

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

ORDER WR 2016-

**In the Matter of Administrative Civil Liability Complaint
Against Byron-Bethany Irrigation District**

And

**In the Matter of Draft Cease and Desist Order
Against The West Side Irrigation District**

SOURCE: Intake Channel to the Banks Pumping Plant (formerly Italian Slough) and Old River, tributary to San Joaquin River

COUNTY: Contra Costa County and San Joaquin County

**ORDER DISMISSING THE ADMINISTRATIVE CIVIL LIABILITY COMPLAINT
AGAINST BYRON-BETHANY IRRIGATION DISTRICT
AND
DISMISSING THE DRAFT CEASE AND DESIST ORDER
AGAINST THE WEST SIDE IRRIGATION DISTRICT**

BY THE BOARD:

1.0 OVERVIEW

This order dismisses the administrative civil liability complaint (ACL Complaint), ENF01951, against Byron-Bethany Irrigation District (BBID) and dismisses the draft cease and desist order (Draft CDO), ENF01949, against The West Side Irrigation District (WSID). The actions brought by the State Water Resources Control Board's (State Water Board or Board) Division of Water Rights (Division) Prosecution Team (Prosecution Team) sought to impose enforcement orders against BBID and WSID for the allegedly unauthorized diversion of water from the southern portion of the Sacramento-San Joaquin Delta during the summer of 2015. Based on the evidence before us, we decline to issue the proposed orders.

2.0 FACTUAL AND PROCEDURAL BACKGROUND

Water years 2014 and 2015 were the third and fourth years of the most serious drought in the state's recorded history, with record low snowpack in the Sierra Nevada and substantial depletion of the state's stored water supplies. Communities faced drinking water shortages, urban water suppliers were mandated to reduce potable water use by 25 percent, and many agricultural water users were subject to continued and severe cutbacks in the delivery of water for irrigation.

On January 17, 2014, Governor Edmund G. Brown Jr., declared a State of Emergency in California due to severe drought conditions. (Proclamation No. 1-17-2014; WR-23.)¹ On April 1, 2015, Governor Brown issued Executive Order B-29-15, which found that the continuation of severe drought conditions presented urgent challenges across the state, including water shortages for municipal water use and agricultural production, increased wildfire risk, degraded habitat for fish and wildlife, threat of saltwater contamination to freshwater supplies, and additional water scarcity if drought conditions continued. (WR-31.) To combat the ongoing emergency conditions, the Executive Order directed the State Water Board to "bring enforcement actions against illegal diverters and those engaging in the wasteful and unreasonable use of water." (*Ibid.*)

In the early spring of 2014, the State Water Board notified thousands of water right holders that water could become unavailable to satisfy their priorities of right during the coming water year. (WR-24.) On May 27, 2014, the State Water Board notified all holders of post-1914 appropriative water rights in the Sacramento and San Joaquin watersheds that the information available to the State Water Board indicated that water was unavailable to serve their rights. (WR-26.) On January 23, 2015, the State Water Board again notified all water right holders that water could become unavailable during the water year to satisfy their priorities of right. (WR-29.) On April 23, 2015, the Board issued a "Notice of Unavailability of Water and Immediate Curtailment," which informed all holders of post-1914 appropriative water rights within the San

¹ Citations to the hearing record are indicated as follows:

Citations to the Reporter's Transcript: Citations to the Reporter's Transcripts are indicated by "RT," followed by the date of the transcript and page(s).

Citations to Exhibits: All citations in the evidentiary hearing record are designated by the name or abbreviation for the party that submitted the exhibit, followed by the exhibit number and the page number or other location of the cited information in the exhibit, if necessary. For example, Division of Water Rights Prosecution Team: Exhibit 1, page 1 would be cited as follows: (WR-1, p. 1.)

Joaquin River watershed of the apparent lack of available water. (WR-33.) On May 1, 2015, the State Water Board issued a second notice of unavailability, informing all holders of post-1914 appropriative water rights within the Sacramento River watershed of the apparent lack of available water. (WR-34.) On June 12, 2015, the State Water Board issued a third notice of unavailability, informing all holders of water rights of a priority of 1903 or later within the Sacramento or San Joaquin River watersheds, including the Delta, of the apparent lack of available water. (WR-36.)

BBID claims an appropriative water right with a priority date of May 18, 1914,² to divert water from the intake channel at the Banks Pumping Plant, formerly Italian Slough, in Contra Costa County. (WR-84; WR-4, ¶¶ 25 & 36.) On July 20, 2015, the Assistant Deputy Director for the Division issued the ACL Complaint against BBID. (WR-4.) The complaint alleges that BBID “diverted and used water in violation of California Water Code section 1052, subdivision (a),” (WR-4, ¶ 1), when there was a “lack of available water supply under the priority of the right,” (WR-4, ¶ 31). The complaint alleges that BBID’s unauthorized diversion began on June 13, 2015, and continued until June 25, 2015, (WR-4, ¶ 33), and asserts that “[t]hese unauthorized diversions have reduced or threatened to reduce the amount of water available for downstream water right holders during an extreme drought emergency. Moreover, BBID’s diversions likely reduced the water available for instream resources and riparian habitat within the Delta during an extreme drought emergency.” (WR-4, ¶ 36.) The complaint proposes a penalty of \$1,553,250. (WR-4, ¶ 40.)

WSID holds water right License 1381, issued on September 29, 1933, with a priority date of April 17, 1916. (WR-112.) The license authorizes the direct diversion of 82.5 cubic feet per second (cfs) from Old River in San Joaquin County from about April 1 to October 31 of each year for municipal, domestic, industrial and irrigation uses. (*Ibid.*) On May 18, 2015, staff from the Office of the Delta Watermaster inspected the pumping station of WSID. (WR-134.) Staff observed that two of WSID’s pumps were diverting water from Old River at an estimated rate of 8 cfs. (*Ibid.*) On July 16, 2015, the Assistant Deputy Director for the Division issued the Draft CDO against WSID. (WR-1.) The Draft CDO alleges that WSID “is violating, or is threatening to violate, the prohibition set forth in Section 1052 against the unauthorized diversion or use of

² BBID claims an appropriative water right with a priority date prior to the effective date of the Water Commission Act; these rights are commonly referred to as “pre-1914” water rights.

water ... based on lack of available water supply under the priority of the right." (WR-1, ¶¶ 34 & 35.)

Other interested parties joined these proceedings and were granted the opportunity to submit evidence and legal arguments. (Procedural Ruling, September 11, 2015, ENF01951; Procedural Ruling, October 8, 2015, ENF01949.) In addition to the Prosecution Team and BBID, the parties to the enforcement action against BBID included Central Delta Water Agency, South Delta Water Agency, City and County of San Francisco, California Department of Water Resources (DWR), San Joaquin Tributaries Authority, State Water Contractors, Patterson Irrigation District, Banta-Carbona Irrigation District, and Mr. Richard Morat. In addition to the Prosecution Team and WSID, the parties to the enforcement action against WSID included Central Delta Water Agency, South Delta Water Agency, City and County of San Francisco, DWR, San Joaquin Tributaries Authority, State Water Contractors, and Westlands Water District.

The evidentiary hearings for the enforcement proceedings against BBID and WSID were initially scheduled to occur separately. Upon request of a majority of the parties, the hearing officers consolidated the portions of the hearings to address the availability of water for diversion under BBID and WSID's claims of right during the relevant time periods. (Procedural Ruling, December 16, 2015.) The consolidated portion of the evidentiary hearing commenced on March 21, 2016.

The Prosecution Team presented testimony about the method used to calculate whether water was available for diversion under the respective claims of right. At the close of the Prosecution Team's presentation of its case-in-chief concerning water availability, several parties moved for dismissal of the enforcement proceedings on the basis that the Prosecution Team had failed to carry its burden of proof. (RT, March 22, 2016, pp. 7-11.) The hearing officers requested oral briefing from the parties on the following day regarding the motion.

On the morning of March 23, 2016, the parties presented oral arguments in support and in opposition to the motion for dismissal and the Prosecution Team filed a written opposition to the motion. That afternoon, the hearing officers allowed the Prosecution Team an additional opportunity to conduct redirect examination of their witnesses. The hearing officers then permitted the opposing parties to cross-examine the witnesses about matters raised during

redirect. The Prosecution Team rested its case at the close of the hearing on March 23, 2016, after which time the hearing officers suspended the remaining portion of both evidentiary hearings. (Procedural Ruling, March 25, 2016.) On April 20, 2016, the hearing officers issued a procedural ruling closing the evidentiary record in both matters. (Procedural Ruling, April 20, 2016.)

3.0 AUTHORITY OF THE STATE WATER BOARD

Before addressing the substance of the motion before us, we are presented with a threshold matter regarding the Board's authority over the ACL Complaint against BBID. BBID seeks dismissal of the complaint for failure to state any basis in law on which the proposed administrative penalty may be assessed. (Motion to Dismiss ACL for Lack of Statutory Authority under Water Code Section 1052, January 25, 2016.) BBID asserts that the Board's authority under Water Code section 1052 does not extend to diversions by a pre-1914 appropriative water right holder when water is unavailable under the water right holder's priority of right.

3.1 Water Rights in California

Our examination of the scope of the State Water Board's authority under Water Code section 1052 requires some understanding of California's dual system of water rights and the role of the Board in the administration of those rights.

"California operates under a 'dual' or hybrid system of water rights which recognizes both doctrines of riparian rights and appropriation rights." (*United States v. State Water Resources Control Bd.* (1986) 182 Cal.App.3d 82, 101 [quoting *People v. Shirokow* (1980) 26 Cal.3d 301, 307].) Riparian rights are conferred with the ownership of land contiguous to a watercourse and do not require a permit or license from the Board. In contrast, "the appropriation doctrine confers upon one who actually diverts and uses water the right to do so provided that the water is used for reasonable and beneficial uses and is surplus to that used by riparians or earlier appropriators." (*United States v. State Water Bd.*, *supra*, 182 Cal.App.3d at p. 101.)

The principle of first in time, first in right, is fundamental to the appropriative system. "One of the essential elements of a valid appropriation is that of priority over others.... [S]o long as [the right holder] continues to apply the water to a beneficial use, subsequent appropriators may not deprive him of the rights his appropriation gives him, by diminishing the quantity or deteriorating the quality of the water." (*Joerger v. Pacific Gas & Electric Co.* (1929) 207 Cal. 8, 26.) The

priority of an appropriative right is an essential element of the scope of that right, on the same footing in defining the right as the quantity of diversion, place of use, and purpose of use.

Before the effective date of the Water Commission Act on December 19, 1914, compliance with statutory requirements was not necessary to obtain a valid appropriative right. A right could be obtained simply by diverting water and applying it to a beneficial use. (See *Nevada County & Sacramento Canal Co. v. Kidd* (1869) 37 Cal. 282, 311-12.) “So long as the diverter acted with due diligence to achieve the intended diversion, did in fact divert within a reasonable time, and used the diverted water for a beneficial purpose, the claim was perfected and had priority over any later established claim.” (*Millview County Water Dist. v. State Water Resources Control Bd.* (2014) 229 Cal.App.4th 879, 890 [citing *Haight v. Costanich* (1920) 184 Cal. 426, 431-33].) The appropriator also had the option of complying with the statutory method of appropriation provided for in the Civil Code by posting a notice at the intended point of diversion and recording a copy of the notice with the county in which notice was posted. (Civ. Code, §§ 1415-18.)

The Water Commission Act of 1913 established a comprehensive system of state management over the diversion and use of surface waters and subterranean streams that replaced the common law and statutory methods of appropriation. (See Wat. Code, § 1225; *Pleasant Valley Canal Co. v. Borror* (1998) 61 Cal.App.4th 742, 777.) The Act created a state water commission to administer the permitting and licensing program for new appropriations (Stats. 1913, ch. 586, §§ 15-23); investigate pre-1914 water rights and the availability of unappropriated water (*Id.*, § 10); conduct stream system adjudications (*Id.*, §§ 24 - 36); supervise the distribution of water in accordance with the established priorities (*Id.*, § 37); and prevent the illegal diversion of water by initiating court proceedings to enjoin unauthorized diversion or use (*Id.*, § 38). The powers of the water commission are now vested in the State Water Board, which is the regulatory agency charged with the administration of water rights in California. (*Shirokow, supra*, 26 Cal.3d at p. 308 fn. 8.)

The scope of the Board’s authority to manage the state’s surface water resources is both broad and comprehensive. “[D]eclarations of policy [in Wat. Code, §§ 100, 102, 104 & 105] together with the comprehensive regulatory scheme set forth in section 1200 et seq. demonstrate a legislative intent to vest in the board expansive powers to safeguard the scarce water resources of the state.” (*Shirokow, supra*, 26 Cal.3d at p. 309.) The Board has the exclusive authority to

issue permits and licenses for new appropriations, (Wat. Code, Division 2, Part 2), and has the responsibility to conduct investigations to determine the availability of unappropriated water and the validity of existing rights (Wat. Code, §§ 1051, 1052, 1201, & 1202). The Board is empowered, in conjunction with the authority of the courts, to conduct comprehensive adjudications respecting all rights to surface water in a given stream system. (Wat. Code, Division 2, Part 3 (commencing with § 2500).) The Board is charged by the state's constitution and supporting statutory language to prevent the waste or unreasonable use of water, regardless of the basis of right under which the use is claimed. (See Cal. Const., art. X, § 2; Wat. Code, § 275; *Imperial Irrigation Dist. v. State Wat. Resources Control Bd.* (1990) 225 Cal.App.3d 548, 557-61.) The Board also has the obligation to protect the interests of the public in trust resources, including interests in commerce, fisheries, recreation, and ecology. (*National Audubon Society v. Superior Court* (1983) 33 Cal.3d 419; see generally *In re Water of Hallett Creek Stream System* (1988) 44 Cal.3d 448, 472 fn. 16.)

3.2 Text and History of Water Code section 1052, subdivision (a)

Water Code section 1052 declares that “[t]he diversion or use of water subject to this division other than as authorized in this division is a trespass,” (Wat. Code, § 1052, subd. (a).) and authorizes the Board to impose penalties administratively or request the Attorney General to seek a judicial remedy.

The diversion or use of water “subject to this division” excludes those diversions or uses of water made pursuant to a valid right that existed as of the effective date of the Water Commission Act. Diversions made under these preexisting rights are not subject to Division 2 of the Water Code because the diversions were authorized by prior law and do not require a permit from the Board. Any diversion or use of water that is not so authorized is a new appropriation for which the diverter must obtain a permit. A diversion or use of water that exceeds the scope of a pre-1914 or riparian water right, whether in quantity, timing, place of use, purpose of use, or priority, unless permitted by the Board, is an unauthorized diversion “subject to this division” and subject to enforcement under Water Code section 1052.

A brief examination of the origin of section 1052 confirms our understanding. Section 1052 codifies section 38 of the Water Commission Act, which stated, “[t]he diversion or use of water subject to the provisions of this act other than as it is in this act authorized is hereby declared to be a trespass.” (Stats. 1913, ch. 586, § 38.) Section 38 clarified that as of adoption of the Act,

the diversion or use of water not within the scope of a valid existing water right or a permit or license from the water commission, was a trespass. Section 38 also empowered the water commission to protect vested water rights by granting the water commission standing to seek a court-issued injunction against unlawful diversion or use. In the context of the Act as a whole, section 38 was relatively unremarkable because the water commission was not granted independent authority to impose an administrative remedy for violations of the priority system but was required to petition the court to enjoin an alleged trespass.

In the aftermath of the severe drought in California in the 1977 water year, and the report of the Governor's Commission to Review California Water Rights Law, the Legislature expanded the Board's enforcement authority to allow the Board to take its own administrative enforcement actions against unauthorized diversions. "The Legislature's intent to expand the Board's authority into territory formerly occupied by the courts is made clear from the progression of legislation in this area." (*Millview, supra*, 229 Cal.App.4th at p. 895.) Section 1831, enacted in 1980, authorized the Board to issue a preliminary cease and desist order to enforce the terms of permits and licenses through its own administrative action. (Former Wat. Code, § 1831, added by Stats. 1980, ch. 933, § 13.) In 1987, the Legislature amended Water Code section 1052 to authorize the Board to petition the court to impose civil liability for the unauthorized diversion or use of water, in addition to seeking an injunction. (Former Wat. Code, § 1052, amended by Stats. 1987, ch. 756, § 1.) The amendment also granted the Board authority to administratively impose civil liability in critically dry years. (*Id.*, § 1, subds. (a) & (b).) In 1991, the Legislature removed the limitation that administrative civil liability only be imposed during years declared to be critical. (Former Wat. Code, § 1052, amended by Stats. 1991, ch. 1098, § 1, subds. (a) & (b).)

As a result of these legislative amendments to the Board's administrative powers, the Board may impose administrative civil liability for any unauthorized diversion or use of water. The Board is mandated by Water Code section 1825 to take vigorous action to prevent the unlawful diversion of water (Wat. Code, § 1825), and has the "authority to prevent illegal diversions ... regardless of the basis under which the right is held." (*Cal. Farm Bur. Federation v. State Water Resources Control Bd.* (2011) 51 Cal.4th 421, 429.)

3.3 Judicial Interpretation of the Board's Authority

The courts have consistently interpreted Water Code section 1052 and related provisions to allow the Board to investigate the validity and scope of pre-1914 and riparian water rights, and to bring an enforcement action against any diversion or use that is not authorized by a valid right.

In *Meridian, Ltd. v. City and County of San Francisco*, (1939) 13 Cal.2d 424, the California Supreme Court affirmed that the Board's investigatory power under section 10 of the Water Commission Act, later codified as section 1051, includes the authority to investigate the diversion or use of water under claim of a pre-1914 water right. "The State Water [Board] ... has the power under [the Water Commission Act] to investigate all streams of the state for the purpose of ascertaining whether the use of water therein is in conformity with the water appropriation laws of the state. And the power extends to the use of water made under appropriations or attempted appropriations acquired or asserted prior to the passage of the act." (*Id.*, at p. 450.)

More recent rulings of the courts in *Young v. State Water Resources Control Bd.*, (2013) 219 Cal.App.4th 397 (*Young*), and *Millview County Water Dist. v. State Water Resources Control Bd.*, (2014) 229 Cal.App.4th 879 (*Millview*), held that the Board is authorized by section 1052 to take enforcement action against a diverter who diverts outside of the scope of a claimed pre-1914 or riparian water right. In *Young*, the court held that Water Code section 1831 grants the board authority to determine whether a diversion and use is authorized by a valid pre-1914 right, and to issue a cease and desist order if the Board determines that the diversion is unauthorized. (*Young, supra*, 219 Cal.App.4th at pp. 403-407.) In *Millview*, the court clarified that the Board has the authority to make a preliminary determination as to the scope of a water right in addition to its validity. "Unauthorized diversion includes not merely the diversion of water under a claimed but invalid pre-1914 right, but also diversion beyond the proper scope of a valid pre-1914 right, whether because the diversion exceeds the maximum perfected amount of water under the right or because an intervening forfeiture has reduced the proper scope." (*Millview, supra*, 229 Cal.App.4th at p. 895.)

These cases support our conclusion that the Board is authorized to impose penalties pursuant to Water Code section 1052 when a diversion is made when water is unavailable under the priority of the diverter's claimed right. We see no relevant distinction between the Board's

authority to prevent the diversion of water that is not authorized because it is in excess of the quantity, place of use, or purpose of use of a diverter's right, and a diversion that is not authorized because water is not available under a diverter's priority of right. Any of these diversions is outside of the scope of the water right.

3.4 Arguments Raised by BBID and Other Parties

The opposing parties object that the Board has no authority to "regulate" pre-1914 or riparian water rights. These enforcement proceedings are not an effort to regulate the exercise of any valid right. Rather, the enforcement actions seek to prevent the diversion or use of water that is not authorized by the diverter's claim of right. Because the property interest in water is defined, in part, by the priority of the right, a diversion that is out of priority is a diversion that is outside of the bounds of the right.

BBID argues that there is "no allegation in the ACL Complaint that BBID diverted water in excess of its claimed pre-1914 water right." (BBID Motion to Dismiss, *supra*, p. 8.) This statement is in error. The complaint alleges that BBID diverted water when there was a "lack of available water supply under the priority of the right." (WR-4, ¶ 31.) If BBID diverted water when water was unavailable under its priority of right, then BBID did indeed divert water in a manner that is not authorized under its claimed pre-1914 water right. The enforcement action is no different than an action for a diversion without a basis of right (*Young, supra*, 219 Cal.App.4th 397), or a diversion in excess of a perfected right (*Millview, supra*, 229 Cal.App.4th 879).

BBID characterizes the *Young* and *Millview* decisions as merely supporting the proposition that the Board may prevent the diversion or use of unappropriated water. In neither case, however, was there any finding that unappropriated water was available, and in fact, both cases involved fully appropriated streams. (*Millview, supra*, 227 Cal.App.4th at p. 887; State Water Board [Order WR 98-08](#) at Exhibit A p. 46.) Certainly, the diversion of unappropriated water is a diversion subject to the permitting and licensing requirements in Division 2, and diversion of unappropriated water without a permit is a trespass. But any diversion made without a pre-existing basis of right is subject to the permitting authority of the Board; whether or not the water diverted is available for appropriation is a secondary matter. Therefore, the relevant question is not whether the water being diverted is unappropriated, but whether the water is being diverted and used pursuant to a valid pre-existing legal right.

As a practical matter, this is the only sensible reading of the statute. The interpretation suggested by BBID would authorize the Board to take enforcement action against illegal diversions when surplus water is available, but not when all of the available natural flow is needed to satisfy more senior rights. By this reading, the Board can enforce the priority system during wet years when there is no shortage in supplies, but is unable to do so during an historic drought when there may be insufficient supplies even for the most senior right holders. We cannot attribute this result either to the text of the statute or the intent of the Legislature.

3.5 Conclusion as to the Board's Authority

We conclude that the Board has the authority to take enforcement action pursuant to Water Code section 1052 against the unauthorized diversion of water under claim of a pre-1914 water right. The allegations in the ACL Complaint against BBID state a legal basis on which the Board may act if the Board finds those allegations are supported by the weight of the evidence. We therefore turn to the substance of the question before us concerning the Prosecution Team's case-in-chief.

4.0 BURDEN OF PROOF

The Prosecution Team bears the burden of proof in an enforcement proceeding. To prove its case, the Prosecution Team must demonstrate by a preponderance of the evidence the existence of each fact that is essential to the cause of action. (Evid. Code, § 500.)

At the close of the Prosecution Team's case-in-chief on the first day of the evidentiary hearing in these matters, the opposing parties submitted an oral motion for nonsuit. (RT, March 21, 2016, pp. 7-10.) The hearing officers had previously ruled that such motions would not be entertained during the course of the hearing, and were to be properly made either in the parties' written opening statement or closing briefs. (Procedural Ruling, February 18, 2016.) In addition, the nature of the motion being made was unclear – whether it was a traditional motion for nonsuit in which the decision-maker is “not permitted to judge the credibility of the witnesses, or weigh the evidence,” or whether it was a motion for judgment akin to a motion pursuant to section 631.8 of the California Code of Civil Procedure. (RT, March 21, 2016, p. 7; *Estate of Pack* (1965) 233 Cal.App.2d 74, 76-77.)

After considering the procedural context of the motion, and our role as the trier of both law and fact, we have determined to take the matter up on our own motion as a motion for judgment.

The purpose of a motion for judgment is to “enable the court, after weighing the evidence at the close of the plaintiff’s case, to find the plaintiff has failed to sustain the burden of proof, without the need for the defendant to produce evidence.... In weighing the evidence, the trial judge may exercise the prerogatives of a fact trier by refusing to believe witnesses and by drawing conclusions at odds with expert opinion.” (*Ford v. Miller Meat Co.* (1994) 28 Cal.App.4th 1196, 1200 [internal citations omitted].) The procedure allows the decision-maker to “avoid the unnecessary deferral of a ruling that otherwise could be made after the close of the plaintiff’s evidence.” (*Lingenfelter v. County of Fresno* (2007) 154 Cal.App.4th 198, 205.)

We do not generally allow parties to move for judgment during the course of an evidentiary hearing. The hearing officers explicitly directed the parties not to do so in these matters. We discourage any parties to a future proceeding before the Board from attempting to do so. However, we retain the discretion to consider whether to close the evidentiary portion of an enforcement proceeding after the Prosecution Team has presented its case-in-chief. With respect to these particular matters, we have determined that additional evidence is not necessary for us to reach a final determination.

4.1 The Prosecution Team’s Case-in-Chief

The basis of the enforcement actions against BBID and WSID was the “lack of available water supply under the priority of the right.” (WR-1, ¶ 35; WR-4, ¶ 31.) The burden of proof rests on the Prosecution Team to demonstrate by a preponderance of the evidence that water was unavailable to serve the priorities of right claimed by BBID and WSID. The Prosecution Team sought to make this showing by “comparing the current and projected available water supply with the total water right diversion demand.” (WR-1, ¶ 19; WR-4, ¶ 19; R.T., March 21, 2016, pp. 166-67.) We will refer to that comparison as the water availability analysis.

To determine water availability, the Prosecution Team relied upon the full natural flow of the contributing watersheds as calculated by DWR. “Full natural flow” or “unimpaired runoff” represents the natural water production of a river basin, unaltered by upstream diversions, storage, storage releases, or by export or import of water to or from other watersheds. (WR-9, p. 9.) In analyzing the amount of water supply available for diversion, the Prosecution Team used a combination of forecasted full natural flow values issued by DWR in Bulletin 120 and daily full natural flow data. (WR-9, p. 11.) The full natural flow amount is different than the measured stream flows at the given measurement points because the measured flows may be

higher or lower due to upstream operations. (WR-9, p. 9.) The Prosecution Team also added unimpaired flow data for smaller tributaries not included in DWR's full natural flow data to adjust the forecasted full natural flow. (WR-9, pp. 13-14.)

To determine water demand, the Prosecution Team relied on information supplied by water right holders. Prior to the adoption of Senate Bill No. 88 (2015–2016 Reg. Sess.), water right users were required to submit actual monthly use data to the Division every year, or every three years, depending on the nature of the right under which the diversion was made. (Former Cal. Code Regs., tit. 23, § 907 et seq., amended by State Water Board Resolution No. 2016-0005; former Wat. Code, § 5104, amended by Stats. 2015, ch. 27, § 18.) In February 2015, the Division issued an informational order that required the top 90 percent of riparian and pre-1914 water users by volume of diversion in the Sacramento and San Joaquin River watersheds, to submit their 2014 actual demands and their projected 2015 demands, and to make ongoing monthly reports of water use in 2015. ([Order WR 2015-0002-DWR](#).) The Prosecution Team used a combination of these reported data, with the exception of the 2015 monthly reported diversions, to calculate water demand by riparian, pre-1914, and post-1914 right holders. (WR-9, pp. 15-16.) The Prosecution Team made some adjustments to reported data to remove demand for non-consumptive uses and to reduce reported irrigation demand to no more than 8 acre-feet per acre. (*Id.*, p. 16.) The Prosecution Team also applied a 40 percent reduction to reported irrigation demand in the Delta, at the request of stakeholders, to account for return flows. (*Id.*, at p. 13.)

For purposes of comparing supply and demand available for diversion under WSID's license, the Prosecution Team considered supply from the Sacramento River watershed, and those demands allocated to the Sacramento River based on the percentage of monthly supply relative to the San Joaquin River. (WR-9, p. 8.) Delta water demands were allocated based on the percentage of monthly supply that came from each watershed. (*Ibid.*) For example, if during one month the majority of natural water supply entering the Delta came from the Sacramento River watershed, then the majority of Delta demand, for that month, was allocated to the Sacramento River watershed. (*Ibid.*) Since the natural water supply entering the Delta varies by month, so too did the percentage of demand allocated to the Sacramento and San Joaquin River watershed. (*Ibid.*) For purposes of comparing supply and demand available for diversion under BBID's claimed right, the Prosecution Team considered the entire geographic area of the Delta and the Sacramento and San Joaquin River watersheds. (WR-9, p. 8.)

The final result of the Prosecution Team's water availability analysis was a graphical representation of the daily available supply plotted against the monthly demands of riparian, pre-1914, and post-1914 water right holders. (WR-47, WR-48.) The Prosecution Team relies on these graphs to demonstrate that water was unavailable after May 1, 2015, and June 12, 2015, respectively, to serve the rights of WSID and BBID. (WR Opening Statement, pp. 8-9.)

4.2 Findings

The water availability analysis conducted by the Prosecution Team compiles diversion records from many thousands of diversion points into a complex and sophisticated pivot table. (See e.g., WR-77.) The resulting information and graphical depiction of supply and demand was, and will likely continue to be, an indispensable planning tool to forecast water availability for categories of rights when shortages are anticipated. These proceedings are not, however, an exercise in forecasting. We are asked to consider the accuracy of the water availability analysis to retrospectively determine the availability of water for particular right holders at particular times. For this purpose, we find that inconsistencies in the water availability analysis that the witnesses could not adequately explain preclude us from finding that the Prosecution Team has carried its burden of proof.

First, witnesses for the Prosecution Team agreed that the supply and demand data used in the analyses that supported the unavailability notices issued by the Board on May 1, 2015 (see WR-47), and June 12, 2015 (see WR-48), are not the most accurate information of water supply and demand in the Delta in May and June 2015 that is available for this proceeding. (RT, March 23, 2016, pp. 107 & 198.) The graphs depicted in WR-47 and WR-48 were generated as a forecasting tool. The graphs necessarily rely upon forecasted data to compare supply and demand. As of the date on which the Prosecution Team submitted the evidence in support of its cases-in-chief, the Prosecution Team had access to data based on measured conditions during the summer of 2015 in the form of daily full natural flow and reported diversions submitted by water users pursuant to the informational order. This measurement data is likely a more accurate reflection of water supply and demand at the time of the allegedly unauthorized diversions than the forecasted data relied upon in WR-47 and WR-48.

A comprehensive water availability analysis that incorporates the updated data sets is not provided in the record before us. WR-52 includes updated supply information, but does not

include updated demand information. WR-54 includes both updated supply and demand information, but is limited to Sacramento River Basin supply and proportionate Delta demand. Omitted from both WR-52 and WR-54 is an adjustment factor that was added to the forecasted supply in WR-48 to account for tributary and return flows.³ No explanation is offered as to why the adjustment was included in the forecast but not the revised graphs.

A second problem in the accounting not disputed by the witnesses for the Prosecution Team was the inclusion of demand in tributary watersheds that could not have been met with supply available to that tributary. This unmet demand should not have been included in total demand on the system when calculating water availability under WSID and BBID's claims of right. (RT, March 23, 2016, pp. 161-162, 165-167.) Again, though the Prosecution Team witnesses agreed that a correction was appropriate, the record before us does not include a comprehensive updated water availability analysis that eliminates this overstated demand. (RT, March 21, 2016, p. 210; RT, March 23, 2016, pp. 160-161.)

A third weakness in the evidence presented by the Prosecution Team was the inability of the witnesses to provide a satisfactory answer as to how and why 1,500 cfs of demand by the San Joaquin River Exchange Contractors was included as demand on the full natural flow of the San Joaquin River when the diversions were likely met with imported or stored water. (RT, March 23, 2016, pp. 190-195.) We understand that the San Joaquin River Exchange Contractors reported their diversions in this manner, but the unusual call on natural flow of the San Joaquin River instead of the standard practice of supplying the contractors with imported storage releases from the Delta, should have been confirmed. (RT, March 21, 2016, p. 192.)

Cumulatively, these discrepancies appear to be significant. The Prosecution Team may have addressed some of these matters in rebuttal, but the cases-in-chief were the appropriate place to present readily available data and information that most accurately portrays conditions in the Delta during May and June 2015. Other criticisms of supply and demand inputs were raised by BBID and other parties during cross-examination of the Prosecution Team's witnesses.⁴ We make no determination as to whether these additional criticisms are accurate, but the questions

³ The adjustment factor for tributary and return flows for June was 2,252 cfs. (RT, March 21, 2016, p. 225.)

⁴ For examples of other questions related to supply and demand input to the analysis, see RT, March 23, 2016, pp. 182-184 (regarding discharges from wastewater treatment plants); RT, March 21, 2016, p. 189 (regarding accounting of demand by North Delta Water Agency); RT, March 21, 2016, p. 235 (regarding adjustments for over-reporting of demand).

revealed an inability of the witnesses to explain the bases for the decisions as to why and how particular demands and supplies were accounted for in the water availability analysis. Ultimately, our fundamental concern with the Prosecution Team's cases-in-chief is this limitation on the witnesses' understanding of the analysis. The witnesses seem to have been the builders of this impressive dataset, but they were not the architects of its design. (RT, March 21, 2016, pp. 163, 201-202; RT, March 23, 2016, pp. 175-177.) They were unable to offer a fully informed opinion as to whether the analysis made sense in application to these enforcement proceedings.

Without adequate testimony to explain and support the manner in which the water availability analysis was constructed and used, and given the potential magnitude of the discrepancies in the water availability analyses on which the Prosecution Team based its case, we are unable to find that the Prosecution Team has carried its burden of proof.

5.0 CONCLUSION

We therefore dismiss the enforcement actions against Byron-Bethany Irrigation District and The West Side Irrigation District, ENF01951 and ENF01949.

CERTIFICATION

The undersigned, Clerk to the Board, does hereby certify that the foregoing is a full, true, and correct copy of an order duly and regularly adopted at a meeting of the State Water Resources Control Board held on June 7, 2016.

Jeanine Townsend
Clerk to the Board