

# Out of the Mud: Moving Past *Environmental Defense Fund v. East Bay Municipal Utility District* Toward Finding a Duty to Produce Recycled Water

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We never know the Worth of Water, till the Well is dry.<sup>1</sup>

## Introduction

THE FACT THAT WATER IS A SCARCE AND PRECIOUS RESOURCE in California is hardly a new or novel concept. Californians have been fighting over water rights since the state was formed in 1850.<sup>2</sup> These disputes have been the subject of everything from academic scholarship to novels to Hollywood blockbusters.<sup>3</sup> Despite this long history, California's water problem grows more dire with each passing day. The population continues to expand, creating increased

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1. GNOMOLOGIA: ADAGIES AND PROVERBS; WISE SENTENCES AND WITTY SAYINGS, ANCIENT AND MODERN, FOREIGN AND BRITISH 237 (Thomas Fuller ed., 1732).

2. ELLEN HANAK ET AL., PUB. POLICY INST. OF CAL., MANAGING CALIFORNIA'S WATER: FROM CONFLICT TO RECONCILIATION, at xiii (2011), available at [http://www.ppic.org/content/pubs/report/r\\_211ehr.pdf](http://www.ppic.org/content/pubs/report/r_211ehr.pdf) ("California has always had water conflicts, and as a semi-arid state it always will."); see *Ferrea v. Knipe*, 28 Cal. 340 (1865).

3. The movie *Chinatown*, starring Jack Nicholson and Faye Dunaway, was inspired by the California Water Wars of the early 1900s. It has been called "the best film of all time." See Andrew Pulver, *Chinatown: The Best Film of All Time*, GUARDIAN (London) (Oct. 22, 2010), <http://www.guardian.co.uk/film/2010/oct/22/best-film-ever-chinatown-season>; see also MARY AUSTIN, THE FORD (1917); MARC REISNER, CADILLAC DESERT: THE AMERICAN WEST AND ITS DISAPPEARING WATER (1986); Jordan Scavo, *Water Politics and the San Fernando Valley: The Role of Water Rights in the 1915 Annexation and 1996–2002 Secession Campaigns*, 92 S. CAL. Q. 93 (2010).

demand on already insufficient water resources.<sup>4</sup> And although the specifics of how climate change will affect California are not yet known, scientists and scholars agree that increased temperatures and more unpredictable weather patterns have the potential to wreak havoc on California's fragile water supply.<sup>5</sup>

It is against this backdrop that California, and local jurisdictions within the state, are scrambling to come up with new ways to stretch their water resources. One promising, but underutilized, method of augmenting limited supplies of potable water is municipal wastewater recycling.

Many municipalities in California have made great strides in wastewater recycling.<sup>6</sup> Not coincidentally, the cities that have implemented the largest-scale, and most successful, wastewater recycling programs are those that are currently struggling with water shortages. On the other hand, municipalities that currently have an adequate supply of water to service their populations have been slow to implement wastewater recycling. San Francisco, despite the city's reputation for being generally progressive, is one such municipality; currently San Francisco uses between 99.0–99.5% of its potable water only once before discharging it into the San Francisco Bay and the Pacific Ocean.<sup>7</sup>

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4. As of the 2010 census, California's population was 37,253,956. *California QuickFacts*, U.S. CENSUS BUREAU, <http://quickfacts.census.gov/qfd/states/06000.html> (last visited Mar. 19, 2012). It is predicted to expand to 46,444,861 by the year 2030. INTERIM PROJECTIONS OF THE TOTAL POPULATION FOR THE UNITED STATES AND STATES: APRIL 1, 2000 TO JULY 1, 2030, U.S. CENSUS BUREAU (Apr. 21, 2005), <http://www.census.gov/population/projections/SummaryTabA1.pdf>.

5. See Adam Schempp, *Western Water in the 21st Century: Policies and Programs that Stretch Supplies in a Prior Appropriation World*, 40 ENVTL. L. REP. NEWS & ANALYSIS 10,394, 10,394 (2010) ("Climate change models predict an intensification of the water cycle, producing longer droughts and more substantial floods. Rising temperatures already have begun to cause earlier and more intense snowmelt, the source of much of the West's water, leaving less water available for the late summer and fall if it cannot be captured.").

6. Successful San Francisco Bay Area recycling programs are discussed *infra* Part III. Cities in Southern California have implemented water recycling programs as well. See Craig Anthony (Tony) Arnold & Leigh A. Jewel, *Litigation's Bounded Effectiveness and the Real Public Trust Doctrine: The Aftermath of the Mono Lake Case*, 14 HASTINGS W.-NW. J. ENVTL. L. & POL'Y 1177, 1203–06 (2008).

7. See E-mail from Suzanne Gautier, Commc'n Officer, S.F. Pub. Utils. Comm'n, to author (Oct. 5, 2010) (on file with author); CITY & CNTY. OF S.F., TECHNICAL MEMORANDUM NO. 405: REGULATORY CONSIDERATIONS FOR WET WEATHER COLLECTION SYSTEMS BACKUPS (2009), available at <http://www.sfwater.org/modules/showdocument.aspx?documentid=599> [hereinafter TECHNICAL MEMORANDUM NO. 405] (identifying the San Francisco Bay and Pacific Ocean as the "receiving waters" for San Francisco's waste water discharge).

This Comment will argue that existing California law imposes a legally enforceable duty to produce recycled water, where it is feasible to do so. It further argues that, in consideration of this legal duty and the fact that water is a limited resource that belongs to the people of California, municipalities should strive to implement water recycling programs, in order to conserve potable water and make maximum use of the potable water at their disposal.

Part I of this Comment will provide a brief overview of wastewater recycling in California. Part II will examine the legal framework for establishing a municipal duty to use recycled water and implement water recycling programs. Part III will look at San Francisco as a case study and consider whether, under the legal theories discussed in Part II, a court could find that San Francisco has a duty to increase its production of recycled water.

## **I. California Recycles: A Brief Overview of Water Recycling in California**

In general, water recycling (also known as reclamation or reuse)<sup>8</sup> is “the process of treating wastewater, storing, distributing, and using the recycled water.”<sup>9</sup> Recycled water is typically used for nonpotable<sup>10</sup> uses such as agriculture, irrigation of landscaping, public parks, golf courses, toilet flushing, industrial uses, construction, dust control, and artificial waterways.<sup>11</sup> Recycled water is also used indirectly for potable purposes, such as groundwater recharge and augmentation of surface reservoirs, although such potable uses are far less common than nonpotable uses.<sup>12</sup>

A 2009 survey by the California State Water Resources Control Board (“SWRCB” or “the Board”) found that over 669,000 acre-feet of

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8. Recycling, reclamation, and reuse are interchangeable terms; all refer to reuse of treated wastewater. See *About Recycling*, CAL. DEP’T WATER RESOURCES, <http://www.water.ca.gov/recycling/> (last visited Mar. 19, 2012).

9. *Id.*; see also CAL. WATER CODE § 13050(n) (West 2009) (“‘Recycled water’ means water which, as a result of treatment of waste, is suitable for a direct beneficial use or a controlled use that would not otherwise occur and is therefor [sic] considered a valuable resource.”).

10. “Potable” is defined as “suitable for drinking.” *Potable Definition*, MERRIAM-WEBSTER.COM, <http://www.merriam-webster.com/dictionary/potable> (last visited Mar. 19, 2012). Therefore, “nonpotable” water is water that is not safe for drinking. For the purposes of this Comment, “nonpotable uses” refers to uses for water other than drinking.

11. U.S. ENVTL. PROT. AGENCY, EPA 909-F-98-001, WATER RECYCLING AND REUSE: THE ENVIRONMENTAL BENEFITS 3 (1998), available at <http://www.epa.gov/region9/water/recycling/brochure.pdf> [hereinafter WATER RECYCLING AND REUSE].

12. *Id.*

recycled water was produced by California public agencies and used in the state of California.<sup>13</sup> The survey found that the most common use for the recycled water was agricultural irrigation.<sup>14</sup>

## II. Duty to Use and Duty to Produce: A Legal Framework for Establishing a Municipal Duty to Use Recycled Water and Implement Water Recycling Programs

When considering whether there is a municipal duty in regards to recycled water, two very different issues are raised: (1) whether, and when, municipalities have a duty to *use* reclaimed water that is already “available” for use; and (2) whether, and when, municipalities have a duty to *produce* reclaimed water for their own use and the use of their municipal customers. For the purposes of this Comment, these duties will be referred to as the “duty to use” and the “duty to produce,” respectively. As will be discussed in greater detail below, the duty to use is relatively clear, and legally enforceable, so long as certain threshold requirements are met. The duty to produce, however, is in a state of legal limbo; it is unclear whether there is any legally enforceable duty to produce recycled water. This Comment will argue that in light of California’s dwindling water supplies, the legislative intent behind the reasonable and beneficial use provision and the reclaimed water provisions, and relevant legal and administrative precedent, there is a legally enforceable duty to produce reclaimed water.

### A. Duty to Use: A Clear, Legally Enforceable Duty Under the California Water Code

The provisions in the California Water Code that explicitly establish a duty to use recycled wastewater are known as the “reclaimed water” section of the Code.<sup>15</sup> The opening statement of the reclaimed water section sets forth, in no uncertain terms, a strong legislative pol-

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13. *Water Recycling Funding Program (WRFP)*, CAL. ST. WATER RESOURCES CONTROL BOARD, [http://www.waterboards.ca.gov/water\\_issues/programs/grants\\_loans/water\\_recycling/munirec.shtml](http://www.waterboards.ca.gov/water_issues/programs/grants_loans/water_recycling/munirec.shtml) (last visited May 8, 2012).

14. Specifically, the survey found that 29% of recycled water produced by public agencies in the state is used for agricultural irrigation; 20% is used for “other” uses (“other” not defined); 18% is used for golf course and landscape irrigation; 8% is used as a seawater barrier; 7% is used for commercial or industrial uses; 7% is used for recreational impoundment (artificial bodies of water used for recreation); 5% is used for groundwater recharge; 4% is used for the restoration of wetlands, wildlife habitat, and other natural systems; and 2% is used for geothermal and other types of energy production. *Id.*

15. *Tsukamoto Sogyo Co.*, Decision 1625, at 7–8 (Cal. State Water Res. Control Bd. Feb. 15, 1990).

icy in favor of the use of reclaimed water and establishes that failure to use recycled water under certain circumstances is per se unreasonable and is in violation of the California Constitution:

The Legislature hereby finds and declares that the use of potable domestic water for nonpotable uses, including, but not limited to, cemeteries, golf courses, parks, highway landscaped areas, and industrial and irrigation uses, is a waste or an unreasonable use of the water within the meaning of Section 2 of Article X of the California Constitution if recycled water is available . . . .<sup>16</sup>

The subsequent section of the Code prohibits the use of potable water for nonpotable uses where recycled water is available:

A person or public agency, including a state agency, city, county, city and county, district, or any other political subdivision of the state, shall not use water from any source of quality suitable for potable domestic use for nonpotable uses, including cemeteries, golf courses, parks, highway landscaped areas, and industrial and irrigation uses if suitable recycled water is available as provided in Section 13550 . . . .<sup>17</sup>

### 1. Meeting the “Availability” Threshold

These statutory provisions clearly create a legally enforceable duty to use recycled water for nonpotable uses where recycled water is “available” within the meaning of the statute. Section 13550 provides that water is “available” for the purposes of the reclaimed water provisions if: (1) there is available water of adequate quality for the nonpotable uses; (2) the cost of supplying the reclaimed water is comparable, or less than, the cost of supplying potable water; (3) the use of reclaimed water will not be detrimental to public health; and (4) the use of reclaimed water will not adversely affect downstream water rights, degrade water quality, or harm plants, fish, or wildlife.<sup>18</sup>

Despite this clear legal duty, there are few cases actually seeking to enforce these requirements.<sup>19</sup> What little case law there is makes clear that whether reclaimed water is “available” within the meaning of the statute is the major threshold that must be met before a court

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16. CAL. WATER CODE § 13550(a) (West 2009).

17. *Id.* § 13551.

18. *Id.* § 13550(a).

19. The author was only able to identify two proceedings in front of the SWRCB in which a party brought an action claiming that potable water was being used for nonpotable uses in violation of sections 13550 and 13551. See *Tsukamoto Sogyo Co.*, Decision 1625; Availability of Reclaimed Water for Greenbelt Irrigation in the San Gabriel Valley Water Company Service Area, Decision 1623-Amended (Cal. State Water Res. Control Bd. Jan. 18, 1990) [hereinafter *Greenbelt Irrigation Case*].

will find that a party is legally obligated to use reclaimed, rather than potable, water for some specified use.<sup>20</sup>

In the SWRCB's *Tsukamoto Sogyo Company* decision, the SWRCB applied a clear, step-by-step analysis to a claimed violation of section 13551. The City of Santa Barbara ("City") claimed that the Tsukamoto Sogyo Company's ("Company") use of potable water for irrigation of the Montecito Country Club ("Country Club") violated section 13551.<sup>21</sup> The City claimed that it was prepared to supply reclaimed water to the Country Club meeting all the requirements of section 13550.<sup>22</sup> In other words, since water was "available" within the meaning of section 13550, and the Company was using potable water for the nonpotable use of irrigation, the Company was in violation of section 13551.<sup>23</sup>

Treating "availability" as the threshold requirement for a finding that a water user was in violation of section 13551, the SWRCB applied the four-part test for availability outlined in section 13550.<sup>24</sup> In finding that water of adequate quality and quantity was available for irrigation at the Country Club, the SWRCB considered both the results of water quality tests of the reclaimed water and the amount of reclaimed water being produced.<sup>25</sup> By undertaking a simple comparison of all costs of using potable water to all costs of using recycled water, the SWRCB found that the cost of using reclaimed water was comparable or less than the cost of using potable water.<sup>26</sup> In considering whether the use of reclaimed water to irrigate the Country Club would be detrimental to public health, the SWRCB stated that a finding that "use of reclaimed water from the proposed source will not be detrimental to public health" could be made only after concurrence with the California Department of Health Services ("DHS").<sup>27</sup> After considering the testimony of both a DHS engineer and an engineer hired by the City, the SWRCB determined that use of recycled water to irrigate the Country Club posed no threat to public health.<sup>28</sup>

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20. See *Tsukamoto Sogyo Co.*, Decision 1625, at 9–10; *Greenbelt Irrigation Case*, Decision 1623-Amended, at 6.

21. *Tsukamoto Sogyo Co.*, Decision 1625, at 1.

22. *Id.* at 2–3.

23. See *id.* at 8–9.

24. See *id.* at 10–19.

25. *Id.* at 10–11.

26. *Id.* at 11–13.

27. *Id.* at 13.

28. *Id.* at 13–15.

In analyzing the fourth and final part of the test for determining whether reclaimed water was “available,” the SWRCB undertook a detailed analysis of the possible effect of the reclaimed water on the plant life at the Country Club, the impact on the groundwater underlying the Country Club, and the potential harm to downstream water rights.<sup>29</sup> It found that: (1) the reclaimed water posed no threat to any plant life at the Country Club, with the possible exception of the golf course greens, and therefore the Company should not be required to use reclaimed water to irrigate the greens until further testing had been performed; (2) based on the testimony of a geologist familiar with groundwater recharge mechanisms in the area, the use of reclaimed water was unlikely to degrade the quality of groundwater; and (3) there would be no adverse effect on downstream water rights, as the wastewater would be discharged directly into the Pacific Ocean.<sup>30</sup>

After considering each element of the availability test, the SWRCB ultimately found that reclaimed water was indeed available for irrigation at the Country Club.<sup>31</sup> Based on this finding, the SWRCB imposed the following order:

NOW, THEREFORE, IT IS ORDERED that [the Company] shall forthwith cease use of potable water for irrigation at the Montecito Country Club, except for the greens. Except for the greens, the City of Santa Barbara shall cease supplying potable water for irrigation at the Country Club as soon as sufficient time has passed to install and connect the system for distributing reclaimed water at the Country Club.<sup>32</sup>

## 2. Application to Municipalities as well as Private Entities

*Tsukamoto Sogyo Company* considers the legal duty of a private entity to use available recycled water for nonpotable uses; the City of Santa Barbara sought to compel the Company to cease use of potable water for the nonpotable use of irrigation of the Country Club’s golf course and other landscaping.<sup>33</sup> However, it is interesting to note that the SWRCB decision implicates the City, as well as the Company, in that the SWRCB not only orders the Company to cease their use of potable water for landscape irrigation, but also orders the City to stop supplying potable water for such purposes.<sup>34</sup> Furthermore, by its very

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29. *Id.* at 15–19.

30. *Id.*

31. *Id.* at 22.

32. *Id.* at 23.

33. *Id.* at 2–6.

34. *Id.* at 23.

terms, section 13551 applies to municipalities as well as private entities: “A person or public agency, including a state agency, city, county, city and county, district, or any other political subdivision of the state, shall not use water from any source of quality suitable for potable domestic use for nonpotable uses . . . .”<sup>35</sup> Although the only cases enforcing section 13551 have involved lawsuits seeking to compel private entities to use recycled water, or cease use of potable water where recycled water is available,<sup>36</sup> it is entirely possible that a private party could similarly invoke section 13551 to compel a municipality to use available reclaimed water for nonpotable uses.

### B. Duty to Produce: Duty Under the California Constitution

The California Constitution, article X, section 2 provides that waste or unreasonable use of the state’s water resources is prohibited and that use of state waters is limited to what is “reasonable and beneficial.”<sup>37</sup> Plaintiffs have successfully invoked this provision to stop a variety of “wasteful” uses of water. Historically, plaintiffs who sought to prevent their neighbors from wasting water to ensure sufficient water supplies were available for their own use turned to article X, section 2.<sup>38</sup> More recently, however, the reasonable and beneficial use provision has been invoked in a conservation context, as a method of protecting and preserving the state’s limited water resources.<sup>39</sup>

This raises the question: Under article X, section 2 of the California Constitution, if a municipality uses potable water only once before discharging it, and therefore fails to recycle all or most of its waste-

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35. CAL. WATER CODE § 13551 (West 2009).

36. See *Tsukamoto Sogyo Co.*, Decision 1625, at 3; *Greenbelt Irrigation Case*, Decision 1623-Amended, at 3.

37. CAL. CONST. art. X, § 2.

38. *E.g.*, *City of Pasadena v. City of Alhambra*, 207 P.2d 17, 23, 33 (Cal. 1949) (en banc) (The City of Alhambra claimed that “[t]he failure of the City of Pasadena to capture and return to the underground basin storm waters and waters used to flush streets, fight fires, and flow sewage” was waste and unreasonable use in violation of the Constitution, and sought to enjoin Pasadena’s use of the water “in order to prevent eventual depletion of the supply.”). In *Peabody v. City of Vallejo*, 40 P.2d 486, 492 (Cal. 1935), the plaintiffs sought to enjoin the City of Vallejo from capturing floodwaters, claiming that the waters were being put to beneficial use by the plaintiffs. In reply, the City of Vallejo claimed, and the court found, that the plaintiffs’ use of floodwaters to deposit silt on their land was waste and unreasonable use in violation of the California Constitution. *Id.*

39. See, *e.g.*, *Envtl. Def. Fund v. E. Bay Mun. Util. Dist. (EBMUD I)*, 125 Cal. Rptr. 601, 604 (Ct. App. 1976); *Envtl. Def. Fund v. E. Bay Mun. Util. Dist. (EBMUD II)*, 572 P.2d 1128 (Cal. 1977); see also discussion *infra* Parts II.B.1–2; Verified Petition for Writ of Administrative Mandate and Declaratory and Injunctive Relief at 11–14, *Cal. Water Impact Network v. Cal. State Water Res. Control Bd.* (Cal. Super. Ct. Sept. 3, 2010) (No. 2010-80000653), available at [http://www.c-win.org/webfm\\_send/112](http://www.c-win.org/webfm_send/112).

water, is this a wasteful and unreasonable use of the water in violation of the California Constitution? In other words, does article X, section 2 impose a legal duty on municipalities to implement effective wastewater recycling programs?

Although the reasonable and beneficial use provision has been extensively interpreted and applied in California case law,<sup>40</sup> only one case has considered whether this provision imposes a duty to recycle wastewater.

**1. *EBMUD I: The California Court of Appeals Finds That the California Constitution May Create a Duty to Produce Recycled Water***

The controversy underlying *Environmental Defense Fund v. East Bay Municipal Utility District* began in the 1960s, when the East Bay Municipal Utility District (“EBMUD”), a governmental agency, determined that its current water supplies would be insufficient to meet the needs of its service area.<sup>41</sup> At the time of the complaint, EBMUD delivered water for over one million people in Alameda and Contra Costa Counties.<sup>42</sup> Looking for a way to supplement its water supply, EBMUD began a search for additional water.<sup>43</sup> It ultimately entered into an agreement with the United States Bureau of Reclamation (“Bureau”), under which EBMUD would obtain additional water from the Bureau.<sup>44</sup> Under the agreement, EBMUD would buy Bureau water from the American River Division of the Bureau’s Central Valley Project and would actively support construction (and ultimately take responsibility for construction, if necessary) of certain water diversion facilities on the river.<sup>45</sup> Three environmental groups and four individuals sued to prevent the agreement from going forward.<sup>46</sup> The plaintiffs’ primary allegation was that:

In contracting for American River water, EBMUD did not recognize its legal obligation to embark on a waste-water reclamation program. EBMUD has decided not to develop reclamation facilities to assist in meeting its present or future water needs. This decision

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40. See *supra* note 38 and accompanying text.

41. *EBMUD I*, 125 Cal. Rptr. at 604.

42. *Id.*

43. *Id.* at 605.

44. *Id.*

45. *Id.*

46. *Id.* at 604. Hereinafter, these parties will collectively be referred to as “the plaintiffs.” The environmental groups involved were the Environmental Defense Fund, the Oceanic Society, and the Save the American River Association. *Id.* The individual plaintiffs were taxpayers and either renters or homeowners within EBMUD’s service area. *Id.*

as well as the seeking of additional water from the American River are abuses of discretion.<sup>47</sup>

The plaintiffs' two main objections to EBMUD's contracting for American River water rather than pursuing recycled water were: (1) that the proposed construction projects and increased diversion would "have serious harmful environmental consequences," and (2) that the American River water would cost consumers in EBMUD's service area more than recycled water.<sup>48</sup> As relief, plaintiffs sought an order requiring EBMUD to rescind the agreement with the Bureau, an order forbidding EBMUD from taking steps to divert water from the American River, and "an order requiring [EBMUD] 'to undertake such a reclamation program as the proof will determine is required by law.'"<sup>49</sup> The plaintiffs' claim was that EBMUD's decision not to recycle wastewater in order to meet increased demand was a wasteful and unreasonable use of existing water supplies in violation of article X, section 2<sup>50</sup> of the California Constitution.<sup>51</sup>

In analyzing whether EBMUD had a duty to produce recycled water, the court first considered what it identified as "the threshold question": Whether the preservation of the environment was among the interests protected by article X, section 2.<sup>52</sup> Stating that the "question as to whether or not [article X, section 2] may be properly interpreted to encompass claims based upon environmental factors such as those involved here is . . . one of first instance," the court engaged in a lengthy discussion of the history of article X, section 2 and ultimately determined that such environmental interests were within the purview of the constitutional amendment.<sup>53</sup>

The court then went on to consider the plaintiffs' primary contention that article X, section 2 imposed a legal duty for EBMUD to produce recycled water. The court confronted the issue head on, asking: "Is recycling waste water a technique that may be required under

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47. *Id.* at 605.

48. *Id.*

49. *Id.*

50. Formerly, and at the time *EBMUD II* was decided, article XIV, section 3.

51. *EBMUD I*, 125 Cal. Rptr. at 607. The plaintiffs also claimed that EBMUD did not have authority to contract for Bureau water. *See id.* at 616. The court of appeals ultimately found that federal law governed the contract, as the Reclamation Act preempted state law. *Id.* The contract/preemption issue is not relevant to the issue of a municipal duty to recycle, and as such will not be discussed in this Comment.

52. *Id.* at 607.

53. *Id.* at 610-13 ("[Article X, section 2] can only reasonably be interpreted as an unqualified expression of fundamental policy by the people of California that the general welfare requires that *all* of 'the water resources of the State be put to beneficial use to the fullest extent of which they are capable.'").

the amendment upon a proper showing as a method of preventing waste or the unreasonable use of water?”<sup>54</sup> In other words, the initial determination to be made was not whether EBMUD had actually violated article X, section 2, but rather whether alleging a violation of article X, section 2 for failure to recycle wastewater even stated a valid cause of action.<sup>55</sup> The court considered the policy reasons supporting use of recycled water, legislative findings unequivocally supporting the use of recycled water,<sup>56</sup> and prior case law finding that what is reasonable or unreasonable, wasteful or beneficial is a question of fact that varies with the changing times and circumstances of each particular case.<sup>57</sup> The court ultimately found that the plaintiffs, in claiming that EBMUD’s failure to produce recycled water was a violation of article X, section 2, had stated a valid cause of action:

It is our conclusion that appellants have therefore raised a justiciable issue in connection with their first cause of action. It may very well be, however, that at a trial they may not be able to offer sufficient evidence to demonstrate that recycling or reclaiming water has yet become an economically practical or feasible method of preventing waste in connection with respondent EBMUD’s operations.<sup>58</sup>

The California Court of Appeals had not found that EBMUD had a duty to produce recycled water. However, what it had done was state, in no uncertain terms, that there existed a legally enforceable duty to produce recycled water under the law of the state of California.

## 2. *EBMUD II*: The California Supreme Court Punts

Two years later, the California Supreme Court reviewed the court of appeals’ decision in *EBMUD I*.<sup>59</sup> The court first considered the issue of federal preemption and found that the complaint seeking to com-

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54. *Id.* at 613.

55. *Id.* at 613–14 (“We observe at the outset that appellants are not contending that the failure of EBMUD to adopt a program for recycling its water is ipso facto a violation of [article X, section 2]. What they do say is simply that they have set forth sufficient facts in their pleading to entitle them to proceed to trial so that the trial court can determine in the first instance whether or not its present water resources are indeed being ‘put to beneficial use to the fullest extent of which they are capable.’”).

56. *Id.* at 614 (“The Legislature finds and declares that a substantial portion of the future water requirements of this state may be economically met by beneficial use of reclaimed water.” (quoting CAL. WATER CODE § 13511)).

57. *Id.* at 615 (“What is a reasonable use or method of use of water is a question of fact to be determined according to the circumstances in each particular case.” (quoting *Joslin v. Marin Mun. Water Dist.*, 429 P.2d 889, 894 (Cal. 1967) (en banc) (internal quotation marks omitted))).

58. *Id.*

59. *EBMUD II*, 572 P.2d 1128 (Cal. 1977).

pel EBMUD to reclaim water was not preempted by federal law.<sup>60</sup> However, in spite of this finding, and the court of appeals' holding that the plaintiffs had stated a cause of action under article X, section 2, the California Supreme Court still held that the plaintiffs could not maintain a cause of action against EBMUD:

[P]laintiffs . . . contend EBMUD's failure to reclaim contravenes the Water Reclamation Law (Wat. Code, § 13500 et seq.), and violates article X, section 2, of the California Constitution and Water Code section 100. However, we conclude the contention is not properly before us in this proceeding. Parties seeking to compel a user to reclaim waste water must, in the first instance, seek relief from the Regional Water Quality Control Boards, and having failed to do so are precluded from maintaining such cause of action against EBMUD.<sup>61</sup>

The court based this holding on its conclusion that it was the legislature's intent that wastewater be regulated by the administrative agency, not the courts.<sup>62</sup> In coming to this conclusion, the court considered the "statutory pattern," which it found "clearly reflect[ed] the Legislature's intent to vest regulation of waste water reclamation in the administrative agencies."<sup>63</sup> It noted that the Water Code provides a thorough framework for the regulation of recycled water and vests the SWRCB with full authority to oversee and implement this regulatory system.<sup>64</sup> However, the primary justification for the court's holding seemed to be judicial incompetence, a feeling that the issue of compelled water recycling is simply too complicated for the courts to handle and is therefore best left to the administrative agency:

The question whether available economic resources should be devoted to waste water reclamation or development of other water supplies is basically a legislative one . . . . The matter is still further complicated when, as here, transcendent interests of public health and safety beyond normal water use are involved. When as in the instant case the statutory pattern regulating a subject matter integrates the administrative agency into the regulatory scheme and the subject of the litigation demands a high level of expertise within the agency's special competence, we are satisfied that litigation in the first instance must be addressed to the agency.<sup>65</sup> The Supreme Court had failed to answer the question posed by the lower court: "Is recycling waste water a technique that may be re-

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60. *Id.* at 1131 ("Insofar as the complaints seek to compel EBMUD to reclaim water, there is no federal or state conflict, application of state law will not impinge on federal controls or interests, and state law is not preempted.").

61. *Id.* at 1135.

62. *Id.* at 1136.

63. *Id.*

64. *Id.* at 1136-37.

65. *Id.* at 1137.

quired under the amendment . . . ?”<sup>66</sup> The issue was left to another decision maker, to be resolved another day.

### 3. After *EBMUD II*: Is there a Municipal Duty to Produce Recycled Water?

After the California Supreme Court’s holding in *EBMUD II*, the United States Supreme Court vacated the decision on other grounds and remanded the case to the California Supreme Court for further consideration.<sup>67</sup> On rehearing, the California Supreme Court declined to disturb its holding in *EBMUD II* that issues involving wastewater reclamation must be addressed in the first instance to the SWRCB.<sup>68</sup> It therefore seemed as though the inevitable next step was for the plaintiffs to bring the issue before the SWRCB. However, after this decision, the parties put all of their focus on the American River diversion issue,<sup>69</sup> and the wastewater reclamation issue was never brought before the Board.<sup>70</sup>

In fact, following the court’s holding in *EBMUD II*, no party has brought an action before the SWRCB seeking to compel a municipality to produce recycled water; the question of whether and under what circumstances a municipality may be required to produce recycled water has yet to be finally resolved. Because no agency or court has directly considered the issue, it is difficult to define the exact parameters of the municipal duty to produce recycled water. However, *EBMUD I* and *EBMUD II*, taken together with other relevant legal and administrative precedent, provide at least some indication of what a plaintiff might have to show in order to establish that a municipality’s failure to produce recycled water is unreasonable and wasteful in violation of article X, section 2.

In *EBMUD I*, the court of appeals held that if plaintiffs could show that a municipality’s failure to produce recycled water was unreasonable, the municipality could be compelled to produce recycled water.<sup>71</sup> Although the Supreme Court in *EBMUD II* held that parties seeking to compel production of recycled water must first address the claim to the SWRCB, it did not otherwise disturb or redefine the duty to pro-

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66. *EBMUD I*, 125 Cal. Rptr. 601, 613 (Ct. App. 1976).

67. *Envtl. Def. Fund v. E. Bay Mun. Util. Dist. (EBMUD III)*, 439 U.S. 811 (1978).

68. *Envtl. Def. Fund v. E. Bay Mun. Util. Dist. (EBMUD IV)*, 605 P.2d 1, 10 (Cal. 1980).

69. See discussion *supra* Part I.B.1.

70. E-mail from Robert Maddow, Attorney, to author (Feb. 13, 2012) (on file with author).

71. *EBMUD I*, 125 Cal. Rptr. at 614.

duce recycled water as defined by the court of appeals.<sup>72</sup> Therefore, it appears that if a party brought before the SWRCB a claim of waste or unreasonable use in violation of article X, section 2, and sought to compel a municipality to produce recycled water, that party would have stated a cause of action. If that party could successfully show that the failure to produce recycled water was unreasonable, the SWRCB could grant the requested relief and compel the municipality to produce recycled water.

This raises the question of what a party seeking to compel production of recycled water would have to show in order to convince the SWRCB that the failure to produce is unreasonable. The court in *EBMUD I* seemed to define the duty to produce recycled water in terms of a basic reasonableness analysis; that is, a municipality violates article X, section 2 by failing to produce recycled water if its failure to produce recycled water is unreasonable under the circumstances.<sup>73</sup>

It is a well-established principle in California water law that “[w]hat is a reasonable use or method of use of water is a question of fact to be determined according to the circumstances in each particular case.”<sup>74</sup> Although the California courts have generally provided little guidance regarding *how* reasonableness should be determined,<sup>75</sup> the SWRCB has provided a list of factors that should be considered in analyzing alleged waste and unreasonable use in violation of article X, section 2: (1) other potential beneficial uses for conserved water; (2) whether the excess water (i.e., the water allegedly being wasted) now serves a reasonable and beneficial purpose; (3) the probable benefits of water savings; (4) the amount of water reasonably required for current use; (5) amount and reasonableness of the cost of saving water; (6) whether the required methods of saving water are conventional and reasonable rather than extraordinary; and (7) the availability of a physical plan or solution.<sup>76</sup>

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72. See *EBMUD II*, 572 P.2d 1128, 1136 (Cal. 1977).

73. See *EBMUD I*, 125 Cal. Rptr. at 614.

74. *Joslin v. Marin Mun. Water Dist.*, 429 P.2d 889, 894 (Cal. 1967).

75. See, e.g., *Jordan v. City of Santa Barbara*, 54 Cal. Rptr. 2d 340, 353 (Ct. App. 1996) (“What is a reasonable use of water varies with the facts and circumstances of the particular case.”); *Drake v. Tucker*, 184 P. 502, 504–05 (Cal. Dist. Ct. App. 1919) (stating that “[w]hat is a reasonable use depends upon all the facts and circumstances of the case,” and considering factors such as “the needs of the parties, the nature of the land, the volume of the stream,” in order to find that defendants use of water for irrigation was unreasonable where it did not leave enough water for the plaintiffs to meet domestic needs).

76. *Imperial Irrigation Dist.*, Decision 1600, at 23–29 (Cal. State Water Res. Control Bd. June 21, 1984). The Board indicated that use of these factors was appropriate because “[a]lthough each case must be evaluated on its own merits, prior court decisions, prior

The SWRCB's decision *In the Matter of Alleged Waste and Unreasonable Use of Water by Imperial Irrigation District*, provides a clear illustration of how these factors are to be applied.<sup>77</sup> *Imperial Irrigation District* involved a complaint alleging waste and unreasonable use of water by the Imperial Irrigation District ("IID").<sup>78</sup> A farmer within the district asked the SWRCB to investigate IID's water use, alleging that IID's waste and unreasonable use of water was putting his property at risk for flooding.<sup>79</sup> He alleged that IID's failure to implement basic conservation measures resulted in an unnecessary amount of water being discharged as wastewater.<sup>80</sup> The Board ultimately concluded that IID's water use practices constituted waste and unreasonable use in violation of article X, section 2 and ordered IID to take measures to improve its water conservation.<sup>81</sup>

Orders and decisions adopted by the SWRCB are precedential.<sup>82</sup> It is therefore essential to consider how the SWRCB has applied these factors to a claim of waste and unreasonable use, such as the complaint at issue in *Imperial Irrigation District*, in order to predict how the SWRCB might analyze a claim seeking to compel a municipality to produce recycled water.

#### a. Other Potential Beneficial Uses for Conserved Water

The SWRCB identified this factor as "[o]ne of the most important factors to be considered" in evaluating the reasonableness of the use at issue.<sup>83</sup> In applying this factor, the SWRCB discussed *Joslin v. Marin Municipal Water District*.<sup>84</sup> In *Joslin*, the California Supreme Court weighed municipal demands against the demands of landowners who required water to supply their land with rock and gravel for the landowners' business.<sup>85</sup> The SWRCB also discussed its Decision 1403, in which the Board concluded that "filling a recreational lake during a drought was an unreasonable use of water since the same

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decisions of the Board, and several statutes provide guidance in evaluating water usage." *See id.* at 23–24.

77. *See id.* at 24–29.

78. *Id.* at 1–2.

79. *Id.* at 4.

80. *See id.*

81. *Id.* at 2.

82. *Resolutions, Orders & Decisions*, CAL. ST. WATER RESOURCES CONTROL BOARD, [http://www.swrcb.ca.gov/board\\_decisions/adopted\\_orders/](http://www.swrcb.ca.gov/board_decisions/adopted_orders/) (last visited Mar. 19, 2012) ("Precedential decisions and orders provide guidance for later decisions and orders.").

83. *Imperial Irrigation Dist.*, Decision 1600, at 24.

84. *Id.*

85. *Joslin v. Marin Mun. Water Dist.*, 429 P.2d 889, 891 (1967).

water could otherwise be used to reduce the need for water imports from Northern California where several areas were experiencing water shortages.”<sup>86</sup> The IID argued that since there were no competing users for the water in question, this factor should be found to weigh in favor of a finding that their use was reasonable; in other words, since there was no shortage, and no one else needed the water, there was no waste or unreasonable use in violation of article X, section 2.<sup>87</sup> The Board disposed of this argument quickly, stating that “a finding of unreasonable use or method of use does not require the existence of a dispute between competing users.”<sup>88</sup> The SWRCB cited *EBMUD I* for the proposition that excessive diversions may be found unreasonable and wasteful if other parties can show that the diversion is harmful to environmental interests.<sup>89</sup>

**b. Whether the Excess Water Now Serves a Reasonable and Beneficial Purpose**

The SWRCB explained this factor as a straightforward consideration of whether the allegedly wasted water is currently being put to beneficial use “downstream.”<sup>90</sup> The Board cited situations in which tailwater reenters a stream and can be put to use by downstream users, or a leaky canal contributes to groundwater recharge.<sup>91</sup>

**c. The Probable Benefits of Water Savings**

The Board simply stated that “[t]he probable economic, environmental and other benefits that would result from more efficient use of water should be identified. These benefits may serve to offset a portion of the cost of more stringent water conservation policies.”<sup>92</sup> In this vein, the California courts have explicitly stated that the benefit of conservation of California’s limited water resources should be of paramount importance: “[W]hat is a reasonable use of water . . . cannot be resolved *in vacuo* isolated from state-wide considerations of transcendent importance. Paramount among these we see the ever increasing need for the conservation of water in this state . . . .”<sup>93</sup>

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86. *Imperial Irrigation Dist.*, Decision 1600, at 24.

87. *Id.* at 24–25.

88. *Id.* at 25.

89. *Id.*

90. *Id.* at 25–26.

91. *Id.*

92. *Id.* at 26.

93. *Joslin v. Marin Mun. Water Dist.*, 429 P.2d 889, 894 (Cal. 1967).

**d. The Amount of Water Reasonably Required for Current Use**

In discussing this factor, the Board noted that it is often exceedingly difficult to determine how much water is “reasonably” required for a given use, especially when dealing with a party such as IID, which the Board described as a “large complex situation” due to the considerable variation involved in providing water for irrigation purposes.<sup>94</sup> The SWRCB stated that in spite of this difficulty, the Board may use whatever “meaningful information is available” to evaluate whether the amount of water being used is reasonable.<sup>95</sup>

**e. Amount and Reasonableness of the Cost of Saving Water**

The SWRCB stated that “[t]he fact that water conservation may require the water user to incur additional expense provides no justification to continue wasteful or unreasonable practices.”<sup>96</sup> The Board cited *People ex rel. State Water Resources Control Board v. Forni* for the proposition that water users may be required to put up with some reasonable expense or inconvenience in order to avoid waste or unreasonable use.<sup>97</sup> It explained that in determining whether the cost in question is reasonable, the Board should consider both the amount of money available to pay for conservation efforts and the value of the water that would be conserved.<sup>98</sup>

**f. Whether the Required Methods of Saving Water are Conventional and Reasonable Rather than Extraordinary**

In discussing this factor, the Board found that while an analysis of what is “conventional and reasonable” should take account of local custom, “conformity with local custom alone does not foreclose a finding of waste and unreasonable use in appropriate circumstances.”<sup>99</sup> The Board noted that it is often difficult to determine exactly how to define or evaluate what the local custom is.<sup>100</sup>

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94. *Imperial Irrigation Dist.*, Decision 1600, at 26 (noting that it was especially difficult to determine the amount of water reasonably required for IID’s use because “cropping patterns may vary from year to year [and] leaching requirements vary with location”).

95. *Id.* at 26–27.

96. *Id.* at 27.

97. *Id.* (citing *People ex rel. State Water Res. Control Bd. v. Forni*, 126 Cal. Rptr. 851 (Ct. App. 1976)).

98. *Id.*

99. *Id.* at 27–28.

100. *Id.* at 28.

### g. The Availability of a Physical Plan or Solution

The “physical solution” doctrine is typically invoked as a method for resolving disputes between competing users.<sup>101</sup> However, the Board noted that even in a case such as the one currently before it, where there was no dispute between competing users, it was still appropriate to consider the availability of a physical solution where “there are impending shortages of water which are reasonably certain to exist within the period in which a physical solution to avoid the shortages could be implemented.”<sup>102</sup>

### III. The Municipal Duty to Produce Applied: San Francisco as a Case Study

San Francisco is known for being one of the most progressive and environmentally friendly cities in California, and arguably, the world.<sup>103</sup> In spite of this reputation, San Francisco lags far behind other California cities in its use and municipal production of recycled water.<sup>104</sup> Currently, San Francisco does not produce any recycled water.<sup>105</sup> Between 99.0–99.5% of the 65 million gallons per day consumed by San Francisco water users is used only once before being discharged into the Pacific Ocean; about 0.5–1.0% of San Francisco’s wastewater is used for construction site dust control.<sup>106</sup> There are currently two proposed projects, the Westside and Eastside Recycled Water Projects, which, once constructed, would allow the City to produce recycled water.<sup>107</sup> Together, these projects would produce up to 4 million gallons per day of recycled water, or about 6% of the total daily water used by San Francisco residents, to be used for nonpotable uses such as irrigation.<sup>108</sup> This water would replace some of the pota-

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101. See *Peabody v. City of Vallejo*, 40 P.2d 486, 499 (Cal. 1935); *Waterford Irrigation Dist. v. Turlock Irrigation Dist.*, 194 P. 757, 761 (Cal. Dist. Ct. App. 1920).

102. *Imperial Irrigation Dist.*, Decision 1600, at 29.

103. See *15 Green Cities*, GRIST (July 19, 2007), <http://www.grist.org/article/cities3> (ranking San Francisco number eight on its list of fifteen green cities).

104. See Kelly Zito, *Plan to Recycle Water at Park*, S.F. CHRON., Sept. 7, 2010, at C1, available at [http://articles.sfgate.com/2010-09-07/bay-area/23991699\\_1\\_water-enterprise-division-pristine-water-supply-shift-in-water-policy](http://articles.sfgate.com/2010-09-07/bay-area/23991699_1_water-enterprise-division-pristine-water-supply-shift-in-water-policy) (“San Franciscans may be ‘green’ in many ways, but when it comes to responsible water use, we’re stuck in the 19th century.” (quoting Mike Marshall, Exec. Dir., Restore Hetch Hetchy)).

105. E-mail from Suzanne Gautier, *supra* note 7.

106. *Id.*

107. *Recycled Water*, S.F. WATER POWER SEWER, <http://www.sfwater.org/index.aspx?page=141> (last visited Mar. 19, 2012).

108. E-mail from Suzanne Gautier, *supra* note 7.

ble water that is currently used,<sup>109</sup> theoretically decreasing the demand on San Francisco's supply of freshwater.

While this may sound promising, whether and when these projects will actually lead to the production and distribution of recycled water is another question entirely. The Recycled Water Ordinances that identified and defined the Westside and Eastside Recycled Water Projects were passed in 1991 and 1994.<sup>110</sup> The Westside project is currently tied up in environmental review, with the draft environmental report not scheduled for publication until late-2012 or early-2013.<sup>111</sup> The Eastside Recycled Water Project has not progressed beyond the preplanning stages.<sup>112</sup>

The slow pace of San Francisco's recycled water development can be juxtaposed against San Francisco's constant quest to increase its freshwater supplies. As recently as 2007, San Francisco indicated that it planned to increase its diversions from the Tuolumne River, a proposal that was stringently opposed by local environmental groups.<sup>113</sup> These groups called on the San Francisco Public Utilities Commission to supplement existing water supplies with recycled water instead of increasing diversions from the Tuolumne River.<sup>114</sup>

If this scenario sounds familiar, it is because it bears a striking similarity to the facts of *EBMUD*—a San Francisco Bay Area utility seeks to supplement its existing water supply by increasing freshwater diversions, and environmental groups demand that instead, the utility supplement its water supply with recycled water. This raises the question: Could a party successfully argue that San Francisco's current failure to produce recycled water amounts to waste and unreasonable use in violation of article X, section 2? And if so, would the SWRCB compel San Francisco to make a meaningful effort to actually produce, or at least accelerate current efforts to produce, recycled water?

The SWRCB would likely apply the seven factors outlined in *Imperial Irrigation District*, or a similar analysis, to any claim alleging that

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109. *Id.*

110. *Id.*

111. *San Francisco Westside Recycled Water*, S.F. WATER POWER SEWER, [http://sfwater.org/bids/projectDetail.aspx?prj\\_id=310](http://sfwater.org/bids/projectDetail.aspx?prj_id=310) (last visited Mar. 19, 2012).

112. *San Francisco Eastside Recycled Water*, S.F. WATER POWER SEWER, [http://sfwater.org/bids/projectDetail.aspx?prj\\_id=311](http://sfwater.org/bids/projectDetail.aspx?prj_id=311) (last visited Mar. 19, 2012).

113. HEATHER DEMPSEY & ERIC WESSELMAN, TUOLUMNE RIVER TRUST, FROM THE TUOLUMNE TO THE TAP: PURSUING A SUSTAINABLE WATER SOLUTION FOR THE BAY AREA, at v, 7 (2007), available at <http://www.tuolumne.org/content/fmd/files/FromtheTuolumneto theTapReport.pdf>.

114. See, e.g., *id.*

San Francisco's current failure to produce recycled water amounts to waste and unreasonable use in violation of article X, section 2. The following section applies each of these factors to the circumstances in San Francisco and analyzes how the SWRCB would likely find in regards to each factor.

#### A. Other Potential Beneficial Uses for the Conserved Water

As the Board explained in *Imperial Irrigation District*, this factor does not require a dispute between competing users; this factor can be met by a showing that the diversions are harmful to environmental interests and that reducing diversions would have environmental benefits.<sup>115</sup> San Francisco's water diversions "have clearly degraded the integrity of the ecosystem" in the Tuolumne Watershed.<sup>116</sup> Reducing diversions has numerous environmental benefits, including improved water quality, lower pollutant discharges, and a reduction of harmful impacts on fish and other aquatic life.<sup>117</sup> Therefore, it is likely that the SWRCB would find that this factor weighs in favor of a finding of unreasonable use.

#### B. Whether the Excess Water Now Serves a Reasonable and Beneficial Purpose

Currently, the vast majority of San Francisco's excess water serves *no* purpose, let alone a beneficial one. An estimated 99.0–99.5% of San Francisco's wastewater is discharged into the Pacific Ocean or the San Francisco Bay.<sup>118</sup> Not only is this discharge not beneficial, it may even be harmful—even though wastewater is treated before being discharged, it still has the potential to cause harm to sensitive ecosystems.<sup>119</sup> It seems clear that this factor would weigh in favor of a finding that failure to produce recycled water is unreasonable.

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115. Imperial Irrigation Dist., Decision 1600, at 25 (Cal. State Water Res. Control Bd. June 21, 1984).

116. DEMPSEY & WESSELMAN, *supra* note 113, at 6.

117. J. Anderson, *The Environmental Benefits of Water Recycling and Reuse*, 3 WATER SCI. & TECH.: WATER SUPPLY, no. 4, 2003 at 1, 8–9.

118. See E-mail from Suzanne Gautier, *supra* note 7; TECHNICAL MEMORANDUM NO. 405, *supra* note 7, at 405-2 (identifying the San Francisco Bay and Pacific Ocean as the "receiving waters" for San Francisco's waste water discharge).

119. WATER RECYCLING AND REUSE, *supra* note 11, at 6. High volumes of wastewater discharged into the South San Francisco Bay by the San Jose/Santa Clara Water Pollution Control Plant threatened a saltwater marsh. *Id.* To reduce discharges and prevent harm to the marsh, a water recycling facility producing 21 million gallons of recycled water per day was constructed. *Id.*

### C. The Probable Benefits of Water Savings

In *Imperial Irrigation District*, the Board provided only limited discussion of this factor, simply stating that: “The probable economic, environmental and other benefits that would result from more efficient use of water should be identified. These benefits may serve to offset a portion of the cost of more stringent water conservation policies.”<sup>120</sup> As discussed above, California courts have identified conservation of California’s limited water resources as a benefit of paramount importance.<sup>121</sup> Producing recycled water would certainly result in conservation of existing fresh water supplies. However, producing recycled water also has the potential to result in economic benefits for San Francisco water users, as recycled water is generally less expensive for consumers than potable water.<sup>122</sup> Since both environmental and economic benefits would result from producing recycled water, it seems clear that this factor would weigh in favor of a finding of unreasonableness.

### D. The Amount of Water Reasonably Required for Current Use

In the context of a suit seeking to compel a municipality to produce recycled water, this factor seems to be redundant and not especially helpful in evaluating whether a municipality’s failure to produce recycled water is unreasonable. Attempted application of this factor leads to circular reasoning: If failing to produce recycled water is reasonable, then the amount of water reasonably required for the current use is the amount of potable water currently being diverted. However, if the failure to produce recycled water is unreasonable, then the amount of water reasonably required for the current use is the amount currently being diverted less any recycled water that could be produced. It is therefore likely that the Board would find that this factor is not applicable to a claim of waste and unreasonable use in the context of a failure to produce recycled water.

### E. Amount and Reasonableness of the Cost of Saving Water

When it comes to producing recycled water, cost is often an overriding concern. Constructing and maintaining wastewater recycling facilities is an expensive affair—the estimated cost of the San Francisco

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120. *Imperial Irrigation Dist.*, Decision 1600, at 26.

121. *Joslin v. Marin Mun. Water Dist.*, 429 P.2d 889, 894 (Cal. 1967).

122. See *South Bay Water Recycling Water Retail Rates*, ENVTL. SERVS.: CITY SAN JOSE, <http://www.sanjoseca.gov/sbwr/rates.htm> (last updated July 7, 2011) (showing a savings of up to \$2.16 per hundred cubic feet).

Westside Recycled Water Project, a relatively small project that would produce about 2 million gallons of recycled water per day, is \$109–155 million.<sup>123</sup> San Francisco would likely argue that the cost of producing recycled water is prohibitively expensive—in these troubled economic times municipalities throughout the country are struggling financially, and San Francisco is no exception.<sup>124</sup> However, as the Board explained in *Imperial Irrigation District*, the amount of money available to pay for conservation efforts is not the only relevant consideration; the Board should also consider the value of the water to be conserved.<sup>125</sup> Putting a value on conserved water can be difficult, especially when a municipality has an abundant supply of relatively cheap freshwater at its disposal. It is also notoriously difficult to put a value on the environmental benefits that would be derived by conserving water.

Further complicating the calculus is the fact that the San Francisco Public Utilities Commission could potentially pass on costs attributable to recycled water production to ratepayers. It is not clear how this would affect the analysis—whether it would tip the balance towards a finding of unreasonableness (because this would reduce the cost to the municipality) or against (because it would put an additional burden on ratepayers in difficult economic times). It is therefore unclear whether this factor would weigh in favor of a finding that San Francisco’s failure to produce recycled water is unreasonable.

#### **F. Whether the Required Methods of Saving Water are Conventional and Reasonable Rather than Extraordinary**

In *Imperial Irrigation District*, the Board said that although local custom is something that should be considered in determining whether the required methods of saving water are conventional and reasonable, local custom is often hard to determine.<sup>126</sup> That concern is not present here—other Bay Area cities have a well-established track record when it comes to water recycling, and it is therefore fairly easy to define the local custom in regards to water recycling. The South Bay Water Recycling Program, serving Milpitas, Santa Clara, and San Jose, produces about 14 million gallons per day of recycled water dur-

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123. *San Francisco Westside Recycled Water*, *supra* note 111.

124. See Joshua Sabatini, *San Francisco Budget Deficit Makes Cuts, Layoffs Seem Likely*, S.F. EXAMINER (Mar. 30, 2011), <http://www.sfexaminer.com/local/2011/03/cuts-layoffs-appear-likely-sf-budget>.

125. *Imperial Irrigation Dist.*, Decision 1600, at 27.

126. *Id.* at 28.

ing the summer months.<sup>127</sup> Similarly, the East Bay Municipal Utilities District, as discussed above, currently produces about 9 million gallons per day of recycled water, comprising about 5% of its total daily water use.<sup>128</sup> To the north, the Marin Municipal Water District (“MMWD”) produces about 2 million gallons per day of recycled water, about the same amount as would be produced by the San Francisco Westside Recycling Project.<sup>129</sup> However, MMWD only serves 185,000 people, and the average water use is 9.5 billion gallons per year, or about 26 million gallons per day;<sup>130</sup> therefore about 13% of MMWD’s total water use is met by recycled water.

There is clearly some variation in the amount of water produced by San Francisco’s neighbors. However, it seems indisputable that the local custom is to produce at least *some* recycled water; on average, neighboring water districts are meeting about 9% of their demand with recycled water. Therefore, it is arguable that, according to local custom, roughly 9% of a district’s water supply should consist of recycled water. It is therefore likely that the Board would find that this factor weighs in favor of a finding that San Francisco’s failure to produce *any* recycled water is unreasonable. Even if the potential production of 2 million gallons of recycled water by the San Francisco Westside Recycling Project<sup>131</sup> is taken into account, the Board could still find that meeting only 3% of total demand with recycled water is out of sync with local custom and therefore constitutes waste and unreasonable use in violation of article X, section 2.

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127. *South Bay Water Recycling: About the System*, ENVTL. SERVS.: CITY SAN JOSE, <http://www.sanjoseca.gov/sbwr/about.htm> (last visited Mar. 19, 2012). The South Bay Water Recycling Program supplies recycled water to several water districts in the region. It is therefore very difficult to determine what percentage of a given district’s water needs is met by recycled water.

128. E. BAY MUN. UTIL. DISTRICT, ALL ABOUT EAST BAY MUD 4 (2011), *available at* <http://www.ebmud.com/sites/default/files/pdfs/All-About-EBMUD-2011.pdf>.

129. *Recycled Water*, MARIN MUN. WATER DISTRICT, <http://www.marinwater.org/controller?action=menuclick&id=572> (last visited Mar. 19, 2012).

130. *The Marin Municipal Water District: 2012 Fact Sheet*, MARIN MUN. WATER DISTRICT, <http://www.marinwater.org/controller?action=menuclick&id=172> (last visited Mar. 19, 2012).

131. If potential production were to be considered, it is likely that only the Westside project would be taken into account because the proposed Eastside project, first proposed over a decade ago, is still in the preplanning stages. *San Francisco Eastside Recycled Water*, *supra* note 112. The Westside Project would produce, on average, about 2 million gallons per day. *San Francisco Westside Recycled Water*, *supra* note 111.

### G. The Availability of a Physical Plan or Solution

The application of this factor is fairly easy in the context of a claim seeking to compel a municipality to produce recycled water; the failure to produce recycled water can be remedied by constructing reclamation facilities. In *Imperial Irrigation District*, the Board suggested that where there is not a dispute between competing users, the physical solution doctrine could be invoked where “there are impending shortages of water which are reasonably certain to exist.”<sup>132</sup> San Francisco currently has sufficient supplies of freshwater to meet demand. However, California generally is facing a water shortage, and every effort must be made to conserve existing water supplies. Therefore, this factor may weigh in favor of a finding of unreasonableness.

### Conclusion

It appears that as applied to San Francisco, the majority of the *Imperial Irrigation District* factors would weigh in favor of a finding that San Francisco’s current failure to produce recycled water constitutes waste and unreasonable use in violation of article X, section 2. Assuming that the SWRCB would apply a similar analysis, it seems that a party bringing a claim seeking to compel San Francisco to produce recycled water would have good a chance of prevailing on its claim. However, much remains unclear, and there are a multitude of different turns the SWRCB could take. It could weigh some factors, such as the economic burden imposed by recycled water development, more heavily than others; it could find the fact that the city already has some water reclamation projects in development is a compelling reason not to mandate further action; or it could find that the problem of compelled water recycling is so unique that it requires a different analysis entirely.

The parameters of the municipal duty to produce recycled water, and the answer to the question of whether it is a duty in fact or only in theory, will remain uncertain until tested before the SWRCB. Testing the duty requires at minimum a plaintiff willing to bring a claim, which in and of itself is problematic. Bringing any lawsuit is expensive, and suits requiring a finding of reasonableness are inherently unpredictable. It will therefore take a motivated plaintiff to take the municipal duty to produce recycled water from muddled, to clear enough to produce meaningful results.

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132. *Imperial Irrigation Dist.*, Decision 1600, at 29 (Cal. State Water Res. Control Bd. June 21, 1984).