



# Racial Equity Resolution Referenced Literature

## REFERENCED LITERATURE

FOR

**THE PROPOSED STATE WATER BOARDS RESOLUTION  
CONDEMNING RACISM, XENOPHOBIA, BIGOTRY, AND  
RACIAL INJUSTICE AND STRENGTHENING COMMITMENT  
TO DIVERSITY, EQUITY, ACCESS, INCLUSION AND ANTI-  
RACISM**

**STATE WATER RESOURCES CONTROL BOARD**

**November 16, 2021**

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**California Environmental Protection Agency**  
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**State Water Resources Control Board**

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State Water Resources Control Board  
California Environmental Protection Agency

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## EXECUTIVE SUMMARY

During its August 18, 2020 meeting, the State Water Resources Control Board publicly acknowledged for the first time that the historical effects of racism and white supremacy must be confronted throughout government. The State Water Board directed its staff to advance racial equity and develop a priority plan of action to achieve this goal. Following that direction, Executive Director Eileen Sobeck formed a Racial Equity Steering Committee and a Racial Equity Working Group. Collectively, the Racial Equity Steering Committee and Working Group are the Water Boards' Racial Equity Team.

Following the State Water Boards' direction, the Racial Equity Team drafted a resolution on racial equity at the beginning of 2021. To develop a resolution informed both by facts and input from Water Boards employees and the communities served by the Water Boards, the Racial Equity Team conducted public and employee listening sessions, as well as a comprehensive review of relevant literature and publicly available data. A draft resolution, *State Water Resources Control Board Resolution No. 2021-: Condemning Racism, Xenophobia, and Racial Injustice and Strengthening Commitment to Racial Equity, Diversity, Inclusion, Access, and Anti-Racism* (i.e., "Racial Equity Resolution"), was released on June 24, 2021 for public comments.

To aid in the interpretation of the Racial Equity Resolution and provide transparency on the resolution drafting process, the Water Boards' Racial Equity Team produced this Referenced Literature document. Part 1 of this document contains a reproduced version of the Racial Equity Resolution with citations or full references in footnotes. Citations included in those footnotes are linked to full references that can be found in the annotated list of references in Part 2 of this document. Annotations within the list of references briefly summarize key points of each source document and identify the key pieces of information that were used to inform the drafting of the Racial Equity Resolution.

Additional information can be found on the Water Boards' [Racial Equity Resolution webpage](https://www.waterboards.ca.gov/racial_equity/resolution.html) ([https://www.waterboards.ca.gov/racial\\_equity/resolution.html](https://www.waterboards.ca.gov/racial_equity/resolution.html)). Questions about this document, the Water Boards' Racial Equity Resolution, or more generally regarding the Water Boards' racial equity work should be addressed to [racialequity@waterboards.ca.gov](mailto:racialequity@waterboards.ca.gov). If you require the translation of documents, please contact us at [opp-contact@waterboards.ca.gov](mailto:opp-contact@waterboards.ca.gov) or 916-322-4265.

# PROPOSED RESOLUTION WITH FOOTNOTE CITATIONS

## STATE WATER RESOURCES CONTROL BOARD RESOLUTION NO. 2021-

### CONDEMNING RACISM, XENOPHOBIA, BIGOTRY, AND RACIAL INJUSTICE AND STRENGTHENING COMMITMENT TO RACIAL EQUITY, DIVERSITY, INCLUSION, ACCESS, AND ANTI-RACISM

#### WHEREAS:

1. As part of the California Environmental Protection Agency (CalEPA), the shared mission of the State Water Resources Control Board (State Water Board) and nine Regional Water Quality Control Boards (Regional Water Boards), collectively Water Boards, is to preserve, enhance, and restore the quality of California's water resources and drinking water for the protection of the environment, public health, and all beneficial uses, and to ensure proper water resource allocation and efficient use for the benefit of present and future generations.<sup>1</sup> In relation to this mission, the Water Boards accept responsibility for confronting structural and institutional racism and advancing racial equity.
2. The Water Boards are a member of the Government Alliance on Race and Equity (GARE) and have adopted its definition of racial equity: racial equity occurs when race can no longer be used to predict life outcomes, and outcomes for all groups are improved. Because race intersects with many, if not all, other marginalized identities, prioritizing and addressing racial inequities improves outcomes for other marginalized communities.<sup>2</sup>

#### **Race as a Determinant of Environmental and Racial Inequities**

3. Historically, decision-makers representing government agencies used race to establish structures and systems that continue to deliver disparate outcomes, including wealth, health, educational, and environmental inequities.<sup>3</sup>
4. CalEPA's 2021 Pollution and Prejudice Story map<sup>4</sup> demonstrates that historically redlined neighborhoods are "generally associated with worse environmental conditions and greater population vulnerability to the effects of pollution today." In addition, Black, Indigenous, and people of color are overrepresented in the neighborhoods that are the most environmentally degraded and are still experiencing severe racial wealth gaps caused by redlining and other land-use practices designed to oppress them. Many of these communities lack access to

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<sup>1</sup> SWRCB, 2020a

<sup>2</sup> Nelson et al., 2015

<sup>3</sup> Brulle and Pellow, 2005; Morello-Frosch and Lopez, 2006; Strife and Downey, 2009; Balazs and Ray, 2014; Khan Academy, 2017; Del Real, 2019; Matthews, 2020; Baldassare et al., 2020; Angermeier et al., 2021; Altare et al., 2021

<sup>4</sup> Altare et al., 2021

parks, open spaces, greenways, and green infrastructure<sup>5</sup> to provide natural flood protection and water treatment.<sup>6</sup>

5. The Office of Environmental Health Hazard Assessment's (OEHHA's) CalEnviroScreen mapping tool identifies communities that are disproportionately impacted by a combination of environmental stressors and socioeconomic disadvantages.<sup>7</sup> The tool's 2021 update reveals that the top 10% of least-polluted neighborhoods are 67% white, and the top 10% of most-polluted neighborhoods are 90% Black, Indigenous, and people of color.<sup>8</sup> Contaminated drinking water sources disproportionately burden low-income communities and Black, Indigenous, and people of color communities throughout California, further exacerbating persistent inequities, which can be seen in data collected by the Human Right to Water Framework and Data Tool 1.0 (released January 2021).<sup>9</sup>
6. In 2021, the State Water Board released the 2021 Drinking Water Needs Assessment, which (1) identifies California small water systems and domestic wells that are failing, or at risk of failing, to provide access to safe drinking water; (2) estimates the cost of interim and long-term solutions for these systems; and (3) determines the statewide funding gap and affordability challenges that may be barriers to implementing these solutions. There are approximately 345 systems that fail to meet the goals of the human right to water.<sup>10</sup> In addition, the needs assessment identified 617 at-risk public water systems, 611 at-risk state small water systems, and 80,000 at-risk domestic wells. It also identified 13 federally regulated tribal water systems that failed to meet the goals of the human right to water and 22 at-risk tribal water systems.

### **Acknowledgement of Racism and Racial Inequities**

7. Historically, the Water Boards' programs were established over a structural framework that perpetuated inequities based on race. These inequities persist, and prior to this resolution, the Water Boards had not explicitly acknowledged the role racism has played in creating inequities in affordability and access to clean and safe water and in the allocation and protection of water resources. Toward reconciliation, the State Water Board now acknowledges:
  - a. White supremacy is a systemically and institutionally perpetuated system of exploitation and oppression of nations and people of color by white people for the purpose of maintaining and defending a system of wealth, power, and privilege.<sup>11</sup> In the United States, white supremacy led to the genocide and forced relocation of Native American people to facilitate

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<sup>5</sup> Kakoyannis and Stankey, 2002; Reineman et al., 2016; Grove et al, 2018; Jennings et al., 2019; Landau et al., 2020; Locke et al., 2021

<sup>6</sup> Wright Wendel et al., 2011; O'Brien et al., 2017; Frank, 2020; Hendricks and Van Zandt, 2021

<sup>7</sup> Altare et al., 2021

<sup>8</sup> OEHHA, 2021a

<sup>9</sup> OEHHA, 2021b; OEHHA, 2021c; Balazs et al., 2021

<sup>10</sup> SWRCB, 2021a; California Human Right to Water Act, *California Water Code* § 106.3 (2012).

[https://leginfo.legislature.ca.gov/faces/codes\\_displaySection.xhtml?lawCode=WAT&sectionNum=106.3](https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=WAT&sectionNum=106.3).

<sup>11</sup> Almaguer, 1994; Wilson, 2018; Gordon-Reed, 2018

white resettlement<sup>12</sup> and the enslavement of Native American and Black people for white economic gain.<sup>13</sup> White supremacy has been served by many other government policies targeting people of color, including for example, race-focused immigration restrictions,<sup>14</sup> the internment of Japanese Americans,<sup>15</sup> exclusionary housing and labor policies,<sup>16</sup> and lack of investment in Black, Indigenous, and people of color communities.<sup>17</sup> The impacts of federal, state, and local decision-making and policies made decades ago continue to impose challenges for Black, Indigenous, and people of color communities, which still grapple with the lasting effects of historical racial inequities stemming from those governmental decisions and policies.<sup>18</sup>

- b. The colonization, displacement, and genocide of Native American people in the United States have contributed to the loss of water resource and watershed management practices that supported Native American people's traditional food sources and ways of life.<sup>19</sup> Watersheds are now primarily managed through large-scale diversion of water for municipal, industrial, agricultural, and commercial beneficial uses to the detriment of traditional, local, and cultural uses and without compensation, recognition, or replacement.<sup>20</sup> Historical land seizures and broken promises related to federal treaty rights have resulted in the loss of associated water rights and other natural resources of value, as well as cultural, spiritual, and subsistence traditions that Native American people have practiced since time immemorial.<sup>21</sup>
- c. As a result, California Native American Tribes continue to face barriers to defining, quantifying, accessing, protecting, and controlling their ancestral lands, water rights, instream flows, cultural resources, and beneficial uses.<sup>22</sup> Redistribution of water has reduced or eliminated access to healthy traditional food sources such as smelt, salmon, freshwater mussels, and freshwater plants.<sup>23</sup> Disconnection from traditional ancestral land and water and the unavailability of traditional foods have been linked

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<sup>12</sup> SAAM, 2014; Castillo, 2021

<sup>13</sup> Wilson, 2018; Gordon-Reed, 2018

<sup>14</sup> Ferguson, 1947; Oppenheimer et al., 2016

<sup>15</sup> Hansen, 1998

<sup>16</sup> Perea, 2011; Balazs and Ray, 2014; Altare et al., 2021

<sup>17</sup> Balazs and Ray, 2014; Hall, 2019; Del Real, 2019

<sup>18</sup> Brulle and Pellow, 2005; Morello-Frosch and Lopez, 2006; Balazs and Ray, 2014; Hardy et al., 2017; Khan Academy, 2017; Del Real, 2019; Wilson, 2020; Matthews, 2020; Meehan et al., 2020; Angermeier et al., 2021; Altare et al., 2021

<sup>19</sup> Ferguson, 1947; Gibler, 2005; Anderson, 2015; California Executive Department, 2019; Castillo, 2021

<sup>20</sup> RWQCB-R2, 2017; Palumbo and Iversen, 2017

<sup>21</sup> Almaguer, 1994; Schelhas, 2002; Khan Academy, 2017; Pfeiffer, 2021; Thompson, 2021

<sup>22</sup> Berry, 1998; Schelhas, 2002; Great Lakes Indian Fish & Wildlife Commission, 2013; Shilling et al., 2014; Palumbo and Iversen, 2017; Leonard, 2021; Thompson, 2021; Pfeiffer, 2021

<sup>23</sup> Shilling et al., 2014; Sivas et al., 2017

to serious and pervasive health issues.<sup>24</sup> In addition, low or non-existent instream flows, and associated water quality problems, impair or prevent water-related cultural, spiritual, and subsistence practices.<sup>25</sup> These injustices are exacerbated by climate change and complex water resource and watershed management processes.<sup>26</sup>

- d. The historical seizures of land from people of color have had, and continue to have, long-standing, oppressive impacts that extend beyond the loss of the land itself.<sup>27</sup> These impacts include the loss of the associated water rights and other natural resources of value, lack of access to affordable and reliable governmental services, and forced relocation to areas with fewer or lower quality natural resources.<sup>28</sup>
- e. In California, race predicts a person's access to governmental services and the quality and affordability of the services they receive. This includes the availability of safe drinking water and the collection, treatment, and reuse of wastewater.<sup>29</sup> In fact, race is the strongest predictor of water and sanitation access.<sup>30</sup>

## **Advancing Racial Equity and Environmental Justice**

- 8. The evidence of past and persisting racism and racial inequity is compelling. On a community scale, race is strongly correlated with more severe pollution burdens.<sup>31</sup> However, until recently, few of the Water Boards' policies, programs, or plans expressly considered or addressed racial inequities. As a government agency, the State Water Board recognizes the need to acknowledge racial inequity and to take action to address racial inequity within the agency and as part of the programs the Water Boards' carry out for the communities we serve.
- 9. Over the last decade, the Water Boards have increasingly emphasized actions to address environmental injustices, including: (1) creating the Safe and Affordable Funding for Equity and Resilience (SAFER) Program,<sup>32</sup> a comprehensive approach to implementing the state's commitment to the Human Right to Water by ensuring the estimated 1 million Californians being served contaminated water have solutions for safe, affordable drinking water;<sup>33</sup> (2) improving engagement with California

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<sup>24</sup> Norgaard, 2005; Gracey and King, 2009; King et al., 2009; Alkon and Norgaard, 2009; de Souza et al., 2021

<sup>25</sup> Schelhas, 2002; Leonard, 2021; Thompson, 2021

<sup>26</sup> Schelhas, 2002; Thompson, 2021

<sup>27</sup> Hansen, 1998; Merritt, 2016; Associated Press, 2021

<sup>28</sup> Williams, 2003; Balazs and Ray, 2014; Anderson, 2015; Del Real, 2019

<sup>29</sup> Morello-Frosch and Lopez, 2006; SWA, EJCW, and IHRLC, 2014; Schechinger, 2020

<sup>30</sup> Roller et al., 2019

<sup>31</sup> OEHHA, 2021a; Walsh, 2012; Farzin, 2009

<sup>32</sup> SWRCB, 2020b; California Senate Bill 200, *California Health and Safety Code* §§ 39719, 100827, 116275, 116385, 116530, 116540, 116686, and 116765 *et seq.* (2014).

[https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill\\_id=201920200SB200](https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201920200SB200).

<sup>33</sup> Abhold et al., 2021

Native American Tribes and recognizing and protecting tribal beneficial uses;<sup>34</sup> (3) developing a comprehensive response to climate change,<sup>35</sup> including addressing disproportionate impacts on vulnerable communities,<sup>36</sup> and (4) administering funding for projects that remediate the harm—or threat of harm—to human health, safety, and the environment<sup>37</sup> caused by existing or threatened surface water and groundwater contamination.<sup>38</sup> Much of this funding is set aside or targeted for projects in disadvantaged and severely disadvantaged communities.<sup>39</sup> The Water Boards recognize the need to further address environmental injustice and racial inequity.

10. Since 2018, the Water Boards have been participating in GARE, an international network of governmental organizations working to achieve racial equity and advance opportunities for all. The GARE network utilizes a racial equity model of change comprising iterative stages of normalizing, organizing, and operationalizing.<sup>40</sup>
11. Since 2018, the Water Boards' staff have been actively engaged in CalEPA's racial equity team which is implementing the agency's "Plan to Achieve Racial Equity," to: (1) improve access to data and information on racial equity; (2) improve communication with communities and partners; (3) improve language access; (4) advance racial equity trainings for the CalEPA workforce; and (5) improve workforce hiring, retention, and promotion practices to advance racial equity within the environmental protection role that each board, department, and office shares with CalEPA.<sup>41</sup>
12. The Water Boards' workforce does not reflect the racial composition of the state. United States Census Bureau data collected via the 2019 American Community Survey (ACS) show that 37% of California's population is white,<sup>42</sup> yet the Water Boards' workforce census data from 2020 show that 57% of the Water Boards'

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<sup>34</sup> SWRCB, 2017a; SWRCB, 2019a

<sup>35</sup> SWRCB, 2017b

<sup>36</sup> Basu and Ostro, 2008; Basu et al., 2008; Shonkoff et al., 2011; Hardy et al., 2017; Voelkel et al., 2018; Thomas et al., 2019; Jessel et al., 2019; Ziter et al., 2019; Wilson, 2020; Hoffman et al., 2020; IPCC, 2021; Locke et al., 2021

<sup>37</sup> California Senate Bill 445, *California Health and Safety Code* § 25299.32 *et seq.* (2014).

[https://leginfo.ca.gov/faces/billNavClient.xhtml?bill\\_id=201320140SB445](https://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=201320140SB445);

<sup>38</sup> Water Quality, Supply, and Infrastructure Improvement Act of 2014, California Assembly Bill 1471 (Proposition 1), *California Public Resources Code* §§ 13467, 78691.5, 79222, and 79591 (2014).

[https://leginfo.ca.gov/faces/billNavClient.xhtml?bill\\_id=201320140AB1471](https://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=201320140AB1471); DWR, 2019

<sup>39</sup> CNRA, 2018; California Senate Bill 1215, *California Water Code* §§ 13288-13289 (2018),

[https://leginfo.ca.gov/faces/billTextClient.xhtml?bill\\_id=201720180SB1215](https://leginfo.ca.gov/faces/billTextClient.xhtml?bill_id=201720180SB1215); California Senate Bill 828, *California Health and Safety Code* § 116276. (2016).

[https://leginfo.ca.gov/faces/billNavClient.xhtml?bill\\_id=201520160SB828](https://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=201520160SB828); California Drought, Water, Parks, Climate, Coastal Protection, and Outdoor Access For All Act of 2018, California Senate Bill 5 (Proposition 68), *California Public Resources Code* §§ 5096.611, 75089.5, and 80000 *et seq.*, and *California Water Code* § 79772.5 (2017),

[https://leginfo.ca.gov/faces/billNavClient.xhtml?bill\\_id=201720180SB5](https://leginfo.ca.gov/faces/billNavClient.xhtml?bill_id=201720180SB5)

<sup>40</sup> Nelson et al., 2015

<sup>41</sup> CalEPA, 2021

<sup>42</sup> United States Census Bureau (USCB), "QuickFacts: California," U.S. Census Bureau Population Estimates Program (PEP) website, July 1, 2019, <https://www.census.gov/quickfacts/fact/table/CA/>.

workforce and 69% of the Water Boards' management is white.<sup>43</sup> Similarly, the 2019 ACS data show that 63% of California's population comprises Black, Indigenous, and people of color,<sup>44</sup> compared to only 43% of the Water Boards' workforce and 31% of the Water Boards' management. In 2019, the Water Boards released the document, "Immediate Hiring Practices Action Plan for Advancing Workforce Diversity at the Water Boards,"<sup>45</sup> which aligns with CalEPA's "Practices to Advance Racial Equity in Workforce Planning."<sup>46</sup> Both documents were developed to articulate the benefits of a diverse workforce and to identify practices to advance racial equity. The Water Boards' plan directs hiring managers and supervisors to take specific short-term actions to improve workforce diversity while a more holistic plan is being developed.

13. In April and May 2020, CalEPA collaborated with GARE to survey staff of all CalEPA boards, departments, and offices, including the Water Boards, to establish baseline progress toward efforts to advance racial equity. Responses reveal that the Water Boards are beginning to normalize workplace conversations about racial equity by establishing a shared language, set of facts, and approaches. In addition, the summary report of the Water Boards' staff responses indicates that more work is needed to further normalize racial equity, and it includes a specific recommendation for the Water Boards to center racial equity work on the perspectives and experiences of Black staff. Overall, the survey responses strongly support the need for additional training and tools for advancing racial equity and for stronger communication with staff.<sup>47</sup>
14. Although the Water Boards' racial equity and environmental justice work began prior to 2020,<sup>48</sup> the national and worldwide backlash against racism toward Black people and related Black Lives Matter protests of 2020 accelerated and informed the State Water Board's decision to address racial inequities within the Water Boards and through the Water Boards' work.
15. During its August 18, 2020 meeting, the State Water Board directed staff to advance racial equity. Executive Director Eileen Sobeck established the Racial Equity Steering Committee and Working Group. The Racial Equity Steering Committee's charge is to ensure leadership remains committed to furthering racial equity and to direct the Working Group's progress on implementing the following priorities: (1) establish a foundation of internal and external engagement that values listening and collaboration to drive action; (2) draft a resolution on racial equity to be considered for adoption by the State Water Board and also leveraged by the Regional Water Boards to adopt their own resolutions; and (3) develop racial equity

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<sup>43</sup> California State Water Resources Control Board (SWRCB), "State of CA Workforce Data in Machine Readable Structure," California Open Data Portal website, Updated: April 22, 2021, <https://data.ca.gov/dataset/calhr-civil-rights-data-for-gare-capital-cohort-2019>.

<sup>44</sup> United States Census Bureau (USCB), "QuickFacts: California," U.S. Census Bureau Population Estimates Program (PEP) website, July 1, 2019, <https://www.census.gov/quickfacts/fact/table/CA/>.

<sup>45</sup> SWRCB, 2019b

<sup>46</sup> CalEPA, 2019

<sup>47</sup> CalEPA and GARE, 2020

<sup>48</sup> SWRCB, 2020c

strategies and action plans to drive the Water Boards' efforts to institutionalize racial equity.<sup>49</sup>

16. In November and December 2020, the Racial Equity Steering Committee and Working Group hosted four public listening sessions to solicit input on the challenges that Black, Indigenous, and people of color are facing and how the Water Boards can better facilitate equitable participation from these communities in their decision-making and policy development processes.<sup>50</sup> Feedback from participants included several common themes, such as: a general distrust of government; feeling excluded from decision-making processes that ultimately affect them; not feeling heard when presenting issues to the Water Boards or that participation results in a change; a desire for more evidence that state government is committed to providing safe drinking water to disadvantaged communities; and concern that the Water Boards' decision-makers and staff do not reflect the diversity of the communities they serve.
17. In March 2021, the Racial Equity Steering Committee and Working Group hosted employee listening sessions to learn how the Water Boards can foster a workplace where all staff feel they belong and can contribute, and where the impacts of institutional racism are being recognized and addressed. To encourage honest, open discussion, each session was facilitated by professional racial equity consultants. Several common themes emerged during the sessions, such as: a general lack of opportunities to increase diversity and promote inclusion within the workforce; a need for mandatory training for all Water Boards staff in the areas of racial equity, racism, implicit bias, and cultural competence; the importance of allocating resources to support racial equity efforts; and the need to bring a racial equity lens to the Water Boards' decision-making processes, including more meaningful opportunities for community involvement.<sup>51</sup>
18. To better represent and serve California's communities, the Water Boards must address the connection between protecting and managing water resources and systemic and institutional racism while fostering greater workforce diversity, equity, and inclusion within the agency.<sup>52</sup>

THEREFORE, BE IT RESOLVED THAT:

The State Water Resources Control Board:

1. Condemns acts of racism, xenophobia, bigotry, white supremacy, and institutional and systemic racism; adopts racial equity, diversity, and inclusion as core values; and acknowledges the role of government agencies—including the Water Boards—in redressing racial inequities and dismantling institutional and systemic racism.
2. Commits to making racial equity, diversity, inclusion, and environmental justice central to our work as we implement our mission so that the access the State Water

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<sup>49</sup> SWRCB, 2021b

<sup>50</sup> SWRCB, 2021c

<sup>51</sup> Ferdman Consulting, 2021

<sup>52</sup> Montag, 2019

Board creates, and outcomes we influence, are not determined by a person's race and the benefits are shared equitably by all people.

3. Commits to centering our work and decision-making on Black, Indigenous, and people of color who are disproportionately represented in the most vulnerable communities and in unsheltered populations, while ensuring the full benefits of the Water Boards' programs for all people.
4. Reaffirms our commitment to upholding California's human right to water law, upholding the State Water Board's human right to water resolution, and demonstrating that every human being in California—including people from Black, Indigenous, and people of color communities—deserves safe, clean, affordable, and accessible water adequate for human consumption, cooking, and sanitation purposes.
5. Reaffirms our commitment to the protection of public health and beneficial uses of waterbodies in all communities, and particularly Black, Indigenous, and people of color communities disproportionately burdened by environmental pollution through: cleanup of contaminated soil, soil vapor and groundwater; control of wastes discharged to land and surface water; and restoration of impaired surface waters; and promotion of multi-benefit water quality projects to increase access to parks, open spaces, greenways, and other green infrastructure.
6. Commits to expanding implementation of the State Water Board's Climate Change Resolution to address the disproportionate effects of extreme hydrologic conditions and sea-level rise on Black, Indigenous, and people of color communities, prioritizing the right to safe, clean, affordable, and accessible drinking water; sustainably managing and protecting local groundwater resources; and facilitating access to surface waters that support subsistence fishing.
7. Reaffirms our commitment to improving communication, working relationships, and co-management practices with all California Native American Tribes, including seeking input and consultation on the Water Boards' rules, regulations, policies, and programs to advance decisions and policies that better protect California's water resources. The State Water Board recognizes our parallel relationship to the people we serve and values tribes' traditional ecological knowledge and historic experience with managing California's water resources since time immemorial.
8. Directs staff to create a proposal by January 2022 to establish an Office of Equity, Diversity, and Inclusion to achieve a workplace, workforce, and work outcomes that reflect racial equity.
9. Directs staff to normalize conversations about racial equity and foster a workforce that competently integrates racial equity into the State Water Board's work by (1) developing and implementing training curricula for racial equity, diversity, inclusion, and environmental justice; (2) incorporating racial equity concepts into existing mandatory Water Boards training courses; (3) educating staff about Equal Employment Opportunity (EEO) laws and the Water Boards' EEO Office's process for preventing and responding to complaints of discrimination, harassment, bullying, or retaliation; (4) developing policies that will lead to a racially equitable and diverse

workforce by ensuring the Water Boards' Immediate Hiring Practices Action Plan addresses recruitment, hiring, retention, promotion, succession planning, mentorship, STEM outreach to schools, and leadership development; and (5) partnering with other organizations to expand opportunities for community capacity building.

10. Directs staff to develop strategies for effectively reaching and meaningfully engaging with Black, Indigenous, and people of color communities; involving and partnering with tribes, stakeholders, and other interested parties in our decision-making processes; providing accessible, open and transparent opportunities for people to participate in our public meetings, hearings, and workshops; meeting people in their communities and spaces to seek out their perspectives; supporting communities with building capacity to advance racial equity and environmental justice; improving our communications by providing more plain-language materials; and addressing barriers to public participation, including language, digital, and time-of-day access.
11. Directs the Executive Office to develop and implement a Racial Equity Action Plan that articulates a vision for racial equity and outlines specific actions the State Water Board will take to address Water Boards systems that perpetuate racial inequities while establishing new, resilient systems.
  - a. The plan shall incorporate all State Water Board divisions, offices, and programs, and it shall address all aspects of our work, including, those detailed above in this resolution, as well as water quality control plans, policies, permits, enforcement, compliance assurance, contracting, funding, procurement, site remediation, monitoring, and water rights administration.
  - b. The plan shall include goals, objectives, actions, timelines, and metrics.
  - c. Staff shall advance a framework of transparency, accountability, and continuous improvement for our racial equity work by establishing metrics and using quantitative and qualitative data collection methods to measure and evaluate the Water Boards' progress toward: implementing those metrics; equitizing our systems, practices, and policies; and diversifying the Water Boards' workforce.
  - d. Staff shall seek out and consider input from stakeholders to inform development of the action plan.
  - e. Staff shall include a framework for asking impacted Black, Indigenous, and people of color communities how State Water Board decisions and staff recommendations to the board may affect them and for regularly incorporating this feedback into our decision-making processes.
  - f. Staff shall include a recommendation for incorporating language that addresses racist, xenophobic, or bigoted workplace behaviors into existing Water Boards policies.
  - g. Staff shall provide updates on developing and implementing the plan at least quarterly.

- h. Staff shall present the action plan to the Board no later than one year after adopting this resolution and report on implementation progress annually thereafter.
12. Encourages the nine Regional Water Boards to adopt this resolution, or a similar resolution that condemns racism, xenophobia, bigotry, and racial injustice; affirms a commitment to racial equity, diversity, inclusion, access, and anti-racism; and otherwise prioritizes this important work.

**CERTIFICATION**

The undersigned Clerk to the State Water Board does hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the State Water Resources Control Board held on November 16, 2021.

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Jeanine Townsend  
Clerk to the Board

## ANNOTATED LIST OF REFERENCES

Abhold, Kristyn, Jeffrey Albrecht, William Allen, Michelle Frederick, Emily Houlihan, Mawj Khammas, David Leslie, Hee Kyung Lim, Bansari Tailor Gregory Pierce, Peter Roquemore, Kelly Trumbull, Tarrah Henrie, Craig Gorman, Chad Seidel, Vivian Jensen, Carleigh Samson, Nathan MacArthur, Brittany Gregory, Adam McKeagney, Maureen Kerner, Erik Porse, Khalil Lezzaik, Dakota Keene, Caitlyn Leo, Morgan Shimabuku, Lillian Holmes, and Shadi Eskaf, *2021 Drinking Water Needs Assessment: Informing the 2021-22 Safe & Affordable Drinking Water Fund Expenditure Plan*. California State Water Resources Control Board: April 2021, [https://www.waterboards.ca.gov/drinking\\_water/certlic/drinkingwater/documents/needs/2021\\_needs\\_assessment.pdf](https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/documents/needs/2021_needs_assessment.pdf).

As a part of the Safe and Affordable Funding for Equity and Resilience (SAFER) Program, which was created to further the goal of achieving the Human Right to Water in California, the Water Boards produces an annual Drinking Water Needs Assessment. The Needs Assessments are used to inform prioritization of state funding and technical assistance. The *2021 Drinking Water Needs Assessment* illustrated the breadth and depth of challenges to safe and affordable water supply in California, identifying water systems that are at-risk of failing to provide safe and affordable water. The results indicated that fragmentation and proliferation of small, underperforming water systems has created challenges in providing safe drinking water and that consolidation and regionalization present a viable solution pathway to increase drinking water safety and affordability.

Alkon, Alison Hope, and Kari Marie Norgaard, "Breaking the Food Chains: An Investigation of Food Justice Activism," *Sociological Inquiry*, Vol. 79, Issue 3, pp. 289-305, 2009, <https://doi.org/10.1111/j.1475-682X.2009.00291.x>.

Alkon and Norgaard used comparative ethnographic case studies of the Karuk Tribe of California and the West Oakland Food Collaborative to develop the concept of food justice, which is the idea that access to healthy, affordable and culturally appropriate food is impacted by institutional racism, racialized geography and racial inequities. Their article describes how the Karuk Tribe of Northern California have advocated for the demolition of the Klamath River dams that prevent them from accessing traditional food sources through subsistence fishing on the Klamath River. This case study illustrates how modern, large-scale modification and management of watersheds in California prevents Native Americans from accessing resources associated with their traditional water sources, which has cascading impacts on the health and wellbeing of members of those tribes.

Almaguer, Tomás, *Racial Fault Lines: The Historical Origins of White Supremacy in California*, University of California Press, London: 1994, <https://cpb-us-e1.wpmucdn.com/sites.ucsc.edu/dist/d/435/files/2020/01/almaguer-racial-fault-lines-nat-text-intro-ch1-ch2.pdf>.

*Racial Fault Lines* includes a description of the ethnic history of California following the conquest by white Americans and the institutionalization of white supremacy in the state. Almaguer's book details the complex relationships between ethnicity, race and class during the second half of the nineteenth century. In particular, Almaguer's book documents how white speculators and developers seized land to create the basis for industrial development of the state. These land seizures were used to stake water rights claims that have helped shape the inequities across racial and ethnic lines in access to water.

Altare, David, Greg Gearheart, Beti Girma, Jaimie Huynh, Maraid Jimenez, Charles Lee, Jennifer McGovern, Kevin Olp, Deldi Reyes, Amy Schwanhausser, Walker Wieland, and Angie Ye, *Pollution and Prejudice: Redlining and Environmental Injustice in California*. CalEPA Story Map, April 19, 2021, <https://storymaps.arcgis.com/stories/f167b251809c43778a2f9f040f43d2f5>.

The CalEPA story map *Pollution and Prejudice: Redlining and Environmental Injustice in California* was produced as a part of the CalEPA racial equity initiative as a tool to aid in the understanding of the role that government has played in perpetuating institutional and structural racism through the practice of redlining. This project focused specifically on redlining, in which federal and local governments and financing entities systematically denied public and private financial services to people of color. The story map presents evidence provided by CalEnviroScreen to demonstrate how past redlining practices in California have led to disparities in exposure to pollution in which environmental burdens disproportionately affect communities of color in previously redlined communities across the state today.

Anderson, Robert T., "Water Rights, Water Quality, and Regulatory Jurisdiction in Indian Country," *Stanford Environmental Law Journal*, Vol. 34, No. 2, 2015, [https://law.stanford.edu/wp-content/uploads/2017/01/anderson\\_article.pdf](https://law.stanford.edu/wp-content/uploads/2017/01/anderson_article.pdf).

This article reviews Native American water rights both on and off reservations and how tribal nations have used sovereignty to protect those water rights. Relevant historical context is provided to understand the development of water rights for Native American tribes.

Angermeier, Paul L., Leigh Anne Krometis, Marc J. Stern, and Tyler L. Hemby, "Exploring relationships among stream health, human well-being, and demographics in Virginia, USA," *Ecological Indicators*, Vol. 121, 107194, February 2021, <https://doi.org/10.1016/j.ecolind.2020.107194>.

This study, which was conducted in Virginia, demonstrates how the health of streams and the communities that surround them are strongly correlated with the racial makeup of those communities. The study was reviewed by an article

published in [Phys.org](https://phys.org/news/2021-03-stream-quality-life.html) (<https://phys.org/news/2021-03-stream-quality-life.html>). Stream conditions were found to be better in Virginia counties with higher percentages of white residents. Additionally, more polluted streams were correlated with higher degrees of overall mortality among community residents.

Associated Press, “L.A. County may return beachfront land seized from Black family nearly a century ago,” *KTLA5*, March 6, 2021, <https://ktla.com/news/local-news/l-a-county-may-return-beachfront-land-seized-from-black-family-nearly-a-century-ago/>.

This article from the Associated Press detailed a case of a Black family whose land was seized from them in Manhattan Beach using eminent domain in 1924. Willa and Charles Bruce, the city’s first Black landowners, were forced off their land, which was later developed into a city park that housed a lifeguard training center for Los Angeles County. Following the passage of SB 796 in September 2021, the Los Angeles County Board of Supervisors began the process of returning the seized land to the descendants of Willa and Charles Bruce (see: Danny Hajek, A. Martínez, and Kelley Dickens, “A Black family got their beach back — and inspired others to fight against land theft,” *NPR*, October 10, 2021, <https://www.npr.org/2021/10/10/1043821492/black-americans-land-history>).

Balazs, Carolina, Jessica J. Goddard, Komal Bangia, Walker Wieland, and John B. Faust, *Achieving the Human Right to Water in California: An Assessment of the State’s Community Water Systems*. OEHHA, January 2021, <https://oehha.ca.gov/media/downloads/water/report/hrtwachievinghrtw2021f.pdf>.

The report, *Achieving the Human Right to Water in California: An Assessment of the State’s Community Water Systems*, is a component of OEHHA’s Human Right to Water Framework and Data Tool (CalHRTW 1.0). The report describes the conceptual framework and approach for quantifying the state’s progress toward achieving the Human Right to Water in California. The report provides an overview for the assessment and data tool (OEHHA) and lays out methods that are used to score individual indicators and to combine those indicator scores to create composite component scores that reflect a system’s overall status. The report summarizes key findings from an assessment of the state’s community water systems using the data tool. Among those findings were that nearly 75% of water systems had scores indicating a low degree of water quality issues (i.e., Water Quality composite scores less than 1), whereas 60% and 50% of community water systems were rated as having a moderate to high degree of water accessibility and water affordability issues (i.e., composite scores for those components greater than 2) respectively. Additionally, because it is critical to assess human right to water outcomes in terms of social equity, the report considers the relationship between these outcomes and key measures of social and institutional vulnerability, including: (1) disadvantaged community status (i.e., disadvantaged, severely disadvantaged and non-disadvantaged communities), (2) size, and (3) managerial constraints of water systems.

Balazs, Carolina and Isha Ray, "The Drinking Water Disparities Framework: On the Origins and Persistence of Inequities in Exposure," *American Journal of Public Health*, Vol. 104, No. 4, pp. 603-611, April 2014, <https://dx.doi.org/10.2105%2FAJPH.2013.301664>.

Balazs and Ray expertly investigated how multilevel factors and actors have worked together to develop many of the exposure and affordability disparities that disproportionately impact communities of color in California. Their seminal work details how natural and built environments shape the baseline contaminant levels in water sources within California's San Joaquin Valley. These factors then intersect with sociopolitical factors to determine levels of exposure. This paper details how explicit and implicit government policies have been used to deny disadvantaged communities and communities of color access to safe and secure water resources in the San Joaquin Valley.

Baldassare, M., D. Bonner, A. Dykman, and R. Lawler, "Race and Ethnicity Matter in Californians' Views on Environmental Disparities," *Public Policy Institute of California*, July 2020, <https://www.ppic.org/wp-content/uploads/ppic-statewide-survey-californians-and-the-environment-july-2020.pdf>.

In California, communities of color face more significant environmental hazards such as water and air pollution, storms, and heatwaves. For example, power plants and oil refineries are disproportionately located in African American neighborhoods, exposing those communities to poor air quality. Based on public surveys, the Public Policy Institute of California (PPIC) determined that about six in ten Californians think air pollution is a very serious or somewhat serious threat to their health and that of their immediate family. African Americans and Latinos are about twice as likely as Asian Americans and whites to view air pollution as a serious threat. Just under half of Californians say pollution in drinking water is a very serious or somewhat serious threat to health, with people of color more than twice as likely as whites to consider it a very serious threat. Latinos, African Americans and Asian Americans are also more likely than whites to recognize that these threats are more significant in communities of color. People of color are more likely to recognize the importance of global warming and are more willing to make major lifestyle changes to address it.

Basu, Rupa, Wen-Ying Feng, and Bart D. Ostro, "Characterizing Temperature and Mortality in Nine California Counties," *Epidemiology*, Vol. 19, Issue 1, pp. 138-145, January 2008, <https://doi.org/EDE.0b013e31815c1da7>.

In this study of nine counties in California, Basu et al. demonstrated that an increase in 10°F in ambient temperatures was associated with a 2.6% increase in cardiovascular mortality among the general population. Their work indicates how one of the most salient impacts of climate change (e.g., increasing temperatures) can have a direct measurable impact on health outcomes.

Basu, Rupa and Bart D. Ostro, "A Multicounty Analysis Identifying the Populations Vulnerable to Mortality Associated with High Ambient Temperature in California," *American Journal of Epidemiology*, Vol. 168, Issue 6, pp. 632-637, September 2008, <https://doi.org/10.1093/aje/kwn170>.

In a follow-up to their previous study (Basu), Basu and Ostro demonstrated how the negative health outcomes (e.g., increased mortality rates) that they observed in relation to increased temperatures were strongly correlated with race. When broken down by race, the mortality rate was significantly higher (i.e., nearly double) among African Americans, with a 4.9% increase in mortality. These combined results suggest that past actions and policies that have created *de facto* racial segregation in California have rendered communities of color more susceptible to environmental stressors. These results indicate that communities of color, and particularly Black communities, in California are at a higher risk of negative health impacts caused by the effects climate change.

Berry, Kate A., "Race for Water? Native Americans, Eurocentrism, and Western Water Policy," In: *Environmental Injustices, Political Struggles*, Duke University Press, Durham, NC: 1998, <https://doi.org/10.2307/j.ctv1168c8g.8>.

In this 1998 work, Berry describes how racial tensions between Native Americans and white settlers in the Western United States have historically been intertwined with conflicts over access to water. Berry describes how Native American tribes have frequently lost their rights to water and have faced difficulties in asserting the rights that they ostensibly retained under treaties with settler governments. Berry finds that Native Americans have repeatedly been forced to accommodate themselves to water distribution systems and policies designed for the benefit of white European settlers at their expense, with significant negative impacts on Native American culture and the health and well-being of tribal members.

Brulle, Robert J., and David N. Pellow, "Environmental Justice: Human Health and Environmental Inequalities", *Annual Review of Public Health*, Vol. 27, pp. 103-124, August 9, 2005, <https://doi.org/10.1146/annurev.publhealth.27.021405.102124>.

In their 2005 paper, Brulle and Pellow reviewed the factors that combine to cause unequal exposures to environmental pollution. They identified that the market economy and institutionalized racism are the two key social dynamics that create environmental inequalities. Namely, racial segregation contributes to these inequities because governments and corporations seek the "path of least resistance" when siting polluting facilities, which frequently leads to their construction near neighborhoods or communities that are isolated socially and lack political power to oppose the construction of those facilities. Although at the time the paper was published more research was needed to understand these dynamics better, Brulle and Pellow recommended a variety of changes to government policies to address these inequities in the distribution of environmental burdens.

California Department of Water Resources (DWR), “Proposition 1,” *California DWR* website, Updated: December 24, 2019, <https://water.ca.gov/work-with-us/grants-and-loans/irwm-grant-programs/proposition-1>.

DWR’s webpage describes the funding program initiated by Proposition 1 in 2014. On November 4, 2014, California voters approved Proposition 1, the Water Quality, Supply, and Infrastructure Improvement Act of 2014. Proposition 1 authorized \$510 million in Integrated Regional Water Management (IRWM) funding. The Proposition 1 IRWM Grant Program, administered by DWR, provides funding for projects that help meet the long-term water needs of the state, including: (1) assisting water infrastructure systems adapt to climate change; (2) providing incentives throughout each watershed to collaborate in managing the region’s water resources and setting regional priorities for water infrastructure; and (3) improving regional water self-reliance, while reducing reliance on Sacramento-San Joaquin Delta.

California Environmental Protection Agency (CalEPA), “CalEPA’s Commitment to Racial Equity,” *CalEPA* website, 2021, <https://calepa.ca.gov/about/calepa-racial-equity-home/>.

The CalEPA Racial Equity webpage provides CalEPA’s Racial Equity Vision Statement, as well as educational materials and general information about the Racial Equity initiative at CalEPA. Links are provided to the CalEPA Racial Equity Plan of Action, Data and Resources, and racial equity initiative contacts from each CalEPA Board, Department and Office (BDO).

California Environmental Protection Agency (CalEPA), “Practices to Advance Racial Equity in Workforce Planning,” 2019.

In 2019, CalEPA prepared an internal document summarizing practices to be used in workforce planning to advance racial equity. This document detailed practices related to recruitment, hiring packages, the hiring process, and interviews to be implemented by CalEPA’s Boards, Departments and Offices (BDOs), including the State Water Resources Control Board.

California Environmental Protection Agency (CalEPA) and the Local and Regional Government Alliance on Race & Equity (GARE), “California Water Boards Racial Equity Employee Survey: Summary of Findings,” 2020.

In 2020, CalEPA collaborated with GARE to survey CalEPA employees on the topic of racial equity to assess racial equity knowledge, skills, and experiences among employees and to inform future action steps toward advancing racial equity within CalEPA. The survey was conducted via an online questionnaire administered across each of the Boards, Divisions, and Offices (BDOs), with results disaggregated by BDO. The Summary of Findings provides a high-level summary of results from employees of the Water Boards. Overall, respondents indicated a willingness and capacity to engage in racial equity work with most respondents indicating that they believed it was valuable to examine and discuss the impacts of race, that they felt comfortable talking about race, and that they possessed a basic understanding of concepts related to racial equity. These

results are positive indicators of the potential for meaningful future engagement and action across Water Boards. Results revealed moderate agreement of respondents with actions taken by CalEPA and the Water Boards on racial equity, but also demonstrated a lack of knowledge of activities being undertaken. Greater involvement of employees in racial equity work may be effective at increasing internal awareness. Differences in responses across race and ethnicity, supervisory status, and division or work unit were also observed. The most pronounced differences were across racial and ethnic subgroups. Across nearly all domains explored, results revealed Black or African American respondents evaluated their division markedly different than other racial and ethnic subgroups included in the analysis, revealing the importance of centering the perspectives of Black or African American employees and community members in racial equity strategy formation and decision-making. Finally, the results suggest that active involvement and more robust communication across all levels of the organization will lead to greater outcomes for all. The report recommended repeating the survey in two years (i.e., in 2022) to evaluate Water Boards' progress toward advancing racial equity.

California Natural Resources Agency (CNRA), "Proposition 68 Overview," *CNRA Bond Accountability* website, 2018, <http://bondaccountability.resources.ca.gov/p68.aspx>.

On June 5, 2018, California voters passed a general obligation bond, Proposition 68, relating to a drought, water, parks, climate, coastal protection, and outdoor access program. Proposition 68 was placed on ballot by Senate Bill 5 of 2018. CNRA's webpage maintains information on the allocation of funds from the general obligation bond.

California Office of Environmental Health Hazard Assessment (OEHHA), "Preliminary Analysis of Race/Ethnicity and Draft CalEnviroScreen 4.0 Scores," *California OEHHA* website, February 2021 (2021a), <https://oehha.ca.gov/media/downloads/calenviroscreen/document/calenviroscreen40preliminaryraceanalysisd12021.pdf>.

OEHHA released a draft version of the fourth iteration of CalEnviroScreen (i.e., CalEnviroScreen 4.0) for public comment in February 2021 with a final report (<https://oehha.ca.gov/media/downloads/calenviroscreen/report/calenviroscreen40reportf2021.pdf>) released in October 2021. CalEnviroScreen scores represent a combined measure of pollution and the potential vulnerability of a population to the effects of pollution, but do not include indicators of race/ethnicity or age. Because research has indicated that the burden of pollution is impacted by race or ethnicity, a preliminary analysis of the relationship between the draft CalEnviroScreen 4.0 scores and race/ethnicity was performed. This preliminary analysis shows clear disparities with respect to the racial makeup of the communities with the highest pollution burdens and vulnerabilities. People of color, especially Latino and Black people, disproportionately reside in highly impacted communities in California. The results using the draft CalEnviroScreen 4.0 scores are consistent with earlier versions of the tool.

California Office of Environmental Health Hazard Assessment (OEHHA), “The Human Right to Water in California,” *California OEHHA* website, January 28, 2021 (2021b), <https://oehha.ca.gov/water/report/human-right-water-california>.

Following the recognition of the human right to water by the state of California in 2012, CalEPA enlisted OEHHA to develop a framework and tool to assess the state’s progress toward achieving this right. With funding from the Water Boards provided in 2016, OEHHA developed the first iteration of the Human Right to Water Framework and Data Tool (CalHRTW 1.0) to assess drinking water quality, accessibility, and affordability. The final version of CalHRTW 1.0 was released in 2021 and comprised of an interactive web tool (OEHHA) and final report (Balazs) describing the tool its main findings. OEHHA’s website includes links to background information, the report, the data tool, and other materials related to CalHRTW 1.0.

California Office of Environmental Health Hazard Assessment (OEHHA), “Human Right to Water Data Tool (CalHRTW 1.0),” *California OEHHA* website, January 28, 2021 (2021c), <https://oehha.maps.arcgis.com/apps/MapSeries/index.html?appid=a09e31351744457d9b13072af8b68fa5>.

This interactive web tool is one of the two primary components of the first iteration of OEHHA’s Human Right to Water Data Tool (CalHRTW 1.0; OEHHA). CalHRTW 1.0 measures and scores nine indicators across three core components for each of the state’s 2,839 active community water systems (as of January 2019). Indicator scores are combined to create three individual composite component scores related to water quality, accessibility, and affordability. Scores for each component range from 0 to 4, with higher scores indicating worse outcomes. The data used is for 2011 to 2019 and access to the tool is publicly available.

California State Water Resources Control Board (SWRCB), Resolution No. 2016-0010: *Adopting the Human Right to Water as a Core Value and Directing Its Implementation in Water Board Programs and Activities*, February 16, 2016, [https://www.waterboards.ca.gov/board\\_decisions/adopted\\_orders/resolutions/2016/rs2016\\_0010.pdf](https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2016/rs2016_0010.pdf).

In February 2016, to advance the implementation of *Water Code* section 106.3, the State Water Board adopted Resolution No. 2016-0010, “The Human Right to Water as a Core Value and Directing Its Implementation in Water Board Programs and Activities.” Resolution No. 2016-0010 includes direction to the Water Boards’ staff to work with stakeholders to improve administration of Water Boards programs and projects to realize the human right to water. From 2016 to 2019, the RWQCB-R1, RWQCB-R3, RWQCB-R5, and RWQCB-R8 Regional Water Boards adopted similar resolutions, further elevating and emphasizing the importance of the human right to water in the Water Boards’ work and the need to improve administration of the Water Boards’ programs and projects to realize the human right to water.

California State Water Resources Control Board (SWRCB), Resolution No. 2017-0027: *Part 2 of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California—Tribal and Subsistence Fishing Beneficial Uses and Mercury Provisions*, May 2, 2017 (2017a), [https://www.waterboards.ca.gov/board\\_decisions/adopted\\_orders/resolutions/2017/rs2017\\_0027.pdf](https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2017/rs2017_0027.pdf).

In 2017, the State Water Board adopted Resolution 2017-0027, which approved *Part 2 of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California—Tribal and Subsistence Fishing Beneficial Uses and Mercury Provisions* (“Part 2 of the ISWEBE Plan”). Part 2 of the ISWEBE Plan outlines a consistent, statewide regulatory approach by setting water quality objectives for mercury to protect the beneficial uses associated with fish consumption by people and wildlife. Additionally, it establishes three new beneficial use definitions for use by the Water Boards to apply when designating Tribal Traditional Culture (CUL), Tribal Subsistence Fishing (T-SUB), and Subsistence Fishing (SUB) beneficial uses to inland surface waters, enclosed bays, or estuaries in the state.

The RWQCB-R1, RWQCB-R6, and RWQCB-R9 Regional Water Boards have adopted similar resolutions to include the State Water Board's tribal and subsistence beneficial use definitions into their respective basin plans. Several other Regional Water Boards are in the process of engaging with tribes, incorporating tribal beneficial and subsistence use definitions, and designating water bodies.

California State Water Resources Control Board (SWRCB), Resolution No. 2017-0012: *Comprehensive Response to Climate Change*, March 7, 2017 (2017b), [https://www.waterboards.ca.gov/board\\_decisions/adopted\\_orders/resolutions/2017/rs2017\\_0012.pdf](https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2017/rs2017_0012.pdf).

In March 2017, the State Water Board adopted Resolution No. 2017-0012, “Comprehensive Response to Climate Change,” directing a proactive approach to climate change in all State Water Board actions, including drinking water regulation, water quality protection, diversification of regional water supplies, and financial assistance. From 2017 to 2019, the RWQCB-R9, RWQCB-R4, and RWQCB-R6 Regional Water Boards adopted similar resolutions to direct staff to address the impacts of climate change. In addition to specific climate change resolutions, the RWQCB-R1, RWQCB-R2, RWQCB-R4, RWQCB-R5, and RWQCB-R6 Regional Water Boards are developing and implementing climate change action plans.

California State Water Resources Control Board (SWRCB), *Tribal Consultation Policy*, June 2019, [https://www.waterboards.ca.gov/about\\_us/public\\_participation/tribal\\_affairs/docs/california\\_water\\_board\\_tribal\\_consultation\\_policy.pdf](https://www.waterboards.ca.gov/about_us/public_participation/tribal_affairs/docs/california_water_board_tribal_consultation_policy.pdf).

In 2019, the Water Boards finalized the Tribal Consultation Policy, which: (1) reaffirmed that collaboration and input from all California Native American Tribes

helps the Water Boards advance decisions and policies that better protect California's water resources; (2) provided guidance on developing effective communication with all California Native American Tribes to facilitate meaningful participation and input while developing or revising regulations, rules, policies, programs and plans that may impact Tribes, and (3) established guiding principles for government-to-government consultation with California Native American Tribes as required by statute (i.e., California Assembly Bill 52 - [https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill\\_id=201320140AB52](https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201320140AB52) – and Section 106 National Historic Preservation Act – <https://www.gsa.gov/real-estate/historic-preservation/historic-preservation-policy-tools/legislation-policy-and-reports/section-106-national-historic-preservation-act-of-1966>).

California State Water Resources Control Board (SWRCB), “About The Water Board,” *California Water Boards* website, November 25, 2020 (2020a), [https://www.waterboards.ca.gov/about\\_us/](https://www.waterboards.ca.gov/about_us/).

The “About The Water Board” webpage contains the full Mission Statement for the California Water Boards:

*To preserve, enhance, and restore the quality of California's water resources and drinking water for the protection of the environment, public health, and all beneficial uses, and to ensure proper water resource allocation and efficient use, for the benefit of present and future generations.*

Additionally, links to other webpages containing information about the Water Boards history, structure, membership, and regulatory mandate are available.

California State Water Resources Control Board (SWRCB), “Human Right to Water Portal,” *California Water Boards* website, April 13, 2021 (2021a), [https://www.waterboards.ca.gov/water\\_issues/programs/hr2w/](https://www.waterboards.ca.gov/water_issues/programs/hr2w/).

The Water Boards Human Right to Water Portal contains information on the legislative and regulatory history of the Human Right to Water in California. The portal serves as the primary location for information on performance measures and program updates, and allows the public to see which communities and non-associated schools do not have, or are at risk of not having, water that is safe, clean, affordable, and accessible.

California State Water Resources Control Board (SWRCB), “Safe and Affordable Funding for Equity and Resilience (SAFER) Program: Frequently Asked Questions,” *California Water Boards* website, April 22, 2020 (2020b), [https://www.waterboards.ca.gov/safer/docs/20200416\\_safer\\_faq.pdf](https://www.waterboards.ca.gov/safer/docs/20200416_safer_faq.pdf).

In 2020, the Water Boards produced a brief Fact Sheet on the Safe and Affordable Funding for Equity and Resilience (SAFER) Program that answers some frequently asked questions (FAQs) about the program. As described in the Fact Sheet, the SAFER Program is a set of tools, funding sources, and regulatory authorities designed to ensure Californians who currently lack safe and affordable drinking water receive it as quickly as possible. The primary

purpose of the SAFER Program is to “bring true environmental justice to California and address the continuing disproportionate environmental burdens in the state by assisting with providing safe drinking water.” SAFER funds help water systems provide drinking water to communities in both the near and long terms by accelerating implementation of drinking water solutions, moving water systems to more efficient modes of operation, providing short-term operation and maintenance support as a bridge until long-term sustainable solutions are in place, and providing long-term operation and maintenance support when necessary.

California State Water Resources Control Board (SWRCB), “Transfer of Drinking Water Programs: Transfer of Drinking Water Programs from the Department of Public Health to the State Water Board,” *California Water Boards* website, October 20, 2020, [https://www.waterboards.ca.gov/drinking\\_water/programs/DW\\_PreJuly2014.html](https://www.waterboards.ca.gov/drinking_water/programs/DW_PreJuly2014.html).

In July 2014, the California State Legislature transferred responsibility for administering the Drinking Water Program from the Department of Public Health to the State Water Board to ensure that “the strengths of the [Drinking Water Program] and the recent positive progress are preserved, while additional steps are taken to improve the program, making it more efficient, streamlined, and better able to provide effective service to communities that need access to its programs and funding.” The transfer raised the Water Board’s consciousness, knowledge, and response to environmental injustices and aligned the state’s drinking water and water quality programs in an integrated organizational structure to best position the state to both effectively protect water quality and the public health as it relates to water quality. The transfer was first proposed on July 1, 2014 and was described in a White Paper ([https://www.waterboards.ca.gov/drinkingwater/docs/dwreorg\\_wp072413.pdf](https://www.waterboards.ca.gov/drinkingwater/docs/dwreorg_wp072413.pdf)) circulated in the summer of 2013.

California State Water Resources Control Board (SWRCB), “Immediate Action Plan for Advancing Workforce Diversity,” 2019b.

In response to the efforts within CalEPA to address racial equity and diversity in the hiring process, the State Water Resources Control Board developed an immediate action plan to establish: “a set of no-regrets hiring practices that can be put in place immediately to promote workforce diversity and realize the benefits of a diversity-aware workforce while a more holistic plan is developed.” These practices included actions such as: (1) training on racial equity and bias for hiring panel members of Water Boards, (2) the inclusion of a diversity statement in job advertisements, (3) inclusion of diversity-related interview questions, and (4) targeted recruitment efforts to increase diversity.

California State Water Resources Control Board (SWRCB), “Welcome to the Water Board’s Racial Equity Initiative,” *California Water Boards* website, July 6, 2021 (2021b), [https://www.waterboards.ca.gov/racial\\_equity/the\\_initiative.html](https://www.waterboards.ca.gov/racial_equity/the_initiative.html).

California State Water Resources Control Board (SWRCB), “Water Boards Racial Equity Initiative: Sharing What We Learned Public Listening Sessions Highlights and Summary,” *California Water Boards* website, 2021c, [https://www.waterboards.ca.gov/racial\\_equity/docs/racialequity\\_externalsessions\\_summary\\_final.pdf](https://www.waterboards.ca.gov/racial_equity/docs/racialequity_externalsessions_summary_final.pdf).

From November 30 through December 3, 2020, the Water Boards held a series of four public listening sessions to help inform the development of this resolution and an action plan to address racial inequity both within the Water Boards and through Water Boards policies and programs. Over the four-day period, 86 members of the public, including high school and college students, agricultural workers, and other community activists, participated in the listening sessions to discuss five topic areas: 1) water in your community, 2) public participation and decision making, 3) improving accessibility and data sharing, 4) funding, and 5) workforce and capacity building. Collectively, participants provided comments, perspectives, and recommendations reflecting the concerns of urban and rural water users and water users in disadvantaged and low-income communities, including majority-Black, indigenous, Latinx, and Asian communities throughout California. The public report summarizes key points and suggestions provided by participants in the listening sessions including that the Water Boards need to increase transparency and accessibility and provide more options for communities to engage. Participants also called for the Water Boards to lead by example by increasing racial equity within the Water Boards workforce and expanding recruiting efforts to increase participation of people of color within the water sector.

California State Water Resources Control Board (SWRCB), “Environmental Justice,” *California Water Boards* website, September 10, 2020 (2020c), [https://www.waterboards.ca.gov/water\\_issues/programs/outreach/education/justice.html](https://www.waterboards.ca.gov/water_issues/programs/outreach/education/justice.html).

The Water Boards Environmental Justice webpage describes environmental justice, provides the Water Boards’ commitment to environmental justice and provides a basic description of how the Water Boards strive to engage with the public on this topic.

Castillo, Edward D., “Short Overview of California Indian History,” *State of California Native American Heritage Commission*, 2021, <http://nahc.ca.gov/resources/california-indian-history/>.

Castillo outlines the genocide and brutal displacement of Native Americans in California in the early decades of California statehood. Following statehood, the relationship between the state and California Native Americans was “fraught with violence, exploitation, dispossession and the attempted destruction of tribal communities.” This led to the passing of the “Act for Government and Protection of Indians” which facilitated removing Native Americans from their lands, separating Native American families to destroy families, language, and culture, and creating a system of indentured servitude as punishment for minor crimes.

This dispossession and genocide of Native Americans created a large transfer in wealth of resources and land from Native Americans to white Californians.

Center for the Study of Hate & Extremism, "FACT SHEET: Anti-Asian Prejudice March 2020," 2020, <https://www.csusb.edu/sites/default/files/FACT%20SHEET-%20Anti-Asian%20Hate%202020%203.2.21.pdf>.

In 2020, the Center for the Study of Hate & Extremism produced a Fact Sheet detailing the significant increase in anti-Asian hate crimes observed throughout the COVID19 pandemic. Despite an overall decrease of 7% in hate crimes in the 10 largest cities in the U.S. during 2020, hate crimes in those cities directed toward Asians and Asian Americans increased by nearly 150%.

Central Coast Regional Water Quality Control Board (RWQCB-R3), Resolution No. R3-2017-0004: *Adopting the Human Right to Water as a Core Value and Directing Its Implementation in Central Coast Water Board Programs and Activities*, 2017, [https://www.waterboards.ca.gov/water\\_issues/programs/hr2w/docs/r3\\_hr2w\\_res.pdf](https://www.waterboards.ca.gov/water_issues/programs/hr2w/docs/r3_hr2w_res.pdf).

Central Valley Regional Water Quality Control Board (RWQCB-R5), Resolution No. R5-2016-0018: *Adopting the Human Right to Water as a Core Value in Central Valley Water Board Programs and Activities*, 2016, [https://www.waterboards.ca.gov/water\\_issues/programs/hr2w/docs/r5\\_hr2w\\_res.pdf](https://www.waterboards.ca.gov/water_issues/programs/hr2w/docs/r5_hr2w_res.pdf).

Central Valley Regional Water Quality Control Board (RWQCB-R5), *Central Valley Region Climate Change Work Plan: Current State of Knowledge & Considerations for Addressing Climate Change*, 2017, [https://www.waterboards.ca.gov/centralvalley/board\\_decisions/tentative\\_orders/1712/20\\_climatechange/3\\_climatechange\\_wkpln.pdf](https://www.waterboards.ca.gov/centralvalley/board_decisions/tentative_orders/1712/20_climatechange/3_climatechange_wkpln.pdf).

Del Real, Jose A., "How Racism Ripples Through Rural California's Pipes," *The New York Times*, November 30, 2019, <https://www.nytimes.com/2019/11/29/us/water-racism-california.html>.

In this 2019 article in the New York Times, Jose Del Real documented how access to clean water for communities of color in California's San Joaquin Valley continues to be impacted by the legacy of segregation. The article documents how 350,000 people in the San Joaquin Valley lack access to potable water and also documents the history of how racial segregation developed in that region.

de Souza, Russell Jude, Nicole M. Bilodeau, Kelly Gordon, A. Darlene Davis, Jennifer C. Stearns, Mary Cranmer-Byng, Katie Gasparelli, Lori Davis Hill, and Sonia Savitri Anand, "Entsisewata'kari:teke (You Will Be Healthy Again): Clinical Outcomes of Returning to a Traditional Haudenosaunee Diet," *International Journal of Indigenous Health*, Vol. 16, No. 2, 2021, <https://doi.org/10.32799/ijih.v16i2.33098>.

de Souza et al. used a case study of the Haudenosaunee people of eastern North America to demonstrate how the disruption of traditional foodways and diets has impacted Native Americans. Dispossession of Native Americans from their ancestral lands in North America has persisted since colonization, separating Native Americans from their traditional diet and lifestyle. Because of this, the Haudenosaunee people have elevated incidences of chronic diseases including diabetes and obesity. In this study, de Souza et al. investigated the impact of a 3-month dietary intervention with traditional foods found prior to colonization by white settlers. Significant improvements in health indicators, such as ectopic fat, body weight and waist circumference, were observed in study participants, demonstrating the significant positive impact that access to traditional foods and lifestyles have on the health and well-being of Native Americans.

Executive Department, State of California, *Executive Order N-15-19*, 2019, <https://www.gov.ca.gov/wp-content/uploads/2019/06/6.18.19-Executive-Order.pdf>.

From the [press release](https://www.gov.ca.gov/2019/06/18/governor-newsom-issues-apology-to-native-americans-for-states-historical-wrongdoings-establishes-truth-and-healing-council/) regarding Executive Order N-15-19 (<https://www.gov.ca.gov/2019/06/18/governor-newsom-issues-apology-to-native-americans-for-states-historical-wrongdoings-establishes-truth-and-healing-council/>):

*In 2019, Governor Gavin Newsom today issued an apology through executive order on behalf of California to California Native American Peoples for the many instances of violence, mistreatment and neglect inflicted upon California Native Americans throughout the state's history. The Governor also announced the creation of a Truth and Healing Council to provide an avenue for California Native Americans to clarify the record – and provide their historical perspective – on the troubled relationship between tribes and the state. This was the first time a state has taken dual action to correct the historical record and acknowledge wrongdoing through executive order mandate and a tribally led, consultation-informed council.*

Farzin, Hossein and Kelly Grogan, "California Water Quality: Is It Lower for Minorities and Immigrants?" *Giannini Foundation of Agricultural Economics, University of California*, 2009, [https://s.giannini.ucop.edu/uploads/giannini\\_public/c3/ad/c3ad8f76-7df3-4532-a72d-5dccb0d777d/v12n3\\_1.pdf](https://s.giannini.ucop.edu/uploads/giannini_public/c3/ad/c3ad8f76-7df3-4532-a72d-5dccb0d777d/v12n3_1.pdf).

In their 2009 study, Farzin and Grogan presented data demonstrating that water bodies located in California counties with a greater population share of people of

color tended to have worse water quality based on a set of water quality indicators.

Ferdman Consulting, “Racial Equity Internal Listening Sessions: California State Water Resources Control Board, Final Report,” March 31, 2021.

The Water Boards held a series of internal listening sessions in March 2021. The purpose of the listening sessions was to start the conversation with Water Boards staff about their experiences, perspectives, and hopes on what a truly equitable and inclusive workplace looks like, and what actions we can take to make it a reality. To create a space to empower employees to share freely, the Water Boards hired third-party racial equity experts. Ferdman Consulting facilitated a total of nine listening sessions with 379 participants in March of 2021. Following the listening sessions, Ferdman Consulting compiled a report detailing key insights. Although many employees of the Water Boards feel the Water Boards is making important progress in promoting an inclusive climate, employees of color frequently discussed feeling isolated and felt that the lack of diversity among staff made it more difficult to recruit and retain people of color. Employees mentioned wanting additional resources for multilingual services. Overall, participants were positive about having a forum to discuss these topics.

Ferguson, Edwin E., “The California Alien Land Law and the Fourteenth Amendment,” *California Law Review*, Vol. 35, No. 1, pp. 61-90, March 1947, <https://www.jstor.org/stable/3477375>.

Ferguson’s 1947 California Law Review article discusses the California Alien Land Law. The California Alien Land Law was a state law that was passed in 1913 to prevent immigrant farmers from Asia from owning agricultural land with the intent of discouraging immigration from Asia.

Frank, Thomas, “Flooding Disproportionately Harms Black Neighborhoods,” In: *Scientific American*, From: *E&E News*, June 2, 2020, <https://www.scientificamerican.com/article/flooding-disproportionately-harms-black-neighborhoods/>.

Frank’s report details how flooding in the United States disproportionately impacts African American neighborhoods. Frank describes how the most vulnerable populations live in low-lying areas without green space that can absorb water during floods. The most vulnerable populations tend to be African Americans and other people of color.

Gibler, John, “Water for People and Place: Moving Beyond Markets in California Water Policy,” *Public Citizen – Water for All*, November 2005, [https://www.citizen.org/wp-content/uploads/water-for-people\\_web.pdf](https://www.citizen.org/wp-content/uploads/water-for-people_web.pdf).

Gibler’s report details some of the history of water resource distribution in California. In particular, Gibler discusses the evolution of water that developed primarily from the economic interests of white miners, irrigators, and land speculators.

Goddard, Jessica, J., Isha Ray, and Carolina Balazs, "Water affordability and human right to water implications in California," *PLoS ONE*, Vol. 16, No. 1, e0245237, 2021, <https://doi.org/10.1371/journal.pone.0245237>.

In their 2021 work, Goddard et al. described how key dimensions to the water affordability measures that were developed to assess California's progress toward realizing the human right to water. Expanding on these affordability measures, Goddard et al. analyzed California's water systems to identify affordability of water across the state, indicating that a high degree of unaffordability exists for households in poverty.

Gordon-Reed, Annette, "America's Original Sin: Slavery and the Legacy of White Supremacy," *Foreign Affairs*, Vol. 97, No. 2, 2018, [https://cf.linnbenton.edu/artcom/social\\_science/clarkd/upload/America's%20Original%20Sin.pdf](https://cf.linnbenton.edu/artcom/social_science/clarkd/upload/America's%20Original%20Sin.pdf).

In her 2018 paper, Gordon-Reed briefly discusses how slavery and the white supremacy that developed from it in the U.S. have had lasting impacts on Black communities.

Gracey, Michael, and Malcolm King, "Indigenous health part 1: determinants and disease patterns," *The Lancet*, Vol. 374, Issue 9683, pp.65-75, July 2009, [https://doi.org/10.1016/S0140-6736\(09\)60914-4](https://doi.org/10.1016/S0140-6736(09)60914-4).

In the first part of their review, Gracey and King describe how poor health among indigenous people is derived in part from poverty, malnutrition, overcrowding, poor hygiene, environmental contamination, and widespread infections. The root causes of these determinants, as described in part 2 of their review (King), include racism, loss of access to resources and traditional lands, loss of traditional lifestyles and language, and disconnectedness from the land, among other factors. When combined, these causes and determinants have led to higher prevalence of a variety of diseases including obesity, cardiovascular disease, type 2 diabetes, and mental health issues and substance abuse disorders.

Great Lakes Indian Fish & Wildlife Commission, "Treaty Rights: Sustaining a Way of Life," *Recommendations to the Obama Administration and the 113th Congress from the Treaty Tribes of the Great Lakes and Pacific Northwest*, February 2013, <https://glifwc.org/publications/pdf/jointtreatyrightspub.pdf>.

This 2013 report from the Great Lakes Indian Fish & Wildlife Commission provided recommendations to the federal government on how best to uphold its treaty obligations to Native American tribes. The report describes how Native Americans in the Great Lakes and the Pacific Northwest, like their Californian counterparts, have depended on access to water and natural resources for cultural, spiritual and economic survival. This is why Native Americans preserved their rights to hunt, fish and gather in traditional places in perpetuity in treaties in which they ceded millions of acres of land to the United States. This report

demonstrates the importance of natural and water resources to Native Americans for traditional purposes.

Grove, Morgan, Laura Ogden, Steward Pickett, Chris Boone, Geoff Buckley, Dexter H. Locke, Charlie Lord, and Billy Hall, "The Legacy Effect: Understanding How Segregation and Environmental Injustice Unfold over Time in Baltimore," *Annals of the American Association of Geographers*, Vol. 108, No. 2, pp. 524-537, 2018, <https://doi.org/10.1080/24694452.2017.1365585>.

Grove et al. describe how legacies of segregation in Baltimore have created social and environmental inequities that persist today. They examined the interactions between past and current environmental injustices using a long-term social-ecological research project and found that redlining had created an inequitable distribution of environmental stressors, with polluting industries, heat islands, and increased vulnerability to flooding all impacting communities of color more significantly.

Hall, Alexandra, "Black Farmworkers in the Central Valley: Escaping Jim Crow for a Subtler Kind of Racism," *The California Report – KQED*, February 22, 2019, <https://www.kqed.org/news/11727455/black-farmworkers-in-the-central-valley-escaping-jim-crow-for-a-subtler-kind-of-racism>.

In this KQED report, Hall describes how segregation of white and black communities in California's San Joaquin Valley has led to underinvestment in the water infrastructure for those black communities. Through policies such as redlining, selective annexation of white communities by municipalities, and racially restrictive covenants, black communities were systematically denied the same degree of access to safe and plentiful water sources that white communities gained access to. These inequities reverberate today, as evidenced by the data presented by [Error! Reference source not found.](#) and others.

Hansen, Gladys, "Japanese Internment," *The Museum of the City of San Francisco*, May 1998, <http://www.sfmuseum.org/hist9/harvest.html>.

Hansen demonstrates how the World War II evacuation of Japanese farmers caused a labor shortage that was addressed through the transfer of confiscated lands from Japanese farmers to naturalized European immigrants or Americans migrating from the Dust Bowl region. Around 6000 farms with 200,000 acres of land were confiscated from Japanese farmers.

Hardy, R. Dean, Richard A. Milligan, and Nik Heynen, "Racial coastal formation: The environmental injustice of colorblind adaptation planning for sea-level rise," *Geoforum*, Vol. 87, pp. 62-72, December 2017, <https://doi.org/10.1016/j.geoforum.2017.10.005>.

In this 2017 article, Hardy et al. present a case study of a predominantly African American coastal community in Georgia to discuss how the United States' deeply racialized history relates to vulnerability mitigation and adaptation to sea-level

rise. Their work indicates how colorblind adaptation planning would perpetuate environmental racism.

Hendricks, Marccus D., and Shannon Van Zandt, "Unequal Protection Revisited: Planning for Environmental Justice, Hazard Vulnerability, and Critical Infrastructure in Communities of Color," *Environmental Justice*, Vol. 14, No. 2, April 2021, <https://doi.org/10.1089/env.2020.0054>.

Hendricks and Van Zandt describe in their 2021 article how the current literature inadequately addresses key topics related to physical infrastructure for stormwater and wastewater management, green spaces, and other systems. Their review describes how neighborhoods are not inherently vulnerable, but rather are made vulnerable due to systematic neglect and lack of services. Adequate access to green infrastructure and green spaces can help decrease the inequities in management and protection against environmental stressors and extreme events faced by low-income communities and communities of color.

Hoffman, Jeremy S., Vivek Shandas, and Nicholas Pendelton, "The Effects of Historical Housing Policies on Resident Exposure to Intra-Urban Heat: A Study of 108 US Urban Areas," *Climate*, Vol. 8, No. 1, 2020, <https://doi.org/10.3390/cli8010012>.

Hoffman et al. describe how urban housing policies of the 20<sup>th</sup> century, like redlining, have created racial distributions in American cities that lead to inequitable exposure to climate change threats and specifically heat waves. Their article describes how increasing heat waves disproportionately impact communities of color. Historically redlined areas were found to have land surface temperatures elevated by as much as 7 °C when compared to non-redlined neighborhoods. These findings are consistent with the results of other researchers and have important implications on the health and well-being of communities of color in U.S. cities in light of the negative health impacts of heat waves described by Basu and Basu.

IPCC, 2021: Summary for Policymakers. In: *Climate Change 2021: The Physical Science Basis. Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change* [Masson-Delmotte, V., P. Zhai, A. Pirani, S. L. Connors, C. Péan, S. Berger, N. Caud, Y. Chen, L. Goldfarb, M. I. Gomis, M. Huang, K. Leitzell, E. Lonnoy, J.B.R. Matthews, T. K. Maycock, T. Waterfield, O. Yelekçi, R. Yu and B. Zhou (eds.)]. Cambridge University Press. *In Press*.  
[https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC\\_AR6\\_WGI\\_Full\\_Report.pdf](https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_Full_Report.pdf).

The 2021 Sixth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC) demonstrates that recent changes in climate are unequivocally human influenced and that these changes are unprecedented over the geological record for many centuries to millennia. Based on the best possible projections, which have been refined since previous reports based on the collection and analysis of new data, the extreme weather and climate changes that have already been observed are only expected to magnify in the absence of large-

scale fundamental changes in human activities (e.g., combustion of petroleum products for energy).

Jennings, Viniece, Matthew E. H. M. Browning, and Alessandro Rigolon, "Urban Green Space at the Nexus of Environmental Justice and Health Equity," In: *Urban Green Spaces*, SpringerBriefs in Geography, Springer, Cham: 2019  
[https://doi.org/10.1007/978-3-030-10469-6\\_4](https://doi.org/10.1007/978-3-030-10469-6_4).

This review by Jennings et al. describes how urban green spaces are distributed inequitably across racial lines. Moreover, this work investigates the interactions between race and ethnicity, socioeconomic status, and the development of these inequities. The authors describe how inequities in access to green spaces and the ecosystem services that they provide can lead to disparities in health outcomes.

Jessel, Sonal, Samantha Sawyer, and Diana Hernández, "Energy, Poverty, and Health in Climate Change: A Comprehensive Review of an Emerging Literature," *Frontiers in Public Health*, Vol. 7, 2019,  
<https://doi.org/10.3389/fpubh.2019.00357>.

This review by Jessel et al. investigates the relationship between household energy, poverty, and health and finds that unaffordable and inadequate household energy, which can have negative impacts on health, are amplified by poverty and climate change.

Jeung, Russell, Aggie Yellow Horse, Tara Popovic, and Richard Lim, "Stop AAPI Hate National Report," *Stop AAPI Hate*, February 2021,  
<https://secureservercdn.net/104.238.69.231/a1w.90d.myftpupload.com/wp-content/uploads/2021/03/210312-Stop-AAPI-Hate-National-Report-.pdf>.

The Stop AAPI Hate National Report compiles information on 3795 incidents of hate crimes committed against Asian Americans and Pacific Islanders in 2020. The report breaks down the incidents by type, location, ethnicity of victim, gender, age, and state. More than two-thirds of hate crimes were committed against female victims and the greatest number of hate crimes of any state (45%) occurred in California.

Kakoyannis, C., and G. H. Stankey, "Assessing and Evaluating Recreational Uses of Water Resources: Implications for an Integrated Management Framework," United States Department of Agriculture, Forest Service, General Technical Report PNW-GTR-536, September 2002,  
[https://www.fs.fed.us/pnw/pubs/pnw\\_gtr536.pdf](https://www.fs.fed.us/pnw/pubs/pnw_gtr536.pdf).

Kakoyannis and Stankey describe the differences in access and use of recreational facilities among different racial groups in the United States. Generally, racial minorities are more likely to use highly developed, urban recreational facilities that are close to home and participate less in water-based activities. Their report evaluates various theories for why racial minorities display these preferences, including "marginality theory," which posits that historical lack

of resources in communities of color combined with discrimination and social exclusion created different opportunities to access green spaces and natural recreational areas. This report is consistent with a growing body of literature documenting the inequitable access of natural areas across racial lines.

Khan Academy, "The Dawes Act," 2017, <https://www.khanacademy.org/humanities/us-history/the-gilded-age/american-west/a/the-dawes-act>.

The Dawes Act was of 1887 allowed the federal government to seize and break up tribal lands to sell individual plots to U.S. citizens (i.e., primarily white Americans). Only Native Americans who accepted individual allotments could become U.S. citizens. The objective was to assimilate Native Americans by destroying their traditional customs and their connection to tribal territories. Over 90 million acres were stripped from Native Americans and sold to settlers.

King, Malcolm, Alexandra Smith, and Michael Gracey, "Indigenous health part 2: the underlying causes of the health gap," *The Lancet*, Vol. 374, Issue 9683, pp. 76-85, July 2009, [https://doi.org/10.1016/S0140-6736\(09\)60827-8](https://doi.org/10.1016/S0140-6736(09)60827-8).

In the second part of their review, King et al. describe the underlying causes of the health disparities between Indigenous and non-Indigenous people that were described in part 1 of their review (Gracey). The authors describe how a variety of factors, including racism, loss of language and connection to the land, environmental deprivation, and spiritual, emotional and mental disconnectedness have contributed to increased negative health outcomes observed in indigenous communities.

Lahontan Regional Water Quality Control Board (RWQCB-R6), Resolution No. R6T-2019-0277: *Climate Change Mitigation and Adaptation Strategy*, 2019, [https://www.waterboards.ca.gov/lahontan/board\\_decisions/adopted\\_orders/2019/docs/r6t\\_2019\\_0277\\_resolution\\_for\\_climate\\_change\\_mitigation\\_and\\_adaptation\\_response\\_plan.pdf](https://www.waterboards.ca.gov/lahontan/board_decisions/adopted_orders/2019/docs/r6t_2019_0277_resolution_for_climate_change_mitigation_and_adaptation_response_plan.pdf).

Lahontan Regional Water Quality Control Board (RWQCB-R6), Resolution No. R6T-2020-0057: *Approving an Amendment to the Water Quality Control Plan for the Lahontan Region to Add Definitions for Three New Beneficial Uses - Tribal Tradition and Culture (CUL), Tribal Subsistence Fishing (T-SUB), and Subsistence Fishing (SUB)*, September 16, 2020, [https://www.waterboards.ca.gov/lahontan/board\\_decisions/adopted\\_orders/2020/docs/resolution\\_r6t-2020-0057.pdf](https://www.waterboards.ca.gov/lahontan/board_decisions/adopted_orders/2020/docs/resolution_r6t-2020-0057.pdf).

Lahontan Regional Water Quality Control Board (RWQCB-R6), *Climate Change Mitigation and Adaptation Action Plan for the Lahontan Region*, March 2021, [https://www.waterboards.ca.gov/lahontan/board\\_info/agenda/2021/mar/item8.pdf](https://www.waterboards.ca.gov/lahontan/board_info/agenda/2021/mar/item8.pdf)

Landau, Vincent A., Meredith L. McClure, and Brett G. Dickson, "Final Report: Analysis of the Disparities in Nature Loss and Access to Nature," *Conservation Science Partners*, Truckee, CA: 2020, [https://www.csp-inc.org/public/CSP-CAP Disparities in Nature Loss FINAL Report 060120.pdf](https://www.csp-inc.org/public/CSP-CAP%20Disparities%20in%20Nature%20Loss%20FINAL%20Report%20060120.pdf).

The report from Landau et al. describes the scale of racial and economic disparities access to nature in the United States. In particular, this report finds that the United States has fewer forests, streams, wetlands, and other natural places near where Black, Latino, and Asian American people live. Notably, families with children, especially families of color with children, have less access to nature nearby than the rest of the country. In California, 61% of Asians, 52% of Black/African Americans, 55% of Hispanic/Latinx folks, and 48% of Native Americans live in nature-deprived areas, compared to only 36% of white folks (by census tract demographics from 2017).

Leonard, Libby, "A New Indigenous-led Student Movement Is Protecting Sacred Waters," *Civil Eats*, August 9, 2021, <https://civileats.com/2021/08/09/a-new-indigenous-led-student-movement-is-protecting-sacred-waters/>.

In this article, Libby Leonard describes how young members of Native American tribes are joining movements to protect their traditional water sources. For example, the Hoopa Valley Tribe in Humboldt County, California relies on the Trinity River for food, livelihood and as a sacred place for ceremonies and traditions. These resources have frequently been under threat due to proposed pipeline projects, rising water temperatures, pollution, and loss of fish due to damming and water diversions. Leonard's article demonstrates how the diversion and overallocation of water to other purposes has a direct impact on Native American tribes due to loss of access to water for traditional food sources, ceremonial purposes, and livelihood.

Locke, Dexter H., Billy Hall, J. Morgan Grove, Steward T. A. Pickett, Laura A. Ogden, Carissa Aoki, Christopher G. Boone, and Jarlath P. M. O'Neil-Dunne, "Residential housing segregation and urban tree canopy in 37 US Cities," *npj Urban Sustainability*, Vol. 1, No. 15, 2021, <https://doi.org/10.1038/s42949-021-00022-0>.

In their 2021 study, Locke et al. demonstrated how historical redlining practices are related to current access to green spaces in cities throughout the United States. Their investigation focused on how redlining practices correlate to present-day tree canopy at the neighborhood level. Urban trees provide many ecosystem services, mitigate the urban heat island effect, and may improve quality of life in cities. In this analysis of 37 metropolitan areas, the authors demonstrated that areas formerly graded D, which were mostly inhabited by racial and ethnic minorities, have on average ~23% tree canopy cover today. Areas formerly graded A, characterized by U.S.-born white populations living in newer housing stock, had nearly twice as much tree canopy (~43%). Results were consistent across small and large metropolitan regions. The ranking system

used by Home Owners' Loan Corporation to assess loan risk in the 1930s parallels the rank order of average percent tree canopy cover today.

Los Angeles Regional Water Quality Control Board (RWQCB-R4), Resolution No. R18-004: *A Resolution to Prioritize Actions to Adapt to and Mitigate the Impacts of Climate Change on the Los Angeles Region's Water Resources and Associated Beneficial Uses*, 2018, [https://www.waterboards.ca.gov/losangeles/board\\_decisions/basin\\_plan\\_amendments/technical\\_documents/130\\_new/ResolutionNoR18-004.pdf](https://www.waterboards.ca.gov/losangeles/board_decisions/basin_plan_amendments/technical_documents/130_new/ResolutionNoR18-004.pdf).

Los Angeles Regional Water Quality Control Board (RWQCB-R4), *Los Angeles Region Framework for Climate Change Adaptation and Mitigation: Potential Regulatory Adaptation and Mitigation Measures*, 2019, [https://www.waterboards.ca.gov/losangeles/water\\_issues/programs/climate\\_change/docs/2019/FrameworkPart2-PotentialRegulatoryAdaptation\\_MitigationMeasures-final.pdf](https://www.waterboards.ca.gov/losangeles/water_issues/programs/climate_change/docs/2019/FrameworkPart2-PotentialRegulatoryAdaptation_MitigationMeasures-final.pdf).

Matthews, Kevin L., "What Is the Racial Wealth Gap and How Can We Fix It?" *Plutus Foundation*, July 28, 2020, <https://plutusfoundation.org/2020/racial-wealth-gap/>.

In his 2020 article, Matthews describes how a variety of laws and policies in the United States have contributed to the significant disparity in wealth between families of different races observed to this day. The difference in median wealth between racial and ethnic groups is termed the racial wealth gap. One law in particular, the Homestead Act, resulted in the distribution of 246 million acres of land to 1.5 million families with 99.73% of the recipients being white families. Nearly 100 million Americans today are direct beneficiaries of that program. As a result of this policy and many others, the net worth of white families in America is 10 times that of Black families. Inequitable access to GI Bill benefits and unfair lending practices also contributed to this significant racial inequity.

Meehan, Katie, Jason R. Jurjevich, Nicholas M. J. W. Chun, and Justin Sherrill, "Geographies of insecure water access and the housing–water nexus in US cities," *PNAS*, Vol. 117, No. 46, pp. 28700-28707, November 2, 2020, <https://doi.org/10.1073/pnas.2007361117>.

In this 2020 article by Meehan et al., the authors demonstrated how of the greater than one million Americans who have insecure access to water, nearly half are in the 50 largest metropolitan areas. Unplumbed houses were most likely to be headed by people of color, have lower incomes, be renters, and live in mobile homes. The authors presented evidence that these trends are not accidental or random, but rather are caused by systemic and racialized inequality.

Merritt, Keri Leigh, "Land and the roots of African-American poverty," *Aeon*, March 11, 2016, <https://aeon.co/ideas/land-and-the-roots-of-african-american-poverty>.

This 2016 article describes the impact of the Homestead Acts on African American land ownership and tracks how poverty among African Americans can

be traced back to their systematic exclusion from benefits provided by those laws.

Montag, Coty, "Water/Color: A Study of Race and the Water Affordability Crisis in America's Cities," *Thurgood Marshall Institute at the NAACP Legal Defense and Educational Fund, Inc.*, 2019, [https://www.naacpldf.org/wp-content/uploads/Water\\_Report\\_FULL\\_5\\_31\\_19\\_FINAL\\_OPT.pdf](https://www.naacpldf.org/wp-content/uploads/Water_Report_FULL_5_31_19_FINAL_OPT.pdf).

Montag's 2019 report investigates the water affordability crisis impacting Black communities. The link between an inability to pay of water and loss of Black homeownership is demonstrated. Failing infrastructure is one of the largest contributing factors to the rising costs of water for Black communities. To investigate these topics, Montag presents case studies of the affordability crises in Baltimore and Cleveland. This report deftly portrays the link between water management practices and institutional racism.

Morello-Frosch, Rachel and Russ Lopez, "The riskscape and the color line: Examining the role of segregation in environmental health disparities," *Environmental Research*, Vol. 102, Issue 2, October 2006, pp. 181-196, <https://doi.org/10.1016/j.envres.2006.05.007>.

Morello-Frosch and Lopez demonstrate in their 2006 study that high levels of poverty and resource insecurity in segregated communities of color leads to disproportionate exposure to environmental pollution that adversely affects their health and well-being.

Nelson, Julie, Lauren Spokane, Lauren Ross, and Non Deng, *Advancing Racial Equity and Transforming Government: A Resource Guide to Put Ideas into Action*. The Local & Regional Government Alliance on Race and Equity: 2015, [https://racialequityalliance.org/wp-content/uploads/2015/02/GARE-Resource\\_Guide.pdf](https://racialequityalliance.org/wp-content/uploads/2015/02/GARE-Resource_Guide.pdf).

In 2015, GARE produced a resource guide to aid government entities in advancing racial equity. The resource guide defines racial equity and presents a framework for a racial equity model involving stages of normalizing, organizing, and operationalizing racial equity actions and policies. Additionally, the resource guide describes how race intersects with many other marginalized identities and that leading by addressing with racial inequities will improve outcomes for all communities. Case studies are presented within the resource guide.

Norgaard, Kari Marie, "The Effects of Altered Diet on the Health of the Karuk People," Independent Report, November 2005, <https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.526.8582&rep=rep1&type=pdf>.

In this 2005 report, Norgaard details the negative health impacts caused by a forced shift in diet among the Karuk people due to loss of water resources and the foods that they historically derived from them. The Karuk people of Northern California and Southern Oregon have historically relied on salmon and other

native fish species in the Klamath River as the basis for a prosperous subsistence economy. The elimination of these traditional food sources has had profound impacts on the Karuk people, including negative impacts on physical, emotional, and mental health. Norgaard identifies the loss of traditional food sources and a shift to “Western” diets as being directly responsible for increased rates of diabetes, heart disease, obesity, hypertension, kidney disease, and strokes among Native people generally and within the Karuk Tribe specifically. Root causes, such as genocide, forced assimilation, and relocation, are also identified in Norgaard’s report.

North Coast Regional Water Quality Control Board (RWQCB-R1), Resolution No. R1-2019-0024: *Adopting the Human Right to Water as a Core Value and Directing Its Implementation in North Coast Regional Water Board Activities and Authorizing the Executive Officer to Enter into a Memorandum of Mutual Understandings with the North Coast Resource Partnership*, 2019, [https://www.waterboards.ca.gov/northcoast/board\\_decisions/adopted\\_orders/pdf/2019/19\\_0024\\_NCRP\\_Resolution.pdf](https://www.waterboards.ca.gov/northcoast/board_decisions/adopted_orders/pdf/2019/19_0024_NCRP_Resolution.pdf).

North Coast Regional Water Quality Control Board (RWQCB-R1), *FY 2021-22 Work Plan*, 2021, [https://www.waterboards.ca.gov/northcoast/board\\_info/board\\_meetings/06\\_2021/pdf/8/PAWS%20Workplan.pdf](https://www.waterboards.ca.gov/northcoast/board_info/board_meetings/06_2021/pdf/8/PAWS%20Workplan.pdf).

North Coast Regional Water Quality Control Board (RWQCB-R1), *Water Quality Control Plan*, May 2011, [https://www.waterboards.ca.gov/northcoast/water\\_issues/programs/basin\\_plan/083105-bp/basin\\_plan.pdf](https://www.waterboards.ca.gov/northcoast/water_issues/programs/basin_plan/083105-bp/basin_plan.pdf).

O’Brien, Liz, Rik De Vreese, Erdoğan Atmış, Anton Stahl Olafsson, Tuija Sievänen, Michael Brennan, Mercedes Sánchez, Thomas Panagopoulos, Sjerp de Vries, Maren Kern, Sandra Gentin, Graça Saraiva, and Ana Almeida, “Social and Environmental Justice: Diversity in Access to and Benefits from Urban Green Infrastructure – Examples from Europe,” In: Pearlmutter D. et al. (eds) *The Urban Forest. Future City*, Vol. 7, Springer, Cham: 2017, [https://doi.org/10.1007/978-3-319-50280-9\\_15](https://doi.org/10.1007/978-3-319-50280-9_15).

O’Brien et al. investigated the inequitable access to urban forests and green infrastructure in Europe and found that ethnic minority groups and the income deprived and disabled are more likely to lack access to these spaces. Their review describes how urban green spaces are connected to healthy outcomes, such as decreased obesity rates and increased mental well-being. Additionally, by decreasing impermeable cover and breaking up paved areas, green spaces provide ecosystem services and water management not afforded by other urban environments.

Oppenheimer, David B., Swati Prakash, and Rachel Burns, "Playing the Trump Card: The Enduring Legacy of Racism in Immigration Law," *Berkeley La Raza Law Journal*, Vol. 26, Issue 1, 2016, [https://www.immigrationresearch.org/system/files/playing\\_the\\_trump\\_card.pdf](https://www.immigrationresearch.org/system/files/playing_the_trump_card.pdf).

This 2016 article by Oppenheimer et al. describes racist immigration laws and policies throughout U.S. history. The article describes assimilation of European immigrants into U.S. society, explore the racism faced by Asian immigrants to the West Coast, describes the involuntary relocation of Africans to the U.S., and describes contemporary issues related to Mexican immigration.

Palumbo, Amanda and Jacob Iversen, "Final Staff Report, Including Substitute Environmental Documentation for Part 2 of the Water Quality Control Plan for Inland Surface Waters, Enclosed Bays, and Estuaries of California—Tribal and Subsistence Fishing Beneficial Uses and Mercury Provisions," *Division of Water Quality, State Water Resources Control Board*, May 2, 2017, [https://www.waterboards.ca.gov/water\\_issues/programs/mercury/docs/hg\\_SR\\_final.pdf](https://www.waterboards.ca.gov/water_issues/programs/mercury/docs/hg_SR_final.pdf).

This staff report discusses the adoption of beneficial uses for subsistence and cultural fishing for tribes. This beneficial use was only recently adopted by the Water Boards even though tribes were using surface waters in California for these purposes well before the state was established.

Perea, Juan F., "The Echoes of Slavery: Recognizing the Racist Origins of the Agricultural and Domestic Worker Exclusion from the National Labor Relations Act," *72 OHIO ST. L.J.* 195, 2011, <https://lawecommons.luc.edu/cgi/viewcontent.cgi?article=1150&context=facpubs>.

Perea's 2011 article details how the continuing exclusion of agricultural and domestic workers from the protections available under the Nation Labor Relations Act (NLRA) is part of a history of exclusionary labor practices and policies in the United States. Historians generally agree that "the exclusion of agricultural and domestic employees...should be understood as part of the pattern of racist exclusions enacted in the major New Deal Era statutes." Perea argues that these exclusions stem from deliberate policies intended to accommodate "southern racism." Perea's article expertly details the horrible conditions, poor wages, and workplace hazards that domestic and agricultural workers, who are primarily people of color, endure as the result of these government policies, arguing that exclusionary sections of the NLRA violate the Constitution's Equal Protection Clause.

Pfeiffer, J., "Honoring A Water Warrior: How Harry Williams Fought for Paiute Water Rights in Owens Valley," *KCET*, July 8, 2021, <https://www.kcet.org/news-community/honoring-a-water-warrior-how-harry-williams-fought-for-paiute-water-rights-in-owens-valley>.

Pfeiffer's 2021 article profiles the recently deceased Harry Williams, an elder of the Bishop Paiute tribe of the Owens Valley and expert on ancestral water

systems. Williams recovered ancestral knowledge of irrigation networks and water practices used by the Paiute tribe, which helped strengthen their water rights claims in the Owens Valley.

Reineman, Dan R., Lisa M. Wedding, Eric H. Hartge, Winn McEnery, and Jesse Reiblich, "Coastal Access Equity and the Implementation of the California Coastal Act," *Stanford Environmental Law Journal*, Vol. 36, 2016, <https://law.stanford.edu/publications/coastal-access-equity-and-the-implementation-of-the-california-coastal-act/>.

In their study, Reineman et al. evaluated access to the California coast for different demographic groups. Their work identified disparities in coastal access opportunities to different groups, showing that wealthy, white, senior residents of California have greater access to the California coast, while populous racial and ethnic minority groups are disproportionately excluded from access.

Roller, Zoë, Stephen Gasteyer, Nora Nelson, WenHua Lai, Marie Carmen Shingne, George McGraw, and Radhika Fox. "Closing the Water Access Gap in the United States: A National Action Plan," *DigDeep* and *US Water Alliance*, 2019, <http://uswateralliance.org/sites/uswateralliance.org/files/publications/Closing%20the%20Water%20Access%20Gap%20in%20the%20United%20States%20DIGITAL.pdf>.

The 2019 report by Roller et al. provides a nationwide analysis of access to water in the United States. The report reveals that more than two million people live without running water or modern plumbing and indicates that race is the single strongest predictor of access to water and wastewater services. African American and Latinx households are twice as likely to not have access to indoor plumbing while Native American households are 19 times more likely. Because of challenges in obtaining accurate data, these may be significant undercounts. The authors term these disparities in access the "water access gap." Additional findings from the national analysis include: poverty is a key obstacle to water access, water access affects entire communities, and although some communities are making progress, others are backsliding.

Safe Water Alliance (SWA), Environmental Justice Coalition for Water (EJCW), and the International Human Rights Law Clinic, University of California, Berkeley, School of Law (IHRLC), "Racial Discrimination and Access to Safe, Affordable Water for Communities of Color in California: A Report Submitted to the Committee on the Elimination of Racial Discrimination in its 85<sup>th</sup> Session," *United Nations Human Rights Treaty Body, UN Treaty Body Database*: August 2014, [https://tbinternet.ohchr.org/Treaties/CERD/Shared%20Documents/USA/INT\\_CERD\\_NGO\\_USA\\_17884\\_E.pdf](https://tbinternet.ohchr.org/Treaties/CERD/Shared%20Documents/USA/INT_CERD_NGO_USA_17884_E.pdf).

The report, *Racial Discrimination and Access to Safe, Affordable Water for Communities of Color in California*, was submitted as a shadow report in response to the Periodic Report of the United States of America to the United Nations Committee on the Elimination of Racial Discrimination Concerning the International Convention on the Elimination of All Forms of Racial Discrimination

(<https://2009-2017.state.gov/documents/organization/210817.pdf>) submitted June 12, 2013. This shadow report stated the following:

*The United States has made progress toward eliminating racial discrimination, but the lack of access to clean drinking water is still strongly linked to race for many communities in California. This shadow report highlights the failure of the U.S. in its obligations under ICERD to realize the human right to water for many communities of color in the state. The report examines the experience of impacted agricultural regions, Native American tribal areas, and urban centers in California, focusing on the challenges affected communities face in accessing clean and affordable water and the political barriers that prevent meaningful dialogue with government actors to address these problems.*

The report details many of the disproportionate burdens in access to safe drinking water faced by communities of color in California, including rural communities of color in the San Joaquin and Salinas Valleys, tribal communities, and people of color living in urban areas. The report also details how people experiencing homelessness, who are disproportionately people of color in the state of California, are particularly impacted by the lack of access to water in public spaces. The report provides a set of recommendations for addressing racial inequities in access to safe drinking water in California.

San Diego Regional Water Quality Control Board (RWQCB-R9), Resolution No. R9-2018-0051: *Addressing Threats to Beneficial Uses from Climate Change*, 2018, [https://www.waterboards.ca.gov/sandiego/board\\_decisions/adopted\\_orders/2018/R9-2018-0051.pdf](https://www.waterboards.ca.gov/sandiego/board_decisions/adopted_orders/2018/R9-2018-0051.pdf).

San Diego Regional Water Quality Control Board (RWQCB-R9), Tentative Resolution No. R9-2020-0254: *Non-Regulatory Updates to the Water Quality Control Plan for the San Diego Basin*, 2020, [https://www.waterboards.ca.gov/sandiego/board\\_info/agendas/2020/dec/item8/S D1-item8.pdf](https://www.waterboards.ca.gov/sandiego/board_info/agendas/2020/dec/item8/S D1-item8.pdf).

San Francisco Bay Regional Water Quality Control Board (RWQCB-R2), "Chapter 2: Beneficial Uses," *California Water Boards* website, December 18, 2017, [https://www.waterboards.ca.gov/sanfranciscobay/water\\_issues/programs/plannin gtmls/basinplan/web/bp\\_ch2.html](https://www.waterboards.ca.gov/sanfranciscobay/water_issues/programs/plannin gtmls/basinplan/web/bp_ch2.html).

Beneficial uses related to water quality in regional watersheds are overseen by the Regional Water Quality Control Boards in California. The San Francisco Bay Regional Board maintains this educational webpage that describes the beneficial uses that have been recognized by the state. Beneficial uses must be weighed against the water quality objectives of a regional watershed.

San Francisco Bay Regional Water Quality Control Board (RWQCB-R2), "EO Summary Report; Item 7: Overview of Regional Water Board Proposed Strategic Priorities – Discussion of the Board's programs and Its Work Plan and Priorities for the 2020-2021 Fiscal Year," *California Water Boards* website, November 18, 2020,

[https://www.waterboards.ca.gov/sanfranciscobay/board\\_info/agendas/2020/November/7\\_EOSR.pdf](https://www.waterboards.ca.gov/sanfranciscobay/board_info/agendas/2020/November/7_EOSR.pdf).

Santa Ana Regional Water Quality Control Board (RWQCB-R8), Resolution No. R8-2019-0078: *Adopting the Human Right to Water as a Core Value and Directing Its Implementation in Santa Ana Regional Water Quality Control Board Programs and Activities*, 2019, [https://www.waterboards.ca.gov/santaana/board\\_decisions/adopted\\_orders/orders/2019/R8-2019-0078.pdf](https://www.waterboards.ca.gov/santaana/board_decisions/adopted_orders/orders/2019/R8-2019-0078.pdf).

Schechinger, Anne Weir, "In California, Latinos More Likely to Be Drinking Nitrate-Polluted Water," *Environmental Working Group*, October 7, 2020, <https://www.ewg.org/interactive-maps/2020-california-latinos-more-likely-drinking-nitrate-polluted-water/>.

Using data provided by the State Water Boards, Schechinger identified that Latinos in California's San Joaquin Valley are disproportionately exposed to elevated levels of nitrate in their drinking water. 60% of communities with nitrate levels exceeding the federal drinking water limit are majority-Latino and Latinos also constitute a majority in communities where nitrate levels are measured at or above one-half the legal limit. Although concentrations of nitrate around 5 mg/L as nitrogen comply with the Safe Drinking Water Act, Schechinger highlights how those levels have been linked to increased health risks, such as colorectal cancer and thyroid disease.

Schelhas, John, "Race, Ethnicity, and Natural Resources in the United States: A Review," *Natural Resources Journal*, Vol. 42, No. 4, 2002, <https://digitalrepository.unm.edu/cgi/viewcontent.cgi?article=1506&context=nri>.

In this 2002 article, Schelhas details how racial discrimination and ethnocentrism in the natural resources field continue to be felt today. Additionally, Schelhas details various ways that Native Americans have lost water rights in the United States, such as through seizure of land and forced relocation, exclusion from decision-making processes, and forced accommodation with water distribution systems favored by white settlers.

Shilling, F., A. Negrette, L. Biondini, and S. Cardenas, "California Tribes Fish-Use: Final Report," A Report for the State Water Resources Control Board and the US Environmental Protection Agency, Agreement # 11-146-250, July 2014, [https://www.waterboards.ca.gov/water\\_issues/programs/mercury/docs/tribes\\_%20fish\\_use.pdf](https://www.waterboards.ca.gov/water_issues/programs/mercury/docs/tribes_%20fish_use.pdf).

In their report, Shilling et al. describe the many traditional uses of fish by Native Americans in California. California tribes have used fish for ceremony, diet, and as a part of culture for far longer than California has existed. The State Water Resources Control Board and the U.S. Environmental Protection Agency supported the collection of information about the current and traditional use of fish by members of tribes across the state, to inform draft water regulations. The authors found that tribes use fish in similar patterns (fish types and source-

waters) as they did traditionally, but not in terms of amounts. Native American tribes used 29 freshwater/anadromous fin-fish species, 23 marine fin-fish species, and 18 other invertebrate species. Current 95th percentile rates of consumption of caught fish varied by tribe and ranged between 30 g/day (Chumash) and 240 g/day (Pit River). The rate of fish use (frequency and consumption rate) was suppressed for many tribes, compared to traditional rates, which most tribes attributed primarily to water quantity and quality issues.

Shonkoff, Seth B., Rachel Morello-Frosch, Manuel Pastor, and James Sadd, “The climate gap: environmental health and equity implications of climate change and mitigation policies in California—a review of the literature,” *Climatic Change*, Vol. 109, pp. 485-503, 2011, <https://doi.org/10.1007/s10584-011-0310-7>.

This work by Shonkoff et al. introduces the term “Climate Gap” which refers to “disproportionate and unequal implications that climate change and climate change mitigation hold for people of color and the poor.” Past research summarized in this review indicates that communities and people of color suffer from a greater vulnerability to climate change impacts including, but not limited to, sea level rise, hurricanes, floods, heat waves, air pollution, and infectious diseases.

Sivas, D. A., M. L. Melius, L. Sheehan, J. Ugai, and H. Kryczka, “California Water Governance for the 21st Century,” Earth Law Center, Stanford Law School, 2017, [https://www-cdn.law.stanford.edu/wp-content/uploads/2017/03/Water-Paper-3-10-17\\_REVISED-FOR-FINAL-CLINIC-PUB.pdf](https://www-cdn.law.stanford.edu/wp-content/uploads/2017/03/Water-Paper-3-10-17_REVISED-FOR-FINAL-CLINIC-PUB.pdf).

Sivas et al. describe how California’s current water allocation system is inefficient, inequitable, and injurious. California’s water rights are allocated based on seniority, without much regard for impact of use, placing vulnerable populations at the bottom of the list during droughts. These issues have led to widespread negative impacts on the health and well-being of Californians, Native Americans, and native species of California plants and animals.

Smithsonian American Art Museum (SAAM), “Manifest Destiny and U.S. Westward Expansion,” *The American Experience in the Classroom*, 2014, [https://americanexperience.si.edu/wp-content/uploads/2014/08/Manifest-Destiny-and-U.S-Westward-Expansion\\_.pdf](https://americanexperience.si.edu/wp-content/uploads/2014/08/Manifest-Destiny-and-U.S-Westward-Expansion_.pdf).

The Smithsonian American Art Museum maintains this educational document on the “Manifest Destiny” doctrine. Manifest Destiny and American westward expansion ultimately led to the United States settling of California. Manifest Destiny was inherently racist and was the belief that white Americans were divinely ordained to settle North America and rule over all other peoples. As described in the resource document:

*Nineteenth-century expansionism went hand in hand with the concept of manifest destiny, each signaling that there was a God-given, sanctioned right to conquer the land and displace the “uncivilized,” non-Christian peoples who, it was believed, did not take full advantage of the land which had been given*

*to them. This ideology served as justification for the violent displacement of native peoples and the forceful takeovers of land by military means.*

Strife, S., and L. Downey “Childhood Development and Access to Nature: A New Direction for Environmental Inequality Research,” *Organization & Environment*, Vol. 22, No. 1, 2009, <https://doi.org/10.1177/1086026609333340>.

In their 2009 work, Strife and Downey summarized the limited studies available on the correlation between race and access to natural spaces for children. They demonstrated that youth from racial minorities are less likely to have access to green spaces and the natural world when compared to their white counterparts and are disproportionately burdened by environmental pollution. These inequities lead to differences in childhood development because access to nature has been shown to have beneficial impacts on the cognitive, emotional, and physical health of children.

Thomas, Kimberley, R. Dean Hardy, Heather Lazrus, Michael Mendez, Ben Orlove, Isabel Rivera-Collazo, J. Timmons Roberts, Marcy Rockman, Benjamin P. Warner, and Robert Winthrop, “Explaining differential vulnerability to climate change: A social science review,” *WIREs Climate Change*, Vol. 10, Issue 2, 2019, e565, <https://doi.org/10.1002/wcc.565>.

This review by Thomas et al. describes how differential vulnerability to climate change develops. Certain populations are at a higher risk to climate threats than others due to a range of social, economic, historical, and political factors. In Section 3.1 of the review, Thomas et al. describe how race, caste, and gender can impact vulnerability to climate threats.

Thompson, Brook, “The familial bond between the Klamath River and the Yurok People,” *High Country News*, August 24, 2021, <https://www.hcn.org/issues/53.9/indigenous-affairs-klamath-basin-the-familial-bond-between-the-klamath-river-and-the-yurok-people>.

Thompson’s 2021 article describes the importance of the Klamath River to the Yurok people of Northern California. Historically, the Klamath River provided salmon for food and ceremonial purposes to the Yurok people, who traditionally consumed approximately 450 pounds of salmon per year. However, the damming of the Klamath River to provide water for agricultural purposes, algal blooms, and drought, have decimated salmon populations. Thompson’s article demonstrates how inequitable water resource management in California has led to a loss of traditional sources of food, livelihood, and ceremonial practices for California Native Americans.

Voelkel, Jackson, Dana Hellman, Ryu Sakuma, and Vivek Shandas, "Assessing Vulnerability to Urban Heat: A Study of Disproportionate Heat Exposure and Access to Refuge by Socio-Demographic Status in Portland, Oregon," *International Journal of Environmental Research and Public Health*, Vol. 15, Issue 4, 2018, <https://doi.org/10.3390/ijerph15040640>.

In their 2018 study, Voelkel et al. describe how communities of color and the poor are at a higher risk of exposure to extreme heat in Portland, Oregon. This differential exposure is described by the authors as an "emerging concern on environmental justice as it relates to climate change."

Walsh, Dylan, "Injustice in U.S. water distribution," *Yale Environment Review*, June 17, 2012, <https://environment-review.yale.edu/injustice-us-water-distribution-0>.

In his 2012 review, Walsh finds that racial minorities frequently pay disproportionately higher water and sewer rates even when analyses are controlled for class, geographic location, and urbanicity. This occurs even though racial minorities are also disproportionately exposed to pollution through drinking water and wastewater discharges. The review identifies that this stems from historical and structural inequalities in urban demographics.

Water Education Foundation, "Appropriative Rights," *Aquapedia*, 2021, <https://www.watereducation.org/aquapedia/appropriative-rights>.

The Water Education Foundation includes the following regarding appropriative rights on their website:

*California law allows surface water to be diverted at one point and used (appropriated) at a separate point. This is in contrast to a riparian right, which is based on ownership of the property adjacent to the water. An appropriative right to use water exists without regard to the relationship between land and water. They depend upon continued use and may be lost by non-use. Appropriative rights may be sold or transferred.*

Water Education Foundation, "Water Rights in California," *Aquapedia*, 2021, <https://www.watereducation.org/aquapedia/water-rights-california>.

The Water Education Foundation includes the following regarding water rights in California on their website:

*...the California Constitution requires that all water use be both "reasonable and beneficial" under the Constitution's Article X, Section 2. Beneficial uses include irrigation, domestic, municipal and industrial, hydroelectric power, recreational use and protection and enhancement of fish and wildlife. Reasonable use, however, is more difficult to categorize. It is defined in part by what it is not; that is, waste or unreasonable use. According to the State Supreme Court, reasonableness is determined by the circumstances, "but varies as the current situation changes."*

Wilson, Bev, "Urban Heat Management and the Legacy of Redlining," *Journal of the American Planning Association*, Vol. 86, Issue 4, May 2020, <https://doi.org/10.1080/01944363.2020.1759127>.

Building on past research on urban heat management, Wilson argues in her 2020 paper that one of lasting impacts of redlining is that people of color are more likely to reside in geographical areas with a history of disinvestment, leaving them more vulnerable to impacts like extreme heat. Historically redlined areas in Baltimore, Dallas, and Kansas City were shown to have higher mean land surface temperatures, which can lead to a variety of negative health impacts as described by Basu and Basu.

Wilson, Erika, "The Legal Foundations of White Supremacy," *DePaul Journal for Social Justice*, Vol. 11, Issue 2, August 2018, <https://via.library.depaul.edu/jsj/vol11/iss2/6>.

In her 2018 paper, Wilson argues that American law has historically played a central role in the construction of white supremacy. Despite the elimination of overtly racist laws favoring whites, laws maintain white supremacy to this day. In her paper, she uses the following definition of white supremacy, from Frances Lee Ansley:

*A political, economic and cultural system in which whites overwhelmingly control power and material resources, and in which white dominance and non-white subordination exists across a broad array of institutions and social settings.*

Wilson argues that our legal system has shifted from a system that initially codified race as a concept and created a racial hierarchy, then shifted to institute a race-conscious system to favor whites explicitly, before finally dismantling race-conscious laws and instituting a "color-blind" or "post-racial" system that purportedly no longer favors white Americans although the effects of previous race-conscious systems were never dismantled. The lasting effects of race-conscious distributions of resources has allowed white supremacy to continue to expand in this current iteration.

Williams, Trina R., "Asset-building Policy as a Response to Wealth Inequality: Drawing Implications from the Homestead Act," *Center for Social Development*, Working Paper No. 03-05, 2003, [https://openscholarship.wustl.edu/cgi/viewcontent.cgi?article=1106&context=csd\\_research](https://openscholarship.wustl.edu/cgi/viewcontent.cgi?article=1106&context=csd_research).

In this 2003 work, Williams argues for asset building policy as a strategy to reduce wealth inequality. Using the Homestead Acts as examples of policies that allowed white Americans to gain access to intergenerational wealth, Williams argues that asset-building policy today can be used to benefit African Americans and reverse the intergenerational inequities of the past few centuries.

Wright Wendel, Heather E., Joni A. Downs, and James R. Mihelcic, "Assessing Equitable Access to Urban Green Space: The Role of Engineered Water Infrastructure," *Environmental Science & Technology*, Vol. 45, Issue 16, July 5, 2011, <https://doi.org/10.1021/es103949f>.

Using a case study from Tampa, Florida as an example, Wright Wendel et al. investigate racial disparities in access to green infrastructure for urban water management. Residents in communities with higher percentages of racial minorities were found to have significantly less access to larger, more desirable green spaces and water features, such as stormwater retention ponds. These inequities have significant implications for urban water management and flooding risks.

Ziter, Carly D., Eric J. Pedersen, Christopher J. Kucharik, and Monica G. Turner, "Scale-dependent interactions between tree canopy cover and impervious surfaces reduce daytime urban heat during summer," *Proceedings of the National Academy of Sciences*, Vol. 116, No. 15, pp. 7575-7580, 2019, <https://doi.org/10.1073/pnas.1817561116>.

This article by Ziter et al. demonstrates the interactions between tree canopy cover and urban heat during the summer. Ziter et al. showed that daytime air temperatures were greatly reduced in areas with tree canopy cover exceeding 40%. This has important implications for racial equity because various studies have demonstrated that communities of color in the United States tend to reside in historically redlined neighborhoods that have less green space, natural areas and tree cover, leaving those communities more vulnerable to exposure to extreme heat.