

TESTIMONY OF KATHY MROWKA

I have been an employee of the State Water Resources Control Board (State Water Board) for the past 29 years, and I am currently employed by the State Water Board. Since September 2014, I have been the Program Manager for the Enforcement Program in the State Water Board's Division of Water Rights. I am a Supervising Water Resources Control Engineer. A copy of my resume is Prosecution Team Exhibit WR-8.

As a Program Manager, I manage five units (there are normally four units, but the program has been temporarily expanded to five units to provide additional resources for drought response). The units which I manage are responsible for complaint inspections, compliance inspections, drought response, development of regulations, and other tasks, including enforcement actions. The drought response has included determination of adequacy of water supply to serve the various priorities of water rights in the Sacramento-San Joaquin Bay Delta watersheds. It has also included enhanced field presence, including inspections, to determine whether persons or entities have been diverting water after receiving notification from the State Water Board that there is inadequate water supply to serve their priority of right.

I directly supervise, among others, Paul Wells, Brian Coats, who supervises Jeffrey Yeazell, and Victor Vasquez, who supervises Kathryn Bare. My supervisor is the Assistant Deputy Director for Water Rights, John O'Hagan. During my tenure as Program Manager for Enforcement, I have supervised and been directly involved in the drought response activities described herein, as well as in the investigation and development of the enforcement actions against BBID and WSID. I am the Prosecution Team lead in both enforcement actions. In preparing this statement, I reviewed the relevant Enforcement files, and I conducted my own research into the issues discussed here. My testimony, herein provided, identifies my personal knowledge of the evidence, actions, and rationale for the Division's recommendation that the State Water Board issue an Administrative Civil Liability (ACL) Order against Byron Bethany Irrigation District (BBID) and a Cease and Desist Order (CDO) against West Side Irrigation District (WSID or West Side).

DROUGHT WATER AVAILABILITY SUPPLY AND DEMAND ANALYSIS

The State Water Board has been vested by the Legislature with the authority to prevent unauthorized diversions and supervise the water right priority system. (See, e.g., Wat. Code, §§ 174, 186, 1050, 1051, 1051.5, 1052, 1825.) In 2015, California was in the fourth year of drought, the worst drought in decades. Water year 2012 was categorized as below normal,

calendar year 2013 was the driest year in recorded history for many parts of California, water year 2014 was the third driest in the 119 years of record, and water year 2015 had the lowest snowpack on record. Governor Brown's January 17, 2014 Drought Emergency Proclamation ordered the State Water Board to "put water right holders throughout the state on notice that they may be directed to cease or reduce water diversions based on water shortages," which the State Water Board staff did on January 17, 2014. (WR-23, WR-24.) On April 25, 2014, Governor Brown issued a Proclamation of a Continued State of Emergency related to the drought, which finds that California's water supplies continue to be severely depleted. (WR-25.) On April 1, 2015, the Governor issued Executive Order B-29-15 (Executive Order) to strengthen the state's ability to manage water and habitat effectively in drought conditions. (WR-31.) The Executive Order confirms that the orders and Proclamations, April 25, 2014 Proclamation, and previous drought Executive Orders remain in full force and effect.

Drought management of water rights is necessary to ensure that water to which senior water right holders are entitled is actually available to them, which requires that some water remain in most streams to satisfy senior demands at the furthest downstream point of diversion of these senior water rights. The failure of junior diverters to cease diversion when no water is available under their priority or right has a direct, immediate impact on other diverters. The Division's drought water supply and demand analyses, and the enforcement actions against BBID and WSID, are within the scope of the Board's authority and the Division's scope of work. Although I was not Program Manager for the Enforcement unit during most of 2014 (Mr. O'Hagan served in that capacity then), I have become familiar with the supply and demand analyses conducted during that year. Along with my supervisor, John O'Hagan, I actively participated in the 2015 drought water availability staff determinations, and I am familiar with the supply and demand analyses as supervisor to Brian Coats and Jeffrey Yeazell. As part of my duties, I regularly interacted with members of the public and with the water rights community regarding the drought water availability analyses.

I have reviewed the Testimony of Brian Coats (WR-9) and the Testimony of Jeffrey Yeazell (WR-11), and I concur with and incorporate herein their conclusions regarding the availability of water during the relevant periods. In my professional opinion, the 1977 Drought Report provides a conceptual template for a drought supply and demand analysis that is appropriate to make water availability determinations during drought emergencies. Fortunately, the Division staff did not need to perform such an analysis after 1977, until 2014. However, when faced with the significant drought emergency and extreme shortages of water, Division

staff, particularly Mr. Coats and Mr. Yeazell, did an exemplary job in adapting the 1977 template to modern data processing capabilities using the best available supply and demand information, particularly given the urgent circumstances. The drought water availability analysis methodology evolved from 2014 into 2015 as new and better information was gathered from a variety of sources, including the affected water community. This evolution continues, and the next time this methodology is needed, hopefully not for many years, it will likely be better than last time.

Based on the Division's drought water availability supply and demand analysis conducted by my staff prior to the State Water Board staff's May 1, 2015, Notice of Unavailability, there was no water was available under the priority of License 1381 as of May 1, 2015. The basis for determining that there was no water to serve post-1914 water rights at the priority of WSID's License 1381 is found in the testimony of Brian Coates (WR-9) and Jeff Yaezell (WR-11). The applicable periods of non-availability are: (a) May 27, 2014 (WR-26) through November 12, 2014 (WR-27), and (b) May 1, 2015 (WR-34) through November 2, 2015 (WR-44). The May 1, 2015, Notice is based on an appropriate drought water availability analysis methodology and incorporates the best available supply and demand information.

Based on the Division's drought water availability supply and demand analysis conducted by my staff prior to the State Water Board staff's June 12, Notice of Unavailability, there was no water was available under the priority of BBID's claimed pre-1914 right as of June 12, 2015. The applicable periods of non-availability are June 12, 2015 (WR-36), until September 17, 2015 (WR-43). The basis for determining that there was no water to serve the priority of the water right during the alleged violation period is described in the testimony of Brian Coates (WR-9) and Jeff Yeazell (WR-11). The June 12, 2015, Notice is based on an appropriate drought water availability analysis methodology and incorporates the best available supply and demand information.

A note regarding the term "water availability analysis": The Division has used the term "water availability analysis" in 2014 and 2015 to describe the drought supply and demand analyses conducted leading to the various notices of unavailability of water, including the ones at issue in the BBID and WSID enforcement proceedings. The Division also uses the term "water availability analysis" to describe a site-specific water availability analysis conducted as part of the water rights permitting process. I worked in the Permitting unit for several years, and I am familiar with the permitting water availability analyses. Those analyses are relatively common, and many private water engineering consultants are familiar with them as well. But

the drought water availability analysis is fundamentally different – it is a supply and demand analysis methodology that can be used to determine whether water is available for various water right priority levels over entire watersheds or groups of watersheds during extreme drought emergencies. To my knowledge, until 2014, no Division staff or private consultants attempted this type of drought water availability analysis since at least 1977.

WEST SIDE IRRIGATION DISTRICT DRAFT CDO

My testimony describes the basis for issuing the Draft CDO, West Side's water right license, provides a description of the diversion works, describes the drainage works, and discusses the sources of water which West Side uses. My testimony also describes ongoing water supply issues, West Side's conveyance of a portion of its contract rights to City of Tracy (Tracy), and Tracy's wastewater discharges.

Rationale for Issuance of CDO

The draft CDO was issued because the Division obtained evidence demonstrating that West Side diverted or threatened to divert water during periods in 2015 when there was insufficient water to divert under the priority of License 1381. Diversions when water is not available under the priority of the water right are unauthorized diversions, and actual or threatened unauthorized diversions are subject to cease and desist orders under Water Code section 1831. I directly participated in the investigation into West Side's diversions and threatened diversions in 2015, and I supervised Enforcement staff in this investigation as well.

I have reviewed the Testimony of Kathryn Bare (WR-13) and I concur with and incorporate herein her conclusions regarding the West Side's diversions during 2014 and 2015, and regarding West Side's threatened diversions. As described in Ms. Bare's testimony, the Division began investigating WSID's potential threatened unauthorized discharges following a citizen complaint received in March, 2015. It became apparent from that investigation that West Side was diverting to at least some extent after the May 1, 2015, Notice of Unavailability (see, e.g., Testimony of John Collins, WR-19). In addition, West Side's attorneys provided a number of communications indicating that West Side would resume diversions during the unavailability period (see particularly WR-125 [July 7, 2015, letter from Jeanne Zolezzi to Tom Howard]).

This evidence indicated to me that West Side was either actually diverting, or threatening to divert treated wastewater produced by the City of Tracy and/or irrigation return flows, both of which could result in unauthorized diversions in light of the staff determination that no water was available for diversion under West Side's License 1381, as described in the May

1, 2015, Notice of Unavailability. After careful consideration, these reasons were found to be inadequate basis for continuing diversion (see below). Thus, a draft CDO was issued (WR-1).

Unauthorized Diversions in 2014 and 2015

Since the Draft CDO was issued, the Prosecution Team has obtained additional evidence indicating that West Side actually diverted water unlawfully in 2014 and 2015 during periods in which Division staff had determined that no water was available for West Side's License 1381. Based on the documents submitted by West Side in response to the Prosecution Team's October 29, 2015, Subpoena (see Testimony of Kathryn Bare, WR-13), unauthorized diversions actually occurred in 2014, under the Tracy Wastewater Agreement, and in 2015, as described below.

Of particular relevance for the Draft CDO is the admission by West Side in its Subpoena response that it continued to divert water from May 1 through May 13, 2015, apparently under claim of License 1381, despite the State Water Board staff determinations described in the May 1, 2015, Unavailability Notice. As shown in WR-13, West Side admits to diverting 735.51 acre-feet from the Old River over 13 consecutive days from May 1 to May 13, 2015. In addition, as shown in in WR-13, West Side also continued to divert water under Banta-Carbona Irrigation District's Statement 000495 for a time after the June 12, 2015, Notice, which described the State Water Board staff's determination that there was no water available for diversion by pre-1914 claimants at the level of priority of Banta-Carbona's claimed right.

Actual unauthorized diversions are a basis for cease and desist orders under Water Code section 1831, subdivision (d). West Side's history of actual unauthorized diversions in the face of Division drought unavailability notices during 2014 and 2015 indicates that West Side remains a threat to resume such unauthorized diversions should Division staff again determine that water is unavailable to serve West Side's License 1381.

Threatened Unauthorized Diversions

West Side and the City of Tracy entered into a Wastewater Agreement in 2015 that was nearly identical to a 2014 Wastewater Agreement between them, yet the City of Tracy never sought or obtained the necessary wastewater change petition under Water Code section 1211, and neither West Side nor Tracy had a valid right to divert the wastewater from the Old River during periods in which Division staff had determined that there was no water available to serve West Side's License 1381 (described below and in the Testimony of Kathryn Bare, WR-13). The fact that West Side entered into wastewater agreements in 2014 and 2015 demonstrates

that West Side may attempt to enter into a similar agreement with Tracy or some other entity in future drought years.

Also, West Side claims to divert tailwater and groundwater accretions collected in its drainage system and discharged from the Bethany Drain into West Side's unregulated intake channel from the Old River. (See below and the Testimony of Kathryn Bare, WR-13.) However, the Division's investigation reveals that West Side does not appear to have the right to redivert all of the water collected into the drainage system. Moreover, West Side does not appear to accurately measure the amount of discharge or the amount of diversions to ensure that West Side does not divert more water than is discharged at the Bethany Drain (see WR-13). Without accurately balancing discharges and diversions, West Side threatens to divert more water than it is entitled to divert from the Drain, which would result in the unauthorized diversion of water from the Old River during periods in which Division staff has determined that no water is available to serve West Side's License 1381.

Revised Cease and Desist Order Terms

Accordingly, evidence indicates that, absent a CDO barring diversion when no water is available to serve License 1381, West Side will be a threat to again divert water unlawfully should similar low water supply conditions again occur or should the State Water Board staff again determine that no water is available to serve rights at the priority of License 1381. The original Draft CDO contains order terms based on the evidence as known at the time of issuance. Based on the facts as understood today, as described below and in WR-13, I recommend that the CDO order terms be revised as follows:

IT IS HEREBY ORDERED, pursuant to sections 1831 through 1836 of the Water Code, that West Side Irrigation District immediately cease and desist the unauthorized diversion and threatened unauthorized diversion of water from Old River until:

1. City of Tracy Wastewater Diversions
 - a. Either the City of Tracy or West Side Irrigation District can demonstrate a valid appropriative right under which the District may divert treated wastewater discharged by the City into Old River, and
 - b. The State Water Board approves a wastewater change petition for the sale of treated wastewater discharged by the City of Tracy into Old River and diversion by West Side Irrigation District for use within the District's boundaries.
2. Intermingled Tail Water Diversions from Old River

- a. West Side Irrigation District installs measurement devices sufficient to ensure that tail water diversions are limited to the amount of tail water arising from irrigation on West Side Irrigation District's lands.
3. Diversion under License 1381
 - a. West Side Irrigation District shall cease all diversion under License 1381 during any period in which the State Water Board staff determines that there is insufficient water to support beneficial use at the priority of License 1381.
4. Diversion under other Claim of Right
 - a. West Side Irrigation District shall cease all diversion under any other claim of right (e.g., contract purchases from another district relying on the other district's pre-1914 right) during any period in which the State Water Board staff determines that there is insufficient water to support beneficial use at the priority of the claim of right.

WSID Supplies

License 1381

West Side holds water right License 1381, originally issued on September 28, 1933, and amended on August 19, 2010. License 1381 has a priority date of April 17, 1916, and authorizes the direct diversion of 82.5 cubic feet per second (cfs) from Old River in San Joaquin County from (1) about April 1 to October 31 of each year for irrigation, and (2) from April 1 to October 31 of each year for municipal, domestic and industrial uses. The maximum amount diverted under License 1381 shall not exceed 27,000 acre-feet per annum (afa). (WR-112.) The District's annual Report of Licensee for the years 2007 through 2013 indicate that it diverted an average of 22,543 afa during that period. (WR-115 through 121.)

Order WR 2010-0012-EXEC, an Order approving settlement agreement and partial revocation of License 1381 (reflected in the quantities listed above), describes ongoing water supply constraints. (WR-174, at p. 1-2, 3 [true and correct].) The following statement is incorporated in the settlement agreement:

On September 7, 2004, Licensee informed the Division that it has experienced low water levels in Old River, particularly in the spring months, for several years, which have inhibited its pumping capacity. Licensee did not identify which years had low water levels.

(WR-174, p. 2.)

The annual Reports of Licensee (all reports up to and including the 2014 report) do not claim use of reclaimed water from a wastewater treatment facility, nor do the reports claim use

of groundwater in lieu of available surface water authorized under the license. (WR-115 through WR-122.)

Other Basis of Right

West Side does not hold or claim any other appropriative or riparian water rights on file with the Division of Water Rights.

Restrictions on Water Sources

West Side has indicated that its existing water sources, Old River water and U.S. Bureau of Reclamation (Reclamation) contract, have restrictions. The Old River restriction is low water and poor quality. The cause of the restriction is listed as federal and state pumping and low tides. This has had the effect on operations of being unable to meet demands. (WR-159, p.5 [true and correct].) The restriction on the contract supply is a regulatory constraint.

Historic Diversion Pattern

West Side was organized on October 25, 1915. (WR-163 [true and correct].) When originally formed in 1916, West Side included 11,993 acres of agricultural land. Due to the urbanization surrounding the City of Tracy, approximately 5,800 acres have changed from agricultural to urban uses and have detached from the district, which is now comprised of 6,161 acres. (WR-164 [true and correct].) Total irrigated acreage in 2009 was 5,722 acres. (WR-159, p. 3.)

The West Side diversion facilities are described as follows:

West Side diverts water from Old River through an intake canal about 1.5 miles long. Water moves very slowly in the flat gradient channel which is affected by tides of about 4 feet. The channel is from 4 feet to 8 feet deep depending on tides. Quality of water is poor; 800 to 1,000 T.D.S. The intake canal has been dredged due to bank sloughing and widened over the years. The estimated capacity is about 280 cubic feet per second (cfs). The pumping plant consists of 9 pumps. Water from 4 of the pumps is discharged into the lower main canal which has an estimated capacity of 157 cfs. It is about 10 miles in total length with sub laterals and return flow pipelines throughout the district. Canals and ditches are partially concrete lined. The Upper Main Canal estimated capacity is 218 cfs. It is served by 5 pumps.

Tail water and return flows from upstream Byron-Bethany Irrigation District (BBID) and Plainview Water District contribute up to 20% of their excess. Large quantities of water are required for pre-irrigation prior to planting, leaching of salts and excess required to reach ends of rows of furrow irrigated crops. Return flows are diverted back into the district canals where they are diluted with better quality water for re-use. The tail water return flows are included in the quantities reported on the Report of Licensee. Also included is the water pumped from a 100 hp pump on a deep well located within Section 5, near the southern district boundary. Capacity of the well is 7 cfs. It is used only upon

demand due to high pumping cost. Pumping and diversion facilities are about the same as licensed in 1933.

(WR-162 [true and correct].)

West Side's facilities were further described in an undated 1987 letter from West Side to the Division:

Not all of our pumps draft from Old River. The district also operates a well with a 100 H.P. pump discharging into the upper main canal and a well with a 125 H.P. pump discharging into the lower main canal. In addition, the main intake pumps draft water from sources other than Old River. The district's drainage system discharges into the intake canal about 350 yards upstream from the pumping plant, a point which is approximately 0.8 of a canal mile away from Old River. This drain carries not only tail water generated by irrigation within district boundaries but also drain water from neighboring districts such as BBID, Plainview Water District and Banta Carbona Irrigation District (BCID) which are upslope from our service area. In addition our system carries cooling water from the Heinz cannery and flows from both the Tracy Defense Depot and a portion of the City of Tracy's storm water drainage. Some of the city's system is encased in gravel and acts in a fashion similar to a sub-surface agricultural drain in areas with flows year round rather than during storms only. The district re-uses this drain water rather than returning it to the river.

(WR-161 [true and correct].)

On October 15, 1987, the Division responded to the undated 1987 correspondence, stating the following:

According to your February 1987 letter, you are using water from two deep wells, the Tracy storm drain, return flow from three neighboring districts, Tracy Defense Depot drain water and cooling water from the Heinz Cannery all of which has in the past been reported as use under License 1381. This is confusing to say the least. Some of these sources appear to be new surface water which may require the District to file one or more new water right applications or establish some other basis of right to use.

(WR- 178 [true and correct].)

A series of letters between West Side and the Division regarding use of intermingled surface flows is summarized in the Division's September 21, 1998 letter, as follows:

West Side's June 4, 1992 letter states the water it diverts is intermingled surface flows, contract water from the State Water Project^[1], return water from upstream water agencies, treated effluent (wastewater), groundwater, and West Side's own return flows. Our (the Division's) July 27, 1992 letter addressed the use of return flows and treated wastewater that you consider as supplemental water. If this water is abandoned and released into the channel by the upstream entities, this water becomes subject to appropriation. West Side can divert the water under the conditions of License 1381. The exception is when the upstream entity has contractual arrangement with the downstream user(s). If this is the situation, please provide copies of the agreements. If

¹ This reference appears incorrect. West Side is a Central Valley Project contractor.

not, you may need to file a new application to appropriate water taken in excess of that allowed under License 1381.

(WR- 177 [true and correct].)

On April 28, 2004, West Side indicated that it previously used recycled water (under contract) from canneries. (WR- 173 [true and correct].) These sources are apparently no longer available.

In 2009, West Side confirmed that it only delivers surface water, no groundwater sources are used. (WR-159.) To date, West Side has not installed any deep wells due to the depth of the water table in the area, plus water quality has kept farm units from installing any wells of their own. (WR-159, p. 18.) In 2008, West Side charged \$14/af for lands within its boundaries; \$25/af for lands that have detached from West Side; \$75/af for lands that have never been within West Side boundaries; and \$200/af for municipal and industrial water. (WR-159, p. 78.)

WSID Drainage System

West Side provides drainage services to lands inside the district as well as lands outside and upslope of the district boundaries. The drainage water (tailwater) from the lands outside and upslope of West Side is being discharged into district's Upper Main Canal (UMC), which conveys irrigation water to the lands within West Side that are served by that facility. The lands that are served by the UMC discharge their drain water (tailwater) into the Lower Main Canal (LMC). The lands served by the LMC discharge their drain water into West Side's drainage system. The drainage system was constructed as a multi-purpose system that receives both tailwater and sub-surface drainage. (WR-159, p. 31.)

In 2009, West Side estimated the quantity of upslope drain water (water entering the district from lands outside and upslope of the district which was being discharged into the UMC) to be 2,500 af. (WR-159, pp. 3, 13, 18.) This 2,500 af cannot be claimed as use under License 1381. The water is used from the upper canal system prior to entering Old River (the source for License 1381). Inasmuch as the water originated outside the district, it cannot be accounted for as return flows from within the district.

In 2009, the irrigation drainage from the service area (in-district surface return flows) was estimated to be 40 to 100 af. Tailwater spill at the lower end of the system was estimated to be 50 to 100 af, with the quantity recovered and reused estimated to be 40 to 80 af. (WR-159, pp. 3, 13, 18.)

Only the 40 to 80 af which originated as in-district surface return flows that were recovered may be claimed as having been retained within the district for re-use. In 2014, West Side diverted as follows: March 1,819 af; April 1,859 af; May 3,073 af; and June 1,350 af. (WR-122.) Total 2014 diversion was 8,102 af. (WR-122.) The 2015 reporting form is not yet due. By comparing the 2014 reported use to in-district surface return flows, it is apparent that that West Side's claimed diversions of return flows far exceeded return flows generated within the district.

In addition to the estimated tailwater spill of 50 to 100 af, the West Side Main Drain contains water from the City. Tracy has two separate outfalls for storm runoff generated within the Westside Channel Watershed². The City and West Side have entered into drainage agreements that have authorized discharges of City storm runoff into West Side facilities and West Side water into City facilities. The 2002 Drainage Agreement authorizes the City to discharge a maximum rate of 145 cfs into the West Side Main Drain. The West Side Main Drain is a tailwater ditch that conveys irrigation tailwater and urban runoff from designated portions of the City and conveys it to the West Side intake area connecting to Old River at Wicklund Road. (WR-192, pp. 1.15, 2.4 [true and correct].)

Exhibit WR-165 is true and correct copy of a map prepared by Kathryn Bare at my direction which shows that tailwater from outside of the West Side district boundaries contributes flow to both the West Side Intake Canal and Old River. Exhibit WR-165 links physical locations along the drainage system to Google earth images showing the flows in the drainage system and drainage facilities. This map shows that in August of 2015, there was flow in the canal, and that flow came from areas outside of the West Side district boundaries. (WR-165.) As documented in the section "Sources of Water Treated at City Wastewater Plant", the Tracy water is foreign water. Insofar as this flow enters Old River, or commingles with Old River flows in the West Side Intake Canal, diversion of the flow must occur under valid appropriative right.

Water in West Side Intake Canal

The water in the West Side Intake Canal consists of Old River water, and any irrigation return water collected in the Main Drain. The District's Main Drain collects irrigation return water from District landowners (40 to 100 af), irrigation return water from lands upslope and outside

² The Westside Channel Watershed is 12.9 square miles in overall area. It encompasses roughly the west half of the developed area for the City, plus additional undeveloped areas. The West Side Main Drain serves a roughly 2-square mile portion of the overall watershed and there is the DET 10/11 with its pump station and force main (extending to Old River to the north) that has the capacity to serve the remaining majority of the overall watershed. (WR-192, p. 2.3 [true and correct].)

the District's boundaries, and municipal drainage from lands within the City of Tracy, and discharges that return water directly into the District's Intake Canal approximately 1,200 feet upstream from the District's pumping station, and approximately 4,500 feet downstream from the Intake Canal opening to Old River. Old River flow includes treated wastewater discharged from the Tracy wastewater facility, return flows from Tracy (at Tracy's Old River discharge location), and native river water. Thus, water drawn into the Intake Canal by West Side's pumps is commingled flows. Unappropriated water flowing in artificial channels may be appropriated the same as water flowing in natural channels. (State Water Board Decisions D-878 [WR-194] and D-1241 [WR-195].) Thus, commingled flows in the Intake Canal are subject to appropriation. West Side apparently does not precisely measure the volume or rate of discharge from Main Drain into the District's Intake Canal.

WSID Water Quality

West Side has previously indicated that surface drainage water quality limits the usefulness of this water source. (WR-159, pp. 11, 13, 14.) In 2009, the surface water concentration ranged from 500 – 800 mg/l; with an average of 700 mg/l. The TDS for surface water was 100 – 400 ppm. Tailwater quality was 800 to 900 TDS, with an average of 850. The TDS was noted as a usage limitation associated with drainage water, requiring blending with water obtained under contract with Reclamation to reduce the high TDS. (WR-159, pp. 11, 13, 14.) These problems are exacerbated by drought conditions.

WSID Water Source – Old River vs Tidal Flows

Right Issued to Divert Old River Flows:

In connection with West Side's original application for a water right, a protest was filed by East Contra Costa Irrigation Company on the basis of potential injury to East Contra Costa Irrigation Company (Protestant). The protest was addressed by the State Water Commission³ (Commission), which determined that there was an ample supply for both projects. The Commission's letter states: "it was explained that the protest of the East Contra Costa Irrigation Company had been filed so that there would be no question as to its priority...In view of the above the Commission has approved the application of the West Side Irrigation District with the usual condition prescribed by statute, that such approval is subject to all existing rights." (WR-175 [true and correct].) Such review, analysis and conclusions would not be required for diversion of unconstrained Delta tidal flows, since such flows would not be depleted by diversion

³ The State Water Commission was predecessor agency to the State Water Board.

with resultant diminishment of supply to Protestant. Only diversions from Old River (the identified source in West Sides' Application) would result in diminished supply. The Commission confirmed in its 1917 letter that it had approved the application to appropriate the waters of Old River. (WR-176 [true and correct].) Thus, I conclude that only the waters of Old River, and not Delta tidal flows, were considered in determining whether to issue a permit leading to License 1381 (Application 000301).

Lending weight to this determination is the reasonable use doctrine. The State Water Board has continuing authority under Water Code sections 100 and 275 to enforce the requirements of the California Constitution, Article X, § 2, which directs that the water resources of the state be put to beneficial use to the fullest extent, and that water not be wasted or unreasonably used. (Wat. Code, § 100, 275; Cal. Const., art. X, § 2.) It further provides that rights to the use of water are limited to such water as is reasonably required for the beneficial use served, and does not extend to the waste, unreasonable use, unreasonable method of use, or unreasonable method of diversion of the water. The reasonable use doctrine applies to the diversion and use of both surface water and groundwater, and it applies irrespective of the type of water right held by the diverter or user. (*Peabody v. Vallejo* (1935) 2 Cal.2d 351, 366-367.) What constitutes an unreasonable use, method of use, or method of diversion depends on the facts and circumstances of each case. (*People ex rel. State Water Resources Control Board v. Forni* (1976) 54 Cal.App.3d 743, 750.) Under the reasonable use doctrine, water right holders may be required to endure some inconvenience or to incur reasonable expenses. (*Id.* at pp. 751-752.)

Assignment of Old River flows to the permit on West Sides' application, and not tidal waters, is consistent with the reasonable use doctrine. Requiring West Side to use lower quality tidal waters when fresher, higher quality Old River water was available would have been inconsistent with the reasonable use doctrine. Inasmuch as the point of diversion is subject to tidal influence, the right holder was subject to some expense or inconvenience associated with the approximate 4 foot change in water height associated with the tides and resultant fluctuations in water quality.

City of Tracy Wastewater Facility

The City operates a wastewater treatment plant and discharges treated wastewater effluent to Old River, a water of the United States, pursuant to Order R5-2012-0115 (WR-184.) The City discharges approximately 9 million gallons per day ("mgd"), which is equivalent to 14

cfs, on a substantially continuous basis into Old River upstream from the District's point of diversion under License 1381. (See Testimony of Kathryn Bare, WR-13.)

Tracy Sources of Water

The City obtains water supplies from the following sources:

- 11,120 acre feet of water per year (afa) of South San Joaquin Irrigation District (SSJID) pre-1914 Stanislaus River water, coupled with an agreement with Reclamation to store water in New Melones Reservoir;
- Reclamation contract water as follows:
 - 5,000 af of Ag water assigned from the Banta Carbona Irrigation District/Reclamation contract to Tracy in 2004,
 - 5,000 af of Ag water assigned from the West Side/Reclamation contract (2,500 af assigned on February 27, 2004 and 2,500 assigned in December 2013) to Tracy
 - 10,000 af of M&I water under City/Reclamation contract delivered from the Delta-Mendota Canal;
 - 630 afa of Byron Bethany Irrigation District (BBID) Reclamation contract water assigned to Tracy in 1991 (water obtained from Plain View Water District (PVWD) contract, but PVWD has been incorporated into BBID);
- 2,430 af of BBID pre-1914 water pursuant to April 2014 Exchange Agreement between BBID and Reclamation;
- Extraction from nine groundwater wells totaling 930 af in 2013.

(WR-193, pp. 24 – 27, 34, 37, 38 [true and correct].)

These water supplies are used to serve City customers, with the return water from municipal use eventually being treated at the wastewater plant. Insofar as these water supplies are used for irrigation and any runoff enters the ditch system, such runoff is foreign in source and/or time to the Old River flow. Similarly, the City's treated wastewater discharges are foreign in source and/or foreign in time to the Old River flow. Use of foreign waters is contingent on having valid appropriative right.

To clarify the sources of water treated at the wastewater facility, I note that the City's NPDES permit allows the treatment plant to accept wastewater from the City and up to 850,000 gallons per day, equivalent to about 1.3 cfs, from the Leprino Foods Company. The City serves as water supplier to Leprino Foods Company. Therefore, the City's treated wastewater

discharges identified in the NPDES permit are foreign in source and/or foreign in time to the Old River flows. (WR-184.)

Disposition of Treated Wastewater

In 2009, West Side did not have any recycled water available to it. (WR-159, p. 17.) Until 2014, the City abandoned the wastewater treatment plant discharge to Old River. The Testimony of Kathryn Bare (WR-13) describes the Wastewater Revocable License Agreements between the City of Tracy and West Side during 2014 and 2015; that testimony is incorporated by reference as if restated here. As described in WR-13, WSID diverted approximately 1,287 acre-feet of Tracy's wastewater discharges pursuant to the 2014 Agreement. The City and WSID adopted a similar agreement in 2015, although that Agreement was terminated by the City prior to commencement (see WR-13), as a result of discussions with the Division.

Authorizations Needed to Use Treated Wastewater

Either the City of Tracy or West Side must have a valid appropriative right in order to divert from a downstream location treated wastewater discharged into Old River. (See Water Rights Decision 1638 [WR-208].) Diversion of foreign waters must be accomplished under an appropriative right. West Side cannot rely on License 1381 to divert Tracy's wastewater flows during periods in which the State Water Board staff has determined that no water is available under License 1381.

In addition, a wastewater change petition is required for the change in point of diversion and place of use of discharged treated wastewater. Until the 2014 and 2015 Agreements, the City of Tracy abandoned its wastewater flows into the Old River, where they were available for diversion by West Side during periods when water is available for diversion under License 1381. However, the 2014 and 2015 Agreements represent a change in place and purpose of use of Tracy's wastewater, and diversion of such flows at the West Side facility commensurately reduces instream flows, triggering the need for a wastewater change petition. (Wat. Code § 1211.) The City of Tracy must first file a wastewater change petition and obtain the State Water Board's approval before allowing West Side to divert water under the 2014 or 2015 Wastewater Agreements.

BYRON-BETHANY IRRIGATION DISTRICT ACL COMPLAINT

This section of my testimony discusses the rationale for issuance of the ACL Complaint, BBID's claimed pre-1914 appropriative right, water which BBID contracts for, sells, and uses, and the recommended ACL penalty amount.

Rationale for Issuing the ACL Complaint

The BBID ACL Complaint was issued because the Prosecution Team gathered evidence beginning in June, 2015, indicating that BBID diverted water after June 12, 2015, during a period when there was insufficient water to divert under the priority of BBID's pre-1914 right. This evidence includes public statements by BBID representatives, such as a June 25, 2015, article in SFGate.com (apparently an online affiliate of the San Francisco Chronicle) noting that BBID had only shut off its pumps on Wednesday, June 24, and quoting BBID general manager as stating that the resumption of pumping was "a possibility." (WR-103.) Based on this and similar statements, I directed staff to review BBID's CDEC diversion records, which indicated that BBID had diverted for several days after the June 12 Notice at rates generally similar to its diversions before the June 12 Notice. (See Testimony of Paul Wells, WR-15.) Diversions when water is not available under the claimed priority of the water right are unauthorized diversions under Water Code section 1052.

The fact that the Division was conducting this type of supply and demand analysis in anticipation of notices of water unavailability that might reach claimed pre-1914 water rights was well known among the water rights community, including to BBID. In April 2014, the State Water Board began posting information regarding lack of water availability and anticipated supply shortfalls for watercourses in several watersheds. The analyses for the Sacramento-San Joaquin Rivers and Scott River watersheds continued to be updated and announced publicly through 2015. In addition, on May 21, 2015, Daniel Kelly, attorney for BBID, sent an email to myself and others on behalf of BBID describing a meeting which he and I both attended, and proposing that BBID would voluntarily reduce diversions by 25% to avoid curtailments.⁴ (WR-172 is true and correct.) BBID received notification on June 12, 2015 (exhibits WR-36 through 38, and 107) that there was no water available to divert, but chose to continue its diversions at rates generally similar to before the June 12 Notice. Thus, the Prosecution Team issued the ACL Complaint.

I have reviewed the Testimony of Paul Wells (WR-15) and I concur with and incorporate herein his conclusions regarding BBID's diversions during the period June 13 through 24, 2015. As described in Mr. Wells' testimony, BBID diverted approximately 1,887 acre-feet during that period, without a basis of right.

⁴ This same email describes how BBID self-reports its daily diversions to the Department of Water Resources for posting to the internet.

BBID's Claimed Pre-1914 Right

In preparation for this witness statement, I reviewed Division files and other available records to examine the scope and extent of BBID's claimed pre-1914 right. The claimed pre-1914 water right of BBID is recorded in Statement 21256 (WR-84). The Statement lists the capacity of the diversion works as 350 cubic feet per second (cfs). The Initial Statement, filed in 2010, lists diversion of 26,179 acre-feet (af). It also lists the maximum annual water use in recent years as 50,000 af, and the minimum as 30,000 af. The Initial Statement indicates that diversion occurs during all months of the year, and identifies the year of first use as 1917.

As part of this matter, I reviewed additional documents relating to BBID's development and early water use. On May 18, 1914, Byron-Bethany Irrigation Company, predecessor to BBID, filed a Notice of Appropriation of Water. The notice was for use of 40,000 miner's inches measured under a 4-inch pressure. (Exhibit WR-196 at Appendix A [true and correct].) The point of diversion was a point where the west bank of Old River intersected the south bank of a branch or channel making south from said Old River and designated as Italian Slough. 40,000 miner's inches are equivalent to 1,000 cfs.⁵ During 1915-16, the Byron-Bethany irrigation project was initiated. The original company pursuing the irrigation project was organized during 1915-16, and commenced to run water through the ditches in May, 1917. (Exhibit WR-179 [true and correct].)

BBID's Pre-1914 Right Transfers and Exchanges

BBID has, at various times, sold some of its claimed pre-1914 water to other entities. For example, in April 2012, BBID entered an agreement with Westlands Water District to deliver up to 5,000 acre-feet per year under its claimed pre-1914 right. (Exhibit WR-191, WR-197 [true and correct].) In April 2014, BBID and Reclamation entered into a draft contract for exchange of up to 4,725 acre-feet per year to for the Tracy Hills Water Supply Project. (Exhibit WR-198, WR-199 [true and correct].) BBID contracts to provide 9,413 afa of its pre-1914 water supply to the Mountain House Project Area for Municipal and Industrial (M&I) purposes. (Exhibit -196, p. 4 [true and correct].) The water is diverted from a separate pump near the BBID pump on the Banks Intake Channel.

Despite these various agreements to provide water to other entities, there is no evidence indicating whether BBID or any other entity diverted water under BBID's claimed pre-1914 appropriative right in order to satisfy these agreements during the alleged violation period. The

⁵ [www.convertunits.com/from/miner's+inch+\[AZ,+CA,+OR\]/to/cubic+feet+per+second](http://www.convertunits.com/from/miner's+inch+[AZ,+CA,+OR]/to/cubic+feet+per+second)

available evidence indicates that BBID's diversions during the alleged violations period were solely for its own irrigation purposes. (See WR-98 [BBID's Informational Order response for June 2015].)

Other BBID Water Supplies

BBID has apparently entered into contracts to secure additional drought water supply. BBID contracted with Contra Costa Water District (Contra Costa) for a short-term water transfer of up to 4,000 af. (Exhibit WR-200, p. 1 [true and correct]) However, it appears that no transfer water was made available to BBID until August 4 to 7, and again on August 23 through 30, 2015. The total volume transferred was 240 af in 2015. (Exhibits WR-201, WR-202, WR-203, WR-204 [true and correct].) BBID has a long-term Central Valley Project contract with Reclamation (Exhibit WR-205 [true and correct].) However, in 2015, Reclamation provided zero water for agricultural use under this contract. (Exhibit WR-206, p. 3 [true and correct].) BBID banks water in San Luis Reservoir for summer water supply. In 2015, BBID was notified that there wouldn't be enough water in the DMC to obtain the San Luis Reservoir water. (Exhibit WR-207 [true and correct].)

In summary, there is no available evidence indicating that BBID may have had alternate supplies to explain the diversions during the alleged violations period.

Proposed Liability Amount

Water Code section 1052 provides the maximum civil liability that can be imposed by the State Water Board in this matter for the unauthorized diversion and use of the water during a drought period is \$1,000 for each day of trespass plus \$2,500 for each acre-foot of water diverted or used in excess of that diverter's water rights. As described in the Testimony of Paul Wells (WR-15), evidence demonstrates that BBID's unauthorized diversions occurred over twelve days, from June 13, 2015, to June 24, 2015, and totaled 1,887 acre-feet.⁶ There is no evidence demonstrating that BBID diverted any of this amount under some other valid claim of right. As described in the Testimony of Brian Coats (WR-10), the maximum civil liability for the alleged violations is \$4,729,500 [12 days at \$1,000 per day plus 1,887 af at \$2,500 per af].

California Water Code section 1055.3 requires that, in determining the amount of civil liability, the State Water Board consider all relevant circumstances, including, but not limited to, the extent of harm caused by the violation, the nature and persistence of the violation, the

⁶ As described in Mr. Wells' Testimony, there some evidence indicating that BBID's unauthorized diversions may instead total 1,829.1 acre-feet, however, this evidence is unclear and potentially unreliable. Therefore, the Prosecution Team recommends administrative civil liability based on the more reliable estimate, 1,889 acre-feet.

length of time over which the violation occurs, and any corrective action taken by the violator. The Testimony of Brian Coats (WR-10, pages 21-22) describes the application of these factors in this case such that the Prosecution Team recommends that the Board adopt an ACL in the amount of **\$1,418,250**. I concur in the application of the Section 1055.3 factors as described by Mr. Coats, and I incorporate that portion of his testimony into my testimony by this reference.

I would add to this discussion by requesting that the Board send a strong signal to the regulated water rights community by adopting the full recommended penalty. From my professional interactions with the regulated community, it is my belief that a substantial ACL penalty against BBID would provide a strong disincentive to others who may be tempted to disregard State Water Board staff notices of water unavailability.

The ACL Complaint (WR-4, paragraph 40) indicates that the Prosecution Team would consider adjustment to the recommended ACL penalty if BBID would provide evidence of the amounts of water diverted during the violations period that were for health and safety needs or critical power generation. The Prosecution Team made this offer because BBID is known to be serving water to Mountain House Community Service District and to power generation facilities that may be deemed critical energy suppliers. BBID and Mountain House Community Service District apparently took corrective actions to secure water available via contract and transfer, although the evidence is insufficient to determine whether BBID diverted any water for Mountain House during the violations period.

The ACL Complaint took into consideration that BBID had apparently stopped its diversions on or around June 25 (now understood to be June 24). However, a cursory review of CDEC records indicates that BBID continued diversions starting in July, and continued diverting most days until September 17, 2015, when water was again available under its claimed pre-1914 right. Exhibit WR-171 is a true and correct copy of a plot taken from CDEC's BBID records (<http://cdec.water.ca.gov/cgi-progs/queryDaily?BBI>) that shows diversions from July through September, 2015. The Prosecution Team notes, without drawing any conclusion, that BBID re-commenced diversions on or around July 16, which is the day that the Prosecution Team issued the WSID Draft CDO. Then BBID briefly ceased diversions starting on or around July 20, when the Prosecution Team issued the BBID ACL Complaint. As part of these proceedings, the Prosecution Team issued a Subpoena seeking, among other things, records of these diversions, but BBID successfully obtained a protective order requiring it only to produce records from June 1 through June 30, 2015.

Because BBID has not provided information sufficient to determine whether, or how much, water it may have diverted for Mountain House Community's basic health and safety needs during the violations period, and because BBID appears to have resumed diversions around the time of issuance of the ACL Complaint without providing any information as to the nature of these diversions, there is no additional basis to adjust the proposed ACL penalty, and I do not recommend any adjustments.

The Division estimates that its staff cost to investigate the unauthorized diversion issues and develop the enforcement documents to be \$3,000 (through development of the ACL Complaint only). The estimated staff cost for hearing preparation cited in the ACL is about \$10,000. This staff cost assumed only the cost of testimony preparation and hearing participation. The cost has exceeded the initial estimate due to the roughly 35 hours expended by staff in depositions requested by BBID, and an additional 100 plus hours expended on deposition and other discovery matters by counsel.

AUTHENTICATION OF EVIDENCE

All exhibits noted as "true and correct" above are true and correct copies of the documents listed in the Prosecution Team's Exhibit Identification Index. In addition, Exhibits WR-158 and WR-166 are true and correct copies. Although discussed and authenticated in other witness statements, I have personal knowledge that the following Prosecution Team Exhibits are also true and correct copies of file documents and/or official State Water Board staff notices, and could if called upon testify as to their authenticity: WR-1 through 6, 23 through 45, 83 through 89, 100 through 108, 112 through 131, 141, and 152 through 154.