sup>5</sup> The level of water regulation and the legal doctrines employed vary by state; however, regional similarities do exist.<sup>6</sup>

The governance of surface water and groundwater use is primarily a matter of state law.<sup>7</sup> Some states manage surface water independently from groundwater, while others—recognizing the interconnectedness of surface water levels and groundwater levels—manage the two conjunctively.<sup>8</sup>

This Article offers a detailed analysis of the evolution of groundwater law in California. Despite the state’s widespread reputation for progressive and innovative environmental regulations,<sup>9</sup> groundwater in California remained largely unregulated until the recent passage of three bills, collectively known as the Sustainable Groundwater Management Act of 2014 (hereinafter the “SGMA”).<sup>10</sup> California’s slow progression in groundwater management may

<sup>1</sup> See generally ROBERT W. ADLER, ROBIN K. CRAIG & NOAH D. HALL, MODERN WATER LAW: PRIVATE PROPERTY, PUBLIC RIGHTS, AND ENVIRONMENTAL PROTECTIONS 1 (2013).

<sup>2</sup> *Id.*

<sup>3</sup> *Id.* at 23.

<sup>4</sup> See *id.* at 1.

<sup>5</sup> See *id.*

<sup>6</sup> See *id.* at 173.

<sup>7</sup> See *id.* at 178.

<sup>8</sup> See, e.g., TEX. WATER CODE §§ 11.001-11.561 and §§ 36.001-36.419; UTAH CODE § 73-1-1.

<sup>9</sup> See, e.g., California, EARTH INNOVATION INST., <http://www.earthinnovation.org> (last visited Nov. 28, 2015) (describing California as a “leader in progressive environmental policies”).

<sup>10</sup> 2014 Cal. Legis. Serv. Ch. 346 (West) (S.B. 1168, Pavley) (codified at scattered sections of CAL. WATER CODE); 2014 Cal. Legis. Serv. Ch. 347 (West) (A.B. 1739, Dickinson) (codified at scattered sections of CAL. GOV. & WATER CODE); 2014 Cal. Legis. Serv. Ch. 348 (West) (S.B. 1319,

seem surprising, given its dependence on the resource.<sup>11</sup> With the largest economy in the United States<sup>12</sup> and the eighth largest economy in the world,<sup>13</sup> California is undeniably reliant on its water resources to keep the economic engine running at full throttle.<sup>14</sup> In fact, California withdraws over 10 billion gallons of fresh groundwater per day—the highest withdrawal rate of fresh groundwater in the U.S.<sup>15</sup> Studies show that groundwater makes up 38 percent of California’s total water supply during years of average rainfall and up to 46 percent during years of drought.<sup>16</sup>

This Article will begin by exploring the common-law roots that formed the basis of California’s groundwater law, the subsequent modifications to the common-law, and the legislative and administrative attempts to statutorily regulate or manage groundwater use. Part III will provide an in-depth analysis of the SGMA. Finally, Part IV will explore the issue of whether the SGMA creates constitutional takings claims. This Article concludes that (1) the SGMA provides state and local agencies with the authority to enforce the state’s longstanding correlative rights doctrine; (2) courts will likely analyze takings claims under the *Penn Central* regulatory rubric; (3) plaintiffs may find more success in the federal court system, but both state and federal courts should limit the compensable property interest in a California groundwater right to reasonable-beneficial use and a correlative share; and (4) claimants with contract-based water rights may, alternatively, seek compensation under principles of contract law.

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Pavley) (codified at CAL. WATER CODE §§ 10735.2, 10735.8) [collectively, hereinafter the “Sustainable Groundwater Management Act” or “SGMA”]; *see also Legislation*, CAL. DEP’T OF WATER RES., <http://www.water.ca.gov/cagroundwater/legislation.cfm> (last visited Nov. 10, 2015).

<sup>11</sup> Groundwater supplies California with thirty-eight percent of its total water supply, while groundwater may comprise up to forty-six percent during dry years or drought. *Groundwater*, CAL. DEP’T OF WATER RES. (March 2015), <http://www.water.ca.gov/groundwater/>.

<sup>12</sup> BUREAU OF ECON. ANALYSIS, U.S. DEP’T OF COM., BEA 15-25, BROAD GROWTH ACROSS STATES IN 2014 (June 2015), [http://www.bea.gov/newsreleases/regional/gdp\\_state/2015/pdf/gsp0615.pdf](http://www.bea.gov/newsreleases/regional/gdp_state/2015/pdf/gsp0615.pdf).

<sup>13</sup> CTR. FOR CONTINUING STUDY OF THE CAL. ECON., CALIFORNIA REMAINS THE WORLD’S 8TH LARGEST ECONOMY (July 2015), <http://www.ccsce.com/PDF/Numbers-July-2015-CA-Economy-Rankings-2014.pdf>.

<sup>14</sup> *See generally* ELLEN HANAK ET AL., PUBLIC POL’Y INST. OF CAL., WATER AND THE CALIFORNIA ECONOMY (2012), [http://www.ppic.org/content/pubs/report/R\\_512EHR.pdf](http://www.ppic.org/content/pubs/report/R_512EHR.pdf); *see also* MOLLY A. MAUPIN ET AL., U.S. GEOLOGICAL SURVEY, USGS CIRCULAR 1405, ESTIMATED USE OF WATER IN THE UNITED STATES IN 2010 (March 2015), <http://pubs.usgs.gov/circ/1405/>.

<sup>15</sup> *Id.*

<sup>16</sup> *Groundwater*, CAL. DEP’T OF WATER RES. (March 2015), <http://www.water.ca.gov/groundwater/>.

## II. THE DEVELOPMENT OF GROUNDWATER LAW IN CALIFORNIA

### A. California's Dual Surface Water System

Before delving into the details of California's groundwater law, it is necessary to have a basic understanding of two surface water doctrines, riparian law and prior appropriation, along with the history and development of those doctrines in California. California integrated aspects of both doctrines into its groundwater law.<sup>17</sup>

When California entered the Union in 1850, it uniformly adopted English common law as the foundation of its legal system.<sup>18</sup> As part of this common-law system, riparian rights served as a primary surface water doctrine for the state of California.<sup>19</sup> Under the riparian rights doctrine, a landowner whose property borders a waterbody (a "riparian") is entitled to make use of the natural flow "unimpaired in quality and undiminished in quantity" on his or her riparian parcel.<sup>20</sup> The doctrine does not permit the use of water on non-riparian lands (i.e., parcels of land that do not abut a waterbody).<sup>21</sup> Each riparian's rights are equal among other riparians along the same waterbody, and the right is appurtenant to the land.<sup>22</sup>

Because riparian rights apply only to landowners, these common-law principles had no application to the miners who began settling California in the late 1840s.<sup>23</sup> The miners were trespassing on government land and thus were not entitled to riparian rights.<sup>24</sup> Consequently, the miners developed a different system, known as "appropriative rights" or "prior appropriation," to protect their working claims to water for mining.<sup>25</sup> Miners established appropriative rights by posting notice of their use and asserting ownership through the principle of "first in time, first in right."<sup>26</sup> The system allowed later miners to divert water so long as there was enough surface water to meet the needs of the earlier appropriators.<sup>27</sup> Indeed, as the name implies, prior appropriation is a hierarchal system of priority where

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<sup>17</sup> See generally *Katz v. Walkinshaw (Katz II)*, 74 P. 766 (Cal. 1903).

<sup>18</sup> *Pleasant Valley Canal Co. v. Borror*, 61 Cal. App. 4th 742, 751 (1998) ("Among its first acts, the Legislature declared that the common law of England should become the rule of decision in the courts...").

<sup>19</sup> *Id.*

<sup>20</sup> *Lux v. Haggin*, 69 Cal. 255, 259 (1886); see also ADLER ET AL., *supra* note 1, at 23.

<sup>21</sup> *Pabst v. Finmand*, 190 Cal. 124, 129 (1922).

<sup>22</sup> *United States v. State Water Res. Control Bd.*, 182 Cal. App. 3d 82, 104 (1986).

<sup>23</sup> *Pleasant Valley*, 61 Cal. App. 4th at 751.

<sup>24</sup> *Id.*

<sup>25</sup> *Id.*

<sup>26</sup> *The Water Rights Process*, CAL. ST. WATER RES. CONTROL BD. (March 2015), [http://www.waterboards.ca.gov/waterrights/board\\_info/water\\_rights\\_process.shtml](http://www.waterboards.ca.gov/waterrights/board_info/water_rights_process.shtml).

<sup>27</sup> See *id.*

senior (earlier) appropriators hold greater rights than junior (later) appropriators.<sup>28</sup> Prior to the inclusion of Article X, Section 2 of the California Constitution in 1928, prior appropriation was distinguishable from the common-law riparian doctrine in two critical ways.<sup>29</sup> First, appropriators were required to put all water diverted to beneficial use.<sup>30</sup> Second, appropriators could divert water for use on non-riparian lands.<sup>31</sup>

In 1851, California half-heartedly recognized appropriative rights, declaring prior appropriation the rule of law—when not in conflict with federal or state law—to resolve disputes among miners.<sup>32</sup> In 1872, the California legislature codified prior appropriation and set forth procedures (now embodied in California Civil Code sections 1414-1420) for obtaining appropriative rights that could withstand judicial scrutiny; the state did not administer the appropriative rights.<sup>33</sup> However, section 1414 limited the extent of appropriative law in California, stating that, “[a]s between appropriators, the one first in time is the first in right.”<sup>34</sup>

The issue of whether California followed appropriative law, riparian law, or both was ripe for a judicial determination. This question was painstakingly answered in *Lux v. Haggin*.<sup>35</sup> After nearly 200 pages of reasoning, the Supreme Court of California held that both prior appropriation and the common-law riparian doctrine governed the state’s surface waters.<sup>36</sup>

#### B. California’s Percolating Groundwater and the Rule of Capture

Development of California’s groundwater law took a backseat to the state’s focus on surface water rights. Although regarded as dictum, the Supreme Court of California first addressed groundwater rights in *Hanson v. McCue*.<sup>37</sup> In that case, the Court recognized the state’s common-law scheme by proclaiming a rule similar to the English “rule of capture” as the law for resolving groundwater disputes.<sup>38</sup> Originally established in England, the “rule of capture” allows an overlying landowner to pump groundwater freely for any use (overlying or non-overlying) without liability for any injury caused by withdrawal.<sup>39</sup> Unlike the

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<sup>28</sup> *Id.*

<sup>29</sup> *Id.*

<sup>30</sup> *Id.*

<sup>31</sup> ADLER ET AL., *supra* note 1, at 88.

<sup>32</sup> *Pleasant Valley Canal Co. v. Borrer*, 61 Cal. App. 4th 742, 752 (providing historical perspective).

<sup>33</sup> CAL. CIV. CODE §§ 1414-20 (2015).

<sup>34</sup> CAL. CIV. CODE § 1414 (2015).

<sup>35</sup> 69 Cal. 255 (1886).

<sup>36</sup> *See id.* at 384.

<sup>37</sup> *Katz v. Walkinshaw (Katz II)*, 74 P. 766, 769-70 (Cal. 1903) (discussing *Hanson v. McCue*, 42 Cal. 303 (1871)).

<sup>38</sup> *See Hanson v. McCue*, 42 Cal. 303, 306-10 (1871).

<sup>39</sup> ADLER ET AL., *supra* note 1, at 179 (citing *Acton v. Blundell*, (1843) 152 Eng. Rep. 1223 (Ex.

original “rule of capture,” the *Hanson* court’s application differed in a few respects.<sup>40</sup> First, the court made a legal distinction between percolating groundwater and subterranean water with a natural channel or outlet.<sup>41</sup> In doing so, the court held that percolating groundwater is subject to the “rule of capture,” whereas subterranean groundwater is subject to the state’s surface water laws.<sup>42</sup> Second, those pumping groundwater maliciously—with the intent to wantonly harm or deprive others of groundwater flow—are not immune from liability.<sup>43</sup> Over 20 years later, in *Southern Pacific Railroad Company v. Dufour*,<sup>44</sup> the Supreme Court of California revisited and approved the dictum articulated in *Hanson*.<sup>45</sup>

### C. Distinguishing Percolating Groundwater from Subterranean Streams

Because the state Supreme Court distinguished percolating groundwater from subterranean streams,<sup>46</sup> California courts faced the arduous task of defining each groundwater class. In *Cross v. Kitts* (1886),<sup>47</sup> the California Supreme Court provided some clarification, stating that, “[w]here percolating waters collect or are gathered in a stream running in a defined channel, no distinction exists between waters so running under the surface or upon the surface of the land.”<sup>48</sup> In *Wolfskill v. Smith*, the California Court of Appeal attempted to differentiate the two classes of groundwater, explaining that percolating groundwater is “[w]ater passing through the soil, not in a stream, but by way of filtration, is not distinctive from the soil itself; the water forms one of its component parts.”<sup>49</sup>

Over a century later, the state remained committed to the separate classifications, but still struggled to define them.<sup>50</sup> Perhaps the most thorough and helpful discussion came from the California Court of Appeal in 2006.<sup>51</sup> In *North Gualala Water Company v. State Water Resources Control Board*, the court found that a subterranean stream exists if: (1) a subsurface channel is present; (2) the

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Ch.), 12 Mees. & W. 324).

<sup>40</sup> See *Hanson*, 42 Cal. at 308.

<sup>41</sup> *Id.*

<sup>42</sup> *Id.* at 309.

<sup>43</sup> *Id.*

<sup>44</sup> 95 Cal. 615 (1892).

<sup>45</sup> *Id.* at 617-18, 620; see also *Katz v. Walkinshaw (Katz II)*, 74 P. 766, 769-70 (Cal. 1903) (indicating that while *Dufour* approved the dictum in *Hanson*, the cumulative case law was unclear and contradictory).

<sup>46</sup> *Dufour*, 95 Cal. at 618.

<sup>47</sup> *Cross v. Kitts*, 69 Cal. 217 (1886).

<sup>48</sup> *Id.* at 222.

<sup>49</sup> 5 Cal. App. 175, 181 (1907).

<sup>50</sup> See *N. Gualala Water Co. v. State Water Res. Control Bd.*, 139 Cal. App. 4th 1577, 1590-91 (2006).

<sup>51</sup> *Id.*

channel has a relatively impermeable bed and banks; (3) the course of the channel is known or capable of being determined by reasonable inference; and (4) groundwater is flowing in the channel.<sup>52</sup>

*D. California's Departure from the Rule of Capture*

Over time, the rule of capture lost popularity as inequitable outcomes persisted in groundwater disputes.<sup>53</sup> For example, in *Gould v. Eaton*, a downslope landowner sought judicial relief after an upslope landowner's diversion of percolating groundwater caused his springs to run dry.<sup>54</sup> The downslope landowner made use of the spring water before the upslope landowner constructed the diversion.<sup>55</sup> Notwithstanding the plaintiff's earlier use of the groundwater, the Supreme Court of California concluded that the upslope defendant holds "exclusive dominion" over the percolating groundwater, even if the diversion destroys the benefits previously enjoyed by an adjacent landowner.<sup>56</sup> Shortly thereafter, in *Katz v. Walkinshaw*, the Supreme Court of California (on rehearing) reassessed the appropriateness of the capture doctrine in light of the state's arid climate and growing population.<sup>57</sup>

The *Katz* litigation arose when an overlying landowner brought suit alleging that a neighbor dried up his well by over-pumping the artesian belt (percolating groundwater).<sup>58</sup> The overlying landowner's well flowed freely for many years, providing him with water for both domestic and agricultural use on his overlying land.<sup>59</sup> The defendant, on the other hand, pumped and sold the water for use on lands outside of the groundwater basin.<sup>60</sup> Based on these facts, the material question in the case was whether California should continue applying the rule of capture.<sup>61</sup>

The *Katz* court first set the stage for change in California's groundwater law by asserting its authority to change the state's common-law rules.<sup>62</sup> The court reasoned that:

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<sup>52</sup> *Id.* at 1585-86, 1606.

<sup>53</sup> See generally *Katz v. Walkinshaw (Katz II)*, 74 P. 766, 769-72 (Cal. 1903) (discussing the difficulties of an equitable rule for groundwater).

<sup>54</sup> 111 Cal. 639, 641-43 (1896).

<sup>55</sup> *Id.*

<sup>56</sup> *Id.* at 645.

<sup>57</sup> *Katz II*, 74 P. at 767-69.

<sup>58</sup> *Katz v. Walkinshaw (Katz I)*, 70 P. 663, 664 (Cal. 1902).

<sup>59</sup> *Id.*

<sup>60</sup> *Id.*

<sup>61</sup> *Id.* at 664-65.

<sup>62</sup> *Katz II*, 74 P. at 767-68.

[w]henever it is found that, owing physical features and character of this state, and the peculiarities of its climate, soil and productions, the application of a given common-law rule by our courts tends constantly to cause injustice and wrong, rather than the administration of justice and right, then the fundamental principles of right and justice . . . requires that a different rule should be adopted . . . .<sup>63</sup>

Ultimately, the *Katz* court abrogated the capture doctrine in order to protect the state's limited groundwater resources.<sup>64</sup>

As a substitute for the common-law rule of capture, the court announced a new doctrine for percolating groundwater, commonly referred to as the “doctrine of correlative rights” or “California correlative doctrine.”<sup>65</sup> Like California's surface water scheme, the correlative rights doctrine is a dual water rights system that utilizes concepts of both riparian rights and prior appropriation.<sup>66</sup>

The correlative rights doctrine is similar to the riparian doctrine because it treats an overlying groundwater user like a riparian user.<sup>67</sup> In particular, it allows groundwater users to pump water from land overlying an aquifer if the water is put to “some useful purpose,”<sup>68</sup> with priority being equal among all overlying users.<sup>69</sup> In times of shortage, overlying landowners reduce their share of groundwater in proportion to their surface land shares (correlative shares).<sup>70</sup> “Overlying use” refers to the use of water in the basin from which the groundwater is pumped.<sup>71</sup>

This doctrine also incorporates concepts of prior appropriation by allowing non-overlying users to appropriate groundwater when there is a water surplus.<sup>72</sup> Put differently, if a surplus of water exists beyond the needs of the overlying users, the law permits the use of surplus water on non-overlying lands under the rules of prior appropriation.<sup>73</sup> Thus, it makes sense that the term “appropriator” is used interchangeably by California courts “[t]o refer to any taking of water for other than riparian or overlying uses.”<sup>74</sup>

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<sup>63</sup> *Id.*

<sup>64</sup> *Id.* at 772.

<sup>65</sup> *See id.*

<sup>66</sup> ADLER ET AL., *supra* note 1, at 189.

<sup>67</sup> *See, e.g., Hillside Water Co. v. City of Los Angeles*, 10 Cal. 2d 677, 686 (1938); *Miller v. Bay Cities Water Co.*, 157 Cal. 256, 279-80 (1910).

<sup>68</sup> *Katz II*, 74 P. at 770.

<sup>69</sup> *Id.* at 772.

<sup>70</sup> *Id.*

<sup>71</sup> *See id.*

<sup>72</sup> *Id.*

<sup>73</sup> *Id.*; *see also City of Los Angeles v. City of San Fernando*, 14 Cal. 3d 199, 277 (1975) (explaining that a surplus exists when the amount of water being extracted is less than the maximum that could be withdrawn without adverse effects to a basin's long term supply).

<sup>74</sup> *See City of Pasadena v. City of Alhambra*, 33 Cal. 2d 908, 925 (1949) (en banc) (internal



The *Katz* court narrowly addressed the rights of an overlying landowner whose use predates that of an appropriator, holding that the former possesses superior rights.<sup>75</sup> Nevertheless, an issue remained: Who prevails when an appropriator's groundwater use antecedes an overlying use? The California Supreme Court answered that question in *Burr v. Maclay Rancho Water Company* (1908),<sup>76</sup> in which an overlying landowner sought to enjoin an appropriator from pumping after the landowner's well went dry.<sup>77</sup> The overlying landowner irrigated only one of three separate parcels that he owned; however, the landowner also claimed the right to irrigate the other two parcels in the future.<sup>78</sup> Finding in favor of the plaintiff, the Court held that an overlying owner cannot lose priority or use rights on his tract of land as a result of non-use—another parallel to riparianism.<sup>79</sup>

The *Katz* and *Burr* holdings revealed three important rules governing the correlative rights doctrine. First, it is clear that the doctrine grants greater rights to overlying users than it does to appropriators, irrespective of time of use.<sup>80</sup> Second, the distinction between an overlying use and non-overlying use can be a dispositive issue.<sup>81</sup> Third, the doctrine relaxes the standard of “reasonable use” for overlying users as compared to appropriators.<sup>82</sup> In *City of San Bernardino v. City of Riverside*,<sup>83</sup> the Supreme Court of California opined, “[o]verlying [users] may take such water on his own land for any beneficial use thereon, so long as such taking works no unreasonable injury to other land overlying such waters . . . .”<sup>84</sup> It follows that an overlying pumper must use water reasonably in consideration of other overlying owners and owes no such duty of reasonableness to appropriators.<sup>85</sup>

The holding in *Herminghaus v. Southern California Edison Company*<sup>86</sup> bolsters this proposition.<sup>87</sup> The facts of that case are relatively straightforward. A riparian owner along the San Joaquin River sought to enjoin an upstream appropriator

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citations omitted).

<sup>75</sup> *Burr v. Maclay Rancho Water Co.*, 154 Cal. 428, 435 (1908).

<sup>76</sup> *Id.*

<sup>77</sup> *Id.* at 430.

<sup>78</sup> *Id.* at 431.

<sup>79</sup> *Id.* at 436; *Peabody v. City of Vallejo*, 2 Cal. 2d 351, 374-75 (1935); *Wright v. Goleta Water Dist.*, 174 Cal. App. 3d 74, 87 (1985) (holding that in a groundwater adjudication, the superior court is not authorized to subordinate the priority of an unexercised overlying water right to a present appropriative use).

<sup>80</sup> *Katz v. Walkinshaw (Katz II)*, 74 P. 766, 772 (1903); *Burr*, 154 Cal. at 436.

<sup>81</sup> *See Katz II*, 74 P. at 772; *Burr*, 154 Cal. at 436.

<sup>82</sup> *See Katz II*, 74 P. at 772; *Burr*, 154 Cal. at 436.

<sup>83</sup> *City of San Bernardino v. City of Riverside*, 186 Cal. 7, 15 (1921).

<sup>84</sup> *Id.* at 15.

<sup>85</sup> *See id.*

<sup>86</sup> *Herminghaus v. S. Cal. Edison Co.*, 200 Cal. 81, 106 (1926).

<sup>87</sup> *Id.* at 106.

from actual and proposed diversions and impoundments.<sup>88</sup> The plaintiff riparian used the river's natural overflow to flood irrigate the lower portion of her land, which caused certain grasses to grow.<sup>89</sup> On the upper portions, the riparian irrigated by means of channels and sloughs and the seepage that resulted therefrom.<sup>90</sup> Such irrigation required water levels reached only at natural peak flow.<sup>91</sup> The upstream appropriators were planning to construct dams, reservoirs and other diversions that would alter the natural flow that was necessary to irrigate the plaintiff's land.<sup>92</sup> As a defense, the appropriators claimed that the riparian plaintiff's method of flood irrigation was wasteful and otherwise unreasonable.<sup>93</sup> The California Supreme Court held that: (1) the plaintiff's practice of flood irrigation was not wasteful or unreasonable; and (2) the requirement of reasonable use is applicable only as between riparians, and thus reasonable use does not limit riparian use against an appropriator.<sup>94</sup>

The *Herminghaus* case has been applied to groundwater despite its focus on surface water law.<sup>95</sup> Moreover, California courts consistently held that an overlying owner's right to groundwater is akin to a riparian right.<sup>96</sup>

#### E. Permitting for Some, Reasonable Use for All

In 1913, the California Conservation Commission released a report finding that the state's current regulatory scheme was inadequate either to protect the state's water resources or to resolve water rights disputes.<sup>97</sup> The report noted that:

[i]n California . . . water litigation has never settled the rights of any persons other than those parties to each suit. If, therefore, there be one hundred water right claimants on any stream, the rights of each of those claimants can never be finally settled until each claimant sues every other claimant, or until, by some such procedure as the proposed bill provides, the rights of all the claimants are, with-out any great expense to the claimant, examined into and declared by a commission representing them all.<sup>98</sup>

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<sup>88</sup> *Id.* at 86-87.

<sup>89</sup> *Id.*

<sup>90</sup> *Id.*

<sup>91</sup> *Id.* at 107.

<sup>92</sup> *Id.* at 86-87.

<sup>93</sup> *See id.* at 101.

<sup>94</sup> *Id.* at 100.

<sup>95</sup> *See, e.g.,* *Hillside Water Co. v. City of Los Angeles*, 10 Cal. 2d 677, 686 (1938); *Miller v. Bay Cities Water Co.*, 157 Cal. 256, 279-80 (1910).

<sup>96</sup> *Id.*

<sup>97</sup> *N. Gualala Water Co. v. State Water Res. Control Bd.*, 139 Cal. App. 4th 1577, 1591 (2006).

<sup>98</sup> *Report of the Commission*, CAL. CONSERV. COMM'N 1, 22 (January 1, 1913), <https://ia801309.us.archive.org/24/items/reportconservat00leegoog/reportconservat00leegoog.pdf>.

The state responded to the report and that same year passed controversial new legislation, the Water Commission Act (the “WCA”), which voters affirmed after it was put to a public referendum.<sup>99</sup> The WCA survived the referendum and became operative in 1914.<sup>100</sup> The WCA’s preamble states that it:

[c]reates [the] state water commission for control of appropriation and use of waters: defines rights in riparian and unappropriated waters; prescribes procedure for investigation of waters and water rights, appropriation thereof, apportionment of same between claimants, issuance of licenses, and revocation thereof; declares present rights of municipal corporations unaffected.<sup>101</sup>

In effect, the WCA created the state’s first water rights permitting system<sup>102</sup> and established the State Water Commission (now the State Water Resources Control Board) to carry out its programs.<sup>103</sup> However, the Act limited the scope of the State Water Commission’s authority by stating that “[w]henver the term stream, stream system, lake or other body of water or water occurs in this act, such term shall be interpreted to refer *only to surface water . . . and to subterranean and definite channels.*”<sup>104</sup> This language unambiguously precluded a permitting requirement for percolating groundwater.<sup>105</sup>

The WCA also set forth water quantity limits by use.<sup>106</sup> In relevant part, section 42 of the WCA reads, “[t]he term ‘useful or beneficial purposes’ as used in this act shall not be construed to mean the use in any one year of more than two and one half acre feet of water per acre in the irrigation of uncultivated areas of land not devoted to cultivated crops.”<sup>107</sup> In *Herminghaus*, decided more than a decade after passage of the WCA, the California Supreme Court addressed section 42 as applied to riparians.<sup>108</sup> The plaintiff riparian flood irrigated—in excess of the two and one-half acre foot limit—to grow grass along the banks of the San Joaquin River.<sup>109</sup> Concluding that the riparian’s irrigation practices were reasonable and not otherwise wasteful, the Court essentially declared that the common-law riparian doctrine (operative through the state’s constitution) controlled over the

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<sup>99</sup> *N. Gualala Water Co.*, 139 Cal. App. 4th at 1591.

<sup>100</sup> *Id.*

<sup>101</sup> Water Commission Act, Cal. Prop. 29, preamble (1914).

<sup>102</sup> *See id.* § 17.

<sup>103</sup> *Id.*

<sup>104</sup> *Id.* § 42 (emphasis added).

<sup>105</sup> *See id.*; *see also N. Gualala Water Co.*, 139 Cal. App. 4th at 1591 (finding that the Water Commission’s authority was limited to surface waters, with an exception for subterranean streams).

<sup>106</sup> Water Commission Act, Cal. Prop 29, § 42 (1914).

<sup>107</sup> *Id.*

<sup>108</sup> *See Herminghaus v. S. Cal. Edison Co.*, 200 Cal. 81, 115-16 (1926).

<sup>109</sup> *Id.* at 86-87.

WCA’s statutory mandates.<sup>110</sup>

Arguably prompted by the holding in *Herminghaus*, the legislature drafted a constitutional amendment to overcome the state constitution’s blockade on reasonable use.<sup>111</sup> California voters approved the amendment in 1928, thereby establishing that:

[t]he right to water or to the use or flow of water in or from any natural stream or watercourse in this State is and shall be limited to such water as shall be reasonably required for the beneficial use to be served, and such right does not and shall not extend to the waste or unreasonable use or unreasonable method of use or unreasonable method of diversion of water. Riparian rights in a stream or watercourse attach to, but to no more than so much of the flow thereof as may be required or used consistently with this section, for the purposes for which such lands are, or may be made adaptable, in view of such reasonable and beneficial uses.<sup>112</sup>

While the 1928 constitutional amendment clearly subjected riparian rights to a reasonable-beneficial use requirement, its application to groundwater was less clear.<sup>113</sup> In light of this ambiguity, the California Supreme Court, in *Peabody v. City of Vallejo*, held that the “rule of reasonable use . . . applies to all water rights enjoyed or asserted in this state, whether the same be grounded on the riparian right or the right, analogous to the riparian right, of the *overlying landowner, or the percolating water right, or the appropriative right.*”<sup>114</sup> In addition to determining whether the amendment applied to groundwater, the *Peabody* court answered another important issue: whether the amendment’s reasonable use requirement applies as between surface water use and groundwater use (percolating water), and if so, to what extent?<sup>115</sup>

California courts first addressed “reasonable use” between surface water and groundwater users in *Hudson v. Dailey*.<sup>116</sup> In *Hudson*, a riparian of San Jose Creek sought an injunction to prevent or limit the defendants’ groundwater pumping.<sup>117</sup> Claiming that the groundwater would percolate into San Jose Creek but for the defendants’ pumping, the plaintiff asserted right to such subsurface drainage as a riparian.<sup>118</sup> The court held that where:

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<sup>110</sup> *Id.* at 100.

<sup>111</sup> *See* CAL. CONST. art. X, § 2.

<sup>112</sup> *Id.*

<sup>113</sup> *Id.*

<sup>114</sup> 2 Cal. 2d 351, 383 (1935).

<sup>115</sup> *See id.* at 375.

<sup>116</sup> 156 Cal. 617, 620 (1909).

<sup>117</sup> *Id.*

<sup>118</sup> *Id.* at 621.

[t]he underground strata is in such immediate connection with the surface stream as to make it a part of the stream . . . then the defendants' lands overlying such water must be considered as also riparian to the stream, and . . . have common right with the plaintiff to the use of the water . . . and may each make a reasonable use upon the land so situated, taking it either from surface flow (if contiguous), or directly from the percolations beneath their lands.<sup>119</sup>

The *Hudson* holding applied only to the percolation of subsurface water that is so interconnected to a stream that it is considered a part of the stream itself.<sup>120</sup> The *Peabody* court, on the other hand, addressed the connection between surface water rights and percolating water in a different context.<sup>121</sup> In *Peabody*, riparians of Suisun Creek sought to enjoin the City of Vallejo, an appropriator, from storing waters of its tributary.<sup>122</sup> Some of the plaintiff riparians asserted the right to full flow of the stream to maintain underground water supplies.<sup>123</sup> The court, however, held that reasonable use for an overlying riparian does not include the right to the “[e]ntire flood and freshet flow of a stream to press a small amount of water into adjoining lands . . . .”<sup>124</sup> Nevertheless, the court went on to explain that the rights of overlying owners where there is either groundwater or a subterranean stream are greater than rights of an appropriator and protect against an unreasonable depletion by an appropriator.<sup>125</sup>

To summarize, the WCA and the 1928 constitutional amendment changed California water law in two significant ways. First, the requirement of reasonable-beneficial use now applied equally to riparian and appropriative rights and to groundwater and surface water.<sup>126</sup> Second, the state established its first water rights permitting system for surface water and subterranean streams.<sup>127</sup>

Absent statutory authority, however, the state still lacked a meaningful mechanism to track groundwater use and to enforce the “reasonable and beneficial use” requirements.<sup>128</sup> Accordingly, groundwater disputes remained within the sole province of the courts, thereby allowing an overlying landowner or groundwater appropriator to continue pumping freely unless a judicial decree

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<sup>119</sup> *Id.* at 626-28.

<sup>120</sup> *Id.*

<sup>121</sup> *See generally* *Peabody v. City of Vallejo*, 2 Cal. 2d 351 (1935).

<sup>122</sup> *Id.* at 359.

<sup>123</sup> *Id.* at 375.

<sup>124</sup> *Id.*

<sup>125</sup> *Id.*

<sup>126</sup> *Id.* at 374-76.

<sup>127</sup> Water Commission Act, Cal. Prop. 29, § 42 (1914); *N. Gualala Water Co. v. State Water Res. Control Bd.*, 139 Cal. App. 4th 1577, 1591 (2006).

<sup>128</sup> *See N. Gualala Water Co.*, 139 Cal. App. 4th at 1591.

stated otherwise.<sup>129</sup>

*F. Groundwater Basin Adjudications via the Common-law Approach*

California also manages its groundwater through basin adjudications.<sup>130</sup> Basin adjudications allow California courts to determine—in a single lawsuit—all groundwater rights (overlying and appropriative) within a basin.<sup>131</sup> In particular, the court decides: “(1) who the extractors are; (2) how much groundwater those well owners can extract; and (3) who the Watermaster will be to ensure that the basin is managed in accordance with the court’s decree.”<sup>132</sup> However, the superior court may not subordinate the priority of an unexercised overlying right to a presently exercised appropriative use.<sup>133</sup> California has 431 delineated groundwater basins within its boundaries.<sup>134</sup> Of these basins, twenty-four are divided into 108 subbasins.<sup>135</sup> None of these delineated basins were fully adjudicated until 1949, resolving the appeal from a 1944 trial court adjudication.<sup>136</sup>

Before 1949, groundwater disputes in California involved small groups within a basin.<sup>137</sup> Consequently, the cases established rights only among those individuals named in the action.<sup>138</sup> This trend in piecemeal litigation changed when the City of Pasadena initiated litigation in 1937 to determine all water rights within the Raymond Basin Area, which was in a state of overdraft.<sup>139</sup> It took seven years for the trial court to fully resolve and adjudicate the forty-square-mile area that covered the City of Sierra Madre, the majority of Pasadena, and sections of South Pasadena, San Marino, and Arcadia.<sup>140</sup>

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<sup>129</sup> *Id.*; see also CAL. WATER CODE § 2500 (2015).

<sup>130</sup> *Groundwater Management*, CAL. DEP’T OF WATER RES., [http://www.water.ca.gov/groundwater/groundwater\\_management.cfm](http://www.water.ca.gov/groundwater/groundwater_management.cfm) (last updated Nov. 26, 2014).

<sup>131</sup> *Id.*

<sup>132</sup> *Id.*

<sup>133</sup> *Wright v. Goleta Water Dist.*, 174 Cal. App. 3d 74, 87 (1985).

<sup>134</sup> *Groundwater: Bulletin 118*, CAL. DEP’T OF WATER RES., <http://www.water.ca.gov/groundwater/bulletin118/gwbasins.cfm> (last updated June 26, 2015).

<sup>135</sup> *Id.*

<sup>136</sup> See *Groundwater: Bulletin 118*, *supra* note 134 (stating that the first basin-wide groundwater adjudication was in the Raymond Basin); see also *City of Pasadena v. City of Alhambra*, 33 Cal. 2d 908 (1949). The actual adjudication (at the trial court level) was complete as of 1944; however, the matter was not fully resolved until 1949.

<sup>137</sup> See, e.g., *Burr v. Maclay Rancho Water Co.*, 154 Cal. 428 (1908) (resolving a groundwater dispute between an overlying owner and an appropriator).

<sup>138</sup> See, e.g., *id.*

<sup>139</sup> *City of Pasadena*, 33 Cal. 2d at 916.

<sup>140</sup> *Id.* at 921.

The court provided the following description of the basin:

In this part of the state there is ordinarily a series of wet years followed by a number of dry years, making it necessary during periods of above-normal rainfall to store water for future use. It appears, however, that the ground water storage capacity is adequate to store the excess during wet years for the following dry years.

Natural underground formations divide the area into two practically separate units. The Western Unit, the larger of the two, consists of the Monk Hill Basin, which is to the northwest, and the Pasadena Subarea. The Eastern Unit, or Santa Anita Sub-area, lies immediately to the east of the Pasadena Sub-area. At the present water table elevations movement of ground water from the Western to the Eastern Unit is so small as to be immaterial but it might be increased by an overdraft in the Eastern Unit. Movement from the Eastern to the Western Unit is almost totally lacking.<sup>141</sup>

Because groundwater basins—like the Raymond Basin Area described above—are complex geologic formations, the trial court appointed a “referee” to investigate and submit reports—namely, the Division of Water Resources (the “DWR”).<sup>142</sup> The DWR found that the basin had been in a state of overdraft since as early as 1913.<sup>143</sup>

In the process of determining how to apportion water use reduction among the overlying pumpers and appropriators, the California Supreme Court established the mutual prescription doctrine.<sup>144</sup> The court held that an appropriator could gain a prescriptive right if: (1) the water used is not surplus; (2) the use is actual, open and notorious; (3) the use is hostile and adverse to the original owner; (4) the use occurs for an uninterrupted and continuous period of five years; and (5) water is used under claim of right.<sup>145</sup> The court went on to explain that the overlying pumpers could also gain prescriptive rights against each other in the same manner.<sup>146</sup> After articulating the rules of the doctrine, the court found that both the overlying pumpers and appropriators—by pumping water for over five years in an over-drafted basin—had gained prescriptive rights against each other.<sup>147</sup> Having established equal priority and common rights among all water users, the

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<sup>141</sup> *Id.*

<sup>142</sup> *Id.* at 917.

<sup>143</sup> *Id.* at 929.

<sup>144</sup> *Id.* at 926, 933.

<sup>145</sup> *Id.* at 926-27.

<sup>146</sup> *Id.* at 933.

<sup>147</sup> *Id.*

court ordered a proportionate reduction in the amount of water that each party had taken during the statutory period.<sup>148</sup>

California courts followed the original doctrine of mutual prescription for several years; however, in *Tehachapi-Cummings County Water District v. Armstrong*, the California Court of Appeal declined to follow the water right quantification method articulated in *Pasadena*.<sup>149</sup> Instead, the Court of Appeal held that quantification is based on current reasonable-beneficial use.<sup>150</sup>

Shortly thereafter, the state Supreme Court modified the doctrine.<sup>151</sup> In *Los Angeles v. San Fernando*, the Court interpreted California Civil Code section 1007 to preclude the establishment of prescriptive rights against public entities.<sup>152</sup> California Civil Code section 1007 reads:

Occupancy for the period prescribed by the Code of Civil Procedure as sufficient to bar any action for the recovery of the property confers a title thereto, denominated a title by prescription, which is sufficient against all, but no possession by any person, firm or corporation no matter how long continued of any land, water, water right, easement, or other property whatsoever dedicated to a public use by a public utility, or dedicated to or owned by the state or any public entity, shall ever ripen into any title, interest or right against the owner thereof.<sup>153</sup>

The *Pasadena* case illustrates the cumbersome and difficult issues faced in groundwater basin adjudications. To date, California has fully adjudicated only 26 of its 431 basins.<sup>154</sup> The rest remain in a state of uncertainty, with a few exceptions.<sup>155</sup>

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<sup>148</sup> *Id.*

<sup>149</sup> *Tehachapi Cummings County Water Dist. v. Armstrong*, 49 Cal. App. 3d 992, 1000 (1975).

<sup>150</sup> *Id.*

<sup>151</sup> *See City of Los Angeles v. City of San Fernando*, 14 Cal. 3d 199, 274-75 (1974) (en banc).

<sup>152</sup> *Id.*

<sup>153</sup> CAL. CIV. CODE § 1007 (2015).

<sup>154</sup> *See* CAL. WATER CODE § 10720.8(a) (2015). The adjudicated basins are: Beaumont Basin, Brite Basin, Central Basin, Chino Basin, Cucamonga Basin, Cummings Basin, Goleta Basin, Lytle Basin, Main San Gabriel Basin, Mojave Basin Area, Puente Basin, Raymond Basin, Rialto-Colton Basin, Riverside Basin, San Bernardino Basin Area, San Jacinto Basin, Santa Margarita River Watershed, Santa Maria Valley Basin, Santa Paula Basin, Scott River Stream System, Seaside Basin, Six Basins, Tehachapi Basin, Upper Los Angeles River Area, Warren Valley Basin, and West Coast Basin. *Id.*

<sup>155</sup> *See* CAL. WATER CODE § 10720.8(b)-(d) (2015) (noting pending adjudication for basins in the Antelope Valley, Inyo County, and Los Osos).



*G. California's Legislative and Administrative Efforts*

California's groundwater (percolating) adjudications were strictly a common-law phenomenon, with one exception: groundwater quality.<sup>156</sup> The state's concern with water quality was first addressed in 1949, when the legislature passed the Dickey Water Pollution Act, which created the State Water Pollution Control Board (the "SWPCB").<sup>157</sup> The SWPCB established a statewide policy for water pollution control and worked in conjunction with state agencies to implement the state's pollution policy.<sup>158</sup>

In addition to the SWPCB, the legislature added California Water Code section 229, which required the Department of Public Works to "[i]nvestigate conditions of the quality of all waters within the state . . . ."<sup>159</sup> Pursuant to section 229, the Department of Public Works, along with the Division of Water Resources,<sup>160</sup> published a water quality report in 1952, entitled "Water Quality Investigations Report No. 3, Ground Water Basins."<sup>161</sup> Following the release of "Water Quality Investigations Report No. 3," in 1975 the California Department of Water Resources (the "DWR"), released Bulletin 118, which provided a technical summary of the state's groundwater and basins.<sup>162</sup> The DWR periodically updates Bulletin 118 as new information becomes available.<sup>163</sup>

As the trustee of all state waters, California took additional steps to protect the public's groundwater resources—namely by adding California Water Code section 2100 (1970).<sup>164</sup> Section 2100 vests the California State Water Resources Control Board (the "Board" or "SWRCB") with authority to initiate "an action in the superior court to restrict pumping, or to impose physical solutions, or both, to the extent necessary to prevent destruction of or irreparable injury to the quality of such water."<sup>165</sup>

In 1978, the legislature added California Water Code section 12924 to order the collection of statewide groundwater data.<sup>166</sup> Section 12924 directed the DWR, "in conjunction with other public agencies, [to] conduct an investigation of the state's

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<sup>156</sup> See CAL. WATER CODE § 2100 (2015).

<sup>157</sup> See *History of the Water Boards*, CAL. ST. WATER RES. CONTROL BD., [http://www.swrcb.ca.gov/about\\_us/water\\_boards\\_structure/history\\_water\\_pollution.shtml](http://www.swrcb.ca.gov/about_us/water_boards_structure/history_water_pollution.shtml) (last updated Sept. 20, 2011).

<sup>158</sup> *Id.*

<sup>159</sup> CAL. WATER CODE § 229 (2015).

<sup>160</sup> The Division of Water Resources was the predecessor of the Department of Water Resources. *History of Bulletin 118*, CAL. DEP'T WATER RES., <http://water.ca.gov/groundwater/bulletin118/b118history.cfm> (last updated Jan. 15, 2015).

<sup>161</sup> *Id.*

<sup>162</sup> *Id.*

<sup>163</sup> See *id.*

<sup>164</sup> CAL. WATER CODE § 2100 (2015).

<sup>165</sup> *Id.*

<sup>166</sup> *California's Groundwater: Bulletin 118*, CAL. DEP'T OF WATER RES., <http://www.water.ca.gov/groundwater/bulletin118/b118history.cfm> (last updated Jan. 1, 2015)

groundwater basins.”<sup>167</sup> In carrying out the study, the DWR was required to identify groundwater basins and collect data to determine which basins were “subject to critical conditions of overdraft.”<sup>168</sup>

In 1992, the legislature enacted Assembly Bill 3030, the Groundwater Management Act (the “GMA”).<sup>169</sup> The GMA provided a voluntary procedure for “existing local agencies”—formed either by statute or by local government’s inherent police power—to follow in developing groundwater plans.<sup>170</sup> The GMA also vested these agencies with the powers of a water replenishment district.<sup>171</sup> Such power allows an existing agency to raise revenue to pay for basin management expenses.<sup>172</sup> Ten years later, in 2002, the legislature revised the GMA through Senate Bill 1938, requiring only a handful of additional procedures for implementing groundwater plans if the agency wished to obtain DWR grant funding.<sup>173</sup>

In 2009, the state passed SBx7-6, the California Statewide Groundwater Elevation Monitoring Act (“CASGEM”).<sup>174</sup> CASGEM required the DWR to prioritize California’s groundwater basins and subbasins and to develop groundwater basin assessments.<sup>175</sup> To complete such a major undertaking, the law encouraged the formation of “voluntary cooperative groundwater monitoring association[s]. . . for the purposes of monitoring groundwater elevations.”<sup>176</sup> The law incentivized the formation of these voluntary monitoring associations by premising eligibility for state water grants and loans on their formation.<sup>177</sup> CASGEM enumerated the following prioritization criteria:

1. The population overlying the basin or subbasin.
2. The rate of current and projected growth of the population overlying the basin or subbasin.
3. The number of public supply wells that draw from the basin or subbasin.
4. The total number of wells that draw from the basin or subbasin.
5. The irrigated acreage overlying the basin or subbasin.

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<sup>167</sup> *Id.*

<sup>168</sup> *Id.*

<sup>169</sup> 1992 Cal. Legis. Serv. Ch. 947 (West) (A.B. 3030).

<sup>170</sup> *Id.*

<sup>171</sup> *Id.*

<sup>172</sup> *Id.*

<sup>173</sup> 2002 Cal. Legis. Serv. Ch. 603 (West) (S.B. 1938).

<sup>174</sup> 2009 Cal. Legis. Serv. 7th Ex. Sess. Ch. 1 (West) (S.B. 6) (“SBx7-6” or “CASGEM”).

<sup>175</sup> *Id.* §§ 10933, 12924.

<sup>176</sup> *Id.* § 10935(a).

<sup>177</sup> *Id.* §§ 10933.5, 10933.7 (requiring groundwater monitoring by DWR if no voluntary entity has agreed to do so, but removing grant/loan eligibility for any basin for which DWR performs the monitoring).

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6. The degree to which persons overlying the basin or subbasin rely on groundwater as their primary source of water.
7. Any documented impacts on the groundwater within the basin or subbasin, including overdraft, subsidence, saline intrusion, and other water quality degradation.
8. Any other information determined to be relevant by the department.<sup>178</sup>

Based on these criteria, the DWR finalized its “Basin Prioritization” in June 2014.<sup>179</sup> The study showed that 127 of California’s groundwater basins and subbasins are either High or Medium priority and that those basins—located primarily throughout the Sacramento and San Joaquin Valleys—account for ninety-six percent of the state’s groundwater withdrawals.<sup>180</sup> The remaining basins are either Low or Very Low priority.<sup>181</sup> The 2014 Basin Prioritization underscored the extent of groundwater overdraft in California and ultimately set the stage for legislative reform.<sup>182</sup>

## II. THE SUSTAINABLE GROUNDWATER MANAGEMENT ACT OF 2014

### A. Overview of the SGMA

In the midst of a hard-hitting drought, increased reliance on groundwater resources, and the overdraft of numerous basins, California’s legislature took unprecedented steps by passing the Sustainable Groundwater Management Act (“SGMA”) in 2014.<sup>183</sup> The SGMA is comprised of the following three bills: Assembly Bill 1739 (Dickinson), SB 1319 (Pavley), and SB 1168 (Pavley).<sup>184</sup> The new law amends existing sections and adds entirely new sections to the state’s water code and government code.<sup>185</sup> It effectively grants broad authority to local and regional agencies to sustainably manage groundwater, backed up by the state regulation if local and regional agencies fail to act.<sup>186</sup> The legislation also provides the state with mechanisms to investigate and enforce groundwater and surface

<sup>178</sup> *Id.* § 10933(b)(1)-(8).

<sup>179</sup> *Groundwater Basin Prioritization*, CAL. DEP’T OF WATER RES., [http://www.water.ca.gov/groundwater/casgem/basin\\_prioritization.cfm](http://www.water.ca.gov/groundwater/casgem/basin_prioritization.cfm) (last updated Jan. 15, 2015).

<sup>180</sup> *Id.*

<sup>181</sup> *Id.*

<sup>182</sup> *See generally id.* (reporting that 127 of California’s groundwater basins are High or Medium priority, and that those basins account for ninety-six percent of the state’s annual groundwater withdrawal).

<sup>183</sup> *See Legislation*, CAL. DEP’T OF WATER RES., <http://www.water.ca.gov/cagroundwater/legislation.cfm> (last updated Nov. 10, 2015).

<sup>184</sup> *Id.*; SGMA, *supra* note 10.

<sup>185</sup> SGMA, *supra* note 10.

<sup>186</sup> *See generally* CAL. WATER CODE §§ 10725-10726.9 (2015).

water use, and to collect fees and data related to groundwater use—primarily through implementation of Groundwater Sustainability Plans.<sup>187</sup>

### B. Coordination with Land Use Agencies

Planning and coordination between land agencies and water supply and/or management agencies is an important aspect of the SGMA.<sup>188</sup> The new law requires a local agency adopting or substantially amending a general plan to consult with “any groundwater sustainability agency that has adopted a groundwater sustainability plan . . . or local agency that otherwise manages groundwater pursuant to other provisions of law or a court order judgment, or decree within the planning area of the proposed general plan.”<sup>189</sup> The local agency must also consult with the SWRCB if it has adopted an interim groundwater sustainability plan.<sup>190</sup>

Once notified of the proposed change to a general plan, the water agencies, in turn, must provide the land use agency with: (1) a current version of its groundwater sustainability plan or alternative plan; (2) maps of recharge basins and percolation ponds, extraction limitations, and other pertinent information; and (3) a report of the anticipated effects of the proposed action as it relates to the groundwater sustainability plan.<sup>191</sup> The required interagency exchange of information ensures that water supply planning and management will account for future land use projects, which may require additional groundwater resources or impact groundwater management.<sup>192</sup>

### C. The SGMA and Sustainability

The water code contains the vast majority of the SGMA’s mandates.<sup>193</sup> The SGMA begins its transformation of the water code by declaring a new state policy of sustainable local groundwater management.<sup>194</sup> Specifically, Section 113 states that:

[i]t is the policy of the state that groundwater resources be managed

<sup>187</sup> *Id.*

<sup>188</sup> CAL. GOV. CODE § 65352.5(a) (2015).

<sup>189</sup> *Id.* § 65352(a)(8).

<sup>190</sup> *Id.* § 65352(a)(9).

<sup>191</sup> *Id.* § 65352.5(d)(1)–(3).

<sup>192</sup> *Id.* § 65352.5(a).

<sup>193</sup> See generally *Sustainable Groundwater Management Act [And Related Statutory Provisions from SB1168 (Pavley), AB1739 (Dickinson), and SB 1319 (Pavley) as Chaptered]*, CAL. DEP’T OF WATER RES., [http://www.water.ca.gov/cagroundwater/docs/2014%20Sustainable%20Groundwater%20Management%20Legislation%20\\_with%202015%20amends%2011-10-2015\\_clean-2.pdf](http://www.water.ca.gov/cagroundwater/docs/2014%20Sustainable%20Groundwater%20Management%20Legislation%20_with%202015%20amends%2011-10-2015_clean-2.pdf) (last visited Nov. 15, 2015).

<sup>194</sup> See CAL. WATER CODE § 113 (2015).

sustainably for long-term reliability and multiple economic, social, and environmental benefits for current and future beneficial uses. Sustainable groundwater management is best achieved locally through the development, implementation, and updating of plans and programs based on the best available science.<sup>195</sup>

Because the SGMA's central focus is "sustainability," it is necessary to understand what the term means. "Sustainable groundwater management" is defined as "[t]he management and use of groundwater in a manner that can be maintained during the planning and implementation horizon without causing undesirable results."<sup>196</sup> The SGMA goes on to clarify that the "planning and implementation horizon" is "a 50-year time period over which a groundwater sustainability agency determines that plans and measures will be implemented in a basin to ensure that the basin is operated within its sustainability yield."<sup>197</sup> Further, "sustainable yield" is defined as "the maximum quantity of water, calculated over a base period representative of long-term conditions in the basin and including any temporary surplus, that can be withdrawn annually from a groundwater supply without causing an undesirable result."<sup>198</sup>

These definitions form the baseline for sustainable groundwater management under the SGMA and will likely influence judicial interpretations of what constitutes "reasonable-beneficial use" and "correlative shares" in future groundwater litigation. For example, in *Tulare Irrigation District v. Lindsay-Strathmore Irrigation District*, the Supreme Court of California concluded that, "[w]hat is a [reasonable and] beneficial use at one time may, because of changed conditions, become a waste of water at a later time."<sup>199</sup> Because the SGMA embodies the legislature's recognition of "changed conditions," courts may redefine what constitutes "reasonable-beneficial use" and "correlative shares" in light of the Act.<sup>200</sup>

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<sup>195</sup> *Id.*

<sup>196</sup> *Id.* § 10721(u).

<sup>197</sup> *Id.* § 10721(q).

<sup>198</sup> *Id.* § 10721(v). The SGMA defines an "undesirable result" as "one or more of the following effects caused by groundwater conditions occurring throughout the basin: (1) Chronic lowering of groundwater levels . . . . (2) Significant and unreasonable reduction of groundwater storage. (3) Significant and unreasonable seawater intrusion. (4) Significant and unreasonable degraded water quality . . . . (5) Significant and unreasonable land subsidence . . . ." *Id.* § 10721(w).

<sup>199</sup> *Tulare Irrigation Dist. v. Lindsay Strathmore Irrigation Dist.*, 345 P.2d 972, 1007 (Cal. Ct. App. 1935).

<sup>200</sup> *Id.*

D. *Prioritization, GSA Formation, and Basin Boundaries*

SGMA's reliance on a system of basin prioritization is another key component.<sup>201</sup> As noted above, CASGEM had already established a system of prioritization,<sup>202</sup> and the SGMA uses the same prioritization classifications as CASGEM: High, Medium, Low, and Very Low.<sup>203</sup> The Board incorporated the June 2014 CASGEM prioritization results as the "initial prioritization" under the SGMA.<sup>204</sup> However, the SGMA requires an additional consideration in basin prioritization: adverse impacts on local habitat and local streamflows.<sup>205</sup> The DWR stated that it "has determined that data is not readily available to allow reprioritization based on impacts from local habitat and local streamflows."<sup>206</sup> As a result, the DWR missed its January 31, 2015, deadline for reprioritization (see part III.G, *infra*, discussing SGMA's Timeline for Action), but it is in the process of collecting the necessary data.<sup>207</sup> Moreover, the DWR anticipates the potential for basin reprioritization in view of the new criteria.<sup>208</sup> The DWR's reprioritization is essential because the timelines for Groundwater Sustainability Agency ("GSA") formation, as well as Groundwater Sustainability Plan ("GSP") submissions and implementations vary by basin priority.<sup>209</sup>

The SGMA allows any local agency or a combination of local agencies overlying a groundwater basin to become a GSA for the basin by following designated administrative procedures.<sup>210</sup> However, the agencies listed in sections 10723(c)(1)(a) through (o) are pre-existing agencies (independent "Special Districts" of the State of California) created by statute to manage groundwater, and thus presumptively hold exclusive jurisdiction over their respective statutory boundaries.<sup>211</sup> But, the statutorily created agencies listed in section 10723(c)(1)

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<sup>201</sup> See, e.g., CAL. WATER CODE §§ 10722.4, 10933 (2015).

<sup>202</sup> See discussion *supra* part II.G.

<sup>203</sup> CAL. WATER CODE § 10722.4 (2015).

<sup>204</sup> *Initial Groundwater Basin Prioritization under the SGM Act*, CAL. DEP'T OF WATER RES., [http://www.water.ca.gov/groundwater/sgm/SGM\\_BasinPriority.cfm](http://www.water.ca.gov/groundwater/sgm/SGM_BasinPriority.cfm) (last updated Jan. 15, 2015).

<sup>205</sup> CAL. WATER CODE § 10933(b)(8) (2015).

<sup>206</sup> *Initial Groundwater Basin Prioritization under the SGM Act*, *supra* note 204.

<sup>207</sup> *Id.*

<sup>208</sup> *Id.*

<sup>209</sup> See, e.g., CAL. WATER CODE §10735.2(a)(1) (2015).

<sup>210</sup> *Id.* §§ 10723(a), 10723.8.

<sup>211</sup> *Id.* §§ 10723(c)(1)(a)-(o). The SGMA recognizes the following pre-existing agencies: Alameda County Water District; Desert Water Agency; Fox Canyon Groundwater Management Agency; Honey Lake Valley Groundwater Management District; Long Valley Groundwater Management District; Mendocino City Community Services District; Mono County Tri-Valley Groundwater Management District; Monterey Peninsula Water Management District; Ojai Groundwater Management Agency; Orange County Water District; Pajaro Valley Water Management Agency; Santa Clara Valley Water District; Sierra Valley Water District; and Willow Creek Groundwater Management Agency.

may elect to opt out of being the exclusive GSA.<sup>212</sup> In addition, if a GSA does not cover an area in a given county, the county is presumed to be the GSA for that area, unless it sends notice to the DWR that it does not intend to be the GSA.<sup>213</sup>

The SGMA avoids boundary disputes among local agencies by declaring in section 10722 that, “[u]nless other basin boundaries are established pursuant to this chapter, a basin’s boundaries shall be as identified in Bulletin 118.”<sup>214</sup> As section 10722 indicates, the SGMA provides a process for requesting and approving basin boundary revisions.<sup>215</sup> Local agencies wishing to revise a basin’s boundaries must comply with several administrative procedures set forth in section 10722.2, which *inter alia*, include technical reports, notice to interested parties, and three public hearings.<sup>216</sup>

#### *E. Powers of a GSA*

Commentators have described the SGMA as “sweeping” groundwater legislation.<sup>217</sup> The SGMA’s broad grant of authority to GSAs supports such assertions.<sup>218</sup> First, the SGMA does not remove or otherwise alter any authority held by existing groundwater agencies.<sup>219</sup> To the contrary, the SGMA allows all GSAs to “adopt rules, regulations, ordinances, and resolutions,” subject to certain procedural requirements.<sup>220</sup>

Second, it confers on the GSAs authority to investigate “(1) to determine the need for groundwater management, (2) to prepare and adopt a groundwater sustainability plan and implementing rules and regulations, (3) to propose and update fees, and (4) to monitor compliance and enforcement.”<sup>221</sup> Moreover, the SGMA does not limit a GSA’s authority to investigating groundwater and groundwater rights.<sup>222</sup> Instead, the SGMA expressly permits the GSAs to investigate surface water and surface water rights.<sup>223</sup> To carry out these investigations, the GSAs may inspect properties or facilities after obtaining either

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<sup>212</sup> *Id.* § 10723(c)(2).

<sup>213</sup> *Id.* § 10724.

<sup>214</sup> *Id.* § 10722.

<sup>215</sup> *Id.* § 10722.2.

<sup>216</sup> *Id.*

<sup>217</sup> See, e.g., Jessica Calefati, *Sweeping new California groundwater pumping rules signed into law by Gov. Jerry Brown*, SAN JOSE MERCURY NEWS (Sept. 16, 2014), [http://www.mercurynews.com/california/ci\\_26547666/sweeping-new-california-groundwater-pumping-rules-signed-into](http://www.mercurynews.com/california/ci_26547666/sweeping-new-california-groundwater-pumping-rules-signed-into).

<sup>218</sup> See generally CAL. WATER CODE §§ 10725-10726.9 (2015).

<sup>219</sup> *Id.* § 10725.

<sup>220</sup> *Id.* § 10725.2(b).

<sup>221</sup> *Id.* § 10725.4(a)(1)-(4).

<sup>222</sup> *Id.* § 10725.4(b).

<sup>223</sup> *Id.*

consent or an inspection warrant pursuant to established government procedure.<sup>224</sup>

Third, the SGMA grants the GSAs authority to require registration of a groundwater extraction facility and the annual filing of statements that document the withdrawals from the previous year.<sup>225</sup> In addition, the GSAs may require the installation of meters on every groundwater extraction facility within its management area, with an exception for *de minimis* extractors, defined to be “a person who extracts, for domestic purposes, two acre-feet or less per year.”<sup>226</sup> The owners or operators of an extraction facility are responsible for the costs associated with the purchase and installation of meters.<sup>227</sup> The SGMA defines “groundwater extraction facility” as “a device or method for extracting groundwater from within a basin.”<sup>228</sup> In other words, a GSA may require metering of every well and spring (or anything that produces groundwater) in its management area with the exception of the *de minimis* extractors.<sup>229</sup>

Fourth, the GSAs have authority to impose spacing requirements on new wells and may also require pumping on a rotational basis.<sup>230</sup> However, the GSAs do not have authority to issue permits for wells, unless the county where the GSA is located authorizes the issuance of well permits.<sup>231</sup> Nevertheless, the GSAs have the authority to:

control groundwater extractions by regulating, limiting, or suspending extractions from individual groundwater wells or extractions from groundwater wells in the aggregate, construction of new groundwater wells, enlargement of existing groundwater wells, or reactivation of abandoned groundwater wells, or otherwise establishing groundwater extraction allocations.<sup>232</sup>

Extractors that pump in excess of the authorized limit are subject to civil penalties up to \$500 per excess acre-foot extracted, and anyone violating a GSA’s rule or regulation is liable for civil penalties up to \$1,000, plus \$100 for each additional day the violation continues.<sup>233</sup>

Fifth, a GSA may impose fees (subject to administrative procedure) to fund any and all of its proscribed activities and to create a “prudent reserve.”<sup>234</sup> Fees and

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<sup>224</sup> *Id.* § 10725.4(c).

<sup>225</sup> *Id.* §§ 10725.6, 10725.8(c).

<sup>226</sup> *Id.* § 10725.8(a), (e).

<sup>227</sup> *Id.* § 10725.8(b).

<sup>228</sup> *Id.* § 10721(h).

<sup>229</sup> *Id.* § 10725.8(a), (e).

<sup>230</sup> *Id.* § 10726.4(a)(1).

<sup>231</sup> *Id.* § 10726.4(b).

<sup>232</sup> *Id.* § 10726.4(a)(2).

<sup>233</sup> *Id.* § 10732(a)(1), (2).

<sup>234</sup> *Id.* § 10730(a), (b).



fee increases must be approved by ordinance, resolution, or “in the same manner as ordinary municipal ad valorem taxes.”<sup>235</sup> The GSAs may charge up to one percent interest per month along with a 10 percent penalty for delinquent payments.<sup>236</sup> Further, in cases of non-payment, the GSAs may bring suit to collect fees, or may collect by any other lawful means applicable to the local agency (for example, submitting delinquent payments to a debt collection agency).<sup>237</sup> Alternatively, a GSA may order an operator to cease extraction after notice and hearing until the operator pays the fees and penalties in full.<sup>238</sup>

Finally, the GSAs have broad authority to acquire real and personal property, augment local water supplies, transfer and exchange water rights, and treat polluted water.<sup>239</sup> In sum, GSAs hold a great deal of power, and with such power comes responsibility. This includes bearing the costs of litigation.<sup>240</sup>

Still, critics of the SGMA claim that while the legislation is a good start, the new law falls short in several respects.<sup>241</sup> First, some critics believe that the SGMA does not require the GSAs to adequately consider the effects of climate change in determining the “sustainable yield” of a basin.<sup>242</sup> Second, the timeline for achieving sustainable aquifer levels is set out too far—especially for basins that are already in a state of overdraft.<sup>243</sup> Third, the law exempts GSP preparation and adoption from the California Environmental Quality Act,<sup>244</sup> which is often used as a legal tool to review significant environmental effects.<sup>245</sup> Furthermore, the GSAs have broad discretion with minimal state oversight, yet the SGMA fails to provide a clear mechanism to challenge GSA actions.<sup>246</sup>

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<sup>235</sup> *Id.* § 10730(c), (d).

<sup>236</sup> *Id.* § 10730.6(b).

<sup>237</sup> *Id.* § 10730.6(c), (d).

<sup>238</sup> *Id.* § 10730.6(e).

<sup>239</sup> *Id.* § 10726.2(a)-(e).

<sup>240</sup> *Id.* § 10726.2(f).

<sup>241</sup> *See, e.g.*, John J. Perona, *A Dry Century in California: Climate Change, Groundwater, and a Science-Based Approach for Preserving the Unseen Commons*, 45 LEWIS & CLARK ENVTL. L. REV. 641, 649-52 (2015) (identifying potential issues with the SGMA).

<sup>242</sup> *See id.*

<sup>243</sup> *Id.*

<sup>244</sup> Rob Diperna, *Groundwater Legislation is Not Strong Enough*, ENVTL. PROTECTION INFO. CTR. (EPIC) (Sept. 11, 2014), <http://www.wildcalifornia.org/blog/groundwater-legislation-is-not-strong-enough/>.

<sup>245</sup> Christopher Chou et al., *California Supreme Court Upholds Most Commonly Used CEQA Categorical Exemptions*, CAL. LAND USE & DEV. LAW REPORT (March 3, 2015), <http://www.wildcalifornia.org/blog/groundwater-legislation-is-not-strong-enough/>.

<sup>246</sup> Diperna, *supra* note 244.

*F. Groundwater Sustainability Plans (“GSPs”) and Interim Plans*

The GSAs must develop GSPs in basins that are High or Medium priority.<sup>247</sup> If multiple GSAs have jurisdiction in a given basin, the GSAs may (1) collectively submit a single GSP for the entire basin, or (2) submit multiple GSPs subject to a coordination agreement.<sup>248</sup> The GSAs may submit an alternative in lieu of a GSP, if the alternative satisfies the SGMA’s objectives.<sup>249</sup> For instance, management pursuant to a basin adjudication decree may suffice as an alternative to a GSP.<sup>250</sup>

The SGMA outlines numerous elements that all GSPs must include.<sup>251</sup> For example, GSPs must include information pertaining to the history of the basin; groundwater levels, groundwater quality, subsidence, and groundwater and surface water interactions; and projected water demands and supplies.<sup>252</sup> In addition, the GSP must include basin boundary maps detailing where the GSA has jurisdiction and what area the plans cover and maps showing recharge areas of the basin.<sup>253</sup> To dictate actual management, the GSP must specify measurable objectives in five-year increments to reach sustainable yields within 20 years of GSP implementation; mitigation measures; monitoring and managing plans; methods to control saltwater intrusion; and numerous other requirements set forth in sections 10727.2 to 10727.4.<sup>254</sup> GSAs that submit multiple GSPs for a single basin must coordinate to use the same data and methodologies for the following plan elements: (1) groundwater elevation data; (2) groundwater extraction data; (3) surface water supply; (4) total water use; (5) change in groundwater storage; (6) water budget; and (7) sustainable yield.<sup>255</sup>

In the process of developing GSPs, the GSAs must allow public participation.<sup>256</sup> Once the process is complete, the GSAs adopt a GSP and submit it to the DWR, which will post the plan on its website and provide a 60-day period for public comment.<sup>257</sup> The DWR will review the plans within two years of submission and issue an assessment that provides *recommended* corrective actions.<sup>258</sup> After the GSAs submit alternatives or GSPs, the DWR will review the plans and alternatives every five years thereafter.<sup>259</sup> Likewise, a GSA must

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<sup>247</sup> CAL. WATER CODE § 10727(a) (2015).

<sup>248</sup> *Id.* § 10727(b).

<sup>249</sup> *Id.* § 10733.6(a).

<sup>250</sup> *Id.* § 10733.6(b)(2).

<sup>251</sup> *See id.* § 10727.2.

<sup>252</sup> *Id.*

<sup>253</sup> *Id.*

<sup>254</sup> *Id.* §§ 10727.2-10727.4.

<sup>255</sup> *Id.* § 10727.6.

<sup>256</sup> *Id.* § 10727.8(a).

<sup>257</sup> *Id.* § 10733.4(c).

<sup>258</sup> *Id.* § 10733.4(d) (emphasis added).

<sup>259</sup> *Id.* § 10733.8.

periodically review its GSP and must also submit annual reports to the DWR.<sup>260</sup>

In some cases, the SWRCB may be forced to step in and create its own interim plan for a basin or area within a basin.<sup>261</sup> The Board may implement interim plans if (1) it designates a basin as a “probationary basin,” and (2) the overlying GSA fails to remedy the deficiencies within the 180-day curative period, with potential extensions if the GSA is making “[s]ubstantial progress toward remedying the deficiency.”<sup>262</sup> Furthermore, the Board places a basin on “probation” if, by a certain date (which varies by priority of basin, see the timeline section below): (1) no local agency has elected to be a GSA for an entire basin; (2) if a collection of GSAs will cover the entire basin and the GSAs fail to form or prepare agreements to develop one or more GSPs to collectively serve the entire basin; (3) a GSA has not submitted an alternative (if no GSP has been submitted); (4) the DWR in consultation with the Board, determines that a groundwater sustainability plan is inadequate or the groundwater sustainability plan is not being implemented in a manner that will likely achieve the sustainability goal; (5) the Board determines that the basin is in a condition of long-term overdraft; or (6) the Board determines that the basin is in a condition where groundwater extractions will result in significant depletions of interconnected surface waters.<sup>263</sup>

### *G. The SGMA’s Timeline for Action*

The sections above provided a general overview of the SGMA. This section provides a detailed timeline of actions that must occur to implement the Act’s mandates.

The provisions of SGMA officially went into effect on January 1, 2015.<sup>264</sup> After this date, the SGMA no longer allowed existing local agencies to adopt or renew groundwater management plans for High and Medium priority basins.<sup>265</sup> Instead, existing local agencies must submit GSPs or alternatives pursuant to the new law.<sup>266</sup>

By January 31, 2015, the Act required the DWR to update basin prioritization.<sup>267</sup> As noted earlier, the DWR was unable to meet this deadline because of insufficient data on local habitat and streamflow; however, it did utilize CASGEM’s June 2014 prioritization results.<sup>268</sup> If, after this date, the Board elevates a basin to a Medium or High priority basin, the local agency has two

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<sup>260</sup> *Id.* §§ 10728, 10728.2.

<sup>261</sup> *Id.* §§ 10735.2, 10735.4.

<sup>262</sup> *Id.*

<sup>263</sup> *Id.* § 10735.2.

<sup>264</sup> *See id.* § 10750.1.

<sup>265</sup> *Id.*

<sup>266</sup> *See id.* §§ 10727(a), 10733.6(a).

<sup>267</sup> *Id.* § 10722.4.

<sup>268</sup> *Initial Groundwater Basin Prioritization under the SGM Act*, *supra* note 204.

years from the date of reprioritization to establish a GSA and five years to adopt a GSP.<sup>269</sup>

In 2015 to 2016, the DWR will investigate and identify basins subject to critical overdraft.<sup>270</sup> By January 1, 2016, the DWR must adopt regulations to set forth the information required from local agencies, when or if such agencies petition to revise basin boundaries.<sup>271</sup> On or before April 1, 2016, the watermaster or local agency within an adjudicated basin must submit to the DWR a copy of the governing final judgment, along with any amendments and must begin to submit annual reports to the DWR.<sup>272</sup> By June 1, 2016, the DWR must adopt regulations for evaluating groundwater sustainability plans, alternatives, the implementation of groundwater sustainability plans, and coordination agreements.<sup>273</sup> By December 31, 2016, the DWR must publish a report on its website that provides an estimate of water available for replenishment of groundwater.<sup>274</sup>

By January 1, 2017, the DWR must publish on its website best management practices for sustainable management of groundwater.<sup>275</sup> Also, GSAs must submit to the DWR alternatives to a GSP by this date.<sup>276</sup> By June 30, 2017, all local agencies and statutorily created pre-existing agencies must establish their respective GSAs for High and Medium priority basins.<sup>277</sup> On or after this date, the Board—after notice and hearing—may place a basin on “probation” if the local and pre-existing agencies fail to establish a GSA or an alternative to a GSA.<sup>278</sup>

On or after July 1, 2017, all operators—extracting groundwater in part of a basin that lies outside of the jurisdiction of a GSA—must submit annual reports, using the established standard form, to the Board by December 15 of each year.<sup>279</sup> However, *de minimis* extractors are exempt from this requirement.<sup>280</sup> If the extractor fails to submit a report, the Board may conduct an investigation to gather necessary information at the extractor’s expense.<sup>281</sup> Nevertheless, before the Board conducts an investigation, the Board must provide 60 days’ notice to file the report without penalty.<sup>282</sup> By this same date, if local agencies and/or pre-existing agencies fail to establish a GSA, the county must submit a statement of

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<sup>269</sup> CAL. WATER CODE § 10722.4(d) (2015).

<sup>270</sup> *Id.* § 12924(a).

<sup>271</sup> *Id.* § 10722.2(b).

<sup>272</sup> *Id.* § 10720.8(f).

<sup>273</sup> *Id.* § 10733.2(a)(1).

<sup>274</sup> *Id.* § 10729(c).

<sup>275</sup> *Id.* § 10729(d)(1).

<sup>276</sup> *Id.* § 10733.6.

<sup>277</sup> *See id.* § 10735.2.

<sup>278</sup> *Id.*

<sup>279</sup> *Id.* §§ 10724, 5202(b).

<sup>280</sup> *Id.* § 5202(c)(1).

<sup>281</sup> *Id.* § 5204(a).

<sup>282</sup> *Id.* § 5204(b).

its desire or refusal to act as a GSA.<sup>283</sup> Moreover, the Board must adopt a fee schedule for costs in administering Chapter 11 (interim plans).<sup>284</sup>

On or after January 1, 2018, the Board may begin to develop interim plans for basins where the GSA has not cured the deficiency that resulted in the basin's probationary status.<sup>285</sup> Additionally, basins may petition for un-designation of probationary status.<sup>286</sup>

By January 31, 2020, the GSAs must manage High and Medium priority basins subject to conditions of critical overdraft under a GSP.<sup>287</sup> The Board, in consultation with the DWR, may designate basins subject to conditions of critical overdraft as a "probationary basin" if it determines that the GSP is inadequate.<sup>288</sup> Beginning January 31, 2021, the Board may begin developing interim plans for critically overdrafted probationary basins one year after probationary designation if the local agency has not cured the deficiency.<sup>289</sup>

By January 31, 2022, the GSAs must manage all other High and Medium priority basins under a GSP.<sup>290</sup> The Board, in consultation with the DWR, may designate High and Medium priority basins as "probationary basins" if it determines that the GSP is statutorily deficient.<sup>291</sup> On or after January 1, 2025, the Board may designate a basin as "probationary" if it determines that the basin's groundwater extractions result in significant surface water depletion.<sup>292</sup>

Ultimately, the SGMA requires High and Medium priority basins subject to conditions of critical overdraft to achieve sustainable groundwater levels by 2040,<sup>293</sup> and all other High and Medium priority basins to achieve sustainable groundwater levels by 2042.<sup>294</sup> However, GSAs that fail to achieve sustainable groundwater levels by the proscribed dates may petition for five-year extensions (up to a total of ten years) by showing "good cause."<sup>295</sup>

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<sup>283</sup> *Id.* § 10724(b).

<sup>284</sup> *Id.* § 1529.5.

<sup>285</sup> *Id.* § 10735.4(c).

<sup>286</sup> *Id.* § 10735.8(g).

<sup>287</sup> *Id.* § 10720.7(a)(1).

<sup>288</sup> *Id.* § 10735.2(a)(2).

<sup>289</sup> *Id.* § 10735.6(b).

<sup>290</sup> *Id.* § 10720.7(a)(2).

<sup>291</sup> *Id.* § 10735.2.

<sup>292</sup> *Id.* § 10735.2.

<sup>293</sup> *See id.* §§ 10720.7(a)(1), 10727.2(b)(1).

<sup>294</sup> *Id.* §§ 10720.7(a)(2), 10727.2(b)(1).

<sup>295</sup> *Id.* § 10727.2(b)(3).

### III. DOES CALIFORNIA’S NEW STATUTE CREATE CONSTITUTIONAL TAKINGS CLAIMS?

The broad and unprecedented changes to California’s groundwater law will likely spur an onslaught of litigation. Undoubtedly, some litigants will argue that the new law amounts to an unconstitutional taking of their property rights. The jurisprudence of takings as applied to water rights—particularly California groundwater rights—is not well defined. Nevertheless, there are a handful of decisions that illustrate the different approaches courts take in analyzing whether government action constitutes a taking.

#### A. Overview of Takings Jurisprudence

Applicable to states by way of the Fourteenth Amendment, the Fifth Amendment limits, but does not prevent, government taking of private property.<sup>296</sup> In particular, governments may take private property for public use, provided that the government compensates owners fairly.<sup>297</sup> Thus, the issue in a takings case is rarely whether the government can actually take private property.<sup>298</sup> Instead, the issues often are: (1) whether a compensable property interest exists; (2) whether the government action amounts to a taking; and (3) if there is a compensable taking, whether the government “fairly” or “justly” compensated the owner for the property taken.<sup>299</sup>

Procedurally, takings claims may be brought under state law, federal law, or both.<sup>300</sup> At a minimum, state constitutions guarantee protection equal to that under the federal Constitution and in some cases greater.<sup>301</sup> Because the California Constitution requires just compensation when property is damaged for public use in addition to a taking, it offers broader protection than the United States Constitution.<sup>302</sup>

The U.S. Supreme Court developed three categories to help determine whether an unconstitutional taking has occurred.<sup>303</sup> The first category of takings is physical occupations,<sup>304</sup> as was demonstrated in the case of *Loretto v. Teleprompter Manhattan CATV Corporation*.<sup>305</sup> In *Loretto*, a landlord brought suit alleging that

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<sup>296</sup> U.S. CONST. amend. V; *Lingle v. Chevron USA Inc.*, 544 U.S. 528, 536 (2005) (citing *First Evangelical Lutheran Church of Glendale v. County of Los Angeles*, 482 U.S. 304, 314 (1987)).

<sup>297</sup> *Lingle*, 544 U.S. at 536-37.

<sup>298</sup> ADLER ET AL., *supra* note 1, at 730.

<sup>299</sup> See *American Pelagic Fishing Co. v. United States*, 379 F.3d 1363, 1372 (Fed. Cir. 2004).

<sup>300</sup> ADLER ET AL., *supra* note 1, at 732.

<sup>301</sup> *Id.* at 731-32.

<sup>302</sup> *Monks v. City of Rancho Palos Verdes*, 167 Cal. App. 4th 263, 294 (2008).

<sup>303</sup> ADLER ET AL., *supra* note 1, at 730.

<sup>304</sup> *Id.*

<sup>305</sup> See generally *Loretto v. Teleprompter Manhattan CATV Corp.*, 458 U.S. 419, 426 (1982) (applying physical occupations analysis to a takings claim).

a state statute allowing cable television companies to install cable boxes and other equipment on her private rental property constituted a taking.<sup>306</sup> The statute at issue prevented landlords from charging the television companies more than the amount determined to be reasonable by a state commission, which in this case was a \$1 flat fee.<sup>307</sup> In holding that a taking occurred, the U.S. Supreme Court explained that “[a] permanent physical occupation authorized by government is a taking without regard to the public interests that it may serve.”<sup>308</sup> The *Loretto* holding states a hard-and-fast rule—all physical takings require compensation—but, it should be noted, the Supreme Court went on to qualify the holding as “very narrow.”<sup>309</sup>

The second category of *per se* takings occurs when regulation deprives an owner of all economically viable use of his land.<sup>310</sup> The U.S. Supreme Court articulated this category in *Lucas v. South Carolina Coastal Council*.<sup>311</sup> Lucas owned beachfront property that was initially exempt from coastal zone building permit requirements.<sup>312</sup> Before Lucas built any structures on his property, the state passed a law that banned all construction on beachfront lots.<sup>313</sup> Lucas alleged that the new law rendered his property valueless and thus prayed for just compensation.<sup>314</sup> The U.S. Supreme Court held that where a regulation deprives an owner of all economically viable use of his land, the government must pay just compensation, subject to two exceptions: (1) the proscribed use is a nuisance under state law; or (2) the proscribed use was not part of the owner’s title to begin with.<sup>315</sup>

The third category of takings, regulatory takings, applies to all other regulations that affect property and is assessed under the analysis set forth in *Penn Central Transportation Company v. City of New York*.<sup>316</sup> In that case, the New York City Preservation Commission—established pursuant to the Landmarks Preservation Law—refused to permit the construction of a fifty-five-story building over the Grand Central Terminal, which it designated as a historic landmark.<sup>317</sup> The plaintiff owners claimed that the Landmarks Preservation Law constituted a taking without just compensation.<sup>318</sup> To assist in determining whether a taking

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<sup>306</sup> *Id.* at 419.

<sup>307</sup> *Id.* at 423-24.

<sup>308</sup> *Id.* at 426.

<sup>309</sup> *Id.* at 441.

<sup>310</sup> *See Lucas v. S.C. Coastal Council*, 505 U.S. 1003, 1015-16 (1992).

<sup>311</sup> *See id.*

<sup>312</sup> *Id.* at 1008.

<sup>313</sup> *Id.*

<sup>314</sup> *Id.* at 1009.

<sup>315</sup> *Id.* at 1020-29.

<sup>316</sup> *See Penn Cent. Transp. Co. et al. v. City of New York*, 438 U.S. 104 (1978).

<sup>317</sup> *Id.* at 115-16.

<sup>318</sup> *Id.* at 119.

occurred, the *Penn Central* court identified the following three factors: the economic impact of the regulation; whether the regulation has interfered with reasonable investment backed expectations; and the character of the regulation.<sup>319</sup> The U.S. Supreme Court held that because (1) the law was substantially related to the promotion of the general welfare; (2) the law still allowed reasonable beneficial use of the property and did not interfere with present uses; and (3) the superjacent air rights were transferrable, the law did not constitute a taking.<sup>320</sup>

In *Lingle v. Chevron U.S.A.*, Justice O'Connor (concurring) eloquently summarized the application of these three categories of takings as follows:

Although our regulatory takings jurisprudence cannot be characterized as unified, these three inquiries (reflected in *Loretto*, *Lucas*, and *Penn Central*) share a common touchstone. Each aims to identify regulatory actions that are functionally equivalent to the classic taking in which government directly appropriates private property or ousts the owner from his domain. Accordingly, each of these tests focuses directly up on the severity of the burden that government imposes upon private property rights. The Court has held that physical takings require compensation because of the unique burden they impose: A permanent physical invasion, however minimal the economic cost it entails, eviscerates the owner's right to exclude others from entering and using her property—perhaps the most fundamental of all property interests. In the *Lucas* context, of course, the complete elimination of a property's value is the determinative factor. And the *Penn Central* inquiry turns in large part, albeit not exclusively, upon the magnitude of a regulation's economic impact and the degree to which it interferes with legitimate property interests.<sup>321</sup>

Although the category into which a takings claim falls may alter a court's takings analysis, the overriding concern is whether the government is “forcing some people alone to bear public burdens which, in all fairness and justice, should be borne by the public as a whole.”<sup>322</sup>

### B. Property Interests in Water Rights

Before a court assesses a takings claim, the claimant must first prove that the property interest at issue is compensable.<sup>323</sup> In *Lucas*, the U.S. Supreme Court

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<sup>319</sup> See *id.* at 124.

<sup>320</sup> *Id.*

<sup>321</sup> *Lingle v. Chevron U.S.A., Inc.*, 544 U.S. 528, 539-40 (2005).

<sup>322</sup> *Armstrong v. United States*, 364 U.S. 40, 49 (1960).

<sup>323</sup> *Am. Pelagic Fishing Co. v. United States*, 379 F.3d 1363, 1372 (Fed. Cir. 2004).



held that state laws establish property interests that qualify for Fifth and Fourteenth Amendment protections.<sup>324</sup> If a regulation prohibits use beyond what the relevant background principles would allow, the owner might have to be compensated for the property interest taken.<sup>325</sup>

*Edwards Aquifer Authority v. Day*<sup>326</sup> from Texas and *Village of Tequesta v. Jupiter Inlet Corp.*<sup>327</sup> from Florida illustrate diverging interpretations of property interests in groundwater rights when a state adopts a groundwater permitting system. The *Day* case involved a landowner (“Day”) who pumped groundwater from the Edwards Aquifer in Texas to irrigate and fill a large lake on his property.<sup>328</sup> To transport the groundwater, Day pumped it into a natural intermittent stream, which emptied into the lake.<sup>329</sup> Surface water from the intermittent stream also filled the lake.<sup>330</sup> The current and previous landowners pumped from the lake to irrigate and also used the lake for recreational purposes.<sup>331</sup>

One year before Day purchased the property, Texas passed the Edwards Aquifer Authority Act.<sup>332</sup> The Act created the Edwards Aquifer Authority (the “EAA” or the “Authority”), which issued permits in accordance with the Act.<sup>333</sup> The Act gave preference to existing users, those “who withdrew and beneficially used underground water from the aquifer on or before June 1, 1993—and their successors and principals,” and mandated, with some exceptions, that “water may not be withdrawn from the aquifer through wells drilled after June 1, 1993.”<sup>334</sup> Moreover, the Act set forth a maximum annual withdrawal for the entire aquifer (the “cap” on withdrawals) and required proportionate reductions among all permittees to meet this requirement.<sup>335</sup>

Day submitted an application for a well permit as an existing user for 700 acre-feet of water per year (two acre-feet of water per acre for 300 acres cultivated land, and 100 acre-feet of water for the lake).<sup>336</sup> The Authority preliminarily indicated by letter that the permit would likely be granted for 600 acre-feet, but it did not issue a final permit.<sup>337</sup> Nevertheless, Day immediately acted on this

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<sup>324</sup> *Lucas v. S.C. Coastal Council*, 505 U.S. 1003, 1030 (1992).

<sup>325</sup> *Id.*

<sup>326</sup> 369 S.W.3d 814 (Tex. 2012).

<sup>327</sup> 371 So.2d 663 (Fla. 1979).

<sup>328</sup> *Day*, 369 S.W.3d at 818.

<sup>329</sup> *Id.*

<sup>330</sup> *Id.*

<sup>331</sup> *Id.*

<sup>332</sup> *Id.* at 818-19.

<sup>333</sup> *Id.*

<sup>334</sup> *Id.* at 819 (internal citations and quotation marks omitted).

<sup>335</sup> *Id.* at 820.

<sup>336</sup> *Id.*

<sup>337</sup> *Id.*

information and drilled a well at a cost of \$95,000.<sup>338</sup> Shortly thereafter, the Authority denied the application because it found the historical water use to be non-beneficial.<sup>339</sup>

Day appealed the Authority's decision to an ALJ.<sup>340</sup> The ALJ found that, based on the historical use of water, the landowner had put 14 acre-feet to beneficial use, and thus he held that Day was entitled to a permit for 14 acre-feet of water.<sup>341</sup> Day brought suit in the district court claiming that the Authority had taken his property without just compensation.<sup>342</sup> The district court held that: (1) the water in the lake was groundwater; (2) water in the lake was used to irrigate 150 acres during the pertinent historical use period; and (3) Day was entitled to a permit based on this water use.<sup>343</sup> Both parties sought review by the Texas Court of Appeals—San Antonio.<sup>344</sup> The Court of Appeals reversed, finding that the water pumped into the lake became surface water and thus could not be considered in issuing the permit.<sup>345</sup> Nevertheless, it held that Day was entitled to the 14 acre-feet of water and that overlying pumpers have ownership rights in groundwater.<sup>346</sup> All parties petitioned the Supreme Court of Texas for review.<sup>347</sup>

On review, the Supreme Court of Texas first determined the scope of private ownership interests in groundwater under the rule of capture.<sup>348</sup> Texas Water Code section 36.002 reads as follows:

- (a) The legislature recognizes a landowner owns the groundwater below the surface of the landowner's land as real property.
- (b) The groundwater ownership and rights described by this section:
  - (1) entitle the landowner, including a landowner's lessees, heirs, or assigns, to drill for and produce the groundwater below the surface of real property, subject to Subsection (d), without causing waste or malicious drainage of other property or negligently causing subsidence, but does not entitle a landowner, including a landowner's lessees, heirs, or assigns, to the right to capture a specific amount of groundwater below the surface of the landowner's land; and
  - (2) do not affect the existence of common law defenses or other

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<sup>338</sup> *Id.*

<sup>339</sup> *Id.* at 820-21.

<sup>340</sup> *Id.* at 821.

<sup>341</sup> *Id.*

<sup>342</sup> *Id.*

<sup>343</sup> *Id.*

<sup>344</sup> *Id.*

<sup>345</sup> *Id.*

<sup>346</sup> *Id.*

<sup>347</sup> *Id.* at 822.

<sup>348</sup> *Id.* at 823.

defenses to liability under the rule of capture.<sup>349</sup>

The Supreme Court held that overlying landowners have a compensable interest in groundwater.<sup>350</sup> The court also concluded that the groundwater transported to a private reservoir via a natural watercourse is state water.<sup>351</sup> However, if a groundwater pumper pipes the groundwater directly into the lake or meters the groundwater coming into and out of a lake, it remains groundwater.<sup>352</sup>

Because issues of material fact remained unanswered, the court remanded without making a determination as to whether the government action amounted to a taking.<sup>353</sup> Nonetheless, the court strongly suggested that a taking had occurred in its application of the *Penn Central* factors: (1) the permit denial had a significant adverse economic impact on Day; (2) although Day should have investigated the water regulations more thoroughly before investing in the property, it was reasonably unforeseeable that his groundwater use would be severely restricted; and (3) the EAA's sole reliance on beneficial use during the historic period to determine allocation of permits is in sharp contrast to the multifactor permitting scheme administered by the state's groundwater districts.<sup>354</sup>

Shortly after the *Day* decision, the Texas Court of Appeals addressed another groundwater takings claim in *Edwards Aquifer Authority v. Bragg*.<sup>355</sup> In *Bragg*, the owner of pecan orchards submitted two applications to the EAA for well permits as an existing groundwater user.<sup>356</sup> The EAA partially granted one permit application and denied the other because the applicant was unable to prove beneficial use during the historic period.<sup>357</sup> In response, the owner filed suit in district court alleging that the EAA's permitting decision amounted to a regulatory taking.<sup>358</sup> The district court found in favor of the owner and ordered just compensation.<sup>359</sup> Both parties appealed.<sup>360</sup>

In view of the state Supreme Court's recent decision in *Day*, the Texas Court of Appeals in *Bragg* held that the EAA action caused a regulatory taking under the *Penn Central* framework.<sup>361</sup> First, the court looked at the economic impact of

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<sup>349</sup> *Id.* at 832 (quoting TEX. WATER CODE § 36.002).

<sup>350</sup> *Id.* at 838.

<sup>351</sup> *Id.* at 822-23.

<sup>352</sup> *Id.*

<sup>353</sup> *Id.* at 843.

<sup>354</sup> *Id.*

<sup>355</sup> *See Edwards Aquifer Auth. v. Bragg*, 421 S.W.3d 118, 123 (Tex. Ct. App. 2013).

<sup>356</sup> *Id.* at 126.

<sup>357</sup> *Id.*

<sup>358</sup> *Id.*

<sup>359</sup> *Id.*

<sup>360</sup> *Id.*

<sup>361</sup> *See id.* at 153.

the regulation and found that a ten percent increase in irrigation costs—to make up for water denied by the EAA decision—weighed “heavily in favor” of a taking of both pecan orchards.<sup>362</sup> Second, the court held that the owner’s investment-backed expectations were reasonable because: (1) the orchards were purchased before the passage of the Edwards Aquifer Authority Act; and (2) the owner was educated in agricultural economics and had extensive experience in the pecan industry.<sup>363</sup> Third, the court held that the nature of the regulation weighed “[h]eavily against a finding of a compensable taking” because the regulation sought to protect a very important natural resource.<sup>364</sup> Finally, the court considered—with very minimal weight—other relevant circumstances that it found to be in favor of a taking: (1) pecan crops require a large quantity of water year-round; and (2) the owner’s only sources of water are rainwater and groundwater.<sup>365</sup> The Texas Supreme Court has refused to review the *Bragg* decision,<sup>366</sup> strongly suggesting that regulation of groundwater in Texas to limit mining of Texas aquifers will require compensation.

The Supreme Court of Florida reached a much different result in *Tequesta*.<sup>367</sup> Like the cases of *Day* and *Bragg*, the shift from common-law groundwater rights to a permitting system served as an impetus to takings litigation in *Tequesta*.<sup>368</sup> Florida replaced its common-law doctrine with a comprehensive permitting scheme when it passed the Florida Water Resources Act of 1972 (the “FWRA” or the “Act”).<sup>369</sup> Before the FWRA’s permitting system, groundwater extractions in Florida were governed by the reasonable use rule:

A landowner, who, in the course of using his own land, obstructs, diverts, or removes percolating water to the injury of his neighbor . . . must be making a reasonable exercise of his proprietary right, i.e., such an exercise as may be reasonably necessary for some useful or beneficial purpose, generally relating to the land in which the waters are found.<sup>370</sup>

The FWRA recognized common-law water use rights—perfected before the passage of the Act—separate from the right to use water under its permitting system.<sup>371</sup> However, the FWRA terminated common-law rights after a two-year

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<sup>362</sup> *Id.* at 139-41.

<sup>363</sup> *Id.* at 142-44.

<sup>364</sup> *Id.* at 144-45.

<sup>365</sup> *Id.* at 145-46.

<sup>366</sup> *Edwards Aquifer Auth. v. Bragg*, No. 13-1023, 2015 BL 127524 (Tex. May 01, 2015).

<sup>367</sup> *See Village of Tequesta v. Jupiter Inlet Corp.*, 371 So.2d 663 (Fla. 1979).

<sup>368</sup> *Id.*; *Bragg*, 421 S.W.3d at 118; *Edwards Aquifer Auth. v. Day*, 369 S.W.3d 814 (Tex. 2012).

<sup>369</sup> *Tequesta*, 371 So.2d at 671.

<sup>370</sup> *Id.* at 672 (quoting *Finley et ux. v. Teeter Stone, Inc.*, 248 A.2d 106, 111-12 (Md. App. 1968)).

<sup>371</sup> *Id.* at 671 (citing FLA. STAT. § 373.226).

transitional period.<sup>372</sup> During the transitional period, the holder of a common-law water right had to convert the exercised right into an “initial permit” right; otherwise, the right was deemed abandoned by statute.<sup>373</sup> The two-year transitional period protected existing uses so long as the use was not contrary to public policy.<sup>374</sup>

The FWRA requires a different permit application for groundwater users that failed to convert their right during the transitional period and those that never perfected a common-law right.<sup>375</sup> Such applications are conditioned by a three-part test: (1) the proposed use is a reasonable-beneficial use; (2) the proposed use will not interfere with any presently existing legal use of water; and (3) the proposed use is consistent with the public interest.<sup>376</sup>

The facts of *Tequesta* are as follows. A development company (“Jupiter”) planned to construct a large condominium complex on one of its properties.<sup>377</sup> Jupiter applied for a permit to pump from the shallow-water aquifer directly below the project property without perfecting its common-law rights.<sup>378</sup> The county denied Jupiter’s permit application because the neighboring municipality (“Tequesta”)—which previously converted its common-law right to a permit right—had over-pumped the aquifer and caused saltwater intrusion.<sup>379</sup> Two options remained: (1) drill 1200 feet down into the aquifer at a much greater cost; or (2) seek a judicial remedy.<sup>380</sup> Jupiter chose the latter and brought suit, alleging that Tequesta’s pumping effected a physical taking of Jupiter’s groundwater rights.<sup>381</sup>

In striking down Jupiter’s takings claim, the Florida Supreme Court began by explaining that state’s constitution proscribes taking private property, unless the property is taken for a public purpose and the owner is provided just compensation.<sup>382</sup> Notwithstanding this prohibition, the Florida Constitution does not expressly require just compensation for damage caused to property (consequential damage).<sup>383</sup> Moreover, the court explained that the water use rights under the reasonable use doctrine are not applicable where the issue before the court is proprietary use of the land, and the water rights are only incidentally

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<sup>372</sup> *Id.*

<sup>373</sup> *Id.*

<sup>374</sup> FLA. STAT. § 373.223(4).

<sup>375</sup> *See id.* §§ 373.223, 373.226., 373.229.

<sup>376</sup> *Id.* § 373.223(1)(a)-(c).

<sup>377</sup> *Tequesta*, 371 So.2d at 665.

<sup>378</sup> *Id.*

<sup>379</sup> *Id.*

<sup>380</sup> *Id.*

<sup>381</sup> *Id.*

<sup>382</sup> *Id.* at 669.

<sup>383</sup> *See id.*

affected.<sup>384</sup> Groundwater use rights “[m]ay be protected by injunction, or regulated by law, but the right of user is not considered ‘private property’ requiring condemnation proceedings unless the property has been rendered useless for certain purposes (i.e., government flooding private property).”<sup>385</sup>

The Supreme Court found that: (1) there was no physical invasion of Jupiter’s land and there was no damage to the land itself; (2) landowners in Florida do not have a compensable property interest in groundwater when water is taken for a public purpose; (3) although water rights may be protected by injunction, Jupiter never perfected its common-law right; and, as a result, (4) Jupiter’s sole remedy was through the FWRA’s permitting process.<sup>386</sup>

Although the outcomes of *Tequesta* and *Day/Bragg* are diametrical opposites, the holdings are, nevertheless, consistent with background principles of the respective states’ property law. First, Article 1, Section 17 of the Texas State Constitution states that “[n]o person’s property shall be taken, damaged, or destroyed for or applied to public use without adequate compensation being made . . . .”<sup>387</sup> On the other hand, the Florida Constitution does not require compensation for “damage” to property.<sup>388</sup> Second, Texas’ statute unambiguously defines groundwater below a landowner’s property as “real property,”<sup>389</sup> whereas Florida law never granted ownership rights in the corpus of the water itself.<sup>390</sup> Third, unlike the nearly unrestricted groundwater pumping in Texas under the common-law rule of capture,<sup>391</sup> groundwater pumpers in Florida were always limited to reasonable use under the state’s common-law doctrine.<sup>392</sup>

Assuming, *arguendo*, that the Florida Supreme Court held water rights to be a compensable property interest, Florida’s reasonable-beneficial use requirement would likely damper any argument for a “reasonable investment-backed expectation” under the *Penn Central* analysis.<sup>393</sup> This proposition is further supported by the fact that Jupiter was not denied reasonable use to all water beneath its land.<sup>394</sup> The permit simply required that Jupiter drill deeper into the Floridan Aquifer.<sup>395</sup>

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<sup>384</sup> *Id.*

<sup>385</sup> *Id.* at 668.

<sup>386</sup> *Id.* at 670-72.

<sup>387</sup> TEX. CONST. art. 1, § 17.

<sup>388</sup> *Tequesta*, 371 So.2d at 669.

<sup>389</sup> TEX. WATER CODE § 36.002.

<sup>390</sup> *Tequesta*, 371 So.2d at 670.

<sup>391</sup> *See Day*, 369 S.W.3d at 832 (quoting TEX. WATER CODE § 36.002).

<sup>392</sup> *Tequesta*, 371 So.2d at 670.

<sup>393</sup> *See generally id.* at 666-67 (explaining that under the reasonable use rule, a landowner that pumps water to the injury of his neighbor must be making a reasonably beneficial use of the water, and that Florida has never defined the actual amount of water that may be taken by overlying owners).

<sup>394</sup> *Id.* at 665.

<sup>395</sup> *Id.*

*C. Takings under the California Constitution*

The compensable property interest in a California water right falls somewhere between the absolute ownership right in Texas and the extremely limited property right in Florida. In California, the property interest in a water right is strictly usufructuary.<sup>396</sup> California Water Code section 1001 reads, “[n]othing in this division shall be construed as giving or conforming any right, title, or interest to or in the corpus of any water.”<sup>397</sup> Instead, “[a]ll water within the State is property of the State, [and] the right to the use of water”<sup>398</sup> is “subject to the regulation and control of the State, in the manner to be prescribed by law.”<sup>399</sup>

In the context of a California water right, the scope of the compensable interest and overall treatment of takings claims may end up varying by venue—i.e., by whether the litigation is brought in state or federal court.<sup>400</sup> The juxtaposition of California water rights takings cases in federal courts and state courts illuminates this difference.<sup>401</sup>

In *Tulare Lake Basin Water District v. United States*, California water districts brought suit in the U.S. Court of Federal Claims alleging that their contract-based water rights were taken when federal agencies placed water outflow restrictions on state waters pursuant to the Endangered Species Act (the “ESA”).<sup>402</sup> The restriction affected, *inter alia*, two of the state’s major aqueduct systems: (1) the Central Valley Project (the “CVP”); and (2) the State Water Project (the “SWP”).<sup>403</sup> The U.S. Bureau of Reclamation (the “BOR”) and the California Department of Water Resources (the “DWR”) work in concert to manage the CVP and the SWP.<sup>404</sup> The SWRCB—the California agency with ultimate authority over state waters—issues appropriative water use permits to both the BOR and the DWR, who in turn contract the water rights to county water districts.<sup>405</sup> The contracts confer the exclusive right to use a specified quantity of water, which is consistent with the terms of the water right permit.<sup>406</sup> After the United States Fish and Wildlife Service (the “USFWS”) and the National Marine Fisheries Service (the “NMFS”) imposed water out-flow restrictions under the ESA to protect Delta smelt and Chinook salmon, the plaintiffs brought suit claiming that the restriction deprived them of their property interest in the water rights without just

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<sup>396</sup> See CAL. WATER CODE § 102 (2015). A usufructuary right is the right to use or enjoy something without acquiring a property interest. See ADLER ET AL., *supra* note 1, at 1.

<sup>397</sup> CAL. WATER CODE § 1001 (2015).

<sup>398</sup> *Id.* § 102.

<sup>399</sup> CAL. CONST. art. 10, § 5.

<sup>400</sup> See discussion, *infra*.

<sup>401</sup> See *id.*

<sup>402</sup> 49 Fed. Cl. 313, 314 (2001).

<sup>403</sup> *Id.*

<sup>404</sup> *Id.*

<sup>405</sup> *Id.* at 315.

<sup>406</sup> *Id.* at 318.

compensation.<sup>407</sup>

The Court of Federal Claims began its analysis by addressing the defendant’s assertion that the restriction cannot be a taking because the U.S. Supreme Court in *Omnia Commercial Co. v. United States* had held that lawful government action causing mere frustration of a contract’s purpose is not a taking.<sup>408</sup> The court distinguished *Omnia* from the present case by explaining that *Omnia* governs where the contract right at issue is “expectancy” (for example, the right to purchase at a set price).<sup>409</sup> Once title to the property is transferred to the plaintiff, the contract right is no longer an “expectancy” right, but instead is an identifiable property interest.<sup>410</sup> Under this reasoning, the court went on to hold that the water districts have an identifiable property interest in a specified amount of water, and therefore *Omnia* is of no import.<sup>411</sup>

Next, the Court of Federal Claims held that the water-flow restrictions were a *per se* physical taking.<sup>412</sup> Although most restrictions allow some use of property and fall under the *Penn Central* regulatory takings analysis, the Court of Federal Claims concluded that—in the context of water rights—“the denial of a right to the use of water accomplishes a complete extinction of all value . . . and totally displace[s] the contract holder.”<sup>413</sup> The Court of Federal Claims relied on three U.S. Supreme Court cases finding physical takings in the context of upstream government impoundments.<sup>414</sup> The court refused to distinguish the trio of Supreme Court cases from the current case, stating that, “[w]hether the government decreased the water to which plaintiffs had access by means of a dam or by means of pumping restrictions amounts to a distinction without difference.”<sup>415</sup>

Finally, the Court of Federal Claims addressed the issue of whether the plaintiffs had a compensable property interest in the water rights.<sup>416</sup> The defendant claimed that the plaintiffs had no compensable property interest in light of three relevant background principles of state law: (1) the public-trust doctrine; (2) the

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<sup>407</sup> *Id.* at 314.

<sup>408</sup> *Tulare*, 49 Fed. Cl. at 316-17 (discussing *Omnia Commercial Co. v. United States*, 261 U.S. 502 (1923)).

<sup>409</sup> *See id.* at 317-18.

<sup>410</sup> *Id.*

<sup>411</sup> *See id.* at 318.

<sup>412</sup> *See id.* at 319.

<sup>413</sup> *Id.*

<sup>414</sup> *Id.* (citing *Int’l Paper Co. v. United States*, 282 U.S. 399, 408 (1931) (holding the government’s upstream impoundment of water, to the detriment of the plaintiff’s mill, amounted to a physical taking); *H.P. Dugan et al. v. Everett Rank et al.*, 372 U.S. 609, 625 (1963) (finding that the Bureau of Reclamation’s impoundment was a taking); *United States v. Gerlach Live Stock Co.*, 339 U.S. 725, 754-55 (1950) (concluding that upstream impoundment of water depriving riparians of natural seasonal overflow from the San Joaquin River was a physical taking)).

<sup>415</sup> *Id.* at 320.

<sup>416</sup> *Id.*



doctrine of reasonable use; and (3) common-law principles of nuisance.<sup>417</sup> While the court agreed that background principles limit the scope of compensable property interests, it found that the SWRCB decision D-1485—the Board’s comprehensive water allocation scheme—defined the scope of the plaintiffs’ contract rights.<sup>418</sup> In particular, the court agreed with the plaintiffs’ contention that “D-1485 represents the state’s determination of various water rights, thereby reflecting the amount of water, under state law, they reasonably can expect and to which they are reasonable entitled.”<sup>419</sup>

Four years later, in *Klamath Irrigation District v. the United States*, the Court of Federal Claims reconsidered many of the issues presented in *Tulare*.<sup>420</sup> Similar to the plaintiffs in *Tulare*, the plaintiffs in *Klamath* alleged that a taking occurred when the BOR substantially reduced their contract-based water deliveries to comply with the ESA.<sup>421</sup>

Consistent with its decision in *Tulare*, the Court of Federal Claims ruled that the plaintiffs’ contract-based water rights were “private property” within the meaning of the Fifth Amendment.<sup>422</sup> However—in sharp contrast to its earlier decision in *Tulare*—the Court of Federal Claims concluded that because: (1) the federal government was acting in a proprietary capacity when it entered into the contracts; and (2) the plaintiffs have other remedies to vindicate their contract rights, the plaintiffs’ claim should be analyzed as a contract claim, not a takings claim.<sup>423</sup> Predictably, the plaintiffs argued that the factual circumstances of this case were essentially identical to those in *Tulare*, and thus the court should find the water reduction to be a *per se* physical taking.<sup>424</sup> In recanting its previous holdings, the court stated, “[w]ith all due respect, *Tulare* appears to be wrong on some counts, incomplete in others and, distinguishable, at all events.”<sup>425</sup> The court provided the following explanation:

For one thing, *Tulare* failed to consider whether contract rights at issue were limited so as not to preclude enforcement of the ESA. Rather the court treated the contract rights possessed by the districts essentially as absolute, without adequately considering whether they were limited in the case of water shortage, either by prior contracts, prior appropriations or some other state law principle. Thus, although the court noted that

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<sup>417</sup> *Id.* at 321.

<sup>418</sup> *Id.* at 321-22.

<sup>419</sup> *Id.*

<sup>420</sup> *Klamath Irrigation Dist. v. United States (Klamath I)*, 67 Fed. Cl. 504, 537-38 (2005).

<sup>421</sup> *Id.* at 507.

<sup>422</sup> *Id.* at 532.

<sup>423</sup> *Id.* at 535.

<sup>424</sup> *See id.* at 537-38.

<sup>425</sup> *Id.* at 538.

there were agreements between the United States and the State of California creating a coordinated pumping system, it did not examine those agreements to see whether they, like the district contracts here, limited the plaintiffs' rights derivatively. Rather, it focused on the districts' contracts with state agencies as if they were free-standing. Nor did the court consider whether the plaintiffs' claimed use of water violated accepted state doctrines, including those designed to protect fish and wildlife, finding that issue to be reserved exclusively to the state courts . . . [and] the court . . . never considered the potential application of the sovereign acts and unmistakability doctrines.<sup>426</sup>

In analyzing the plaintiffs' breach of contract claims, the Court of Federal Claims held that the sovereign acts doctrine precluded government liability.<sup>427</sup>

The *Klamath* plaintiffs appealed to the United States Court of Appeals for the Federal Circuit. On appeal, the Federal Circuit questioned whether there is a compensable property interest in the contract-based water rights under Oregon law and examined the application of the sovereign acts doctrine as a defense to the contract claims.<sup>428</sup>

To resolve the first issue, the Federal Circuit issued certified questions to the Oregon Supreme Court to determine whether a compensable interest exists in the contract-based water rights.<sup>429</sup> To determine whether the water users "[h]ad an equitable or beneficial property interest in the water right to which the United States held legal title," the Oregon Supreme Court adopted the three-factor test articulated in *Nevada v. United States*: "(1) under state law, the water right became appurtenant to the land once it was put to beneficial use; (2) the United States' relationship with the landowners under the Reclamation Act; and (3) the contracts between the United States and the landowners."<sup>430</sup> The Supreme Court of Oregon held that the first two factors weigh in favor of a compensable property interest; however, the ultimate determination depends on the specific contract language between each water user and the United States.<sup>431</sup> Based on Oregon Supreme Court's certified decision, the Federal Circuit ruled that "[t]he case should now proceed under the Oregon Court's three-factor test for determining whether plaintiffs hold beneficial or equitable property interests."<sup>432</sup>

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<sup>426</sup> *Id.* (internal citations omitted).

<sup>427</sup> *Klamath Irrigation Dist. v. United States (Klamath II)*, 75 Fed. Cl. 677, 685 (2007).

<sup>428</sup> *Klamath Irrigation Dist. v. United States*, 532 F.3d 1376, 1377 (Fed. Cir. 2008).

<sup>429</sup> *Id.* at 1377-78.

<sup>430</sup> *Klamath Irrigation Dist. v. United States (Klamath III)*, 227 P.3d 1145, 1163 (Or. 2010) (citing *Nevada v. United States*, 463 U.S. 110, 121-26 & n. 9 (2009)).

<sup>431</sup> *Id.* at 1166.

<sup>432</sup> *Klamath Irrigation Dist. v. United States (Klamath IV)*, 635 F.3d 505, 518-19 (Fed. Cir. 2011).

The Federal Circuit next addressed—with respect to the contract claims—whether the government is immune from liability under the sovereign acts doctrine.<sup>433</sup> The Federal Circuit recognized that the sovereign acts defense is subject to a two-part test: (1) whether the sovereign act is attributable to the government as a contractor; and (2) whether the act would otherwise release the government from liability under “impossibility.”<sup>434</sup> In applying the two-part test, the court found first that the BOR’s withholding of water pursuant to the ESA was a public and general act, and thus passes the first prong of the two-part test.<sup>435</sup> Next, the court held that “the Court of Federal Claims erred in holding that impossibility of performance is not a factor to be taken into account in considering the sovereign acts doctrine.”<sup>436</sup> Although the Federal Circuit backed away from *Tulare*’s pro-plaintiff application of breach of contract claims, the Federal Circuit instructed the Court of Federal Claims to apply a takings analysis if a compensable property interest exists under state law.<sup>437</sup> In other words, the Federal Circuit indicated that plaintiffs may proceed with a takings claim even if the sovereign acts doctrine precludes liability under a breach of contract claim.<sup>438</sup>

The Court of Federal Claims clearly departed from its broad application of both takings claims and breach of contract claims that it previously had embraced in *Tulare*.<sup>439</sup> The Federal Circuit, on the other hand, stood in agreement—in terms of takings claims—with *Tulare*, as demonstrated by its review in *Klamath* and its holding in *Casitas Municipal Water District v. the United States*.<sup>440</sup>

The *Casitas* case involved a municipal water district, which brought suit claiming that the BOR’s directive to construct a fish ladder and partially divert its water to the ladder amounted to a breach of contract and an uncompensated taking.<sup>441</sup> The water district and BOR entered into a contract where the BOR agreed to construct a series of dams, canals, and other structures.<sup>442</sup> In exchange, the water district agreed to pay for the costs of building the water project and its operation and maintenance.<sup>443</sup> The contract further required that the water district apply to the SWRCB to obtain the appropriative rights necessary to carry out the project.<sup>444</sup> Finally, the contract granted Casitas “[t]he perpetual right to use all

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<sup>433</sup> *Id.* at 520.

<sup>434</sup> *Id.* at 521.

<sup>435</sup> *Id.*

<sup>436</sup> *Id.* at 522.

<sup>437</sup> *Id.* at 519-20.

<sup>438</sup> *Id.* at 522.

<sup>439</sup> *Klamath I*, 67 Fed. Cl. 504, 537-38 (2005).

<sup>440</sup> See *Klamath IV*, 635 F.3d 505, 516-17 (Fed. Cir. 2011); *Casitas Mun. Water Dist. v. United States*, 543 F.3d 1276, 1292-93 (Fed. Cir. 2008).

<sup>441</sup> *Casitas*, 543 F.3d at 1281-82.

<sup>442</sup> *Id.*

<sup>443</sup> *Id.*

<sup>444</sup> *Id.* at 1282.

water that becomes available through the construction and operation of the Project.”<sup>445</sup> Nearly forty years later, the NMFS listed the West Coast steelhead trout as an endangered species.<sup>446</sup> To comply with the ESA, the BOR issued a directive ordering Casitas to construct a fish ladder and divert water to the ladder.<sup>447</sup>

First, the Federal Circuit addressed the plaintiff’s contract claims under the guidance of *Nampa & Meridian Irrigation District v. Bond*.<sup>448</sup> In *Nampa*, an irrigation district filed a lawsuit against the United States claiming that it was forced to pay for costs beyond the terms of the contract.<sup>449</sup> *Nampa* and the United States entered into a fixed-price contract where each party agreed to pay a certain amount toward construction, operation, and maintenance of an irrigation project, which included water transport and drainage systems.<sup>450</sup> Thereafter, it became necessary to drain water outside the scope of the contract because the water project caused seepage into adjacent agricultural lands.<sup>451</sup> *Nampa* sought compensation for the costs associated with construction of these additional drainage systems.<sup>452</sup> The U.S. Supreme Court held that *Nampa* was obligated to pay a proportionate share in “remedy[ing] conditions brought about by the use of the [irrigation project],” even if the drainage does not benefit water users within *Nampa*’s district.<sup>453</sup> Following the Supreme Court’s reasoning articulated in *Nampa*, the Federal Circuit concluded that: (1) Casitas was obligated to “remedy injurious effects resulting from the project’s subsequent operation;” and (2) the BOR’s decision to adopt the NMFS’s biological opinion fell within the protection of the sovereign acts doctrine, and thus the Court denied Casitas’ contract-based claims.<sup>454</sup>

Next, the Federal Circuit addressed the plaintiff’s takings claim in view of the U.S. Supreme Court’s decision in *Tahoe-Sierra Preservation Council v. Tahoe Regional Planning Agency*.<sup>455</sup> In *Tahoe-Sierra*—a regulatory takings case—the Supreme Court held that a thirty-two month moratorium on construction and development of the plaintiff’s land was not a *per se* taking under *Lucas* because the owner regained use of his land at the end of the moratorium.<sup>456</sup> The BOR argued that the dedication of water to the fish ladder is akin to a

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<sup>445</sup> *Id.*

<sup>446</sup> *Id.*

<sup>447</sup> *Id.*

<sup>448</sup> *Id.* at 1284.

<sup>449</sup> *Nampa & Meridian Irrigation Dist. v. Bond*, 268 U.S. 50, 51-52 (1925).

<sup>450</sup> *Id.*

<sup>451</sup> *Id.*

<sup>452</sup> *Id.* at 53-54.

<sup>453</sup> *Id.*

<sup>454</sup> *Casitas Mun. Water Dist. v. United States*, 543 F.3d 1276, 1284, 1288 (Fed. Cir. 2008).

<sup>455</sup> *See id.* at 1289.

<sup>456</sup> *See Tahoe-Sierra Pres. Council, Inc. v. Tahoe Reg’l Planning Agency*, 535 U.S. 302 (2002).

restriction, and thus—like the land use restriction in *Tahoe-Sierra*—falls under a regulatory takings analysis.<sup>457</sup> First, the Federal Circuit held that the water diverted to the fish ladder is a direct appropriation, not a restriction.<sup>458</sup> Second, the court found *Tahoe-Sierra* to be distinguishable because it did not involve a physical taking; the case did not involve water rights; and the water diverted for the fish ladder is a permanent loss, not a temporary loss.<sup>459</sup> Third, the Federal Circuit concluded that *Tahoe-Sierra* did not overrule or modify *International Paper, Dugan, or Gerlach*.<sup>460</sup> Ultimately, the Federal Circuit instructed the Court of Federal Claims to proceed under the physical takings framework.<sup>461</sup>

On remand, the Court of Federal Claims analyzed the scope of Casitas' property interest in its water rights.<sup>462</sup> Casitas sought compensation for 3,492 acre-feet of water lost annually to operate the fish ladder.<sup>463</sup> However, Casitas' appropriative water license provided that it could divert 107,800 acre-feet of water per year and put 28,500 acre-feet per year to beneficial use.<sup>464</sup> First, the Court of Federal Claims held that background principles of state law limit Casitas' property interest to a right of beneficial use:

Indeed, by the very terms of its water license, Casitas is limited to the beneficial use of 28,500 acre-feet of water per year. Accordingly, we hold that plaintiff must demonstrate an interference with that beneficial use in order to establish a Fifth Amendment taking of its property.<sup>465</sup>

The Court of Federal Claims also addressed the government's position that California's public trust doctrine limits property interests in water rights.<sup>466</sup> Under a totality of the circumstances approach, the court determined that the government failed to show that dedication of water for steelhead trout was superior to other competing interests (e.g., domestic and agricultural uses), and thus declined to limit Casitas' water rights under the public trust doctrine.<sup>467</sup>

Once again, the plaintiffs appealed to the Federal Circuit.<sup>468</sup> On the second appeal, the Federal Circuit agreed with the lower court's decision that Casitas' takings claim is limited to beneficial use and concluded that storage of water is

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<sup>457</sup> *Casitas*, 543 F.3d at 1296.

<sup>458</sup> *Id.*

<sup>459</sup> *Id.* at 1296.

<sup>460</sup> *Id.*

<sup>461</sup> *Id.*

<sup>462</sup> *Casitas Mun. Water Dist. v. United States*, 102 Fed. Cl. 443, 452-55 (2011).

<sup>463</sup> *Id.* at 451.

<sup>464</sup> *Id.*

<sup>465</sup> *Id.* at 455.

<sup>466</sup> *Id.* at 455-61.

<sup>467</sup> *Id.*

<sup>468</sup> *See Casitas Mun. Water Dist. v. United States*, 708 F.3d 1340 (Fed. Cir. 2013).

not a beneficial use under California state law.<sup>469</sup> Despite the Federal Circuit’s predilection for applying the physical taking rubric to water right takings cases, the court’s ruling underscored its inability to depart from established state law when determining the scope of a compensable property interest in a water right.<sup>470</sup>

*Tulare, Klamath, and Casitas* involved appropriative water right licenses, which specifically limit the amount of water allowed for diversion and use, and therefore are distinguishable from common-law groundwater rights.<sup>471</sup> Nevertheless, the cases arguably demonstrate that federal courts are—in the context of water rights takings claims—pro-plaintiff, as compared to California state courts.<sup>472</sup> Specifically, the cases display the Federal Circuit’s willingness to apply a physical takings approach in lieu of a regulatory takings analysis.<sup>473</sup> In addition, the federal courts seem to suggest that a plaintiff may prevail in a water rights takings case by showing that the government deprived the claimant of any licensed water that would otherwise be put to reasonable-beneficial use.<sup>474</sup> Moreover, the federal courts recognized a property interest in contract-based water rights, which may be recovered through remedies under principles of contract law.<sup>475</sup> Finally, in *Casitas*, the Court of Federal Claims suggested that there is a presumption—absent a showing to the contrary—that agricultural and domestic water uses are more important than in-stream flow for wildlife, and thus the public trust doctrine does not favor limiting the scope of property interests under such circumstances.<sup>476</sup>

Unlike the relaxed application of takings claims in the federal venues, California’s state courts appear to be more restrictive about requiring compensation.<sup>477</sup> The case of *Joslin v. Marin Municipal Water District* illustrates the Supreme Court of California’s disfavor for awarding compensation to plaintiffs in water right takings litigation.<sup>478</sup> *Joslin* involved downstream riparians

<sup>469</sup> *Id.* at 1356-60.

<sup>470</sup> *See id.*

<sup>471</sup> *See Casitas*, 708 F.3d 1340; *Klamath Irrigation Dist. v. United States*, 635 F.3d 505, 507-08 (Fed. Cir. 2011); *Tulare Lake Basin Water Storage Dist., et al. v. United States*, 49 Fed. Cl. 313 (2001).

<sup>472</sup> *See Casitas*, 708 F.3d 1340; *Klamath*, 635 F.3d at 507-08; *Tulare*, 49 Fed. Cl. 313.

<sup>473</sup> *See Casitas*, 708 F.3d 1340; *Klamath*, 635 F.3d at 507-08; *Tulare*, 49 Fed. Cl. 313.

<sup>474</sup> *See Casitas*, 708 F.3d at 1356-60.

<sup>475</sup> *See Casitas*, 708 F.3d 1340; *Klamath*, 635 F.3d 505; *Tulare*, 49 Fed. Cl. 313.

<sup>476</sup> *See Casitas Mun. Water Dist. v. United States*, 102 Fed. Cl. 443, 453 (2011) (concluding that “[w]hat is in the best interest of a single public trust resource is not necessarily what is in the best interest of the public as a whole. This is especially true since California has explicitly identified domestic and irrigation as the highest uses of water . . . [d]efendant must therefore show that the balance between *Casitas*’ various uses and the uses identified in the biological opinion weighs in favor of the fish”).

<sup>477</sup> *See, e.g., Joslin v. Marin Mun. Water Dist.*, 67 Cal. 2d 132, 149 (1967) (finding in favor of the government in a water right inverse condemnation action); *Allegretti & Co. v. County of Imperial*, 138 Cal. App. 4th 1261, 1273-76 (2006) (denying the plaintiffs’ request to apply a categorical takings analysis to the facts of the case).

<sup>478</sup> *See Joslin*, 67 Cal. 2d 132 (1967).

who brought an inverse condemnation action after a municipal water district constructed a dam for municipal water supply purposes.<sup>479</sup> The downstream riparians claimed that the dam prevented sand, gravel and other sediment from being deposited, which was necessary for their rock and gravel business.<sup>480</sup> In rejecting the riparians' takings claim, the Supreme Court of California held that "[t]here is now no provision of law which authorizes an unreasonable use or endows such use with the quality of a legally protectible interest merely because it may be fortuitously beneficial to the lands involved."<sup>481</sup>

In the context of California groundwater rights, the scope of the compensable property interests varies depending on whether the claimant is an overlying pumper or an appropriator. Overlying pumpers enjoy use rights akin to a riparian and have superior rights to appropriators.<sup>482</sup> In times of shortage, appropriators must be the first to reduce pumping according to the rules of prior appropriation.<sup>483</sup> If there remains a shortage, overlying pumpers must reduce their extraction proportionally in relation to their surface land shares.<sup>484</sup> Both overlying pumpers and appropriators must put water to reasonable beneficial use.<sup>485</sup> In either case, the state's public trust doctrine does not apply to groundwater unless the groundwater at issue is directly impacting a surface waterway.<sup>486</sup> These background principles generally define the extent of the compensable interests in groundwater use.

In *Allegretti & Co. v. County of Imperial*, an overlying owner initiated an inverse condemnation action after the County placed an extraction limit—pursuant to local ordinance—on his well permit.<sup>487</sup> The owner alleged that he used several existing wells, which produced enough water to irrigate approximately 800 of the 2,400 acres on his property.<sup>488</sup> Seeking to farm an additional 200 acres, the owner applied for a permit to activate another well.<sup>489</sup> The County issued the well permit subject to a total extraction limit of 12,000 acre-feet (i.e., no more than 12,000 acre-feet total pumped from all wells on the property).<sup>490</sup> The trial court found that the plaintiff "offered no evidence that [he] had the ability to

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<sup>479</sup> *Id.* at 134.

<sup>480</sup> *Id.* at 134-35.

<sup>481</sup> *Id.* at 144.

<sup>482</sup> *See, e.g., Miller v. Bay Cities Water Co.*, 157 Cal. 256, 279-80 (1910) (explaining that overlying landowners may prevent appropriators from diverting from a "well-defined" water source if the overlying owner can put the water to reasonable use).

<sup>483</sup> *See Katz v. Walkinshaw*, 141 Cal. 116, 135-36 (1903).

<sup>484</sup> *Id.*

<sup>485</sup> CAL. CONST. art. X, § 2; *see also Peabody v. City of Vallejo*, 2 Cal. 2d 351, 365-67 (1935).

<sup>486</sup> *Santa Teresa Citizens Action Grp. v. City of San Jose*, 114 Cal. App. 4th 689 (2003).

<sup>487</sup> *Allegretti & Co. v. County of Imperial*, 138 Cal. App. 4th 1261, 1267 (2006).

<sup>488</sup> *Id.* at 1276.

<sup>489</sup> *Id.* at 1267-68.

<sup>490</sup> *Id.*

extract in excess of 12,000 acre/feet absent the restriction.”<sup>491</sup>

Relying on the Court of Federal Claims’ holding in *Tulare*, the owner argued that the County’s permit restriction amounted to a *per se* physical taking.<sup>492</sup> The California Court of Appeal expressly denounced the *Tulare* ruling and also found the decision to be non-binding on state courts and distinguishable from the facts of *Allegretti*.<sup>493</sup> The Court of Appeal went on to explain that “[i]n the context of water rights, our highest court has found a physical taking where the government diverted water for its own consumptive use or decreased the amount of water accessible by the owner of the water rights.”<sup>494</sup> Because the County neither physically invaded the owner’s property nor appropriated water to the detriment of the owner, the Court of Appeal rejected the owner’s physical taking argument.<sup>495</sup> In other words, the court did not characterize a permit condition limiting the extraction of groundwater as a physical occupation or invasion.<sup>496</sup>

Next, the owner argued that if the permit condition falls under a regulatory analysis, it constitutes a *per se* categorical taking because the permit condition prevented him from making economically beneficial use of a multi-million dollar investment.<sup>497</sup> The owner went on to argue that he purchased the land with expectation of farming the entire lot and making a substantial profit.<sup>498</sup> In rejecting the owner’s second argument, the Court of Appeals explained that the permit condition did not deprive him of all economically viable use of his land and thus could not be considered a categorical regulatory taking under *Lucas*.<sup>499</sup>

Ultimately, the court analyzed the alleged taking under *Penn Central*.<sup>500</sup> First, the court found that because the County did not physically invade or appropriate the owner’s property or the groundwater, the character of the government action did not support a taking.<sup>501</sup> Second, the court reasoned that the economic impact of the permit condition did not favor a taking because: (1) the owner failed to demonstrate the economic impact of the limitation (other than testimony proffered by a lay witness); and (2) “regulations that prohibit the most ‘beneficial use of the property’ or which prohibit ‘a beneficial use to which the individual parcels had previously been devoted and thus cause individualized harm’ are not takings.”<sup>502</sup> Third, the court held that the owner did not have a “reasonable investment-backed

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<sup>491</sup> *Id.* at 1269.

<sup>492</sup> *Id.* at 1271.

<sup>493</sup> *Id.* at 1273-75.

<sup>494</sup> *Id.*

<sup>495</sup> *Id.*

<sup>496</sup> *Id.*

<sup>497</sup> *Id.* at 1275.

<sup>498</sup> *Id.*

<sup>499</sup> *Id.* at 1276.

<sup>500</sup> *Id.* at 1277.

<sup>501</sup> *Id.*

<sup>502</sup> *Id.* at 1278 (quoting *Penn Cent. Transp. Co. v. New York City*, 438 U.S. 104, 125 (1978)).



expectation” because: (1) the evidence did not reveal distinct expectations; and (2) the owner’s expectation that he could pump an unlimited amount of water was contrary to the reasonable beneficial use requirement.<sup>503</sup>

The *Allegretti* case demonstrates the high standard for prevailing in a groundwater right takings action in California state courts.<sup>504</sup> However, the *Allegretti* decision might have gone the other way had the County reduced the pumping instead of limiting the pumping.<sup>505</sup> Moreover, the plaintiff may have strengthened his case by offering evidence that shows: (1) the wells are capable of producing more than 12,000 acre-feet of water;<sup>506</sup> (2) the increase in groundwater withdrawal is proportionate to his correlative share;<sup>507</sup> (3) that a specified amount of the water (e.g., 14,400 acre-feet) is necessary to irrigate the land; and (4) that all of the water would be put to reasonable beneficial use while implementing irrigation efficiency practices.<sup>508</sup>

Even if *Allegretti* filed suit in the federal venue, federal courts are bound by the state courts’ interpretation of state law.<sup>509</sup> Nevertheless, the determination of what constitutes reasonable beneficial use may be subject to a federal court’s sole discretion, if state courts leave the question at issue unanswered.<sup>510</sup> For example, in *Casitas*, the Federal Circuit concluded that California courts had already determined that the storage of water in itself is not a reasonable-beneficial use, and therefore the Federal Circuit was bound by the state’s determination.<sup>511</sup> On the other hand, for example, a federal court may decide freely whether applying five acre-feet of groundwater to each acre of vineyard through surface irrigation is a reasonable-beneficial use because California has left that question unanswered.<sup>512</sup>

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<sup>503</sup> *Id.* at 1279-80.

<sup>504</sup> *See generally id.* (finding for the defendant in a water right inverse condemnation action).

<sup>505</sup> *See generally id.* at 1273, 1277-78 (holding that the county’s limitations on pumping were not a taking, but leaving open the question as to whether a reduction would constitute a taking).

<sup>506</sup> *See Allegretti*, 138 Cal. App. 4th at 1269 (noting that at trial court *Allegretti* offered no evidence that he had the ability to pump more than 12,000 acre-feet of water).

<sup>507</sup> *See Katz v. Walkinshaw*, 141 Cal. 116, 135-36 (1903) (explaining that in times of shortage, overlying landowners are each given a “fair and just proportion”).

<sup>508</sup> CAL. CONST. art. X § 2; *see also Peabody v. City of Vallejo*, 2 Cal. 2d 351, 365-67 (1935).

<sup>509</sup> *Johnson v. Frankell*, 520 U.S. 911, 916 (1997).

<sup>510</sup> *See id.* (holding that federal courts may not “place a construction on a state statute different than one rendered by the highest court of the State”).

<sup>511</sup> *See Casitas Mun. Water Dist. v. United States*, 708 F.3d 1340, 1356-60 (Fed. Cir. 2013).

<sup>512</sup> *See e.g., Peabody*, 25 P.2d 454, 460 (Cal. 1933) (addressing reasonable use of water with respect to sub-irrigation of vineyards, but leaving open the determination of reasonable use for surface irrigation of vineyards).

*D. Takings as Applied to the SGMA*

The likelihood of the SGMA resulting in a constitutional taking is largely dependent on the extent of the GSAs' actions. California Water Code section 10720.5(b) states that “[no] groundwater management plan adopted pursuant to this part, determines or alters surface water rights or groundwater rights under common law or any provision of law that grants or determines water rights.”<sup>513</sup> Nonetheless, the GSAs may promulgate “[r]easonable operating regulations on existing groundwater wells . . . .”<sup>514</sup> Moreover, the GSAs have the authority to “regulat[e], limit[], or suspend[] extractions from individual groundwater wells.”<sup>515</sup>

If a GSA takes action in enforcing the reasonable-beneficial use requirement, a taking is unlikely because the compensable property interest in a California water right is limited to reasonable-beneficial use.<sup>516</sup> Nevertheless, if a GSA action restricts or prevents groundwater pumping to amounts below what the reasonable-beneficial use standard would allow, such action may constitute a taking.<sup>517</sup> Thus, it is imperative that California pumpers document common-law groundwater use to establish pre-existing and reasonable-beneficial water use.<sup>518</sup> Furthermore, because federal and state courts treat takings claims differently, the venue selected may have a significant effect on dispositive issues, such as the determination of reasonable-beneficial use.<sup>519</sup> For example, in *Casitas*, the U.S. Court of Federal Claims favored agricultural and domestic uses over environmental concerns.<sup>520</sup> However, the SGMA's goal of maintaining sustainable aquifer levels is broader than the minimum in-stream flows imposed pursuant to the ESA.<sup>521</sup> In fact, the SGMA seeks to provide reliable and long-term groundwater withdrawal for agricultural and domestic uses.<sup>522</sup> Thus, immediate limitations that the GSAs impose may ultimately benefit groundwater users, especially in critically overdrawn basins, by preserving and extending the productivity of their overlying lands.

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<sup>513</sup> CAL. WATER CODE § 10720.5(b) (2015).

<sup>514</sup> *Id.* § 10726.4(a)(1).

<sup>515</sup> *Id.* § 10726.4(a)(2).

<sup>516</sup> See CAL. CONST. art. X § 2 (“The right to water . . . shall not extend to the waste or unreasonable use.”); see also *Joslin v. Marin Mun. Water Dist.*, 67 Cal. 2d 132, 144 (1967) (stating that “there is now no provision of law which authorizes an unreasonable use or endows such use with the quality of a legally protectible interest . . . .”).

<sup>517</sup> *Allegretti & Co. v. County of Imperial*, 138 Cal. App. 4th 1261, 1267 (2006) (“[The] court has found a physical taking where the government . . . decreased the amount of water accessible by the owner of the water rights.”).

<sup>518</sup> See *id.*

<sup>519</sup> See discussion, *supra* section III.C.

<sup>520</sup> *Casitas Mun. Water Dist. v. United States*, 102 Fed. Cl. 443, 455-61 (2011) (discussing the balance between water rights and the environment).

<sup>521</sup> See CAL. WATER CODE § 113 (2015).

<sup>522</sup> *Id.*

Irrespective of the venue, most takings claims prompted by the SGMA will likely fall under the *Penn Central* regulatory takings analysis.<sup>523</sup> Unlike *Casitas* and *Klamath*, which both involved actual diversion or appropriation of water by the government, most takings claims relating to the SGMA will involve groundwater withdrawal restrictions and thus will not fall under the *per se* physical takings rubric.<sup>524</sup> Moreover, most courts should find that one *Penn Central* factor—the character of the government action/restriction—favors the government, and therefore the outcomes of the SGMA-based takings claims will hinge on: (1) the economic impact of the regulation; and (2) whether a plaintiff’s investment-backed expectations are distinct and reasonable.<sup>525</sup>

#### IV. CONCLUSION

California’s correlative rights doctrine requires overlying pumpers to reduce pumping in proportion to their surface land shares during times of shortage.<sup>526</sup> The SGMA essentially defines “shortage” in terms of basin sustainability and provides state and local agencies with the authority to enforce the correlative rights doctrine, in addition to the reasonable-beneficial use requirement.<sup>527</sup> Therefore, California groundwater pumpers in Medium and High priority basins no longer bear the onus of seeking judicial enforcement of their groundwater rights, unless, however, a GSA’s action is overreaching and constitutes a taking.<sup>528</sup>

The outcome of a California water right takings case is much less predictable than a takings case in either Florida or Texas.<sup>529</sup> Still, the comparison of California-based takings cases in the federal and state venues suggests that plaintiffs will likely experience greater success by staying clear of California state courts.<sup>530</sup> Lastly, plaintiffs with contract-based water rights may, alternatively, seek compensation under principles of contract law.<sup>531</sup>

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<sup>523</sup> See, e.g., *Tahoe-Sierra Pres. Council, Inc. v. Tahoe Reg’l Planning Agency*, 535 U.S. 302, 314-15 (2002); *Allegretti*, 138 Cal. App. 4th at 1270.

<sup>524</sup> *Tahoe-Sierra*, 535 U.S. at 314-15; *Allegretti*, 138 Cal. App. 4th at 1270; see also CAL. WATER CODE § 10726.4(a)(2) (2015).

<sup>525</sup> See, e.g., *Allegretti*, 138 Cal. App. 4th at 1277; *Edwards Aquifer Auth. v. Bragg*, 421 S.W.3d 118, 123, 144-45 (Tex. Ct. App. 2013).

<sup>526</sup> *Katz v. Walkinshaw*, 141 Cal. 116, 135 (1903) (explaining that in times of shortage, overlying landowners are each given a “fair and just proportion”).

<sup>527</sup> See generally CAL. WATER CODE §§ 10721, 10725.4 (section 10721 outlines sustainability, while section 10725.4 outlines the powers of a GSA).

<sup>528</sup> See generally *id.* § 10720.5(b) (stating that the SGMA does not alter existing water rights).

<sup>529</sup> Compare discussion *supra* part III.B, with part III.C.

<sup>530</sup> See discussion *supra* part III.C.

<sup>531</sup> *Id.*