# Environmental Law

Vol. 26, No. 1 • Spring 2017

# Editor's Note...

by Julia Stein

In this Spring 2017 issue of Environmental Law News, we are excited to bring you a series of articles that cover a wide variety of topics facing California practitioners of environmental law. This is our first issue since the November 2016 presidential election, and while many have opined on the uncertainties facing environmental regulation and enforcement at the federal level, the articles in this issue make it clear that we California environmental lawyers still have much to occupy us in our own backyard.

The issue begins with Austin Cho's overview of the California WaterFix administrative proceedings before the State Water Resources Control Board, in which the California Department of Water Resources and U.S. Bureau of Reclamation seek to modify their water permits to allow construction of the controversial Delta Tunnels. Following that, Jonathan Shardlow and Martin Stratte offer their thoughts on the need for guidance as to whether a CEQA petitioner's claim of public interest standing can be denied or subjected to discovery before the action has been litigated. The next article, a joint effort by Angela Howe, Jana Zimmer, Jennifer Lucchesi, and John Erskine, reprises and builds upon the well-attended October 2016 Yosemite Environmental Law Conference panel covering issues facing the Coastal Act in its 40th year. Next comes a useful overview of regulatory reporting requirements applicable to releases of hazardous substances in California by Sedina Banks and Brian Moskal. Aaron Ezroj then provides guidance on the latest developments in carbon reporting, outlining existing carbon reporting programs and strategies for institutional investors and energy companies that are looking to protect against a potential "carbon bubble," and presenting a financial case for renewables investment even in today's uncertain political climate. Following that is Marina Cassio's commentary on the California Supreme Court's decision in Friends of the College of San Mateo Gardens v. San Mateo County Community College District, and its impact on CEQA review of modified projects. Her analysis is particularly relevant in light of the Court of Appeal's decision applying the Supreme Court's analysis on remand in early May 2017. Finally, the issue closes with our annual recap of the most recent California legislative session, courtesy, as always, of Gary Lucks. Summarizing a number of relevant enactments from this atypically productive election year session, the article highlights the environmental justice bent that has pervaded much recent legislation. And, as Mr. Lucks points out, with the Trump Administration in, we may well see even more legislative activity as many at the state level work to draw a "green boundary line" for California.

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# California WaterFix: A Snapshot of the SWRCB Water Rights Change Hearings

by Austin C. Cho\*



Austin C. Cho

### I. INTRODUCTION

After five parched years, substantial winter rains and Sierra snowpack have brought California a long-sought reprieve from drought, though not without presenting a new set of challenges. In February, nearly 200,000 residents below an overflowing Lake Oroville were forced to temporarily evacuate their homes due to the reser-

voir's inundated and damaged spillways.¹ Increased river flows have resulted in some of the state's floodplain levees showing signs of strain and threat of breach.² Yet despite the recent deluge, portions of the state remain relatively dry and many groundwater basins will take years to recover from overpumping. While Governor Brown has finally lifted the state's drought emergency for most regions, he cautions that "the next drought could be around the corner."³

These varying extreme conditions have been cited as a justification for the California WaterFix project ("Water-Fix" or "Delta Tunnels"), new water infrastructure proposed by the California Department of Water Resources ("DWR") and United States Bureau of Reclamation ("collectively "Petitioners") to divert water from the northern Sacramento-San Joaquin River Delta just south of Sacramento. Southern Delta diversions for DWR's State Water Project ("SWP") and Reclamation's Central Valley Project ("CVP") would also be retained. The Petitioners say that WaterFix would improve California's water infrastructure system and increase supply reliability for areas that use water exported from the Delta. The plan calls for the construction of three north Delta intakes, each capable of diverting 9,000 cubic feet per second, feeding into two 40-foot-wide, 30-mile-long tunnels. Currently, fresh water inflows from the Sacramento River wend their way through the complex of Delta channels towards the Bay Delta estuary and, ultimately, the Pacific Ocean. The tunnels would divert a portion of that water directly to the State and Federal water projects' existing export facilities in the south Delta. Proponents say these new diversions would provide needed flexibility to divert water from the northern Delta at times that conditions for diversion in the southern Delta are not ideal due to endangered species protections, water quality requirements, and other constraints.

The Delta Tunnels are backed by Governor Brown, but face strong local and environmental opposition. Opponents are concerned that the project would siphon fresh water flows from the lower Sacramento River for the benefit of export interests at the expense of the Delta and the environment. As no set operations plan is being proposed, many are concerned that the Delta Tunnels are a water grab, and that water will exported from the northern Delta creating permanent drought conditions. Proponents of the project argue that the existing means of diverting water from the Delta are unsustainable for fish and humans alike and that major change is needed. While many would agree that California's current water system is not perfect, few agree on what (if any) major changes are needed to how water is diverted from the Delta.

This article provides a brief summary and status update of the ongoing administrative proceedings before the California State Water Resources Control Board ("Water Board"), in which the Petitioners seek to modify their water permits in order to allow construction of the Water-Fix intake facilities and tunnels. Before it may approve the petition, the Water Board must find that Petitioners have satisfied their burden of proof in demonstrating that the changes will not cause injury to other legal users of water. In addition to the "no injury" rule, the Water Board must find that the project as approved will not unreasonably adversely impact fish, wildlife, public interest, or the Public Trust.

The hearing parties include counties, cities, water contractors, local agencies, environmental groups, landowners, and community members, all of whom have organized to participate, voice their concerns, and protect their respective interests. The WaterFix Change Petition hearing has been described as "the largest and most complex in the state's history," in large part because of the number of participants, the volume of evidence in the administrative record, and the widespread implications the Water Board's decision will have on all Californians.<sup>6</sup>

### II. THE DELTA AS PLACE

The Sacramento-San Joaquin Delta is intrinsically tied to California's history. In the same year California became a state, Congress passed the Swamp Land Act of 1850,<sup>7</sup> authorizing the transfer of title for wetlands to private owners on the condition that the lands be reclaimed. Large portions of the Sacramento-San Joaquin Delta were subsequently transformed from a tidal freshwater

marsh and other wetlands into fertile farmland by the late 1800s.<sup>8</sup> The Delta is now the largest continuous swath of Prime Farmland in the state, and its farmers rely on some of the most senior riparian and pre-1914 water rights in the state due to the early establishment of farming in this agriculturally productive area.<sup>9</sup>

As the nexus for two of the state's largest rivers, the Delta provides at least a portion of the freshwater supply for two-thirds of California's population and a large percentage of the state's irrigated acreage. The Delta is where California's two major water infrastructure projects—the CVP and SWP—export water to meet contractual commitments to contractors throughout the state. The Delta is also host to a number of threatened and endangered fish and wildlife species including the 3-inch Delta smelt, part of the migratory corridor for anadromous fish such as the winter run Chinook salmon, and a critical stopping point for migratory birds on the Pacific Flyway.

The Delta is tidally influenced and management of salinity encroachment and freshwater flows is crucial to both the ecological health of the Delta as well as its beneficial water uses. The Bay-Delta Water Quality Control Plan, as implemented by Water Rights Decision 1641 ("D-1641"), requires the CVP and SWP to meet certain water quality standards in the Delta as established by the Water Board. 12 Additionally, DWR and Reclamation are obligated to operate their respective projects pursuant to Biological Opinions issued by the United States Fish and Wildlife Service and the National Marine Fisheries Service to protect species covered by the Endangered Species Act.<sup>13</sup> Biological Opinions from 2008<sup>14</sup> and 2009<sup>15</sup> require DWR and Reclamation to restore approximately 28,000 acres of habitat to mitigate the impacts of their existing project operations in the south Delta.<sup>16</sup>

The Sacramento-San Joaquin Delta Reform Act of 2009 requires the imposition of appropriate Delta flow criteria and defines California's co-equal water policy goals of providing a reliable water supply for the state and protecting the Delta ecosystem in furtherance of the "Delta as an evolving place." The 2016 California Water Action Plan states, California's "water management system is currently unable to satisfactorily meet both ecological and human needs" and provides that "[t]o be sustainable, solutions must strike a balance between the need to provide for public health and safety[,] protect the environment, and support a stable California economy." 18

According to its advocates, the new diversions proposed under WaterFix stem from the desire to improve and update the existing Delta conveyance systems, while preserving the vulnerable species populations that rely on Delta waters. DWR and Reclamation began working on the predecessor to WaterFix, the Bay Delta Conser-

vation Plan ("BDCP"), in 2006. The BDCP included both the construction of the Delta Tunnels and measures aimed at improving the ecological health of the Delta estuary through a 50-year federal Habitat Conservation Plan ("HCP") and state Natural Communities Conservation Plan ("NCCP"). To this end, the BDCP included restoration of more than 100,000 acres of wetland and wildlife habitat. The Draft Environmental Impact Report/Environmental Impact Statement ("DEIR/EIS") for the BDCP was released for public comment in December 2013.

While the restoration goals of the BDCP were lauded by some, the effectiveness, feasibility and appropriateness of that scale of land use changes on productive, and largely privately-owned, farmland received significant public scrutiny.<sup>21</sup> After nearly 10 years of developing the BDCP, the agencies retooled their approach in 2015, abandoning the HCP/NCCP and issuing a Recirculated Draft EIR/Supplemental Draft EIS ("RDEIR/SDEIS") under the "WaterFix" moniker. DWR and Reclamation removed the habitat restoration components in light of the uncertainties posed by a 50-year conservation plan, but stated they still aim to satisfy the "co-equal goals" of providing a more reliable water supply along with protecting, restoring, and enhancing the Delta ecosystem. These goals are now being advanced under a separate effort, dubbed "EcoRestore," which reduces the scope of restoration to 30,000 acres—about 28,000 acres of which was already required under the 2008 and 2009 Biological Opinions—and will be further defined and pursued at an unspecified later date.<sup>22</sup>

### III. PETITION FOR CHANGE HEARING<sup>23</sup>

On August 26, 2015, DWR and Reclamation submitted a petition to the Water Board requesting to add three points of diversion to existing water right permits for the tunnels proposed as part of the WaterFix Project.<sup>24</sup> The three new intakes, each with a capacity of 3,000 cubic feet per second, are proposed to be constructed along the east bank of the Sacramento River to purportedly provide more operational flexibility for the SWP and CVP to move water to the Westside San Joaquin Valley, to Kern County and Southern California.<sup>25</sup> Under WaterFix, the Petitioners would be permitted to use the new northern diversion in conjunction with the existing SWP and CVP export facilities in the southern Delta.<sup>26</sup>

Though DWR and Reclamation contend WaterFix will not alter existing places of use, manners of use, quantities of diversion, or other objectives and conditions as identified in D-1641, legal users of water throughout the Sacramento Valley, in the Delta, and in the San Joaquin Valley have protested the petition on the basis that their water rights would be harmed by the project. For example, the undefined flexibility and adaptive management provisions undergirding the WaterFix proposal make it

unclear how the new diversions will actually be operated. Numerous groups also challenged the Petition on the grounds that WaterFix would impair fish and wildlife resources, contravene the Public Trust and public interest, and fail to meet "appropriate Delta flow criteria" as prescribed by the Delta Reform Act.<sup>27</sup> The Water Board bifurcated the hearing to be conducted in two parts, with Part 1 focusing on impacts to human uses of water, flood control, and environmental justice issues, and Part 2 addressing environmental impacts, fishery health, and recreation.<sup>28</sup> Upon request by protesting parties, Part 1 of the hearing was further divided into Part 1A, in which the Petitioners would first put on their case-in-chief for Part 1 issues, and Part 1B, in which participating parties would present their own evidence.29 The Water Board also determined that the hearing need not be delayed for purposes of the ongoing parallel review of the RDEIR/ EIS for WaterFix or future updates to the Bay-Delta Water Quality Control Plan.30

### A. Part 1A: Petitioners' Case in Chief

Part 1A of the Change Petition took place over 16 days in fall 2016, during which expert witnesses from DWR and Reclamation presented their direct testimony and answered cross-examination questions by participating parties. In support of their case in chief, DWR and Reclamation presented five panels of witnesses regarding various aspects of the project including: a general project overview; engineering overview; operations; modeling; and water rights, to argue that WaterFix would not result in injury to any legal users of water.<sup>31</sup>

First, the Petitioners' project overview panel was led by Jennifer Pierre, a consultant for DWR who served as a project manager in the development of the WaterFix project and related environmental review documents, and the current General Manager for the State Water Contractors. Ms. Pierre testified that, although an operations plan for the proposed tunnels has not yet been determined, the Petitioners would show that the changes sought would not injure legal users of water by presenting the effects under two modeled operational "bookends," named Boundary 1 and Boundary 2.32 According to Ms. Pierre, the boundaries do not necessarily represent the WaterFix project, but consideration of the two scenarios would ensure that any operations within that range will also have been considered.33 Although Ms. Pierre initially testified that upstream operations of the SWP and CVP would not change under WaterFix, she clarified upon cross-examination that operations would be different, but the Petitioners did not assume any changes in the regulatory criteria governing operations.34 This highlighted a central unresolved issue of whether the existing regulatory parameters can prevent all injuries under all of the scenarios within the broad proposed operating range.

Second, DWR and Reclamation presented a panel of witnesses on project engineering led by John Bednarski, an engineer for the Metropolitan Water District of Southern California, who worked as lead engineer on the 2015 Conceptual Engineering Report for the project. Mr. Bednarski provided an overview of the engineering specifications and refinements for the proposed WaterFix facilities, including the intakes, tunnels and modifications to pumping plants, and mitigation of construction impacts.<sup>35</sup> Mr. Bednarski's testimony was limited to impacts resulting from the construction, not operation, of the new tunnels, based on a conceptual level of design.<sup>36</sup>

Third, the Petitioners presented a panel discussing how the CVP and SWP might be operated under WaterFix, featuring John Leahigh for DWR and Ron Milligan for Reclamation. They explained that the proposed project would operate under "real-time" and "adaptive" management in order to avoid injury to legal users of water.<sup>37</sup> The operations witnesses testified that the CVP and SWP have historically been successful in achieving operational compliance with regulatory criteria and objectives most of the time, which suggests that they could meet future objectives under WaterFix's so-called additional flexibility.38 Neither witness, however, could provide details of the proposed future operations to support their assurances, given the project's wide operational latitude.39 Mr. Leahigh more generally described the proposed northern diversion facilities an additional "knob" the Petitioners could turn in addition to their ability to release stored water and export from the southern Delta facilities to meet flow level and salinity objectives in the Delta.40

Fourth, Petitioners' modeling panel presented direct testimony on the computer modeling that simulated how operation of the CVP and SWP with the Delta Tunnels would compare to a simulation of the projects without the Delta Tunnels. The modeling panel was headed by Armin Munevar, a modeling consultant, and Dr. Parviz Nader-Tehrani of DWR, both of whom stressed that the modeling information presented by Petitioners can only be used for comparative purposes rather than as a predictive tool.41 Specifically, the models were used to evaluate projected differences in water supply, water quality, and water levels that may affect legal users of water, as between the proposed project and the No Action Alternative. 42 They asserted that any scenarios in which an impact did appear to occur in the modeling could be resolved by the operators in real-time.43 In other words, the modeling can tell whether certain water deliveries will increase or decrease under the proposed project relative to the modeled No Action alternative, but cannot be used to predict future conditions.

The Petitioners presented a final witness panel on water rights. The purpose of the water rights testimony was to support Petitioners' position that construction and

operation of the new diversions would not injure other legal users of water or initiate a new water right. Maureen Sergent of DWR and Ray Sahlberg of Reclamation testified that they believed the Petitioners provided sufficient information for the Water Board to find that the WaterFix, as proposed, would not create a new water right or cause injury to other legal users.44 According to Ms. Sergent, although there will likely be changes in water levels and water quality during certain periods, the Petitioners will continue to abide by their obligations under D-1641, which acts as a blanket protection to legal users.45 Ms. Sergent also testified that DWR believes that it has an exclusive right to its stored water and while it may change release schedules under WaterFix, no water user has a right to those releases and thus there can be no injury.46 Mr. Sahlberg similarly testified that there will be no injury to any CVP contractors because Reclamation will still comply with the terms and conditions of its water service contracts and other legal obligations.47 On cross-examination, however, Ms. Sergent admitted that DWR had not investigated any individual points of diversion in the Delta to determine whether a specific diversion could suffer injury, even if D-1641 were complied with.48

### B. Part 1B: Protestants' Cases in Chief

Part 1B began on October 20, 2016, and also took place over 16 days. During Part 1B, protesting parties were given the opportunity to present their cases-in-chief, which largely consisted of identifying their respective water rights and describing how WaterFix would interfere with the exercise of those rights.<sup>49</sup> Many parties argued that changes in surface water quality, quantity, or elevation, as well as indirect changes to groundwater resources and wells could adversely impact their existing water uses.50 Other parties described how increased salinity in irrigation water, and consequently in the soils, could reduce agricultural productivity in the Delta.51 Flood control agencies expressed concerns that extended construction of the tunnels and facilities may destabilize vulnerable Delta levees.<sup>52</sup> Parties protesting on environmental justice grounds argued that the Petitioners failed to adequately consider impacts to tribal traditional uses like subsistence fishing and other cultural purposes.53

Several parties enlisted their own engineering consultants to review the Petitioners' modeling output data, question the methodologies used, and provide supplemental modeling and testimony to address those issues. For example, a number of different parties, coordinating as the Sacramento Valley Water Users ("SVWU"), presented expert testimony and analysis that indicated the Petitioners' modeling did not realistically utilize the additional conveyance capacity that would be made available by the tunnels. Rather, Petitioners' modeling artificially limited export capacity in a manner that over-

stated upstream carryover storage levels for the following year.<sup>54</sup> By ignoring that additional capacity and the flexibility it would provide to CVP and SWP operators to export water, the SVWU argued the Petitioners' boundary analysis concealed additional impacts to upstream storage reservoir levels.<sup>55</sup> The SVWU's adjusted modeling showed that a more realistic operation of the proposed tunnels in one year could result in significant reductions to carryover storage in project reservoirs and interfere with Reclamation's ability to meet water needs in a subsequent dry year.<sup>56</sup>

### C. Evidentiary Objections

By the conclusion of Part 1B, the Petitioners and other parties submitted numerous objections to the admissibility of various exhibits and testimony that had been introduced throughout the hearing. Objections touched on procedural issues like relevance, foundation issues, and hearsay, as well as more substantive matters like whether the Petitioners provided sufficient information for the Water Board to make a fully-informed decision.<sup>57</sup> The Water Board issued a ruling on February 21, 2017, rejecting the majority of objections for being too argumentative or improperly attacking the weight or credibility of evidence rather than admissibility.<sup>58</sup> As the ultimate fact-finders, the Hearing Officers tend to consider all relevant evidence available and discount as evidence that which they deem less reliable.<sup>59</sup>

However, the Water Board notably sustained an objection to the Petitioners' submission of the physical model output information for the project because it was submitted as an exhibit after the deadline.60 The omitted output data were repeatedly referenced by the Petitioners' witnesses during cross-examination to support their conclusion that there would be no injury to water users in locations outside of those expressly reflected in the Petitioners' admitted exhibits.61 Petitioners have resubmitted the excluded model output data as part of their rebuttal evidence, though it remains to be seen whether it will be accepted; rebuttal is typically limited to evidence that could not have been presented during a case-in-chief. Exclusion of that data could potentially limit the Petitioners' ability to satisfy their burden of proof to show there will be no injury to any legal users.

The February 21 ruling also established a rebuttal schedule to address points raised by the parties in Part 1 testimony and cross-examination. The Part 1 rebuttal phase, during which the parties may present responsive evidence and testimony, commenced in late April 2017 and will continue for as long as necessary. Part 2, which will address Waterfix's potential effects on fish, wildlife, and the public interest, will begin sometime later in 2017.

In parallel with the change petition hearing proceedings, Reclamation and DWR issued a Final EIR/EIS for the BDCP/WaterFix Project on December 22, 2016.<sup>63</sup> The

Final EIR/EIS included approximately 73,000 pages of analysis of environmental impacts, potential mitigation measures, and responses to comments that may contain relevant information for Part 2 of the hearing. While certain protesters argued that the hearing process should be delayed given the volume of potentially new information in the Final EIR/EIS,<sup>64</sup> the hearing officers opted not to delay the proceedings further.<sup>65</sup>

Although the sufficiency of the Final EIR/EIS under the California Environmental Quality Act ("CEQA")66 or the National Environmental Protection Act<sup>67</sup> is not the focus of any part of the WaterFix Change Petition hearing, mitigation measures have been cited by Petitioners as avoiding injury to water rights holders<sup>68</sup> and environmental impacts have been slated for consideration by the hearing officers in Part 2 of the hearing. With regard to the Part 1 issue of impacts on human uses of water, DWR and Reclamation did not submit the Final EIR/ EIS as part of their rebuttal evidence. This could mean that any of the modifications to mitigation measures contained in the Final EIR/EIS that pertain to avoidance of injury may not be presented as part of this hearing. In any case, the Water Board is a responsible agency under CEQA<sup>69</sup> and, as such, it would ultimately rely on the Final EIR/EIS and any supplements or revisions to satisfy its own legal obligations.

### IV. CONCLUSION AND IMPLICATIONS

The Change Petition hearing for the California WaterFix project rivals the complexity of the hearings that led up to Water Right Decision 1485 in 1978 and D-1641 in 2000. Both of those decisions resulted in fundamental changes to California's water management system. If the requested water rights changes are granted, it is possible that the hearing will lead to major and long-lasting changes in California's water management system. Or not. Part 2 of the hearing is slated to continue well into 2018, and extensive litigation will likely follow the Water Board's decision, regardless of outcome.

Whether the so-called "WaterFix" would actually "fix" California's long-standing water challenges or will merely add to them remains to be seen. The project would add new points of diversion that could be used when pumping conditions are not ideal in the southern Delta. With the broad range of operating criteria proposed and an emphasis on "adaptive management" to guide future operations once built, however, critics worry that the project would lack adequate constraints to protect other water users, endangered fish and the Delta more generally. During low flow periods, some fear this project could lead to permanent drought conditions in the Delta. WaterFix also does not propose any improvements to the levee system necessary to continue diversions in the southern Delta, raising concerns that the existing "through-Delta" pathway for SWP and CVP diversions

may be eventually abandoned altogether. By reducing freshwater flows into the Delta from the Sacramento River, WaterFix would also increase salinity levels, at least incrementally, in locations throughout the Delta. Delta advocates argue these and other water quality impacts threaten the continued viability of currently productive Delta farmlands and injure other beneficial uses of Delta water. With the habitat restoration requirements from the 2008/2009 Biological Opinions still largely unimplemented, combined with concerns about a host of new environmental impacts from construction and operation of the proposed WaterFix diversion points and facilities, it is unclear when conditions for Delta species and fisheries will improve.

DWR and Reclamation appear prepared to move forward with WaterFix without holding any of their own public hearings, making the Water Board process the main public venue in which affected water users, environmental groups and other interests can illuminate their concerns. While the outcome of the Water Board process is unknown, the one sure thing is that it will be an interesting process to watch.

### **ENDNOTES**

- \* Austin C. Cho is an associate attorney in the Water Practice Group of Downey Brand LLP. He assists public and private entities in water rights disputes, administrative proceedings, and environmental compliance. Mr. Cho is counsel to a number of Downey Brand LLP's clients that have protested the petitions by DWR and Reclamation in the WaterFix proceedings. The opinions offered in this article are those of the author and not of Downey Brand LLP or its clients.
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- 29. California WaterFix Project Pre-Hearing Conference Ruling, February 11, 2016, pp. 1, 6-7.
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- 41. California WaterFix Hearing Transcript, Vol. 13, August 23, 2016, p. 47.
- 42. Id. at p. 85.
- 43. Department of Water Resources, Testimony of Parviz Nader-Tehrani, Exhibit DWR-66, May 27, 2016, p. 11, available at http://www.waterboards. ca.gov/waterrights/water\_issues/programs/bay\_ delta/california\_waterfix/exhibits/docs/petitioners\_ exhibit/dwr/dwr\_66.pdf.

- 44. Department of Water Resources, Testimony of Maureen Sergent, Exhibit DWR-53, May 31, 2016, pp. 2-3, available at http://www.waterboards.ca.gov/ waterrights/water\_issues/programs/bay\_delta/cal ifornia\_waterfix/exhibits/docs/petitioners\_exhibit/ dwr/dwr\_53.pdf.
- 45. California WaterFix Hearing Transcript, Vo. 17, September 22, 2016, p. 14.
- 46. Ibid.
- 47. Id. at p. 29.
- 48. California WaterFix Hearing Transcript, Vol. 18, September 23, 2016, pp. 13, 41.
- 49. See generally, State Water Resources Control Board, Other Parties' Part 1B Exhibits and Rebuttal Exhibits, updated April 12, 2017, available at http:// www.waterboards.ca.gov/waterrights/water\_issues/ programs/bay\_delta/california\_waterfix/exhibits (last visited April 13, 2017).
- See, e.g., North Delta Water Agency, Exhibit NDWA-3, Testimony of Gary Kienlen, pp. 11-12, available at http://www.waterboards.ca.gov/waterrights/water\_issues/programs/bay\_delta/california\_water fix/exhibits/docs/NDWA%20et%20al/ndwa\_003.pdf.
- 51. See, e.g., Islands, Inc., Exhibit IL-13, Testimony of Michelle Leinfelder-Miles, July 12, 2016, pp. 2-4, available at http://www.waterboards.ca.gov/waterrights/water\_issues/programs/bay\_delta/california\_waterfix/exhibits/docs/Islands/II\_13.pdf.
- 52. Delta Flood Control Group, Exhibit DFCG-1, Testimony of Gilbert Cosio, pp. 5-9, available at http://www.waterboards.ca.gov/waterrights/water\_ issues/programs/bay\_delta/california\_waterfix/ exhibits/docs/BALMD%20et%20al/dfcg\_01.pdf.
- 53. See, e.g., Restore the Delta, Exhibit RTD-20, Testimon y of Barbara Barrigan-Parrilla, August 30, 2016, p. 23, available at
- 54. Sacramento Valley Water Users, Exhibit SVWU-107, MBK Engineers, California WaterFix Modeling, August 30, 2016, p. 27, available at http://www. waterboards.ca.gov/waterrights/water\_issues/pro grams/bay\_delta/california\_waterfix/exhibits/docs/ SVG/svwu 107.pdf.
- 55. Sacramento Valley Water Users, Exhibit SVWU-100, Testimony of Walter Bourez, p. 2, available at http://www.waterboards.ca.gov/waterrights/water\_issues/programs/bay\_delta/california\_waterfix/exhibits/docs/SVG/svwu 100.pdf.

- 56. Sacramento Valley Water Users, Exhibit SVWU-108, MBK Engineers, Example Effect of California WaterFix on Upstream Reservoir Storage, August 31, 2016, available at http://www.waterboards.ca.gov/ waterrights/water\_issues/programs/bay\_delta/cali fornia\_waterfix/exhibits/docs/SVG/svwu\_108.pdf.
- 57. See generally, State Water Resources Control Board, Written Objections and Responses to Part 1B Cases-in-Chief, available at http://www.water boards.ca.gov/waterrights/water\_issues/programs/ bay delta/california waterfix/part1bobjection.shtml.
- 58. Ruling on Evidentiary Objections to Admission of Testimony and Exhibits into Evidence, Establishment of Deadline for Rebuttal Testimony and Exhibits, and Notice of Rebuttal Hearing Dates, February 21, 2017, p. 4.
- 59. Id. at p. 3.
- 60. Id. at p. 24.
- 61. See, e.g., California WaterFix Hearing Transcript, Vol. 13, August 23, 2016, pp. 202-204 (Petitioners' modeling expert states that specific data for specific locations are only available in model output); id. at 214-215 (data showing amount of water delivered once Folsom reservoir drops below 90,000 acrefeet are only available in model output); id. at pp. 287-289 (exceedance charts of carryover water moved in the fall are only available in model output); California WaterFix Hearing Transcript, Vol. 14, August 24, 2016, p. 19 (analysis of velocity or flow in the Delta is only contained in model output, not Petitioners' case in chief).
- 62. Ruling on Evidentiary Objections to Admission of Testimony and Exhibits into Evidence, Establishment of Deadline for Rebuttal Testimony and Exhibits, and Notice of Rebuttal Hearing Dates, February 21, 2017, Attachment A.
- 63. Department of Water Resources and U.S. Bureau of Reclamation, Bay Delta Conservation Plan/California WaterFix Final EIR/EIS, 2016, available at http://baydeltaconservationplan.com/FinalEIREIS.aspx.
- 64. See LAND letter to Hearing Officers re: New Information Pertaining to CWF Hearing Process in BDCP/CWF Final Environmental Impact Report/ Statement , Feb. 16, 2017, available at http://www.waterboards.ca.gov/waterrights/water\_issues/programs/bay\_delta/california\_waterfix/docs/petitions/2017feb/20170216\_land\_ltr.pdf.

- 65. See Ruling on Evidentiary Objections to Admission of Testimony and Exhibits into Evidence, Establishment of Deadline for Rebuttal Testimony and Exhibits, and Notice of Rebuttal Hearing Dates, February 21, 2017, p. 2.
- 66. Cal. Pub. Res. Code, §§21000 et seq.
- 67. 42 U.S.C. §§ 4321 et seq.
- 68. See, e.g., Department of Water Resources, Exhibit DWR-57, Testimony of John Bednarski, May 31, 2016, p. 16.
- 69. See Cal. Pub. Res. Code, § 21069; 14 Cal. Code Regs., §§ 15096, 15381.
- See generally, California WaterFix: Significant Progress And Next Steps, available at http://cms.capi toltechsolutions.com/ClientData/CaliforniaWaterFix/ uploads/CWF\_ProgressReport20173.pdf.
- 71. California WaterFix Change Petition live and archived hearings, as well as transcripts can be accessed here: http://www.waterboards.ca.gov/waterrights/water\_issues/programs/bay\_delta/california waterfix/water right petition.shtml.