

# THE PERFECT STORM: MONUMENTAL IMPACTS OF A HISTORIC DROUGHT ON SAN JOAQUIN VALLEY FARMERS

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## INTRODUCTION<sup>1</sup>

Imagine if you will, the morning sun shining over fifty acres of orange groves as a farmer heads out to begin the harvest. Snow-capped mountains border the scene. The air is crisp with a slight chill, but it is not too cold to prevent the work that needs to be done. The crisp leaves are glistening with the morning dew and last night's rainfall. The orange fruit adds to the picturesque scene that surrounds the farmer. The farmer anticipates a greater yield this year than in years past because of an abundant rainfall and the trees are full of fruit. Now imagine the same fields are fallow and brown due to lack of rain. The leaves on the trees are curling because of inadequate water. The fruit is small, moldy, or dead. The farmer has had to eliminate a third of his livelihood in order to conserve water in a harsh and relentless drought. Water has become so scarce that the farmer is forced to make due with a fraction of what he received in years past from the Delta River.

Central California is divided into two valleys: the wetter Sacramento Valley to the north, and the drier, semi-arid San Joaquin Valley to the South.<sup>2</sup>

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<sup>†</sup> Author's Biography: J.D. Candidate: May 2017 – Ave Maria School of Law; B.A. Franciscan University of Steubenville. I live in Tulare County, California—more commonly known as the agricultural capital of the world. I was inspired to write this Note after seeing the drought first-hand and the devastating effects on the farming industry. I would like to thank my Note Advisor Professor Eric Fleetham for his guidance and insights on this project. I also want to give a huge shout-out to my mom and best friend Rebecca Herwaldt who brought fresh pairs of eyes and edited my grammar when I was going cross-eyed from reading this multiple times. My Note would not be where it is today without the help of everyone involved in this project.

1. Eric Luebehusen, *U.S. Drought Monitor – California*, NAT'L INTEGRATED DROUGHT INFO. SYS., (Mar. 21, 2017) <https://www.drought.gov/drought/california> (As of Mar. 21, 2017, almost 75% of California is out of the worst drought in state history due to greater than expected rainfall totals. However, until more efficient short-term and long-term storage plans are implemented, California will continue to experience drought-like conditions.).

2. Central Valley (California), WIKIPEDIA (Jan 15, 2016), [http://en.wikipedia.org/wiki/Central\\_Valley\\_\(California\)](http://en.wikipedia.org/wiki/Central_Valley_(California)) (The Sacramento Valley receives more than 20 inches of rain per year while the San Joaquin Valley is semi-arid and feels much like a desert, especially in the summer. Together, the Central

Rich soil abounds in this area of California—especially Tulare County.<sup>3</sup> In 2014, Tulare County was ranked “one of the largest agricultural producing counties in the entire nation.”<sup>4</sup> People across the United States enjoy the fruits of these harvests.<sup>5</sup> However, due to the severe drought, farmers have had to make drastic cutbacks in the amount of water used, the number of crops planted, and even the size of their fields. Although California experiences periodic dry spells, this drought is historic because the problem comes from two sources. In addition to the lack of rain, environmental groups have pressured lawmakers to allocate more water<sup>6</sup> from the Delta River for a tiny fish called the Delta smelt.<sup>7</sup> The agricultural industry is the biggest water user in the state,<sup>8</sup> consuming the majority of water allocated from the Delta. However, depriving farmers of almost all of their water allocations is unreasonable. There are more efficient and sustainable ways to manage the state’s water resources. Some of these solutions include: re-writing the water laws, using drip irrigation systems for micro-plots, planting less water-

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Valley is bordered by the Cascade and Sierra Nevada mountains to the east, the Tehachapi Mountains to the south, and the Coastal Ranges to the West.).

3. See KAREN ROSS, CALIFORNIA AGRICULTURAL STATISTICS REVIEW 5, 14 (2014–2015) [hereinafter ROSS, 2015 REVIEW]; MARILYN KINOSHITA, 2014 TULARE COUNTY ANNUAL CROP AND LIVESTOCK REPORT 9, 12 (2014); *Agriculture*, TULARE COUNTY ECONOMIC DEVELOPMENT OFFICE (2017), <http://www.tularecounty.ca.gov/economicdevelopment/index.cfm/agriculture/> (“Tulare County is one of the most productive farming areas in the world. Local farmers and ranchers produced food and fiber products with a wholesale value of \$6.2 billion in 2012.”).

4. *Tulare County Agricultural Facts*, TULARE COUNTY FARM BUREAU (Sept. 5, 2016), <http://www.tulcofb.org/index.php?page=agfacts>. See ROSS, 2015 REVIEW, *supra*, note 3, at 4, 11–14, 18; KINOSHITA, *supra* note 3.

5. See KAREN ROSS, CALIFORNIA AGRICULTURAL STATISTICS REVIEW, 2012–2013, at 2 (2013) (Over 400 commodities are produced in California. “The state produces nearly half of U.S.-grown fruits, nuts, and vegetables. Across the nation, U.S. consumers regularly purchase several crops produced solely in California.”). For 2014, milk, almonds, and grapes were the top three commodities with revenue valued at \$9.4 billion, \$5.9 billion, and \$5.2 billion respectively. ROSS, 2015 REVIEW, *supra* note 3, at 4. *Cf. California Agricultural Production Statistics*, CALIFORNIA DEPARTMENT OF FOOD AND AGRICULTURE, <https://www.cdfa.ca.gov/statistics/> (last visited Sept. 1, 2016).

6. See *Water Allocation*, ECOLOGY DICTIONARY, [http://www.ecologydictionary.org/WATER\\_ALL](http://www.ecologydictionary.org/WATER_ALL) OCAATION (last visited Aug. 26, 2016) (“Water allocation” is defined as “the process of measuring a specific amount of water devoted to a given purpose . . .”).

7. See *Saving the Delta Smelt*, CTR. BIOLOGICAL DIVERSITY, [http://www.biologicaldiversity.org/species/fish/Delta\\_smelt/](http://www.biologicaldiversity.org/species/fish/Delta_smelt/) (last visited Sept. 1, 2016) (The delta smelt is one of many species found within the San Francisco Bay-Delta water system. It is an important indicator for environmental conditions. In 2007, the smelt were already close to extinction, which indicates that more species are likely to become extinct in the near future.).

8. See Blaine Hanson, *Irrigation of Agricultural Crops in California*, DEP’T LAND, AIR & WATER RESOURCES, <http://www.arb.ca.gov/fuels/lcfs/workgroups/lcfsustain/hanson.pdf> (last visited Dec. 21, 2015) (The agricultural industry uses almost 80% of the developed water supply.).

dependent crops, and rotating between water-dependent crops and drought-resistant crops.

California is currently in the fourth year of a relentless drought—resulting in drastic cutbacks on water usage.<sup>9</sup> Farmers received less water in 2015,<sup>10</sup> and almost every city in the state has implemented a drought-response program.<sup>11</sup> Citizens are required to water their yards on certain days of the week and hefty fines are given out for violations.<sup>12</sup> To comply with the new water mandate, farmers are forced into an extremely difficult situation: dig deeper wells to reach the underground aquifers or let fields go dry.<sup>13</sup> Either way, farmers are suffering. Consumers all over the nation are also suffering because they are losing access to some of the best and freshest produce.<sup>14</sup> In his article on the impacts of California food production, Richard Cornett remarks: “No other state, or even a combination of states, can match California’s output per acre.”<sup>15</sup> A drastic and common sense solution is needed to solve this crisis sooner rather than later. Farmers are essential.

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9. See *California Drought*, USGS, <http://ca.water.usgs.gov/data/drought/> (last visited Nov. 11, 2015) (2014 and 2015 were the warmest years on record with 2015 as the driest year ever recorded in state history.).

10. *Will El Niño End California’s Drought?* ASS’N CAL. WATER AGENCIES (Nov. 2015), [http://www.acwa.com/sites/default/files/news/water-supply-challenges/2015/11/acwa-el-nino-and-ca-drought-info\\_graphic.pdf](http://www.acwa.com/sites/default/files/news/water-supply-challenges/2015/11/acwa-el-nino-and-ca-drought-info_graphic.pdf) (“Surface water deliveries for farms were reduced by 8.7 million acre-feet in 2015.”).

11. See, e.g., *Water Conservation*, CITY OF PORTERVILLE, CAL., <http://www.ci.porterville.ca.us/depts/PublicWorks/waterconservation.cfm> (last visited Mar. 9, 2016) (In Porterville, the author’s hometown, the city is now in Phase III of its drought response program. Residents are on a mandatory odd/even watering schedules: Residents with street addresses ending in odd numbers are allowed to water their lawns only on Tuesdays and Saturdays while those with even-numbered street addresses can water only on Wednesdays and Sundays. No watering can be done between 5a.m.–10a.m. and 5p.m.–10p.m.).

12. See, e.g., *id.*

13. See Jennifer Medina, *California Cuts Farmers’ Share of Scant Water*, N.Y. TIMES (June 12, 2015), [http://www.nytimes.com/2015/06/13/us/california-announces-restrictions-on-water-use-by-farmers.html?\\_r=0](http://www.nytimes.com/2015/06/13/us/california-announces-restrictions-on-water-use-by-farmers.html?_r=0) (“[M]any farmers and agricultural water districts prepared for [water curtailments] by increasing their reserves or digging new wells for groundwater.”); see also Brian Clark Howard, *California Drought Spurs Groundwater Drilling Boom in Central Valley*, NAT’L GEOGRAPHIC (Aug. 16, 2014), <http://news.nationalgeographic.com/news/2014/08/140815-central-valley-california-drilling-boom-groundwater-drought-wells/> (One drilling company charges an initial fee of \$5,000 and \$225 per installed foot. A 1,000-foot well would cost between \$300,000 and \$350,000. The deeper wells also cause the ground to sink, as much as a foot in some places.).

14. See Richard Cornett, *What Happens if US Loses California Food Production?*, WESTERN FARM PRESS (Oct. 31, 2013), <http://westernfarmpress.com/tree-nuts/what-happens-if-us-loses-california-food-production?page=1> (These impacts will be felt primarily in higher consumer prices and in a less balanced diet for consumers. This article states that as prices for fresh fruit increases, young people eat less fresh fruit.).

15. *Id.*

Without this precious resource, they are unable to contribute to the state's economy.

This historic drought has gone on for too long; San Joaquin Valley ("Valley") farmers should not have to make do with minimal water. Water is a property right, and the people in this state, including farmers, have a right to use what is theirs under the law. One doctrine governing water use in California is the Beneficial Use Doctrine. A "beneficial use" of water is defined as human consumption and use.<sup>16</sup> While preserving endangered species is a noble undertaking, it is not a beneficial use of water, and it therefore violates the beneficial use doctrine. Farmers use water beneficially when they use it to irrigate their fields, and this in turn produces food that people eat in order to survive.<sup>17</sup> The California Aqueduct<sup>18</sup> is the primary water source for the state. It transports water from the Delta River south through many channels—one of which runs through the Valley. Farmers also receive water from the State Water Project and the Central Valley Project.<sup>19</sup> If farmers are to use water beneficially, water laws should be revised to allow more water to flow to this important state resource.

A competing but equally important water doctrine in California is the Public Trust Doctrine—which generally holds the state "responsible for protecting the public's right to the use" of the state's navigable waters.<sup>20</sup> While the public trust doctrine serves as an "inherent limitation on the exercise of all water rights,"<sup>21</sup> it "must be evaluated in conjunction with the constitutional mandate of reasonable use."<sup>22</sup> Judge Richard Hodge first stated

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16. See CAL. WATER CODE § 1254 (West 2015).

17. See *id.*

18. *California Aqueduct*, WATER EDUC. FOUND., <http://www.watereducation.org/aquapedia/california-aqueduct> (last visited Nov. 12, 2015) (The California Aqueduct is a critical water source for the San Joaquin Valley and Southern California. This 444-mile long artificial river carries water from the Delta River south to the Tehachapi Mountains. To reach Southern California, the water is lifted 2,000 feet into the air through pipes before it empties into basins further south. Roughly 30% of State Water Project ("SWP") water is delivered to farms in the San Joaquin Valley via the California Aqueduct.). See also *California Aqueduct*, ENCYCLOPEDIA BRITANNICA, <http://www.britannica.com/topic/California-Aqueduct> (last visited Nov. 12, 2015) (The California Aqueduct is made up of "more than 20 pumping stations, 130 hydroelectric plants, and more than 100 dams and flow-control structures.").

19. See *Friant-Kern Canal*, WATER EDUC. FOUND., <http://www.watereducation.org/aquapedia/friant-kern-canal> (last visited Nov. 12, 2015) (The Friant-Kern Canal is part of the federal Central Valley Project ("CVP"). Water from the Friant River is "stor[ed] and divert[ed] . . . into the canals for irrigation on the east side of the San Joaquin Valley.").

20. See *Public Trust Doctrine*, BLACK'S LAW DICTIONARY (10th ed. 2014).

21. Brian E. Gray, *The Public Trust Doctrine: 30 Years Later: Ensuring the Public Trust*, 45 U.C. DAVIS L. REV. 973, 979 (2012).

22. *Id.* at 988.

this proposition in 1990.<sup>23</sup> Judge Hodge set forth a proposal that would establish a physical solution to this problem: (1) set minimum flow standards and (2) establish a water storage reserve to release water per explicit parameters.<sup>24</sup> I would argue that the same balancing approach applied in that case should also be applied to farmers. Establishing a water storage reserve for specific fisheries would ensure that endangered species have adequate water for their habitats, while providing farmers with enough water to adequately irrigate their fields. Evaluated in conjunction with Catholic social teaching, the Public Trust Doctrine becomes one side of a multi-faceted issue: “authentic human development.”<sup>25</sup> Tipping the scales to favor the Delta Smelt exclusively has wreaked havoc throughout the state, and has therefore stunted authentic human growth. Consistent with Catholic social teaching, I would advocate for a middle approach: balancing the needs of farmers’ access to water with species protection. When these extremes are equally balanced, adequate water will flow to all Valley farmers, and endangered species will no longer be threatened.

This Note details the “perfect storm” drought currently plaguing California. The lethal combination of insufficient rainfall, and the diversion of water for species protection have created a double-edged sword. Either one alone would not have a major impact, but together they have had devastating impacts in the San Joaquin Valley. Part I discusses the background law in the state from various sources, and explains how it affects Valley farmers. This Note will also highlight what farmers have been doing in order to comply with the new state and city laws. Part II explains this historic drought in detail, its impacts on Valley farming, and delineates the current Delta River litigation between farmers and environmentalists. Part III argues that the Public Trust Doctrine should be re-evaluated in conjunction with Catholic teaching on human life and the environment. Part IV lists potential solutions to this drought that will alleviate the farmers’ water woes, and send more water to the fertile soils of the San Joaquin Valley. While farmers have to take some of the blame in some of the farming practices used, a lack of adequate water is a burden no one should bear.

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23. *See id.* at 988 & n.52.

24. *Id.* at 989.

25. *See* Pope Francis, *Laudato Si* [Encyclical Letter *On Care for Our Common Home*] ¶ 5 (2015) [hereinafter *Laudato Si*] (Authentic human development “presumes full respect for the human person . . . .” We have the ability to “transform reality” but it “must proceed in line with God’s original gift of all that is.”).

## I. ALL-ENCOMPASSING WATER LAW

This section highlights the existing and complex nature of the water laws in California. In order to account for all of the various uses of water, water law is complex. The water laws discussed in this Note can be found in the following sources: (1) the California Constitution; (2) the Water Code; and (3) case law. The California Constitution sets out the general laws and different ways that water can be used. The Water Code defines the general terms found in the Constitution. Case law surrounding water rights is far reaching, and encompasses a whole host of subjects. After defining the general applicability of water law, this section will focus on the beneficial use and public trust doctrines, as well as their impacts on farmers.

### A. California Constitution

Water is a scarce and precious resource—especially in California. State lawmakers devoted an entire article of the state constitution to this resource and its different uses. The California Constitution<sup>26</sup> expressly states that water resources are to “be put to beneficial use to the fullest extent of which they are capable, and that the waste . . . or unreasonable method of use of water be prevented . . . .”<sup>27</sup> It also provides that water conservation should be implemented according to “reasonable and beneficial uses.”<sup>28</sup> The Constitution further states that the use of water appropriated now or in the future is a “public use.”<sup>29</sup> Farming is a public use of water; the water is used to grow the crops that are enjoyed by millions of people worldwide.

### B. California Water Code

The importance of conservation did not escape the notice of the California legislature, and its importance was specifically codified in the Water Code. Under current state conditions, “the general welfare requires that the water resources of the State be put to beneficial use to the fullest extent of which they are capable, and that the waste or unreasonable use or unreasonable

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26. CAL. CONST. art. X (The section devoted to water uses in the state was adopted in 1976.).

27. *Id.*; see also *Cent. and W. Basin Water Replenishment Dist. v. S. Cal. Water Co.*, 135 Cal. Rptr. 2d 486, 495–96 (Cal. Dist. Ct. App. 2003) (The beneficial use doctrine applies to all water uses and the settlement of all water controversies.).

28. CAL. CONST. art. X, § 2.

29. *Id.* at § 5.

method of use of water be prevented.”<sup>30</sup> Water use is limited to what is “reasonably required” to be a beneficial use.<sup>31</sup> Public benefit also holds great weight for California lawmakers. As a result, both surface and underground water resources are to “be developed for the greatest public benefit.”<sup>32</sup> California legislators have also declared that domestic use of water is the highest use of water, followed by irrigation purposes.<sup>33</sup> By putting irrigation as the second highest use of water, legislators recognized the importance of farming and its role in the state economy.

### C. *Case Law*

The water law cases in California are as complex and unique as the statutory laws outlined above—covering every water use and body of water in the State. When it comes to farmers, California, through the State Water Resources Control Board, has attempted to restrict water uses under the fear that farmers are using too much water. This fear is inconsistent with the beneficial use doctrine. In response to this fear, California courts have consistently held that the farmer is entitled to enough water that is reasonably necessary for their farming needs. Through these decisions, the California courts have upheld the beneficial use doctrine. More recently, this line of precedent has been eroded under the public trust doctrine.<sup>34</sup> Under the public trust doctrine, environmentalists have effectively destroyed the beneficial use doctrine in favor of species protection. The following cases will demonstrate that the beneficial use doctrine and the public trust doctrine can be effectively balanced.

#### 1. *Beneficial Use of Water and Farming*

Consistent with the beneficial use doctrine, farmers are entitled to as much water as is *reasonably necessary* for use on their lands. A riparian<sup>35</sup> owner has the right “to all the water . . . which it can use on its riparian lands for

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30. CAL. WATER CODE § 100 (West 2015).

31. *Id.*

32. *Id.* at § 105.

33. *Id.* at § 1254.

34. See CAL. CONST. art. X, § 5 (“The use of all water now appropriated . . . is hereby declared to be a public use, and subject to the regulation and control of the state, in the matter to be prescribed by law.”).

35. See *Riparian*, BLACK’S LAW DICTIONARY (10th ed. 2014) (“Of, relating to, or located on the bank of a river or stream . . .”).

useful and beneficial purposes.”<sup>36</sup> In *Meridian Ltd. v. San Francisco*, the farmer relied on water from the Tuolumne River for crop irrigation and domestic use on his 4,320-acre ranch.<sup>37</sup> The City of San Francisco and San Francisco County created the Hetch Hetchy<sup>38</sup> project to store and divert water from the Tuolumne River for use by the city.<sup>39</sup> The farmer sued to quiet title for prescriptive water rights, and an injunction to protect his rights as a water-user.<sup>40</sup> Ultimately, the court concluded that the farmer had the right to use all the water from the Tuolumne River as would be reasonable and necessary for use on his lands.<sup>41</sup> The city “ha[d] the right to store the excess waters of the stream.”<sup>42</sup> Consistent with this case, farmers living near a stream or river are entitled to all water as would be “reasonable and necessary” for use on their land. Any excess water could be stored by the city for other uses.

Recognizing the need to prevent overuse, in *Tulare Irrigation Dist. v. Lindsay-Strathmore Irrigation Dist.*, the California Supreme Court established a water limit consistent with the beneficial use doctrine. This water limit would allow farmers to better comply with the beneficial use doctrine. Under the constitutional amendment of beneficial use, each riparian or appropriative owner will have a fixed quantity of water “for his actual reasonable beneficial uses.”<sup>43</sup> Appellant, Lindsay-Strathmore Irrigation District, was formed to increase water quality in the area after irrigation water was found to be insufficient for citrus farming.<sup>44</sup> The farmers in this case had a riparian right to the waters of the St. Johns and/or the Kaweah River.<sup>45</sup> Among other claims, they alleged that the city had no right to the water.<sup>46</sup> Before this case was decided, as riparian owners, the farmers were “not limited to a reasonable beneficial use.”<sup>47</sup> Relying on the doctrine of reasonable beneficial use, the California Supreme Court concluded that each riparian owner would have a

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36. *Meridian, Ltd. v. San Francisco*, 90 P.2d 537, 554 (Cal. 1939) (Farmers living near a river would be protected under this right.).

37. *Id.* at 539.

38. See *Hetch Hetchy*, WIKIPEDIA, [http://en.wikipedia.org/wiki/Hetch\\_Hetchy](http://en.wikipedia.org/wiki/Hetch_Hetchy) (last visited Mar. 17, 2016) (“Hetch Hetchy Valley lies in the northwestern part of Yosemite National Park.” The Hetch Hetchy Project delivers water to San Francisco and other cities in the San Francisco Bay Area.).

39. *Id.*

40. *Meridian, Ltd.*, 90 P.2d at 542.

41. *Id.* at 554.

42. *Id.*

43. *Tulare Irrigation Dist. v. Lindsay-Strathmore Irrigation Dist.*, 45 P.2d 972, 986 (Cal. 1935).

44. *Id.* at 977–78.

45. *Id.* at 978.

46. *Id.* at 979.

47. *Id.* at 985.



fixed quantity of water “for his actual reasonable beneficial uses.”<sup>48</sup> By fixing the quantity for each riparian owner, the actual beneficial uses of the riparian owner are protected.<sup>49</sup> It is unnecessary to fix the quantity for future riparian owners because the quantity of water will not be known until the need arises.<sup>50</sup> By fixing the exact amount needed for farmers according to their needs, water is conserved for other uses and will not be wasted.

Consistent with the beneficial use doctrine, impounding or diverting water without just compensation is an unreasonable taking.<sup>51</sup> In *Rank v. Krug*, a California District Court resolved an alleged constitutional violation of the farmers’ water rights.<sup>52</sup> The farmers owned land between the Friant and Mendota Dams.<sup>53</sup> City officials built the Friant Dam above the farmers’ lands and began diverting water to store behind the dam.<sup>54</sup> The farmers argued that unless the city officials were enjoined from such use, the entire stream would be dammed, and this would prevent any water from flowing to the farmers’ lands.<sup>55</sup> Relying on the promise that the city would not interfere with their water rights, the farmers took no action until they were informed that their water rights were adjusted.<sup>56</sup> Relying on precedent, the court stated “that the riparian owner ha[d] a prior and paramount right to [the public use] and if necessary [wa]s entitled to the full natural flow of the stream or its equivalent undiminished in quantity and unimpaired in quality.”<sup>57</sup> Because the farmers were putting all of the available water to a reasonable and beneficial use, the court held that the farmers could continue using the water.<sup>58</sup> The court also held that impounding the water destroyed current water flow, and thus constituted an unjust taking without compensation.<sup>59</sup> Just like any other property right, water cannot be taken by the city without just compensation.

The cases above outline the importance of the beneficial use doctrine and its application to farmers. *Meridian* held that farmers were entitled to as much water that was “reasonably necessary” for use on the farm.<sup>60</sup> *Tulare Irrigation*

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48. *Id.* at 986.

49. *Id.*

50. *Id.*

51. *See Rank v. Krug*, 90 F. Supp. 773, 791 (S.D. Cal. 1950).

52. *Id.* at 779.

53. *Id.* at 781.

54. *Id.* at 783.

55. *Id.*

56. *See id.*

57. *Id.* at 787–88. The prior precedent used by the court declared all water to be a public use.

58. *Id.* at 788.

59. *See id.* at 789.

60. *Meridian, Ltd. v. San Francisco*, 90 P.2d 537, 554 (Cal. 1939).

*District* established a limit on farmers' water use consistent with the beneficial use doctrine.<sup>61</sup> *Rank* held that taking water without compensation is an unjust taking.<sup>62</sup> Since the California Supreme Court decided *Meridian* and *Tulare Irrigation District*, water rights for farmers have slowly eroded to favor environmentalists and their reliance on the public trust doctrine over the farmer. If water uses are to be used beneficially "to the fullest extent of which they are capable,"<sup>63</sup> then farming should not be excluded. Taking away a farmer's right to adequate water directly contravenes the beneficial use doctrine. Courts need to balance the two theories and find middle ground.

Conversely, if the city has a prior vested right to that of the farmer, water can be released for other uses without damaging the farmer's right. Water "releases are to supply downstream diversions of the surface flow under vested prior rights" and are not an unreasonable use.<sup>64</sup> In *Jordan v. City of Santa Barbara*, a group of farmers owned "approximately 2,500 acres of agricultural land in the Lompoc Plain, some of which [wa]s riparian to the Santa Ynez River."<sup>65</sup> The City of Santa Barbara and the Montecito Water District owned and operated dams on the upstream portion of the river, and diverted water for use by city residents.<sup>66</sup> The farmers filed a suit against the city, and alleged that both the city and water district were diverting more water than was allowed.<sup>67</sup> Because the farmers could not prove they were substantially damaged, the court ultimately ruled for the city.<sup>68</sup> The city's prior vested right did not damage the farmer's right to appropriate water because the prior vested right also used water in a beneficial way.

## 2. *Water as a Public Trust*

While earlier court decisions held that farmers had a right to water under the beneficial use doctrine, recent trends have eroded that right under the public trust doctrine. The public trust doctrine is an "inherent limitation on the exercise of all water rights, regardless of type or priority of right."<sup>69</sup> Consistent with this idea, in *National Audubon Society v. Superior Court*, the

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61. *Tulare Irrigation Dist. v. Lindsay-Strathmore Irrigation Dist.*, 45 P.2d 972, 986 (Cal. 1935).

62. *Rank v. Krug*, 90 F. Supp. 773, 789 (S.D. Cal. 1950).

63. See CAL. CONST. art. X, § 2.

64. *Jordan v. City of Santa Barbara*, 54 Cal. Rptr. 2d 340, 354 (Cal. Ct. App. 1996).

65. *Id.* at 343.

66. *Id.*

67. *Id.* at 344.

68. See *id.* at 354.

69. Gray, *supra* note 21.

California Supreme Court held that the state was under an affirmative duty to incorporate the public trust in water planning “and to protect public trust uses whenever feasible.”<sup>70</sup> The City of Los Angeles held a permit allowing it to appropriate the majority of the water flowing into Mono Lake.<sup>71</sup> A substantial amount of the water in Mono Lake was diverted, and this resulted in lower water levels and substantial aesthetic changes.<sup>72</sup> An environmental group argued that the lake and its surrounding shores were “protected by the public trust.”<sup>73</sup> After entering summary judgment against the group, the trial court became the defendant in this action.<sup>74</sup> The environmental group alleged that the continuing water diversions would cause enormous environmental impacts to Mono Lake and the surrounding region.<sup>75</sup> The heart of the public trust doctrine allows a state “to exercise a continuous supervision and control over the navigable waters of the state and the lands underlying those waters.”<sup>76</sup> The court considered the purpose and scope of the public trust, as well as the powers and duties of the state as trustee.<sup>77</sup> After evaluating the traditional purposes of the public trust, the court expanded the definition—allowing for changes according to public needs.<sup>78</sup> The court concluded that the public trust doctrine applied to “protect[] navigable waters from harm caused by diversion of non-navigable tributaries.”<sup>79</sup> The court also affirmed that the duty of the State to uphold the public trust was a duty “to protect the people’s common heritage of” all the state’s waters, including streams, rivers, and marshlands.<sup>80</sup> Consistent with this idea, when the State Water Board allocates water resources, it must keep the public trust at the forefront of all allocations, and make sure that adequate water is left for recreational and aesthetic purposes.

Occasionally, these core water doctrines clash—leaving the courts to resolve the problem. Statutes provide the answer in determining which doctrine takes precedence over the other.<sup>81</sup> Diversion of water for frost protection of crops is an unreasonable use when it is in violation with a water

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70. *See Nat’l Audubon Soc’y v. Superior Court*, 658 P.2d 709, 728 (Cal. 1983).

71. *Id.* at 711.

72. *Id.*

73. *Id.* at 712.

74. *See id.*

75. *Id.* at 715–16.

76. *Id.* at 712.

77. *Id.* at 719–21.

78. *Id.* at 719.

79. *Id.* at 721.

80. *Id.* at 724.

81. *See Light v. State Water Res. Control Bd.*, 173 Cal. Rptr. 3d 200, 219 (Cal. Ct. App. 2014).

management demand program.<sup>82</sup> For example, in *Light v. State Water Resources Control Board*, the First District Court of Appeals in California concluded that although the Water Board could regulate the unreasonable use of water, crop protection was not unreasonable in this instance.<sup>83</sup> Grape vineyard owners challenged the Water Board's authority to divert water to protect salmonids<sup>84</sup> in the Russian River.<sup>85</sup> This dramatic reduction in water resulted in many young salmon dying prematurely—forcing the Water Board to take action to prevent further deaths.<sup>86</sup> Ultimately, the task force could not persuade all farmers to reduce their use of water for crop spraying.<sup>87</sup> The court looked at the authority of the Legislature to enact laws governing the reasonable use of water, and concluded that the Water Board also had that authority because it was an extension of the California Legislature.<sup>88</sup> When it came to the issue of water diversion, the court concluded that some regulation of water normally diverted for crops “was necessary to prevent unwarranted salmonid mortality.”<sup>89</sup> In this case, the public trust doctrine prevailed over the beneficial use doctrine to preserve endangered species. Environmentalists have taken the public trust doctrine and used it to protect the smelt from ultimate mortality. Their argument echoes the city's argument in *Light*: diversion of water is “necessary to prevent unwarranted . . . mortality.”<sup>90</sup>

In *National Audubon Society*, the court reaffirmed the public trust doctrine's dominant role in California jurisprudence. The court concluded that the public trust doctrine was flexible enough to change with the public's needs. In *Light*, the court rejected the beneficial use doctrine and favored the public trust doctrine for species protection. The cases mentioned above are a small snapshot of cases that have undone decades of precedent to tip the scales too far to one side. Instead of protecting the right to use navigable waters, environmentalists have used the public trust doctrine to restrict thousands of gallons of water to protect the delta smelt's habitat. *National Audubon Society* expanded the definition of the public trust doctrine to include public

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82. *Id.*

83. *See id.*

84. *See Salmonid*, FREE DICTIONARY, <http://dictionary.reference.com/browse/salmonid> (last visited Jan. 16, 2016) (“[B]elonging or pertaining to the family Salmonidae, including the salmon, trouts, chars, and whitefishes.”).

85. *Light*, 173 Cal. Rptr. 3d at 206.

86. *See id.*

87. *Id.* at 207.

88. *Id.* at 215–16.

89. *Id.* at 225.

90. *Id.*

“recreational and ecological” needs as “among the purposes of the public trust.”<sup>91</sup> The court in *Light* allowed some regulation of water normally reserved for farmers as a necessary step in preventing endangered species mortality.<sup>92</sup> California legislators need to once again strike a balance between the two extremes: allowing farmers to use enough water reasonably necessary for their farms and protecting endangered species.

## II. CONTENTIOUS DELTA RIVER BATTLE: A VIOLATION OF THE BENEFICIAL USE DOCTRINE

End-to-end, and side-to-side, Central California is roughly 450 miles long and 60 miles wide.<sup>93</sup> Sunshine is ample—with nearly 300 sunny days per year.<sup>94</sup> Coupled with the 25-degree temperature swing between day and night, California has perfect growing conditions.<sup>95</sup> However, this rich agricultural farmland is not without its problems. The farming equipment, mega cattle farms, like Harris Ranch,<sup>96</sup> and mountain ranges on three sides make the air in the San Joaquin Valley the worst in the nation.<sup>97</sup> Despite its many problems, California’s Central Valley still leads the nation in the number of crops produced per year, making the water rights battle both current and relevant. Without water, many crops would be lost, as well as millions of dollars in revenue.

Simply put, the water rights battle in California is complex and contentious. Insufficient rainfall and a lack of water from the Delta have contributed to the current litigation. Farmers are pitted against environmentalists for two important interests on opposite ends of the spectrum. While protecting endangered species is important, it should not

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91. Nat’l Audubon Soc’y v. Superior Court, 658 P.2d 709, 719 (Cal. 1983).

92. See *Light*, 173 Cal. Rptr. 3d at 225.

93. Mark Bittman, *Everyone Eats There*, N.Y. TIMES MAG. (Oct. 10, 2012), [http://www.nytimes.com/2012/10/14/magazine/californias-central-valley-land-of-a-billion-vegetables.html?\\_r=0](http://www.nytimes.com/2012/10/14/magazine/californias-central-valley-land-of-a-billion-vegetables.html?_r=0).

94. *Id.*

95. *Id.*

96. Harris Ranch is located in Coalinga, California on the western side of the San Joaquin Valley—running alongside Interstate 5. *Harris Ranch*, WIKIPEDIA, [https://en.wikipedia.org/wiki/Harris\\_Ranch](https://en.wikipedia.org/wiki/Harris_Ranch) (last visited Nov. 4, 2015). (With over 100,000 cattle on 800 acres, Harris Ranch is the largest beef producer in the state. Harris Ranch alone produced 150 million pounds of beef in 2010.)

97. Fresno and Bakersfield are the top two cities with the worst air in the nation. Rachele Blidner, *Air Pollution Makes it “Dangerous to Breathe” in Many U.S. Cities: Report* N.Y. DAILY NEWS (April 30, 2015, 11:04 AM), <http://www.nydailynews.com/life-style/health/pollution-dangerous-breathe-report-article-1.2204916>. Tulare County is in the middle of these two cities. See *Tulare County Map*, TULARE COUNTY HISTORICAL SOCIETY <http://www.tularecountyhistoricalsociety.org/map-of-tulare-county/> (last visited July 7, 2017).

come at the expense of farming. California case law has declared that farmers have the right to a reasonable amount of water consistent with the beneficial use doctrine;<sup>98</sup> a right now impeded by contentious litigation protecting the smelt. As of March 2015, there were only six remaining smelt in the Delta River.<sup>99</sup> This historic drought has prompted drought response programs in almost all California cities.<sup>100</sup> Farmers must comply with the drought response programs, and as a result, their businesses are suffering heavy losses. The national (and global) economy is also impacted because the nation's freshest fruits and vegetables have increased in price with each passing year.<sup>101</sup>

California has a notorious history of over-allocating water,<sup>102</sup> and thus contributed to the current contentious litigation between farmers and environmentalists. So far, the law has favored the Delta smelt, and protecting its environment. California's drought has even caught the attention of Congress and the President, prompting solutions at both ends of the spectrum. State water policy has also been affected; legislation has been drafted to battle the drought, and curtailment notices have been issued to conserve water across the board. While reserving water for the smelt's habitat is important, this need diminishes when it directly affects the beneficial use doctrine. Water is to be put to its most "beneficial use"<sup>103</sup> possible, and these beneficial uses include human consumption and use. Farmers comply with this mandate when they use water to irrigate their fields. Current water laws restricting access to water for farmers should be revised, allowing more water to flow to farmers. While returning allocation levels to near normal would be unreasonable in current drought conditions, farmers should have the right to as much water as is reasonably necessary to keep their crops alive.

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98. See CAL. CONST. art. X, § 2.

99. Jane Kay, *Delta Smelt, Icon of California Water Wars, Is Almost Extinct*, NAT'L GEOGRAPHIC (Apr. 3, 2015), <http://news.nationalgeographic.com/2015/04/150403-smelt-california-bay-delta-extinction-endangered-species-drought-fish/>.

100. See, e.g., *Water Conservation*, *supra* note 11.

101. See *California Economy*, CALIFORNIA, [http://www.netstate.com/economy/ca\\_economy.htm](http://www.netstate.com/economy/ca_economy.htm) (last visited Nov. 4, 2015) (California is "the agricultural powerhouse of the United States." More than 200 crops are grown in California—"some grown nowhere else in the nation . . . California produces almost all of the country's almonds, apricots, dates, figs, kiwi fruit, nectarines, olives, pistachios, prunes, and walnuts. It leads in the production of avocados, grapes, lemons, melons, peaches, plums, and strawberries."). See also TULARE COUNTY ECONOMIC DEVELOPMENT OFFICE, *supra* note 3 ("Tulare County is one of the most productive farming areas in the world. Local farmers and ranchers produced food and fiber products with a wholesale value of \$6.2 billion in 2012.").

102. See THEODORE E. GRANTHAM & JOSHUA H. VIERS, *100 YEARS OF CALIFORNIA'S WATER RIGHTS SYSTEM: PATTERNS, TRENDS, AND UNCERTAINTY* 1, 6 (IOP Publishing, 2014) ("Water rights allocations total 400 billion cubic meters, approximately five times the state's mean annual runoff.").

103. See CAL. CONST. art. X § 2.

*A. Historical Problem: Over-Allocation of Water Study*

Water has been historically over-allocated for well over 100 years—mostly due to inefficiency in reporting and “inaccurate” or “incomplete accounting of water rights.”<sup>104</sup> This historical problem of inaccuracy and over-allocation has made for an ill-equipped state unable to meet “growing societal demands for water supply reliability and healthy ecosystems.”<sup>105</sup> The authors of *100 Years of California’s Water Rights System* conducted a comprehensive study of California’s water rights system in order to determine the gap between supply and demand.<sup>106</sup> The authors obtained over 31,000 active surface water rights which represented roughly 450,000 million cubic meters of water.<sup>107</sup> Most of the water granted corresponds to a small number of appropriative water rights: “[O]f the top 1% water rights by count account for over 80% of the total water volume allocated.”<sup>108</sup> While the volume of water allocated has decreased since the turn of the 20th century, water rights have increased steadily over time.<sup>109</sup> Ultimately, the statistics represent that the number of water rights (demand) exceeds the supply by nearly five times.<sup>110</sup> At the end of their study, the authors point out that in order to meet the new and increasing demands, the existing water rights system needs to be reallocated and shifted around.<sup>111</sup> In order to implement this strategy, state regulatory agencies, such as the Water Resources Control Board, will have to receive more funding and resources.<sup>112</sup>

The current water allocation to farmers is below what is needed.<sup>113</sup> Nevertheless, farmers have contributed to the problem by using more water than is necessary. While farmers must bear their share of the problem, this does not mean that they should be subject to dramatic cuts in their water supply

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104. See GRANTHAM & VIERS, *supra* note 102.

105. *Id.*

106. *Id.*

107. *Id.* at 4.

108. *Id.*

109. *Id.*

110. *Id.* at 6–7.

111. *Id.* at 8.

112. See *id.*

113. See Brett Walton, *California Drought Cuts Farm Water Allocation to Zero for Second Consecutive Year*, CIRCLE OF BLUE (Feb. 27, 2015), <http://www.circleofblue.org/2015/world/california-drought-cuts-farm-water-allocation-zero-second-consecutive-year/> (“For the second consecutive year, farmers with contracts from the Central Valley Project, a large federal irrigation system, will receive no water . . .”).

from the Delta River.<sup>114</sup> Instead of slashing the normal amount of water allocated to a specific farmer, the legislature should work with farmers to implement a solution that allows the farmer to maintain his livelihood and conserve resources at the same time. One solution is to plant crops that demand less water;<sup>115</sup> while the farmer cannot plant what he normally plants, he is still contributing to the economy and complying with the demand to conserve water. Re-allocating existing water rights will also help to ensure that farmers still receive the amount of water they need while also conserving water.

### B. Current Water Battle over the Delta River

The San Francisco Bay-Delta is “a major hub for California’s water system”<sup>116</sup> with much of the water for California residents coming from this source. The smelt is one of many species found within this water system, and it is an important indicator for environmental conditions within the Bay-Delta.<sup>117</sup> In 2007, the smelt were already close to extinction, which indicates that more species are likely to become extinct in the near future.<sup>118</sup> Contrary to the popular belief that water appropriation is the sole contributor to smelt decline, the U.S. Fish and Wildlife Service has found four significant threats to the species.<sup>119</sup> While water appropriation has played a large part in the decline, it is not the sole factor and therefore should not be blamed.

The controlling precedent on the current water battle over the Delta River can be found in the United States Court of Appeals for the Ninth Circuit case *San Luis & Delta-Mendota Water Authority v. Jewell*.<sup>120</sup> This massive case pitted a coalition of farmers and water contractors against the Fish and Wildlife

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114. See Kurtis Alexander, *Delta Farmers Offer to Take 25 Percent Less Water*, SFGATE (May 20, 2015) <http://www.sfgate.com/drought/article/Delta-farmers-offer-to-take-25-percent-less-water-6277049.php> (In a recent deal with California legislatures, some farmers have agreed to give up 25 percent of their rights “or plant 25 percent less, if state water officials agree not to demand the remaining 75 percent later . . .”).

115. See Sonoma County Master Gardeners, *Drought-Resistant Crops and Varieties*, U. CAL. COOPERATIVE EXTENSION, <http://ucanr.edu/sites/scmg/files/183771.pdf> (last visited Dec. 22, 2015).

116. *Saving the Delta Smelt*, *supra* note 7.

117. *Id.*

118. *Id.* The other species that could go extinct include longfin smelt, salmon, and sturgeon. *Id.*

119. See *Delta Smelt*, U.S. FISH & WILDLIFE SERV. BAY DELTA FISH & WILDLIFE OFF. [https://www.fws.gov/sfbaydelta/species/delta\\_smelt.pdf](https://www.fws.gov/sfbaydelta/species/delta_smelt.pdf) (last visited Nov. 6, 2015) (The four significant threats to the smelt include: (1) “Direct entrainments by State and Federal water export facilities”; (2) “Summer and fall increases in salinity”; (3) “Summer and fall increases in water clarity”; and (4) “Effects from introduced species.”).

120. *San Luis & Delta-Mendota Water Auth. v. Jewell*, 747 F.3d 581 (9th Cir. 2014).



Service through the Department of the Interior.<sup>121</sup> In this case, the court considered whether to redirect water from the Delta River through two state water projects: the Central Valley Project (“CVP”) and the State Water Project (“SWP”).<sup>122</sup> Combined, the CVP and SWP supply water to more than 20 million consumers, and help irrigate several million acres of farmland.<sup>123</sup> The Fish and Wildlife Service (“FWS”) issued a Biological Opinion (“BiOp”) that concluded the SWP and CVP did not jeopardize the smelt’s habitat.<sup>124</sup> The environmentalists argued that redirecting water from the Delta River resulted in higher water salinity, trapped the smelt in the water pumps, and introduced salty tidal waters further upstream.<sup>125</sup> The farmers sought a preliminary injunction to prevent implementation of a new BiOp that would divert water for the smelt.<sup>126</sup> On appeal, the farmers raised three claims of error with the final being the most important for this paper.<sup>127</sup>

Their third claim of error was that the FWS “failed to prepare an environmental impact statement . . . .”<sup>128</sup> Federal law requires an environmental impact statement (“EIS”) for every legislation proposal that affects the human environment.<sup>129</sup> The FWS argued that it was not required to file the EIS because it was not a federal agency.<sup>130</sup> The Ninth Circuit concluded there was no reason to require a consulting agency to file an EIS because they submitted their findings to a federal agency that would file the report.<sup>131</sup> Despite the limited amount of data, there was ample evidence to support the finding that the smelt’s habitat was jeopardized by the water projects.<sup>132</sup> Ultimately, the Ninth Circuit reversed the lower court, and ruled that the FWS had the power to protect the smelt through the Environmental Protection Act.<sup>133</sup> In January of last year, farmers appealed to the Supreme Court of the United States. The Supreme Court denied certiorari without

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121. *Id.* at 592.

122. *Id.* at 592, 594.

123. *Id.* at 592–93.

124. *Id.* at 597.

125. *Id.* at 595, 622.

126. *See id.* at 599.

127. *Id.* at 638.

128. *Id.*

129. *Id.* at 640–41.

130. *See id.* at 642.

131. *See id.* at 644.

132. *Id.* at 616.

133. *Id.* at 655.

issuing an opinion<sup>134</sup>—thus leaving thousands of farmers without adequate water.<sup>135</sup>

The immediate impacts of this decision have resulted in increased drastic cutbacks on water. Governor Jerry Brown recently declared that if drought conditions continued to worsen, water restrictions would remain in effect “until the end of October 2016.”<sup>136</sup> The inadequate water has already forced farmers to dig deeper wells to reach the underground aquifers. Long term effects of the deep water drilling could result in a higher probability of earthquakes. “Massive changes in groundwater levels in the southern Central Valley are changing the stresses on the San Andreas Fault . . . .”<sup>137</sup> While earthquakes have not been a major concern in years past, the continued water pumping could increase this risk. More federal appeals could also become a reality—with farmers seeking the protection of the federal courts without resorting to the state courts.

Another contributing factor in the current litigation is a 2007 federal protective order listing the Delta smelt on the federal endangered species list.<sup>138</sup> The federal restrictions put into place by this federal protective order, and the Ninth Circuit ruling in *San Luis & Delta-Mendota Water Authority v. Jewell* has drastically limited the water pumping from the Bay-Delta. In his article, Reed Hopper explains the impact of the federal protective order: “81 billion gallons of water have been allowed to flow out to the ocean—off limits to human use or consumption.”<sup>139</sup> That massive amount of water pumped into the Pacific Ocean would save 85,000 acres of farmland in the Central

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134. See *State Water Contractors v. Jewell*, 135 S. Ct. 950 (2015). See also *Petition for Writ of Certiorari, State Water Contractors. v. Jewell* 2014 U.S. S. Ct. Briefs LEXIS 3557 at \*36 (The issue on appeal was whether the Endangered Species Act required “the Government to protect species at all costs, without regard for the impact on the public.”).

135. See Michael Doyle, *Supreme Court Isn't Biting on California's Delta Smelt Case*, MCCLATCHY WASHINGTON BUREAU (Jan. 12, 2015, 4:46 PM), <http://www.mcclatchydc.com/news/nation-world/national/article24778312.html> (“Put simply, the appellate court concluded the Fish and Wildlife Service could curtail water deliveries to farms in order to protect the fish under the Endangered Species Act, without regard to the human or economic cost.”).

136. See Justin Worland, *California May Extend Water Restrictions Next Year*, TIME (Nov. 15, 2015), <http://time.com/4113952/california-drought-restrictions/>.

137. See Katherine Bourzac, *Groundwater Depletion is Destabilizing the San Andreas Fault and Increasing Earthquake Risk*, S.F. PUBLIC PRESS (May 14, 2014, 10:01 AM), <http://sfpublicpress.org/news/2014-05/groundwater-depletion-is-destabilizing-the-san-andreas-fault-and-increasing-earthquake-risk>.

138. See Geoffrey Willis, *Special Feature: Water Right: Continuing Water Wars in California—Different Issues. Same Fight*, 56 ORANGE COUNTY LAWYER 20, 22 (Aug. 2014).

139. See M. Reed Hopper, *Water Cutoff for Delta Smelt is Illegal*, PACIFIC LEGAL FOUND., <http://www.pacificlegal.org/cases/Water-cutoff-for-Delta-smelt-is-unconstitutional> (last visited Nov. 6, 2015).

Valley.<sup>140</sup> This federal protective order alone has had massive impacts on farming in the Central Valley, and it has contributed to the double-edged sword effect of the current drought. If that water had been allowed to flow to farms, the drought impact would only be coming from one source—lack of adequate rain. The federal government has taken notice of this historic drought, and two very different responses have surfaced as a result.

### *C. Federal Government Intervention*

The drought in California has caught the attention of the United States Congress and President Obama. Both the President and the former House Speaker Boehner have visited the drought stricken San Joaquin Valley to see the severity of the drought first-hand.<sup>141</sup> One proposal offered \$183 million in federal funds that would fund drought relief programs, while the other spurred legislation that would alleviate the long-term problem.<sup>142</sup> While the President's proposal would alleviate the short-term problem, this historic drought necessitates long-term solutions. Instead of putting a Band-Aid on the short-term problem, "major upgrades in water infrastructure" are needed, as well as releasing more water from the San Joaquin-Sacramento River Delta.<sup>143</sup> California experiences dry spells frequently, and claiming this is the result of climate change does nothing to solve the problem.<sup>144</sup> Drought response programs are an important first step, but without a long-term solution, the problems will continue unabated.

On the other hand, after former House Speaker John Boehner visited the drought-stricken Central Valley, the House of Representatives passed H.R. 3964—aptly named the Sacramento-San Joaquin Valley Emergency Water Delivery Act.<sup>145</sup> Section 101 would amend the Central Valley Project Improvement Act ("CVPIA") to include: "(1) ensur[ing] that water dedicated to fish and wildlife purposes is replaced and provided to Central Valley Project ("CVP") water contractors by December 31, 2018, . . . and (2) facilitate and

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140. *Id.*

141. See Norimitsu Onishi & Coral Davenport, *Obama Announces Aid for Drought-Stricken California*, N.Y. TIMES (Feb. 14, 2014), [http://www.nytimes.com/2014/02/15/us/politics/obama-to-announce-aid-for-drought-racked-california.html?\\_r=0](http://www.nytimes.com/2014/02/15/us/politics/obama-to-announce-aid-for-drought-racked-california.html?_r=0).

142. *Id.*

143. *Id.*

144. *Id.* (The President linked the current drought to climate change. While California experiences dry spells all the time, this drought comes from two sources—lack of adequate rain and insufficient water allocation from the Delta River.)

145. *Id.*; see Sacramento-San Joaquin Valley Emergency Water Delivery Act, H.R. 3964, 113th Cong. (2013–2014).

expedite water transfers in accordance with that Act.”<sup>146</sup> Furthermore, Section 107 puts in place a failsafe that would increase the annual delivery of CVP water by 800,000 acre-feet if the Secretary fails to implement long-term solutions.<sup>147</sup> Instead of allocating more federal funds, this solution strikes at the heart of the problem. Central Valley farmers do not want more money—they would rather have more water. Adequate water is the only solution to this drastic and severe problem.

#### *D. Impact on State Water Policy*

In addition to spurring multiple lawsuits, this historic drought has also had an impact on state water policy. Governor Jerry Brown issued an executive order in April of last year that “mandate[ed] statewide water restrictions.”<sup>148</sup> The goal was to achieve a “25 percent reduction in potable urban water usage through February 28, 2016.”<sup>149</sup> This Executive Order primarily affected urban water users and left the agricultural sector largely untouched.<sup>150</sup> However, the State Water Resources Control Board is an independent regulatory authority that has begun exercising restrictions against Central Valley farmers.<sup>151</sup> Pursuant to that authority, the Board began issuing curtailment notices to 276 senior rights holders on June 12th, 2015.<sup>152</sup> The curtailment notices sparked additional lawsuits from the affected holders, including “individual property owners, irrigation districts, hydroelectric facilities, state agencies, [and] private businesses . . . .”<sup>153</sup> The state backed the curtailment notices when it

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146. H.R. 3964 § 101.

147. *Id.* § 107.

148. See Kevin Haroff, *The California Drought and Its Impact on State Water Law and Policy*, MARTEN LAW (July 28, 2015), <http://www.martenlaw.com/newsletter/20150729-california-drought-state-water-law-policy>.

149. *Id.*

150. *Id.*

151. *Id.*

152. *Id.*

153. *Id.* (“In a separate action, a Sacramento County Superior Court Judge has issued a temporary restraining order barring the State Board from enforcing its curtailment orders on constitutional grounds—according to the court, issuing the orders without a ‘pre-deprivation’ hearing violated the petitioner’s constitutional right of due process.”). See, e.g., Pamela Martineau *Irrigation Districts Sue State Water Board Over Curtailment Notices*, ASS’N OF CAL. WATER AGENCIES (June 22, 2015, 2:44 PM), <http://www.acwa.com/news/water-supply-challenges/irrigation-districts-sue-state-water-board-over-curtailment-notices> (The curtailment notices also prompted a number of lawsuits by dissatisfied water rights holders. In the first case, the San Joaquin Tributaries Authority argued that the State Water Board does not have authority to pre-emptively protect their right to the water.)

argued that the notices were within the scope of the Board's authority according to constitutional and statutory provisions.<sup>154</sup>

Access to the state's groundwater supply has also been affected by the drought, prompting the state legislature to enact the Sustainable Groundwater Management Act ("SGMA") in 2014.<sup>155</sup> This Act would "implement sustainability plans for the majority of groundwater basins throughout the state . . . ."<sup>156</sup> Plans "vary from simple basin-wide plans developed and implemented by individual local agencies, to multiple plans by different agencies operating in the same basin, to state-imposed plans where no sufficient local plan exists."<sup>157</sup> The SGMA would give farmers access to water that has been denied to them because of the Delta smelt litigation. Another bill, AB 1390, "would clarify court procedures that apply to comprehensive groundwater adjudications, encourage early settlement and avoid disruption of local groundwater planning."<sup>158</sup> AB 1390 would streamline disputes and encourage settlements out of court. Both the SGMA and AB 1390 are promising starts to changing state water policy with an eye towards beneficial use.

While preserving endangered species is a noble and important undertaking, it directly contravenes the beneficial use doctrine. A proper way to implement the beneficial use doctrine would allocate enough water for farmers to sustainably manage their farms, while leaving an adequate amount for species protection. The "zero-sum game"<sup>159</sup> currently in place has farmers receiving between 5% and 15% of what they would normally receive in a given year. The rest, between 85% and 95%, is kept for the Delta smelt's habitat. This is the exact opposite of a "beneficial use" of water because fish have been placed above human life. Endangered species must be preserved, but it cannot come solely at the expense of human life. Consistent with the *Meridian* holding, San Joaquin Valley farmers have a right to use all water reasonably necessary for use on their lands.<sup>160</sup> Any excess water can be used to keep the Delta smelt alive.

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154. Haroff, *supra* note 148.

155. *Id.*

156. *Id.*

157. *Id.*

158. *Id.*

159. See Onishi & Davenport, *supra* note 141.

160. See *Meridian, Ltd. v. San Francisco*, 90 P.2d 537, 554 (Cal. 1939).

### III. RE-EVALUATING THE PUBLIC TRUST IN CONJUNCTION WITH CATHOLIC SOCIAL TEACHING

As it currently stands, the public trust doctrine is an “inherent limitation” on exercising water rights.<sup>161</sup> However, it “must be evaluated in conjunction with the constitutional mandate of reasonable use.”<sup>162</sup> The current water war favors the public trust—with the Delta smelt taking precedence over farmers. Judge Hodge’s balancing test, first expressed in *Environmental Defense Fund v. East Bay Municipal Utility District*, would dramatically alleviate the drought and protect the endangered smelt at the same time. Protecting human life is a priority that can never be put on the proverbial back burner. The public trust doctrine must be reevaluated with an eye towards reasonable use. When it is evaluated in conjunction with Catholic social teaching, it acquires a whole new meaning and moves towards sustainable development.

#### A. Judge Hodge’s Physical Solution

Judge Richard Hodge’s physical solution to the public trust would: (1) set minimum flow standards and (2) establish a water reserve to release water per explicit parameters.<sup>163</sup> This physical solution would take care of the problem at both ends and comply with the beneficial use doctrine mandated by the California Constitution.<sup>164</sup> Judge Hodge further explains that the different uses of water must be assessed to evaluate “whether the fullest beneficial use of water has been achieved.”<sup>165</sup> However, once the “fullest beneficial use” of water has been determined, “the Court must still be cautious to avoid needless harm to public trust values.”<sup>166</sup> Judge Hodge’s physical solution would “accommodate [the] water supply, public health needs, and the public trust.”<sup>167</sup> Farmers would receive an adequate amount of water to sustainably manage their lands, and the Delta smelt would have enough water to survive without any threat of extinction. The water storage reserve kept specifically for fish species would ensure that the waters held there would not be used for anything

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161. See Gray, *supra* note 21.

162. *Id.* at 988.

163. *Id.* at 989.

164. See CAL. CONST. art. X, § 2.

165. Gray, *supra* note 21, at 989.

166. *Id.*

167. *Id.* (Judge Hodge’s solution would set “minimum flow standards (greater than those set forth in the U.S. Bureau of Reclamation’s water rights permits for [each] project) . . .” It would also set up “a water storage reserve ‘for release upon the recommendation of the California Department of Fish and Game in response to specific fishery requirements.’” (alteration adopted) (citation omitted)).

other than species preservation. The rest of the water would flow through the California Aqueduct and other delivery systems to farmers and cities throughout the state.

### *B. Catholic Teaching*

Catholic teaching offers a unique view on the dignity of human life and species protection that can positively impact California's water woes. Through the Magisterium, the Catholic Church has stated her view about the proper order of society. The Church has beautifully stated that each creature, no matter how small, "reflects in its own way a ray of God's infinite wisdom and goodness."<sup>168</sup> However, only man is made in God's image and likeness<sup>169</sup>—thus giving man a special responsibility to care for creation.<sup>170</sup> Only man can foresee potential consequences of any given action and plan accordingly. God has charged man to care, conserve, and protect all the ecosystems of the earth, including the human ecosystem.<sup>171</sup> As a result, "[m]an must therefore respect the particular goodness of every creature, to avoid any disordered use of things which would be in contempt of the Creator and would bring disastrous consequences for human beings and their environment."<sup>172</sup> No matter their place in the world, "God loves all [of] His creatures" and charges us to take care of them.<sup>173</sup> While the over-allocation of water has contributed significantly to the protection of the species, preservation of human life must always be a priority.

His Holiness Pope Francis emphasized the importance of caring for our common home in his encyclical *Laudato Si*.<sup>174</sup> He references Pope St. John Paul II's concern for the "destruction of the human environment"—calling it "extremely serious."<sup>175</sup> In addition to the physical, emotional, spiritual, and mental aspects of human life, "[a]uthentic human development has a moral character."<sup>176</sup> Pope Francis further explains that this "authentic human development" must respect every other living thing and "proceed in line with

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168. CATECHISM OF THE CATHOLIC CHURCH ¶ 339 (2d. ed.1994).

169. See *Genesis* 1:27.

170. See *Genesis* 2:15.

171. See Memorandum from D. Brian Scarnecchia, President and U.N. Counsel, Int'l Solidarity & Human Rights Inst. And Soc'y of Catholic Scientists, to U.N. Human Rights Comm. (Oct. 28, 2015) ("[W]e may not do less for the human family, made in God's image, than we do for flora and fauna.").

172. CATECHISM, *supra* note 168, at ¶ 339.

173. *Id.* at ¶ 342.

174. See generally *Laudato Si*, *supra* note 25.

175. *Id.*

176. *Id.*

God's original gift of all that is."<sup>177</sup> Paying homage to St. Francis of Assisi, the prime example of "an integral ecology," Pope Francis summarizes the Saint's care for the environment and invites us to approach nature with the same "openness to awe and wonder."<sup>178</sup> Without it, we continue on the path we have already begun to develop—exploiting the environment to suit our own needs.<sup>179</sup> Pope Francis called "for a new dialogue" to take place concerning the future of the world that involves "universal solidarity."<sup>180</sup>

Professor Brian Scarnecchia expounded on the public trust doctrine in a presentation given in Austria. His presentation explored the constitutional underpinnings of the doctrine and its possible implications.<sup>181</sup> He argued that the public trust doctrine can be taken in one of two directions: towards collectivism or towards the common good.<sup>182</sup> Collectivism undermines Catholic social teaching while the common good flows directly from Catholic social teaching.<sup>183</sup> Under the first implication, "all natural resources . . . are held in trust by the State in fee simple for the benefit of the people according to the will of the strongest . . ."<sup>184</sup> Under this line of thinking, the public trust doctrine "has the potential to reach . . . all parties that contribute collectively to an ecological problem, even if the causal link . . . is attenuated."<sup>185</sup> Under the second, natural resources are held "with a fee tail or reversionary interest in the Grantor/grantors for the benefit of the people according to the virtue of justice and the logic of human flourishing . . . marked by the integral and sustainable development of the trust assets."<sup>186</sup> Following this line of thinking to its natural conclusion, if something is not for the benefit of the people, it would go back to the original Grantor—i.e. God. By restricting water from farmers in the name of the public trust, California is viewing the public trust

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177. *Id.* Pope Francis also quoted Pope Benedict XVI as saying that "the deterioration of nature is . . . closely connected to the culture which shapes human coexistence . . ." Pope Benedict XVI, *Caritas in Veritate*, [Encyclical Letter on Integral Human Development in Charity and Truth]¶ 51 (June 29, 2009) [hereinafter, *Caritas in Veritate*].

178. *Laudato Si*, *supra* note 25, at ¶ 11.

179. *Id.*

180. *Id.* at ¶ 14.

181. See D. Brian Scarnecchia *The Public Trust Doctrine: The Natural Law of Constitutional Law?* PowerPoint (on file with author).

182. *Id.*

183. See Pope Pius XI *Quadragesimo Anno* [Encyclical Letter On Reconstruction of the Social Order] ¶ 45, 49 (May 15, 1931).

184. D. Brian Scarnecchia, *The Public Trust Doctrine*, *supra* note 181.

185. *Id.*

186. *Id.*; see also Pope Leo XIII, *Rerum Novarum* [Encyclical Letter On Capital and Labor] ¶ 32 (May 15, 1891). (In his discussion on the role of the state, Pope Leo XIII says that the state prospers through "the abundant yield of the land . . .").



doctrine under the first implication. Water is a public trust asset, and by denying farmers access to it, California is directly contradicting their duties under the public trust.

“Ethical degradation is found when men and women attempt to exercise absolute dominion over the earth by imposing their own laws and interests on reality.”<sup>187</sup> By restricting water for the Delta smelt, California environmentalists are attempting to exercise their control over the environment—a spirituality that is directly contrary to Pope Francis’ view in *Laudato Si*. In a roundabout way, environmentalists have “claim[ed] an unlimited right to trample [God’s] creation underfoot”<sup>188</sup> by restricting water for the Delta smelt. Environmentalists have artificially prolonged the smelt’s lifecycle and have imposed their own laws on reality. This ideology has all the markings of taking the public trust towards collectivism. Allowing water to flow to farms via the California Aqueduct to San Joaquin Valley farms would point the needle in the other direction—towards sustainable development.

Catholic social teaching recognizes the harmony between man and nature, and advocates for a responsible use of the planet’s resources. Man cannot continue to exploit the planet’s resources unchecked, because there is a harmony between man and the rest of nature. God placed man at the head of creation to “cultivate and care for it.”<sup>189</sup> However, under the public trust doctrine alone, the needle has shifted too far to one side: species protection has taken precedence over human life. When it is used in conjunction with Catholic social teaching, the extremes are balanced. Farmers receive enough water to contribute to the economy and by extension preserve human life, and endangered species are not threatened with ultimate extinction. Under the umbrella of Catholic social teaching, the public trust doctrine encapsulates care for the environment within the framework of authentic human development, instead of favoring one over the other, the two work together to create a sustainable habitat for all. Catholic social teaching advocates the importance of all sides of the issue: authentic human development, preservation of human life, and caring for the environment. When man respects the place each creature has in God’s creation, he is then able to use the earth’s natural resources in a responsible manner. When he uses these

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187. See D. Brian Scarnecchia, *ASEAN’S Declaration of Human Rights (ADHR): Human Rights, National Sovereignty and the Public Trust* 9 (unpublished manuscript) (on file with the author).

188. See *Laudato Si*, *supra* note 25, at ¶ 75.

189. *Genesis* 2:15 (New American Bible).

resources responsibly, he is fulfilling God's command to "cultivate [the earth] and care for it."<sup>190</sup>

#### IV. SUSTAINABLE SOLUTIONS FOR THE FUTURE OF CALIFORNIA WATER LAW

This water crisis has gone on for too long—the agricultural industry in Central California has suffered heavy losses for multiple years. A recent study out of UC Davis has predicted that direct agricultural costs of the drought in 2015 will be roughly \$1.84 billion and the loss of 10,100 direct seasonal jobs.<sup>191</sup> It further estimated that the drought “may result in the fallowing of 542,000 irrigated acres, almost all (99.5%) in the Central Valley.”<sup>192</sup> Sustainable solutions and re-writing the state's water laws are necessary changes that would alleviate the drought, send more much-needed water to the Central Valley, and provide a sustainable plan for future water use. Using a drip irrigation system to water micro-plots is also an efficient way to save water and plant the same crops. Finally, planting drought resistant crops allows farmers to continue their livelihoods and contribute to the national and global economies at the same time.

The first solution is to re-write the state water laws that would sustainably allocate more water for Central Valley farmers. Farmers have suffered enough heavy losses with the bare minimum of needed water. While farmers have contributed to the drought, they should not be cut off from the state's water supply altogether. State lawmakers should hear from experts in order to determine how best to sustainably balance all of the needed uses of water. Judge Hodge's physical solution to the public trust is a step in the right direction: lawmakers can allocate a set amount for the Delta smelt and other endangered species and allow the rest of the water to flow to the rest of the state.<sup>193</sup> The Delta smelt should not need all of the state's water in order to survive. A set amount of water specifically allocated for the fish would be more than adequate to maintain their habitat.

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190. *Id.*

191. See Richard Howitt, et. al. *Economic Analysis of the 2015 Drought for California Agriculture*, UC DAVIS CENTER FOR WATERSHED SCIENCES, 16 (Aug. 7, 2015), [https://watershed.ucdavis.edu/files/biblio/Final\\_Drought%20Report\\_08182015\\_Full\\_Report\\_WithAppendices.pdf](https://watershed.ucdavis.edu/files/biblio/Final_Drought%20Report_08182015_Full_Report_WithAppendices.pdf).

192. *Id.* at 5; see also Brian Johnson, *Kern County Orchard Pulling 10,000 Acres of Almond Trees*, ABC 30 ACTION NEWS (Mar. 2, 2016), <http://abc30.com/weather/kern-county-orchard-pulling-10000-acres-of-almond-trees/1228702/> (“[I]n 2014, the drought forced farmers to take out a quarter of a million acres of row crops in Tulare County.”).

193. See Gray, *supra* note 21 at 989.

The second solution would be encouraging farmers to use a drip irrigation system to water micro-plots instead of massive fields. One farm in Kingsburg, California has already implemented this system to great success.<sup>194</sup> “Each micro-plot is treated like a backyard garden and irrigated accordingly.”<sup>195</sup> Farmer Chris Velez adjusts the water needs for different crops because not every crop has the same water needs.<sup>196</sup> Some vegetables are also washed off in the field to conserve more water; this water is then reused for crop irrigation.<sup>197</sup> Planting different crops in a micro-garden is an excellent way to conserve water, produce the same crops as a normal water year, and still make a profit. Encouraging more farmers to take this approach would conserve a substantial amount of water. If this plan is implemented, California would see a significant improvement in water tables, and this would insure enough water for future farmers.

The third and final sustainable solution would be to encourage farmers to do one of the following: plant less water-dependent crops or rotate water-dependent crops with crops that do not need as much water. Drought-resistant crops are far reaching and profitable—the list encompasses a wide variety of beans, corn, herbs, grain, and some fruits and vegetables.<sup>198</sup> Some farmers have already begun switching from thirsty crops to drought tolerant varieties. Father and daughter team Debbie and Gary Broomell used to grow citrus in Escondido but switched to winemaking because grapes use less water.<sup>199</sup> Water prices in San Diego County are extremely high—they “more than doubled in the past six years . . .”<sup>200</sup> Grape “vineyards require [roughly] 25 percent less water than orange groves”—making grapes a much less thirsty crop than orange groves.<sup>201</sup> Instead of giving up their fields, some farmers are making the switch to unusual crops, i.e. pomegranates and dragon fruit.<sup>202</sup>

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194. See Dale Yurong, *Valley Farmers Planning Future Crops Carefully*, ABC 30 ACTION NEWS (Feb. 26, 2016), <http://abc30.com/food/valley-farmers-planning-future-crops-carefully/1220986/>.

195. *Id.*

196. *Id.*

197. *Id.*

198. See Sonoma County Master Gardeners, *supra* note 115 (The list is geared more towards the home garden but is easily applied to commercial farms in Central California).

199. See Lesley McClurg, *California Drought Changes What Farmers Grow*, CAPITAL PUBLIC RADIO (June 11, 2015), <http://www.capradio.org/articles/2015/06/11/california-drought-changes-what-farmers-grow/>.

200. *Id.*

201. *Id.*

202. *Id.*

While the forecast of California's drought is still very bleak, an upcoming, exceptionally strong El Niño<sup>203</sup> is the much-needed silver lining. In March of 2016, Sierra snowpack levels stood at 97% of average.<sup>204</sup> Precipitation levels for Fresno measure at roughly 9.5 inches for October 2015 to February 2016, about 168% of normal.<sup>205</sup> Although many people say this is the beginning of the end, many are not convinced. The Department of Water Resources measures water levels at eight different stations in the Sierra Nevada Mountains<sup>206</sup> to gauge the snowpack level. Water from Sierra snowpack levels is delivered directly to farmers in the San Joaquin and Central Valley and then to Southern California.<sup>207</sup> Between 1922 and 1998, roughly 50 inches of rain fell annually.<sup>208</sup> "Using that average, officials said 75 inches of rain would need to fall in those Northern California spots . . ."<sup>209</sup> Meteorologists at the National Oceanic and Atmospheric Administration concur and say to "nudge California out of drought territory, it will take almost double the amount of rain that falls in a normal year . . ."<sup>210</sup> This amount of rain would barely take California out of the "bottom 20 percent of precipitation totals."<sup>211</sup> To reach half of rainfall totals for a five-year period (2011-2016), Southern California coasts "would have to experience rainfall at 300 percent of normal, or about 53 inches in one year . . ."<sup>212</sup> Although El Niño is the silver lining many had

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203. See *What Are El Niño and La Niña?*, NAT'L OCEANIC AND ATMOSPHERIC ADMINISTRATION, <http://oceanservice.noaa.gov/facts/ninonina.html> (last updated Jun. 28, 2016) ("The term El Niño refers to the large-scale ocean-atmosphere climate interaction linked to a periodic warming in sea surface temperatures across the central and east-central Equatorial Pacific.").

204. See Brian Clark Howard, *Snowpack 97% of Average in California's Northern Sierra*, NAT'L GEOGRAPHIC (Mar. 30, 2016), <http://news.nationalgeographic.com/2016/03/160330-california-snow-survey-snowpack-water-drought/> (At the same time last year, "[t]he snowpack was just 5 percent of average then, the lowest ever recorded . . .").

205. See California Nevada River Forecast Center, *California Climate Station Precipitation Summary*, NAT'L OCEANIC AND ATMOSPHERIC ADMIN. (Feb. 2, 2016), <http://www.cnrfc.noaa.gov/awipsProducts/RNOWRKCLI.php>.

206. The Sierra Nevada mountain range lies along the eastern border of California and "[e]xtend[s] more than 250 miles . . . northward from the Mojave Desert to the Cascade Range of northern California and Oregon." *Sierra Nevada*, ENCYCLOPÆDIA BRITANNICA, <http://www.britannica.com/place/Sierra-Nevada-mountains> (last visited Feb. 2, 2016).

207. See Matt Stevens, *California Needs More Rain, Any Way You Count It*, LOS ANGELES TIMES (Dec. 5, 2014), <http://www.latimes.com/local/california/la-me-1204-rain-drought-20141205-story.html>.

208. *Id.*

209. *Id.*

210. See Steve Scauzillo, *How Much Rain Will It Take to End California's Drought?*, SAN GABRIEL VALLEY TRIBUNE (Sept. 20, 2015, 4:55 PM), <http://www.sgvtribune.com/general-news/20150920/how-much-rain-will-it-take-to-end-californias-drought>.

211. *Id.*

212. *Id.*

hoped for, this alone will not solve the problem. Coupled with the solutions listed above, California can work towards eliminating the drought and implementing sustainable water uses.

#### CONCLUSION

California is in a relentless drought from two fronts: insufficient rainfall/snowpack levels and the preservation of the Delta smelt. This “perfect storm” drought has caused countless fallow fields, billions of dollars in lost revenue, and the loss of thousands of jobs. Farmers have been pushed aside for the preservation and protection of the Delta smelt—a federally endangered species. Diverting water for species protection is the epitome of an unreasonable use and directly violates the beneficial use doctrine. Farmers are entitled to an appropriate amount of water that would allow them to maintain their livelihood and contribute to the national and global economies. Judge Hodge’s physical solution to the public trust doctrine would allow more water to flow for farmers and would allocate a set amount of water for species protection. When it is evaluated in conjunction with Catholic social teaching, the public trust doctrine would take into account species protection, authentic human development, and care for the environment.

Central Valley farmers should not be denied access to the source that keeps their livelihood alive. Farming is the backbone of California, and without access to water, countless jobs are lost and access to some of the best produce in the world disappears. While the Delta smelt is an integral part to the state’s fish population, restricting almost all of the water access for this fish is grossly unreasonable. A sustainable compromise would allow farmers to continue producing the world’s best produce and allow the fish to survive. It is simple logic: no water leads to no jobs, which ultimately leads to no produce from the world’s agricultural capital.