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15 Attorneys for SOUTH DELTA WATER AGENCY

16 BEFORE THE
17 CALIFORNIA STATE WATER RESOURCES CONTROL BOARD
18

19 ENFORCEMENT ACTION ENF01949
20 DRAFT CEASE AND DESIST ORDER
REGARDING UNAUTHORIZED
21 DIVERSIONS OR THREATENED
UNAUTHORIZED DIVERSIONS OF WATER
22 FROM OLD RIVER IN SAN JOAQUIN
COUNTY

23 In the Matter of ENFORCEMENT ACTION
24 ENF01951 – ADMINISTRATIVE CIVIL
LIABILITY COMPLAINT REGARDING
25 UNAUTHORIZED DIVERSION OF WATER
FROM THE INTAKE CHANNEL TO THE
26 BANKS PUMPING PLANT (FORMERLY
ITALIAN SLOUGH) IN CONTRA COSTA
27 COUNTY

SWRCB Enforcement Action
ENF01951 and ENF01949

DECLARATION OF MICHAEL E.
VERGARA IN SUPPORT OF
BYRON-BETHANY IRRIGATION
DISTRICT'S AND SOUTH DELTA
WATER AGENCY'S MOTIONS IN
LIMINE

1. EXCLUDE PAUL HUTTON'S
TESTIMONY AND EXHIBITS
2. EXCLUDE PAUL MARSHALL'S
TESTIMONY AND EXHIBITS
3. EXCLUDE MAUREEN
SERGENT'S TESTIMONY AND

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EXHIBITS

- 4. EXCLUDE KATHY MROWKA'S TESTIMONY AND EXHIBITS
- 5. EXCLUDE BRIAN COATS'S TESTIMONY AND EXHIBITS

I, Michael E. Vergara, declare:

1. I am an attorney at law licensed to practice before the courts of the State of California, and a shareholder with Somach Simmons & Dunn. I am the attorney with primary responsibility for this matter in my firm, and am familiar with all pleadings, filings, and correspondence related to it. The following matters are within my personal knowledge and, if called as a witness, I can competently testify thereto.

2. A true and correct copy of the State Water Resources Control Board's (SWRCB), Pre-Hearing Conference Order dated August 19, 2015, attached as Exhibit A.

3. A true and correct copy of the ruling by the Hearing Team's Second Pre-Hearing Order, dated February 18, 2016, is attached as Exhibit B.

4. A true and correct copy of the State Water Contractors (SWC), Notice of Intent to Appear dated August 28, 2015, is attached as Exhibit C.

5. A true and correct copy of the California Department of Water Resources' (DWR), Notice of Intent to Appear dated September 2, 2015, is attached as Exhibit D.

6. A true and correct copy of correspondence from October 2015 through late January 2016, is attached as Exhibit E.

7. A true and correct copy of the DWR's, Amended Notice of Intent to Appear dated January 19, 2016, is attached as Exhibit F.

8. A true and correct copy of the direct expert witness testimony by Kathy Mrowka filed by the Prosecution Team on January 19, 2016 is attached as Exhibit G.

9. A true and correct copy of the direct expert witness testimony by Brian Coats filed by the Prosecution Team on January 19, 2016 is attached as Exhibit H.

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1 10. During the February 8, 2016, Pre-Hearing Conference, Hearing Officer
2 Dudoc advised the participants that the Hearing Team will not allow the parties and
3 intervenors to present testimony and exhibits that contain legal theories, legal opinion, or
4 legal conclusions. Hearing Officer Doduc further noted that such evidence will properly
5 be subject to a motion in limine on the ground that it invades the SWRCB's responsibility
6 to decide issues raised in this matter and issue judgment.

7 11. A true and correct copy of the Rebuttal Testimony of Paul Marshall filed by
8 the DWR dated February 22, 2016, is attached as Exhibit I.

9 12. A true and correct copy of the Rebuttal Testimony of Maureen Sergent filed
10 by the DWR dated February 22, 2016, is attached as Exhibit J.

11 13. A true and correct of the ruling by the Rebuttal Testimony of Paul Hutton
12 filed by the SWC dated February 22, 2016, is attached as Exhibit K.

13 14. A true and correct copy of the rebuttal expert witness testimony by Kathy
14 Mrowka filed by the Prosecution Team on January 19, 2016, is attached as Exhibit L.

15 15. A true and correct copy of the rebuttal expert witness testimony by Brian
16 Coats filed by the Prosecution Team on January 19, 2016, is attached as Exhibit M.

17 16. A true and correct copy of the SWRCB's Objection to West Side Irrigation's
18 (WSID) addition to Karna Harringfeld, dated January 23, 2016, attached as Exhibit N.

19 17. A true and correct copy of the ruling by the SWRCB, dated February 1,
20 2016, is attached as Exhibit O.

21 18. A true and correct copy of excerpt pages from the Deposition Transcript of
22 Brian Coats dated November 12, 2015, attached as Exhibit P.

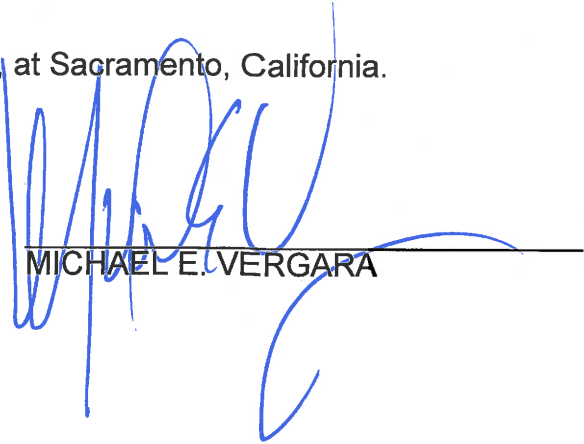
23 19. A true and correct copy of the Notice of Intent to Appear in the
24 Administrative Civil Liability against BBID filed by SWRCB, dated September 2, 2015, is
25 attached as Exhibit Q.

26 20. A true and correct copy of the Notice of the Intent to Appear in the Draft
27 Crease and Desist Order against West Side Irrigation District filed by SWRCB, dated
28 October 2, 2015, is attached as Exhibit R.

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21. A true and correct copy of the SWRCB Curtailment Notice, dated June 12, 2015, is attached as Exhibit S.

Executed on February 29, 2016, at Sacramento, California.



MICHAEL E. VERGARA

SOMACH SIMMONS & DUNN
A Professional Corporation

**SERVICE LIST OF PARTICIPANTS
BYRON-BETHANY IRRIGATION DISTRICT
ADMINISTRATIVE CIVIL LIABILITY HEARING
(Revised 9/2/15; Revised: 9/11/15)**

SOMACH SIMMONS & DUNN
A Professional Corporation

<p><u>VIA ELECTRONIC MAIL</u></p> <p>Division of Water Rights Prosecution Team Andrew Tauriainen, Attorney III SWRCB Office of Enforcement 1001 I Street, 16th Floor Sacramento, CA 95814 andrew.tauriainen@waterboards.ca.gov</p>	<p><u>VIA ELECTRONIC MAIL</u></p> <p>Byron-Bethany Irrigation District Michael E. Vergara Somach Simmons & Dunn 500 Capitol Mall, Suite 1000 Sacramento, CA 95814 dkelly@somachlaw.com</p>
<p><u>VIA ELECTRONIC MAIL</u></p> <p>Patterson Irrigation District Banta-Carbona Irrigation District The West Side Irrigation District Jeanne M. Zolezzi Herum\Crabtree\Suntag 5757 Pacific Avenue, Suite 222 Stockton, CA 95207 jzolezzi@herumcrabtree.com</p>	<p><u>VIA ELECTRONIC MAIL</u></p> <p>City and County of San Francisco Jonathan Knapp Office of the City Attorney 1390 Market Street, Suite 418 San Francisco, CA 94102 jonathan.knapp@sfgov.org</p>
<p><u>VIA ELECTRONIC MAIL</u></p> <p>Central Delta Water Agency Jennifer Spaletta Law PC P.O. Box 2660 Lodi, CA 95241 jennifer@spalettalaw.com</p> <p>Dante John Nomellini Daniel A. McDaniel Dante John Nomellini, Jr. NOMELLINI, GRILLI & MCDANIEL 235 East Weber Avenue Stockton, CA 95202 ngmplcs@pacbell.net dantejr@pacbell.net</p>	<p><u>VIA ELECTRONIC MAIL</u></p> <p>California Department of Water Resources Robin McGinnis, Attorney P.O. Box 942836 Sacramento, CA 94236-0001 robin.mcginnis@water.ca.gov</p>
<p><u>VIA ELECTRONIC MAIL</u></p> <p>Richard Morat 2821 Berkshire Way Sacramento, CA 95864 rmorat@gmail.com</p>	<p><u>VIA ELECTRONIC MAIL</u></p> <p>San Joaquin Tributaries Authority Tim O'Laughlin Valerie C. Kincaid O'Laughlin & Paris LLP 2617 K Street, Suite 100 Sacramento, CA 95816 towater@olaughlinparis.com vkincaid@olaughlinparis.com</p>

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<u>VIA ELECTRONIC MAIL</u>	<u>VIA ELECTRONIC MAIL</u>
South Delta Water Agency John Herrick Law Offices of John Herrick 4255 Pacific Avenue, Suite 2 Stockton, CA 95207 Email: Jherriaw@aol.com	State Water Contractors Stefani Morris 1121 L Street, Suite 1050 Sacramento, CA 95814 smorris@swc.org

**SERVICE LIST
WEST SIDE IRRIGATION DISTRICT
CEASE AND DESIST ORDER HEARING**

<p>1 2 3 4 5 6 7</p>	<p>Division of Water Rights Prosecution Team Andrew Tauriainen, Attorney III SWRCB Office of Enforcement 1001 I Street, 16th Floor Sacramento, CA 95814 andrew.tauriainen@waterboards.ca.gov</p>	<p>The West Side Irrigation District Jeanne M. Zolezzi Karna Harringfeld Janelle Krattiger Herum\Crabtree\Suntag 5757 Pacific Avenue, Suite 222 Stockton, CA 95207 jzolezzi@herumcrabtree.com kharringfeld@herumcrabtree.com jkrattiger@herumcrabtree.com</p>
<p>8 9 10 11 12 13</p>	<p>State Water Contractors Stefani Morris 1121 L Street, Suite 1050 Sacramento, CA 95814 smorris@swc.org</p>	<p>Westlands Water District Daniel O'Hanlon Rebecca Akroyd Kronick Moskowitz Tiedemann & Girad 400 Capitol Mall, 27th Floor Sacramento, CA 95814 dohanlon@kmtg.com rakroyd@kmtg.com</p> <p>Phillip Williams of Westlands Water District pwilliams@westlandswater.org</p>
<p>14 15 16 17 18 19</p>	<p>South Delta Water Agency John Herrick Law Offices of John Herrick 4255 Pacific Avenue, Suite 2 Stockton, CA 95207 Email: jherriaw@aol.com</p>	<p>Central Delta Water Agency Jennifer Spaletta Law PC P.O. Box 2660 Lodi, CA 95241 jennifer@spalettalaw.com</p> <p>Dante Nomellini and Dante Nomellini, Jr. NOMELLINI, GRILLI & MCDANIEL ngmplcs@pacbell.net dantejr@pacbell.net</p>
<p>20 21 22 23</p>	<p>City and County of San Francisco Jonathan Knapp Office of the City Attorney 1390 Market Street, Suite 418 San Francisco, CA 94102 jonathan.knapp@sfgov.org</p>	<p>San Joaquin Tributaries Authority Valerie C. Kincaid O'Laughlin & Paris LLP 2617 K Street, Suite 100 Sacramento, CA 95816 vkincaid@olaughlinparis.com</p>
<p>24 25 26</p>	<p>Byron-Bethany Irrigation District Michael E. Vergara Somach Simmons & Dunn 500 Capitol Mall, Suite 1000 Sacramento, CA 95814 dkelly@somachlaw.com</p>	<p>California Department of Water Resources Robin McGinnis, Attorney P.O. Box 942836 Sacramento, CA 94236-0001 robin.mcginis@water.ca.gov</p>

EXHIBIT A

State Water Resources Control Board

**NOTICE OF PUBLIC HEARING
and
PRE-HEARING CONFERENCE**

The State Water Resources Control Board will hold a Public Hearing to determine whether to impose Administrative Civil Liability against

Byron-Bethany Irrigation District

**Intake Channel to the Banks Pumping Plant (formerly Italian Slough)
Contra Costa County**

The **Pre-Hearing Conference**
will commence on
Friday, September 25, 2015
at **9:00 a.m.**

in the Sierra Hearing Room
Joe Serna Jr.-CalEPA Building
1001 I Street, Second Floor
Sacramento, CA

The **Public Hearing** will commence on
Wednesday, October 28, 2015 and continue, if necessary,
on October 29 and 30, 2015
at **9:00 a.m.**

in the Coastal Hearing Room
Joe Serna Jr.-CalEPA Building
1001 I Street, Second Floor
Sacramento, CA

PURPOSE OF HEARING

The purpose of this hearing is for the State Water Resources Control Board (State Water Board or Board) to receive evidence relevant to determining whether to impose administrative civil liability against the Bryon-Bethany Irrigation District (BBID) for alleged unauthorized diversion of water and, if so, whether in the amount of \$1,553,250 or some other amount.

FELICIA MARCUS, CHAIR | THOMAS HOWARD, EXECUTIVE DIRECTOR

BACKGROUND

Water Code section section 1052, subdivision (a), which provides that the diversion or use of water subject to Division 2 of the Water Code other than as authorized in Division 2 is a trespass. The State Water Board may administratively impose civil liability in an amount not to exceed \$500 for each day that a trespass occurs. (Wat. Code, § 1052, subd. (b).) Fines can go up to \$10,000 for each day a trespass occurs in certain critically dry years. (See Wat.Code § 1845, subd. (b)(1)(A).)

Water Code section 1052, subdivision (c), provides that any person or entity committing a trespass during a period for which the Governor has issued a proclamation of a state of drought emergency may be liable in an amount not to exceed the sum of one thousand dollars (\$1,000) for each day the trespass occurs plus two thousand five hundred dollars (\$2,500) for each acre-foot of water diverted or used in excess of that diverter's rights. A trespass is the unauthorized diversion or use of water, as defined in Water Code section 1052, subdivision (a).

Water Code section 1052, subdivision (d)(2), provides that civil liability may be imposed administratively by the State Water Board pursuant to Water Code section 1055.

On July 20, 2015, the Assistant Deputy Director of the Division of Water Rights (Assistant Deputy Director) issued an [administrative civil liability complaint \(complaint\)](#) alleging that BBID committed a trespass through the unauthorized diversion of water in violation of Water Code section 1052, subdivision (a). The complaint proposes that liability be imposed upon BBID in the amount of **\$1,553,250**.

By letter dated August 6, 2015, BBID [requested a hearing](#) on the complaint.

This notice, the complaint, and other material related to this hearing can be found on the Division's website at:

http://www.waterboards.ca.gov/waterrights/water_issues/programs/hearings/byron_bethany/index.shtml

KEY ISSUES

In determining the amount of civil liability, the Board must take into consideration all relevant circumstances (Wat. Code, § 1055.3) The hearing will address the following key issues:

- 1) Whether the State Water Board should impose administrative civil liability upon BBID for trespass and, if so, in what amount and on what basis;
 - a. What is the extent of harm caused by BBID's alleged unauthorized diversions?
 - b. What is the nature and persistence of the alleged violation?
 - c. What is the length of time over which the alleged violation occurred?
 - d. What corrective actions, if any, have been taken by BBID?
- 2) What other relevant circumstances should be considered by the State Water Board in determining the amount of any civil liability?

HEARING OFFICER AND HEARING TEAM

State Water Board Member Tam Doduc will preside as the hearing officer for this proceeding. A hearing team will assist the hearing officer by providing legal and technical advice. The hearing team members will be: Nicole Kuenzi, Staff Counsel; Jane Farwell-Jensen, Environmental Scientist; and Ernest Mona, Water Resource Engineer. The hearing team and their supervisors will assist the hearing officer and other members of the State Water Board throughout this proceeding.

SEPARATION OF FUNCTIONS

A staff prosecution team will be a party to this hearing. State Water Board prosecution team members will include: Andrew Tauriainen, Attorney III, Office of Enforcement and Kathy Mrowka, Manager, Enforcement Section.

The prosecution team is separated from the hearing team and is prohibited from having *ex parte* communications with any members of the State Water Board and any members of the hearing team regarding substantive issues and controversial procedural issues within the scope of this proceeding. This separation of functions also applies to the supervisors of each team. (Gov. Code, §§ 11430.10-11430.80.)

HEARING PARTICIPATION

IF YOU WANT TO TAKE PART IN THIS HEARING, you should carefully read the enclosure entitled "Information Concerning Appearance at Water Right Hearings." As stated in that enclosure, anyone wishing to present evidence at the hearing must submit a **Notice of Intent to Appear**, which must be **received** by the State Water Board no later than the deadline listed below. **If BBID fails to submit a Notice of Intent to Appear by the deadline specified in this notice, the State Water Board will deem the request for a hearing regarding the imposition of administrative civil liability to be withdrawn, and the Board may impose administrative civil liability in the amount of \$1,553,250 without further notice. Similarly, if BBID withdraws its request, administrative civil liability may be imposed without further notice.**

Within one week after the deadline to submit Notices of Intent to Appear, the State Water Board will mail out a list of those who desire to participate in the hearing and a copy of all Notices of Intent to Appear that the Board timely received. The list is provided in order to facilitate exchange of written testimony, exhibits, and witness qualifications in advance of the hearing. Only parties and other participants who are authorized by the hearing officer will be allowed to present evidence. Copies of witnesses' proposed **testimony, exhibits, lists of exhibits, qualifications, and statement of service** must be **received** by the State Water Board and served on each of the parties who have indicated their intent to appear, no later than the deadline listed below.

12:00 noon, Wednesday, September 2, 2015

Deadline for receipt of Notice of Intent to Appear.

12:00 noon, Monday, October 12, 2015

Deadline for receipt and service of witnesses' proposed testimony, exhibits, lists of exhibits, qualifications, and statement of service.

PRE-HEARING CONFERENCE

The hearing officer will conduct a pre-hearing conference to discuss the scope of the hearing and any other procedural issues on **Friday, September 25, 2015 at 9:00 a.m.** The goal of the pre-hearing conference is to ensure that the hearing proceeds in an orderly and expeditious manner. The pre-hearing conference will not be used to hear arguments on, or determine the merits of, any hearing issues, other than procedural matters, unless the parties agree to resolve a hearing issue by stipulation. Following the pre-hearing conference, the hearing officer may, at her discretion, modify the hearing procedures or issues set forth in this notice in whole or in part. All parties to the hearing must attend the pre-hearing conference. Failure to attend the pre-hearing conference may result in exclusion from participation in the hearing.

SUBMITTALS TO THE STATE WATER BOARD

All documents, including Notices of Intent to Appear, written testimony, and other exhibits submitted to the State Water Board should be addressed as follows:

Division of Water Rights
State Water Resources Control Board
Attention: Jane Farwell-Jensen

By Mail: P.O. Box 2000, Sacramento, CA 95812-2000
By Hand Delivery: Joe Serna Jr.-CalEPA Building
1001 I Street, 2nd Floor, Sacramento, CA 95814
By Fax: (916) 341-5400
By Email: wrrhearing@waterboards.ca.gov
With Subject of "**BBID ACL Hearing**"

ALL HAND DELIVERED SUBMITTALS should be Date and Time stamped by the Division of Water Rights' Records Unit on the second (2nd) floor of the Joe Serna Jr.-CalEPA Building at the above address prior to or at the submittal deadline. Persons delivering submittals must first check in with lobby security personnel on the first floor. Hand delivered submittals that do not have a timely Date and Time stamp by the Division of Water Rights' Records Unit will be considered late and may not be accepted by the hearing officer.

SETTLEMENTS

Please read the discussion of "Settlements" in the enclosure entitled "Information Concerning Appearance at Water Right Hearings." In this water rights enforcement hearing, the prosecution team is prosecuting BBID for an alleged violation. The prosecution team and BBID may, at their discretion, engage in private settlement discussions and may include any other persons in those discussions. Due to the separation of functions discussed above, **the hearing team cannot participate** in settlement discussions. Should the parties reach settlement, they must notify the hearing team as soon as possible.

IF YOU HAVE ANY QUESTIONS


During the pendency of this proceeding, there shall be no *ex parte* communications regarding substantive or controversial procedural matters within the scope of the proceeding between State Water Board members or hearing team members and any of the other participants, including members of the prosecution team. (Gov. Code, §§ 11430.10-11430.80.) Questions regarding non-controversial procedural matters should be directed to Staff Counsel Nicole Kuenzi at (916) 322-4142 or by email to Nicole.Kuenzi@waterboards.ca.gov; or to Jane Farwell-Jensen at (916) 341-5349 or by email to Jane.Farwell-Jensen@waterboards.ca.gov. (Gov. Code, § 11430.20, subd. (b).)

PARKING, ACCESSIBILITY AND SECURITY

The Joe Serna Jr.-CalEPA Building (CalEPA Building) is accessible to people with disabilities. Individuals who require special accommodations at the CalEPA Building are requested to contact Tanya Cole, Equal Employment Opportunity Office, at (916) 341-5880.

Due to enhanced security precautions at the CalEPA Building, all visitors are required to register with security staff prior to attending any meeting. To sign in and receive a visitor's badge, visitors must go to the Visitor and Environmental Services Center, located just inside and to the left of the building's public entrance. Depending on their destination and the building's security level, visitors may be asked to show valid picture identification. Valid picture identification can take the form of a current driver's license, military identification card, or state or federal identification card. Depending on the size and number of meetings scheduled on any given day, the security check-in could take up to fifteen minutes. Please allow adequate time to sign in before being directed to the hearing.

August 19, 2015
Date



Jeanine Townsend
Clerk to the Board

Enclosures

INFORMATION CONCERNING APPEARANCE AT WATER RIGHT HEARINGS

The following procedural requirements will apply and will be strictly enforced:

- 1. HEARING PROCEDURES GENERALLY:** The hearing will be conducted in accordance with the procedures for hearings set forth at California Code of Regulations, title 23, sections 648-648.8, 649.6 and 760, as they currently exist or may be amended. A copy of the current regulations and the underlying statutes governing adjudicative proceedings before the State Water Board is available upon request or may be viewed at the State Water Board's web site: http://www.waterboards.ca.gov/laws_regulations

Unless otherwise determined by the hearing officers, each party may make an opening statement, call and examine witnesses, introduce exhibits, cross-examine opposing witnesses on any matter relevant to the issues even if that matter was not covered in the direct examination, impeach any witness, rebut adverse evidence, and subpoena, call and examine an adverse party or witness as if under cross-examination. At the discretion of the hearing officers, parties may also be afforded the opportunity to present closing statements or submit briefs. The State Water Board encourages parties with common interests to work together to make the hearing process more efficient. The hearing officers reserve the right to issue further rulings clarifying or limiting the rights of any party where authorized under applicable statutes and regulations.

Parties must file any requests for exceptions to procedural requirements in writing with the State Water Board and must serve such requests on the other parties. To provide time for parties to respond, the hearing officers will rule on procedural requests filed in writing no sooner than fifteen days after receiving the request, unless an earlier ruling is necessary to avoid disrupting the hearing.

- 2. SETTLEMENTS:** In water right enforcement hearings, a State Water Board staff member or team prosecutes an alleged violation. In such enforcement cases, the prosecution and a party who is the subject of the proposed enforcement action may at their discretion engage in private settlement discussions, or may include any other persons in those discussions. Although other persons may be authorized to participate in the hearing as parties, such a designation does not constitute a ruling that those persons must be allowed to engage in any settlement discussions between the prosecution and the party against whom the agency action is directed. The consent of other parties is not required before the State Water Board, or the Executive Director under State Water Board [Resolution No. 2012-0061](#), can approve a proposed settlement agreement between the prosecution and a party subject to a proposed enforcement action. However, all parties will be given the opportunity to comment on any settlement submitted to the State Water Board or the Executive Director for approval.

In non-enforcement hearings involving an unresolved protest between a protestant and a water right applicant or petitioner, those persons will be designated as parties in the hearing. (Cal. Code Regs., tit. 23, § 648.1, subd. (b).) Other persons who file a Notice of Intent to Appear in the hearing, may also be designated as parties. In such cases, the parties whose dispute originates the action may at their discretion meet privately to engage in settlement discussions, or may include other persons. If the original parties resolve the dispute, the hearing officers will determine whether or not to continue the hearing, after allowing all remaining parties the opportunity to comment on any proposed settlement. The Executive Director or the State Water Board may approve a settlement in the absence of a hearing, notwithstanding the lack of consent of parties besides the protestant and the applicant or petitioner.

3. **PARTIES:** The current parties to the hearing are **Byron-Bethany Irrigation District; and the prosecution team for the State Water Board**. Additional parties may be designated in accordance with the procedures for this hearing. Except as may be decided by specific rulings of the hearing officers, any person or entity who timely files a Notice of Intent to Appear indicating the desire to participate beyond presenting a policy statement shall be designated as a party. The hearing officers may impose limitations on a party's participation. (Gov. Code, § 11440.50, subd. (c).) Persons or entities who do not file a timely Notice of Intent to Appear may be designated as parties at the discretion of the hearing officers, for good cause shown, and subject to appropriate conditions as determined by the hearing officers. Except as specifically provided in this notice or by ruling of the hearing officers, only parties will be allowed to present evidence.
4. **INTERESTED PERSONS:** Pursuant to California Code of Regulations, title 23, section 648.1, subdivision (d), the State Water Board will provide an opportunity for presentation of non-evidentiary policy statements or comments by interested persons who are not designated as parties. A person or entity that appears and presents only a policy statement is not a party and will not be allowed to make objections, offer evidence, conduct cross-examination, make legal argument or otherwise participate in the evidentiary hearing. Interested persons will not be added to the service list and will not receive copies of written testimony or exhibits from the parties, but may access hearing documents at the website listed in the hearing notice.

Policy statements are subject to the following provisions in addition to the requirements outlined in regulation. (Cal. Code Regs., tit. 23, § 648.1, subd. (d).)

- a. Policy statements are not subject to the pre-hearing requirements for testimony or exhibits, except that interested persons are requested to file a Notice of Intent to Appear, indicating clearly an intent to make a policy statement only.
 - b. The State Water Board requests that policy statements be provided in writing before they are presented. Please see section 7, for details regarding electronic submittal of policy statements.
5. **NOTICE OF INTENT TO APPEAR:** Persons and entities who seek to participate as parties in this hearing must file either an electronic copy or a paper copy of a Notice of Intent to Appear, which must be **received** by the State Water Board no later than **the deadline prescribed in the Hearing Notice**. Failure to submit a Notice of Intent to Appear in a timely manner may be interpreted by the State Water Board as intent not to appear. **If BBID fails to submit a Notice of Intent to Appear by the deadline specified in this notice, the State Water Board will deem the request for a hearing regarding the administrative civil liability complaint to be withdrawn, and administrative civil liability may be imposed without further notice. Similarly, if BBID withdraws its request, administrative civil liability may be imposed without further notice.**

Any faxed or emailed Notices of Intent to Appear must be followed by a mailed or delivered hard copy with an original signature.

Interested persons who will not be participating as parties, but instead presenting only non-evidentiary policy statements should also file a Notice of Intent to Appear.

The Notice of Intent to Appear must state the name and address of the participant. Except for interested persons who will not be participating as parties, the Notice of Intent to Appear must also include: (1) the name of each witness who will testify on the party's behalf;

(2) a brief description of each witness' proposed testimony; and (3) an estimate of the time (not to exceed the total time limit for oral testimony described in section 9, below) that the witness will need to present a brief oral summary of his or her prior-submitted written testimony. (See section 6, below.) Parties who do not intend to present a case-in-chief but wish to cross-examine witnesses or present rebuttal should so indicate on the Notice of Intent to Appear.¹ Parties who decide not to present a case-in-chief after having submitted a Notice of Intent to Appear should notify the State Water Board and the other parties as soon as possible.

Parties who are not willing to accept electronic service of hearing documents should check the appropriate box on the Notice of Intent to Appear. (See section 7, below.)

The State Water Board will mail a service list of parties to each person who has submitted a Notice of Intent to Appear. The service list will indicate if any party is unwilling to accept electronic service. If there is any change in the hearing schedule, only those parties on the service list, and interested persons that have filed a Notice of Intent to Appear expressing their intent to present a policy statement only, will be informed of the change.

- 6. WRITTEN TESTIMONY AND OTHER EXHIBITS:** Exhibits include written testimony, statements of qualifications of expert witnesses, and other documents to be used as evidence. Each party proposing to present testimony on factual or other evidentiary matters at the hearing shall submit such testimony in writing.² Written testimony shall be designated as an exhibit, and must be submitted with the other exhibits. Oral testimony that goes beyond the scope of the written testimony may be excluded. A party who proposes to offer expert testimony must submit an exhibit containing a statement of the expert witness's qualifications.

Each party shall submit to the State Water Board **three (3) paper copies** and **one electronic copy** of each of its exhibits. With its exhibits, each party must submit a completed Exhibit Identification Index. Each party shall also serve a copy of each exhibit and the exhibit index on every party on the service list. A statement of service with manner of service indicated shall be filed with each party's exhibits.

The exhibits and indexes for this hearing, and a statement of service, must be **received by the State Water Board and served on the other parties no later than the deadline prescribed in the Hearing Notice**. The State Water Board may interpret failure to timely submit such documents as a waiver of party status.

All hearing documents that are timely received will be posted on the hearings program webpage identified in the hearing notice.

The following requirements apply to exhibits:

- a. Exhibits based on technical studies or models shall be accompanied by sufficient information to clearly identify and explain the logic, assumptions, development, and operation of the studies or models.

¹ A party is not required to present evidence as part of a case-in-chief. Parties not presenting evidence as part of a case-in-chief will be allowed to participate through opening statements, cross-examination, and rebuttal, and may also present closing statements or briefs, if the hearing officers allow these in the hearing.

² The hearing officers may make an exception to this rule if the witness is adverse to the party presenting the testimony and is willing to testify only in response to a subpoena or alternative arrangement.

- b. The hearing officers have discretion to receive into evidence by reference relevant, otherwise admissible, public records of the State Water Board and documents or other evidence that have been prepared and published by a public agency, provided that the original or a copy was in the possession of the State Water Board before the notice of the hearing is issued. (Cal. Code Regs., tit. 23, § 648.3.) A party offering an exhibit by reference shall advise the other parties and the State Water Board of the titles of the documents, the particular portions, including page and paragraph numbers, on which the party relies, the nature of the contents, the purpose for which the exhibit will be used when offered in evidence, and the specific file folder or other exact location in the State Water Board's files where the document may be found.
- c. A party seeking to enter in evidence as an exhibit a voluminous document or database may so advise the other parties prior to the filing date for exhibits, and may ask them to respond if they wish to have a copy of the exhibit. If a party waives the opportunity to obtain a copy of the exhibit, the party sponsoring the exhibit will not be required to provide a copy to the waiving party. Additionally, with the permission of the hearing officers, such exhibits may be submitted to the State Water Board solely in electronic form, using a file format readable by Microsoft Office 2003 software.
- d. Exhibits that rely on unpublished technical documents will be excluded unless the unpublished technical documents are admitted as exhibits.
- e. Parties submitting large format exhibits such as maps, charts, and other graphics shall provide the original for the hearing record in a form that can be folded to 8 ½ x 11 inches. Alternatively, parties may supply, for the hearing record, a reduced copy of a large format original if it is readable.

7. ELECTRONIC SUBMISSIONS: To expedite the exchange of information, reduce paper use, and lower the cost of participating in the hearing, participants are encouraged to submit hearing documents to the State Water Board in electronic form and parties are encouraged to agree to electronic service.

Any documents submitted or served electronically must be in Adobe Portable Document Format (PDF), except for Exhibit Identification Indexes, which may be in a format supported by Microsoft Excel or Word. Electronic submittals to the State Water Board of documents less than 11 megabytes in total size (incoming mail server attachment limitation) may be sent via electronic mail to: wrhearing@waterboards.ca.gov with a subject of "**BBID ACL Hearing**". Electronic submittals to the State Water Board of documents greater than 11 megabytes in total size should be submitted on a compact disc (CD). Each electronically submitted exhibit must be saved as a separate PDF file, with the name in lower case lettering.

8. PRE-HEARING CONFERENCE: At the hearing officers' discretion, a pre-hearing conference may be conducted before the proceeding to discuss the scope of the hearing, the status of any protests, and any other appropriate procedural issues.

9. ORDER OF PROCEEDING: Hearing officers will follow the Order of Proceedings specified in California Code of Regulations, title 23, section 648.5. Participants should take note of the following additional information regarding the major hearing events. The time limits specified below may be changed by the hearing officers, for good cause.

- a. **Policy Statements Within the Evidentiary Hearing:** Policy statements will be heard at the start of the hearing, before the presentation of cases-in-chief. Oral summaries of the policy statements will be limited to **five (5) minutes** or such other time as established by the hearing officers.
- b. **Presentation of Cases-In-Chief:** Each party who so indicates on a Notice of Intent to Appear may present a case-in-chief addressing the key issues identified in the hearing notice. The case-in-chief will consist of any opening statement, oral testimony, introduction of exhibits, and cross-examination of the party's witnesses. The hearing officers may allow redirect examination and recross examination. The hearing officers will decide whether to accept the party's exhibits into evidence upon a motion of the party after completion of the case-in-chief.
 - i. **Opening Statements:** At the beginning of a case-in-chief, the party or the party's attorney may make an opening statement briefly and concisely stating the objectives of the case-in-chief, the major points that the proposed evidence is intended to establish, and the relationship between the major points and the key issues. Oral opening statements will be limited to **(20) minutes** per party. A party may submit a written opening statement before the hearing or during the hearing, prior to their case-in-chief. Any policy-oriented statements by a party should be included in the opening statement.
 - ii. **Oral Testimony:** All witnesses presenting testimony shall appear at the hearing. Before testifying, witnesses shall swear or affirm that the written and oral testimony they will present is true and correct. Written testimony shall not be read into the record. Written testimony affirmed by the witness is direct testimony. Witnesses will be allowed up to **(20) minutes** to summarize or emphasize their written testimony on direct examination. Each party will be allowed up to **one (1) hour total** to present all of its direct testimony.³
 - iii. **Cross-Examination:** Cross-examination of a witness will be permitted on the party's written submittals, the witness' oral testimony, and other relevant matters not covered in the direct testimony. (Gov. Code, § 11513, subd. (b).) If a party presents multiple witnesses, the hearing officers will decide whether the party's witnesses will be cross-examined as a panel. Cross-examiners initially will be limited to **one (1) hour** per witness or panel of witnesses. The hearing officers have discretion to allow additional time for cross-examination if there is good cause demonstrated in an offer of proof. Ordinarily, only a party or the party's representative will be permitted to examine a witness, but the hearing officers may allow a party to designate a person technically qualified in the subject being considered to examine a witness.
 - iv. **Redirect and Recross Examination:** Redirect examination may be allowed at the discretion of the hearing officers. Any redirect examination and recross examination permitted will be limited to the scope of the cross-examination and the redirect examination, respectively. The hearing officers may establish time limits for any permitted redirect and recross examination.

³ The hearing officers may, for good cause, approve a party's request for additional time to present direct testimony during the party's case-in-chief. The hearing officers may allow additional time for the oral direct testimony of the witness if the witness is adverse to the party presenting the testimony and the hearing officers are satisfied that the party could not produce written direct testimony for the witness.

v. **Questions by State Water Board and Staff:** State Water Board members and staff may ask questions at any time and may cross-examine any witness.

c. **Rebuttal:** After all parties have presented their cases-in-chief and their witnesses have been cross-examined, the hearing officers will allow parties to present rebuttal evidence. Rebuttal evidence is new evidence used to rebut evidence presented by another party.

Rebuttal testimony and exhibits need not be submitted prior to the hearing, although the hearing officers may require submittal of rebuttal testimony and exhibits before they are presented in order to improve hearing efficiency. Rebuttal evidence is limited to evidence that is responsive to evidence presented in connection with another party's case-in-chief, and it does not include evidence that should have been presented during the case-in-chief of the party submitting rebuttal evidence. It also does not include repetitive evidence. Cross-examination of rebuttal evidence will be limited to the scope of the rebuttal evidence.

d. **Closing Statements and Legal Arguments:** At the close of the hearing or at other times, if appropriate, the hearing officers may allow oral closing statements or legal arguments or set a schedule for filing legal briefs or written closing statements. If the hearing officers authorize the parties to file briefs, three copies of each brief shall be submitted to the State Water Board, and one copy shall be served on each of the other participants on the service list. A party shall not attach a document of an evidentiary nature to a brief unless the document is already in the evidentiary hearing record or is the subject of an offer into evidence made at the hearing.

10. EX PARTE CONTACTS: During the pendency of this proceeding, commencing no later than the issuance of the Notice of Hearing, there shall be no *ex parte* communications with State Water Board members or State Water Board hearing team staff and supervisors, regarding substantive or controversial procedural issues within the scope of the proceeding. (Gov. Code, §§ 11430.10-11430.80.) **Any communications regarding potentially substantive or controversial procedural matters, including but not limited to evidence, briefs, and motions, must demonstrate that all parties were served and the manner of service.** Parties may accomplish this by submitting a proof of service or by other verification, such as correct addresses in an electronic-mail carbon copy list, or a list of the parties copied and addresses in the carbon copy portion of a letter. Communications regarding non-controversial procedural matters are permissible and should be directed to staff on the hearing team, not State Water Board members. (Gov. Code, § 11430.20, subd. (b).) A document regarding *ex parte* communications entitled "Ex Parte Questions and Answers" is available upon request or from our website at:
http://www.waterboards.ca.gov/laws_regulations/docs/exparte.pdf.

11. RULES OF EVIDENCE: Evidence will be admitted in accordance with Government Code section 11513. Hearsay evidence may be used to supplement or explain other evidence, but over timely objection shall not be sufficient in itself to support a finding unless it would be admissible over objection in a civil action.

NOTICE OF INTENT TO APPEAR

_____ plans to participate in the water right hearing regarding
(name of party or participant)

Administrative Civil Liability
against
Byron-Bethany Irrigation District

**scheduled to commence
Wednesday, October 28, 2015 and continue, if necessary,
on October 29 and 30, 2015
at 9:00 a.m.**

1) Check only one (1) of the following:

- I/we intend to present a policy statement only.
- I/we intend to participate by cross-examination or rebuttal only.
- I/we plan to call the following witnesses to testify at the hearing. (Fill in the Following Table)

NAME	SUBJECT OF PROPOSED TESTIMONY	ESTIMATED LENGTH OF DIRECT TESTIMONY	EXPERT WITNESS (YES/NO)

(If more space is required, please add additional pages or use reverse side.)

2) Fill in the following information of the Participant, Party, Attorney, or Other Representative:

Name (Print): _____

Mailing Address: _____

Phone Number: () _____ . Fax Number: () _____

E-mail: _____

Optional:

- I/we decline electronic service of hearing-related materials.

Signature: _____ Dated: _____

Exhibit Identification Index

Administrative Civil Liability
against
Byron-Bethany Irrigation District

scheduled to commence
**Wednesday, October 28, 2015 and continue, if necessary,
on October 29 and 30, 2015
at 9:00 a.m.**

PARTICIPANT: _____

Exhibit Identification Number	Exhibit Description	Status of Evidence (for Hearing Team use Only)		
		Introduced	Accepted	By Official Notice

EXHIBIT B



State Water Resources Control Board

February 18, 2016

VIA ELECTRONIC MAIL

TO: ENCLOSED REVISED SERVICE LIST OF PARTICIPANTS

SECOND PRE-HEARING CONFERENCE RELATED TO BYRON BETHANY IRRIGATION DISTRICT ADMINISTRATIVE CIVIL LIABILITY COMPLAINT AND THE WEST SIDE IRRIGATION DISTRICT DRAFT CEASE AND DESIST ORDER HEARINGS

This letter addresses the procedural issues that were raised during the State Water Resources Control Board's (State Water Board) February 8, 2016 second pre-hearing conference and several additional procedural issues.

ORDER AND TIMING OF PROCEEDING

We will conduct the hearings in the following order:

Policy Statements: Before the commencement of Phase 1 of the consolidated hearings, we will hear from any speakers who did not submit a Notice of Intent to Appear but wish to make a non-evidentiary policy statement. (See Hearing Notice Attachment, Sec. 9a, Policy Statements.) We will limit policy statements to 5 minutes, or less as is appropriate based on the number of persons wishing to make a policy statement.

Opening Statements: We will allow one written opening statement to be submitted by each party in each proceeding. Each written opening statement shall not exceed 10 pages in length, double-spaced, in 12 point font (preferably Arial). Alternately, parties may file a joint opening statement of up to 20 pages in length. Written rebuttal of written opening statements will not be accepted. The opportunity to respond in writing to opening statements is in a party's closing brief.

After presentation of any policy statements and before we proceed to summaries of direct testimony in Phase 1, we will allow all of the parties to either proceeding to make a single oral opening statement. We will not allow time for additional opening statements prior to Phase 2 of either hearing.

Oral opening statements made by parties presenting a case-in-chief should briefly summarize the parties' objectives in the case, the major points they intend to establish, and the relationship between the major points and the Key Issues. Oral opening statements may include policy-oriented statements and should briefly summarize the party's interest and extent of participation.

FELICIA MARCUS, CHAIR | THOMAS HOWARD, EXECUTIVE DIRECTOR

We will hear oral opening statements in the following order according to the stated time limits. Parties may choose to combine their allowed time with that of other parties. However, parties will need to inform us of these changes, by Noon, March 14, 2016:

1. Division of Water Rights Prosecution Team (Prosecution Team) (20 minutes)
2. Byron Bethany Irrigation District (BBID) (20 minutes)
3. The West Side Irrigation District (WSID) (20 minutes)
4. Mr. Morat (5 minutes)
5. South Delta Water Agency (SDWA) (5 minutes)
6. Central Delta Water Agency (CDWA) (5 minutes)
7. City and County of San Francisco (CCSF) (5 minutes)
8. San Joaquin Tributaries Authority (SJTA) (5 minutes)
9. California Department of Water Resources (DWR) (5 minutes)
10. State Water Contractors (5 minutes)
11. Patterson Irrigation District (5 minutes)
12. Banta-Carbona Irrigation District (5 minutes)
13. Westlands Water District (5 minutes)

Cases-in-Chief – Phase 1 (Water Availability): We will allow the parties to present their oral summaries of direct testimony in the following order, according to the stated time limits. We may, upon an offer of proof as to the substance, purpose, and relevancy of the expected testimony, approve a party's request for additional time to present direct testimony during the party's case-in-chief:

Order of Presentation for Direct Testimony:

1. Prosecution Team (1.5 hours)
2. BBID (1.5 hours)
3. WSID (1.5 hours)
4. SDWA (30 minutes)

Order of Cross-Examination:

Cross-examination is not limited to the scope of direct testimony. Cross-examination must, however, be limited to the factual issues in dispute. The parties may choose to combine their allowed time for cross-examination with that of other parties. However, parties will need to inform us of these changes, by Noon, March 14, 2016.

In Phase 1, cross-examination will be conducted in the following order, according to the stated time limits per witness, or in the case of multiple witnesses, per panel of witnesses:

1. Prosecution Team (1 hour)
2. BBID (1 hour)
3. WSID (1 hour)
4. SDWA (10 minutes)
5. CDWA (10 minutes)
6. CCSF (10 minutes)
7. SJTA (10 minutes)
8. DWR (10 minutes)
9. State Water Contractors (10 minutes)
10. Patterson Irrigation District (10 minutes)
11. Banta-Carbona Irrigation District (10 minutes)
12. Westlands Water District (10 minutes)

During the second pre-hearing conference, some of the parties expressed concern that the time allowed for cross-examination is too limited, and that cross-examination of witnesses by panel will lead to confusion. At this time, we intend to proceed within the time limits provided here and allow cross-examination by panel of witnesses if a party has presented its direct testimony in that manner rather than by individual witness. However, the cross-examiners may direct their questions to particular witnesses on the panel.

We note that the parties have already had the opportunity to depose the Prosecution Team's witnesses, so cross-examination during the hearing will not be the parties' first and only opportunity to elicit testimony from these individuals. The parties also have the option of coordinating and combining their allotted time. We conclude that the time limits are appropriate to avoid repetitive testimony and promote efficiency of the hearing procedure. We will consider requests for additional time during the hearing, and will allow additional time if further cross-examination appears likely to produce relevant and material evidence.

Redirect Testimony and Recross-Examination: At our discretion during the hearing, we may allow redirect examination upon an offer of proof as to the substance, purpose, and relevancy of the expected testimony. Recross-examination, if any, shall be limited to the scope of the redirect testimony. We are likely to establish time limits for any redirect and recross-examination.

If allowed, redirect testimony and recross-examination will be conducted in the same order established for direct testimony and cross-examination.

Exhibits offered into Evidence: After completion of direct testimony, cross-examination, and if allowed, redirect testimony and recross-examination, the party presenting its case-in-chief may offer its exhibits into evidence.

Presentation of Rebuttal: After completion of direct testimony and cross-examination, and any allowed redirect testimony and recross-examination, the parties may present rebuttal evidence.

Rebuttal evidence is limited to evidence that is responsive to evidence presented in connection with another party's case-in-chief, and does not include evidence that should have been presented during the case-in-chief of the party submitting rebuttal evidence. Rebuttal evidence may not be repetitive of evidence already submitted. Cross-examination of rebuttal evidence shall be limited to the scope of the rebuttal evidence.

We will allow parties to present a summary of submitted written rebuttal testimony. Parties may also offer rebuttal testimony that is in response to new evidence and could not have been previously submitted in writing. The parties may choose to combine their allowed time for rebuttal with that of other parties. However, parties will need to inform us of these changes, by Noon, March 14, 2016.

Rebuttal testimony will be presented in the following order, according to the stated time limits. The Prosecution Team, BBID, and WSID will each be allowed 30 minutes. All other parties will be limited to 10 minutes per party for rebuttal.

1. Prosecution Team (30 minutes)
2. BBID (30 minutes)
3. WSID (30 minutes)
4. SDWA (10 minutes)

5. CDWA (10 minutes)
6. CCSF (10 minutes)
7. SJTA (10 minutes)
8. DWR (10 minutes)
9. State Water Contractors (10 minutes)
10. Patterson Irrigation District (10 minutes)
11. Banta-Carbona Irrigation District (10 minutes)
12. Westlands Water District (10 minutes)

We may allow additional time for rebuttal upon an offer of proof as to the substance, purpose, and relevancy of the expected testimony.

Cross-examination of rebuttal evidence will follow the same order as presentation of rebuttal, and will be limited to the scope of the rebuttal evidence. Time limits for cross-examination of rebuttal testimony will be specified at a later time.

After completion of presentation of rebuttal evidence and rebuttal cross-examination by all the parties, each party may offer any rebuttal exhibits into evidence.

Cases-in-Chief – Phase 2 (BBID ACL Complaint):

We will allow the parties to present their cases-in-chief and conduct cross-examination in the following order, according to the stated time limits. We may, upon an offer of proof as to the substance, purpose, and relevancy of the expected testimony, approve a party's request for additional time to present direct testimony during the party's case-in-chief:

Order of Presentation for Direct Testimony:

1. Prosecution Team (1 hour)
2. BBID (1 hour)
3. SDWA (20 minutes)
4. Richard Morat (10 minutes)

Order of Cross-Examination:

1. Prosecution Team (1 hour)
2. BBID (1 hour)
3. WSID (10 minutes)
4. SDWA (10 minutes)
5. CDWA (10 minutes)
6. CCSF (10 minutes)
7. SJTA (10 minutes)
8. DWR (10 minutes)
9. State Water Contractors (10 minutes)
10. Patterson Irrigation District (10 minutes)
11. Banta-Carbona Irrigation District (10 minutes)

The parties may choose to combine their allowed time for cross-examination with that of other parties. However, parties will need to inform us of these changes, by Noon, March 14, 2016.

We may allow additional time for cross-examination, if we determine that the examination is likely to produce relevant and material testimony.

Redirect Testimony and Recross-Examination: At our discretion during the hearing, we may allow redirect examination upon an offer of proof as to the substance, purpose, and relevancy of the expected testimony. Recross-examination, if any, shall be limited to the scope of the redirect testimony. We are likely to establish time limits for any redirect and recross-examination.

If allowed, redirect testimony and recross-examination will be conducted in the same order established for direct testimony and cross-examination.

Exhibits offered into Evidence: After completion of direct testimony, cross-examination, and if allowed, redirect testimony and recross-examination, the party presenting its case-in-chief may offer its exhibits into evidence.

Presentation of Rebuttal: After completion of direct testimony and cross-examination, and any allowed redirect testimony and recross-examination, the parties may present rebuttal evidence.

Rebuttal evidence is limited to evidence that is responsive to evidence presented in connection with another party's case-in-chief, and does not include evidence that should have been presented during the case-in-chief of the party submitting rebuttal evidence. Rebuttal evidence may not be repetitive of evidence already submitted. Cross-examination of rebuttal evidence shall be limited to the scope of the rebuttal evidence.

We will allow parties to present a summary of submitted written rebuttal testimony. Parties may also offer rebuttal testimony that is in response to new evidence and could not have been previously submitted in writing. The parties may choose to combine their allowed time for rebuttal with that of other parties. However, parties will need to inform us of these changes, by Noon, March 14, 2016.

The order of presentation of rebuttal evidence will be the same as the order for cross-examination. The Prosecution Team and BBID will each be allowed 30 minutes. All other parties will be limited to 10 minutes per party for rebuttal.

We may allow additional time for rebuttal upon an offer of proof as to the substance, purpose, and relevancy of the expected testimony.

Cross-examination of rebuttal evidence will follow the same order as presentation of rebuttal, and will be limited to the scope of the rebuttal evidence. Time limits for cross-examination of rebuttal testimony will be specified at a later time.

After completion of presentation of rebuttal evidence and rebuttal cross-examination by all the parties, each party may offer any rebuttal exhibits into evidence.

Cases-in-Chief – Phase 2 (WSID Draft CDO):

We will allow the parties to present their cases-in-chief and conduct cross-examination in the following order, according to the stated time limits. We may, upon an offer of proof as to the substance, purpose, and relevancy of the expected testimony, approve a party's request for additional time to present direct testimony during the party's case-in-chief:

Order of Presentation for Direct Testimony:

1. Prosecution Team (1 hour)
2. WSID (1 hour)
3. SDWA (20 minutes)

Order of Cross-Examination:

1. Prosecution Team (1 hour)
2. WSID (1 hour)
3. BBID (10 minutes)
4. SDWA (10 minutes)
5. CDWA (10 minutes)
6. CCSF (10 minutes)
7. SJTA (10 minutes)
8. DWR (10 minutes)
9. State Water Contractors (10 minutes)
10. Westlands Water District (10 minutes)

The parties may choose to combine their allowed time for cross-examination with that of other parties. However, parties will need to inform us of these changes, by Noon, March 14, 2016.

We may allow additional time for cross-examination if we determine that the examination is likely to produce relevant and material testimony.

Redirect Testimony and Recross-Examination: At our discretion during the hearing, we may allow redirect examination upon an offer of proof as to the substance, purpose, and relevancy of the expected testimony. Recross-examination, if any, shall be limited to the scope of the redirect testimony. We are likely to establish time limits for any redirect and recross-examination.

If allowed, redirect testimony and recross-examination will be conducted in the same order established for direct testimony and cross-examination.

Exhibits offered into Evidence: After completion of direct testimony, cross-examination, and if allowed, redirect testimony and recross-examination, the party presenting its case-in-chief may offer its exhibits into evidence.

Presentation of Rebuttal: After completion of direct testimony and cross-examination, and any allowed redirect testimony and recross-examination, the parties may present rebuttal evidence.

Rebuttal evidence is limited to evidence that is responsive to evidence presented in connection with another party's case-in-chief, and does not include evidence that should have been presented during the case-in-chief of the party submitting rebuttal evidence. Rebuttal evidence may not be repetitive of evidence already submitted. Cross-examination of rebuttal evidence shall be limited to the scope of the rebuttal evidence.

We will allow parties to present a summary of submitted written rebuttal testimony. Parties may also offer rebuttal testimony that is in response to new evidence and could not have been previously submitted in writing. The parties may choose to combine their allowed time for rebuttal with that of other parties. However, parties will need to inform us of these changes, by Noon, March 14, 2016.

WSID Revised Notice of Intent to Appear

On January 19, 2016, WSID submitted an amended Notice of Intent to Appear that added Ms. Karna Harrigfeld and Mr. Greg Young as witnesses. The Prosecution Team objected to these revisions to WSID's witness list. In our ruling of February 1, 2016, we allowed the revision to include Mr. Young, who had previously been identified by BBID as a witness in the BBID ACL Complaint hearing. We sustained the Prosecution Team's objection with respect to Ms. Harrigfeld, and excluded her testimony from the record.

On February 3, 2016, WSID again revised their witness list to include Mr. Jack Alvarez. We find that the same reasoning applicable to our exclusion of the testimony of Ms. Harrigfeld is applicable to Mr. Alvarez. In our prior ruling, we permitted WSID to submit the testimony of an alternate witness solely for the purpose of authenticating the referenced exhibits. Because the Prosecution Team is willing to stipulate to exhibits WSID 0001 through 0026, and absent the objection of any other party, testimony for this purpose is now unnecessary. Therefore, we will not include any of Mr. Alvarez's testimony in the record at this time.

Ex Parte Communications

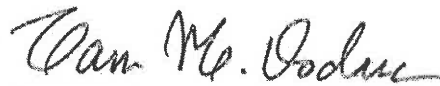
We would like to take this opportunity to remind the parties that ex parte communications concerning substantive or controversial procedural issues relevant to this hearing are prohibited. Please be sure to copy the service list on any correspondence to us, the other Board Members, or the hearing team.

Thank you for your continued cooperation. Questions regarding non-controversial procedural matters should be directed to Staff Counsel Nicole Kuenzi at (916) 322-4142 or by email to Nicole.Kuenzi@waterboards.ca.gov; or Ernie Mona at (916) 341-5359 or by email to Ernie.Mona@waterboards.ca.gov or to Jane Farwell-Jensen at (916) 341-5349 or by email to Jane.Farwell-Jensen@waterboards.ca.gov (Gov. Code, § 11430.20, subd. (b).)

Sincerely,



Frances Spivy-Weber, Vice-Chair
WSID Hearing Officer



Tam M. Doduc, Board Member
BBID Hearing Officer

Enclosures: Revised Service Lists

**SERVICE LIST OF PARTICIPANTS
THE WEST SIDE IRRIGATION DISTRICT
CEASE AND DESIST ORDER HEARING
(October 8, 2015, Revised 12/18/15)**

Parties THE FOLLOWING <u>MUST BE SERVED</u> WITH WRITTEN TESTIMONY, EXHIBITS AND OTHER DOCUMENTS. (All have AGREED TO ACCEPT electronic service, pursuant to the rules specified in the hearing notice.)	
<p>DIVISION OF WATER RIGHTS Prosecution Team Andrew Tauriainen, Attorney III SWRCB Office of Enforcement 1001 I Street, 16th Floor Sacramento, CA 95814 Andrew.Tauriainen@waterboards.ca.gov</p>	<p>THE WEST SIDE IRRIGATION DISTRICT Jeanne M. Zolezzi Karna Harrigfeld Janelle Krattiger Herum\Crabtree\Suntag 5757 Pacific Ave., Suite 222 Stockton, CA 95207 jzolezzi@herumcrabtree.com kharrigfeld@herumcrabtree.com jkrattiger@herumcrabtree.com</p>
<p>STATE WATER CONTRACTORS Stephanie Morris 1121 L Street, Suite 1050 Sacramento, CA 95814 smorris@swc.org</p>	<p>WESTLANDS WATER DISTRICT Daniel O'Hanlon Rebecca Akroyd Kronick Moskovitz Tiedemann & Girard 400 Capitol Mall, 27th Floor Sacramento, CA 95814 dohanlon@kmtg.com rakroyd@kmtg.com</p> <p>Philip Williams of Westlands Water District pwilliams@westlandswater.org</p>
<p>SOUTH DELTA WATER AGENCY John Herrick, Esq. Dean Ruiz 4255 Pacific Ave., Suite 2 Stockton, CA 95207 jherrlaw@aol.com dean@hprlaw.net</p>	<p>CENTRAL DELTA WATER AGENCY Jennifer Spaletta Spaletta Law PC PO Box 2660 Lodi, CA 95241 jennifer@spalettalaw.com</p> <p>Dante Nomellini and Dante Nomellini, Jr. Nomellini, Grilli & McDaniel ngmplcs@pacbell.net dantejr@pacbell.net</p>
<p>CITY AND COUNTY OF SAN FRANCISCO Jonathan Knapp Office of the City Attorney 1390 Market Street, Suite 418 San Francisco, CA 94102 jonathan.knapp@sfgov.org</p>	<p>SAN JOAQUIN TRIBUTARIES AUTHORITY Valerie Kincaid O'Laughlin & Paris LLP 2617 K Street, Suite 100 Sacramento, CA 95814 vkinaid@olaughlinparis.com towater@olaughlinparis.com</p> <p>(revised 12/18/15)</p>

<p>CALIFORNIA DEPARTMENT OF WATER RESOURCES Robin McGinnis, Attorney PO Box 942836 Sacramento, CA 94236-0001 robin.mcgininis@water.ca.gov</p>	<p>BYRON BETHANY IRRIGATION DISTRICT Daniel Kelly Somach Simmons & Dunn 500 Capitol Mall, Suite 1000, Sacramento, CA 95814 dkelly@somachlaw.com</p>
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**SERVICE LIST OF PARTICIPANTS
BYRON-BETHANY IRRIGATION DISTRICT
ADMINISTRATIVE CIVIL LIABILITY HEARING**

(09/02/15; Revised: 09/10/15; Revised 10/06/15; Revised 10/22/15, 12/18/15)

PARTIES	
<p>THE FOLLOWING <u>MUST BE SERVED</u> WITH WRITTEN TESTIMONY, EXHIBITS AND OTHER DOCUMENTS. (All have AGREED TO ACCEPT electronic service, pursuant to the rules specified in the hearing notice.)</p>	
<p>Division of Water Rights Prosecution Team Andrew Tauriainen, Attorney III SWRCB Office of Enforcement 1001 I Street, 16th Floor Sacramento, CA 95814 andrew.tauriainen@waterboards.ca.gov</p>	<p>Byron Bethany Irrigation District Daniel Kelly Somach Simmons & Dunn 500 Capitol Mall, Suite 1000, Sacramento, CA 95814 dkelly@somachlaw.com</p>
<p>Patterson Irrigation District Banta-Carbona Irrigation District The West Side Irrigation District Jeanne M. Zolezzi Herum\Crabtree\Suntag 5757 Pacific Ave., Suite 222 Stockton, CA 95207 jzolezzi@herumcrabtree.com</p>	<p>City and County of San Francisco Jonathan Knapp Office of the City Attorney 1390 Market Street, Suite 418 San Francisco, CA 94102 jonathan.knapp@sfgov.org</p> <p>Robert E. Donlan Ellison, Schneider & Harris L.L.P. 2600 Capitol Avenue, Suite 400 Sacramento, CA 95816 (916) 447-2166 red@eslawfirm.com</p>
<p>Central Delta Water Agency Jennifer Spaletta Spaletta Law PC PO Box 2660 Lodi, CA 95241 jennifer@spalettalaw.com</p>	<p>California Department of Water Resources Robin McGinnis, Attorney PO Box 942836 Sacramento, CA 94236-0001 robin.mcgininis@water.ca.gov</p>

<p>Dante Nomellini and Dante Nomellini, Jr. Nomellini, Grilli & McDaniel ngmpics@pacbell.net dantejr@pacbell.net</p>	
<p>Richard Morat 2821 Berkshire Way Sacramento, CA 95864 rjmorat@gmail.com</p>	<p>San Joaquin Tributaries Authority Valerie Kincaid O'Laughlin & Paris LLP 2617 K Street, Suite 100 Sacramento, CA 95814 vkincaid@olaughlinparis.com towater@olaughlinparis.com lwood@olaughlinparis.com</p> <p>(revised 12/18/15)</p>
<p>South Delta Water Agency John Herrick, Esq. 4255 Pacific Ave., Suite 2 Stockton, CA 95207 iherrlaw@aol.com</p> <p>Dean Ruiz, Esq. Harris, Perisho & Ruiz, Attorneys at Law 3439 Brookside Road, Suite 210 Stockton, CA 95219 dean@hprlaw.net</p>	<p>State Water Contractors Stefani Morris, Attorney 1121 L Street, Suite 1050 Sacramento, CA 95814 smorris@swc.org</p>

EXHIBIT C

NOTICE OF INTENT TO APPEAR

State Water Contractors plans to participate in the water right hearing regarding
(name of party or participant)

Administrative Civil Liability
against
Byron-Bethany Irrigation District

**scheduled to commence
Wednesday, October 28, 2015 and continue, if necessary,
on October 29 and 30, 2015
at 9:00 a.m.**

1) Check only one (1) of the following:

- I/we intend to present a policy statement only.
- I/we intend to participate by cross-examination or rebuttal only.
- I/we plan to call the following witnesses to testify at the hearing. (Fill in the Following Table)

NAME	SUBJECT OF PROPOSED TESTIMONY	ESTIMATED LENGTH OF DIRECT TESTIMONY	EXPERT WITNESS (YES/NO)

(If more space is required, please add additional pages or use reverse side.)

2) Fill in the following information of the Participant, Party, Attorney, or Other Representative:

Name (Print): Stefanie Morris

Mailing Address: 1121 L Street, Suite 1050

Sacramento, California 95814

Phone Number: (916) 447-7357 Fax Number: (916) 447-2734

E-mail: smorris@swc.org

Optional:

- I/we decline electronic service of hearing-related materials.

Signature: *Stefanie Morris* Dated: 8/27/2015

EXHIBIT D

NOTICE OF INTENT TO APPEAR

Department of Water Resources plans to participate in the water right hearing regarding
(name of party or participant)

Administrative Civil Liability
against
Byron-Bethany Irrigation District

scheduled to commence
**Wednesday, October 28, 2015 and continue, if necessary,
on October 29 and 30, 2015
at 9:00 a.m.**

1) Check only one (1) of the following:

- I/we intend to present a policy statement only.
- I/we intend to participate by cross-examination or rebuttal only.
- I/we plan to call the following witnesses to testify at the hearing. (Fill in the Following Table)

NAME	SUBJECT OF PROPOSED TESTIMONY	ESTIMATED LENGTH OF DIRECT TESTIMONY	EXPERT WITNESS (YES/NO)
Paul Marshall	Effects of Delta Diversions	One hour	Yes

(If more space is required, please add additional pages or use reverse side.)

2) Fill in the following information of the Participant, Party, Attorney, or Other Representative:

Name (Print): Robin McGinnis, Attorney

Mailing
Address: P.O. Box 942836, Sacramento, CA 94236-0001

Phone Number: (916) 657-5400 . Fax Number: ()


E-mail: robin.mcginis@water.ca.gov

Optional:

- I/we decline electronic service of hearing-related materials.

Signature:  Dated: 9/2/15

EXHIBIT E

From: **McGinnis, Robin C.@DWR** Robin.McGinnis@water.ca.gov 
Subject: RE: Deposition Scheduling for Paul Marshall
Date: January 28, 2016 at 4:17 PM
To: Jeanne Zolezzi JZOLEZZI@herumcrabtree.com, Dan Kelly dkelly@somachlaw.com, S. Dean Ruiz dean@hprlaw.net,
Jennifer Spaletta jennifer@spalettalaw.com



Thanks all!

Robin McGinnis
Attorney
Office of the Chief Counsel
Department of Water Resources
Direct: (916) 657-5400
robin.mcginnis@water.ca.gov

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From: Jeanne Zolezzi [<mailto:JZOLEZZI@herumcrabtree.com>]
Sent: Thursday, January 28, 2016 3:10 PM
To: McGinnis, Robin C.@DWR; Dan Kelly; S. Dean Ruiz; Jennifer Spaletta
Subject: RE: Deposition Scheduling for Paul Marshall

Yes – I agree.

Jeanne M. Zolezzi
HERUM CRABTREE SUNTAG

Jeanne M. Zolezzi
Attorney-at-Law

T: 209.472.7700 \ F: 209.472.7986
5757 PACIFIC AVENUE, SUITE 222 STOCKTON, CA 95207
www.herumcrabtree.com \ jzolezzi@herumcrabtree.com

Connect to Us:  

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From: McGinnis, Robin C.@DWR [<mailto:Robin.McGinnis@water.ca.gov>]
Sent: Thursday, January 28, 2016 3:02 PM
To: Dan Kelly; S. Dean Ruiz; Jennifer Spaletta; Jeanne Zolezzi
Subject: RE: Deposition Scheduling for Paul Marshall

Thanks Dan, Dean, and Jen. That just leaves Jeanne. Would you also like to cancel Paul's deposition, Jeanne?

Robin McGinnis
Attorney

Office of the Chief Counsel
Department of Water Resources
Direct: (916) 657-5400
robin.mcginnis@water.ca.gov

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From: Dan Kelly [<mailto:dkelly@somachlaw.com>]
Sent: Thursday, January 28, 2016 6:18 AM
To: S. Dean Ruiz
Cc: Jennifer Spaletta; McGinnis, Robin C.@DWR; Jeanne Zolezzi
Subject: Re: Deposition Scheduling for Paul Marshall

Same for BBID.

Regards,
Dan

On Jan 27, 2016, at 10:58 PM, S. Dean Ruiz <dean@hprlaw.net> wrote:

I agree on behalf of SDWA.

S. Dean Ruiz, Esq.
HARRIS, PERISHO & RUIZ
ATTORNEYS AT LAW
Telephone: (209) 957-4254
Facsimile: (209) 957-5338
www.harrisperishoruiz.com

From: Jennifer Spaletta [<mailto:jennifer@spalettalaw.com>]
Sent: Wednesday, January 27, 2016 6:05 PM
To: McGinnis, Robin C.@DWR
Cc: Jeanne Zolezzi; dkelly@somachlaw.com; S. Dean Ruiz
Subject: Re: Deposition Scheduling for Paul Marshall

Hi Robin: I do not see a need to depose Paul at this point. I will let the others speak for their clients. If Paul submits rebuttal testimony, we may seek a deposition then.

Thanks, Jen

Jennifer L. Spaletta
SPALETTA LAW PC
Jennifer@spalettalaw.com

Sent from iPhone, please excuse typos

On Jan 25, 2016, at 11:02 AM, McGinnis, Robin C.@DWR
<Robin.McGinnis@water.ca.gov> wrote:

Jen,

Thanks for talking to me last week about Paul's deposition. You mentioned that you and the other parties that noticed the deposition were thinking about cancelling it, because DWR is no longer submitting a case-in-chief. Do you have an update?

Robin

Robin McGinnis
Attorney
Office of the Chief Counsel
Department of Water Resources
Direct: (916) 657-5400
robin.mcginnis@water.ca.gov

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From: Jennifer Spaletta [<mailto:jennifer@spalettalaw.com>]
Sent: Saturday, January 16, 2016 4:14 PM
To: McGinnis, Robin C.@DWR
Cc: Jeanne Zolezzi; dkelly@somachlaw.com; dean@hprlaw.net
Subject: RE: Deposition Scheduling for Paul Marshall

Robin – We will be sending out an updated notice for Feb. 2nd. Thanks, Jen

JENNIFER L. SPALETTA
Attorney-at-Law
Jennifer@spalettalaw.com

SPALETTA LAW PC
T: 209-224-5568
F: 209-224-5589
C: 209-481-9795
Mailing: PO Box 2660 Lodi CA 95241
Office: 225 W. Oak Lodi, CA 95240

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From: McGinnis, Robin C.@DWR [<mailto:Robin.McGinnis@water.ca.gov>]
Sent: Wednesday, December 09, 2015 1:46 PM
To: Jennifer Spaletta
Cc: Jeanne Zolezzi; dkelly@somachlaw.com
Subject: RE: Deposition Scheduling for Paul Marshall

Jen,

He's available any day during those two weeks.

Robin

Robin McGinnis
Attorney
Office of the Chief Counsel
Department of Water Resources
Direct: (916) 657-5400
robin.mcginnis@water.ca.gov

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From: Jennifer Spaletta [<mailto:jennifer@spalettalaw.com>]
Sent: Wednesday, December 09, 2015 11:23 AM
To: McGinnis, Robin C.@DWR
Cc: Jeanne Zolezzi; dkelly@somachlaw.com
Subject: RE: Deposition Scheduling for Paul Marshall

Robin – Let's see what other dates are options. What is Paul's availability the last week in January or first week in February? Thanks, Jen

JENNIFER L. SPALETTA
Attorney-at-Law
Jennifer@spalettalaw.com

SPALETTA LAW PC
T: 209-224-5568
F: 209-224-5589
C: 209-481-9795
Mailing: PO Box 2660 Lodi CA 95241
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From: McGinnis, Robin C.@DWR [<mailto:Robin.McGinnis@water.ca.gov>]

From: McGinnis, Robin C. [mailto:robin.mcgininis@water.ca.gov]

Sent: Wednesday, December 09, 2015 11:16 AM

To: Jennifer Spaletta

Cc: Jeanne Zolezzi; dkelly@somachlaw.com

Subject: RE: Deposition Scheduling for Paul Marshall

Jen,

Paul Marshall is no longer available to be deposed on December 30. Do you want to reschedule now, or do you want to wait until after the hearing teams finalize the new hearing schedules? I remember we rescheduled so that the deposition would take place after the cases-in-chief were due, and now it appears they will be due on January 19, but this is not a set deadline yet.

Robin

Robin McGinnis

Attorney

Office of the Chief Counsel

Department of Water Resources

Direct: (916) 657-5400

robin.mcgininis@water.ca.gov

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From: Jennifer Spaletta [mailto:jennifer@spalettalaw.com]

Sent: Monday, November 23, 2015 3:06 PM

To: McGinnis, Robin C. [mailto:R.C.@DWR]; Jeanne Zolezzi; dkelly@somachlaw.com

Cc: Tauriainen, Andrew [mailto:Andrew@Waterboards]; dantejr@pacbell.net; dean@hpplaw.net;

dohanlon@kmtg.com; ernie.mona@waterboards.ca.gov; Frances.Spivy-

Weber@waterboards.ca.gov; Janelle Krattiger; Jherriaw@aol.com;

jonathan.knapp@sfgov.org; kharrigfeld@herumcrabtree.com;

ngmplcs@pacbell.net; pwilliams@westlandswater.org; rakroyd@kmtg.com;

robin.mcgininis@water.ca.gov; smorris@swc.org; vkincaid@olaughlinparis.com;

Unit, Wr_Hearing@Waterboards

Subject: RE: Deposition Scheduling for Paul Marshall

Robin – This will confirm that Mr. Marshall’s deposition will be at 9:30am on December 30th at the Somach office. The deadline for production will also be extended to that same time. However, if you can produce some or all of the documents in advance, it would be greatly appreciated and will make the deposition go much faster. Thank you for your cooperation regarding this matter, it is greatly appreciated.

Jen

JENNIFER L. SPALETTA

Attorney-at-Law

Jennifer@spalettalaw.com

SPALETTA LAW PC

T: 209-224-5568

F: 209-224-5589

C: 209-481-9795

Mailing: PO Box 2660 Lodi CA 95241

Office: 225 W. Oak Lodi, CA 95240

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From: McGinnis, Robin [C.@DWR \[mailto:Robin.McGinnis@water.ca.gov\]](mailto:Robin.McGinnis@water.ca.gov)

Sent: Monday, November 23, 2015 2:40 PM

To: Jennifer Spaletta; Jeanne Zolezzi; dkelly@somachlaw.com

Cc: Tauriainen, Andrew@Waterboards; dantejr@pacbell.net; dean@hprlaw.net; dohanlon@kmtg.com; ernie.mona@waterboards.ca.gov; Frances.Spivy-Weber@waterboards.ca.gov; Jherrylaw@aol.com; jonathan.knapp@sfgov.org; kharrigfeld@herumcrabtree.com; ngmplcs@pacbell.net; pwilliams@westlandswater.org; rakroyd@kmtg.com; robin.mcginnis@water.ca.gov; smorris@swc.org; vkincaid@olaughlinparis.com;
Unit, Wr_Hearing@Waterboards

Subject: RE: Deposition Scheduling for Paul Marshall

Dan, Jeanne, and Jennifer,

DWR does not need amended deposition notices, but please confirm the starting time, location, and that DWR's deadline for producing documents is also extended to December 30. We plan to make documents available before then.

Robin

Robin McGinnis

Attorney

Office of the Chief Counsel

Department of Water Resources

Direct: (916) 657-5400

robin.mcginnis@water.ca.gov

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From: Jennifer Spaletta [<mailto:jennifer@spalettalaw.com>]

Sent: Monday, November 23, 2015 2:09 PM

To: McGinnis, Robin C.@DWR

Cc: Jeanne Zolezzi; Tauriainen, Andrew@Waterboards; dantejr@pacbell.net;

dean@hprlaw.net; dkelly@somachlaw.com; dohanlon@kmtg.com;
ernie.mona@waterboards.ca.gov; Frances.Spivy-Weber@waterboards.ca.gov;
Janelle Krattiger; Jherrlaw@aol.com; jonathan.knapp@sfgov.org;
kharrigfeld@herumcrabtree.com; ngmplcs@pacbell.net;
pwilliams@westlandswater.org; rakroyd@kmtg.com;
robin.mcginnis@water.ca.gov; smorris@swc.org; vkincaid@olaughlinparis.com;
Unit, Wr_Hearings@Waterboards

Subject: Re: Deposition Scheduling for Paul Marshall

All:

WSID, BBID and the Delta Agencies have decided to reset the Marshall deposition for December 30th. Please be advised there will not be a deposition tomorrow. We are still scheduled for the continuation of Mr. Howard on Wednesday at 8am.

Thank you,

Jennifer L. Spaletta
SPALETTA LAW PC
Jennifer@spalettalaw.com

Sent from iPhone, please excuse typos

On Oct 30, 2015, at 11:48 AM, McGinnis, Robin C.@DWR
<Robin.McGinnis@water.ca.gov> wrote:

<image002.gif>

Jeanne,

Paul Marshall is available November 23, 24, and 30.

Robin

Robin McGinnis
Attorney
Office of the Chief Counsel
Department of Water Resources
Direct: (916) 657-5400
robin.mcginnis@water.ca.gov

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From: Jeanne Zolezzi [<mailto:JZOLEZZI@herumcrabtree.com>]

Sent: Thursday, October 29, 2015 5:58 PM

To: McGinnis, Robin C.@DWR

CC: Ernie.Mona@waterboards.ca.gov; dean@hprlaw.net;

CC: [tauriamen, Andrew@waterboards.ca.gov](mailto:tauriamen,Andrew@waterboards.ca.gov); daniejl@pacbell.net;
dean@hprlaw.net; dkelly@somachlaw.com; dohanlon@kmtg.com;
'ernie.mona@waterboards.ca.gov'; 'Frances.Spivy-
Weber@waterboards.ca.gov'; Janelle Krattiger;
jennifer@spalettalaw.com; 'Jherriaw@aol.com';
'jonathan.knapp@sfgov.org'; kharrigfeld@herumcrabtree.com;
ngmplcs@pacbell.net; 'pwilliams@westlandswater.org';
'rakroyd@kmtg.com'; 'robin.mcginis@water.ca.gov';
'smorris@swc.org'; vkincaid@olaughlinparis.com; Unit,
Wr_Hearing@Waterboards

Subject: Deposition Scheduling for Paul Marshall

Importance: High

Robin,

Can you please provide possible dates when Paul Marshall would be available for deposition? The following dates in November are unavailable: 5, 9, 12, 13, 16, 18, 19, 20 and 25. I look forward to hearing from you at your earliest convenience.

Jeanne M. Zolezzi

<image003.jpg>

Jeanne M. Zolezzi
Attorney-at-Law

T: 209.472.7700 \ F: 209.472.7986
5757 PACIFIC AVENUE, SUITE 222 STOCKTON, CA 95207
www.herumcrabtree.com \ jzolezzi@herumcrabtree.com

Connect to Us: <image004.jpg><image005.jpg>

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EXHIBIT F

**AMENDED
NOTICE OF INTENT TO APPEAR**

California Department of Water Resources plans to participate in the water right hearing regarding
(name of party or participant)

Draft Cease and Desist Order
Against
West Side Irrigation District

1) Check only one (1) of the following:

- I/we intend to present a policy statement only.
 I/we intend to participate by cross-examination or rebuttal only.
 I/we plan to call the following witnesses to testify at the hearing. (Fill in the Following Table)

NAME	SUBJECT OF PROPOSED TESTIMONY	ESTIMATED LENGTH OF DIRECT TESTIMONY	EXPERT WITNESS (YES/NO)

(If more space is required, please add additional pages or use reverse side.)

2) Fill in the following information of the Participant, Party, Attorney, or Other Representative:

Name (Print): Robin McGinnis, Attorney

Mailing

Address: PO Box 942836, Sacramento, CA 94236-0001

Phone Number: (916) 657-5400 Fax Number: ()

E-mail: robin.mcginis@water.ca.gov

Optional:

- I/we decline electronic service of hearing-related materials.

Signature:  Date: 1/19/16

From: **McGinnis, Robin C.@DWR** Robin.McGinnis@water.ca.gov

Subject: BBID/WSID Hearings

Date: January 19, 2016 at 11:07 AM

To: Unit, Wr_Hearing@Waterboards Wr_Hearing.Unit@waterboards.ca.gov

Cc: Tauriainen, Andrew@Waterboards Andrew.Tauriainen@waterboards.ca.gov, jzolezzi@herumcrabtree.com, kharrigfeld@herumcrabtree.com, jkrattiger@herumcrabtree.com, **Stefanie Morris** SMorris@swc.org, dohanlon@kmtg.com, Akroyd, Rebecca@KMTG rakroyd@kmtg.com, pwilliams@westlandswater.org, Herrick, John @aol.com jherriaw@aol.com, S. Dean Ruiz dean@hprlaw.net, **Jennifer Spaletta** jennifer@spalettalaw.com, ngmpics@pacbell.net, dantejr@pacbell.net, jonathan.knapp@sfgov.org 'jonathan.knapp@sfgov.org', vkincaid@olaughlinparis.com, dkelly@somachlaw.com, red@eslawfirm.com, rjmorat@gmail.com, lwood@olaughlinparis.com, **Kuenzi, Nicole@Waterboards** Nicole.Kuenzi@waterboards.ca.gov, **ernie.mona@waterboards.ca.gov** 'ernie.mona@waterboards.ca.gov', Farwell Jensen, Jane Jane.Farwell-Jensen@waterboards.ca.gov



Hello,

Attached please find California Department of Water Resources' (DWR's) Amended Notices of Intent to Appear (NOI) in the BBID and WSID hearings. The NOIs that DWR filed previously indicated that it would submit a case-in-chief at each hearing. DWR now intends to participate by cross-examination and/or rebuttal only. Thank you.

Robin

Robin McGinnis

Attorney

Office of the Chief Counsel

Department of Water Resources

Direct: (916) 657-5400

robin.mcginnis@water.ca.gov

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**AMENDED
NOTICE OF INTENT TO APPEAR**

California Department of Water Resources plans to participate in the water right hearing regarding
(name of party or participant)

Administrative Civil Liability
against
Byron-Bethany Irrigation District

1) Check only one (1) of the following:

I/we intend to present a policy statement only.

I/we intend to participate by cross-examination or rebuttal only.

I/we plan to call the following witnesses to testify at the hearing. (Fill in the Following Table)

NAME	SUBJECT OF PROPOSED TESTIMONY	ESTIMATED LENGTH OF DIRECT TESTIMONY	EXPERT WITNESS (YES/NO)

(If more space is required, please add additional pages or use reverse side.)

2) Fill in the following information of the Participant, Party, Attorney, or Other Representative:

Name (Print): Robin McGinnis, Attorney

Mailing Address: PO Box 942836, Sacramento, CA 94236-0001

Phone Number: (916) 657-5400, Fax Number: ()

E-mail: robin.mcginis@water.ca.gov

Optional:

I/we decline electronic service of hearing-related materials.

Signature:  Dated: 1/19/16

AMENDED
NOTICE OF INTENT TO APPEAR

California Department of Water Resources plans to participate in the water right hearing regarding (name of party or participant)

Draft Cease and Desist Order
Against
West Side Irrigation District

1) Check only one (1) of the following:

- I/we intend to present a policy statement only.
- I/we intend to participate by cross-examination or rebuttal only.
- I/we plan to call the following witnesses to testify at the hearing. (Fill in the Following Table)

NAME	SUBJECT OF PROPOSED TESTIMONY	ESTIMATED LENGTH OF DIRECT TESTIMONY	EXPERT WITNESS (YES/NO)

(If more space is required, please add additional pages or use reverse side.)

2) Fill in the following information of the Participant, Party, Attorney, or Other Representative:

Name (Print) Robin McGinnis, Attorney

Mailing

Address: PO Box 942836, Sacramento, CA 94236-0001

Phone Number: (916) 657-5400 Fax Number: ()

E-mail: robin.mcginis@water.ca.gov

Optional:

I/we decline electronic service of hearing-related materials.

Signature:  Date: 1/19/16

EXHIBIT G

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.

EXHIBIT H

TESTIMONY OF BRIAN COATS

I have been an employee of the State Water Resources Control Board (State Water Board) for the past 16 years, and am currently employed by the State Water Board. In 1996 I received a Bachelor of Science Degree in Chemical Engineering from The University of California at Davis, and have been registered as a Professional Chemical Engineer in California since 2011. Since September 2012, I have supervised an enforcement unit in the State Water Board's Division of Water Rights (Division) as a Senior Water Resources Control Engineer. As a Senior Water Resources Control Engineer, I supervise a group of engineers working on water rights compliance and enforcement actions. In my work with the State Water Board, I have become familiar with the California water rights system and with the concepts of water supply and water demand, as well as with the databases used by the State Water Board to collect the information submitted by diverters. A copy of my resume is Prosecution Team Exhibit WR-10.

My testimony, herein provided, identifies my personal knowledge of the evidence, actions, and rationale for the Division's recommendation that an Administrative Civil Liability (ACL) Complaint be issued against Byron-Bethany Irrigation District (BBID), and that a Cease and Desist Order (CDO) be issued against the West Side Irrigation District (WSID). Since January 2014, I have been actively involved with the Division's supply and demand analysis which determines if water supplies are sufficient to meet current water use demands in critical watersheds during the 2014 and 2015 drought.

My written testimony outlines water supply availability analysis the Division undertook in 2015 in order to determine whether there was sufficient supply to satisfy demand in certain watersheds affected by the Drought. I participated in this effort, supervised by Kathy Mrowka and John O'Hagan. I supervised Jeffrey Yeazell, who is an engineer in my enforcement unit. Mr. Yeazell and I conducted the water availability analyses described here and in Mr. Yeazell's testimony (WR-11) at the direction of Ms. Mrowka and Mr. O'Hagan.

Water Rights

Background

The State Water Board has been vested by the Legislature with the authority to prevent unauthorized diversions of water and to supervise the water rights priority system. (See, e.g., Wat. Code §§ 174, 186, 1050, 1051, 1051.5, 1052, 1825.) Drought management of water rights is necessary to insure that water to which senior 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 water rights priority system provides the primary basis for determining which users may divert water, and how much, when there is insufficient water in the system for all users. If water supplies are insufficient to meet all demands in a given area, due to low rainfall and/or snowpack levels, the water rights priority system is used to allocate limited supplies based on relative priority of rights. With respect to water rights priority, the overriding governing principle is “First in Time, First in Right” which assigns the most protected and senior water right to whoever has documented and preserved their use based on: the date of filing (post-1914), posting (pre-1914) or assignment to private ownership (riparian). While there are many types of specialized water rights, there are three main classes (riparian, pre-1914 and post-1914) which consume the bulk of the State’s supplies in any given year.

Classes of Rights – Riparian, Pre-1914 and Post-1914

Riparian right holders generally have the most senior priority due to their parcel’s date of transfer to private ownership. Transfer of the majority of parcels to private ownership in California occurred in the late 1800s which, following the “First in Time, First in Right” principle, results in riparian claims of right having priority over most water rights in California. One limiting constraint to riparian claims of right is they are not allowed to store water; they can only divert natural flows in an adjacent stream or water course. In addition, in the event of a water shortage notice issued to riparian water rights holders, all the riparian right holders in the impacted area must absorb a correlative reduction, or equally share in the reduction, since all riparian rights have an equal priority to the water.

Pre-1914 claims of right are claims made prior to the Water Commission Act of 1914. Most pre-1914 claims of rights are junior in priority to riparian right holders but can divert non-natural or abandoned sources of water unlike riparian holders. The pre-1914 claims of right can be senior to the above riparian class of right if their posting date occurred prior to the competing riparian parcel’s date of transfer to private ownership, again, “First in Time, First in Right.”

The third priority class of rights which are junior to the above two classes are post-1914 water rights which accrued after the Water Commission Act of 1914.

Types of Water - Natural, Stored & Abandoned

The above three classes are prioritized in order to allocate the limited amount of “natural” water supply. The key word here is “natural,” as “stored” or “imported” water is not subject to priority allocation. When water is stored or imported from another watershed, the entity that stored or imported the water has the paramount right to that water. Therefore, while a water shortage notice may have been issued, an entity with stored or imported water may use that water since it is not considered “natural” flow. As mentioned earlier, holders of riparian

water rights may not use stored water since they only have the right to divert the natural flow of water abutting their parcel without any provision for storage.

Water can also be classified as “abandoned” and/or “return flow”. Abandoned water is water that has been used for a purpose with the excess or unneeded amount released with no claim of ownership. Since the abandoned water has been used and no longer considered “natural,” it is only currently available for diversion by appropriative diverters which include the pre-1914 and post-1914 classes of water rights. Abandoned water may also be a wastewater discharge from a water treatment plant where the discharger has abandoned its claim to the water. A similar class of abandoned water is called return flow which is excess flow that leaves the field following the application of irrigation water. While return flows can be sourced from riparian or appropriative (pre-1914 and post-1914 water rights) diversions, they are only available for “recapture” by appropriative water rights (pre-1914 and post-1914) since the “non-natural” or “abandoned” designation prevents riparians from diverting.

Why is this important? When Division staff perform a water supply and demand analysis for purposes of determining water availability during drought, we only consider the natural sources of water for the supply with an adjustment for return flows, if applicable. While abandoned flows may be present, the Division would be double-counting those flows if the original source of water, prior to being classified as abandoned, was sourced from natural flow.

These distinctions between classes of water rights mean that it may not always be clear to a junior diverter whether there is sufficient flow in the system to support their diversion. For example, an appropriative diverter may see water near their point of diversion (i.e. pump) and not be sure if that water is available to them or needed to support senior water uses downstream. Similarly, it can be difficult for a riparian to know if water is natural flow, or stored or imported water, and whether, when, and to what extent correlative reductions in water use are needed due to the need to share limited supplies amongst riparians.

This is where the Division’s supply and demand analysis becomes necessary. In accordance with the State’s water right priority system, the State Water Board staff notifies diverters of a water shortage when sufficient natural flows in a watershed are not available for a water user’s needs, based on their priority of right.

Drought Notices & Notices of Water Unavailability

On January 17, 2014, Governor Brown issued a state of emergency via Proclamation 1-17-2014, due to drought conditions (WR-23 is a true and correct copy). In response to the governor’s proclamation, the State Water Board staff issued a notice of surface water shortage

and potential curtailment on the same day which was posted to the State Water Board's website (WR-24 is a true and correct copy). The State Water Board staff notice advised junior-priority water right holders in critically dry watersheds that water may be unavailable in order to satisfy senior-priority water right demands.

A water shortage notice, or notice of water unavailability, is a notification to water right holders of a certain priority of right that, due to water shortage conditions, the State Water Board staff has determined water is not available under their priority of right. However, the notice of water unavailability is only a staff determination, it is not an enforceable decision or order of the State Water Board. The notice provides the affected water right holder with the Division's findings of the unavailability of water under their priority of right and the need to cease diversion under that right, the exceptions to the notice for direct diversion of water for power, other nonconsumptive uses and for continued use of previously stored water, and the potential for future enforcement for unauthorized diversions. A water shortage notice does not consider any particular diverter's other senior water rights or alternative basis-of-right such as water supply contracts, private agreements, transfers or groundwater supplies that may allow the diverter to continue to divert lawfully. The notice is therefore not a State Water Board determination that any individual diverter is taking water without authorization under the Water Code. A diverter who continues to divert after receiving a notice of unavailability is not subject to enforcement or penalties for violating the notice, but may be subject to enforcement for an unauthorized diversion if their diversions do not fall within the exceptions enunciated in the notice and are not entirely authorized by other water rights for which water remains available.

On April 25, 2014, Governor Brown issued a proclamation continuing the state of emergency due to the drought which resulted in the State Water Board staff issuing water unavailability notices (WR-25 is a true and correct copy of the April 25, 2014, proclamation). On May 27, 2014, the State Water Board staff issued unavailability notices to all Sacramento and San Joaquin River post-1914 water right holders informing them of the lack of water availability to service their junior-priority water right (WR-26 is a true and correct copy). The unavailability notice extended through the summer, with the last water right holders notified that water was again available for diversion on November 19, 2014 (WR-27 and WR-28 are true and correct copies of the November 2014 notices).

Two months later, similar to 2014, the State Water Board staff issued a notice advising of surface water shortage and potential for curtailment on January 23, 2015 (WR-29 is a true and correct copy). To obtain current and more accurate water right demands for the largest diverters claiming senior (pre-1914 and riparian) rights, the State Water Board issued an

Informational Order, 2015-0002-DWR (WR-30 is a true and correct copy), requesting supporting information for riparian and pre-1914 claims of right, along with their 2014 water use and projected diversions for 2015. The Division incorporated the Informational Order response information into the 2015 demand calculations.

Two months later, Governor Brown issued an Executive Order, Order B-29-15 (WR-31 is a true and correct copy), which confirmed that the prior drought orders and provisions are still in effect due to ongoing drought conditions. After warning post-1914 water right holders of an imminent unavailability notice on April 2, 2015 (WR-32 is a true and correct copy), the State Water Board staff issued an unavailability notice to all post-1914 water rights in the San Joaquin River watershed on April 23, 2015 (WR-33 is a true and correct copy).

A similar staff notice to the Sacramento River and Delta post-1914 water right holders, including WSID, was issued on May 1, 2015 (WR-34 is a true and correct copy; WR-35 is a true and correct copy of the notice addressed to WSID). The May 1, 2015, Notice reflects the State Water Board staff's determination that the existing water available in the Sacramento River and in the Sacramento-San Joaquin Watersheds and Delta is insufficient to meet the demands of diverters with appropriate water right permits or licenses with a priority date of 1914 and later. The methodology underpinning the May 1 Notice is described here and in the Testimony of Jeffrey Yeazell (WR-11).

A similar staff notice to pre-1914 water right holders with priority dates 1903 and later in the Sacramento and San Joaquin River watersheds and Delta, including BBID, was issued on June 12, 2015 (WR-36 is a true and correct copy¹). The June 12, 2015, Notice reflects the State Water Board staff's determination that the existing water available in the Sacramento River and in the Sacramento-San Joaquin Watersheds and Delta is insufficient to meet the demands of diverters with claims of pre-1914 appropriate rights with a priority date of 1903 and later. The methodology underpinning the June 12 Notice is described here and in the Testimony of Jeffrey Yeazell (WR-11).

On July 15, 2015, the State Water Board staff issued a clarification that the earlier 2015 unavailability notices, including the April 23, May 1 and June 12 notices, were not orders to stop diverting (or orders directing "curtailments"), but rather were notices that the State Water Board

¹ WR-37 is a true and correct copy of the mailing list for the June 12 Notice. WR-38 is a true and correct copy of the June 12 Notice addressed to BBID. WR-39 is a true and correct copy of the June 12 Notice issued to Banta-Carbona Irrigation District.

staff had determined that water was not available to serve the rights at the various priorities in the notices. Exhibit WR-40 is a true and correct copy of the July 15 Clarification.²

On September 17, 2015, due to changing conditions, the State Water Board staff issued a notice of water availability for diversion by pre-1914 water rights holders on the Sacramento River, Feather River, and the Delta (WR-43 is a true and correct copy). BBID's claimed pre-1914 right falls within the scope of the September 17, 2015, Notice. On November 2, 2015, the State Water Board staff issued a notice of temporary water availability for water right holders with pre-1927 rights for the Sacramento River and Sacramento-San Joaquin Delta (WR-44 is a true and correct copy). On November 6, 2015, the State Water Board staff issued a notice that water is available for diversion by all post-1914 water right holders in the Sacramento and San Joaquin River watersheds and the Sacramento-San Joaquin Delta (WR-45 is a true and correct copy). WSID's License 1381 is within the scope of the November 2 and November 6, 2015, Notices.

Supply and Demand Analysis

General Overview

Prior to issuing a notice of water unavailability during the 2014 and 2015 drought, Division staff determined the availability of water for water rights of varying priorities in various watersheds by comparing the current and projected available water supply with the total water right diversion demand.³ The supply and demand analysis concept was developed in response to the 1977 drought, and is used to determine the necessity for issuing a notice of water unavailability compares the available natural water supply with the total water right demand by month for a given watershed. See WR-69, which is a true and correct copy of a graphical summary of a fictitious watershed having three priority of rights (riparian, pre-1914 and post-1914) with varying monthly demands plotted against a natural supply line. This graph, which was prepared in 1977, illustrates the concepts the Division used as a starting point for our analysis in 2014 and 2015. This type of graph summarizes all the water supplies and demands

² WR-41 is a true and correct copy of the July 15 Clarification issued to BBID. WR-42 is a true and correct copy of the July 15 Clarification issued to WSID.

³ This drought supply and demand analysis is often referred to as a "water availability analysis," and is referred to in that way at times in this statement. It is important to note that the Division's supply and demand analysis during the 2014 and 2015 drought is fundamentally different from the site-specific "water availability analysis" prepared by the Division's Permitting unit in response to water right applications. The Permitting unit regularly conducts those water availability analyses, and Division staff and outside consultants are familiar with that process. To my knowledge, as described here, prior to 2014, no Division staff or outside consultant attempted to conduct a drought supply and demand "water availability analysis" since at least 1977.

for a given area and visually presents a comparison of the data for a particular timeframe. WR-69 comes from Division staff files dating back to 1977 and was prepared alongside a report called the 1977 Dry Year report (WR-152 is a true and correct copy of the 1977 Dry Year Report; WR-79 is a true and correct copy of the Dry Year Report Appendix). When the 2014 Drought effort was started in January 2014, I researched past materials in the Division's File Room and discovered the staff report folder along with the formal 1977 report and appendix.⁴ The 1977 report and appendix describe and recommend that the Division conduct a water supply and demand analysis to determine water availability during severe drought conditions. Due to there not being a drought of this magnitude since 1977, the 1977 report was chosen as the appropriate starting point for the 2014 to 2015 analyses.⁵ However, as described here and in the Testimony of Jeffrey Yeazell, the Division adapted the supply-demand analysis to current conditions, and incorporated the best available information regarding supply and demand, while at the same time reacting to worsening drought conditions. The 2015 methodology is therefore an appropriate basis for supporting the water unavailability notices at issue in the BBID and WSID enforcement proceedings.

As one would expect, water demand increases in the summer due to heavier irrigation uses and declines in the fall months after harvest. As for the supply, in the Sacramento-San Joaquin Valley, it builds from the winter into the spring with a peak occurring in early summer after any snow has melted. As illustrated on WR-69, once supply drops and intersects with a demand curve, those water rights above the supply, which correspond to those with the junior-most priority, do not have enough water to supply their demand and are notified accordingly.

To begin the supply and demand analysis for a specific area, like the Sacramento - San Joaquin River Delta Watershed (where BBID's and WSID's points of diversion are located) we begin by looking at the available natural supply as reported by the California Department of Water Resources (DWR).

⁴ WR-69 was authored by Mert K. Lininger who was a program manager in the Division's Application section in 1977. WR-69 was in the 1977 file, but I located it after my deposition in these proceedings. WR-69 is included here for illustrative purposes, and did not form the foundation of the recent actions; the 1977 Dry Year Report provided that foundation.

⁵ Also included in the Division's files, and relevant to this drought, is a 1978 report by the California Department of Water Resources, titled "The 1976-1977 California Drought, A Review." WR-153 is a true and correct copy of this report. The State Water Board's February, 2015, Recommendations for Improving the Administration of the Water Rights Priority System in Dry Years (WR-154 is a true and correct copy) does not provide technical guidance for the 2015 water availability determinations, but the water availability determinations are consistent with that report's general goals.

Watershed Selection

Due to time constraints resulting from the urgency of the worsening drought conditions, Division staff in 2014 chose the watershed boundaries pertaining to the Sacramento River and San Joaquin River based on how they were defined in the 1977 Report. In the 1977 Report, the Sacramento River watershed boundary generally included the area upstream of Shasta along with the streams feeding the Sacramento River all the way down to the northern part of the Delta known as the Sacramento Delta. The San Joaquin River boundary, in 1977, was similarly mapped to include the remaining part of the Central and South Delta known as the San Joaquin Delta with the major tributaries of the Stanislaus, Merced, Tuolumne and San Joaquin serving as the boundaries.

For 2015, Division staff proposed an alternate boundary, with respect to how the Delta demand and supply was allocated, such that the entire Delta geographic boundary was included in both the Sacramento and San Joaquin watersheds, but the associated Delta water use demands were parsed subject to how much monthly supply came from the Sacramento or San Joaquin watershed. For example, if during one month the majority of natural supply entering the Delta came from the Sacramento River watershed, then the majority of total Delta demand, for that month, was allocated to the Sacramento River watershed. Since the natural water supply entering the Delta varies by month, so too would the percentage of demand allocated to the Sacramento and San Joaquin River watersheds.

The rationale behind this “pro-rated” allocation of Delta demand is that since the Delta is hydraulically connected to both the Sacramento and San Joaquin Rivers, the Delta’s fresh water demands should be apportioned based on the percentage of fresh water entering the Delta; i.e., if 80% of the fresh water comes from the Sacramento River, 80% of the Delta’s demands should be assigned, for priority allocation determination, to the Sacramento River watershed. The disadvantage to this allocation method, in comparison to the 2014 and prior method, is that the Sacramento River watershed is assigned a greater percentage of the Delta’s demands since the majority of fresh water entering the Delta comes from the Sacramento River watershed.

In the case of WSID’s point of diversion, even though it is located in the southern Delta, the pro-rated Delta demand allocated to the Sacramento River watershed was so high, due to the meager fresh water supplies from the San Joaquin River, that WSID’s post-1914 unavailability notice for 2015 (the May 1 Notice) was based on the Sacramento watershed analysis. For BBID, the pre-1914 analysis leading up to the June 12, 2015 notice was based on the combined Sacramento and San Joaquin watershed. Ahead of the June 12 notice, the Division prepared a separate San Joaquin River watershed-only pre-1914 analysis, but this

would have resulted in much deeper and earlier cuts for pre-1914 claimants such as BBID. The Division also prepared a separate Sacramento River pre-1914 analyses using both a pro-rated and North Delta method. This analysis resulted in the same determination as the combined Sacramento and San Joaquin watershed analysis ultimately used for the June 12 Notice.

**Supply Data – DWR Bulletin 120, Exceedance Forecasts & Daily Full Natural Flows
- Background**

For the supply curve in each watershed, the State Water Board relies upon third-party full natural or unimpaired flow data supplied by DWR in its Bulletin 120 forecasts (see, e.g., WR-109, page 4, which includes a summary of the May 2015 B120 report that shows forecasts for the San Joaquin River; WR-63 is the full May 2015 B120 forecast). DWR publishes these reports every year from February to May where they forecast full natural flow with monthly updates (see the written testimony of Stephen E. Nemeth, WR-17). The B120 reports include full natural flow stations that provide the largest impact to the referenced river's supplies. For the May 1 Notice, which applies to WSID, being included within the pro-rated Sacramento River watershed analysis as described earlier, we looked at the Sacramento River at Bend Bridge, Feather River at Oroville, Yuba River at Smartville and the American River at Folsom Dam as the full natural flow stations used as supplies from the B120 report. For the June 12 Notice, which applies to BBID, since we used a combined Sacramento River and San Joaquin River watershed in the pre-1914 analysis, we added the Stanislaus, Tuolumne, Merced, Upper San Joaquin, Mokelumne and Consumnes River stations to compliment the Sacramento River sources. (See WR-11, Testimony of Jeff Yeazell.)

“Unimpaired Runoff” or “Full Natural Flow” represents the natural water production of a river basin, unaltered by upstream diversions, storage, or by export or import of water to or from other watersheds. The full natural flow amount is different than the measured stream flows at given measurement points because the gauged flows increase or decrease depending on upstream operations. For example, while a stream gage may report 50 cubic feet per second (cfs) of flow, the full natural flow upstream of that gage may be 100 cfs since an upstream neighbor is diverting the 50 cfs difference. The Bulletin 120 forecast provides a monthly, full natural flow, water supply probability table for certain watersheds. As there is uncertainty with predicting how much water will actually arrive at each location in the future, statistical probabilities in the form of exceedance percentages are provided which estimate, based on current snowpack data and historical trends, how much full natural or unimpaired water is predicted to be available upstream of the referenced location for the rest of the water year (water years run October 1 through the following September 30).

The exceedance percentage, which is listed as the header for each row in the B120 Table (see for example WR-109), is simply the percent of the time that the actual flow is expected to exceed the projected flow. For example, in WR-109, page 4, the first table is for the Stanislaus River below Goodwin Reservoir. Each row of the table is the exceedance forecast percentage with each column being the forecasted month's value in thousands of acre-feet.

One thing immediately noticed is that for past months from October to April, the value is the same for each exceedance forecast and the reason is that there is no uncertainty in what happened for past months, what's done is done. Since WR-109, page 4, was prepared in early May, there was still uncertainty in how much rain would actually be produced going forward hence the different exceedance values for May through September. As the exceedance percentage forecast drops, say to 50%, the forecasted amounts increase since there is now a smaller chance (just 50%) that the actual flows will be higher. Division staff have used DWR's 50%, 90% and 99% monthly exceedance forecasts for its supply and demand analyses, together with DWR's daily full natural flow (FNF) data.

Daily full natural flow data is a calculation, performed by DWR, which uses current stream gage values, known upstream diversions and reservoir data such as changes in storage and posted evaporation numbers, to arrive at the amount of available water for that day. Unlike the monthly B120 forecasts, which are based on actual historical data and current snowpack conditions, the daily FNF is, as the name suggests, a daily tracking tool we use to not only qualify the monthly B120 forecasts but also serves as a "backup" supply in the event the daily-averaged monthly B120 forecast is less than the daily FNF. For example, let's say the monthly B120 forecast was 3,000 acre-feet for a particular 30-day month. On a daily basis, the 3,000 acre-feet monthly value works out to a daily-averaged 100 acre-feet per day. If the daily FNF values are higher than the 100 acre-feet value, we will use them since a higher water supply is of more benefit to water right holders such as BBID or WSID. In other words, when determining the "supply" side of the supply and demand analysis, the Division makes every assumption conservatively in favor of a greater estimate of supply, which is in the favor of diverters because more supply means water will be available for diversions for a longer period of time.

DWR's daily full natural flow calculations are less accurate than the monthly exceedance calculations because they are based on less data than is available at the completion of each month. Due to the time lag between the effect of upstream operations and downstream flow measurements, calculated daily full natural flow fluctuates from day to day. You can view a daily full natural flow sample taken from DWR's website as WR-155, which shows the full natural flow values for the various stations in thousands of acre-feet.

For example, using the “TLG” row within WR-155, this row of data represents the daily FNF values for each day above La Grange Dam on the Tuolumne River. The first column header is 15, which is for September 15th (since that is when that particular query was executed) with each successive column the next day afterwards. The value in the 15th column is 0.19 thousand of acre-feet, or 190 acre-feet. As I mentioned earlier, some of the daily FNF values are revised with most of any changes occurring to the most recent data which are the columns on the far right of the table. For the days where a “---“ is displayed, no data has been posted, which I understand could be due, for example, to the local reservoir operator not supplying data.

In its supply and demand analysis, in terms of analyzing the amount of water supply available for diversion, Division staff used a combination of DWR forecasted data supplied by the B120 along with the daily FNF data that has actually been measured. WR-47 is a graphical representation of this methodology at the time of the May 1, 2015 Notice, which applies to WSID. WR-48 is a graphical representation of this methodology at the time of the June 12, 2015, Notice, which applies to BBID.

Supply Data – DWR Bulletin 120, Exceedance Forecasts & Daily Full Natural Flows - Application

In the initial stages of a drought supply and demand analysis, the Division will chart the DWR-calculated daily full natural flow as a check against which DWR B120 exceedance forecast to use. For example, if the daily FNF is tracking very close to the 90% monthly supply forecast, we will use the 90% supply forecast as our estimate for analysis. On the other hand, if the daily FNF is tracking between the 90% and 50% forecast, we will use the 50% forecast to base our decisions on; in each case erring on the side of caution and of most benefit to water right holders.

In the case of the May 1, 2015 notice affecting WSID, Division staff chose the 50% and 90% forecasts from the four full natural flow stations in the Sacramento River watershed to use. For the June 12, 2015 pre-1914 notice affecting BBID, we also included the San Joaquin and Eastside Streams to compliment the Sacramento supplies since the June 12, 2015 notice was a combined watershed analysis. In both cases, the supplies were totaled from February through May 2015 for both the 50% and 90% supply forecasts. Since DWR does not provide a 90% or 99% forecast for the smaller eastside streams entering the Delta (i.e. the Cosumnes and Mokelumne Rivers), the Division used DWR’s 50% forecast amount to add to the total which is more generous and, again, provides more supply to the analysis which benefits diverters.

As we move into the late summer period, sometimes the B120 forecast will estimate

zero flow, as was the case for the seven FNF stations in the global San Joaquin River watershed. Despite this, the DWR-calculated daily FNFs may still yield a small positive value.

For example, for the San Joaquin tributary analysis in the summer of 2015, the May 2015 B120 monthly forecast (WR-109, page 4) for the Stanislaus, Tuolumne and Merced Rivers in August and September was zero for the 50% through the 99% exceedance percentages. However, the daily FNF, while low, was above zero for some days so we used the daily FNF trend as a supply estimate. In WR-78, which is a supply and demand graph for the San Joaquin River prepared in August 2015, we see the blue daily FNF line above the B120 supply forecast for July and August (dark blue-50% and violet-90% hashed lines). Since the daily FNF is slightly positive, we used that daily FNF trend in our monitoring since higher supply is of most benefit to the water right holder; even a small positive supply is better than zero.

However, since recent daily FNF data is sometimes revised, any additional unavailability decisions would need to be based off a trend rather than recent data. Daily FNF can change quickly with these revisions. See WR-156 and WR-157, which are true and correct copies of recent supply and demand graphs of the Yuba River watershed, which show the change in the daily FNF over just 9 days. In these two graphs, we see the blue line which represents the daily FNF, smoothing out in the August month. For this reason, analysis decisions in the late summer for both unavailability determinations and potential long-term availability determinations (resulting in the release notices) are based on a daily FNF trend, however, if the B120 monthly forecast is zero, we exclude the recent 5-7 days worth of data that is often subject to revision.

As a check against supply forecasts provided by DWR, unimpaired flow forecasts provided by the California-Nevada River Forecast Center (a federal department under NOAA) under their website's Ensemble option (<http://www.cnrfc.noaa.gov/>) were referenced, from time-to-time, along with real time flow conditions using United States Geological Survey gages (<http://ca.water.usgs.gov/>). The NOAA unimpaired flow forecasts, while representing different locations, were generally comparable in magnitude to DWR's.

Moreover, DWR continued to provide us with an updated, non-published, June 50% supply forecast (see WR-82, true and correct copy of an email from Sean DeGuzman dated June 8, 2015) in an effort to incorporate late season precipitation events. The June 50% supply update, while appreciated, did not appreciably alter the analysis leading to the June 12, 2015 decision to issue unavailability notices.

We also use the daily FNF values, which are calculated separately from the B120 monthly values, to verify that the B120 monthly forecasts are appropriate. As you can see in WR-52, which is an analysis from August, 2015, that incorporates the monthly values for June,

the combined Sacramento-San Joaquin graph shows a B120 forecast point for June and the daily FNF line above the B120 point for the first half of the month and below for the latter half of the month, averaging out close to the B120 value. This showed us that DWR's monthly B120 forecasts were appropriate when issuing the water unavailability notices in April through June of 2015, including the May 1 and June 12 Notices.

San Joaquin River & Delta Supply Supplements – Return Flows & Valley Floor Sources

Due to the lower elevations of some areas of the Delta, including some below the incoming tide, Delta diverters often pump lower quality water off of their parcel into the channel while at the same time diverting higher quality water from the channel onto their land. As a result, these diverters may use a smaller net quantity of fresh water, in comparison to the actual amount diverted, for irrigation. The Division attempted to address this occurrence by adjusting the supply and/or demand estimates within the Delta.

The Division met with San Joaquin and Delta stakeholders on May 12, 2015 (see WR-80, true and correct copy of a meeting invitation with Delta and San Joaquin stakeholder, including representatives from many of the parties in these actions) to discuss return flows and additional supply sources to be considered for the drought water supply and demand analysis. During that meeting, the stakeholders indicated that applying a 40% reduction to the reported irrigation demand for the Delta would be appropriate to address the actual net irrigation demand. The Division applied this 40% demand reduction by either increasing the available supply, through an adjustment, or by reducing the reported demand.

In addition to these Delta supplements, and following direction in the 1977 Dry Year Report, we added additional supply owing to return flows from the valley floor as specified in the 1977 report. Return flows are simply the excess flow not needed by the irrigated crop (also called irrigation runoff) that return to a stream system. Page 6 of the Appendix to the 1977 Drought report specifies varying percentages by month of return flow for the San Joaquin River watershed (see WR-79). The 1977 Drought report did not allocate any return flows (see page 4 of WR-79) for the Sacramento River.

Lastly, as the full natural flows available to the Sacramento and San Joaquin River watersheds include the B120 stations mentioned earlier, additional supply was added for the other smaller tributaries. DWR's Bay Delta Office published a 2007 report titled, "California Central Valley – Unimpaired Flow Data" which was used to supplement the full natural flow supply for these areas (WR-76 is a true and correct copy of the 2007 report). The 2007 report provides full natural flows for a variety of water year types. Due to snowpack levels in 2015

being the lowest on record, Division staff opted to choose the 1977 full natural flow values for the excluded areas to best represent a 2015 estimate, since the 1977 snowpack was the next worse value relative to 2015. These excluded area supply values were added to the global Sacramento and San Joaquin River watersheds.

Watershed Supply Summary

Adding up the full natural flow station values (see WR-109, which includes the May B120 summary) with the additional return flow adjustments for the Delta and Valley Floor gives us a monthly total in acre-feet, which is converted into an average daily cubic feet per second for graphical purposes (at two or more exceedance levels). The purpose of converting the monthly total in acre-feet into a daily rate is so that the daily full natural flows can be charted on the same time step, i.e. an apples-to-apples comparison. For example, here is a summary table of the total supply used for the San Joaquin watershed in June. The first row is the total B120 supply forecast for the six FNF stations listed with the second row the expected return flows producing a total of 1,924 cfs for June. WR-78, which is the San Joaquin River watershed 8/19/2015 graph, shows the 1,924 cfs data point as the dark blue point labeled, “Adjusted 50% FNF Forecast” directly above the month of June, which begins the dark blue hashed line.

FNF FORECAST ADJUSTMENT (CFS)		
	June	Reference
CDEC 50% Exceedance FNF Forecast	1,462	Sum of GDW, LGR, EXC, MHB, TLG, and MIL
Return Flow	462	
Adjusted 50% Exceedance FNF Forecast	1,924	

Now that we have a basic understanding of the supply side, we can now move onto the demand side of the analysis.

Demand Data – 4-Year Average Demand & Informational Order Data

To analyze the demand data, the Division relied upon the water right users themselves, who are required to submit their actual monthly use online every 1-3 years, depending on the type of right. The water right users are required to submit this information accurately and to the best of their knowledge, so this represents the best available demand data.

Since riparian and pre-1914 users are on a 3-year reporting cycle, the most recent year’s demand was not available for all users (i.e. a third of the pre-1914 and riparian users had their 3-years of use ending in one year, the next third a year later and so on). For example, BBID’s 2010-2012 reported use is referenced in WR-85 through WR-87, but BBID will not need

to report its 2013-2015 use until 2016. Since only the 2010, 2011 and 2012 complete use reports have been submitted, we only have an estimate for future use using an above-average precipitation year (2010) and two average years (2011 and 2012) of which the three-year average may be underreporting actual use in a drought year (i.e. 2014 and 2015). Due to the drought urgency, the Division staff did not have time to refine the demand analysis to account for these staggered reporting dates during the 2014 analysis. But the Division staff implemented a slightly different analysis in 2015 to account for these differences.

During the 2014 drought, the Division used the most recent complete reported demand that was available. Due to the above triennial reporting, the Division only had a complete record of demand for all riparian and pre-1914 water rights for the 2010 year. Unfortunately, 2010 was an above average year for rainfall and not as reflective of a drought year demand.

For the 2015 drought, the Division used a four-year average (years 2010 to 2013 or whatever years in the 2010-2013 range that were available) demand to best represent projected demand for 2015. Since 2014 demand was not due until July 1, 2015, the four-year average demand did not include 2014.

Going a step further, the Division issued an Informational Order in February 2015 (WR-30) which required the top 90% of riparian and pre-1914 water users to provide their 2014 demand in advance of the July 1, 2015 due date as well as their projected 2015 demand by March 6, 2015. The Informational Order was issued to the largest water users in the Sacramento River, San Joaquin River and Sacramento-San Joaquin Delta, and also required monthly reporting of 2015 use, due early the month following any diversions, as a check against the use of their 2014 demand in our 2015 analysis.

In the demand calculation, for the recipients of the Informational Order, their four-year average demand was replaced by the reported 2014 demand. Those not subject to the Informational Order had their demand represented by the four-year average demand described above. For WSID, since they hold a license, Division staff used their 2010-2013 average demand. BBID, being a recipient of the Informational Order, submitted their 2014 and 2015 projected use along with supporting documentation of their pre-1914 claim of right. WR-88 includes a summary report, prepared in response to the Division's February 2015 Informational Order, of BBID's 2014 actual use by month with an estimate for their projected 2015 use. WR-89 is a service area map BBID provided to support their pre-1914 claim of right. The Division included BBID's Informational Order response along with all of the other responses received to adjust the projected 2015 demand data.

Including the Informational Order data, including the data submitted by BBID, resulted in decreased projected demand, which means more water was available for various water right classes for a longer period of time in 2015, as compared to what would have been available using the methodology employed in 2014. This is another example of how the Division's drought water supply and demand analysis methodology in 2015 made every effort to err on the side of caution in favor of diverters.

Demand Data– Parties Claiming Both Riparian and Pre-1914 Water Rights

For water right holders in the Legal Delta boundary, where BBID's and WSID's points of diversion are located, claiming both a riparian and pre-1914 water right, special consideration was taken. For these holders, stakeholders representing their interests advised that in the event a pre-1914 notice of unavailability was issued, the holders claiming both would "roll over" their pre-1914 amount into the more senior priority riparian right. Provided there are no portions of the water right holders' land that would not qualify as riparian, this approach is allowed since the pre-1914 claim is redundant for direct diversion (i.e., no storage).

To address this possibility, Division staff assigned all reported demand as riparian for those that reported use under both a riparian and pre-1914 water right within the Delta. If Division staff had not taken this course, any demand savings under a pre-1914 unavailability notice may not have been realized since the water right holder would have routed that pre-1914 demand into their riparian priority to compensate.

Demand Data – Quality Control Check

AS described in the Testimony of Jeffrey Yeazell (WR-11), State Water Board staff performs quality control checks on the reported data by removing obvious errors, adjusting the data for excess reporting (i.e., correcting reported irrigation demand in excess of a generous 8 acre-feet/acre water duty, which is the worst case scenario water duty for rice), removing demand for power generation where no water is consumed, removing other nonconsumptive uses such as aquaculture, and making additional changes based on stakeholder comments.

The Division posted its water right demand data on its website and invited the public to comment on and correct the data. The Division only received comments from MBK Engineers, a consulting firm for certain water right holders in the Sacramento and San Joaquin watersheds. MBK provided comments on the demand data, which included both the 2014 reported use data for the top 90% of watershed riparian and pre-1914 demand and the 2010 to 2013 four year average demand for the remaining diverters.

Treatment of Delta Demand – Pro-Rated Analysis

Since the Sacramento-San Joaquin Delta is hydraulically connected to both the

Sacramento and San Joaquin Rivers, and both the Sacramento and San Joaquin supply different amounts of water, the fresh water demands of the Delta are complicated in a supply and demand analysis.

In 2014, the Division used the method adopted in 1977, where the area known as the North Delta had its demands assigned to the Sacramento River analysis, with the Central and South Delta's demands assigned to the San Joaquin River. The problem with this approach is apparent when the San Joaquin River does not supply enough fresh water to satisfy the Central and South Delta demand (as was the case in 2015). In this case, the Sacramento River, being the dominant source of fresh water to the Delta, must bear the burden of any demand not satisfied by the San Joaquin River fresh water supply.

To address this problem, Division staff opted to allocate a proportion of the total Delta demand to both the Sacramento and San Joaquin River analyses based on their respective supplies to the Delta. We proposed this approach in our meeting with San Joaquin River stakeholders on May 12, 2015 (WR-80) who embraced the concept as this would reduce their Delta demand allocation and allow them to divert for longer.

The pro-rated demand method totals the full natural flows from select stations in the Sacramento and San Joaquin watersheds and then applies a pro-rated monthly percentage of the Delta demand to that watershed. For example, if, for a given month, 10 units of full natural flow were projected in the Sacramento and 5 units for the San Joaquin River, for a total of 15 units, two-thirds (10/15) of the total Delta demand would be assigned to the Sacramento River analysis with the remaining third (5/15) allocated to the San Joaquin River analysis. As the 2015 summer months approached, less water was available from the San Joaquin River and consequently less Delta demand was assigned to the San Joaquin River analysis.

This pro-rated allocation of Delta demand was more equitable to the San Joaquin watershed than the 2014 allocation since the entire Central and South Delta demand greatly exceeded the small fraction of Delta demand assigned to the San Joaquin River watershed in 2015. For example, the estimated demand attributed to the San Joaquin Delta diverters in 2014 was about 70 percent of the total Delta demand for riparian and pre-1914 rights from May through September, so the 2015 analysis with a maximum of 17 percent attributed to the San Joaquin watershed is conservative for the San Joaquin watershed diverters. These prorated percentages change monthly based on the adjusted full natural flow projections provided by DWR's Bulletin 120 forecast.

Watershed Demand Summary

Using the reported demands for either 2014 for the informational order recipients or the

2010-2013 four-year average for all others, the State Water Board staff displays the demands graphically according to their respective priorities with the riparian rights at bottom, and the pre-1914 appropriative right demands added and depicted above the riparian demand since all the post-1914s were already advised they were curtailed. The monthly amounts are averaged into cubic feet per second for graphical purposes. WR-78 is the supply and demand analysis for the San Joaquin River watershed with the pro-rated Delta demand published to the Division's website on August 19, 2015. As shown, after the June 12, 2015 unavailability notice was issued, the daily full natural flow dropped quickly into the riparian demand thus confirming, after the fact, the Division's June 12 decision.

Bringing it all together – Supply and Demand Comparison

As you can see from WR-47, which is the April 29, 2015 graph showing conditions at the time of the May 1, 2015, Notice, there is insufficient supply to service all post-1914 water rights between the 90% and 99% forecast points (blue and violet dots) which are applicable with the daily FNF trending closer to the 99% forecast line. Looking hindsight at WR-54, which is an October 30, 2015 graph of the Sacramento River watershed with proportional Delta demand, we see that the daily FNF supply trended in the pre-1914 demand levels from May through August. Since the actual daily FNF supply beginning in May 2015 and continuing through August 2015 was not sufficient to satisfy all pre-1914 reported demands, this graph confirms that there was not enough natural flow to satisfy WSID's post-1914 demand from May 1 onwards.

In the case of BBID, at the time the June 12 notice was issued, Division staff based its decision on the June 10, 2015 combined Sacramento/San Joaquin graph⁶ (WR-48) which showed the combined daily FNF trending downward at ~11,000 cfs and the B120 monthly forecast total even lower at ~9,000 cfs. Since the daily FNF was higher, we based our decision to issue the notices on the daily FNF supply trend, which was about 2,000 cfs less than the demand reported through the 1902 priority year. Looking hindsight, the Division's decision to issue pre-1914 notices at the 1903+ priority level on June 12th was appropriate, as seen in WR-52, which shows the same combined graph two months later. WR-52 shows the daily FNF dropping precipitously in mid-June into the riparian level of demand before July 1. The abrupt mid-June drop in daily FNF into the riparian demand area shows that there was not enough supply to satisfy the remaining pre-1903 water right demands; thus confirming no water was available for BBID's junior priority diversion from June 12 onwards.

⁶ Due to limited San Joaquin watershed supplies in comparison to the Sacramento River sources, the Division opted to include the San Joaquin watershed with the Sacramento in the analysis leading to the June 12 Notice, because a separate San Joaquin only analysis resulted in deeper cuts to pre-1914 users

A separate analysis (see WR-81) was performed after issuing the BBID ACL, which compared the upstream flow at Vernalis, as measured by a gage, to the pro-rated downstream senior Delta demand which included the 1902 and earlier pre-1914 and riparian users. The Vernalis gage is a location just upstream of the Delta where water quality requirements are often measured. The significance of the Vernalis gage is that it can confirm whether there is enough measured flow (which is different than the full natural flow since measured flow may include storage releases) at its location to satisfy remaining downstream pre-1903 water right demands, which are senior to BBID's priority.

In the WR-81 comparison, the Division used the same pro-rated percentage method of total Delta demand assigned to the San Joaquin watershed used in the April 23, 2015 notice and compared that demand with the available flow at Vernalis. This comparison shows that the measured flow at Vernalis was insufficient to service the pro-rated remaining senior demand for at least the June 13 through June 25 time period of the ACL Complaint. An additional demand line, seen as a red hashed line (on WR-81), was included in the comparison which displays the entire Central and South Delta demand (which was typically assigned to the San Joaquin watershed and used in the 2014 supply and demand analysis) vs. the substantially reduced pro-rated demand.

This comparison shows that even under the best-case scenario of using the smaller pro-rated Delta demand, the available flow at Vernalis was needed by downstream senior right holders (riparian and pre-1914 rights with a priority before 1902) and was not available for BBID's diversion during the June 13 through June 25 time period set forth in the ACLC. Moreover, this comparison also demonstrates that no water was available to serve WSID's License 1381 at any time after the May 1 Notice, until November 2015.

Water Unavailability Notice with Supporting Graphs

WR-36 and WR-83 are complete and accurate copies of the June 12th and June 16th notices sent to BBID. The notices are the same type of unavailability notices that are described above. The June 16th notice clarifies to the Delta Diverters' claiming both riparian right and pre-1914 appropriative right that only their pre-1914 right is affected by the notice. The notices are staff determinations only, and do not constitute a decision or order of the State Water Board or a determination that BBID or any other individual diverter has engaged in an unauthorized diversion of water under the Water Code. The notices do not constitute a determination of the validity of claims to divert water.

WR-48 is the supply and demand analysis posted to the Division's website on June 12, 2015. As shown, as of mid-June 2015, both the daily full natural flow trend and B120 supply

forecast for June support the water unavailability notices issued to those diverters with a 1903 and later priority date. Similarly, with respect to WSID, Division staff prepared the same supply and demand analysis for the Sacramento River watershed which included the entire Delta (see WR-34, which is the May 1 Notice, and WR-47, which is the analysis graph supporting the May 1 Notice).

BBID ACL Complaint

Issuance of the ACL Complaint

As described in the testimony of Paul Wells (WR-15), BBID currently only has a single pre-1914 claim of right, Statement S021256, filed on June 30, 2010, for the diversion of water from the Intake Channel to the Banks Pumping Plant in Contra Costa County. The priority date for S021256 is May 18, 1914, as provided by material submitted in response to the Division's February 2015 Informational Order. On June 12, 2015, BBID was notified by mail and through a LYRIS email, to which Rick Gilmore, BBID's General Manager, is subscribed, of the notice of water unavailability which included statement S021256 (WR-107). BBID received this notice no later than June 15 (see WR-106 [BBID's June 15 response]), but likely received it on June 12 with the LYRIS email. Despite this notification, the Division received evidence of BBID's continued diversion, as monitored by the California Data Exchange Center (WR-90) and as discussed in various press publications (see, e.g., WR-10, for the June 13, 2015 to June 25, 2015 time period (see WR-90 and the testimony of Paul Wells, WR-15; see also WR-103 [newspaper article from Thursday, June 25, noting that BBID only shut off its pumps in response to the June 12 Notice on Wednesday, June 24]).

Enforcement Staff developed an ACL Complaint against BBID for the unauthorized diversion of water between June 13, 2015 and June 25, 2015. I reviewed and assisted in the development of the ACL Complaint and the penalty calculation methodology described therein. WR- 4 is a true and correct copy of the ACL Complaint issued to BBID on July 20, 2015. WR-5 is a true and correct copy of the certified mail return receipts indicating service to BBID. WR-6 is a true and correct copy of BBID's request for hearing.

Proposed Civil Liability Amount

Staff analyzed the evidence collected from CDEC and calculated the amount of water that had been allegedly unlawfully diverted by BBID (see written testimony of Paul Wells). To address the unauthorized diversion of water, the ACL Complaint proposes that BBID should be assessed an ACL in the amount of **\$1,553,250** for the unauthorized diversion of water from the Intake Channel to the Banks Pumping Plant based on a calculation that BBID diverted 2,067

acre-feet during the June 13 through June 25, 2015 period. The maximum ACL amount authorized by statute during a drought for an unauthorized diversion is \$1,000 for each day in which the trespass occurred plus a \$2,500 per acre-foot fine. The total potential fine set forth in the ACL Complaint for unlawful diversion of 2,067 acre-feet is \$5,180,500 (13 days at \$1,000 per day plus 2,067 acre-feet at \$2,500 per acre-foot).

Since issuing the ACL Complaint, the Division has received additional information regarding the BBID diversions during June 13 through 25, 2015. Specifically, BBID has supplied a response to the Prosecution Team's October 29, 2015, Subpoena, and Division staff has also continued to investigate the diversions. (See, Testimony of Paul Wells, WR-15.) Based on this new information, the Division has revised the proposed penalty to incorporate the revised calculation of diversion by BBID of 1,887 acre-feet from June 13 through June 24, 2015. Using this amount, the maximum potential liability is **\$4,729,500** (12 days @ \$1,000/day + 1,887 acre-feet at \$2,500/acre-foot using the same formula).⁷

In considering the appropriate amount for the ACL, Water Code section 1055.3 requires that 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 length of time over which the violation occurs, and any corrective action taken by the violator.

In this case, BBID has made unauthorized diversions of water from the Intake Channel to the Banks Pumping Plant (formerly Italian Slough) during the most extreme drought in decades, when there was insufficient water supply available for BBID's claimed water right. BBID was aware that the State Water Board had determined that there was insufficient water supply available for BBID's claimed water right. These unauthorized diversions likely 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.

While it is difficult to quantify for purposes of Water Code section 1055.3 the harm caused by BBID's unauthorized diversions in terms of actual or threatened reductions in water available for downstream water right holders, and it is similarly difficult to quantify any harm caused by the reduction of water available for instream resources and riparian habitat, it is possible to quantify BBID's economic advantage gained through its unlawful diversions. BBID

⁷ As described in the Testimony of Paul Wells, BBID submitted evidence indicating that its diversions ceased after June 24, and that the total diversions during the 12-day violations period may be 1829.1 af, although the evidence is not conclusive. Using this volume, the maximum potential liability would be **\$4,584,750** (12 days @ \$1,000/day + 1,829.1 acre-feet at \$2,500/acre-foot).

received an economic advantage over other legitimate water diverters in the area by foregoing the costs of buying replacement water during the violation period. In this case, the cost of replacement water can be estimated using a June 10, 2015 statement by Mountain House CSD's General Manager (WR-100), as between \$250 and \$1,000 per acre-foot. At 1,887 acre-feet unlawfully diverted, and using the most conservative estimate of replacement cost of water (\$250/acre-foot), BBID's total avoided cost of purchased water is **\$471,750**.⁸

Disincentive Factor

The cost of replacement water alone is not a sufficient basis for setting an ACL under Water Code section 1055.3, because penalties would not be higher than the cost of doing business and violators would have no incentive to comply with the law. Therefore, I determined that using a factor of 3 times the estimated economic benefit is appropriate under these circumstances, given the severity of the drought, the duration and public nature of BBID's violation, and the Division's goal of deterrence. Applying a disincentive factor of three to the replacement cost of water and adding in staff costs in preparing the ACL of \$3,000 brings the recommended ACL amount to **\$1,418,250**.⁹ Should the ACL go to hearing and litigated further, I recommend that all hearing-related expenses be added onto the total liability.

⁸ Using the lower diversion amount suggested by some of BBID's Subpoena response, the total avoided cost of purchased water would be **\$457,275** (\$250/acre-foot times 1,829.1 acre-feet).

⁹ Applying the same disincentive factor to the replacement cost described in the previous footnote, plus adding staff costs, would bring the recommended ACL amount to **\$1,374,825**.

EXHIBIT I

**California Department of Water Resources
Paul Marshall’s Testimony Regarding
Enforcement Actions ENF01949 and ENF01951.**

My name is Paul A. Marshall, and I am Chief of the Bay-Delta Office for the California Department of Water Resources (DWR). This testimony is provided in regard to the Draft Cease and Desist Order issued to The West Side Irrigation District (WSID), Enforcement Action ENF01949; and the Administrative Civil Liability Complaint issued to Byron-Bethany Irrigation District (BBID), Enforcement Action ENF01951. The purpose of my testimony is to rebut written testimony and exhibits submitted by WSID and BBID. A copy of my statement of qualifications has been submitted as Exhibit DWR-1. I am testifying as an expert based on my special knowledge, skill, experience, training, and education.

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I. California Hydrology and Delta Hydrodynamics

California experiences a high annual variability in precipitation stemming from the role of a relatively small number of storms making up the state water supply. The practice of the State Water Resources Control Board (Board) is to employ a water year classification system to categorize annual precipitation and account for this variability. The Sacramento Valley 40-30-30 Index and the San Joaquin Valley 60-20-20 Index were developed by the Board for the Sacramento and San Joaquin River hydrologic basins as part of Board’s Bay-Delta Plan and the Board’s Water Right Decision D-1641 (D-1641). Figure 1 shows the number of years that the various water year hydrologic classifications occurred for water years 1967 through 2015 for the Sacramento and San Joaquin Valley hydrologic basins.

Water Year Classification	Wet	Above Normal	Below Normal	Dry	Critical
Number of Years (San Joaquin Valley Runoff)	17	7	3	8	14
Number of Years (Sacramento Valley Runoff)	17	7	6	9	10

Figure 1, Total Number of Years of Various Water Year Hydrologic Classifications, WY1967 through WY2015

Cumulatively, water years 2012-2015 stand as California’s driest period since construction of the State Water Project (SWP) and Central Valley Project (CVP). Prior to construction of the SWP and CVP, California’s most significant historical statewide drought was the six-year drought of 1929-34. The 1929-34 event occurred within the climatic context of a decades-plus dry period in the 1920s and 1930s whose hydrology rivaled that of the most severe dry periods in more than a millennium of reconstructed Central Valley paleoclimate data. That drought’s impacts, however, were small by present-day standards, however, because the state’s urban and agricultural development was far less than that of current times.

Generally, Delta hydrodynamics are defined by complex interactions between tributary inflows, tides, in-Delta diversions, and SWP and CVP operations. The degree to which a single variable impacts the overall hydrology of the Delta varies depending on its magnitude as compared to the other variables. Changes in any of the variables affect water quality in the Delta, particularly with regard to salinity. Each day two high and two low tides of differing magnitudes cause large fluctuations (flood and ebb tides) in flow in the various parts of the Delta estuary. Also, the strength of the tides varies within the month depending on the position of the Sun and the Moon (Spring-Neap cycle) and is also influenced by atmospheric conditions. Each flood tide has the potential to bring a large volume of high salinity ocean water into the Delta. Keeping saltwater from reaching the central Delta is crucial to protecting freshwater supplies for in-Delta and SWP/CVP water users.

To prevent saltwater from intruding deeper into the Delta during dry periods, SWP/CVP operators repel it with the tools available to them: either by reducing the exports of water from the south Delta; or by increasing the amount of water flowing into the Delta from releases of stored water from upstream reservoirs.

By far, the most important of the variables affecting salinity in the Delta is Delta outflow. Delta outflow refers to the flow leaving the Delta at Martinez. Net Delta Outflow (NDO) represents an average value over a tidal cycle and is an estimate of the water flowing through the system that can be used to push out the incoming tidal force.

Since the tidally driven flow at Martinez can vary to a great degree,¹ the magnitude of the tide has a strong ability to subsume direct measurements of the other variables at that location and a more manageable approach of a calculated index is used, known as the “Net Delta Outflow Index” (NDOI), in place of NDO. NDOI is an arithmetic summation of river inflows, precipitation, assumed agricultural consumptive demand, and project exports. It is an estimate of the net difference between ebbing and flooding tidal flows at Chipps Island converted to a daily average.² NDOI was introduced in the 1995 Bay-Delta Plan and is now part of D-1641, which sets specific minimum monthly NDOI objectives for the protection of fish and wildlife based on water year type.

The magnitude of NDOI determines how much it will impact water quality. Under high flow events (high NDOI), the Delta is flushed out and filled with fresh water, and there are only very small traces of ocean water. During such conditions, small changes in flows cause only negligible effects on water quality in the Delta. On the other hand, under very dry conditions (low NDOI), small changes in flows can have a noticeable effect on water quality in the Delta. This makes water quality management during drought conditions a much bigger challenge. Due to general lack of freshwater supplies within the Delta watershed in 2015, flows into the Delta were lower than are typically experienced, which resulted in salinity intrusion into the north Delta.

II. Regulatory Objectives

Water quality is measured through monitoring of objectives in D-1641, which are categorized by the beneficial uses they are intended to protect, including municipal, industrial, agricultural, and fish and wildlife. Figure 2 shows a map of the Delta with the various objective locations.

D-1641 contains agricultural salinity objectives that vary by location. The salinity objectives are based on both water year type and a 14-day running average during the irrigation season, from April to mid-August, at Andreas in the West and in the central Delta. The agricultural salinity objectives at these Delta locations become less stringent under dryer conditions. In the south Delta, the salinity objectives are based on a 30-day running average and measured by electrical conductivity (EC). The SWP and CVP are jointly required by D-1641 to meet EC objectives.

The estuarine habitat protection objectives incorporate modified X2 criteria (geographic isohaline) first established in the 1994 USFWS Delta Smelt Biological Opinion. The upstream movement of 2 ppt isohaline (2 parts per thousand of salt in the water), measured as 2.64 mS/cm at the surface, is maintained within a certain range of positions in the estuary by adequate Delta outflow. These positions (Collinsville, Chipps Island, Port Chicago, and Martinez) are associated with an abundance of fish and biota.

¹ DSM2 historical modeling indicates that the tidally driven flow at Martinez varies by 500,000 cfs.

² DSM2 historical modeling indicates that the tidally driven flow at Chipps Island varies by 400,000 cfs.

D-1641 BAY-DELTA OBJECTIVES LOCATIONS

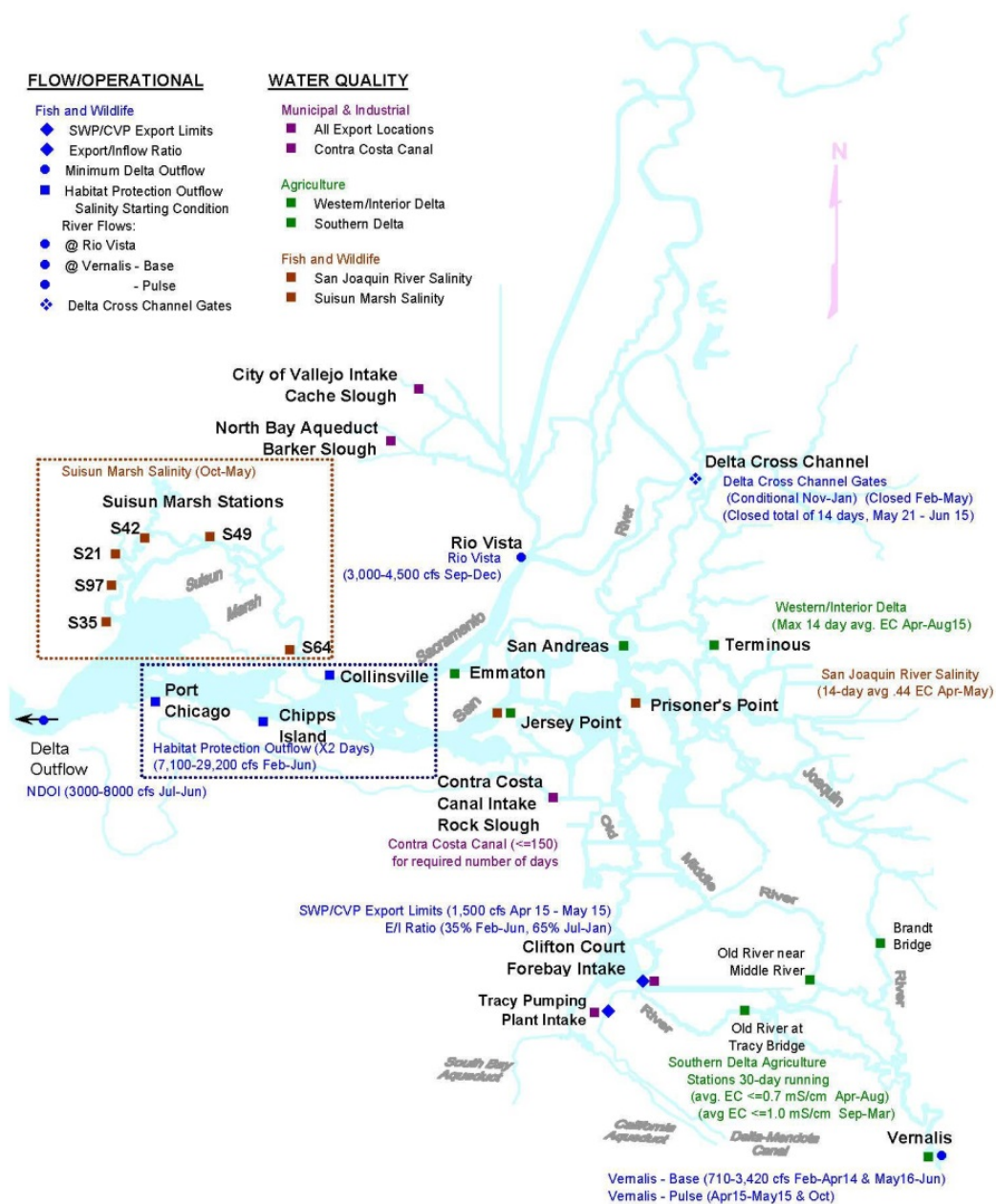


Figure 2, D-1641 Bay-Delta Objectives Locations

The Bay Delta Standards provide for less stringent flow and salinity objectives under dry and critically dry years. However, because of the exceptionally dry conditions existing

over the past three years, there was insufficient supply to meet these requirements and to also meet all beneficial uses of water in the Sacramento-San Joaquin River basin.

In 2014 and 2015, due to serious drought conditions, DWR and the U.S. Bureau of Reclamation (Reclamation) petitioned the Board for temporary modifications to their water rights permits, requesting changes in the D-1641 objectives. In both years, after receiving a petition, an order was issued that allowed a reduced level of Delta outflow and/or a modified salinity objective, conditioned upon a reduction in SWP/CVP exports. The orders also required that stored water in the SWP and CVP reservoirs be used for ecosystem protection and health and safety needs and the order provided flexibility in operation of the Delta Cross-Channel gates in order to help manage interior Delta water quality. Project exports were restricted to serving health and safety purposes only, storage in reservoirs was at critically low levels, and releases were constrained to protect against the drought's continuation. Protections for public interest fish and wildlife values were cut back and urban water use was curtailed by 25% across the state in response to the drought emergency.

Term 91 conditions were in effect for much of the summer and fall of 2015. When the Board finds that Term 91 applies, this indicates a dry hydrologic scenario in which the SWP and CVP are making storage withdrawals of project water to meet some of the in-basin needs of the Delta's watershed. These needs include flow and water quality standards contained in D-1641, as necessary conditions of the Projects' water rights. Under Term 91 conditions, when project water is diverted without authorization, the amount of water releases that are available to meet authorized in-basin needs is reduced by a corresponding amount. This water must then be "made up" later by the projects with additional storage withdrawals.

III. Agricultural Diversions Affect the Ability of DWR and Reclamation to meet D-1641 Objectives – Especially during a Drought

To understand the impacts of unauthorized diversions, one must understand how the Delta is balanced for salinity. There are five basic factors that influence salinity in the Delta:

1. Delta Inflows;
2. Net Delta Outflow;
3. Exports;
4. Net Channel Depletions to meet Delta Consumptive Use; and
5. Tidal Flux.

Project operators have no control over most of these factors. Project operators are only able to control: (1) releases from water project reservoirs upstream of the Delta, which are a portion of Delta inflows; and (2) exports. When there are no excess flows and the projects are operating in balanced conditions to control salinity, either for a near term or seasonal objectives, operators adjust reservoir releases and export rates to meet the objectives. Operators must consider in advance how the other factors might influence the system in order to attempt to maintain balanced conditions to control salinity. This is

further complicated because of the amount of time it takes for Project reservoir releases to reach the Delta.

NDO is a key index of the physical, chemical, biological state of the Delta.³ It includes daily river inflows, water exports, rainfall, and estimates of Delta agriculture depletions to estimate the “net” flow at the confluence of the Sacramento and San Joaquin Rivers, nominally at Chipps Island. There are also flow gauges at Freeport, Vernalis, and on the Mokelumne and Calaveras Rivers. After water is released from Project reservoirs, water users upstream of and in the Delta divert various amounts of water as it makes its way to the Delta and through it. Agricultural diversions are generally not scheduled in advance, as irrigation needs depend on local weather and soil conditions. Warmer conditions can increase the need for irrigation or cause it to occur earlier. With each diversion, less water is available to contribute to Net Delta Outflow. In other words, there is less water to flush and dilute ocean and land-derived salts out of the Delta. Project operators adjust the exports scheduled at the SWP and CVP pumping plants to further prevent salinity incursion into the Delta.

Project operators forecast how temperature, humidity, wind conditions, and barometric pressure will affect the tides and the projected use patterns days in advance. On a typical summer day, the exports average about 9,000 cfs, because summer demands south of the Delta are usually high. When operators see salinity increasing at the various Delta EC measurement stations, they reduce or stop exports. If having already slowed Project exports to well below the capabilities of Delta Islands to take water, Project operators lose the ability to control salinity by reducing exports. For instance, in 2015, SWP and CVP exports were jointly limited to 1,500 cfs, and Project operators were also required to meet an NDOI of 3,000 cfs. (Exports were often less than 1,500 cfs and to meet the modified salinity objectives, the Net Delta Outflow Index was often higher than 3,000 cfs).

In 2015, tides and in-Delta diversions played a far larger role in determining the salinity of the Delta than exports. The remaining tools available to DWR for water quality control are reservoir releases, which may be constrained by regulatory agencies, and in extreme circumstances, the installation of physical barriers within the Delta. DWR and Reclamation cannot control the use of water by in-Delta diverters and these in-Delta uses will continue to impact delta water quality despite the tools available to Project operators.

Figure 3 below shows observed export and diversion data taken from the DAYFLOW⁴ database in June for years 2009 and 2015. Year 2009 is classified as a below normal

³ See California Department of Water Resources, Dayflow, an Estimate of Daily Average Delta Outflow (accessed Nov. 1, 2015), available at <http://www.water.ca.gov/dayflow/>.

⁴ DAYFLOW is a model that DWR uses to estimate Delta channel depletions. The Delta channel depletions in DAYFLOW are derived from a 1965 DWR study that was based on land use surveys from the late 1950s and early 1960s. In the 1960s, many of the crops grown in the Delta were row crops and not permanent crops. At that time, sugar beets were grown in many places and supplied the Clarksburg Sugar Mill.

year hydrologically, and 2015 is classified as a critical year. The graphics show that exports made up a small percentage of water removed from Delta channels in 2015.

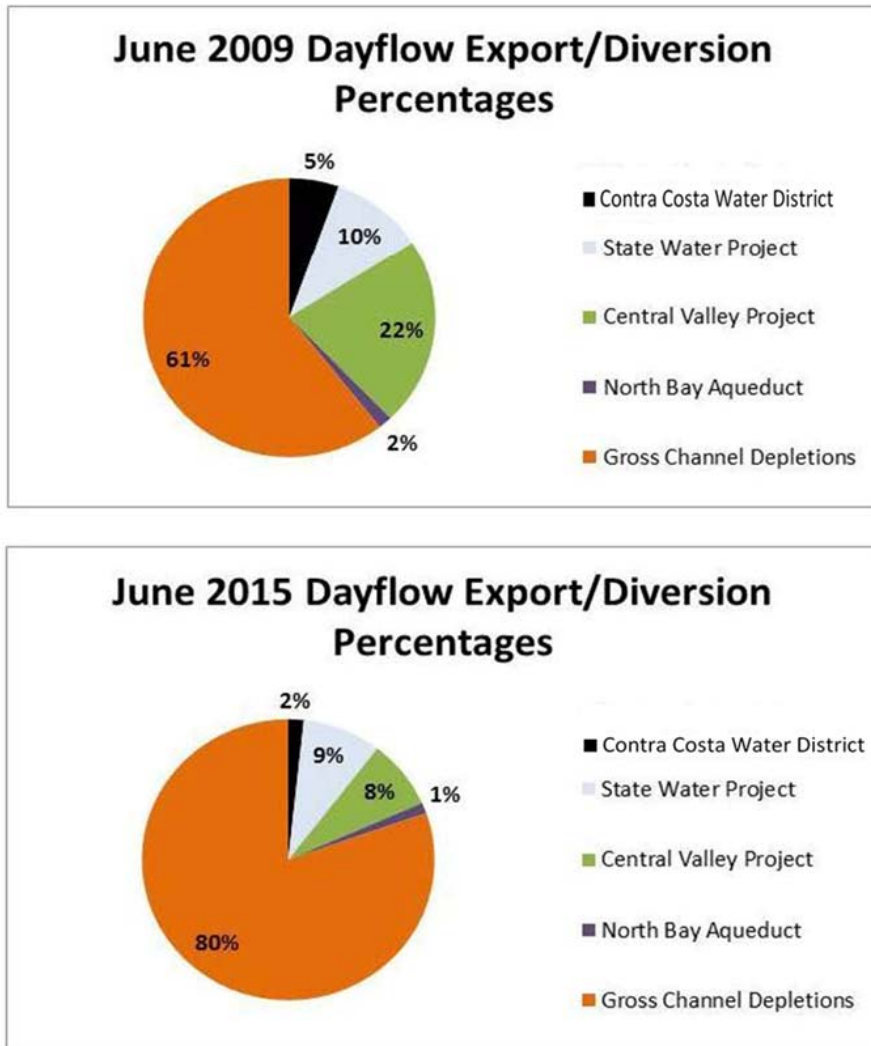


Figure 3, Export and Diversion Percentages for 2009 and 2015 Using DAYFLOW Data

Few diverters of water within the Delta use flow meters to monitor and report the amount of water that is diverted from or returned to the system. Non-project diversions are not coordinated with project releases or project exports. The channel depletions are estimated by first estimating Delta crop water use demands and then accounting for sources of water to meet these demands. Generating meaningful estimates of Delta channel depletion requires having accurate and timely land use surveys, an accurate estimate of seasonal variations in crop water use, and an accurate representation of relevant meteorological information. Each of these factors affects modeling Delta consumptive use and channel depletions.

Delta channel depletions are a significant factor considered in computer modeling of Delta salinity. Figure 4 below shows the results of several different methods of estimating net channel depletions in the Delta. Flow in cfs is shown on the left margin and each month is shown with its respective study along the horizontal axis. The one thing they have in common is that they are level for each month. Regardless of the temperature or moisture in any month, these consumptive uses remain level throughout the month. July is shown as the peak month in each study, topping out at nearly 5,000 cfs with one set of assumptions. June is the second most consumptive month with averages around 4,000 cfs, and August is the next highest month with a little over 3,000 cfs. Actual consumptive uses vary radically with weather and crop conditions, making it a major controlling factor for Delta salinity.

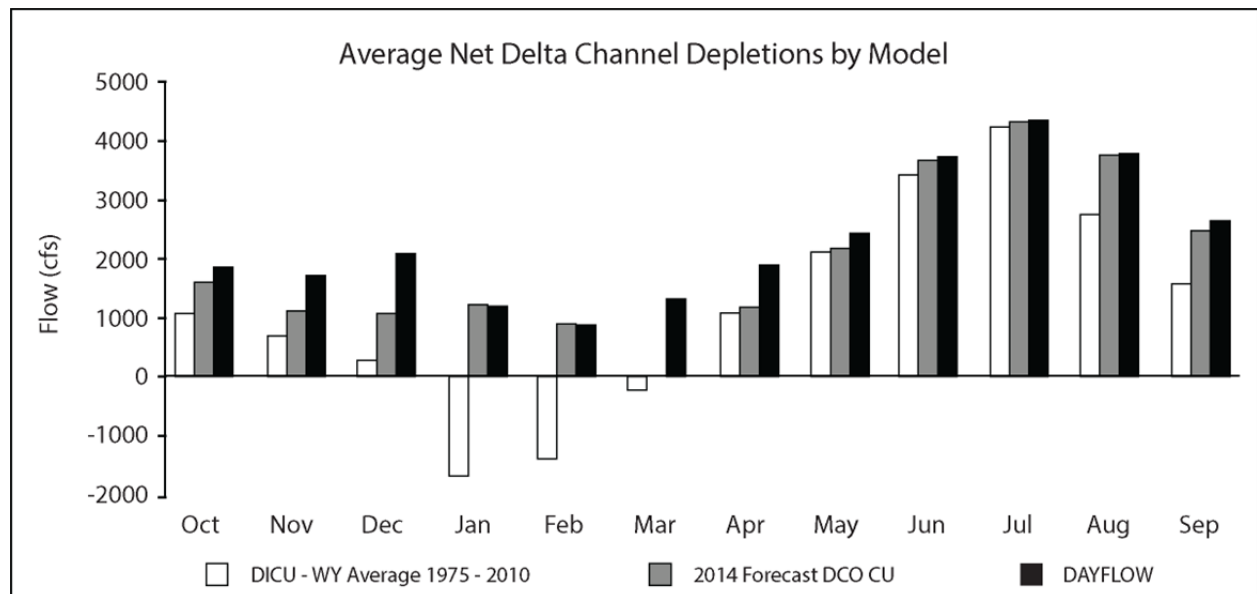


Figure 4, Graph of Estimated Net Channel Depletions, DWR 2015

Net Channel Depletions can be thought of as the water diverted from the channels and returned to the channels to help meet the consumptive use needs. Channel Depletions is the water diverted from the channels but does not include the return flow.

Figures 5 and 6 each show a pie chart of exports and channel diversions from the Delta in cfs and by percentage. The BBID diversions were separated out from the rest of the

channel depletions to show their relative significance. As can be seen, agricultural diversions made up the largest portion of water taken from the Delta in June 2015.

Two additional notes for these figures: channel depletions were plotted rather than net channel depletions because of not knowing the return flows of BBID; and SWP exports, in addition to water exported to meet health and safety needs, reflect water exported as water transfers.

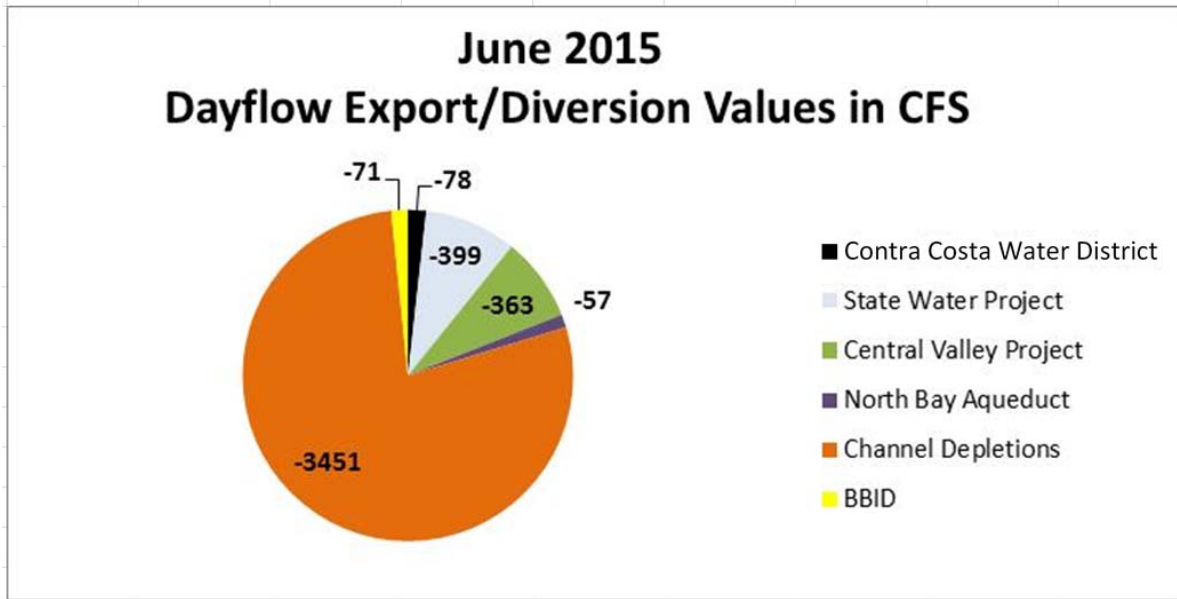


Figure 5, Exports and Diversions for June 2015 in cfs

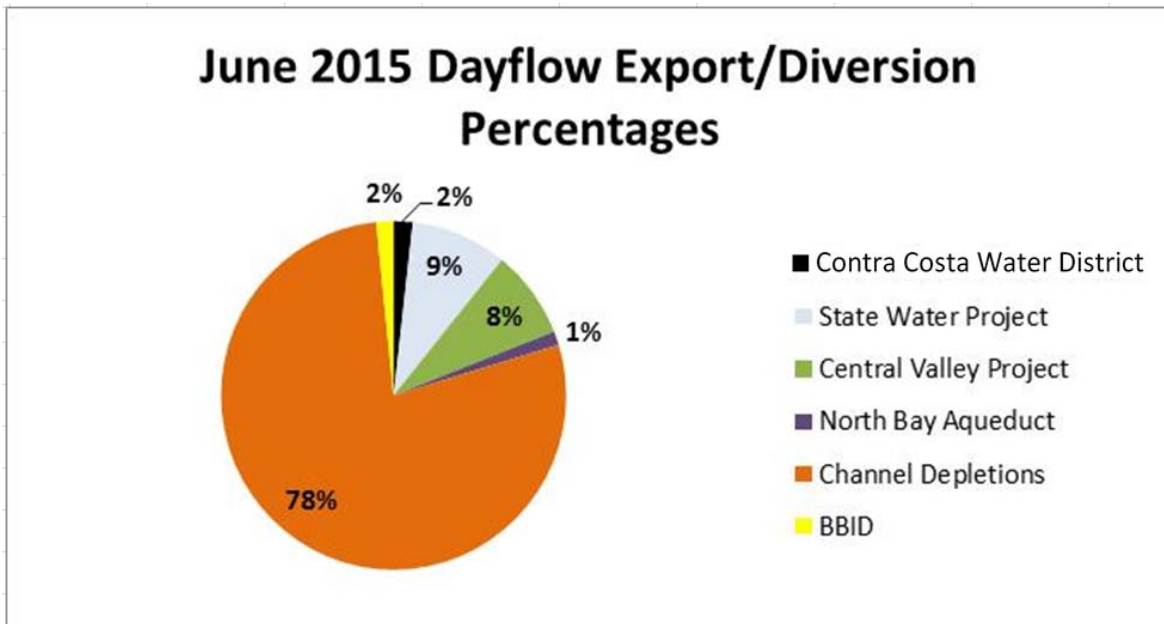


Figure 6, Exports and Diversions for June 2015 by percentage

Figures 7 and 8 are also graphs of values taken from DAYFLOW 2015 data. Figure 27 shows the additional monthly volume of water needed for net channel depletions to meet D-1641 objectives. The blue box chart bars represent the inflows minus the water needed for exports and diversions (Contra Costa, North Bay Aqueduct). The graph shows from 100 TAF to 260 TAF of additional upstream water was needed to flow into the Delta to meet agricultural demands. Figure 28 shows the same information but in cfs on a daily basis.

In 1931, the D-1641 objectives were not in place. Neither were there additional flow and storage requirements necessary to comply with the Endangered Species Act. This includes flows needed to meet X2 requirements for Delta Smelt and reservoir storage needed for temperature releases for Salmon. Especially during a series of drought years, these water quality and endangered species needs play a big part in water management.

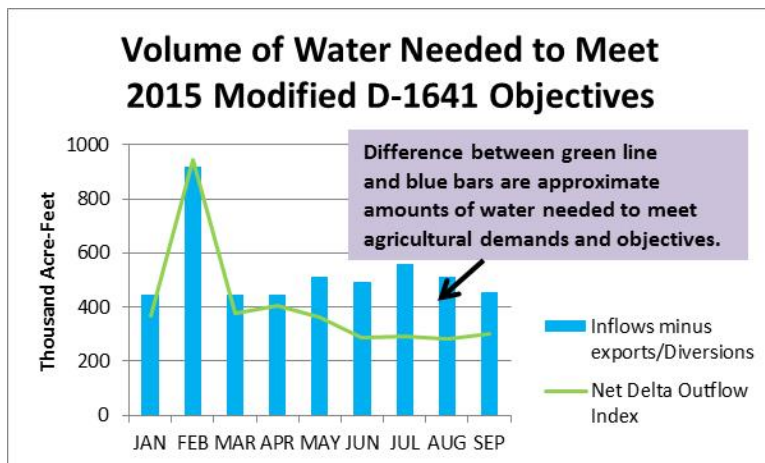


Figure 7, Volume of Water Needed to Meet 2015 D-1641 Objectives

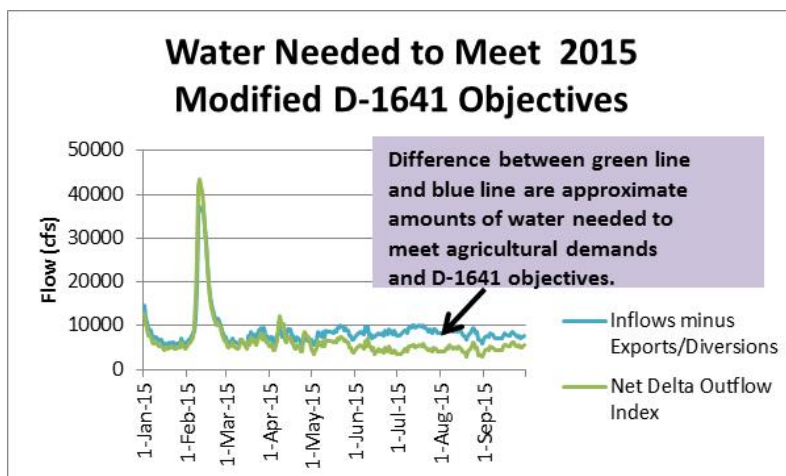


Figure 8, Amount of Water in CFS Needed to Meet 2015 D-1641 Objectives

IV. Effects of Unauthorized Diversions

Any water that is released from SWP/CVP storage for the purpose of meeting regulatory objectives will be negatively influenced by unfavorable tides and weather (such as high temperatures), which increases the difficulty for the Projects to maintain Delta water quality. This is particularly true during very dry periods where little additional buffer water is released due to the tension between competing demands for stored water. These circumstances are complex as salinity intrusion is not a one time event, but is recurring. Episodes of unfavorable tides and weather stretch for days and sometimes weeks, which can prolong and worsen salinity conditions by continually accumulating salts in the interior Delta.

Unauthorized diversions reduce outflow, reducing NDO. Combined with higher demands from authorized diversions, *un*authorized diversions can contribute to reductions of extra water that was added as a buffer that was released by Project operators to meet permit conditions. With each unauthorized diversion, less water is available than projected by Project operators to flush salt from the Delta and dilute salt within it.

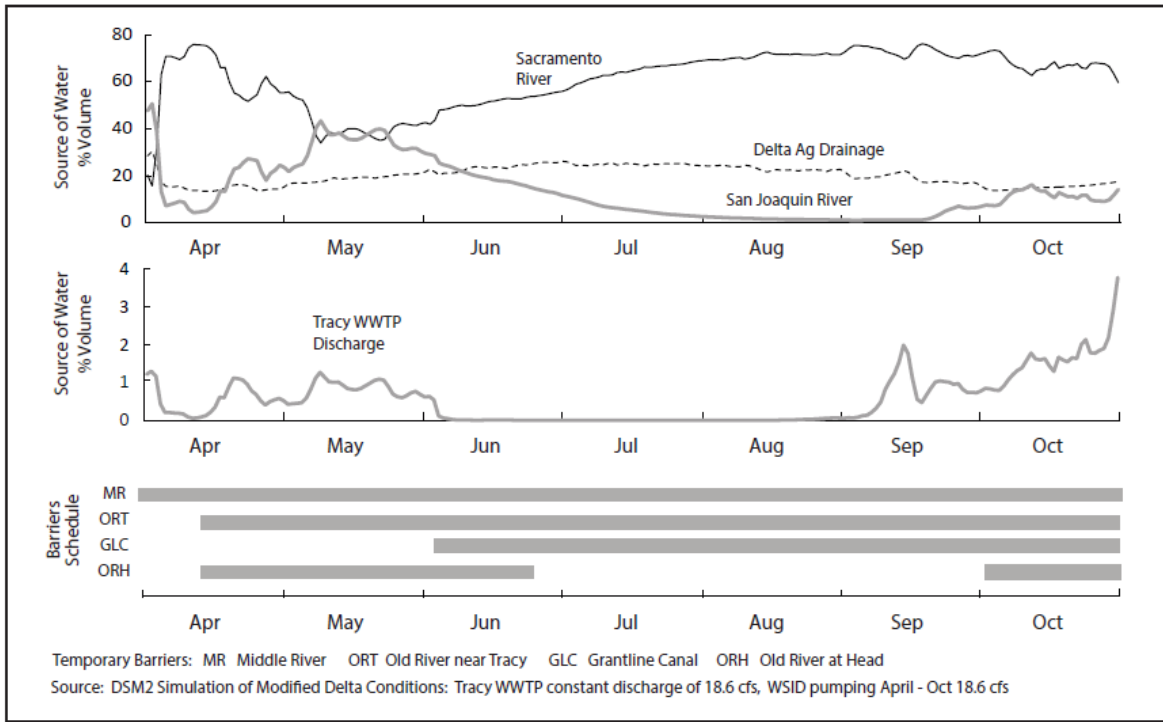
Operators adjust project reservoir releases and exports to maintain water quality for both near-term and seasonal goals. When unauthorized diversions occur, the amount of water available to transport salts out of the Delta or dilute it is reduced, causing incrementally worse salinity conditions. Project operators must therefore increase reservoir releases or decrease exports to improve salinity conditions. These adjustments come from existing Project supplies, reducing them by a corresponding amount.

V. Sources of Water at WSID's Intake Channel

Figures 9 and 10 show the DSM2⁵ (Delta Simulation Model 2) simulation of source of water in Old River at the WSID intake channel during April through October of 2014 and 2015 assuming 14 cfs for both City of Tracy Wastewater Treatment Plant (WWTP) discharge and WSID diversion. The City of Tracy WWTP discharge contributes about 1 to 2% of the water by volume in Old River at the WSID intake channel when the temporary barrier at the head of Old River is installed. At other times, the simulations indicate essentially no WWTP water is present at the intake channel.

⁵ DSM2 is one of the main models used for modeling hydrodynamics and water quality in the Delta. DSM2 has three different modes of application: historical simulations, forecasts, and longer term planning simulations. In order to simulate historical or forecasted hydrodynamic conditions, DSM2 requires input data such as historical conditions, project conditions in the near future, and hypothetical Delta changes.

Source of Water in Old River at West Side Irrigation Intake Channel
 Assuming 14 cfs Tracy Wastewater Treatment Plant Discharge and West Side Irrigation District Diversion
2014

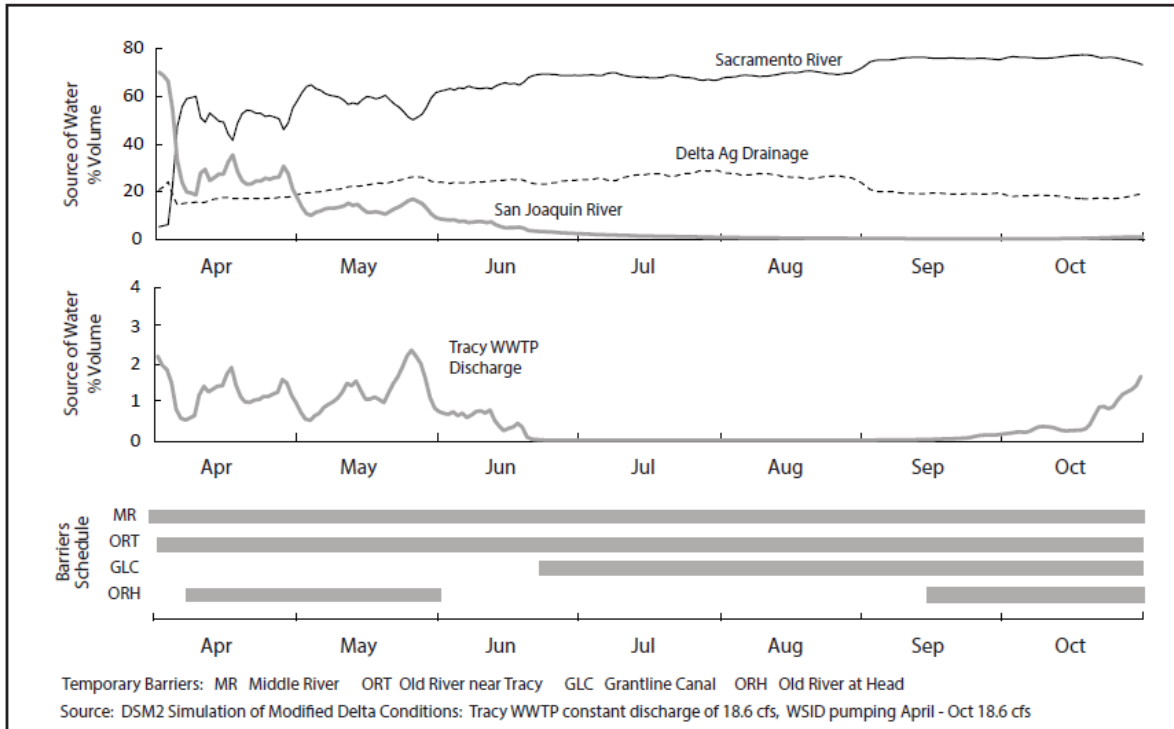


DWR Delta Modeling Section

February 1, 2016

Figure 9, Source of Water in Old River at West Side Irrigation Intake Channel, 2014

Source of Water in Old River at West Side Irrigation Intake Channel
 Assuming 14 cfs Tracy Wastewater Treatment Plant Discharge and West Side Irrigation District Diversion
 2015



DWR Delta Modeling Section

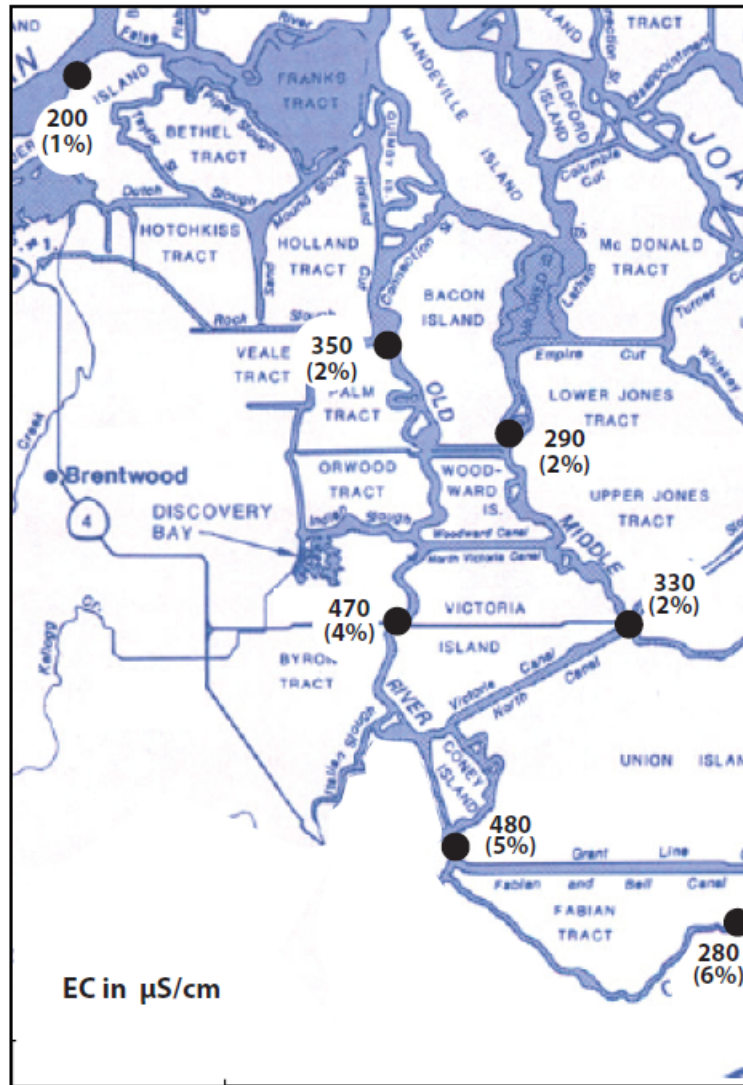
February 1, 2016

Figure 10, Source of Water in Old River at West Side Irrigation Intake Channel, 2015

VI. Effects of BBID’s diversions in 1931

Figures 11 and 12, based on DSM2 simulations of historical and modified historical conditions, show the impact on peak daily average EC in Old and Middle Rivers in 1931 due to BBID’s diversions that year. Peak EC in Old River upstream and downstream of Italian Slough increased 470 to 480 $\mu\text{S}/\text{cm}$. As shown in Figure 11, this increase was due to more of the water in Old River coming from Martinez where the salinity was high in 1931. These two graphs demonstrate that the diversion of water by BBID in 1931 influenced the salinity intrusion into the Delta.

Increase in Peak Daily Average EC for 1931 due to BBID Pumping
 (Peak EC Occurs on Different Days for Different Locations: Sep 1 - Oct 4, 1931)

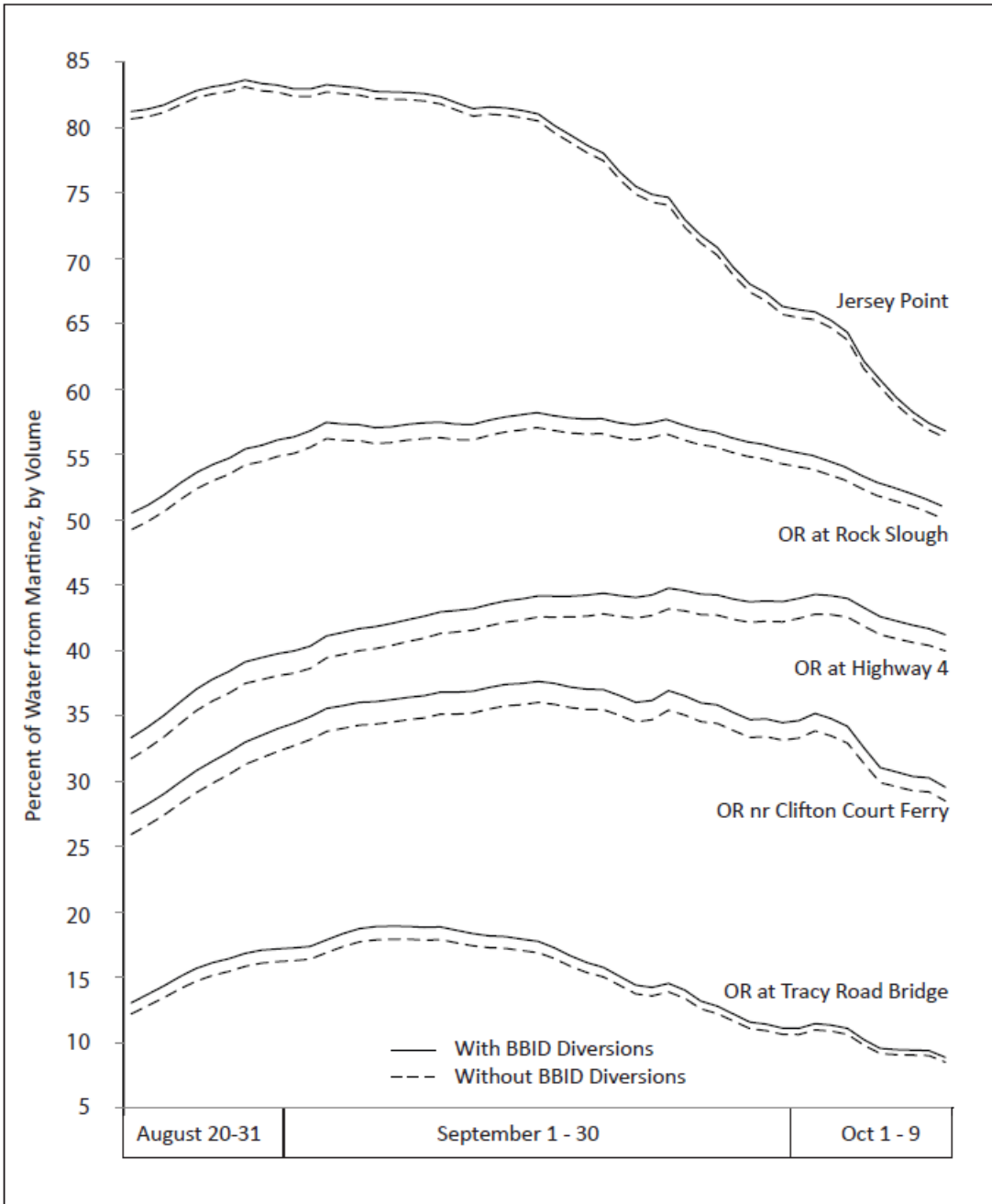


Source: DSM2 simulation of historical 1931 conditions with and without including BBID diversions as reported in DWR Bulletin 23.

February 2, 2016
 Delta Modeling Section

Figure 11, Increase in Peak Daily Average EC for 1931 due to BBID Pumping

**Volumetric Portion of Water Originating from Martinez
DSM2 Fingerprint Simulation of Historical 1931 with and without BBID Diversions**



DWR Delta Modeling Section

February 5, 2016

Figure 12, Volumetric Portion of Water Originating from Martinez

VII. Water Was Not “Fresh” in the Summer of 1931

Susan Paulsen’s testimony (Exhibit BBID388, at 10:14-10:28) states that the peak Chloride concentration in 1931 reached 1,300 mg/L Chloride. Thomas Burke’s testimony states that the salinity levels did not rise until later in year at the end of the prime growing season (Exhibit WSID123, at p. 6). Using the conversion equations for Clifton Court Forebay from the May 29, 2001 memorandum from Bob Suits (Exhibit DWR-5) and the 1986 memorandum from Kamyar Guivetchi (Exhibit DWR-6), the following equivalent EC values were obtained and are shown in Figure 13.

Peak Chloride (mg/L)	Equivalent EC (mmhos/cm) ⁶	Equivalent EC (mmhos/cm) ⁶
	Bob Suits Memorandum	Kamyar Guivetchi Memorandum
1,000	3.8	4.0
1,300	4.9	5.1

Figure 13, Equivalent EC for Peak 1931 Salinity

Figure 3 on page 4 shows the D-1641 objectives and locations. The peak salinity values reached in 1931 are four to five times greater than the current agricultural objectives in the south Delta. So even if salinity rose after “the prime growing season,” the agricultural objectives extend throughout the year. Dr. Paulsen’s and Mr. Burke’s testimony implies that higher EC water is acceptable to agricultural users, which contradicts the current objectives.

In a January 2010 report to the Board’s Division of Water Rights, Dr. Glenn J. Hoffman investigated the impacts of Sodium Chloride on various crops. (Exhibit DWR-7.) As Table 3.8 (Page 39 of the report) shows, the foliar injury from saline sprinkling water for various crops would range between 5 and 20 mol/m³ for Sodium or Chloride concentration (Figure 14). To change mol/m³ to mg/l, the table suggests dividing the concentration by 0.02821. Therefore, chloride concentrations of between 177 and 710 mg/l would cause foliar injury to sample crops shown on the table below. In contrast to Dr. Paulsen’s statement that water with chloride levels at 1,000 mg/L chloride is relatively fresh, Dr. Hoffman’s report shows how potentially detrimental this might have been to crops in 1931.

Figure 15 is an excerpt from DWR Bulletin 23 for 1931 regarding the crop losses experienced in the Delta that year. This excerpt shows that Delta crops were negatively impacted by the salinity levels in the Delta, which also contradicts Dr. Paulsen’s and Mr. Burke’s testimony.

⁶ The units of mS/cm are equivalent to mmhos/cm.

Table 3.8. Relative susceptibility of crops to foliar injury from saline sprinkling waters (Maas and Grattan, 1999).

Na or Cl concentration causing foliar injury, mol/m ³ *			
<5	5-10	10-20	>20
Almond	Grape	Alfalfa	Cauliflower
Apricot	Pepper	Barley	Cotton
Citrus	Potato	Corn	Sugar beet
Plum	Tomato	Cucumber	Sunflower
		Safflower	
		Sesame	
		Sorghum	

*To convert mol/m³ to mg/l or ppm divide Cl concentration by 0.02821 and Na concentration by 0.04350. The conversion from mg/l to EC is EC = mg/l / 640.

Note: These data are to be used as general guidelines for daytime sprinkling. Foliar injury is also influenced by cultural and environmental conditions.

Figure 14, Relative Susceptibility of Crops to Foliar Injury, Hoffman Report, 2010

Tangible Crop Losses

To arrive at the tangible losses as outlined, all of the data of the field forms were thoroughly reviewed, summarized by islands and crops and compiled as shown in Table 92. Under the three classifications of tangible crop losses, this table shows, segregated by crops, the total losses, in production and money. It is to be noted that the estimates of loss in money represent the market value of the lost production and as such might be termed the gross loss as distinguished from net loss represented by the net profit which the grower might have realized had he been able to market the crops lost. As shown by Table 92, the market value of the Delta crops estimated to have been lost because of salinity in 1931 totals \$1,263,716. Of this amount, \$890,906, or 70 per cent of the total, is the loss estimated to have resulted from curtailment of irrigation, \$357,640 or 29 per cent, the loss due to actual application and use of water of too high salinity and \$15,170 or one per cent, the loss due to destruction of permanent plantings and to abandonment of crops or plans therefor because of high salinity.

Figure 15, Crop Losses in 1931 due to Salinity Intrusion, Bulletin 23, 1931

Dr. Paulsen’s testimony (Exhibit BBID388, at 11:1-11: 12) emphasizes that water was of “suitable quality” during June 1931, but does not discuss the quality of the water in later summer months even though Bulletin 23 for 1931 shows that BBID diverted water into October at the much higher salinity levels mentioned previously (Figure 16, see Exhibit DWR-8, at. p. 85). The availability of water in terms of quality and quantity is questioned due to the poor water quality later in the summer.

TABLE 39
DELTA UPLANDS DIVERSIONS FROM OLD SAN JOAQUIN RIVER

WATER USER	MILE AND BANK	NUMBER AND SIZE OF PUMP	MONTHLY DIVERSIONS IN ACRE-FEET								TOTAL DIVERSION: APRIL TO OCTOBER ACRE-FEET	** ACREAGE IRRIGATED
			MAR.	APR.	MAY	JUN.	JUL.	AUG.	SEP.	OCT.		
EAST CONTRA COSTA IRRIGATION DISTRICT	36.5 L (1)	2-30" 1-24" 1-18"	2717	6387	5423	3224	5383	3596	227	17	26974	13357
STROMBERG IRRIGATION DISTRICT (2)	40.9 L	1-20" 1-30"	1176	3485	1888	2469	2847	2652	1139	140	15796	7853
JOE P. COSTA	13.44-6 L	1-7"					58				58	20
Ed. H. STEVENSON (RAY SPOS.)	(4) 45.3 L	1-12"		80			39		63		182	111
H. LINDEMAN	47.2 L	1-12"										

Figure 16, Bulletin 23 - 1931 BBID Diversions

VIII. BBID Diverted Less Water in 1931 Than It Did in 1930

Dr. Paulsen’s testimony (Exhibit BBID388, starting at 10:14) indicates that the peak Chloride concentration reached 1,300 mg/L Chloride and implies that BBID diverted as much water as it desired. Mr. Burke, in his testimony (Exhibit WSID123, at p. 7), says:

Based on the fact that during the 1931 and 1939 drought years measured salinity levels did not rise until late in the year (at the end of the prime growing season), and there was no noticeable decline in irrigation diversions or irrigated acreage at BBID or WSID (when compared to normal or wet years) it is my opinion that the water quality during these two drought years did not hinder irrigation diversions.

Bulletin 23 for 1930 indicates that BBID diverted more water from May to October 1930 compared to from May to October 1931. (Exhibit DWR-9, at p. 58.) The decreases in diversions from 1930 to 1931 could have been due to conservation methods done earlier in 1931 (Exhibit DWR-9, at pp. 5-19.), a change in the “freshness” of the water from 1930 to 1931, or some other reason. Figure 17 shows the 1930 diversions. Figure 18 shows both the 1930 and 1931 diversions in the same table with percentage of reduction in diversions in 1931. July was the only month that could possibly be considered close in terms of the amount of the diversions between the two years. Otherwise, in 1931, diversions were 17% to 97% lower than they were in 1930. That BBID diverted less in 1931 than it did in 1930 indicates that it did not divert as much as it could have desired. Figure 19 is an excerpt from Bulletin 23 for 1931 that describes how the Delta farmers were made aware of the salinity encroachment. (Exhibit DWR-9, at p. 150.)

TABLE 23

DELTA UPLANDS DIVERSIONS FROM OLD SAN JOAQUIN RIVER

Water User	*Mile and Bank	:Number: and size of pump	Monthly Diversions in Acre-feet							Total	
			Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	:Diversion: April to October	:Acreage Irrigated
East Contra Costa Irrigation District	36.5 (1)	L 2-30" 1-24"	1520	7070	5783	5481	5019	2613	1314	28800	13929
Sycamore Bottom Irrigation District	40.0 (2)	L 1-26" 1-30"	273	3198	3387	3276	3071	2787	569	16561	9200

SACRAMENTO-SAN JOAQUIN

Figure 17, Bulletin 23 - 1930 BBID Diversions

	May	June	July	August	September	October
1930 BBID	3198	3387	3276	3071	2787	569
1931 BBID	1888	2459	2947	2552	1139	17
Difference in Diversion	1210	928	329	519	1648	552
Percent Reduction in 1931 Diversions	41%	27%	10%	17%	59%	97%

Figure 18, BBID Diversions 1931 and 1930 (from Bulletin 23)

Salinity Bulletins

With the unusually early encroachment of salinity in the 1931 season, water users throughout the Delta were anxious to obtain the results of the tests in order that their irrigation operations might be governed to prevent the use of water of injurious salinity content. In the period from May 1st to November 15th therefore, bulletins reporting the salinity at the various stations were mailed to a large list of Delta water users at weekly or ten-day intervals. This service as well as that in testing many samples taken at points other than the regular stations, was in great demand and was probably instrumental to a considerable extent in reducing or preventing damage from the use of water of too high salinity.

Figure 19, Bulletin 23, 1931 – Delta Users informed of salinity encroachment

IX. Delta Diversions Influenced Salinity Intrusion in 1931

Dr. Paulsen's testimony (Exhibit BBID388, at 12:14-12:20) discusses that the 1931 modeling indicated that some of the Sacramento River water found at BBID entered the Delta during February to May. Building upon the idea that water movement in the Delta has a memory or is influenced by previous hydrodynamic circumstances, a similar case can be made that increased net channel depletions in the earlier summer months significantly contributed to the higher levels of chloride later in the season. Figure 20 shows the volumetric fingerprint for Old River at Highway 4 (Exhibit BBID384, Figure 4-11, at p. 49). Page 85 of the exhibit shows volumetric fingerprint broken out by months for the Sacramento source but neglects to show it for Martinez. Even without that information, it is easy to see from that figure that the percent by volume of Martinez salinity increases overtime. Under D-1641, Martinez EC by volume would be closer to 2% or 3% (see Exhibit BBID384, Figure 4-11, at p. 49). DWR also modeled 1931 using the Bulletin 23 data. Figure 21 below shows the difference between NDOI and the inflows to the Delta. The difference between these two lines reflects the agricultural net channel depletions. Inflows into the Delta drop, but it is the net channel depletions that cause a negative NDOI, close to -5,000 cfs, and this inflow to the Delta from the ocean starts in June 1931. This inward movement of salt is also reflected in Figure 22. (See Exhibit BBID384, Figure 6-4, at p. 81.) The graphs show the movement of the peaks of salinity over time from the western Delta into the southern Delta. Net Channel Depletions in the summer cause the strong salinity intrusion through the summer and fall months.

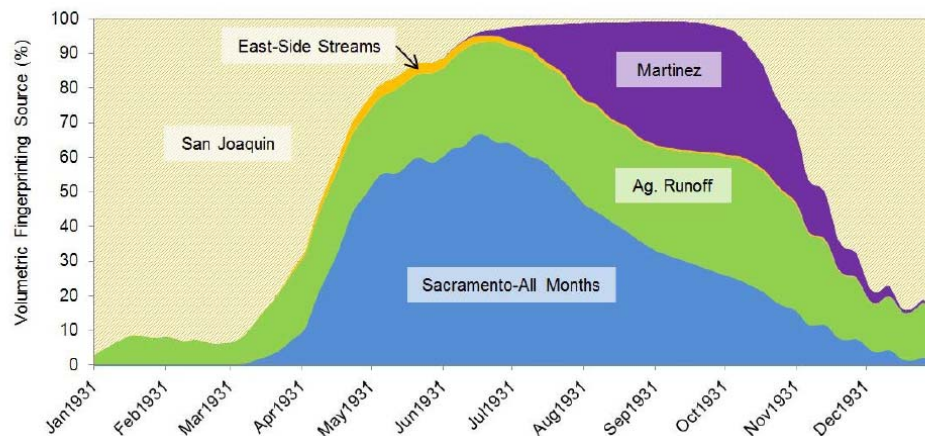


Figure 20, Exhibit BBID-384, Figure 4-11, at page 49

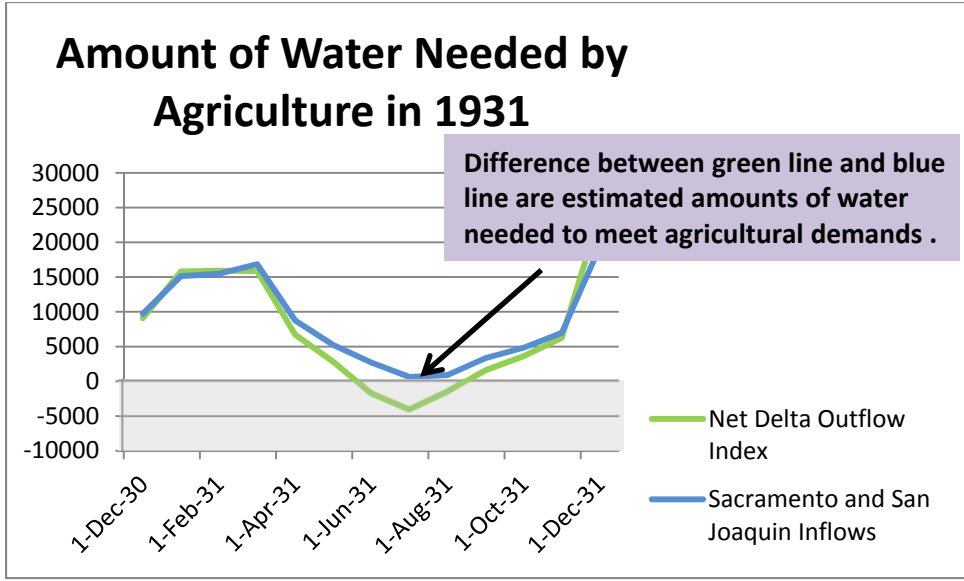


Figure 21, Amount of Water Needed by Agriculture in 1931

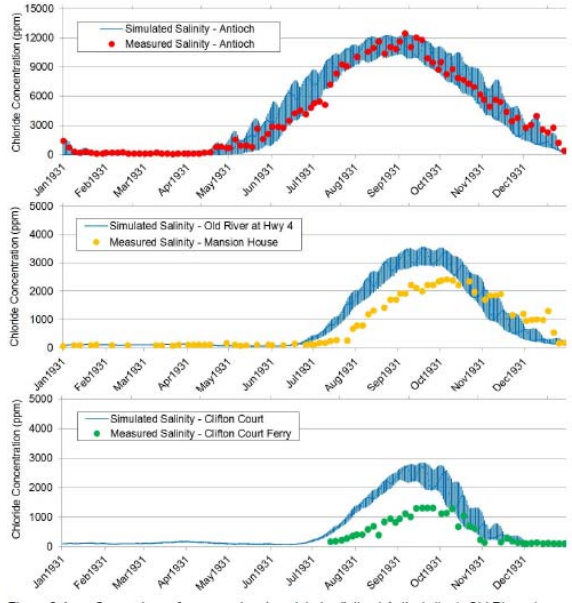


Figure 22, Exhibit BBID-384, Figure 6-4, at page 81

X. Salinity Intrusion Impacts of Zero Net Delta Outflow Index

Below are plots (Figures 23-28) from DSM2 simulations showing EC contours of progression of salinity intrusion under initial conditions of June 1, 2015 and then 30, 60, 90, 120, and 150 days of no Delta inflow and no Delta diversions or exports. This reflects a zero NDOI over a five month time period. The salinity intrusion over time shows the impact of not having enough outflow to push back salinity. It also shows that after five months, salinity did not reach the higher peak salinities of 1931, which had negative net Delta Outflow (Figure 21) due to low inflows and agricultural net channel diversions.

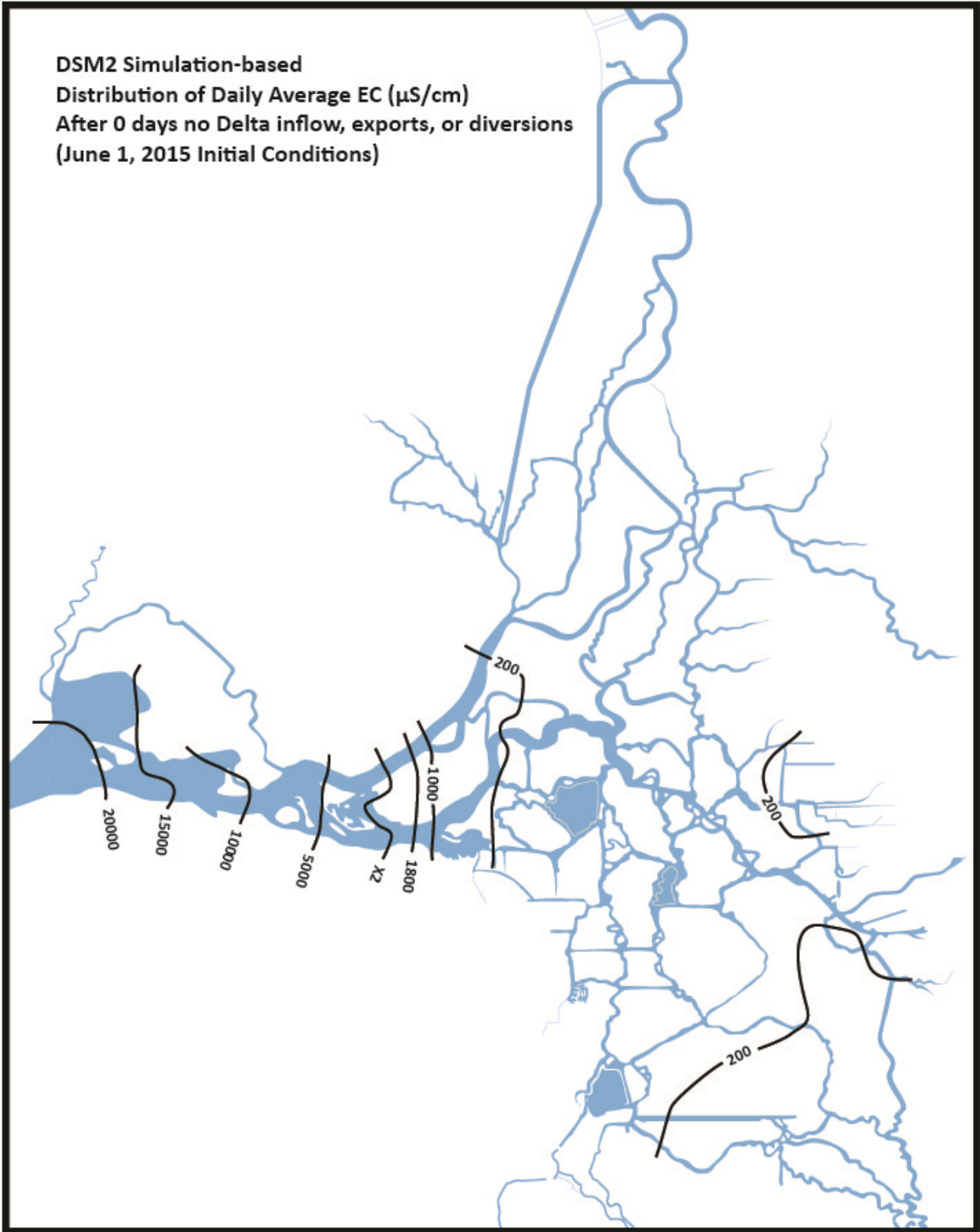


Figure 23, DSM2 Simulation, Distribution of Daily Average EC with NDOI =0, Initial Condition June 1, 2015

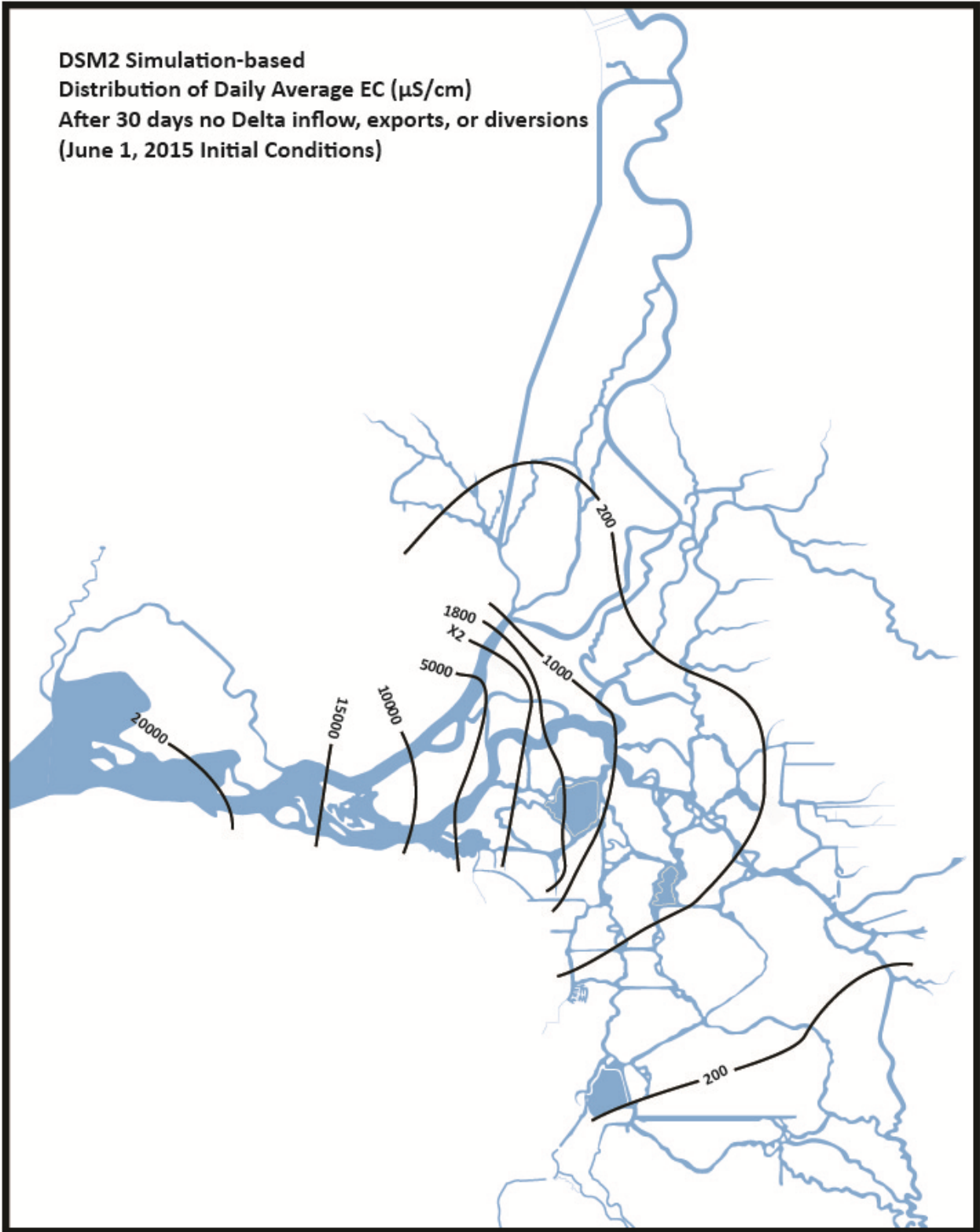


Figure 24, DSM2 Simulation, Distribution of Daily Average EC with NDOI =0, Day 30

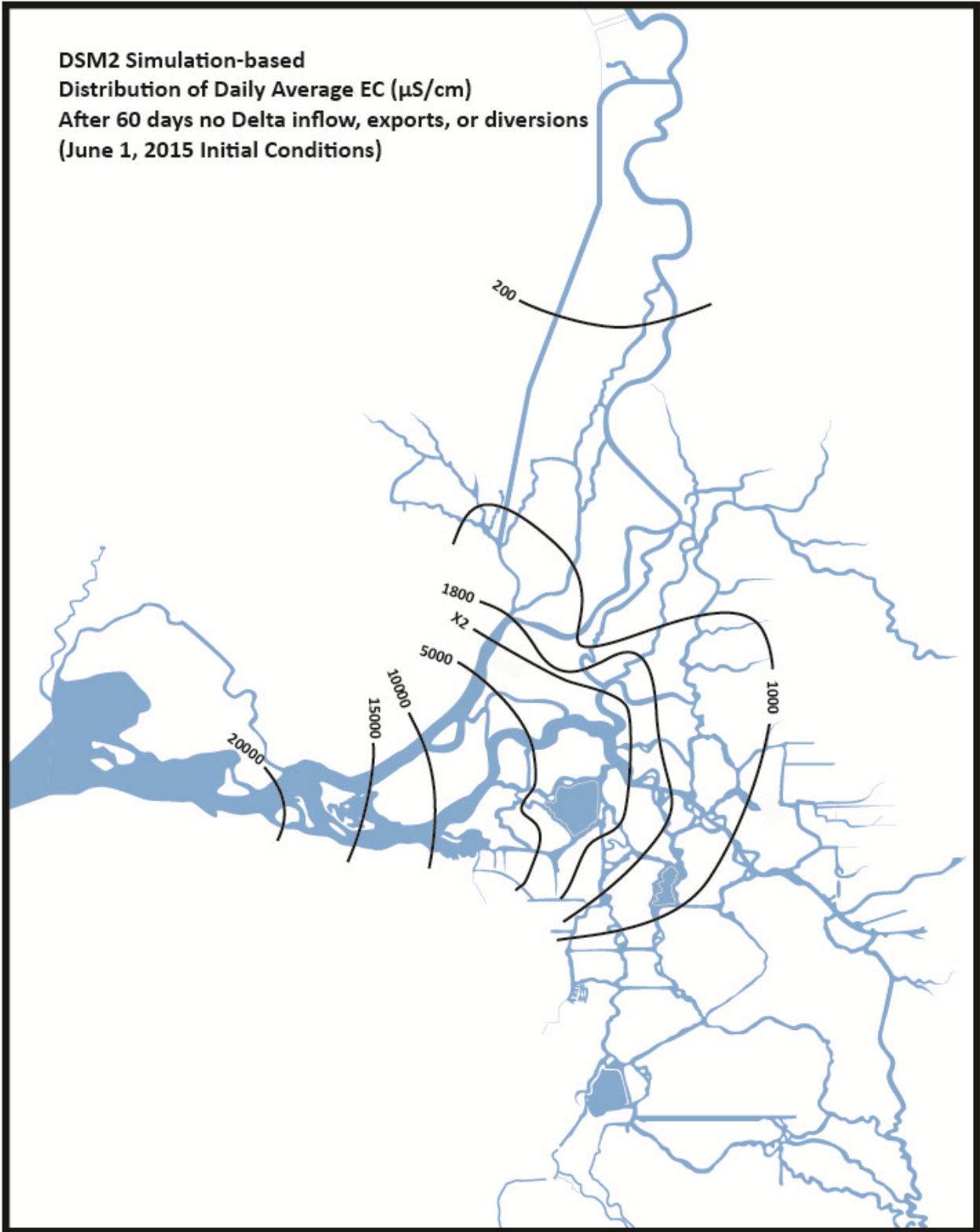


Figure 25, DSM2 Simulation, Distribution of Daily Average EC with NDOI =0, Day 60

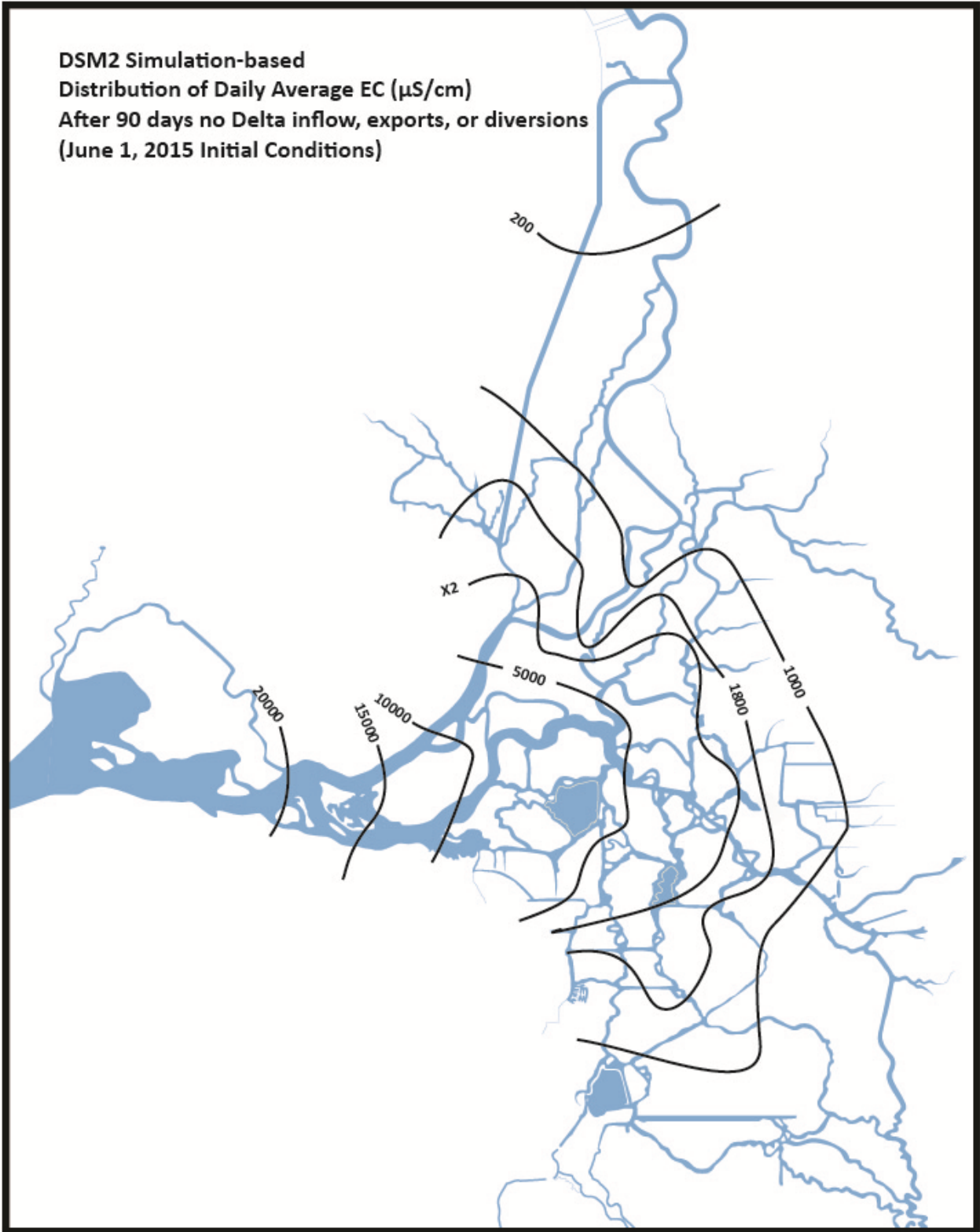


Figure 26, DSM2 Simulation, Distribution of Daily Average EC with NDOI =0, Day 90

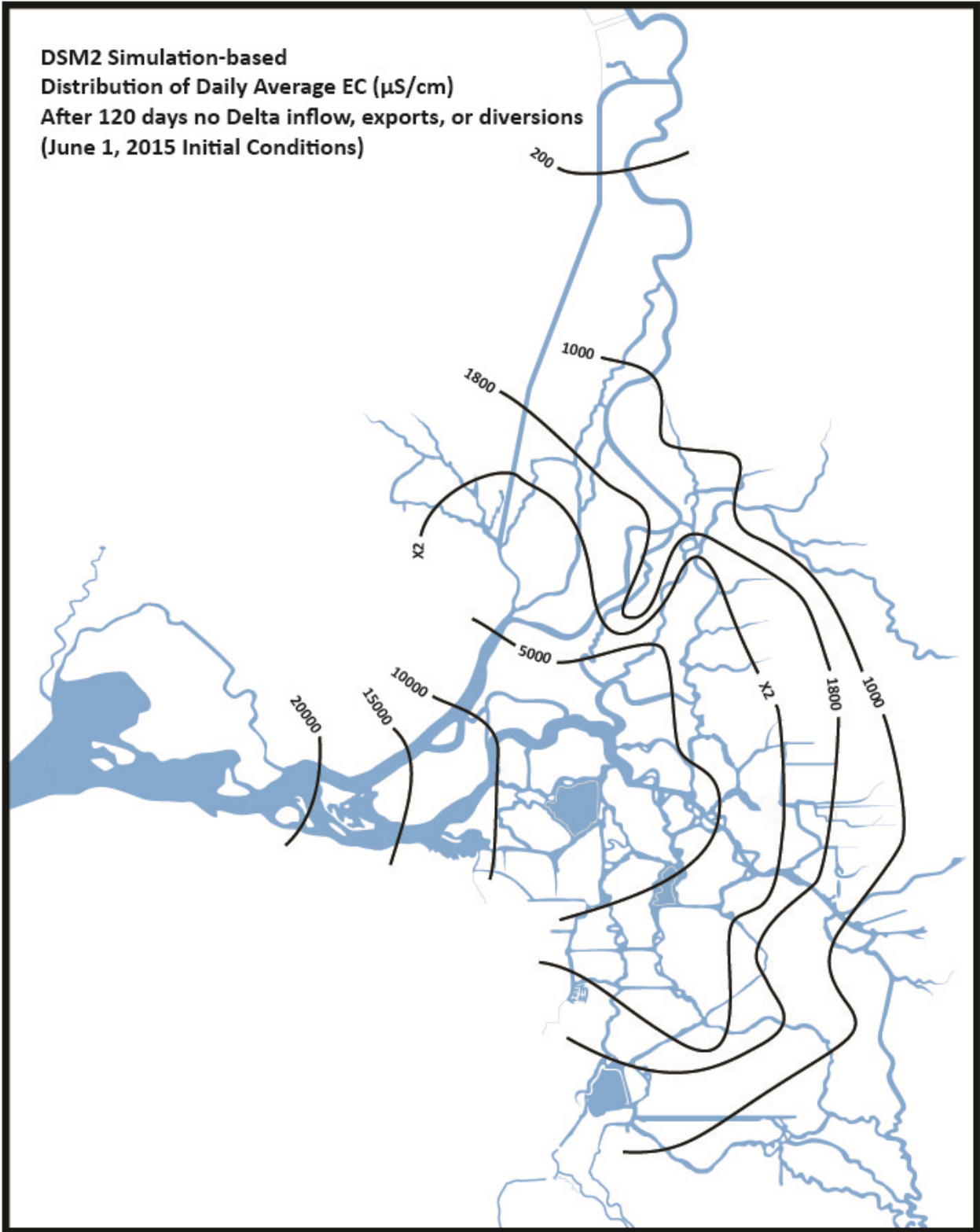


Figure 27, DSM2 Simulation, Distribution of Daily Average EC with NDOI =0, Day 120

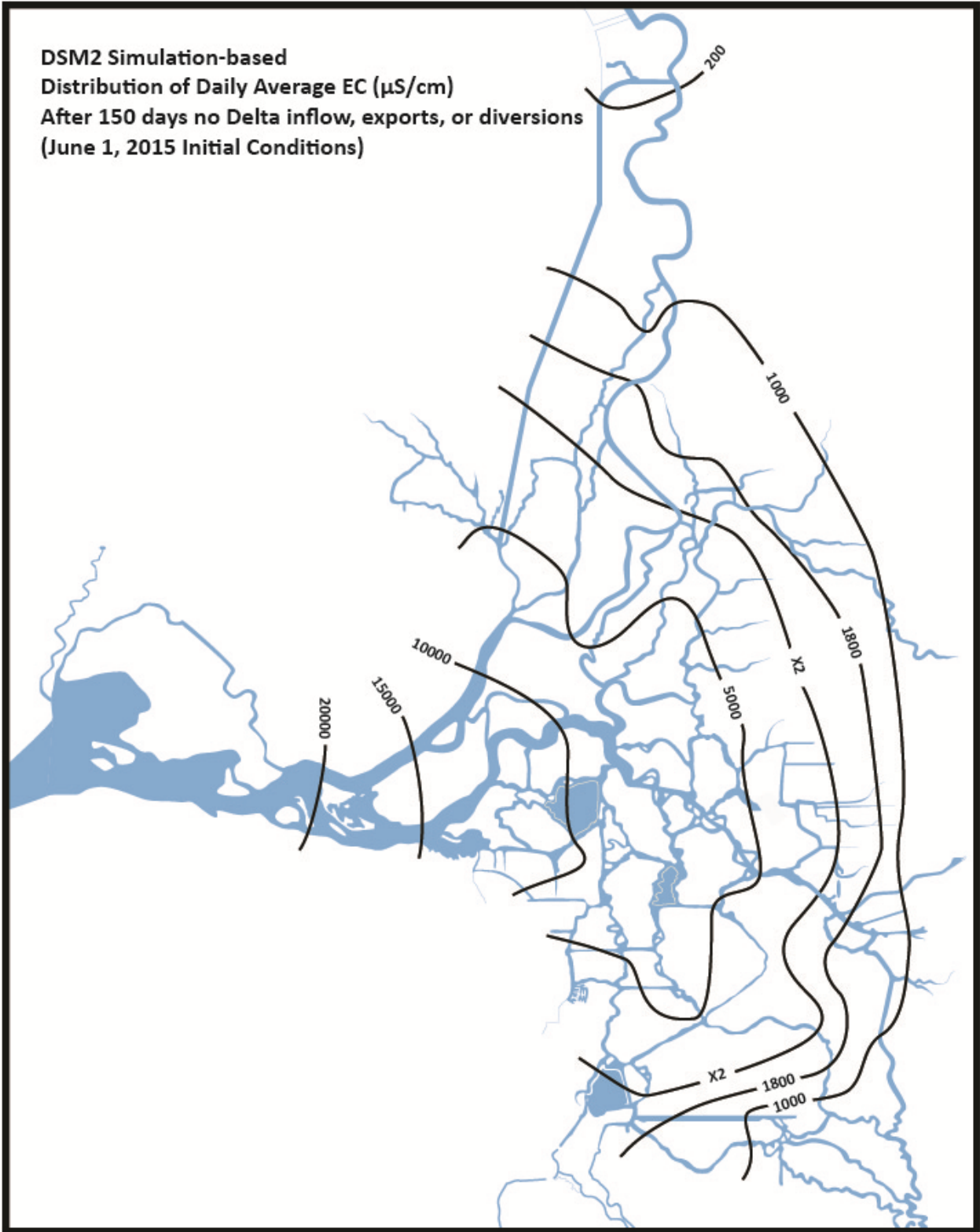


Figure 28, DSM2 Simulation, Distribution of Daily Average EC with NDOI =0, Day 150

EXHIBIT J

**California Department of Water Resources
Maureen Sergent's Rebuttal Testimony Regarding
Enforcement Actions ENF01949 and ENF01951.**

My Name is Maureen Sergent. I am a Senior Engineer with the California Department of Water Resources (DWR) in the State Water Project Analysis Office (SWPAO). I have worked for DWR since 1991. I work primarily on issues related to DWR's water rights and water transfers. I am a registered engineer in the State of California. A copy of my statement of qualifications is DWR Exhibit DWR-2. I am testifying as an expert based on my special knowledge, skill, experience, training, and education.

As part of my work in SWPAO, I was directly involved in the negotiation of certain agreements with Byron Bethany Irrigation District (BBID) as well as evaluation of proposals from BBID for the transfer of water. The purpose of my testimony is to correct certain representations made by BBID in its testimony as to the purpose and scope of its agreements with DWR and representations it made regarding 2015 discussions with or decisions by DWR with respect to BBID's efforts to obtain alternate supplies.

1964 Right-of-Way Agreement

Prior to the construction of the State Water Project (SWP), BBID diverted water from Italian Slough under claim of pre-1914 water right. DWR bifurcated BBID's delivery canal with the construction of the intake channel to the Harvey O. Banks Pumping Plant. On May 4, 1964, DWR and BBID executed a right-of-way agreement to allow the construction of new BBID points of diversion within the DWR right-of-way. (Exhibit BBID206.) The agreement granted an easement to BBID to construct, operate and maintain pumping facilities on the intake channel. The agreement was a right-of-way agreement only. Article 4 of the 1964 Agreement states that "[n]othing contained in this agreement nor in State's consent to change in District's points of diversion shall either enlarge or restrict District's present water rights." (Exhibit BBID206 at p. 3.)

1993 Mountain House Agreement

BBID is primarily an agricultural district, and historic use within BBID was for irrigation purposes. In the early 1990s, a portion of the land within BBID was slated for a planned development, the Mountain House Community. The conversion of the Mountain House property from agricultural use to municipal and industrial use required securing a year round water supply. BBID filed a petition with the State Water Resources Control Board (State Water Board) to appropriate up to 3,420 af of water during the winter months for municipal and industrial use within the Mountain House Community, Application 29857.

In lieu of pursuing the winter water right, which would contain Term 91,¹ BBID entered into negotiations with DWR for an exchange of water under their respective water rights. DWR and BBID executed an Agreement for the exchange of up to 4,000 af per year on September 17, 1993 (Exchange Agreement, Exhibit DWR-10²). Under the Exchange Agreement, BBID would make water available to DWR under its pre-1914 water right April 1 through October 31 of each year through a reduction in irrigation season use within BBID in exchange for an equivalent amount of SWP water for use within the Mountain House Community November 1 through March 31. BBID was to provide information to DWR each year identifying the number of acres shifted from agricultural use to municipal and industrial use. Application 29857 was canceled on September 18, 1997 following execution of the Exchange Agreement with DWR. The agreement did not expand BBID's pre-1914 water right and contained no provisions addressing diversions by BBID for use outside the irrigation season other than the winter deliveries to the Mountain House Community. This 1993 Exchange Agreement was terminated as of the effective date of the 2003 Agreement.

2003 Agreement

Throughout the 1990s, BBID initiated several efforts to market water that it deemed was available under its pre-1914 water right but in excess of its current needs within BBID. DWR protested a number of the proposed sales based on potential injury to DWR's water rights arguing that the proposed sale represented an expansion in use and was beyond the scope of its pre-1914 water right. DWR and BBID initiated discussions with the goal of developing an agreement that would resolve the ongoing disputes. On May 28, 2003, DWR and BBID executed an agreement regarding the diversion of water by BBID from the Delta (2003 Agreement, Exhibit BBID208).

In Section A.2.2.4.2 of Mr. Rick Gilmore's testimony, he claims that under the 2003 Agreement, DWR agreed that BBID had the right to up to 50,000 acre-feet in each year which could be diverted year-round. (Exhibit BBID201, at p. 6.) Mr. Gilmore also implies that under the 2003 Agreement, DWR provides water to BBID regardless of the amount available to BBID under its pre-1914 water right. (*Ibid.*) DWR disagrees with these interpretations. The 2003 Agreement was for the sole purpose of resolving certain disputes between DWR and BBID. It does not provide any protections to BBID beyond those specifically provided in the agreement, nor does it restrict any other entity's authority, including the State Water Board.

¹ Term 91 is a standard permit term included in new permits to appropriate water from the Sacramento watershed. It requires diversions to cease when DWR and U.S. Bureau of Reclamation are making supplemental storage releases to maintain Delta standards. During dryer year types, Term 91 can extend into the winter months.

² BBID submitted a copy of the Exchange Agreement as Exhibit BBID207, but this exhibit is only partially executed. DWR-10 is the fully executed version of the Exchange Agreement.

Recital F of describes its purpose and limited scope:

The purpose of this Agreement is to describe the nature and extent of the District's right as between the District and the Department for the diversion of water from the Delta for agricultural, municipal and industrial uses within the District.

(Exhibit BBID208, at p. 2) The claim that DWR provides water to BBID under the 2003 Agreement, assumedly under DWR's water right, is inconsistent with the terms of the 2003 Agreement. BBID has consistently asserted that the water being diverted was done so under its claim of pre-1914 water right. During the negotiations for the 2003 Agreement, DWR was very clear that the while BBID made certain claims as to the scope of its pre-1914 water right, DWR did not agree with those claims. Through the 2003 Agreement, DWR agreed not to disturb or challenge BBID's use as long as the diversions were within the provisions of the 2003 Agreement. BBID asserted its claim as to the rights under which the water is being provided in Article 8 of the agreement:

The District maintains that water diverted by the District under this Agreement shall be deemed diverted under the District's present water rights. This Agreement neither enlarges nor restricts the District's present water rights. This Agreement shall constitute the full and sole agreement between the Department and the District to divert water from the Delta for agricultural, municipal and industrial use. The uses shall not be disturbed or challenged by the Department and the District shall not claim any right against the Department in conflict with provisions in this Agreement so long as this Agreement remains in full force and effect.

(Exhibit BBID208, at p. 6.)

In support of BBID's claim that DWR provides a backup supply irrespective of BBID's pre-1914 water right, it referenced a September 23, 2014 letter from DWR to the State Water Board. (Exhibit BBID217.) I would like to clarify the context within which the September 23, 2014 letter was written and the limited scope of its applicability. On July 23, 2014, DWR and the Bureau of Reclamation (Reclamation) sent a joint letter to the State Water Board requesting that the State Water Board use its authority to order those diverting from the Delta under claim of riparian or pre-1914 water right to provide information supporting their basis of right and records of diversion. (Exhibit DWR-11.) The purpose of the July 23, 2014 letter was to request that the State Water Board acquire additional information to determine whether there are unlawful diversions by diverters claiming a riparian or pre-1914 water right without adequate support for that right. On September 10, 2014, BBID sent DWR a letter claiming that its July 23, 2014

request to the State Water Board represented an attack on the validity of BBID's pre-1914 water right in conflict with Article 8 of the 2003 Agreement. (Exhibit DWR-12.)

The September 23, 2014 letter that Mr. Gilmore referenced in his testimony from was in response to BBID's September 10, 2014 letter. Its intent was to clarify that DWR was not including BBID in its request to the State Water Board to require substantiating documentation and diversion records from in-Delta diverters. DWR explained that the 2003 Agreement requires BBID to accurately measure and report its diversions. DWR includes, but does not verify, the diversion information provided by BBID when reporting its diversions to the State Water Board. The September 23, 2014 letter states that "DWR requests that *because of the reporting requirements agreed to by BBID in this contract*, the State Water Resources Control Board (SWRCB) not include BBID in any order..." (BBID217 at p. 1, emphasis added). The letter also states "[i]n 2003, DWR and BBID executed a contract to settle *between them* an issue over the amount of any pre-1914 appropriative water right that BBID could divert from the Clifton Court Forebay." (Exhibit BBID217, at p. 1, emphasis added.) The statement in the September 23, 2014 letter that DWR provides BBID up to 50,000 acre feet annually reflects the physical relationship of the SWP facilities and BBID's relocated pumping facilities which now reside within the SWP right-of-way, "a diversion location which establishes a unique relationship between BBID and DWR." (BBID217 at p. 1.) The 2003 Agreement does not provide BBID with a SWP water supply outside that of the winter water provided consistent with the Mountain House exchange which was incorporated in the 2003 Agreement. (Exhibit BBID208, at p. 2.) As noted earlier, the exchange for winter water in the 1993 Agreement was based on an equivalent reduction in irrigation season use by BBID under its pre-1914 water right which was to be provided to DWR. The 1993 Exchange Agreement was terminated as of the effective date of the 2003 Agreement. (*Ibid.*)

2015 Proposals to DWR for Alternate Water Supply

In section C.2.2 of Mr. Gilmore's testimony, he describes efforts to acquire a water supply through an exchange with Alameda County Flood Control and Water Conservation District, Zone 7 (Zone 7, Exhibit BBID-201, at pp. 11-13). I would like to correct some of the mischaracterizations made in Mr. Gilmore's testimony.

Zone 7 receives water from the SWP under the terms of a long-term water supply contract. The SWP long-term water supply contracts contain specific terms and conditions governing the delivery of allocated SWP water, as well as temporary or permanent transfers or exchanges of water that may be in excess of a SWP contractor's demands. On June 16, 2015, Zone 7 provided DWR with a copy of an executed June 15, 2015 letter agreement between Zone 7 and BBID, in which Zone 7 proposed to transfer up to 3,000 acre-feet of SWP water to BBID in exchange for a return of 4,500

acre feet of BBID water to be delivered to Zone 7 in future years through implementation of crop idling to be conducted consistent with DWR and Reclamation's Draft Technical Information for Preparing Water Transfer Proposals and Addendum (Water Transfer White Paper, Exhibits DWR-13 & DWR-14). Understandably, DWR and other SWP contractors expressed concern over the delivery of up to 3,000 acre-feet of allocated SWP water to a non-SWP contractor at a time when many SWP contractors were facing severe water supply shortages that threatened their ability to meet critical agricultural and municipal demands.

On June 17, 2014, Zone 7 submitted a modified letter agreement between BBID and Zone 7 for a similar exchange of up to 2,800 acre feet of Zone 7 local water rather than allocated SWP water (to be provided to BBID through an exchange of SWP water facilitated by DWR) with the return of up to 4,200 acre feet of BBID water in future years. The exchange required the approval of DWR consistent with Article 6 of the 2003 Agreement.³ (Exhibit BBID208, at p. 5.) As in the earlier proposal, the letter agreement stated that the BBID return water would be provided through cropland idling implemented consistent with the Water Transfer White Paper. DWR agreed to develop an agreement for the exchanges between DWR, Zone 7, and BBID. The terms of the proposed exchange agreement were largely consistent with other executed transfer agreements. The proposed exchange was unique in one respect: the specific details for the return of BBID water were undefined. DWR provided the draft agreement to BBID on July 10, 2015 and required compliance with the Water Transfer White Paper for any crop idling to be used for the return of BBID water to Zone 7. Although BBID had agreed in its June 17, 2015 letter agreement with Zone 7 that any idling would be consistent with the Water Transfer White Paper, BBID objected to DWR having specific terms on water management and reporting consistent with the Water Transfer White Paper and declined to sign the exchange agreement.

³ Article 6 limits the delivery or sale of water diverted by BBID to the area shown on the map included in the agreement. Water may not be sold outside those boundaries without the prior written consent of DWR.

EXHIBIT K

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18 Attorneys for State Water Contractors

19
20 **BEFORE THE**
21 **CALIFORNIA STATE WATER RESOURCES CONTROL BOARD**

22 ENFORCEMENT ACTION ENF01949 -
23 DRAFT CEASE AND DESIST ORDER
24 REGARDING UNAUTHORIZED OR
25 THREATENED UNAUTHORIZED
26 DIVERSIONS OF WATER FROM OLD RIVER IN
27 SAN JOAQUIN

**REBUTTAL TESTIMONY OF PAUL
HUTTON**

28 In the Matter of ENFORCEMENT ACTION
ENF01951 -ADMINISTRATIVE CIVIL
LIABILITY COMPLAINT REGARDING
UNAUTHORIZED DIVERSION OF WATER
FROM THE INTAKE CHANNEL TO THE
BANKS PUMPING PLANT (FORMERLY
ITALIAN SLOUGH) IN CONTRA COSTA
COUNTY

1 I, Paul Hutton, declare:

2 1. I submit this written rebuttal testimony on behalf of the State Water Contractors
3 (“SWC”) in the following proceedings: 1) Westside Irrigation District Enforcement Matter No.
4 01949(ENF1949); and 2) Byron-Bethany Irrigation District Enforcement Matter No. 01951
5 (ENF1951).

6 2. If called as a witness, I can and would testify to the following facts, analyses, findings
7 and conclusions stated herein, and to the information contained in Exhibits SWC0002, SWC0003,
8 SWC0004, SWC0005, SWC0006, and WSID0008, pp.198, 200, 202, 205-207, which is incorporated
9 by reference as part of my written testimony.

10 **BACKGROUND AND QUALIFICATIONS**

11 3. I am currently the Principal Engineer for the Bay-Delta Initiatives at Metropolitan
12 Water District of Southern California (“MWD”). In that position, which I have held since 2002, I
13 work collaboratively with interagency and interdisciplinary teams to provide policy-level decision
14 support for MWD’s ongoing water management, regulatory and legal activities in the areas of
15 Sacramento-San Joaquin Delta (“Delta”) hydrodynamics and water quality as well as Central Valley
16 Project (“CVP”) and State Water Project (“SWP”) operations.

17 4. Prior to joining MWD I held several positions at the Department of Water Resources
18 (“DWR”) from 1990 to 2002. My last position with DWR was the supervising engineer and
19 program manager of the Delta Modeling Section with a staff of seventeen engineers responsible for
20 developing and applying various water quality, hydrodynamic and biological models. In addition, I
21 was the program manager responsible for developing actions and studies for implementing
22 CALFED’s Drinking Water Improvement Strategy and managing DWR’s Statewide Planning
23 Program, which involved developing and implementing policies related to the California Water Plan
24 Update (Bulletin 160-98). My previous experience is summarized in my C.V. at exhibit SWC0002.

25 5. I am a registered civil engineer in California and my license number is C040795.

26 6. I have a B.S. in Civil Engineering and graduated with highest honors from the
27 University of Illinois, Urbana in May 1983.

28

1 7. I obtained a M.S. in Environmental Engineering from University of Illinois, Urbana
2 in January of 1985.

3 8. I obtained a Ph.D. in Civil and Environmental Engineering from the University of
4 California, Davis in December 1994.

5 9. I have been working on Delta issues for 25 years. I have published several papers on
6 hydrodynamics and water quality in the Delta. For a complete list of my publications please see
7 exhibit SWC0002.

8 10. In 1994, I received the American Society of Civil Engineers Water Resources
9 Planning and Management Division Outstanding Journal Paper Award.

10 11. In 2006, I received the Hugo B. Fischer Award from the California Water and
11 Environmental Modeling Forum in recognition of model development and application in support of
12 the San Joaquin River Salinity Management Plan.

13 12. My job duties include working with the SWC and directing work on behalf of MWD
14 or in coordination with SWC. As part of my job duties I assisted in the development of an analysis
15 of without project salinity conditions in the Delta (2012-2015). I completed a comparative analysis
16 of Delta outflow and salinity in 1931 (historical scenario) and 2015 (without project scenario). I
17 was also directed to review the technical report by Susan Paulsen (BBID384), the testimony of
18 Susan Paulsen (BBID388), the testimony of Thomas Burke (WSID0123), and the following
19 Department of Public Works Documents: Bulletin 27 (SWC0004) and Bulletin 23 (1931)
20 (WSID0008, pp. 198, 200, 202, 205-207).

21 **SUMMARY OF WORK COMPLETED**

22 13. I assisted in directing a CH2M Hill analysis of salinity conditions; the technical report
23 is attached as exhibit SWC0005. The purpose of this study was to analyze salinity conditions in the
24 south Delta channels under a “without project” scenario based on historical hydrology spanning the
25 period January 1, 2012 to August 31, 2015. The without project scenario modifies the historical
26 hydrology by removing (1) upstream impairments associated with CVP and SWP reservoirs, (2)
27 Delta diversions at the Banks and Jones Pumping Plants, and (3) the Delta Cross Channel facility.
28 The multi-year timeframe allows understanding of Delta salinity conditions under a sequence of

1 differing hydrologic conditions. A complete description of the methods and data used in the analysis
2 are described in the CH2M Hill technical appendix attached as exhibit SWC0005.

3 14. I completed a scenario analysis of irrigation season Delta outflow and salinity
4 comparing 1931 (historical) and 2015 (without project). The attached figure (SWC0003) compares
5 monthly average outflow and salinity (as measured by X2 position) for the two scenarios. The
6 source of the 1931 outflow data is DAYFLOW. The source of the 1931 salinity data is Hutton et al.
7 (2015) "Nine Decades of Salinity Observations in the San Francisco Bay and Delta: Modeling and
8 Trend Evaluation." *J. Water Resour. Plng. Mgmt.*, DOI: 10.1061/(ASCE)WR.1943-5452.0000617
9 (available at: <http://ascelibrary.org/doi/abs/10.1061/%28ASCE%29WR.1943-5452.0000617>). The
10 source of the 2015 scenario outflow and salinity data is described in exhibit SWC0005.

11 15. In the figure "Comparison of Delta Outflow and Salinity," exhibit SWC0003, month
12 is shown on the horizontal axis, Delta outflow (in units of cubic feet per second) is shown on the
13 left-side vertical axis, and X2 position (in units of kilometers) is shown on the right-side vertical
14 axis. In the same figure, the blue and black bars represent April through August Delta outflow in the
15 2015 and 1931 scenarios, respectively. In the same figure, the blue and black lines represent April
16 through August X2 in the 2015 and 1931 scenarios, respectively. X2 is used as an indicator of
17 salinity intrusion into the Delta.

18 16. As part of my work on this matter, I was directed to review the technical report of
19 Susan Paulsen (BBID384), the testimony of Susan Paulsen (BBID388), the testimony of Thomas
20 Burke (WSID0123), and portions of Bulletin 27 (SWC0004) and Bulletin 23 (1931) (WSID0008).
21 Bulletin 27 (SWC0004) is a true and correct copy that was obtained from DWR by the SWC.
22 Bulletin 27 is also available on the internet at
23 http://www.water.ca.gov/waterdatalibrary/docs/historic/Bulletins/Bulletin_27/Bulletin_27_1931.pdf
24 [f](#).

25 **SUMMARY OF FINDINGS**

26 17. The CH2M Hill analysis, as described in exhibit SWC0005, concluded that salinity
27 would typically be much higher in the Delta absent the CVP and SWP relative to historical
28 conditions. The analysis further concluded that, absent the CVP and SWP, salinity (measured as

1 specific conductance) would be above 1.0 mS/cm during the irrigation season of many dry and
2 critically dry years.

3 18. As part of my job duties, I monitor SWP and CVP compliance with the State Water
4 Resources Control Board's ("Water Board") Bay-Delta Water Quality Control Plan ("WQCP")
5 standards. In 2015, DWR and the Bureau of Reclamation ("Reclamation") continued to satisfy
6 WQCP regulatory obligations, including those modified by the Water Board's orders regarding the
7 DWR and Reclamation temporary urgency change petition ("TUCP"). The Water Board's 2015
8 TUCP orders relaxed certain WQCP standards and limited SWP and CVP project pumping during
9 the irrigation season to health and safety levels. Throughout the irrigation season, the SWP and CVP
10 continued to make releases from upstream reservoirs to satisfy WQCP standards. DWR also
11 installed a salinity barrier at West False River from June to September 2015 for the purpose of
12 blocking salinity intrusion into the Delta from the ocean.

13 19. Unauthorized diversions of SWP stored water released for the purpose of satisfying
14 WQCP and other regulatory obligations and/or for diversion by the SWP impact the SWC member
15 agencies as the contractual beneficiaries of the SWP. These unauthorized diversions cause the SWP
16 to make additional stored water releases or to reduce exports to satisfy WQCP and other regulatory
17 requirements, thereby decreasing the stored water supplies of the SWP available to SWC member
18 agencies. In 2014, DWR and Reclamation sent a joint letter stating "Where water quality standards
19 are controlling Water Project Operations, any diversion of stored water by these diverters results in
20 additional releases of stored water or reductions in Project deliveries..." This letter is exhibit
21 SWC0007. This occurred in 2014 as indicated in exhibit SWC0007 and also occurred in 2015.

22 20. My comparison of the 2015 and 1931 scenarios as illustrated in exhibit SWC0003
23 indicate that historical outflow during the irrigation season (April through August) of 1931 is
24 consistently higher than without project outflow during the irrigation season of 2015. Outflow in
25 1931 ranged from approximately -3,000 cfs to 7,500 cfs, whereas without project outflow in 2015
26 ranged from approximately -3,900 cfs to 6,400 cfs.

27 21. As also shown in exhibit SWC0003, historical salinity during the irrigation season
28 (April through August) of 1931 is consistently lower than without project salinity during the

1 irrigation season of 2015. Salinity in 1931 (as measured by X2 position) ranged from approximately
2 76 km to 122 km, whereas without project X2 position in 2015 ranged from approximately 83 km to
3 137 km.

4 22. Although there are similarities between 1931 and 2015 with respect to annual
5 unimpaired runoff conditions and water year type, the Delta conditions of 1931 poorly represent
6 those associated with 2015 absent the CVP and SWP. Due to less upstream development (water use)
7 in 1931, irrigation season outflow was significantly higher and salinity was significantly lower
8 relative to the 2015 without project scenario.

9 23. The 1931 baseline assumption in Susan Paulsen's modeling (BBID384) is
10 inappropriate. The technical report by Susan Paulsen (BBID384) selected the pre-project year 1931
11 as a surrogate for 2015 without project conditions. Her assumption is inappropriate because, as
12 exhibit SWC0003 illustrates, 1931 experienced higher outflows and lower salinity than would have
13 occurred in 2015 absent the CVP and SWP. The primary reason for the differences between 1931
14 and 2015 (without project) is because upstream development was lower in 1931 than in 2015.

15 24. Susan Paulsen's analysis (BBID384) is also inappropriate because she fails to remove
16 SWP and CVP operations and facilities from the modeling of 2015 salinity and flow patterns. To the
17 extent that Susan Paulsen is using her 2015 modeling results to define the quantity and source of
18 water available to WSID and BBID in that year, her baseline is flawed because WSID and BBID do
19 not have a right to stored water supplies based on their senior water rights.

20 25. Susan Paulsen's analysis (BBID384) also fails to acknowledge that the combined
21 effect of all diversions in the Delta is to change flow patterns and to draw Sacramento River water
22 into the south Delta.

23 26. Westside Irrigation District (WSID) references Bulletin 23 (1931) (WSID0008),
24 Table 39, as evidence of the District's diversions in 1931. To the extent diversions occurred in 1931
25 by WSID and others, the same report analyzes the damage that 1931 diversions of high salinity
26 water caused to crops and the soil. The report at p. 198 explains that:

27 Since the beginning of salinity observations in the Sacramento-San
28 Joaquin Delta it has been recognized that in years of deficient Spring

1 and Summer stream flow to the Delta, the resulting extensive
2 encroachment of salinity from San Francisco Bay has caused damaged
3 in the Delta. In 1930, 1924, and 1926, but particularly in 1924, the
4 magnitude of the encroachment was such as to leave no doubt that
5 damage must have been sustained...In the Spring of 1931 it was plainly
6 evident that the stream flow to the Delta would probably be as low if
7 not lower than it was in 1924 and that a salinity encroachment as great
8 if not greater than in that year could be expected.

9 27. Bulletin 23 (WSID0008) quantified the economic impacts resulting from the salinity
10 intrusion into the Delta in 1931. The report at p. 200 describes the reasons for the damage and
11 resulting economic losses, as follows:

12 Under tangible losses is classed [as] the actual loss in production of
13 crops in 1931 due to (1) the curtailment of irrigation when the salinity
14 of the irrigation water became too high, (2) the actual application of
15 irrigation water of too high salinity, and (3) the abandonment of a crop,
16 or plans for it, because of high salinity.

17 28. Bulletin 23 (WSID0008) quantified the economic impacts at p. 202, Table 92, stating
18 that the resulting economic losses caused by salinity encroachment into the Delta during the
19 irrigation season of 1931 totaled \$1,263,716.

20 29. Bulletin 23 (WSID0008) at pp. 205-207 also describes a range of intangible injury to
21 crops caused by salinity encroachment into the Delta during the irrigation season in 1931, injury that
22 included agricultural soils, levees, and native vegetation.

23 30. Bulletin 27 (SWC0004) also describes the salinity conditions that existed in the Delta
24 in 1931 and other dry and critically dry years. Bulletin 27 explains that:

25 Beginning in 1917, there has been an almost unbroken succession of
26 subnormal years of precipitation and stream flow which, in combination
27 with increased irrigation and storage diversions from the upper
28 Sacramento and San Joaquin River system, has resulted in a degree and
extent of saline invasion greater than has occurred ever before as far as
known. These abnormal saline invasions not only have curtailed
irrigation diversions and affected crop production and land values in the
delta also have reduced considerably the diversions of fresh-water
supplies from the lower river and upper bay.... (SWC0004, p. 15.)

And:

1 The greater degree and extent of saline invasion in certain years since
2 1917 have resulted in curtailment of irrigation diversions for a portion
3 of the delta and upland area. (SWC0004, p. 20.)

4 And:

5 During several years in the period 1920 to 1929, the inflow into the delta
6 during the summer months has been insufficient to take care of the
7 consumptive requirements. (SWC0004, p.32.)

8 And:

9 On the other hand, in years when the stream flow into the delta during
10 the summer months was insufficient to meet the consumptive demands
11 in the delta, invasions of saline water of considerable extent and degree
12 have occurred. This was especially true in the dry years of 1924, 1920
13 and 1926, when stream flow was insufficient to meet consumptive
14 demands for a considerable period of time. (SWC0004, p. 36.)

15 CONCLUSION

16 31. Contrary to the conclusion of Susan Paulsen, the 1931 historical scenario poorly
17 represents the 2015 without project scenario. In 1931, salinity conditions would have been more
18 favorable than 2015 (without project), with higher outflow and lower salinity resulting from lesser
19 upstream water development.

20 32. While agricultural diverters in the Delta may have diverted water in 1931, they also
21 experienced crop damage, curtailed diversions and abandoned crops in the field, while also
22 experiencing more intangible salinity damage to agricultural soils (and subsequent crops), levees and
23 native vegetation. The cost of the salinity damage experienced by farmers in the Delta in 1931 was
24 estimated to be \$1,263,716.

25 33. Absent the SWP and CVP, salinity in the south Delta would typically exceed 1.0
26 mS/cm specific conductance during the irrigation season of dry and critically dry years, which is
27 higher than the current irrigation season WQCP agricultural salinity standard of 0.7 mS/cm. This
28 suggests that water quality would be too poor to support agricultural use during summer and fall of
dry and critically dry years if the SWP and CVP did not exist.

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I declare under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Executed this 22nd day of February, 2016, in Sacramento, California.



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Professional Experience

- o Metropolitan Water District Southern Cal., Sacramento, Jun. 2002 - present.
- o Calif. Dept. of Water Resources, Sacramento, Aug. 1990 - Jun. 2002.
- o Pacific Gas and Electric, Sacramento, Oct. 1989 - Aug. 1990.
- o Los Angeles County Sanitation Districts, Feb. 1986 – Jul. 1989.
- o MWH (formerly JMM Engineers), Pasadena, Oct. 1984 - Feb. 1986.

Education

- o Ph.D., Civil and Environ. Engineering, University of California, Davis (Dec. 1994)
- o M.S., Environ. Engineering, W.E. Deuchler Fellow, University of Illinois, Urbana (Jan. 1985)
- o B.S., Civil Engineering, Highest Honors, University of Illinois, Urbana (May 1983)

Honors and Professional Affiliations

- o Convener, California Water & Environmental Modeling Forum, 2009-10.
- o Vice Convener, California Water & Environmental Modeling Forum, 2007-08.
- o California Water & Environmental Modeling Forum, Hugo B. Fischer Award, 2006.
- o MWDSC, Innovation/ Creativity Award, 2006.
- o MWDSC, Leadership Award, 2006.
- o Calif. Dept. of Water Resources, Meritorious Service Award, 1999.
- o CALFED, Draft PEIS/ EIR Superior Accomplishment Team Award, 1999.
- o Calif. Dept. of Water Resources, DSM2 Development Team Unit Citation, 1998.
- o ASCE Water Resources Plng. and Mgmt. Div. Outstanding Journal Paper Award, 1994.
- o Calif. Dept. of Water Resources, Outstanding Professional Accomplishment Award, 1994.
- o Calif. Professional Engineer Registration #C040795.

Refereed Publications

- o Hutton, P.H., Rath, J.S., Chen, L., Unga, M.J., and Roy, S.B. (2015). "Nine Decades of Salinity Observations in the San Francisco Bay and Delta: Modeling and Trend Evaluation." *J. Water Resour. Plng. Mgmt.*, American Society of Civil Engineers, DOI: 10.1061/ (ASCE)WR.1943-5452.0000617.
- o Fox P., Hutton, P.H., Howes, D.J., Draper, A.J., and Sears, L. (2015). "Reconstructing the Natural Hydrology of the San Francisco Bay-Delta Watershed." *Hydrology and Earth System Sciences* 19:4257–4274.
- o Howes, D.J., Fox, P., Hutton, P.H. (2015). "Evapotranspiration from Natural Vegetation in the

Central Valley of California: Monthly Grass Reference-Based Vegetation Coefficients and the Dual Crop Coefficient Approach., *J Hydrd. Eng.*, American Society of Civil Engineers, DOI: 10.1061/ (A SCE)HE.1943-5584.0001162.

o Hutton, P.H. and Chung, F.I. (1994). "Bromine Distribution Factors in THM Formation." *J Water Resour. Plng. Mgmt.*, American Society of Civil Engineers, 120(1), 1-16.

o Hutton, P.H. and Chung, F.I. (1994). "Correlating Trihalomethane Data." *J Environ. Eng.*, American Society of Civil Engineers, 120(1), 219-241.

o Hutton, P.H. and Chung, F.I. (1992). "Simulating THM Formation Potential in Sacramento Delta: Part I." *J Water Resour. Plng. Mgmt.*, American Society of Civil Engineers, 118(5), 513-529.

o Hutton, P.H. and Chung, F.I. (1992). "Simulating THM Formation Potential in Sacramento Delta: Part II." *J Water Resour. Plng. Mgmt.*, American Society of Civil Engineers, 118(5), 530-542.

Conference Proceedings & Other Publications

o *CALFED Bay-Delta Program Programmatic EIS/EIR* (1999). June Draft.

o *Calif. Water Plan Update, Bulletin 160-98*. (1998). Calif. Dept. of Water Resources, Sacramento.

o Enright, C., Hutton, P.H. and Chung, F.I. (1996). Transport of Dormant Spray Pesticides in the San Francisco Bay-Delta. *Proceedings 1996 North American Water and Environment Congress*, ASCE, Anaheim, Calif., C.T. Bathala, Ed.

o Enright, C., Mahadevan, N. and Hutton, P.H. (1996). Simulation of Dormant Spray Pesticide and Dissolved Organic Carbon Transport during 1993. *IEP Newsletter*, Interagency Ecological Program for the Sacramento-San Joaquin Estuary, 9(2), 27-31.

o *Estimation of Delta Island Diversions and Return Flows* (1995). Calif. Dept. of Water Resources, Division of Planning, Sacramento, Calif., Feb.

o Hutton, P.H. and Enright, C. (1993). Simulating THM Precursors Transport with DWRDSM. *Proceedings 1993 Hydraulic Div. National Conf.*, ASCE, San Francisco, Calif., H.W. Shen, Ed. 821-826.

o Hutton, P.H. (1994). Bay-Delta THM Formation Potential: Data Collection and Mathematical Modeling. *IEP Newsletter*, Interagency Ecological Program for the Sacramento-San Joaquin Estuary, 7(4), 12.

o Hutton, P.H., Sandhu, N. and Chung, F.I. (1996). Predicting THM Formation with Artificial Neural Networks. *Proceedings 1996 North American Water and Environment Congress*, ASCE, Anaheim, Calif., C.T. Bathala, Ed.

o Hutton, P.H., Mahadevan, N. and Chung, F.I. (1996). Simulating DBP Precursor Transport in Sacramento Delta. *Proceedings 1996 North American Water and Environment Congress*, ASCE, C.T. Bathala, Ed.

o *Representative Delta Island Return Flow Quality for Use in DSM2*. (1995). Calif. Dept. of Water Resources, Division of Planning, Modeling Support Branch, Sacramento, Calif.

o *Trihalomethane Formation Potential in the Sacramento-San Joaquin Delta: Mathematical Model Development*. (1991). Calif. Dept. of Water Resources, Division of Planning, Sacramento, Calif.

Conference Presentations

o Application of SANMAN: A San Joaquin River Salinity Management Spreadsheet Model, presented at the CWEMF Annual Meeting, Pacific Grove, Calif., Mar. 2005.

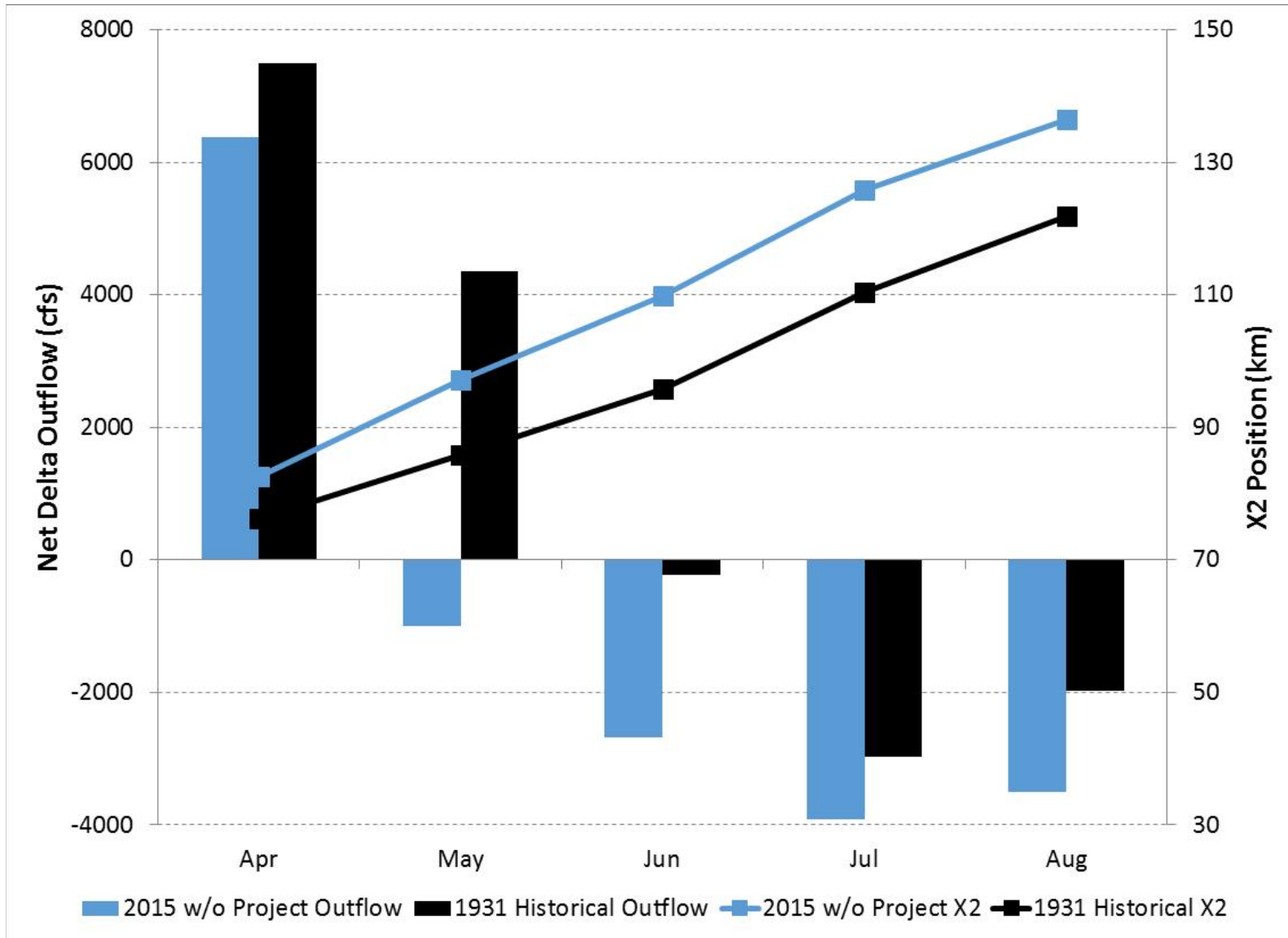
o Delta and Aqueduct Taste and Odor Precursors: Modeling Status, presented at the CWEMF Workshop on Overview of Delta Nutrient Water Quality Problems: Nutrient Load – Water Quality Impact Modeling, Sacramento, Calif., Mar. 2008.

o Delta Island Consumptive Use Model, presented at the Annual Interagency Ecological Program Workshop & Bay-Delta Modeling Forum, Pacific Grove, Calif., Mar. 1995.

o Delta Island Diversions and Returns, presented at the Bay-Delta Modeling Forum Workshop on Delta Modeling for End Users, Sausalito, Calif., Nov. 1995.

- o Delta Salinity Gradient (DSG) Model, presented at the 8th Biennial Bay-Delta Science Conference, Sacramento, Calif., Oct. 2014.
- o DWR's Delta Model on DBP Precursors, presented at the American Water Works Association Calif.-Nevada Section Spring Conference, San Jose, Calif., Apr. 1992.
- o Estimating Combined Old and Middle River Flow, presented at the CWEMF Annual Meeting, Pacific Grove, Calif., Feb. 2008.
- o Forecasting Delta Turbidity Conditions, presented at the 7th Biennial Bay-Delta Science Conference, Sacramento, Calif., Oct. 2012.
- o Life after Bulletin 160-98: Ongoing DWR Statewide Planning Program Elements, presented at the Bay-Delta Modeling Forum Workshop on Approaches and Problems for Long-Term Regional Water Planning, Sacramento, Calif., Feb. 1999.
- o Metropolitan's Evaluation of the 2003 Colorado River Contingency Transfer, presented at the CWEMF Annual Meeting, Pacific Grove, Calif., Feb. 2003.
- o Metropolitan's Policy Principles on Long-Term Delta Actions, presented at the Bay Planning Coalition's 19th Annual Decisionmakers Conference, Oakland, Calif., Mar. 2006.
- o Metropolitan's 2003 Colorado River Contingency Transfer in Retrospect, presented at the CWEMF Annual Meeting, Pacific Grove, Calif., Feb. 2004.
- o Modeling Delta Flow-Turbidity Relationships with Artificial Neural Networks, presented at the CWEMF Annual Meeting, Folsom, Calif., Apr. 2012.
- o Modeling of Delta Standards Using ANN Approach in the Joint CALSIM Model, presented at the Annual Interagency Ecological Program Workshop & Bay-Delta Modeling Forum, Pacific Grove, Calif., Feb. 2001.
- o Natural Delta Outflow Water Balance, presented at the CWEMF Annual Meeting, Folsom, Calif., Feb. 2014.
- o Neural Networks and THM Prediction, presented at the Bay-Delta Modeling Forum Workshop on Drinking Water Quality, Sacramento, Calif., Oct. 1995.
- o New Empirical Bay-Delta Salinity Model, presented at the CWEMF Annual Meeting, Folsom, Calif., Apr. 2013.
- o Nine Decades of Salinity Observations in Suisun Bay & Western Delta, presented at the CWEMF Annual Meeting, Folsom, Calif., Apr. 2013.
- o Overview of Recent Efforts to Characterize Natural Delta Outflow, presented at the CWEMF Annual Meeting, Joint Session with the Interagency Ecological Program, Folsom, Calif., Feb. 2014.
- o San Joaquin River Salinity Management Model, SANMAN, presented at the CWEMF Technical Workshop on San Joaquin River Valley Modeling, Sacramento, Calif., Nov. 2005.
- o SANMAN: Decision Support for the DIP's San Joaquin River Salinity Management Plan, presented at the CWEMF Annual Meeting, Pacific Grove, Calif., Mar. 2005.
- o Simulating DBP Precursor Transport, presented at the Bay-Delta Modeling Forum Workshop on Drinking Water Quality, Sacramento, Calif., Oct. 1995.
- o Validation of DSM2 Volumetric Fingerprints Using Grab Sample Mineral Data, presented at the CWEMF Annual Meeting, Pacific Grove, Calif., Mar. 2006.

Comparison of Delta Outflow and Salinity



2012 – 2015 Delta Salinity Conditions under a Without Project Scenario

PREPARED FOR: Terry Erlewine/SWC
PREPARED BY: Tyler Hatch/CH2M HILL
Chandra Chilmakuri/CH2M HILL
DATE: June 5, 2015

Study Objective

The purpose of this study is to analyze salinity conditions in the south Delta channels under a Without Project scenario using the January 1, 2012 to August 31, 2015 Central Valley rim inflows. 2012 - 2015 historic and projected Sacramento River and San Joaquin River inflows to the Delta were modified to remove the impairments related to the upstream CVP – SWP reservoirs under the Without Project Scenario in addition to zeroing out the Delta exports at the Banks and Jones Pumping Plants and closing the Delta Cross Channel. The 2012 – 2015 study is an extension of a previous study of Without Project conditions for the year 2014. The multi-year timeframe allows understanding Delta salinity conditions under a sequence of differing hydrologic conditions.

Approach

A DSM2 model capable of simulating 2012-2015 historical Delta hydrodynamics and salinity conditions obtained from the DWR was used for representing the With Project scenario in this task. DWR used 2012 – 2015 Delta inflows, exports and salinity as the boundary conditions for the DSM2 model.

For the 2012-2015 Without Project DSM2 model, adjusted daily Delta inflow data at Vernalis and Freeport provided by the SWC were used as boundary conditions. As shown in Figures 1 and 2, Sacramento and San Joaquin Without Project inflows to the Delta are significantly lower (in some cases negative) in the summer and fall months compared to the historical conditions primarily due to the lack of contributions from project reservoir storage. The Without Project Scenario also assumed zero Delta exports from Banks and Jones Pumping Plants. The Without Project DSM2 model also uses historical electrical conductivity estimates for salinity boundary conditions at Freeport consistent with the historical DSM2 model. However, for the San Joaquin River at Vernalis modified electrical conductivity estimates were used to account for the unimpaired conditions under the Without Project scenario. The modified Vernalis EC estimates for the Without Project scenario were computed based on a methodology provided by the SWC, which is outlined in the Appendix A of this memo. For the Without Project conditions, the Delta Cross Channel gates were assumed to be closed for the entire length of the simulation.

Clifton Court Forebay (CCF) gate operations under the historical and Without Project DSM2 simulations were modified to represent Priority 3 gate operations. Under the Without Project simulation, instead of relocating BBID's existing DICU diversion from inside the CCF and closing the CCF gates, the With Project CCF gate operations were assumed to allow for the BBID diversion to continue. Even though the CCF gates are operational under the Without Project scenario, resulting Clifton Court inflow (Figure 3) confirms that inflow to CCF occurs only during the months with BBID diversion.

Sacramento River at Freeport timeseries input into the Without Project DSM2 model used only the positive flows provided. All negative flows were set to zero. Figure 1 below shows a comparison of the historical record, the Without Project timeseries with negative values from SWC, and the timeseries input into DSM2. In the summer months, the demands upstream of the Delta exceed the supply when there is no storage available to supplement the river flows into the Delta.

For the San Joaquin River at Vernalis, the Without Project DSM2 simulation used a 20 cfs base flow, when the Without Project flows from SWC are negative in order to achieve model stability in the channels near the San Joaquin River boundary in the DSM2 model. This base flow was used to keep water in the few channels downstream of Vernalis and was diverted upstream of the Old River (model node 4). Figure 2 shows a comparison between the historical Vernalis flows, the Without Project flows from SWC, and the Without Project flows used in the DSM2 simulation. In addition, the

diversion component of the Delta Island Consumptive Use (DICU) in the channels near the San Joaquin River boundary (at node 1 and 3) were set to zero when the base flow was the only flow assumed in the model at Vernalis. Without curtailing the DICU diversions at model nodes 1 and 3, the base flow would have to be large enough to meet the DICU demand and keep water in the channel.

Based on the modified electrical conductivity at Vernalis under the Without Project conditions, zero or negative flows have zero electrical conductivity. This assumption of zero EC was continued even though 20 cfs base flow was assumed under the Without Project scenario. However, the artificial base flow of 20 cfs with zero EC could therefore dilute salinity in the San Joaquin River near the Vernalis boundary that would otherwise exist in higher concentrations. A sensitivity analysis using the same model and assuming 2014 historical salinity for the 20 cfs base flows shows that the resulting salinity in the San Joaquin River near the Vernalis boundary is somewhat sensitive, but the differences are minimal beyond model node 4. In addition, while the DICU diversion values are set to zero at nodes 1 and 3, the DICU drain flow is continued in the model, which continues to add salt to the Delta channels.

For conditions projected from May 2, 2015 to August 31, 2015, stage and electrical conductivity at the downstream boundary was assumed at 2014 values for both the With Project and Without Project scenarios. For the With Project conditions, 2014 conditions were assumed for May 2, 2015 to August 31, 2015 for all inflows and outflows with the exception of inflows at Freeport and Vernalis and outflows for SWP and DMC. Projected 2015 with project flows at Vernalis were calculated as the sum of New Melones monthly outflows and San Joaquin River above the Stanislaus River flows after removing any contractor deliveries from the forecasted operations provided by the U.S. Bureau of Reclamation to the SWRCB in support of the 2015 TUC petition (http://www.waterboards.ca.gov/waterrights/water_issues/programs/drought/docs/tucp/2015/inputsheet_april90_upstream_ops.pdf). Projected 2015 With Project flows at Freeport were estimated as the balance of Delta monthly inflows and outflows, and assuming SWP and CVP Delta exports to be zero for May through August 2015. The Without Project simulation used the same boundary inflows and diversions as the With Project simulation for May 2, 2015 to August 31, 2015 period with the exception of Sacramento River at Freeport and San Joaquin River at Vernalis inflows, which were assumed to be zero. Figures 1 and 2 show the assumed inflow boundary conditions for 2015 projected conditions.

Results

Due to a lack of inflow at both Freeport and Vernalis during the summer and fall months under the Without Project scenario, salinity is much higher in the Delta compared to the historical conditions. During these months there is no fresh water to dilute the higher salinity intrusion, and as a result, the tide brings saltier water further into the Delta. In figures 5 to 52, the saltwater-freshwater interface has moved much further inland by the end of June in the Without Project Scenario than the With Project conditions. The Sacramento River inflows tend to be much higher than the San Joaquin River inflows and cause the salt to be in higher concentrations in the south Delta. However, low flows in the Sacramento River allow the salt concentrations to be relatively high in the north Delta as well. By September the flows in the Sacramento River are high enough to push the saltwater interface further to the south. The area around Frank Tract tends to hold higher salinity water late into the year even after the Sacramento and San Joaquin Delta inflows have flushed much of the saltwater back out of the Delta. The contribution of New Melones Reservoir to flows at Vernalis appears to be a major component of the historical flows during the summer and fall months. Contour plots of weekly EC conditions for 2012 - 2015 are provided as electronic attachments to this memorandum.

Martinez EC Sensitivity Simulations

To consider the potential effect of modified NDOI on the Martinez EC boundary condition, a sensitivity analysis was performed of the modeled salinity under the With Project and Without Project cases by using the Martinez salinity boundary condition estimated using the DWR's G-Model, instead of the historical Martinez EC values. Figure 4 compares the daily-average Martinez EC values for the historical conditions, G-model estimates using With Project NDOI, and G-model estimates using Without Project NDOI. The G-Model salinity values are higher on average than the historical salinity used. DSM2 model for both With Project and Without Project cases were simulated with G-model based EC values specified at Martinez. DSM2 results showed that the higher salinity conditions extended further into the Delta under both the With Project and Without Project cases. Since the Martinez tide and the hydrology used remained unchanged under the sensitivity runs, the resulting

hydrodynamics remained consistent with the original simulations. Therefore, using the G-model based EC values resulted in similar durations of salinity as compared to the simulations using historical Martinez EC.

Summary

The results in this memorandum show that without the CVP-SWP project reservoir storage, salinity would be much higher in the Delta during dry years than under the historical (With Project) conditions. There appears to be some pockets of higher salinity that persist late into the fall months in the central/south Delta channels over the multiple dry years simulated. However, due to the higher storm flows into the delta in the Without Project scenario, the driest years still have most of the salinity flushed east of Antioch in the spring months. The high salinity in the summer and fall months would further limit the beneficial use of water from the Delta during years like 2012 through 2015 under the Without Project scenario.

Limitations

Simulation of Delta salinity under With Project conditions and Without Project conditions using DSM2 are subject to limitations of the model and the approach used. DSM2 limitations and uncertainties are well documented in the DWR Annual Reports (<http://baydeltaoffice.water.ca.gov/modeling/deltamodeling/annualreports.cfm>).

Salinity in San Joaquin River upstream of Head of Old River is likely not accurate due to artificial base flows assumed for model stability, and curtailing of the DICU diversions upstream of Head of Old River (at model nodes 1 and 3), under the Without Project scenario. Projections of Delta inflows and exports for May – Aug 2015 are also subject to change.

The salinity contour plots presented in this memorandum were created from point data in the model using kriging. As a result, the zones where the contours are calculated may be influenced by a neighboring channel without direct access to comingled salinity. An example of this is the Sacramento Deep Water Ship Channel and the Sacramento River on September 6, 2014.

FIGURE 1: SACRAMENTO RIVER AT FREEPORT DSM2 MODEL INFLOW FOR 2012 TO 2015

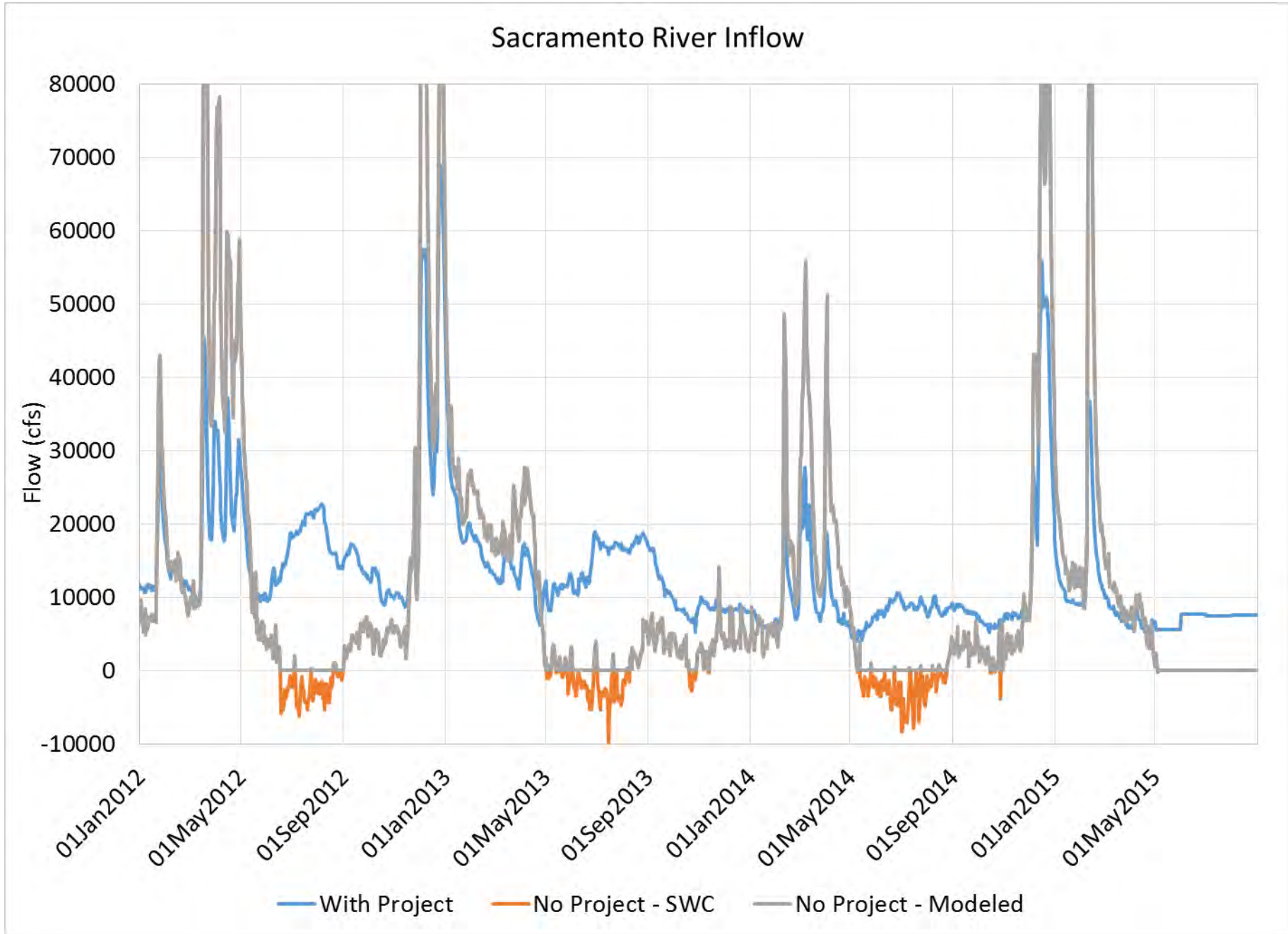


FIGURE 2: SAN JOAQUIN RIVER AT VERNALIS DSM2 MODEL INFLOW FOR 2012 TO 2015

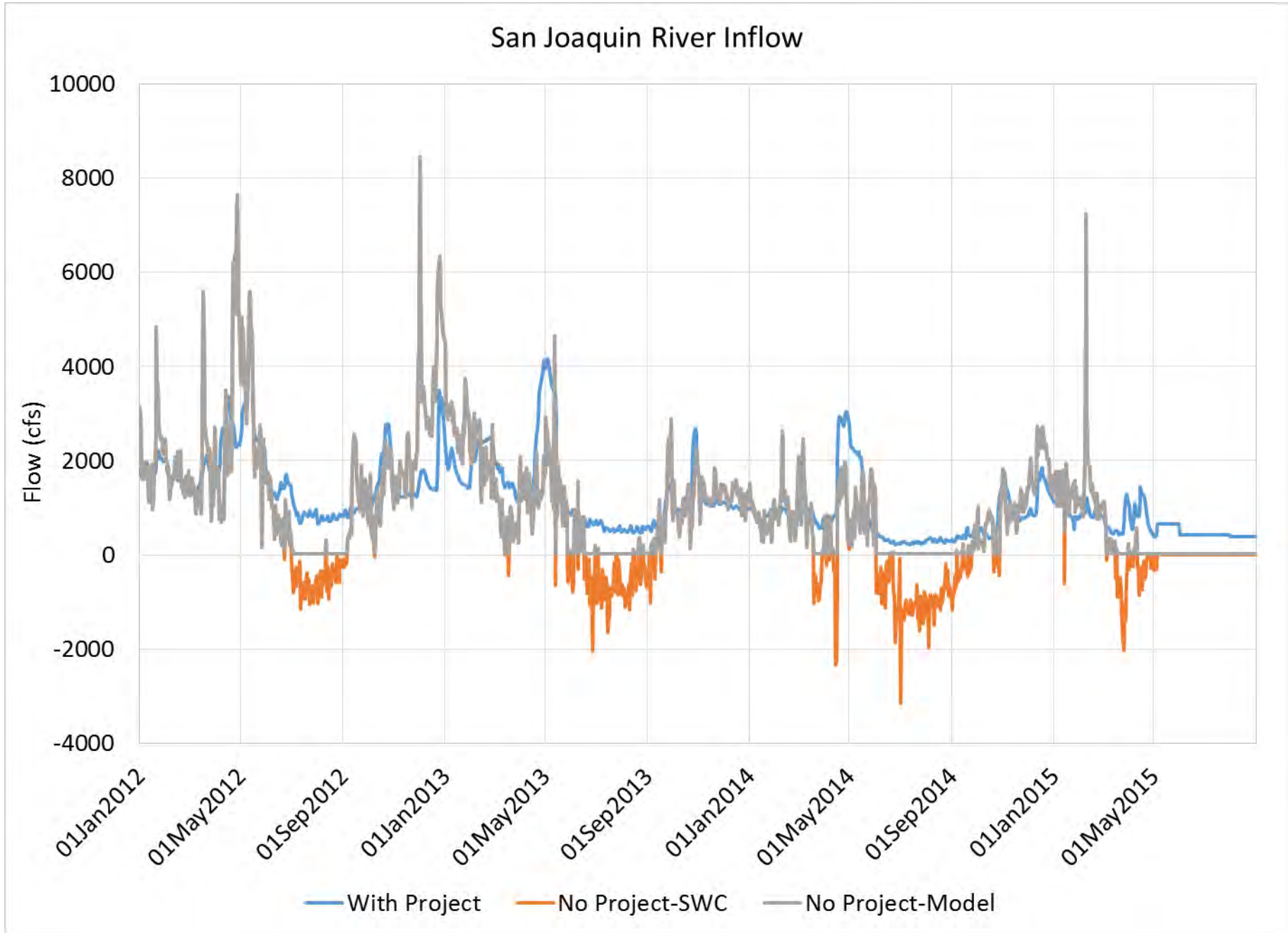


FIGURE 3: ASSUMED BBID DICU DIVERSION, AND DSM2 RESULT OF CLIFTON COURT FOREBAY INFLOW

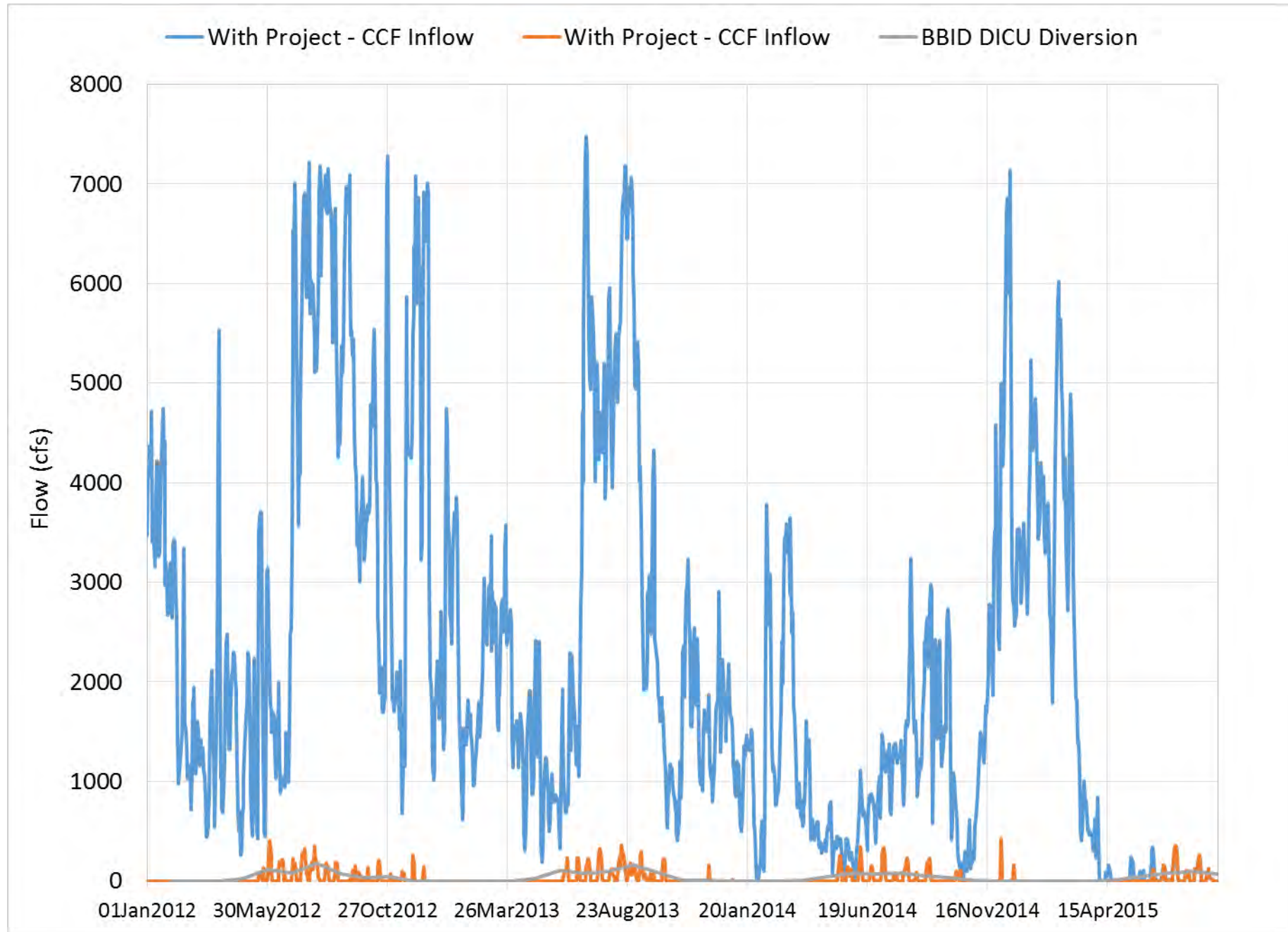
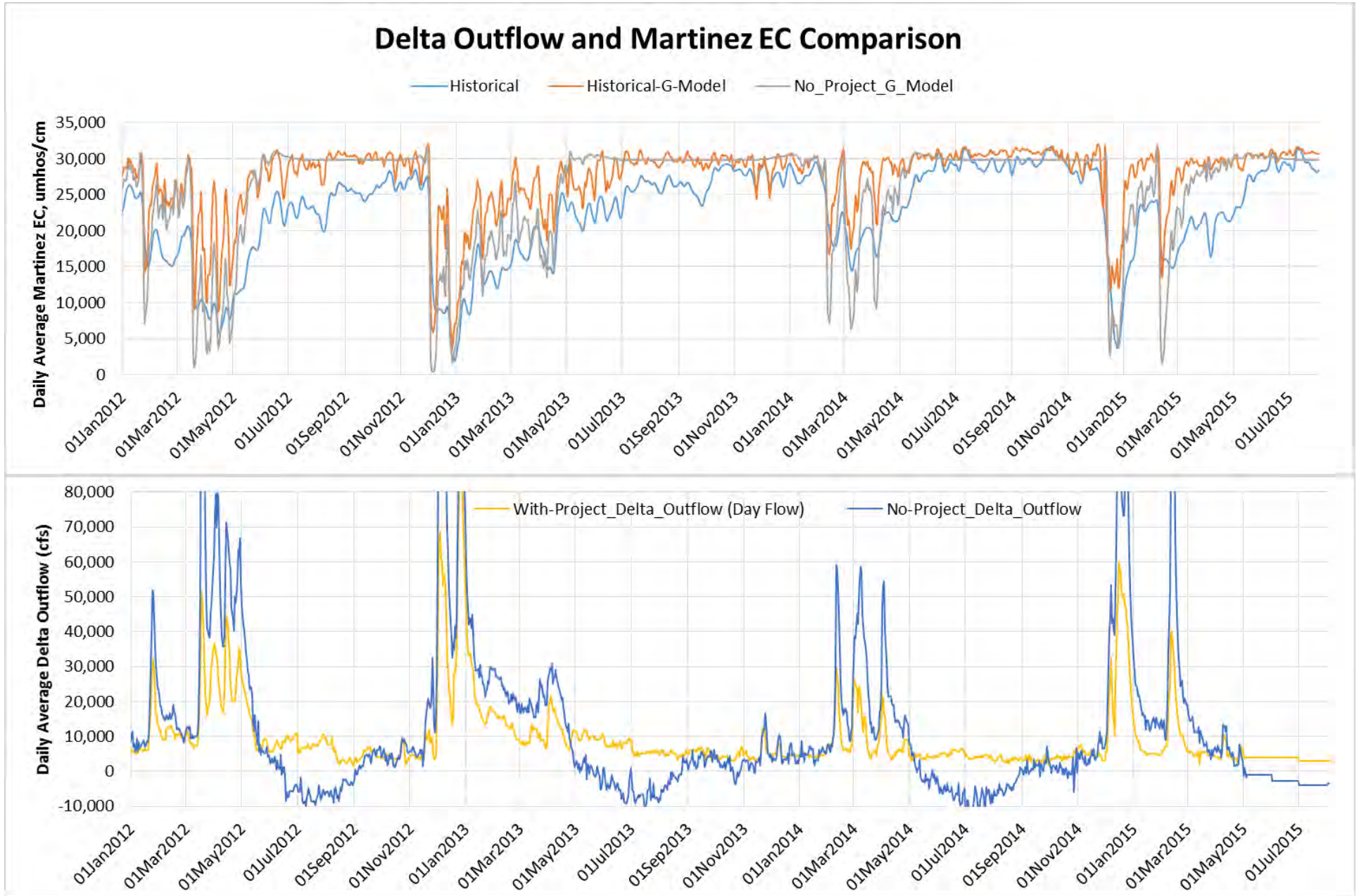
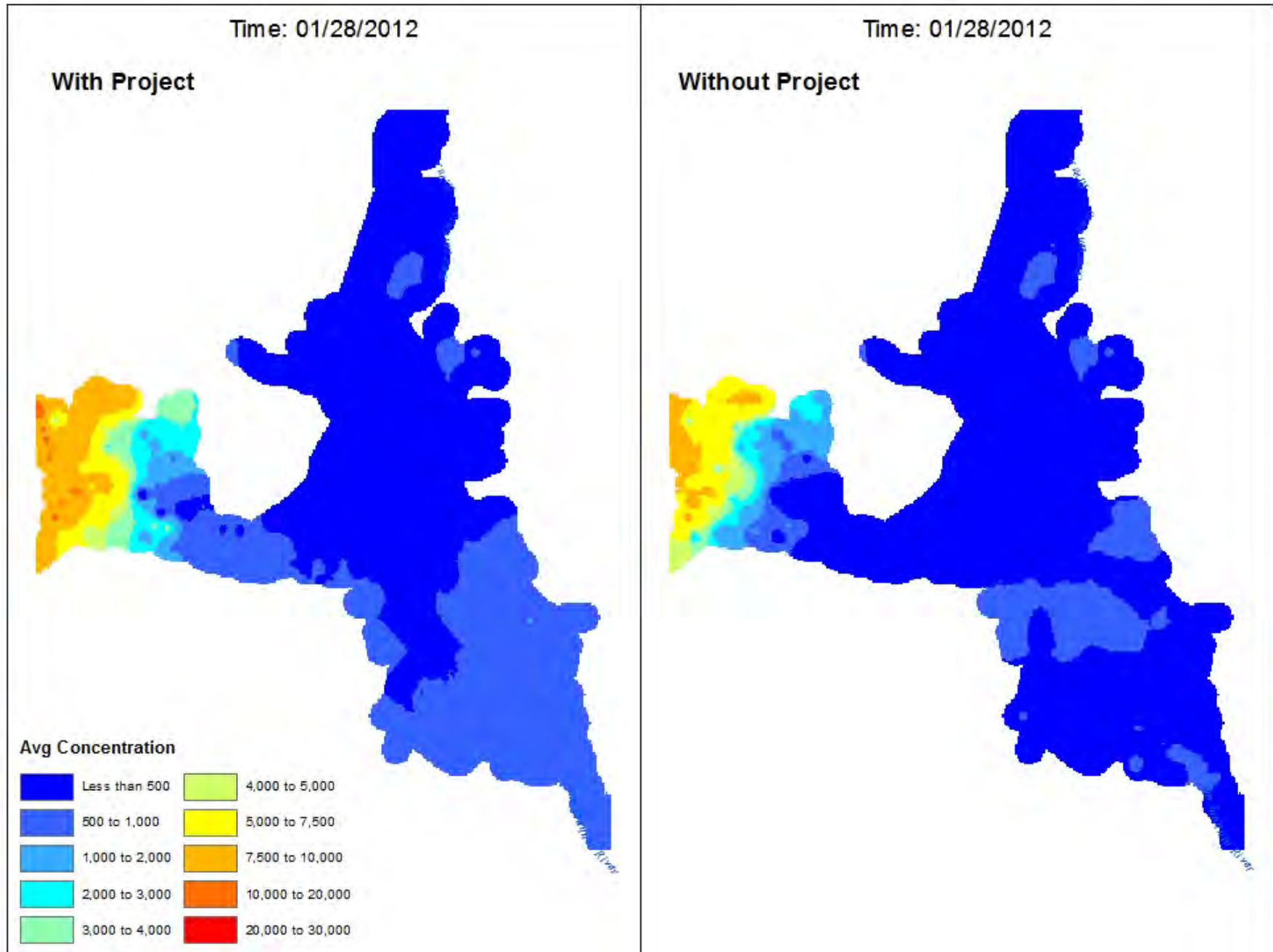


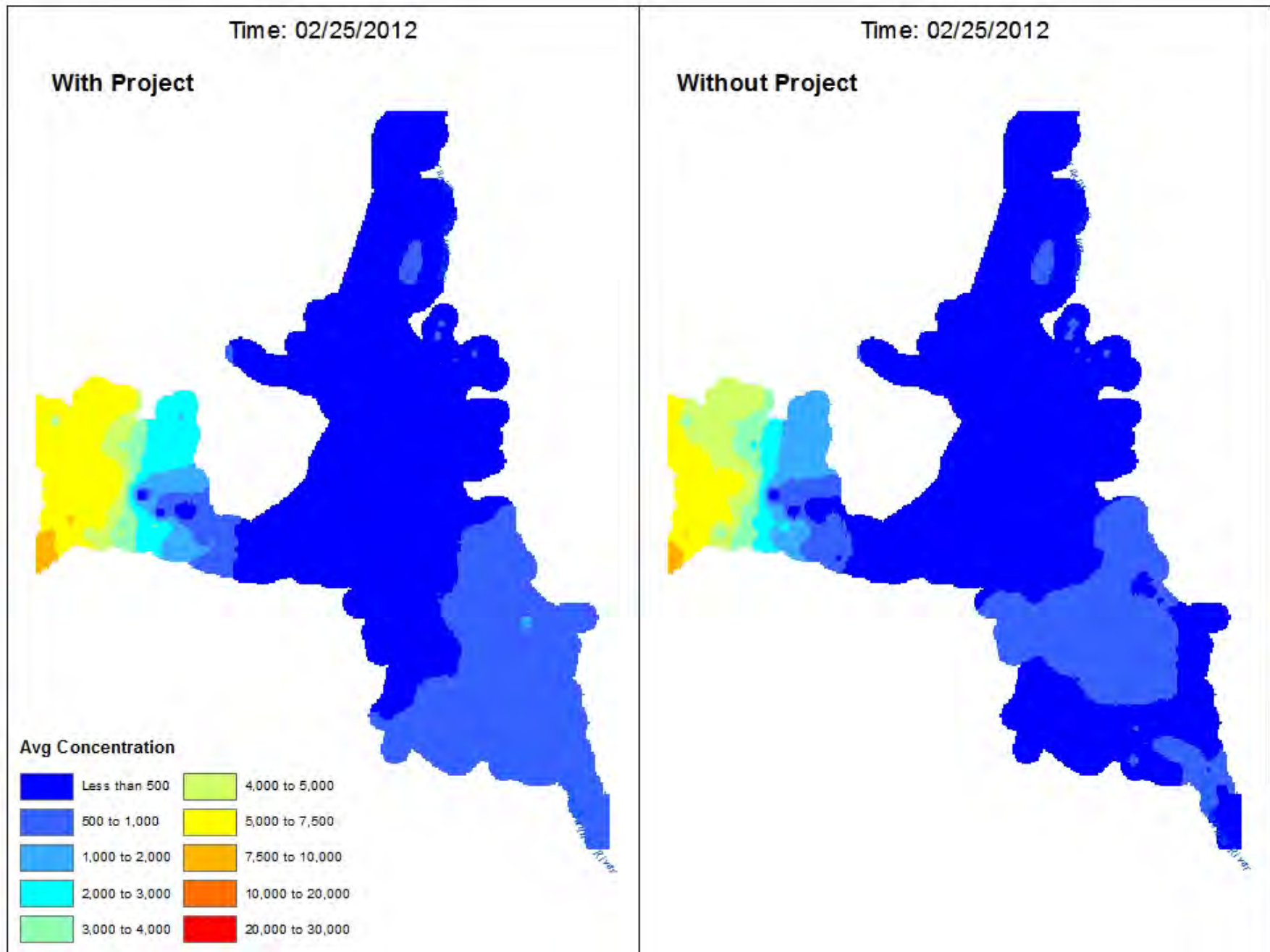
FIGURE 4: DAILY AVERAGED EC AT MARTINEZ FOR 2012 TO 2015

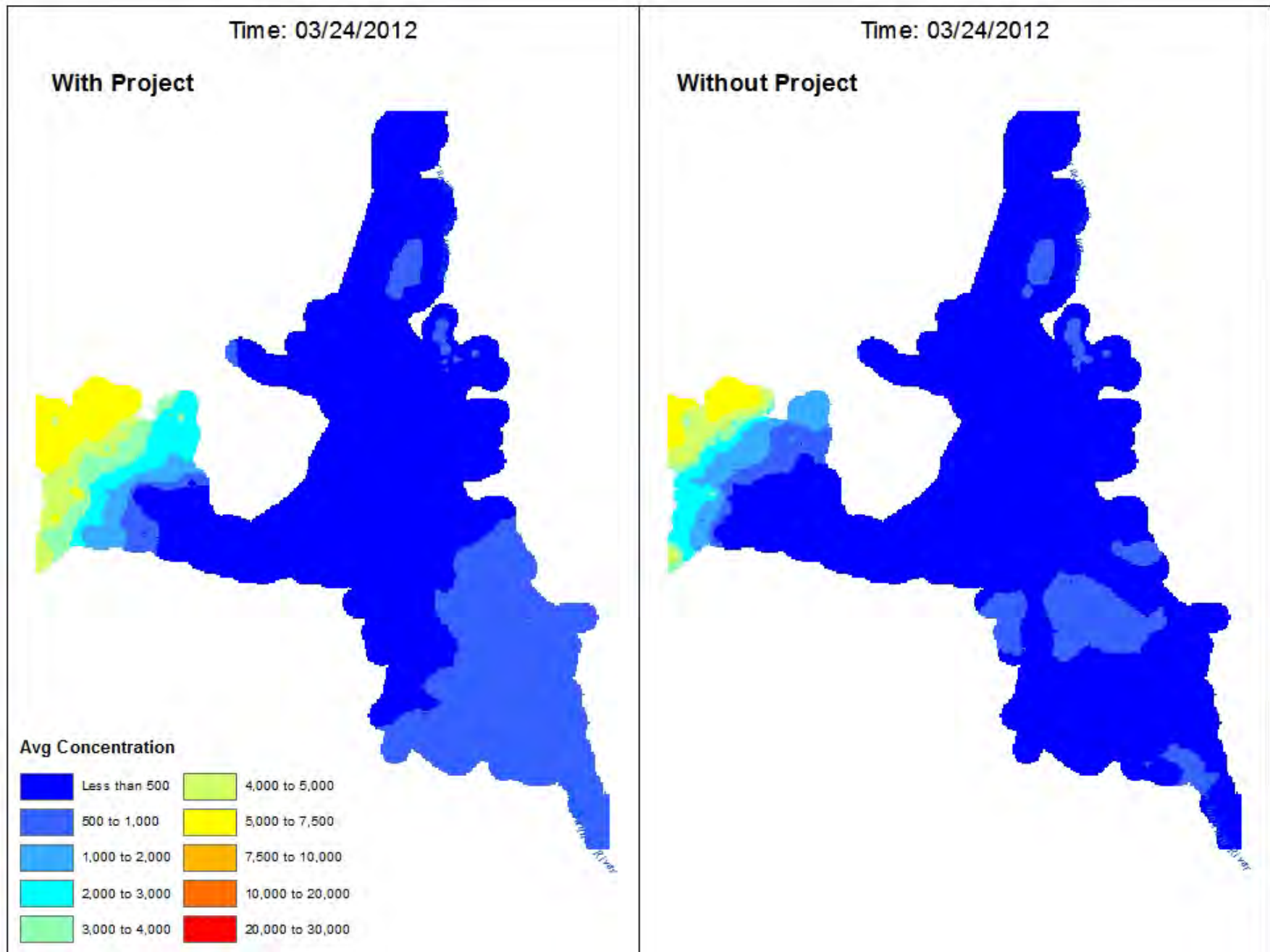


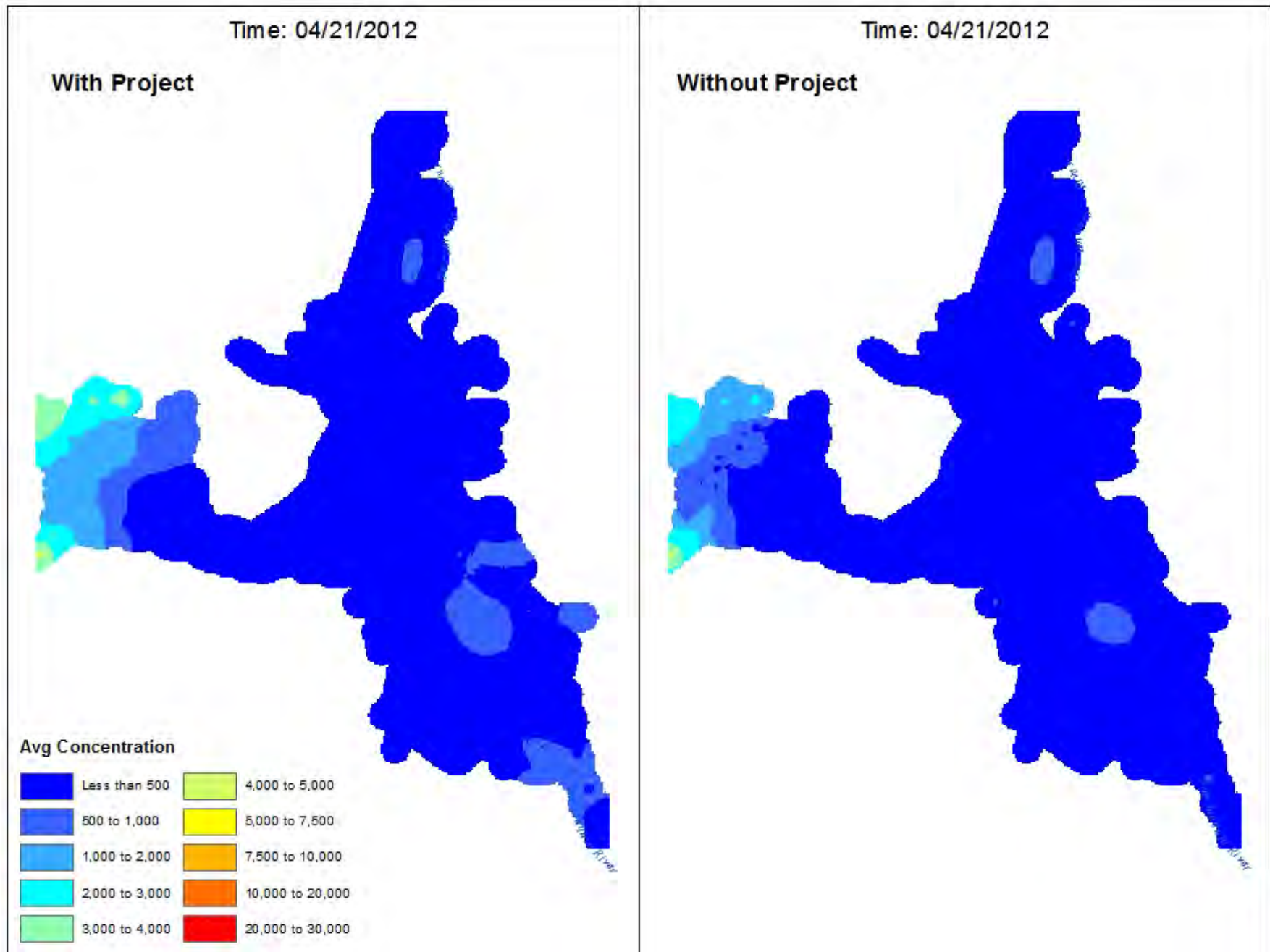
FIGURES 5 TO 52

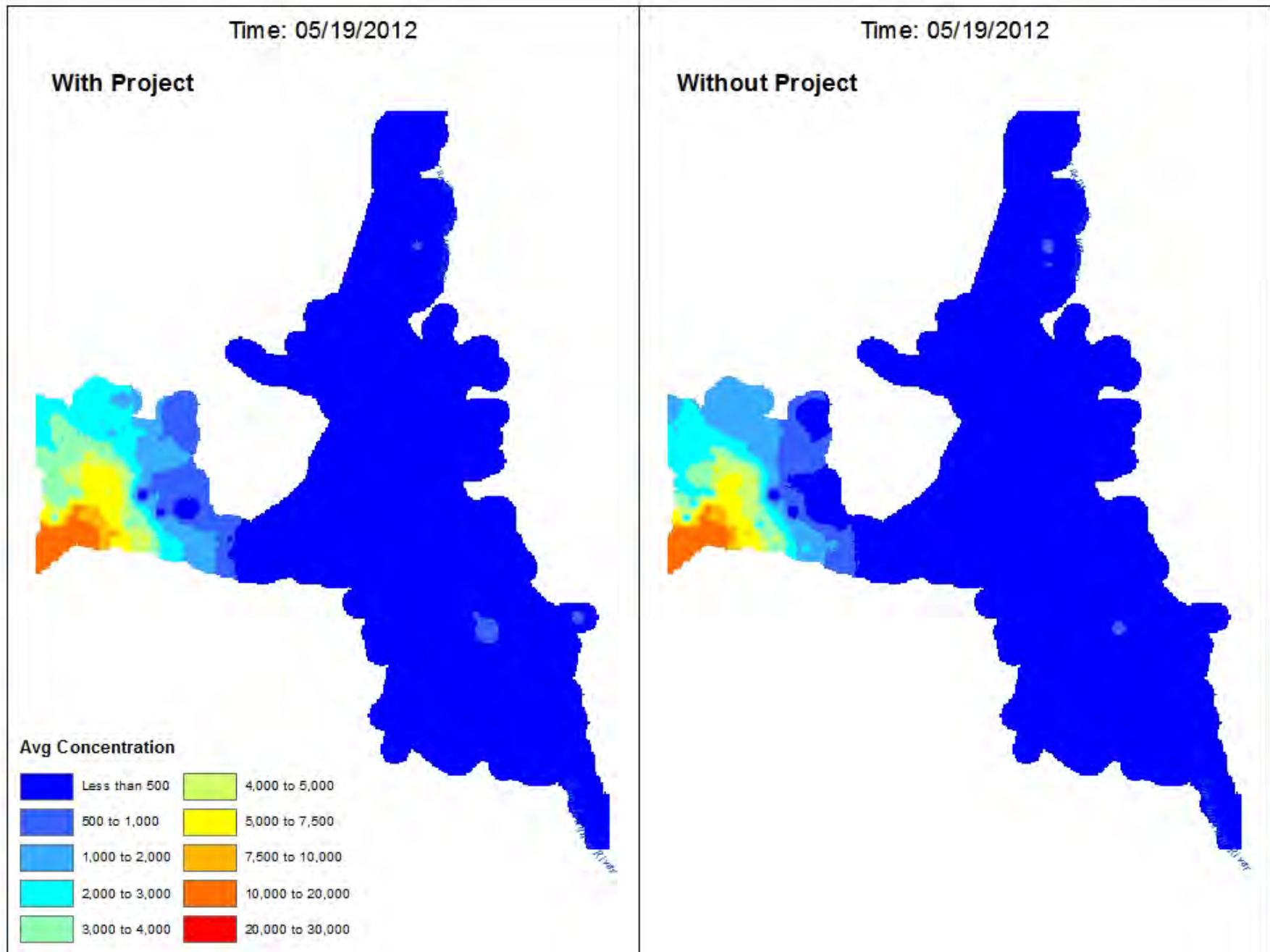
Contour plots of DSM2 electrical conductivity in the Delta on a 4 week timestep for 2011-2015 for With Project conditions (left) and Without Project conditions (right)

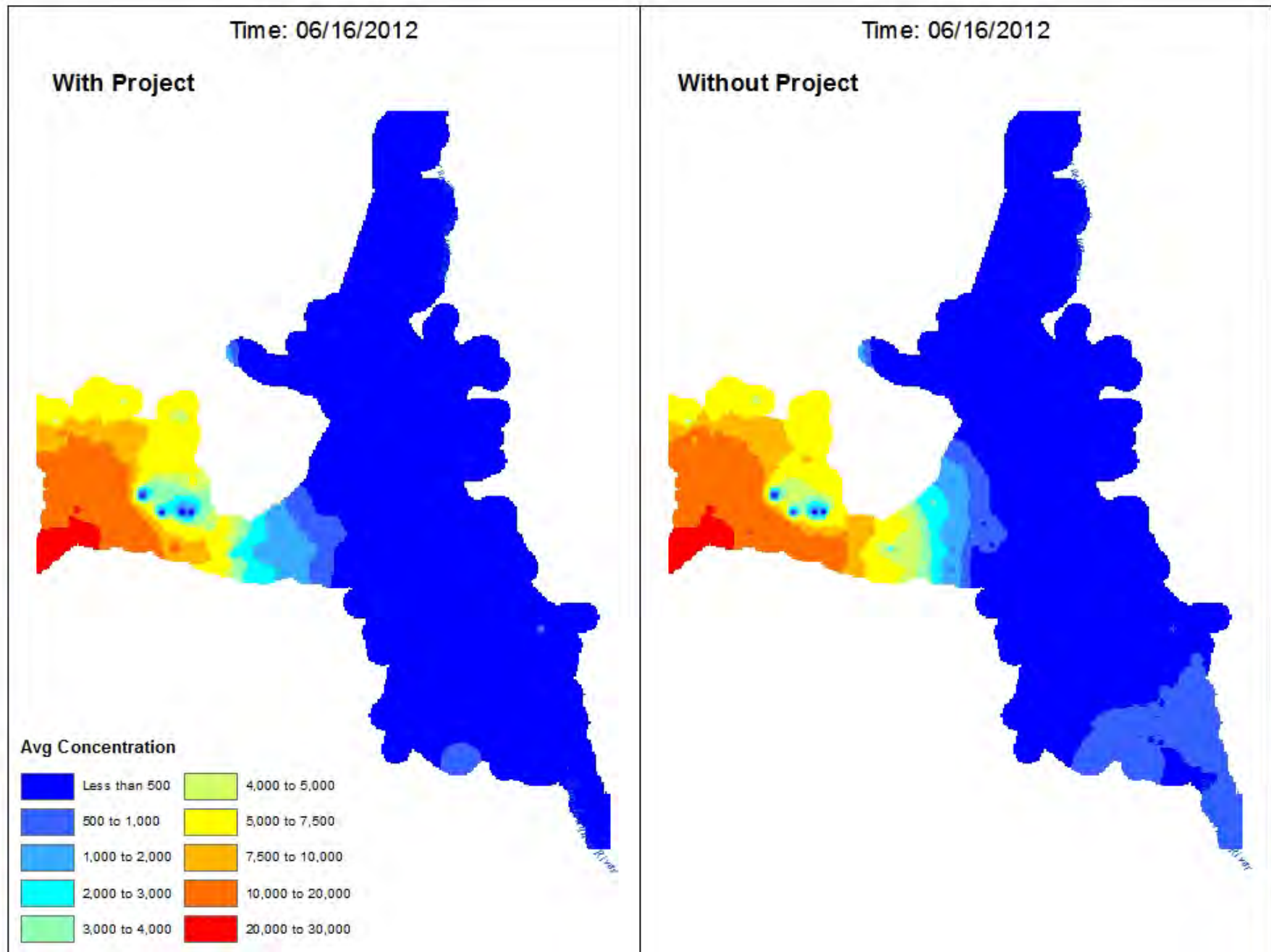


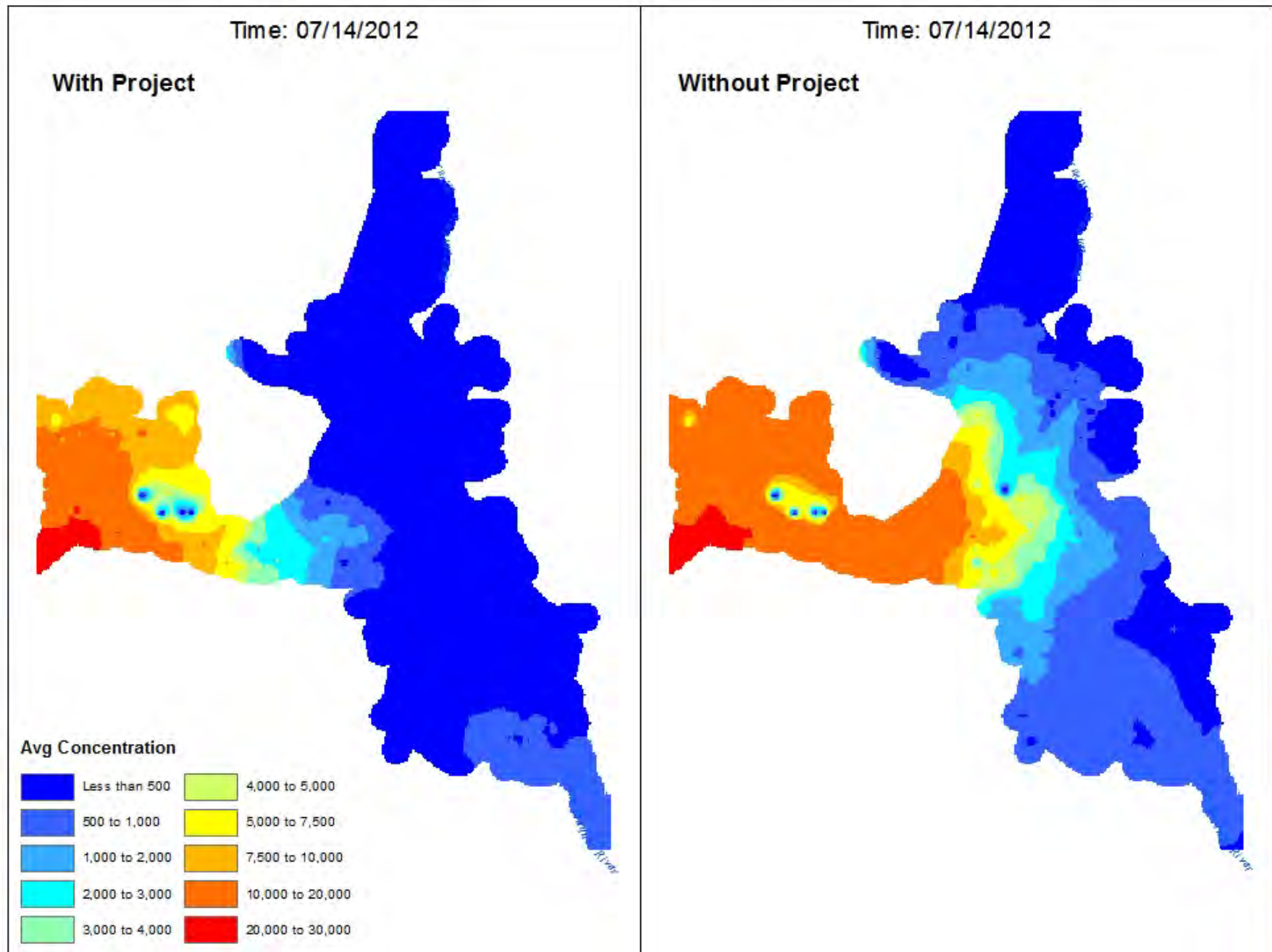


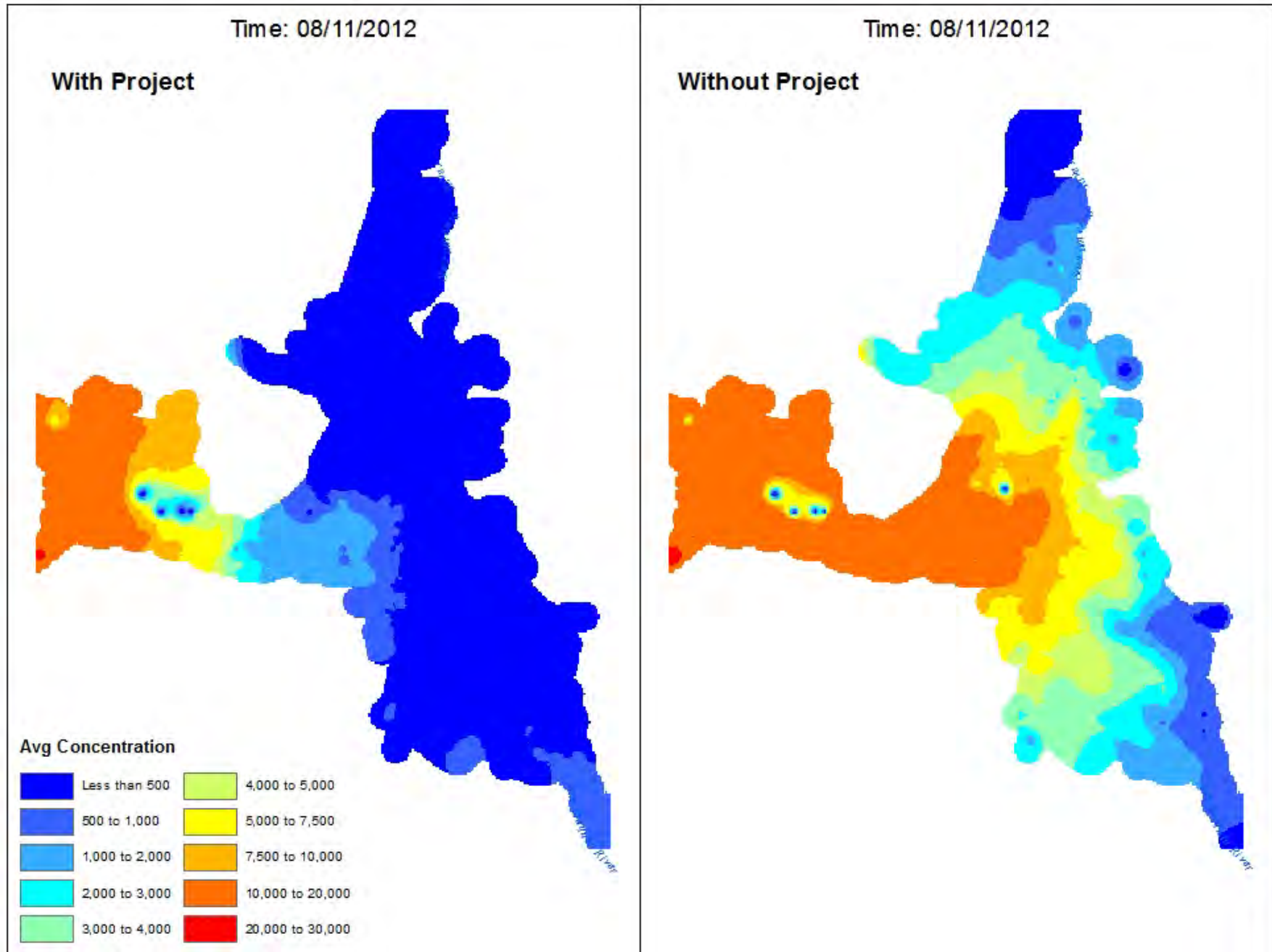


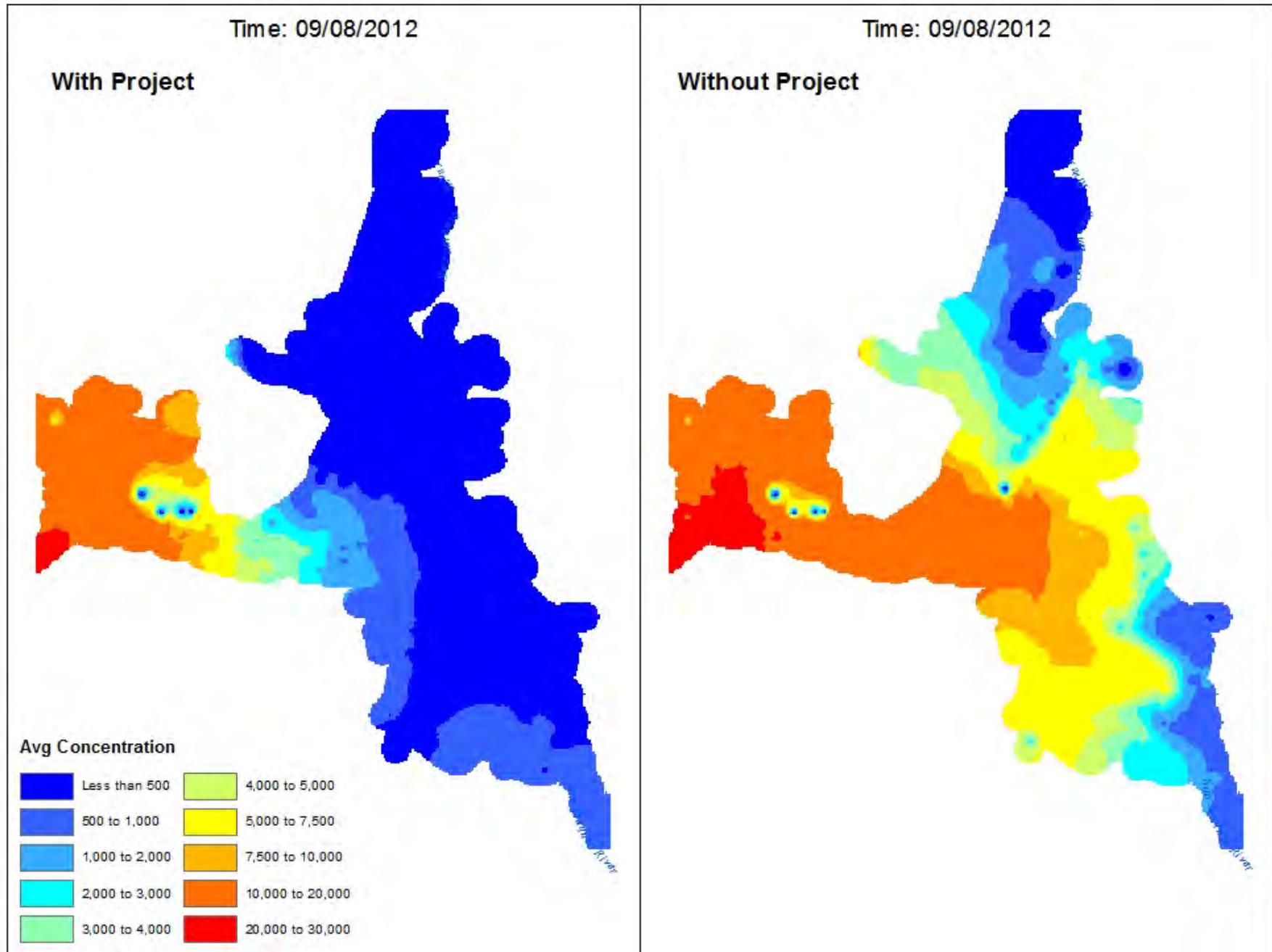


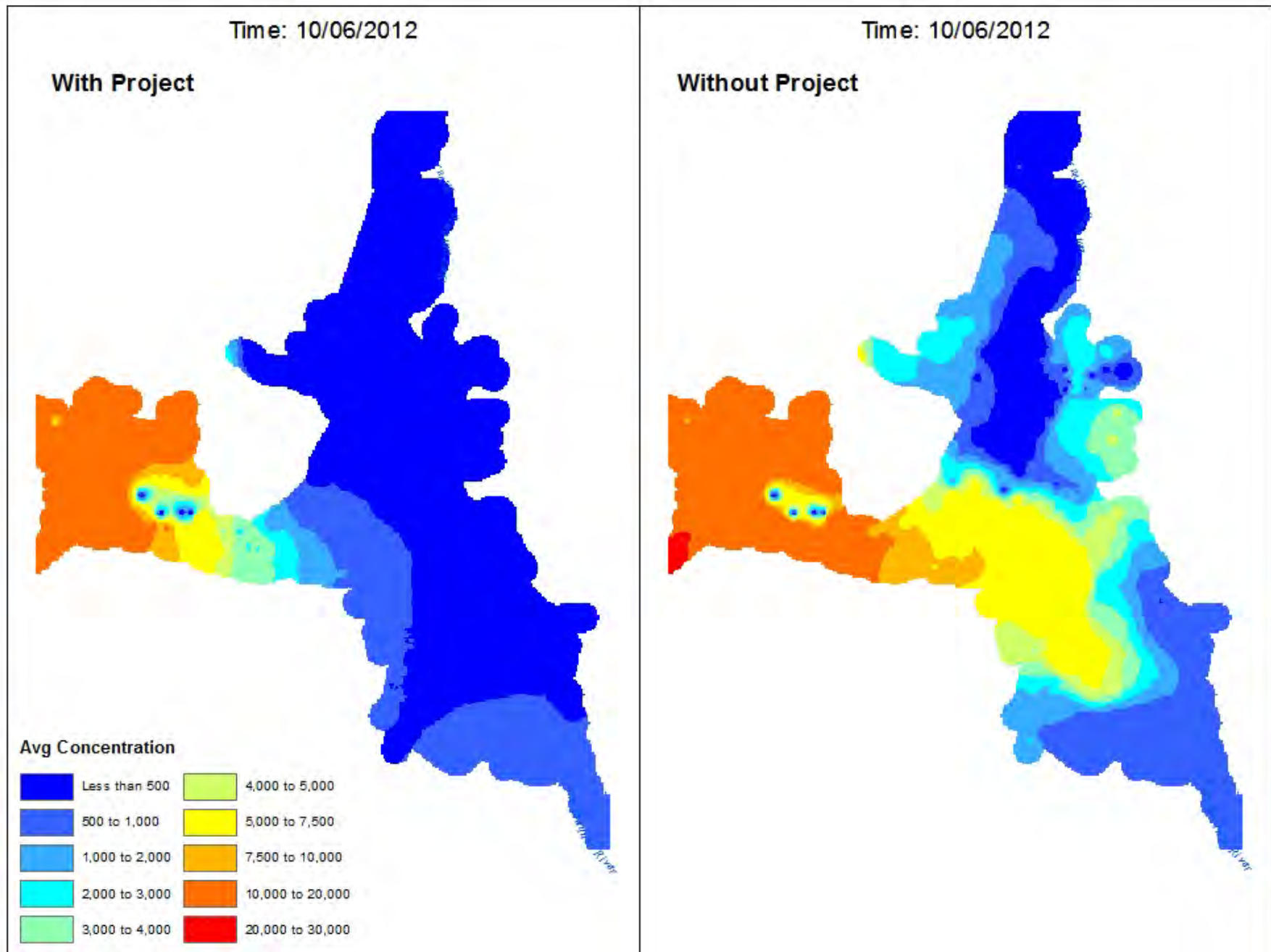


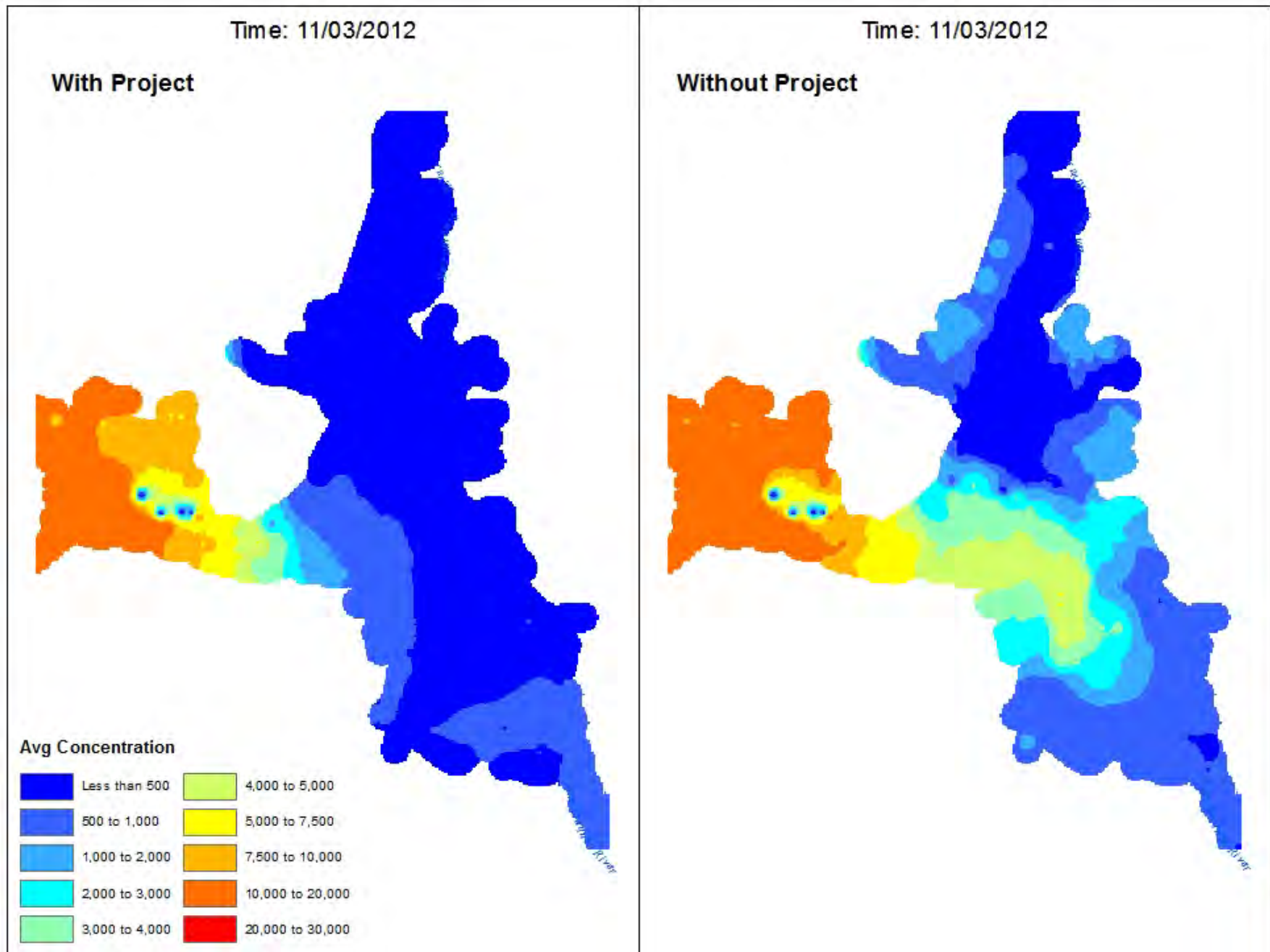


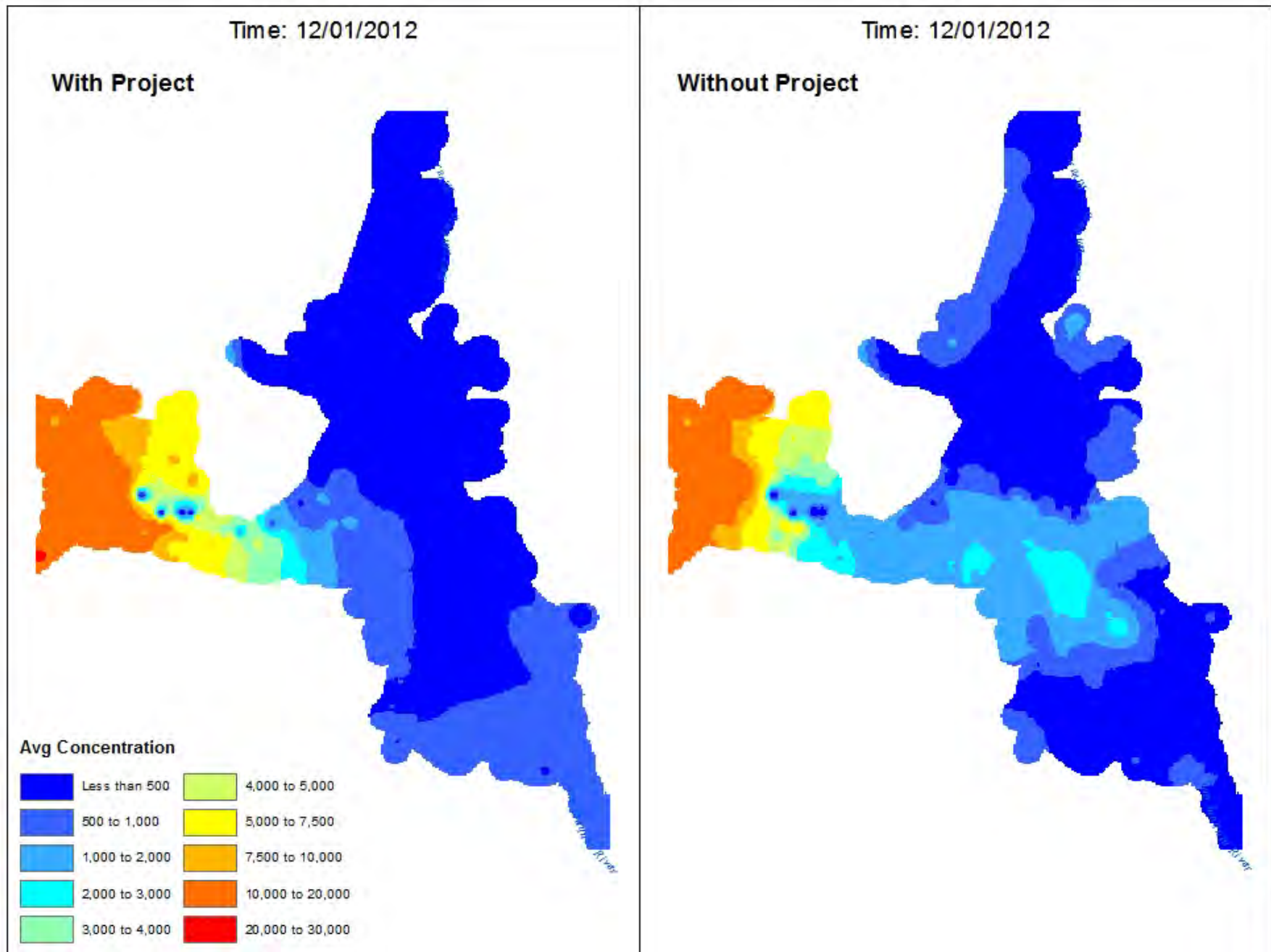


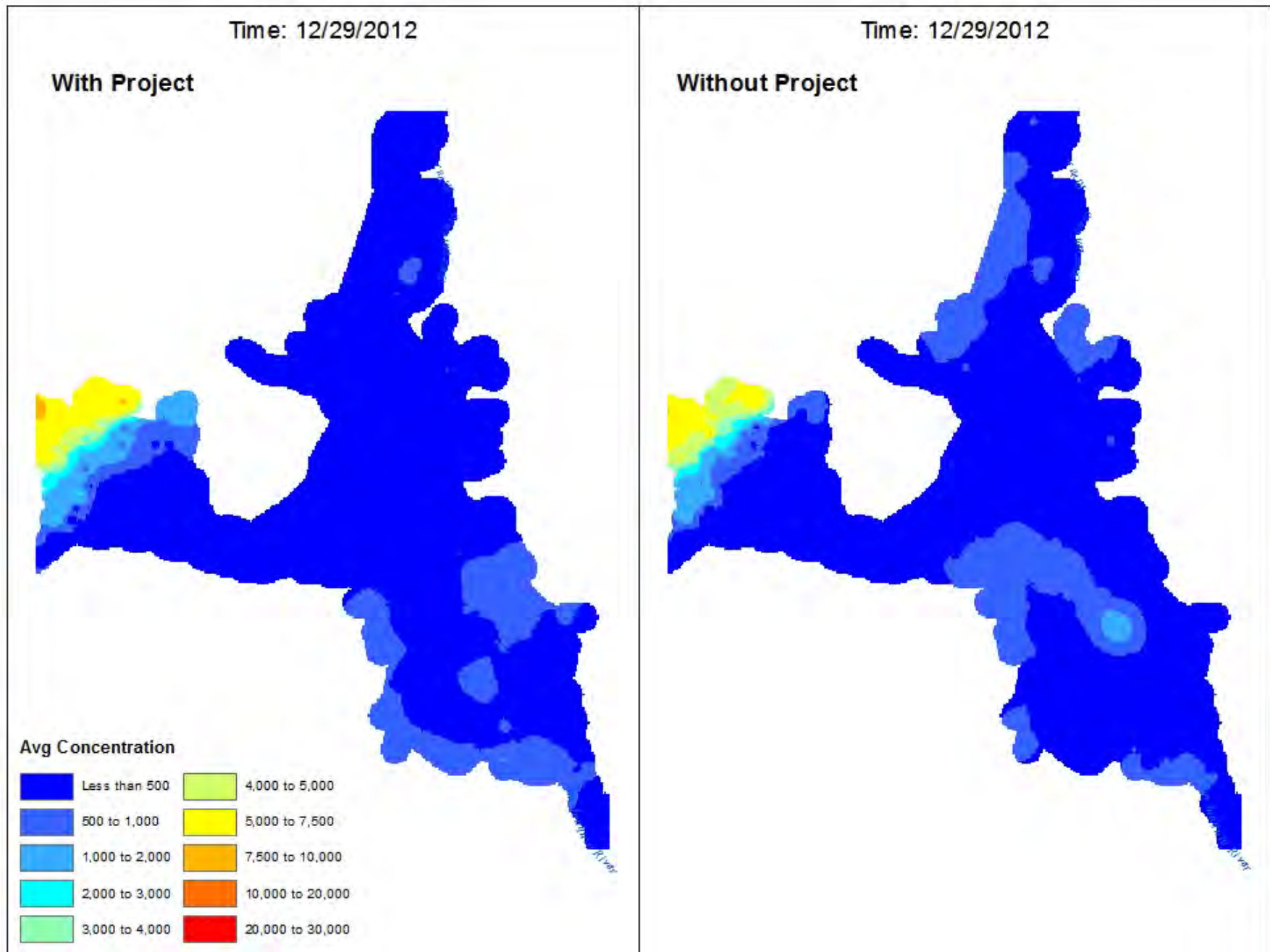


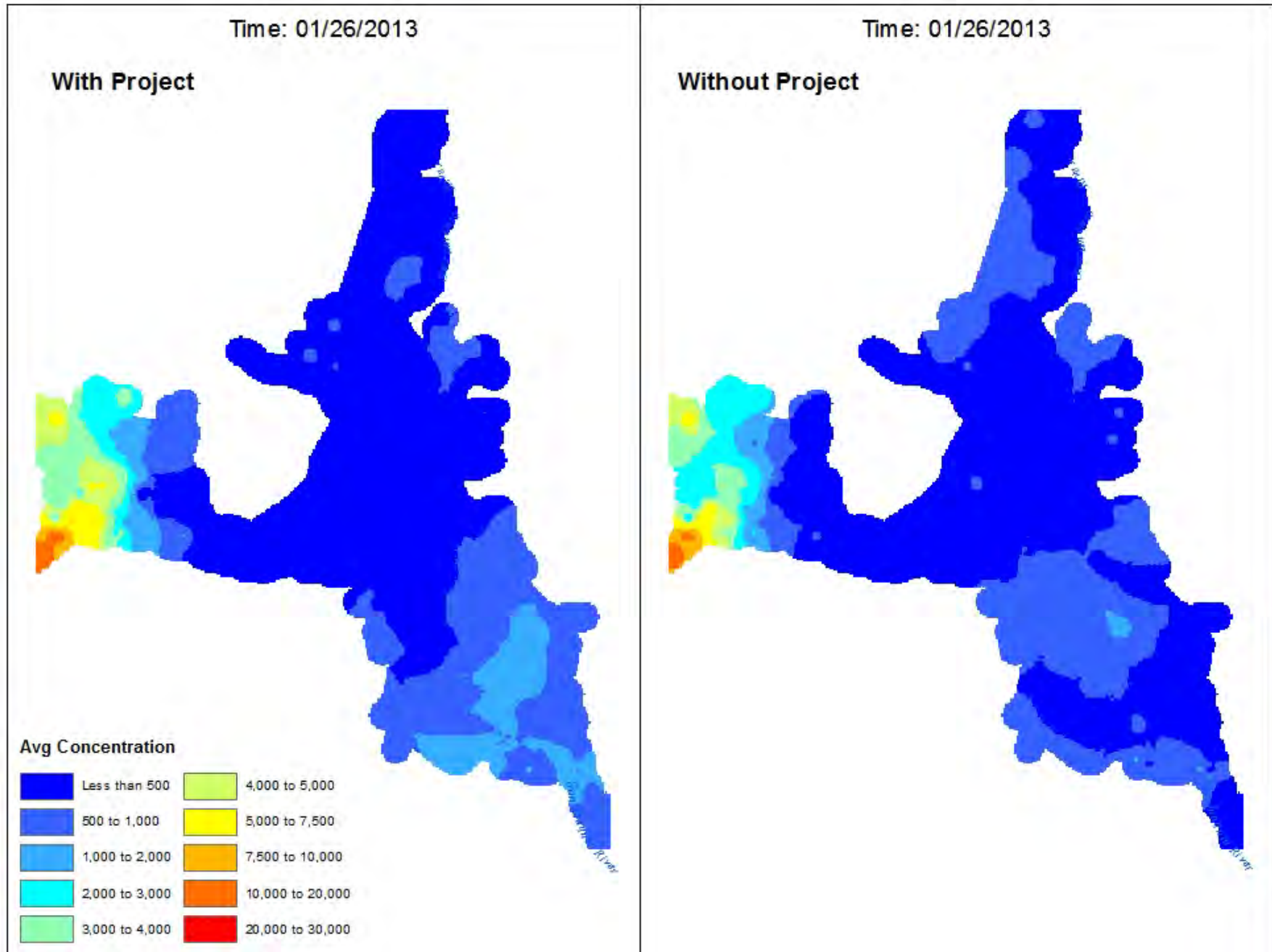


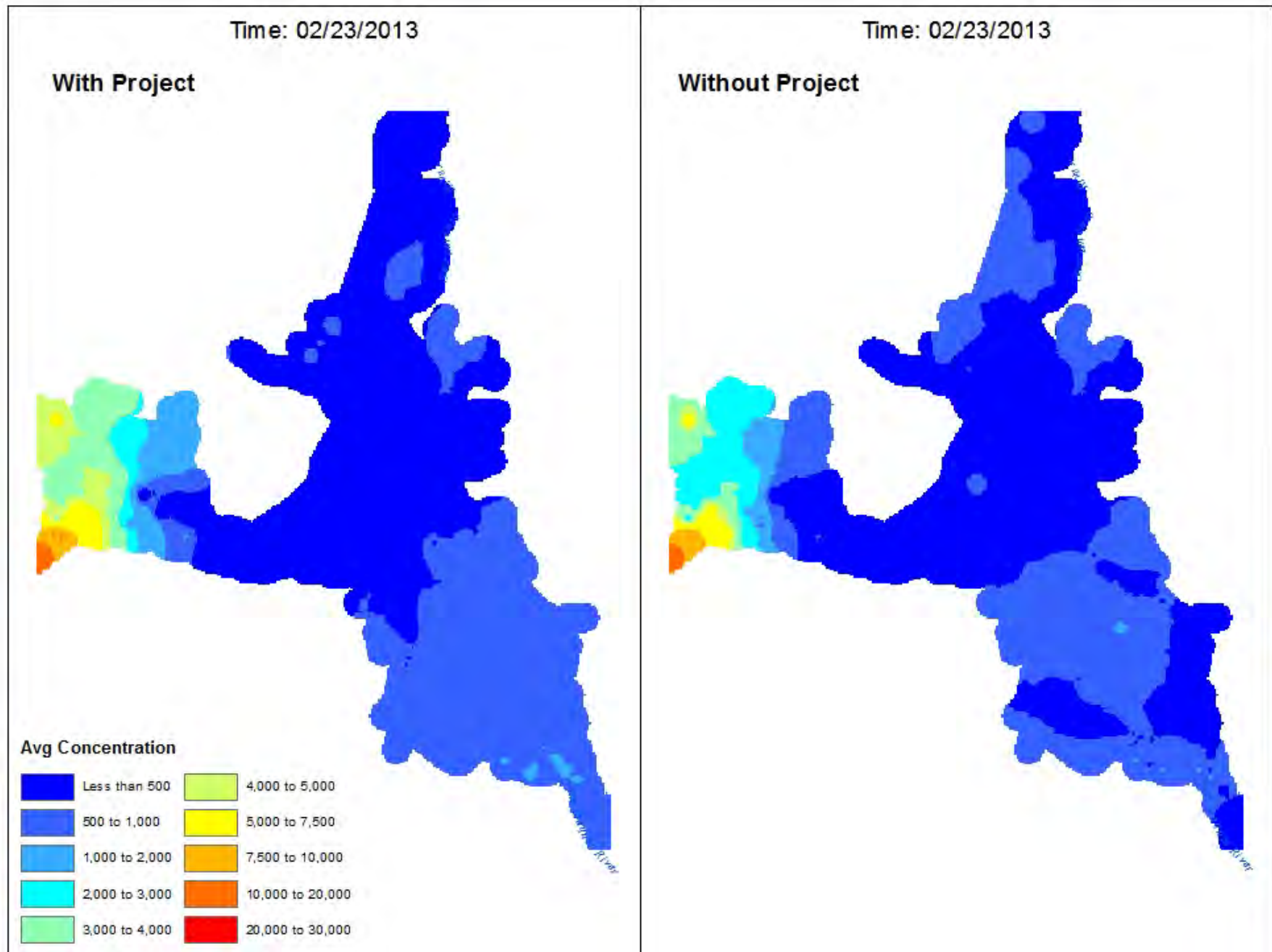


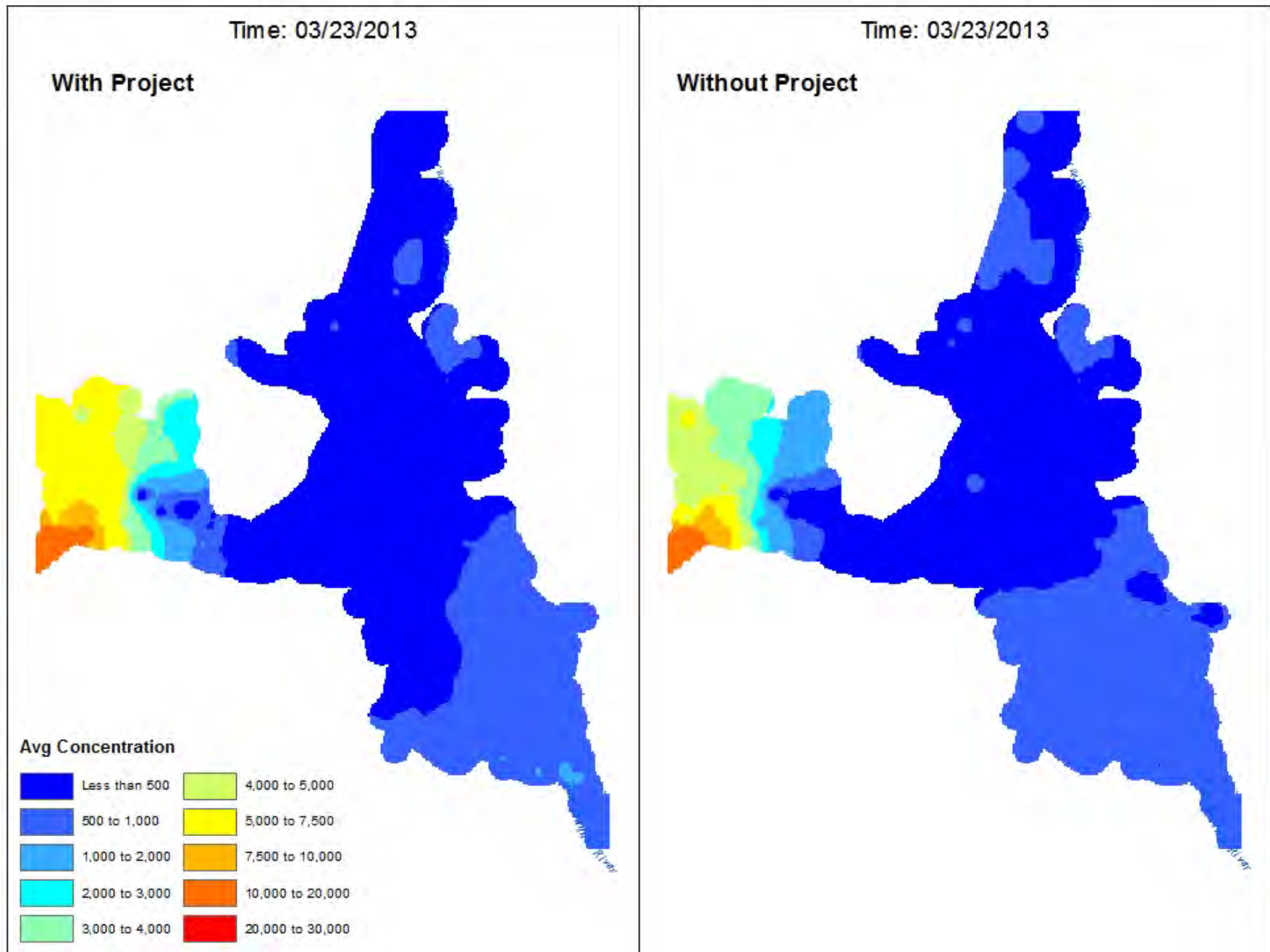


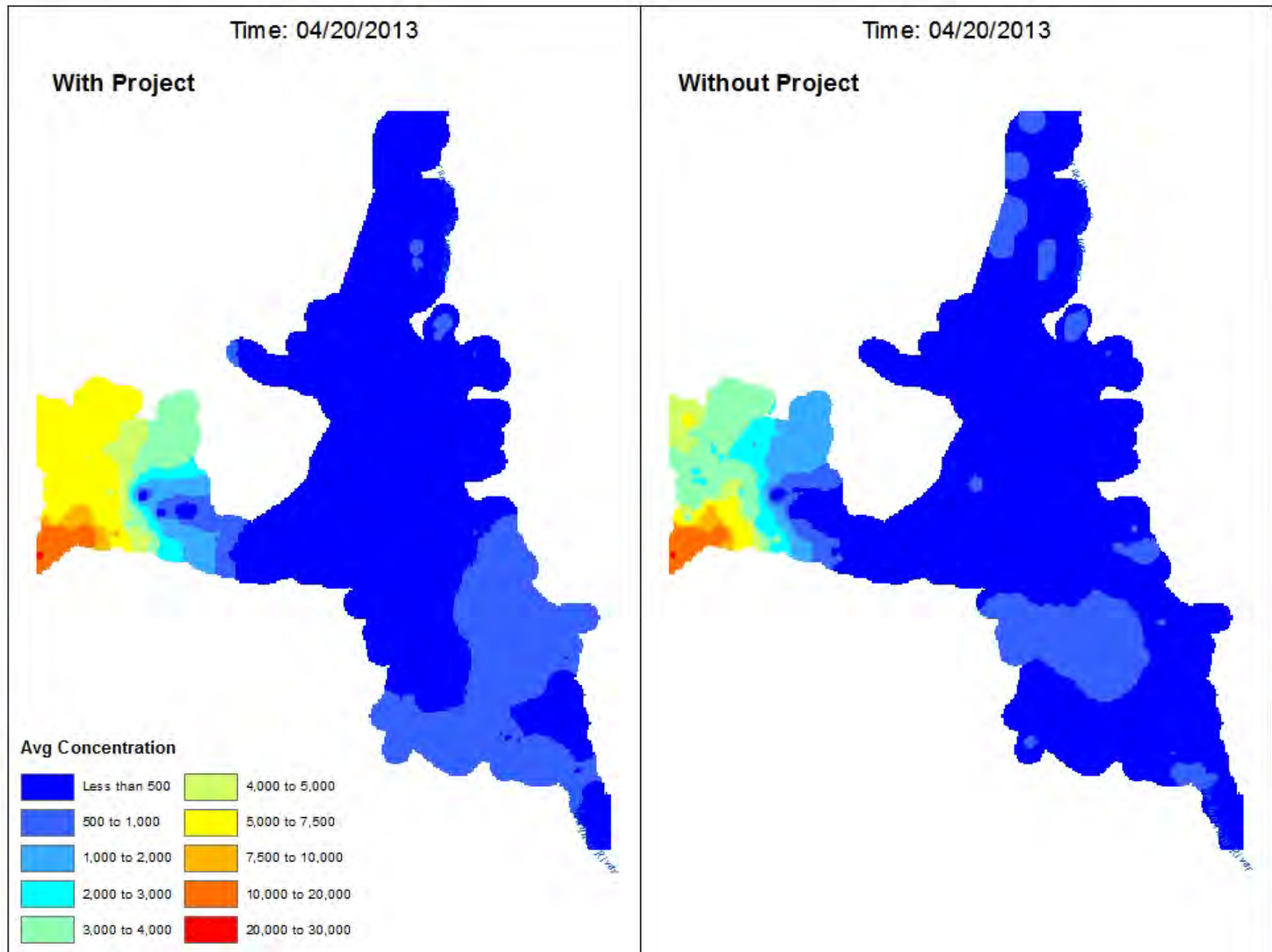


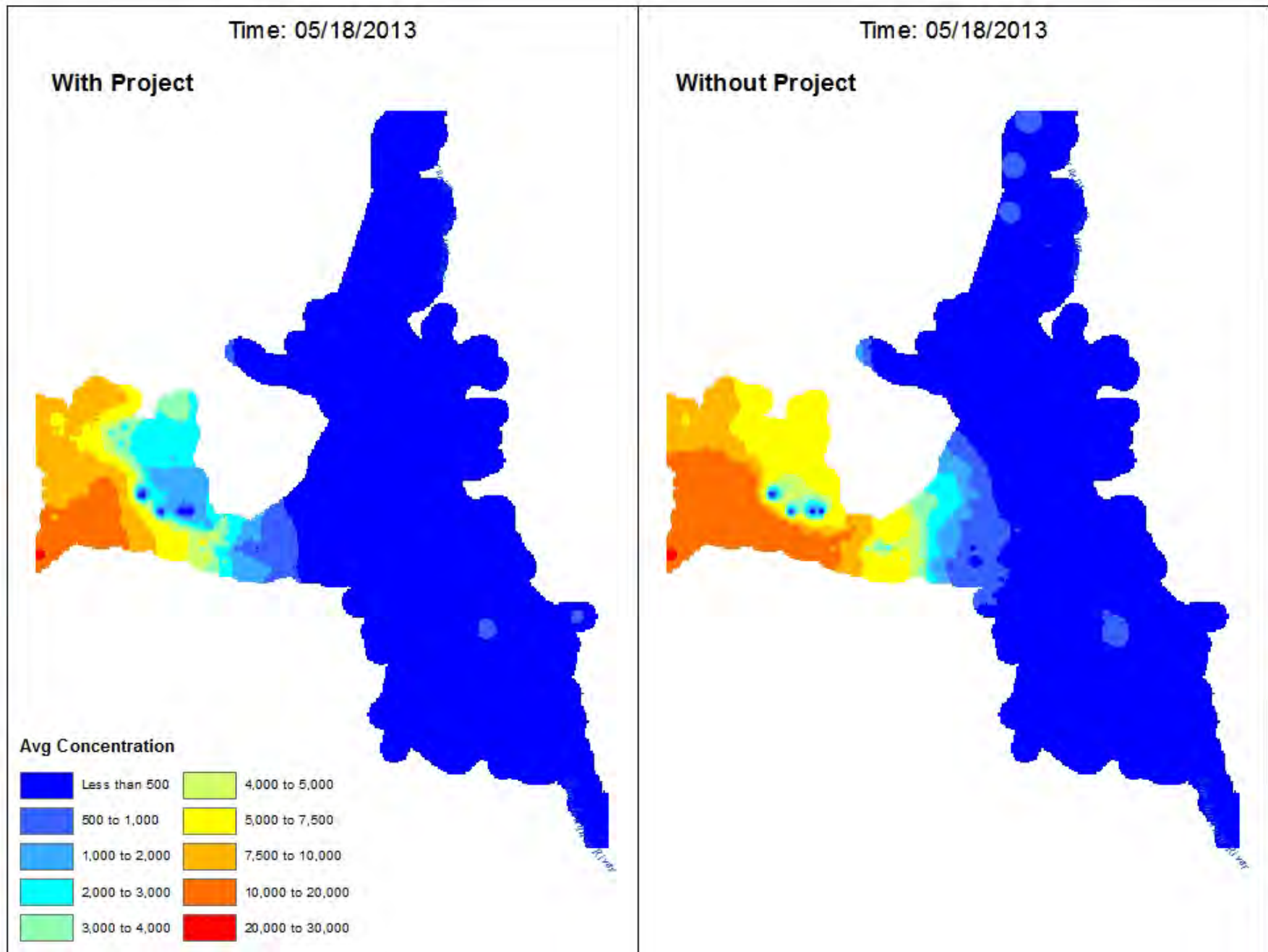


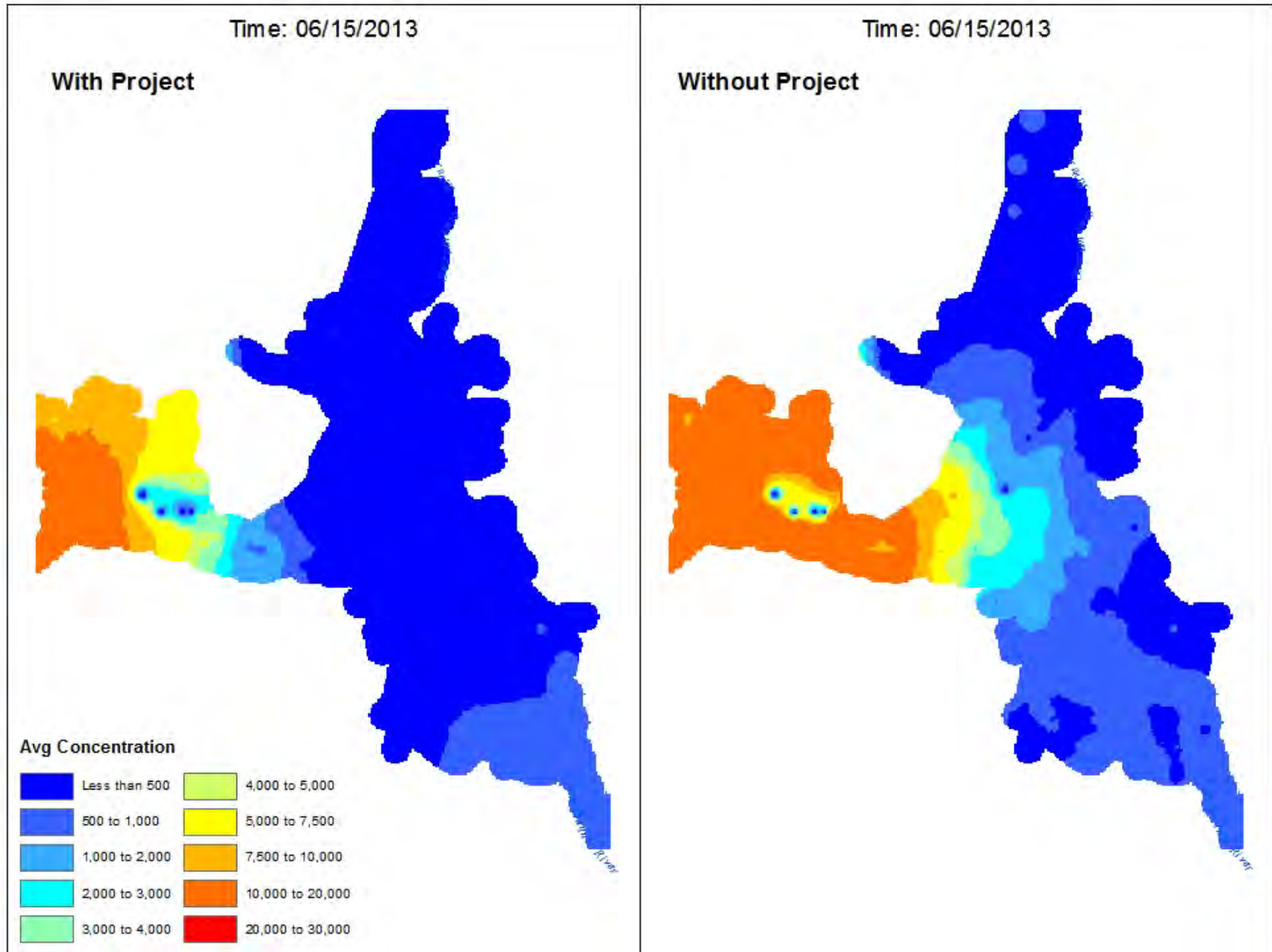


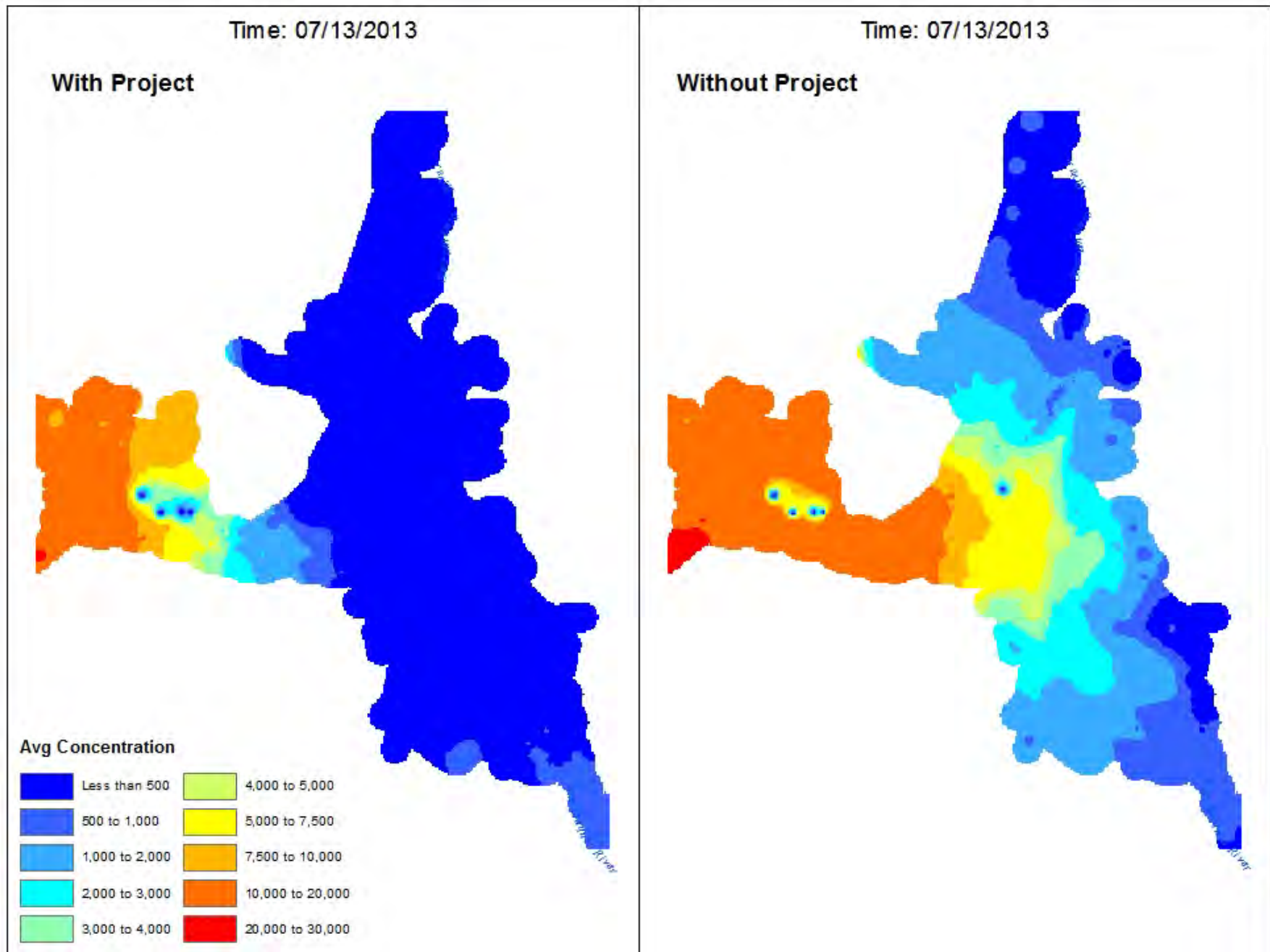


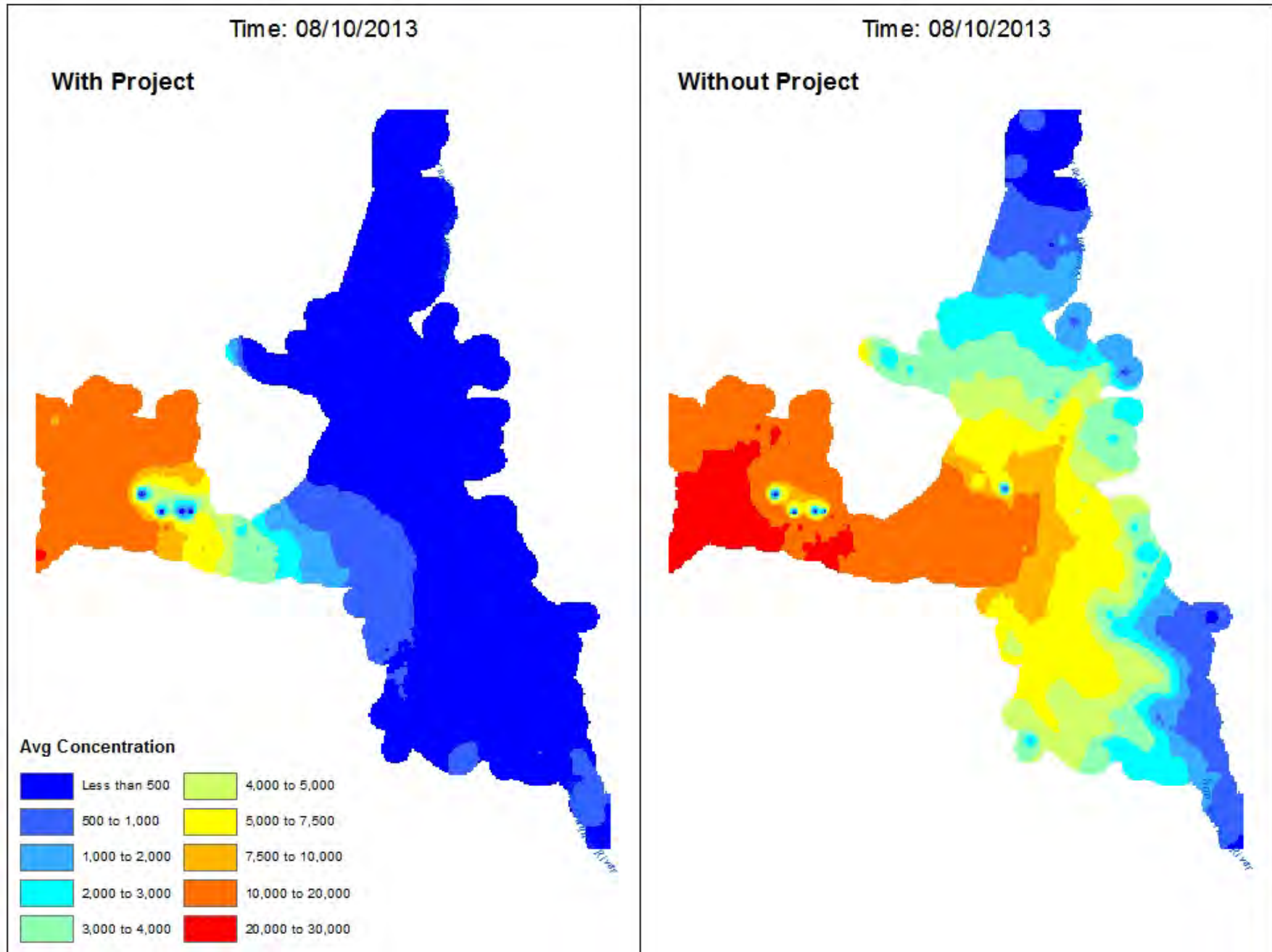


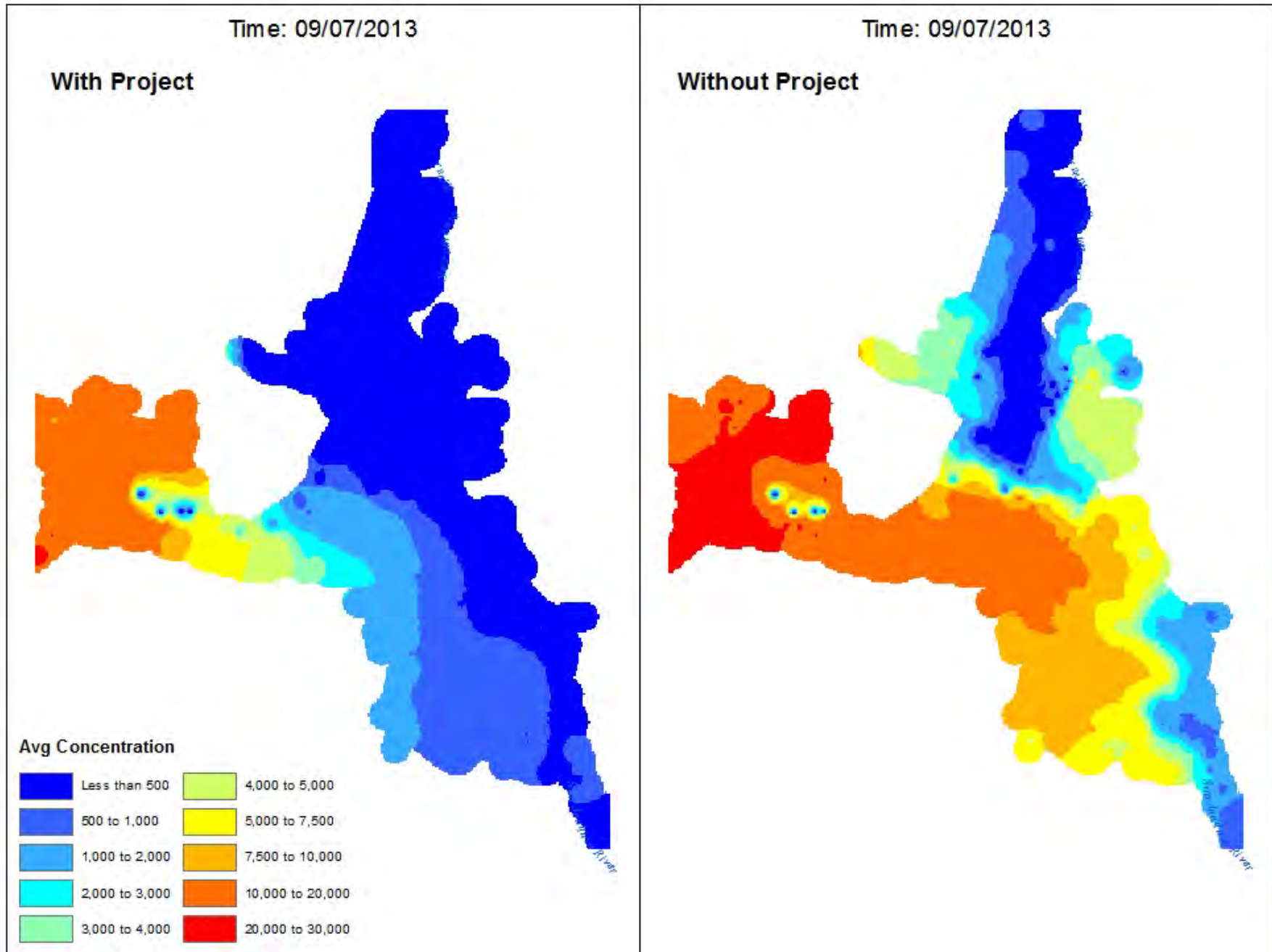


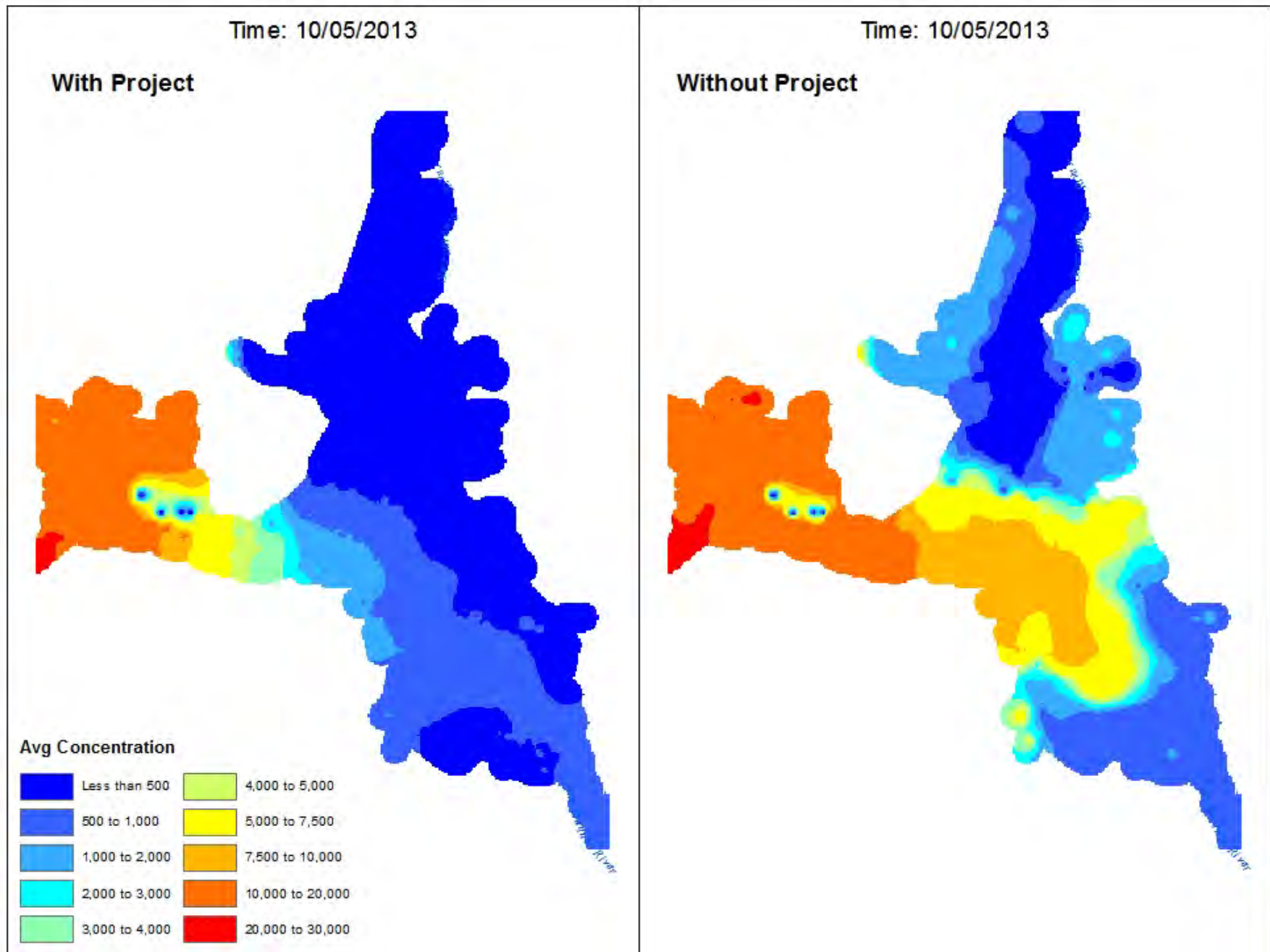


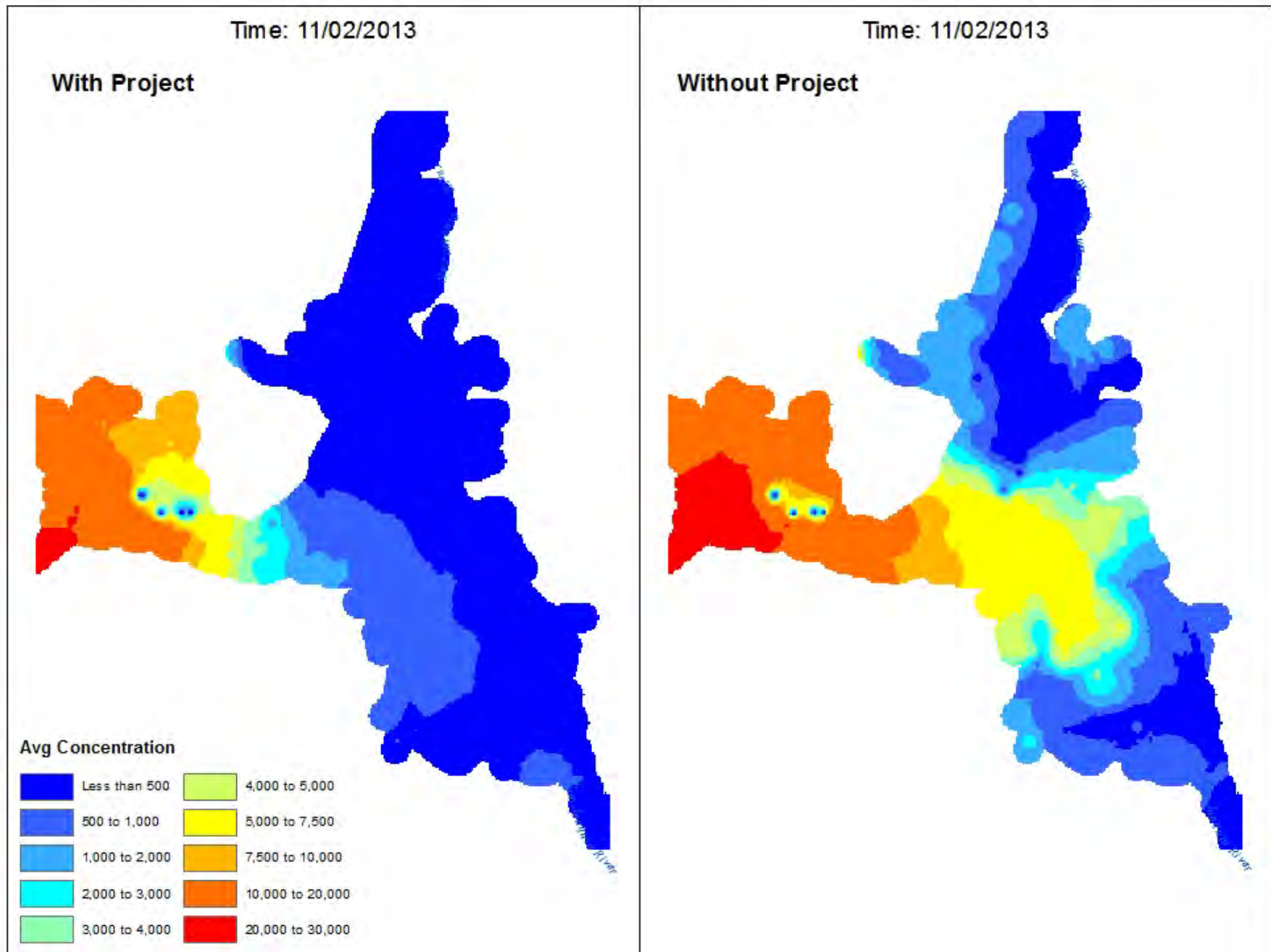


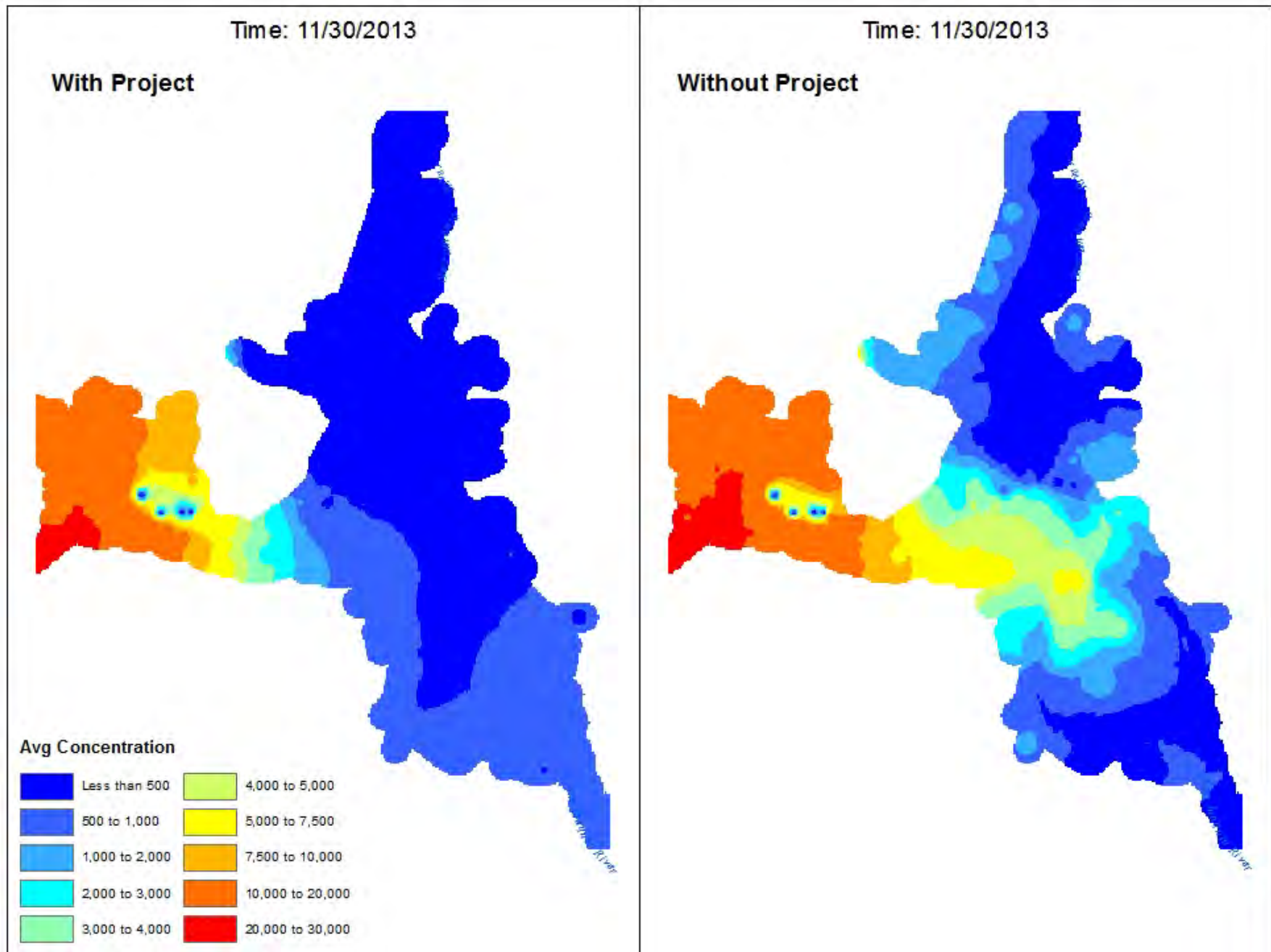


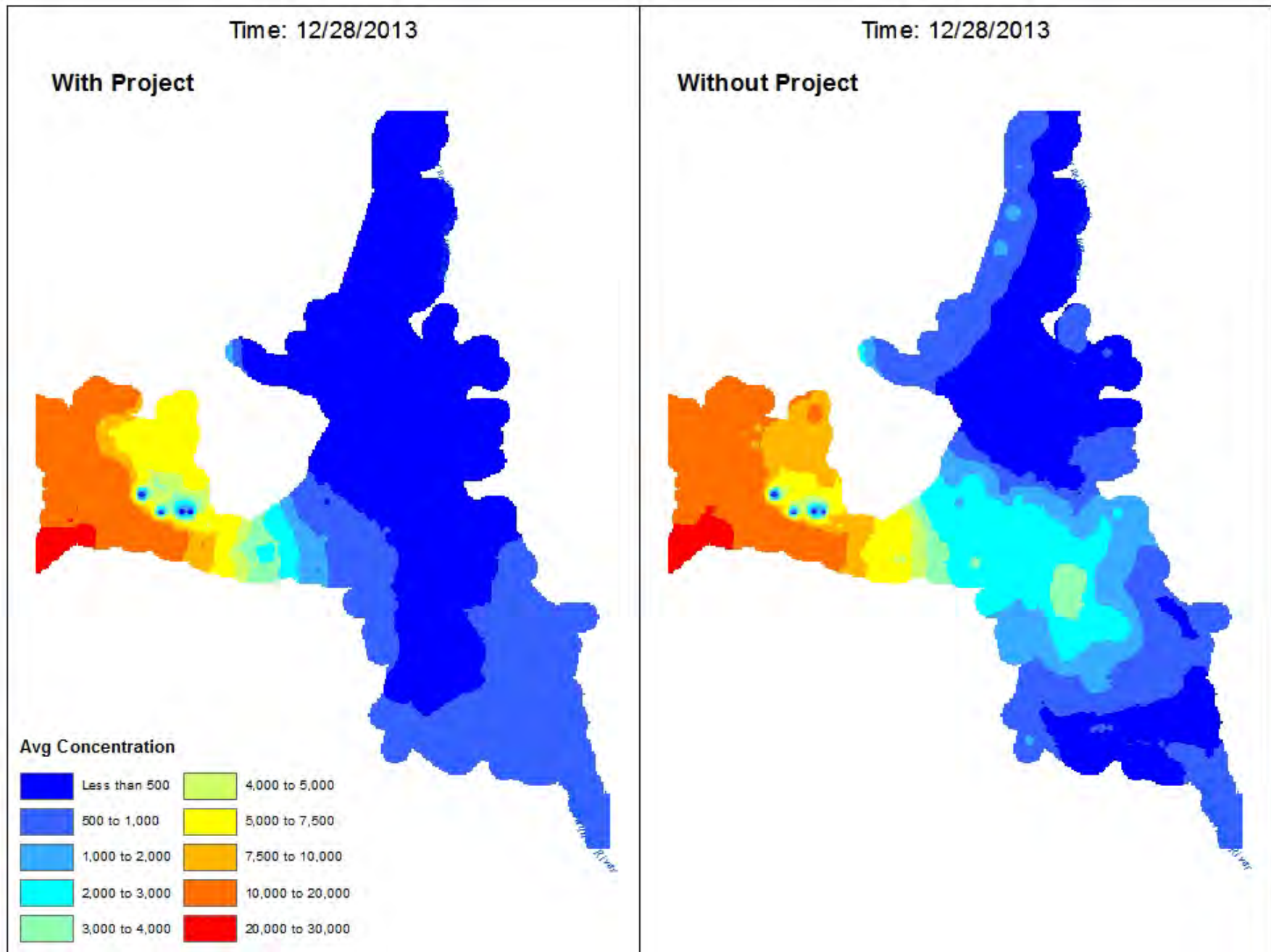


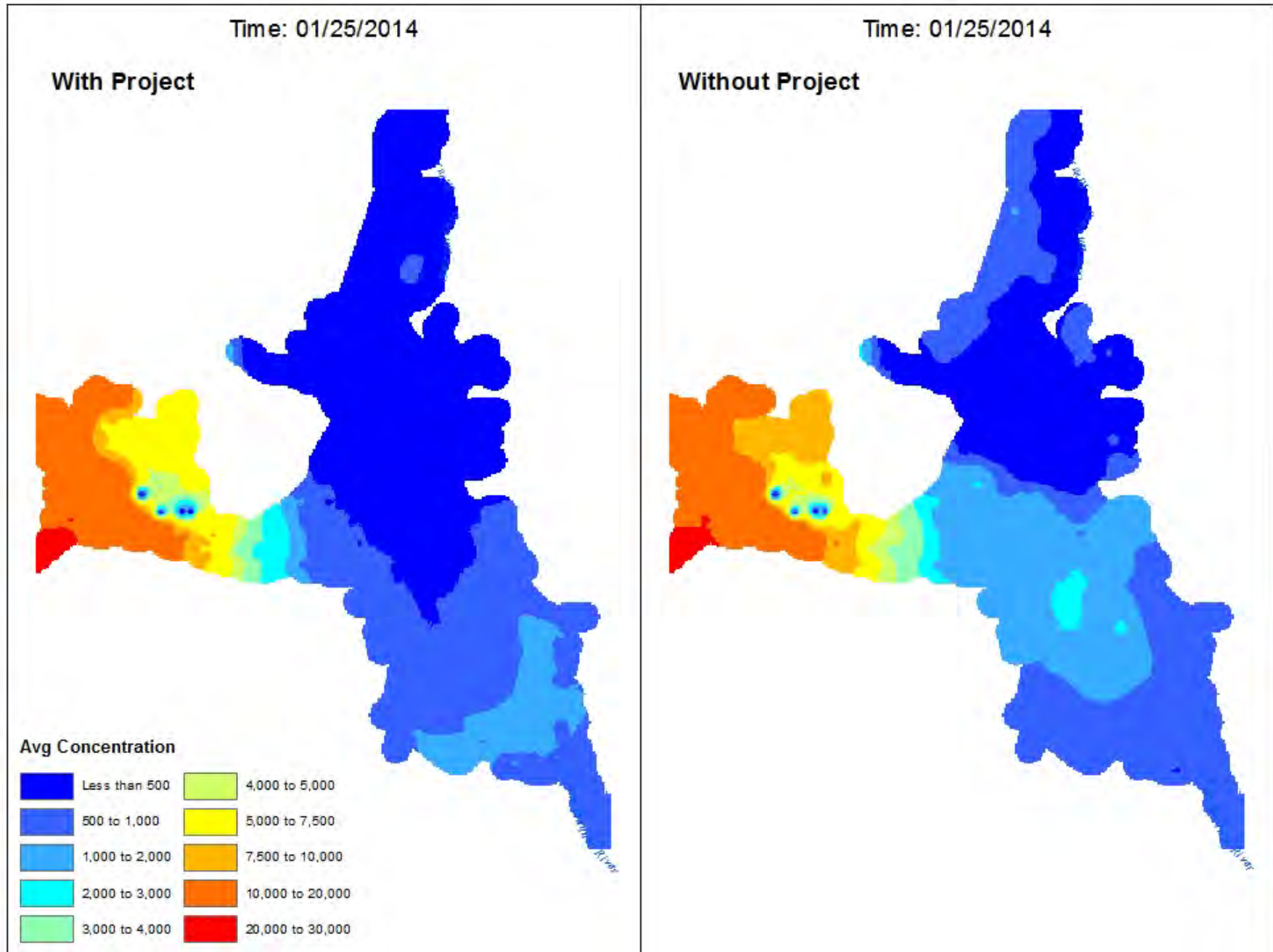


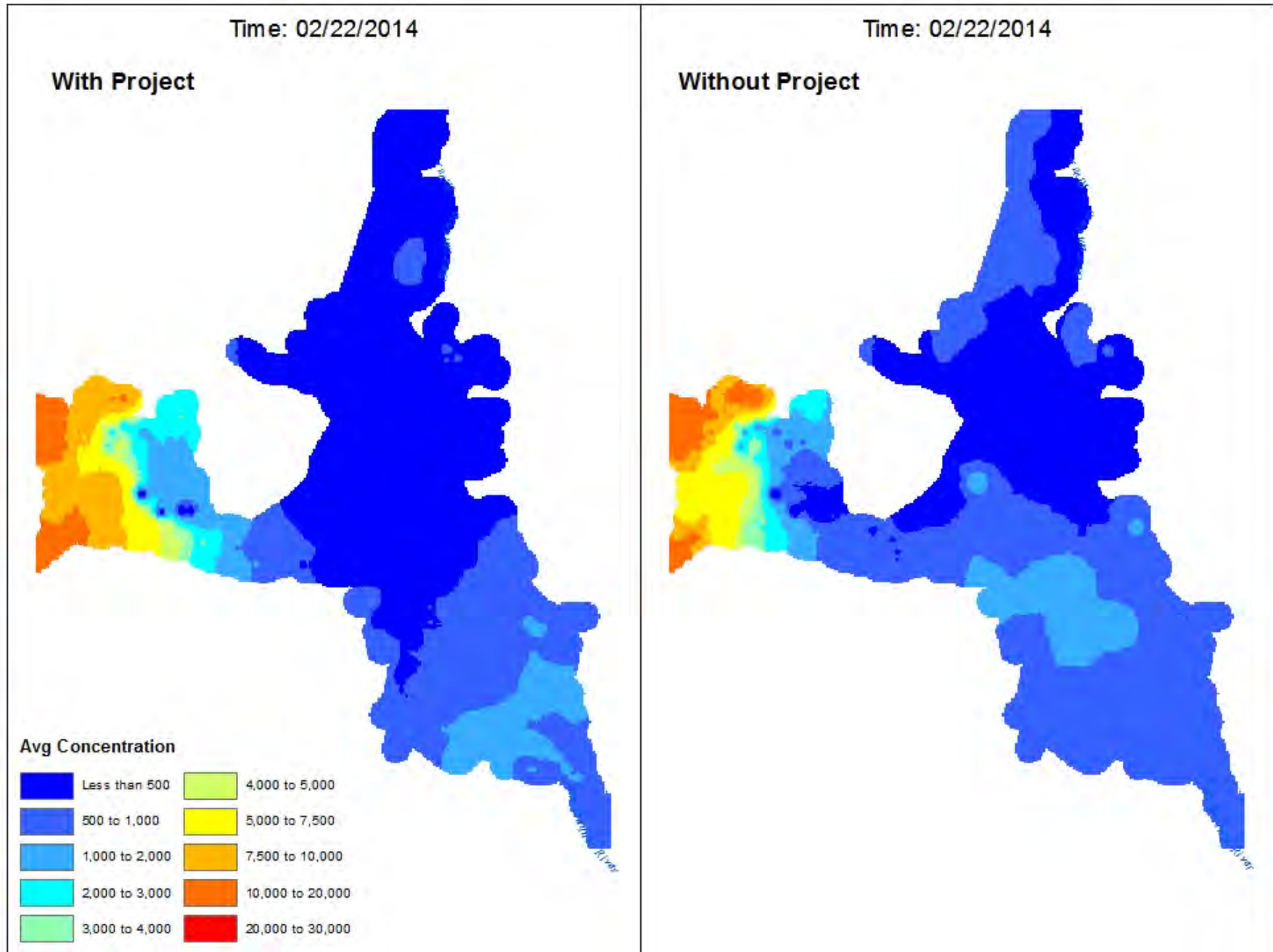


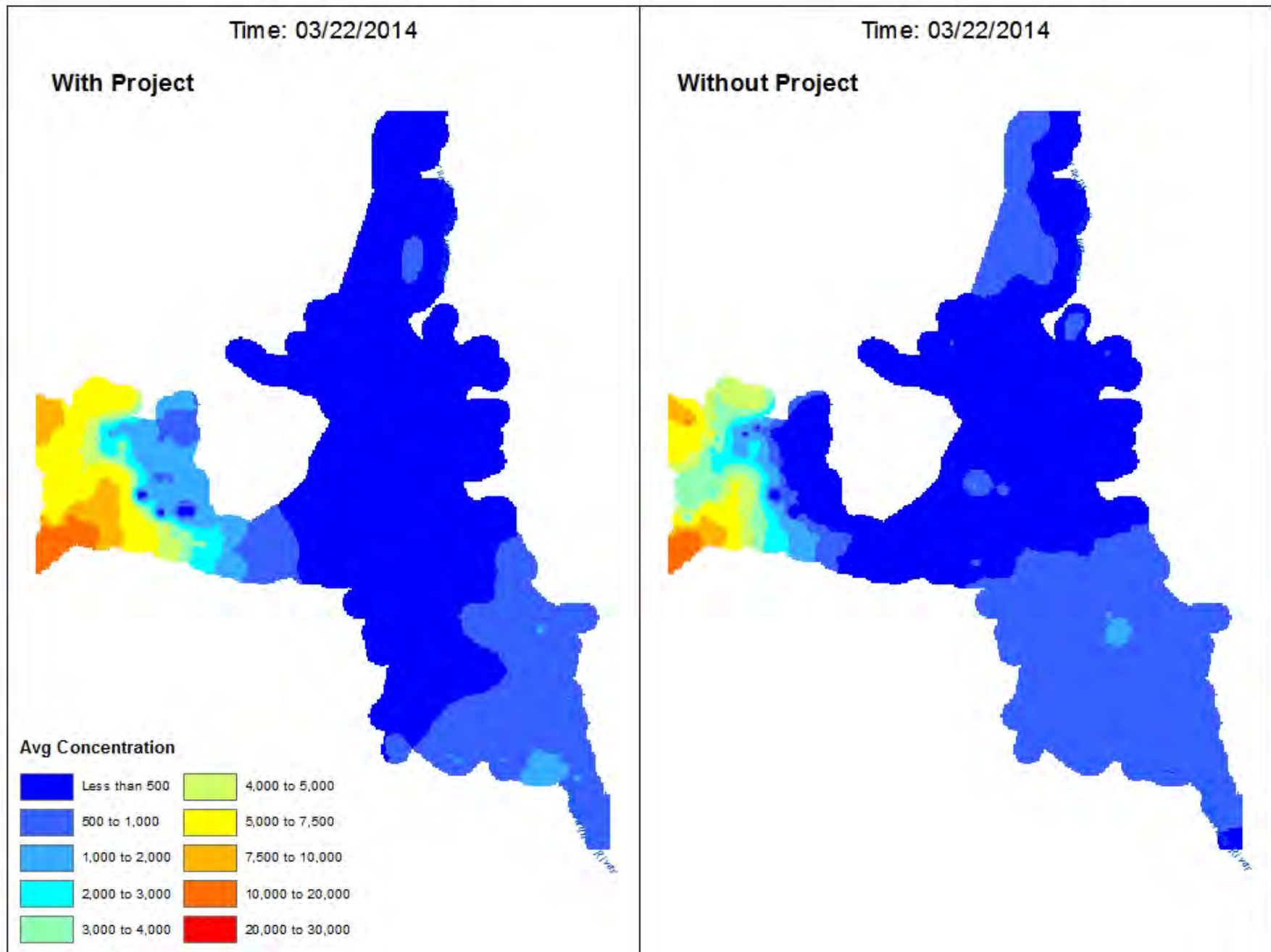


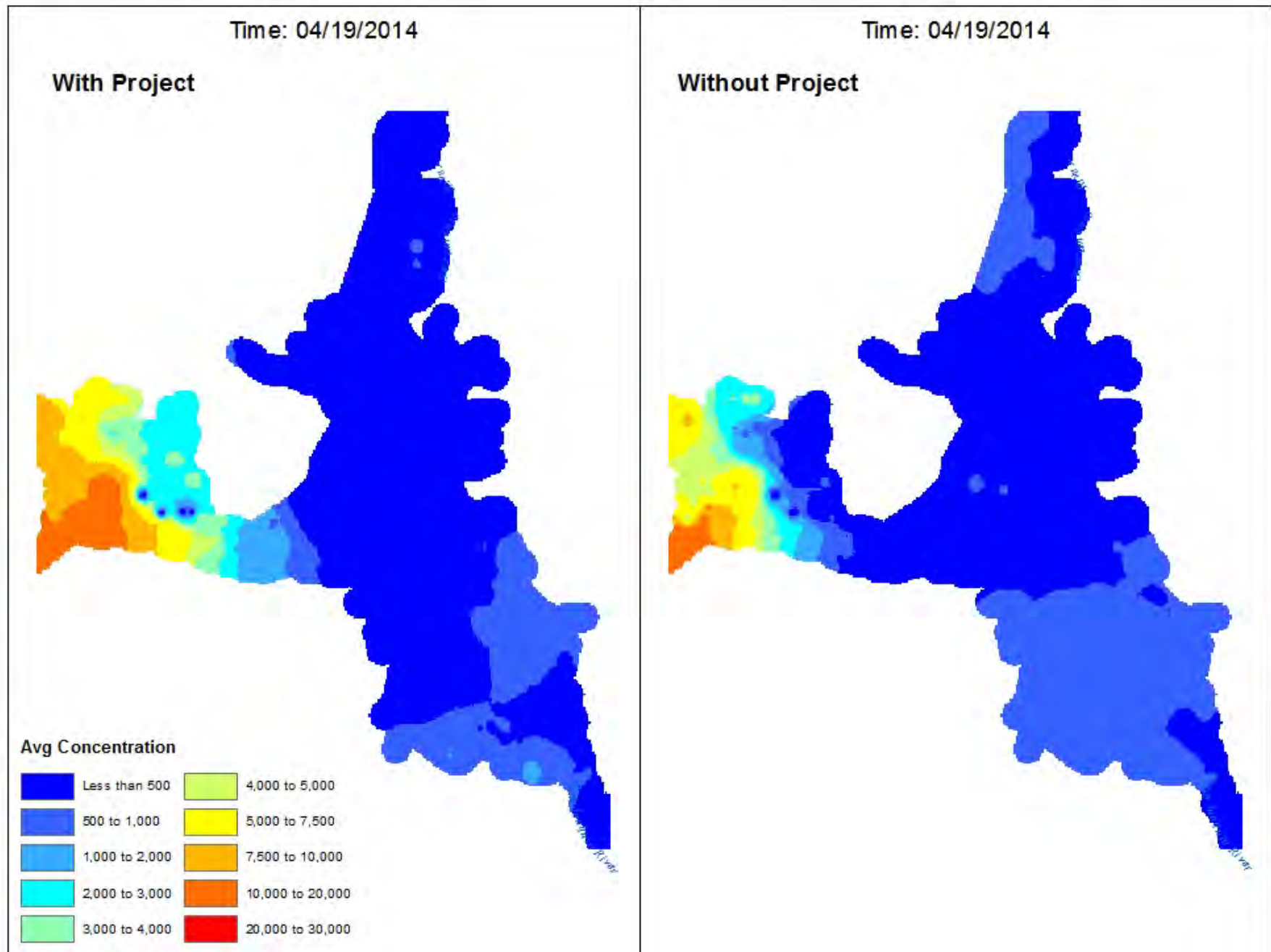


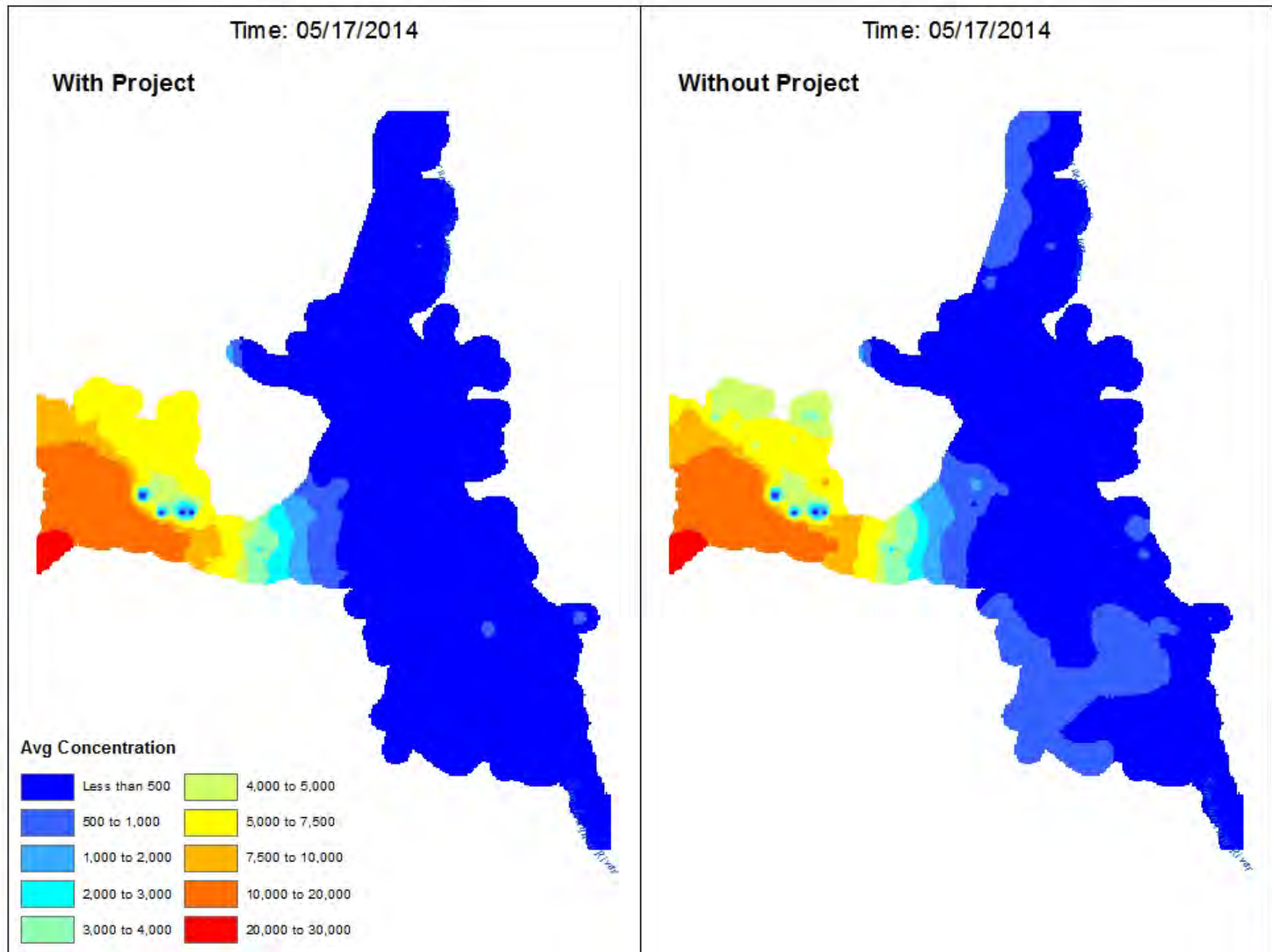


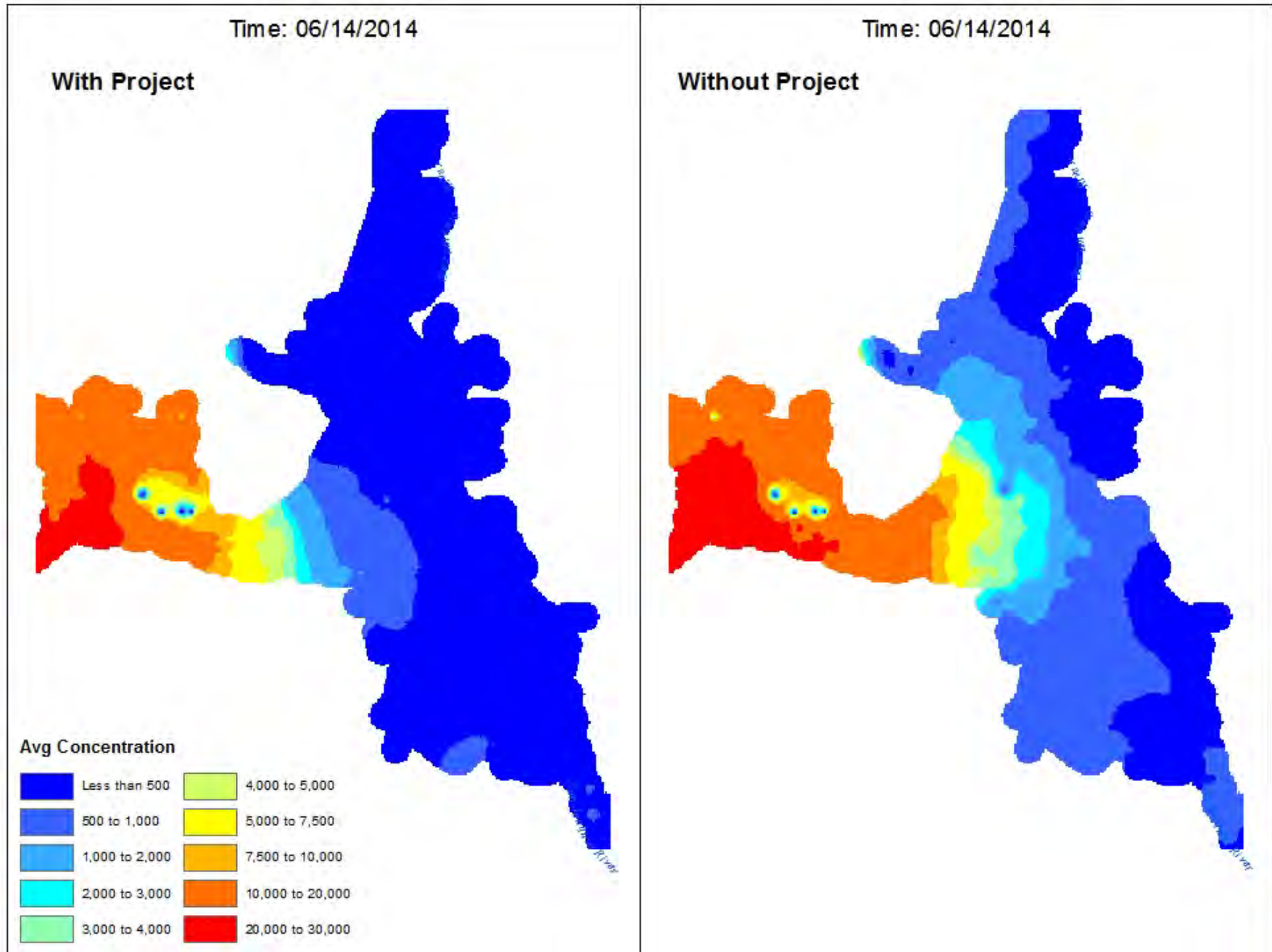


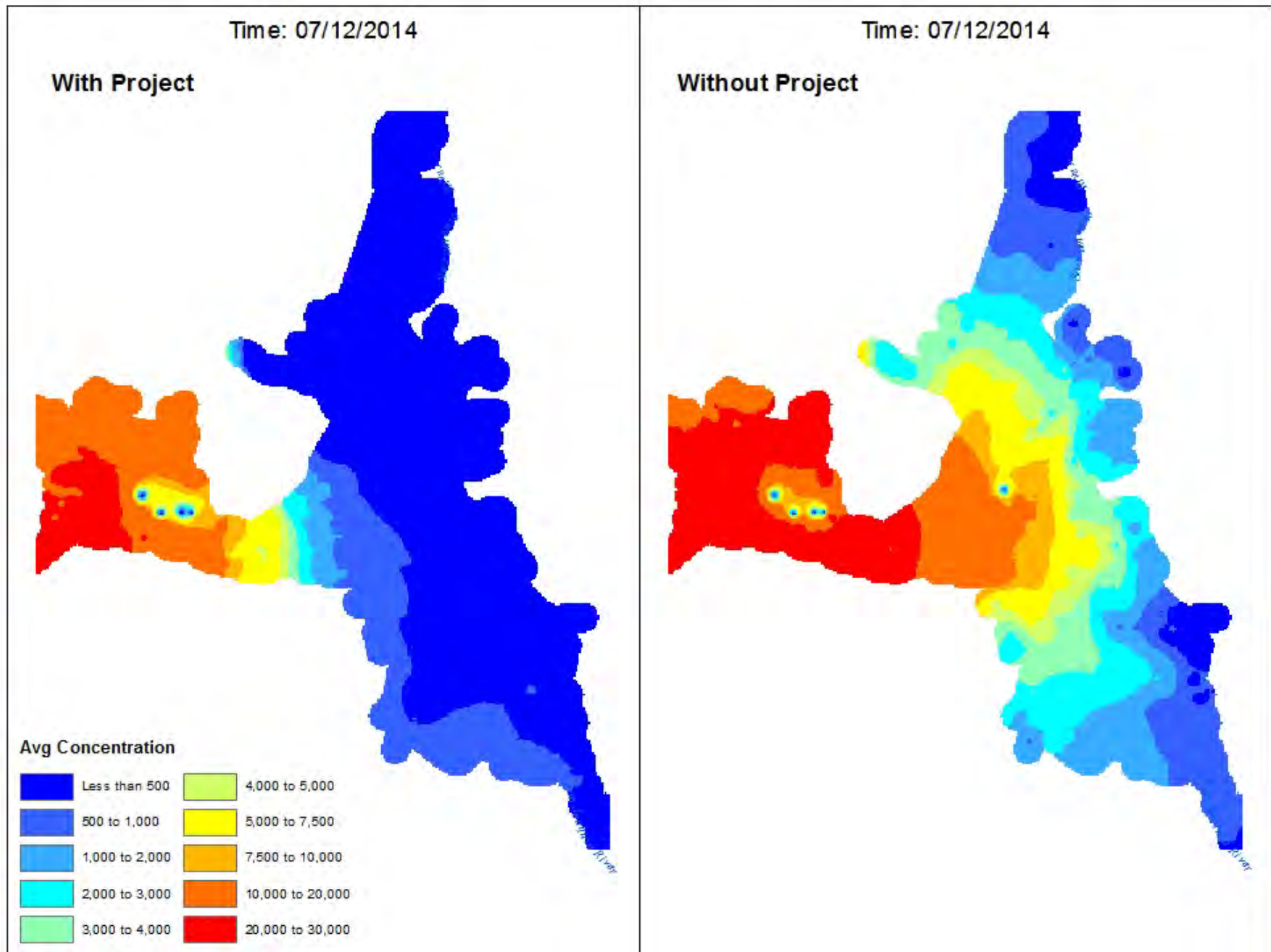


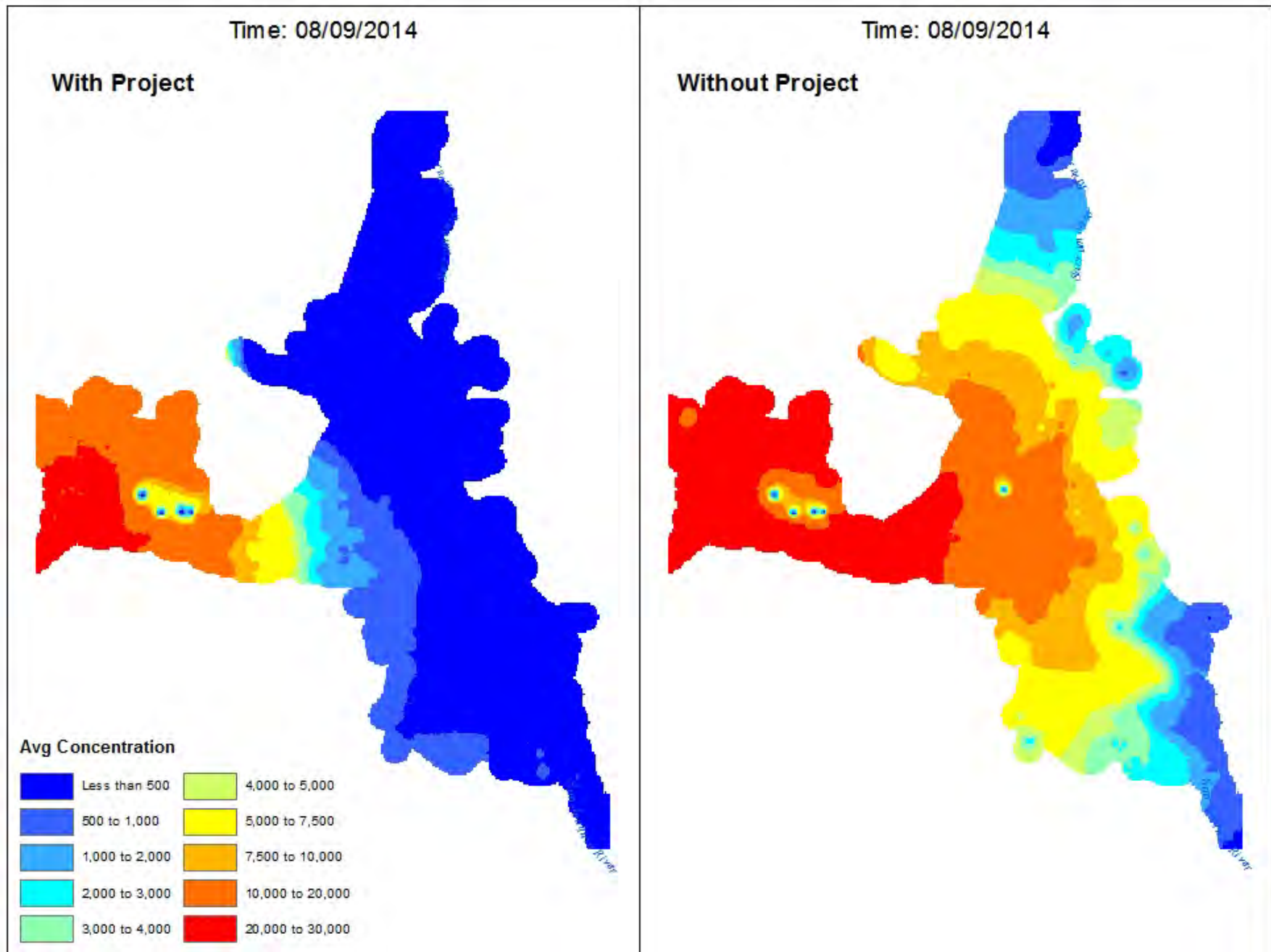


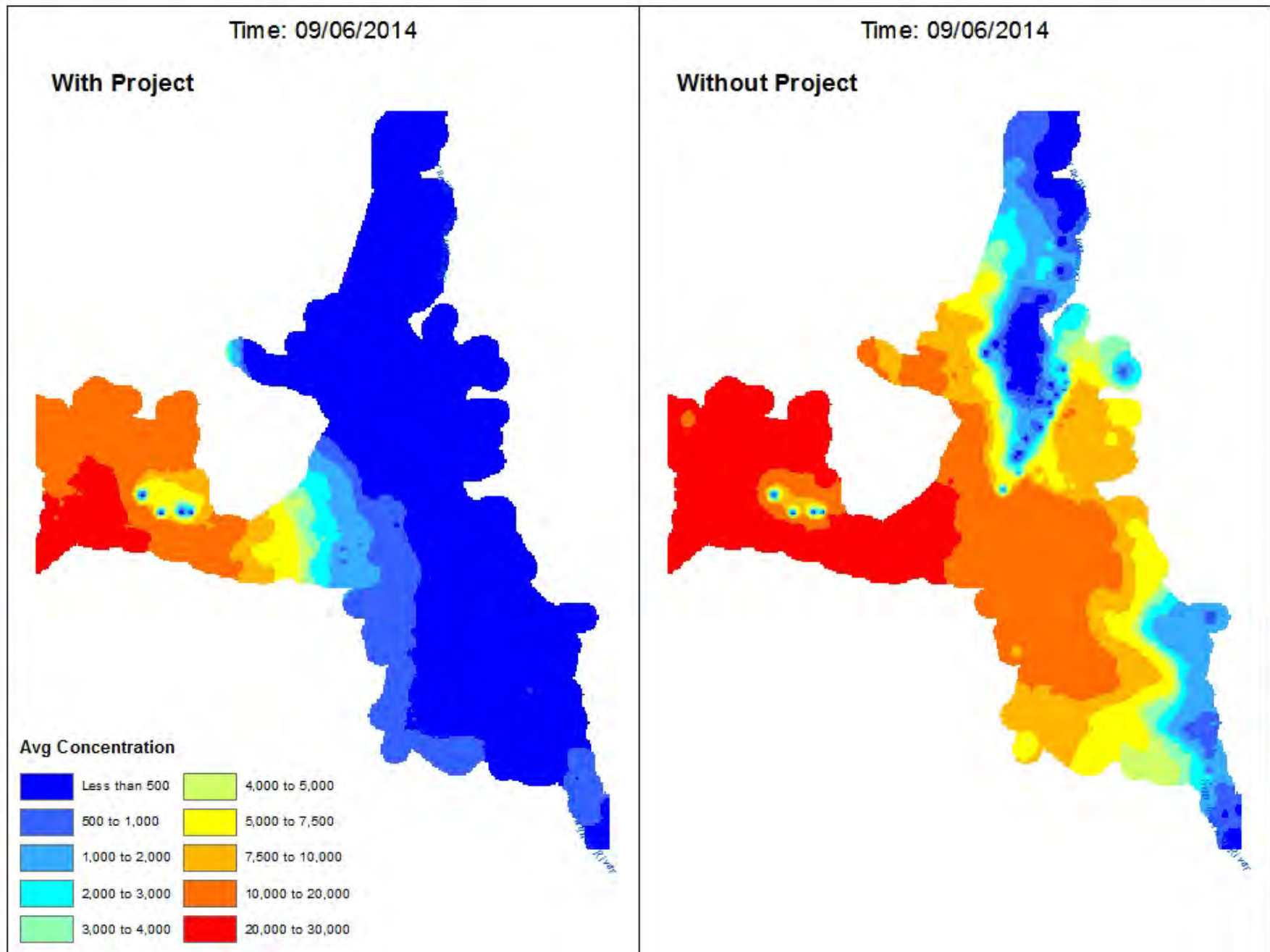


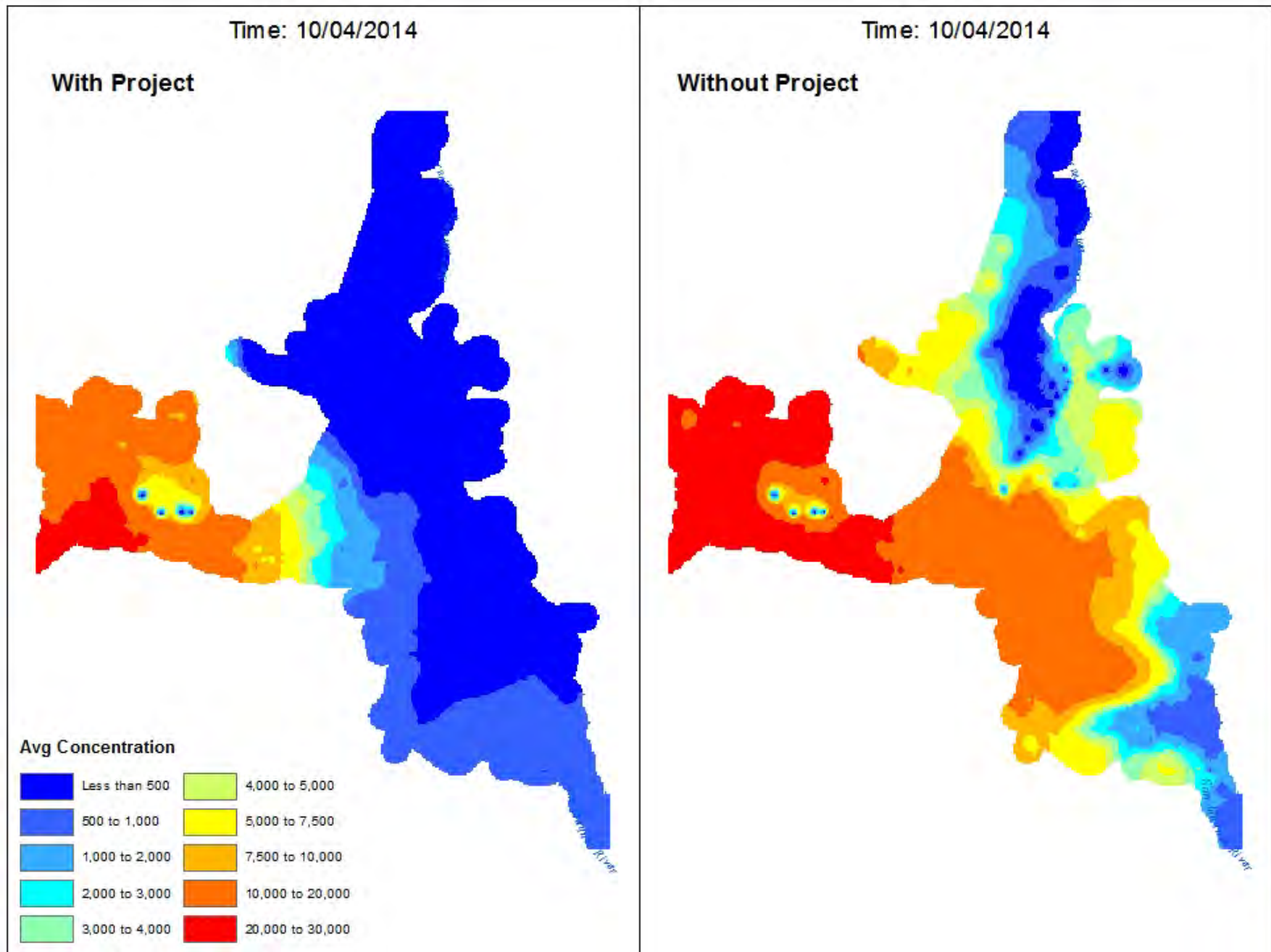


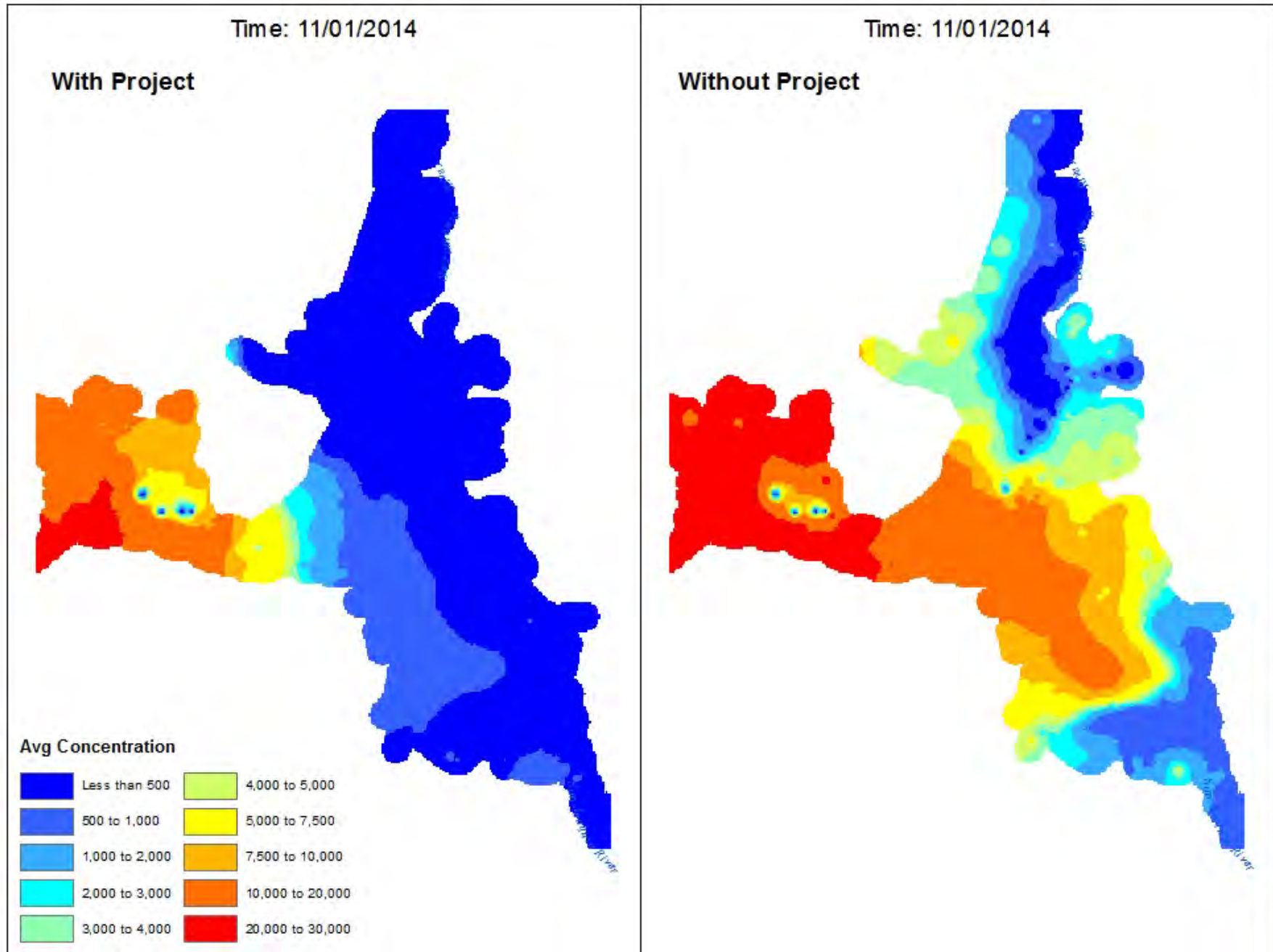


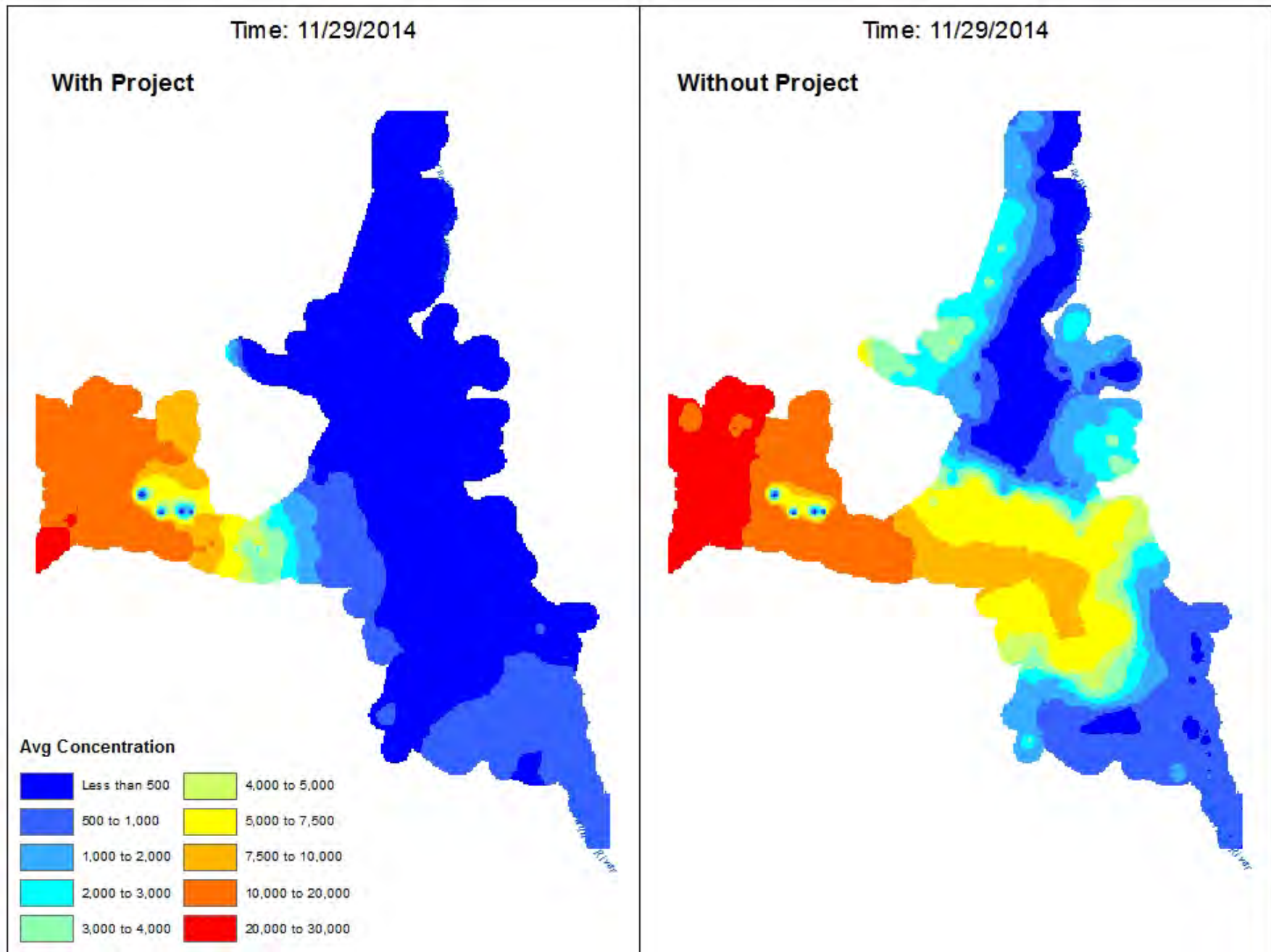


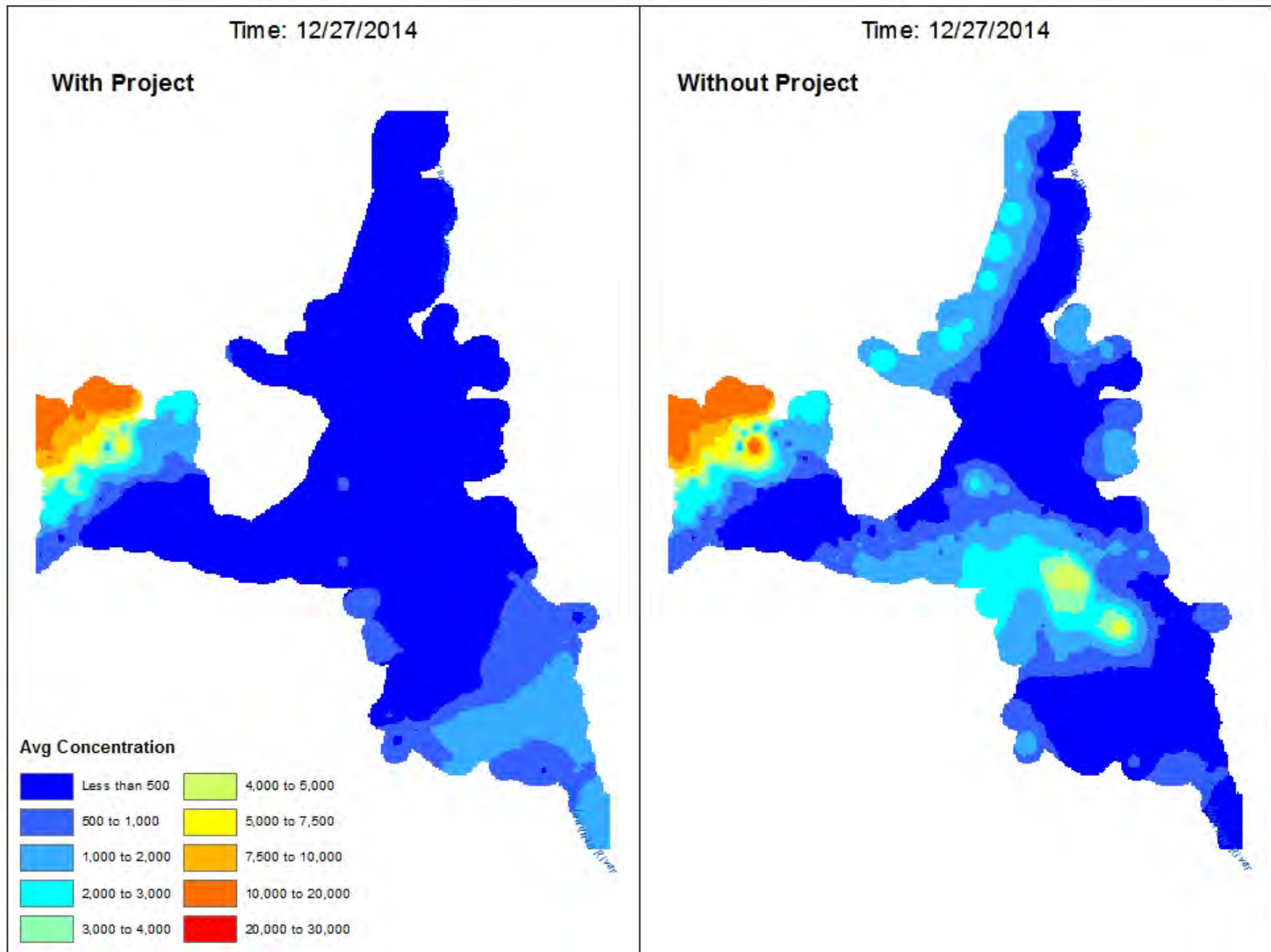


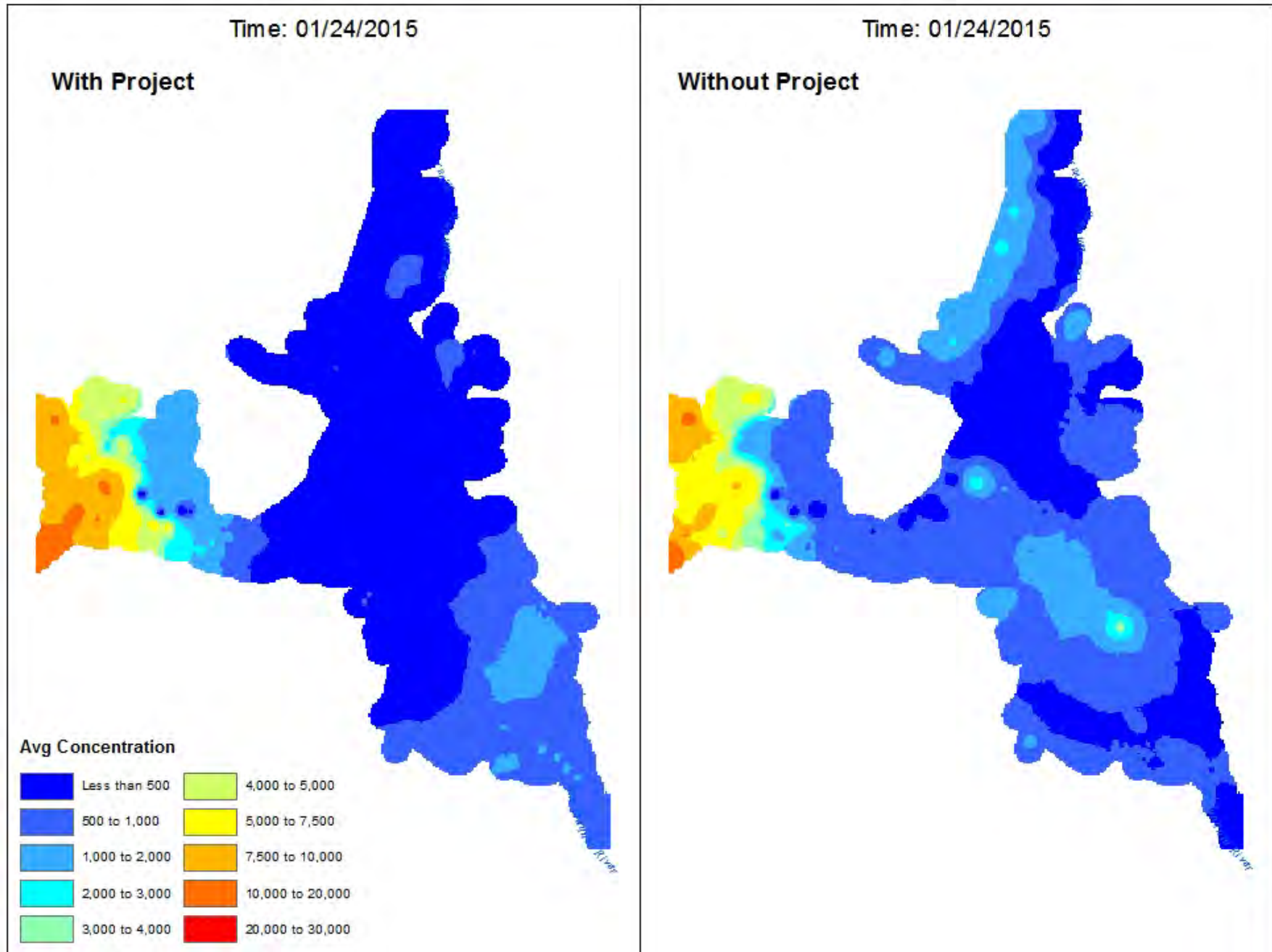


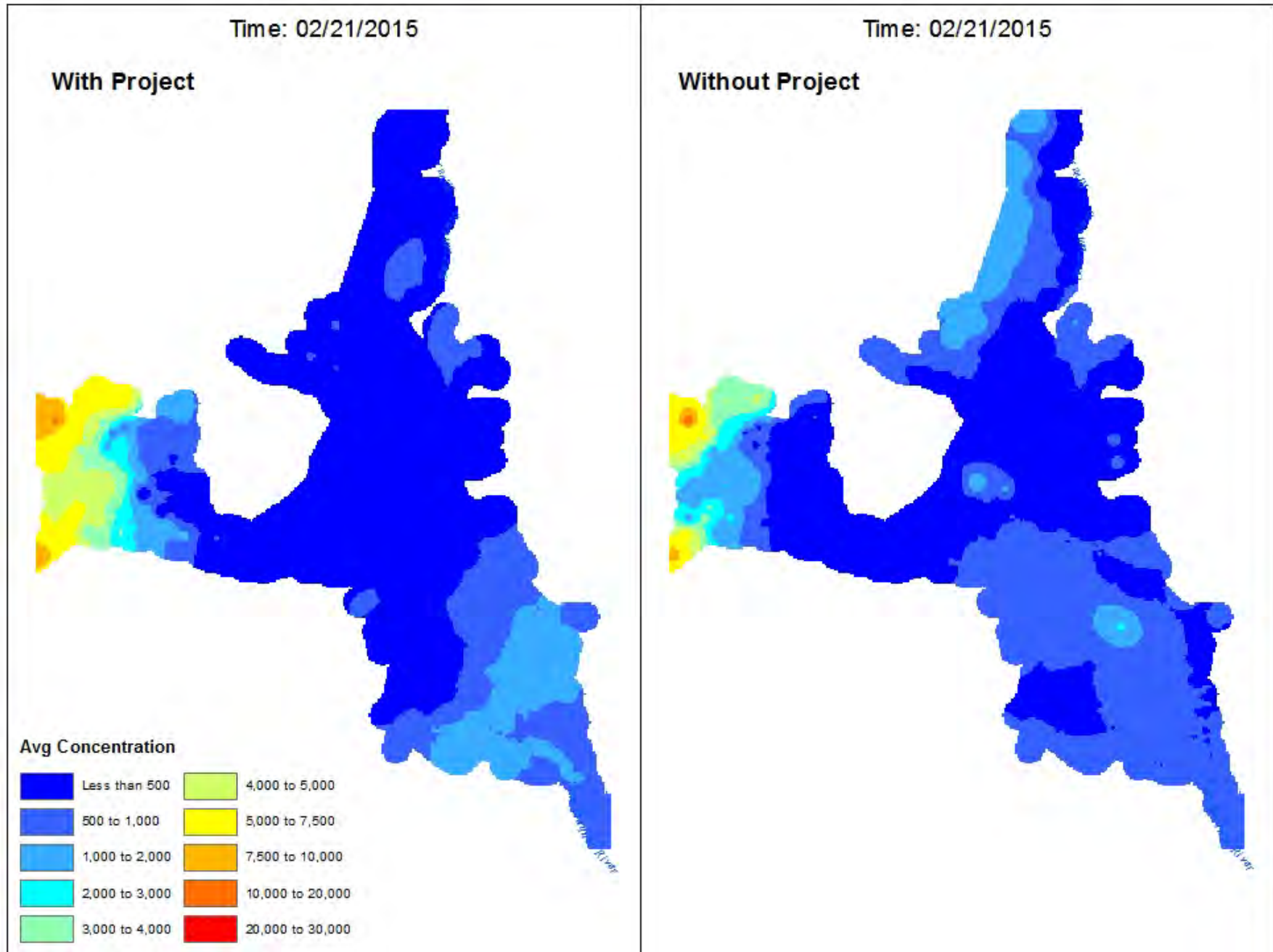


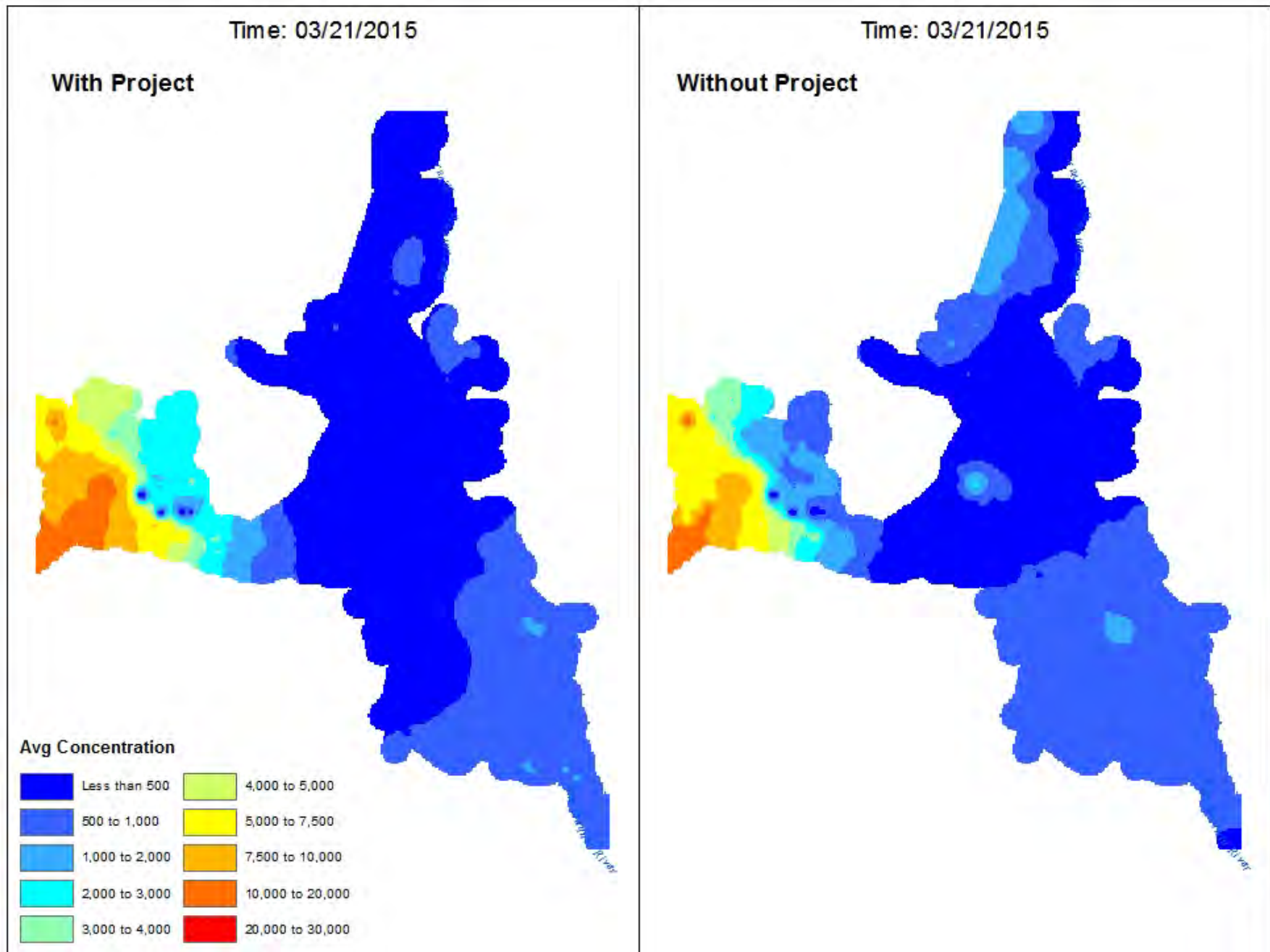


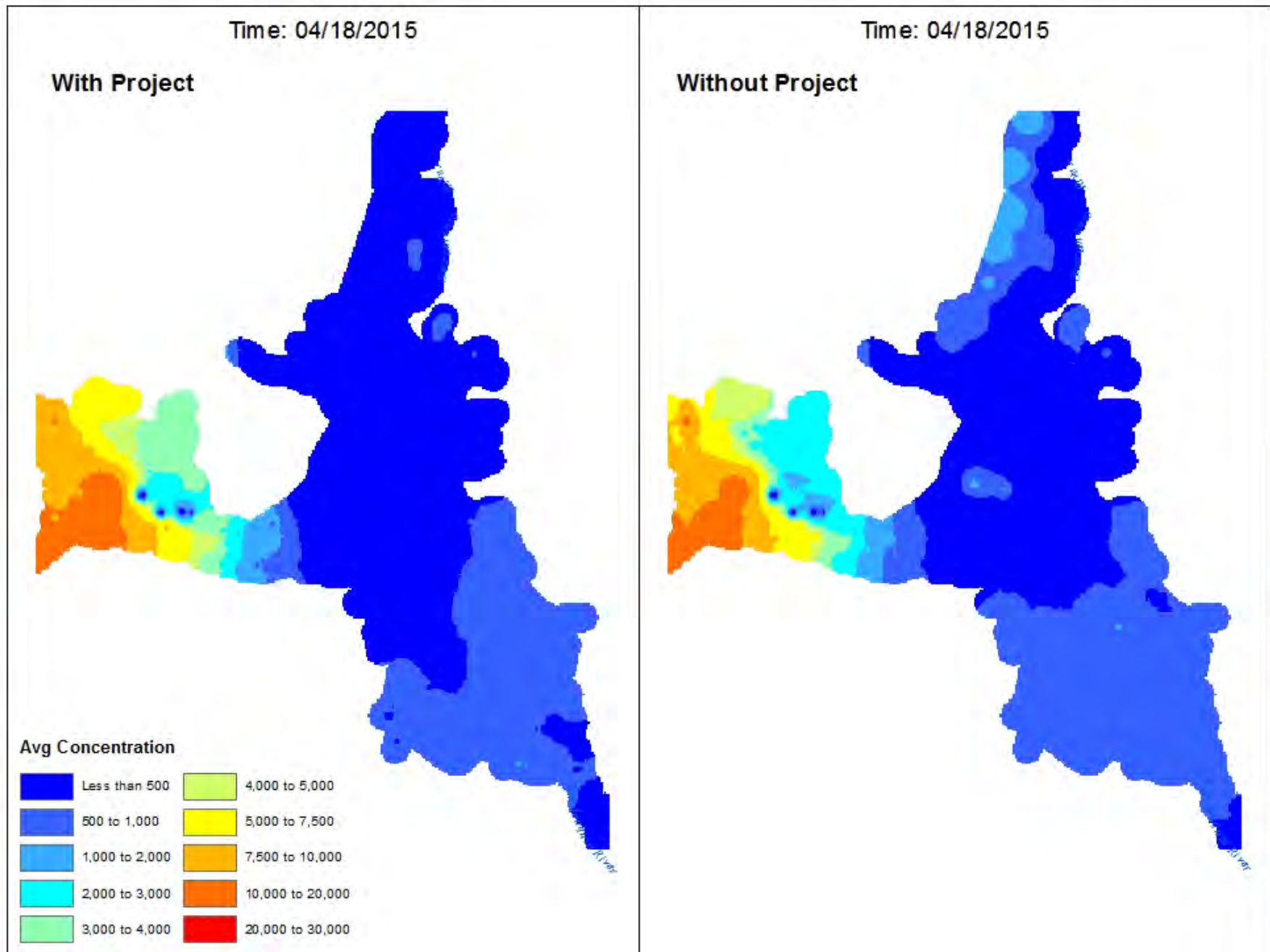


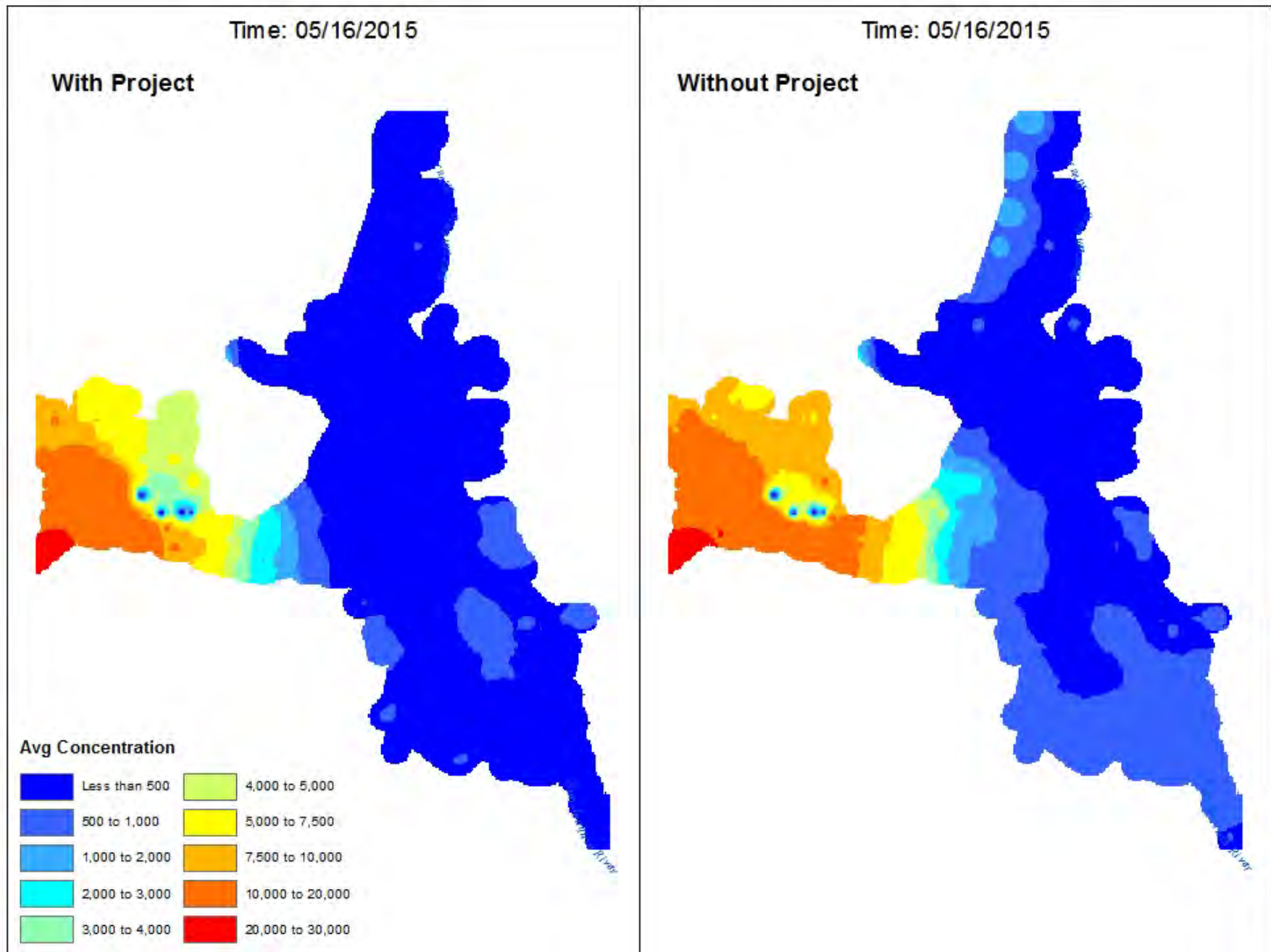


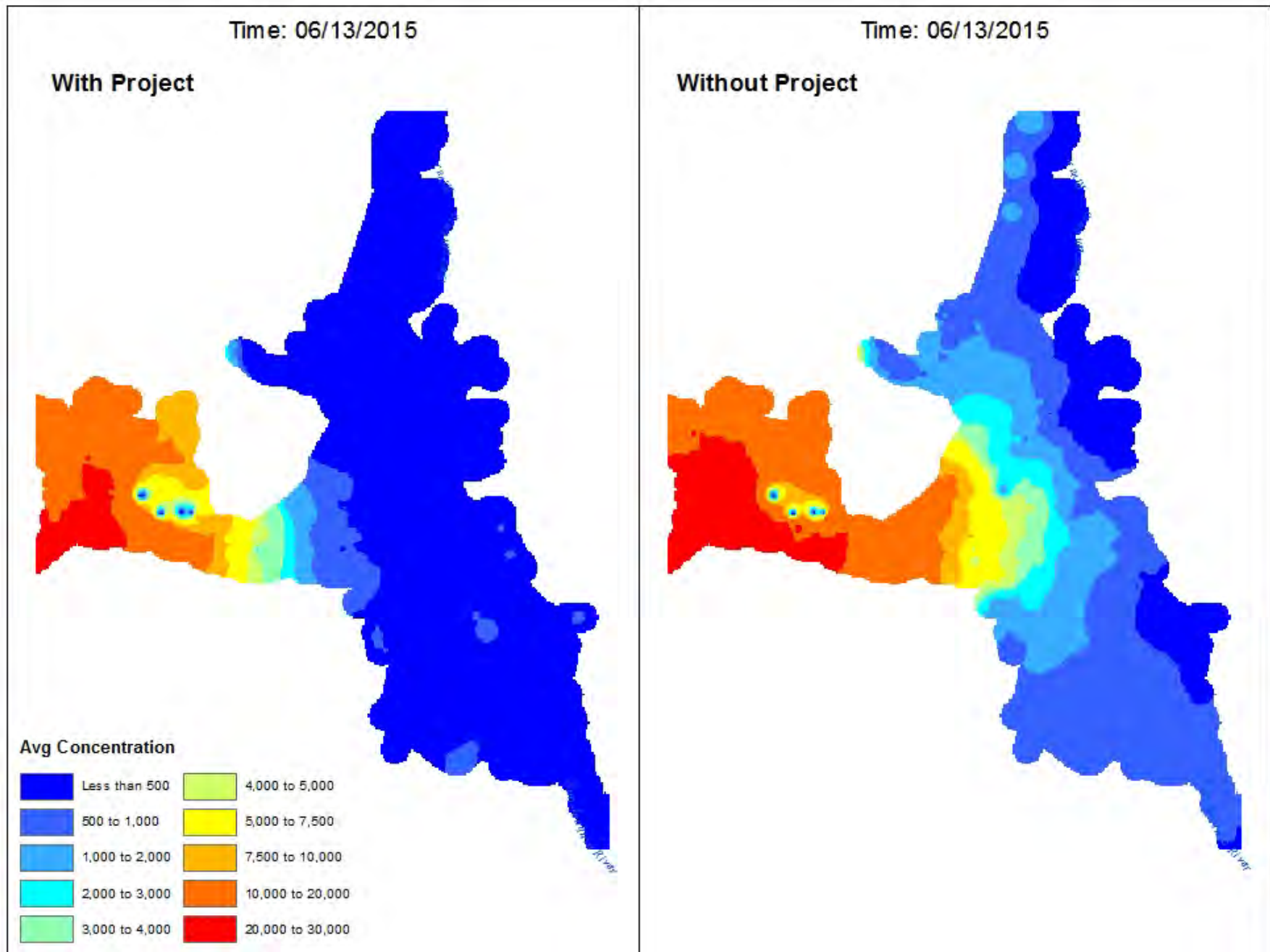


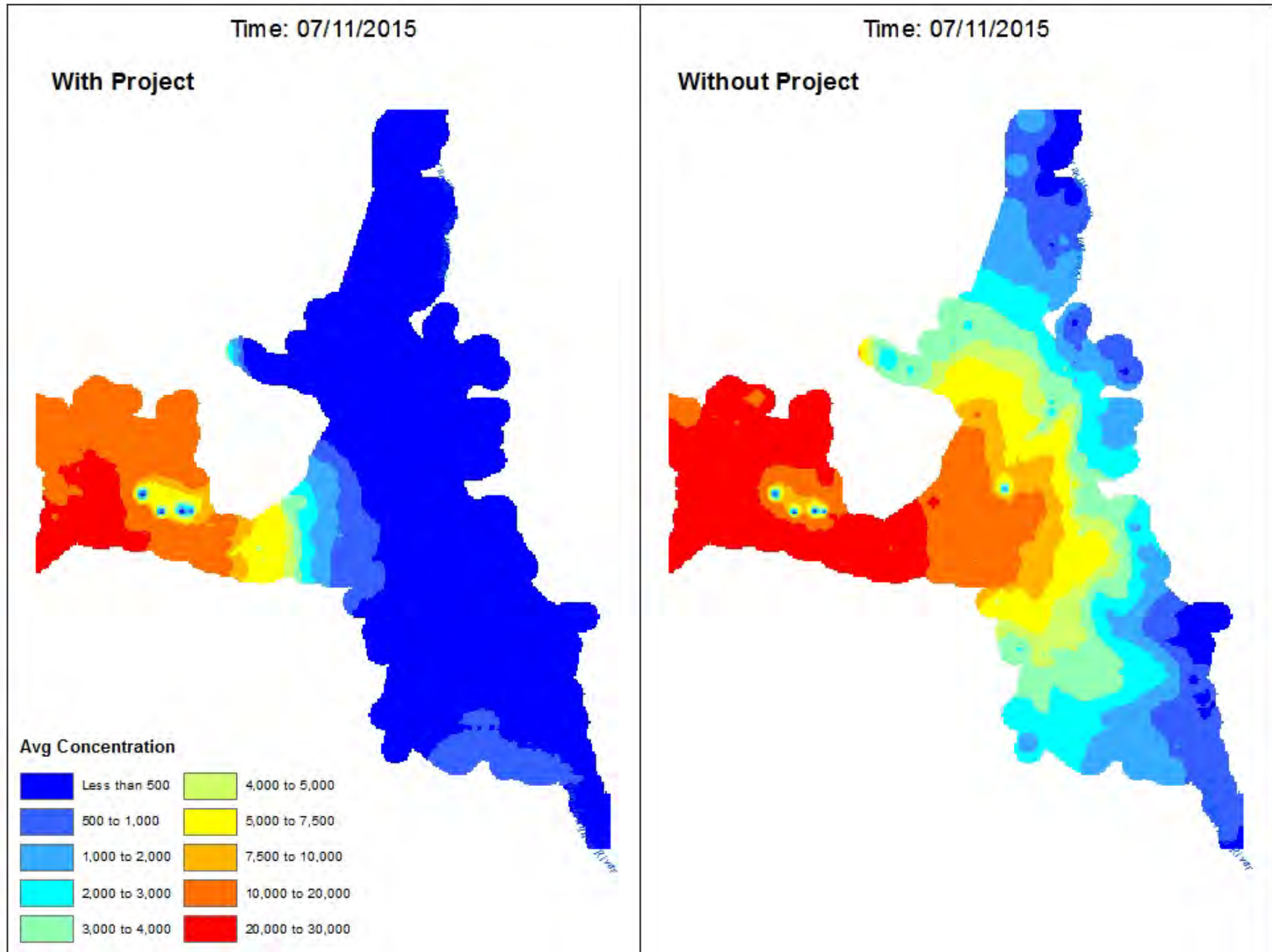


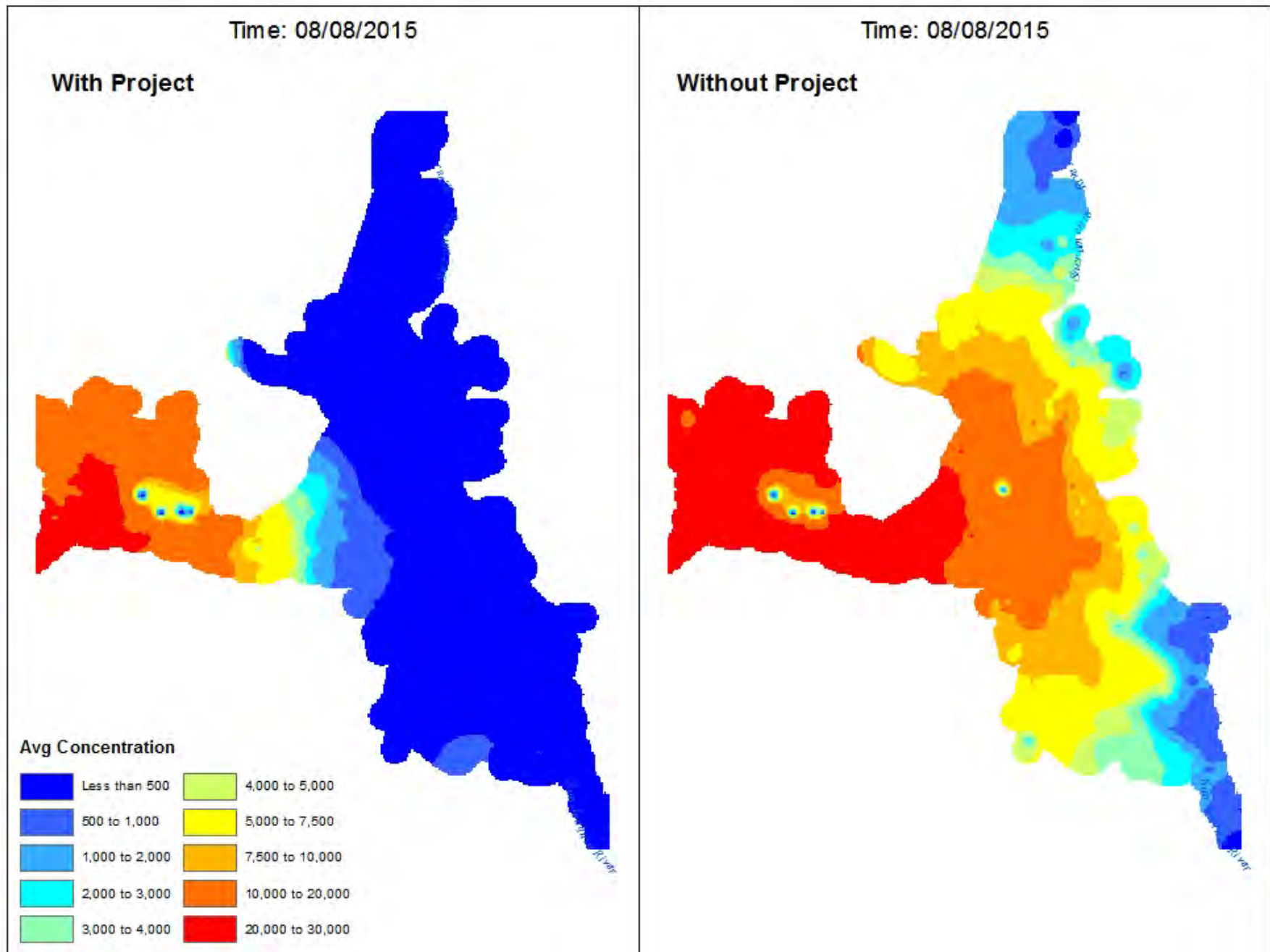


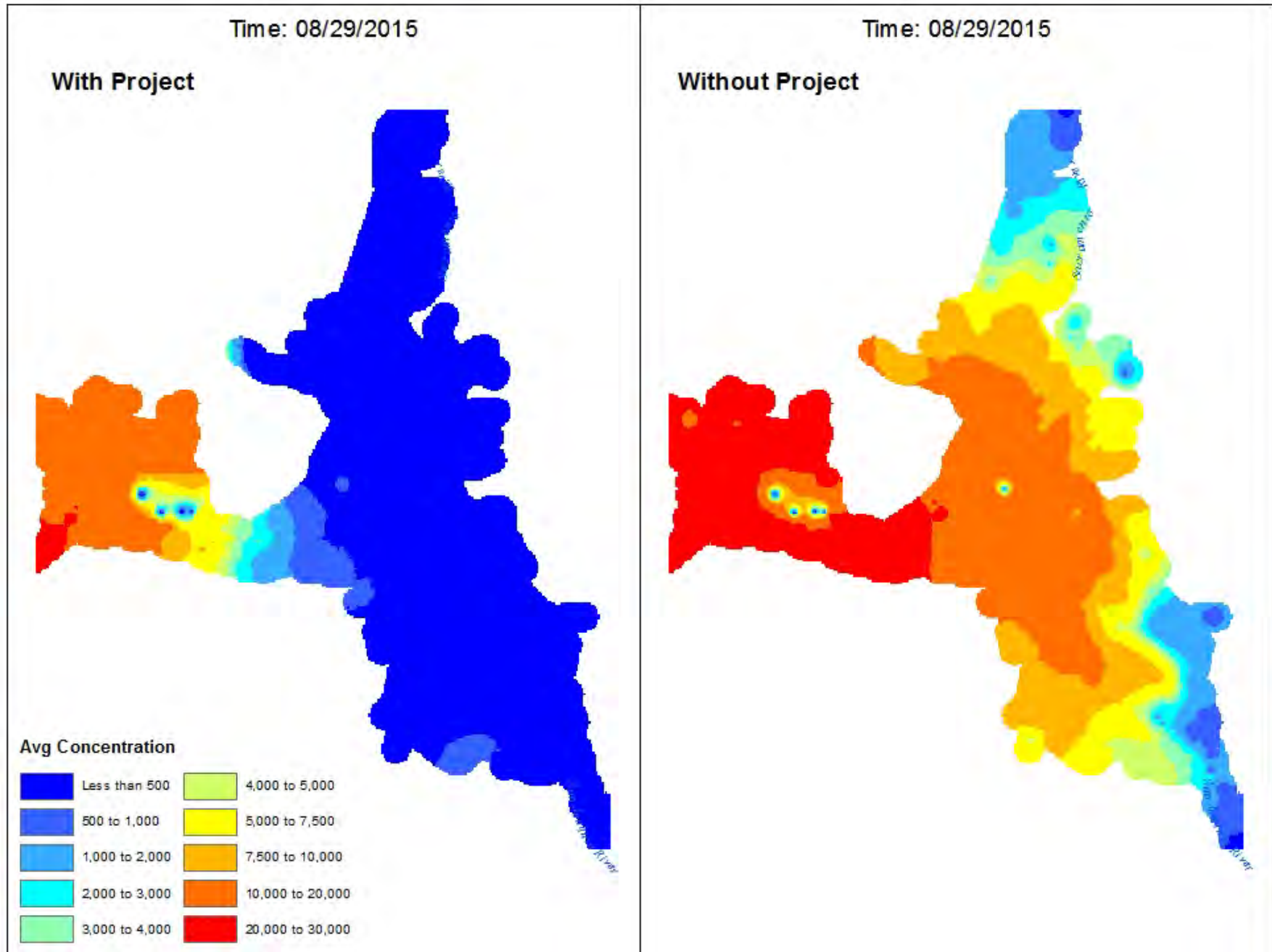












Appendix A: Methodology to Estimate Vernalis Salinity Under Without Project Conditions (from USBR & SDWA 1980) – provided by SWC

Calculate Salt Load Based on Flow (Table VI-7, page 89)

TABLE VI - 7
CHLORIDE LOAD VS. FLOW COEFFICIENTS AT VERNALIS
1930 - 1950

MONTH	C1	C2	# OF PAIRS*	R
OCTOBER	.3416451758E+03	.7238303788	7	.993
NOVEMBER	.3393044927E+03	.6880766404	6	.987
DECEMBER	.3639052910E+03	.6787756342	7	.972
JANUARY	.3928349175E+03	.6231583178	10	.965
FEBRUARY	.5368474514E+03	.5675747831	9	.914
MARCH	.4968879101E+03	.6035477710	10	.951
APRIL	.3866605718E+03	.5624873484	9	.942
MAY	.3805863844E+03	.5399998219	9	.920
JUNE	.6355065225E+03	.5175446121	9	.849
JULY	.6038658134E+03	.6219848451	8	.900
AUGUST	.3874538954E+03	.7410226741	8	.991
SEPTEMBER	.3500905302E+03	.7524035817	8	.989

* # OF PAIRS DOES NOT INCLUDE RESTRICTION POINT (.5,200)

$$y = C1*(X)^{C2}$$

Convert Salt Load to Chloride Concentration (page 110)

$$p/m = \frac{\text{Load}}{\text{Flow} \times 1.36}$$

where,

p/m = parts per million Cl⁻
Load = chloride load in tons
Flow = 1,000's of acre-feet

Calculate Specific Conductance EC from Chloride Concentration (page 86)

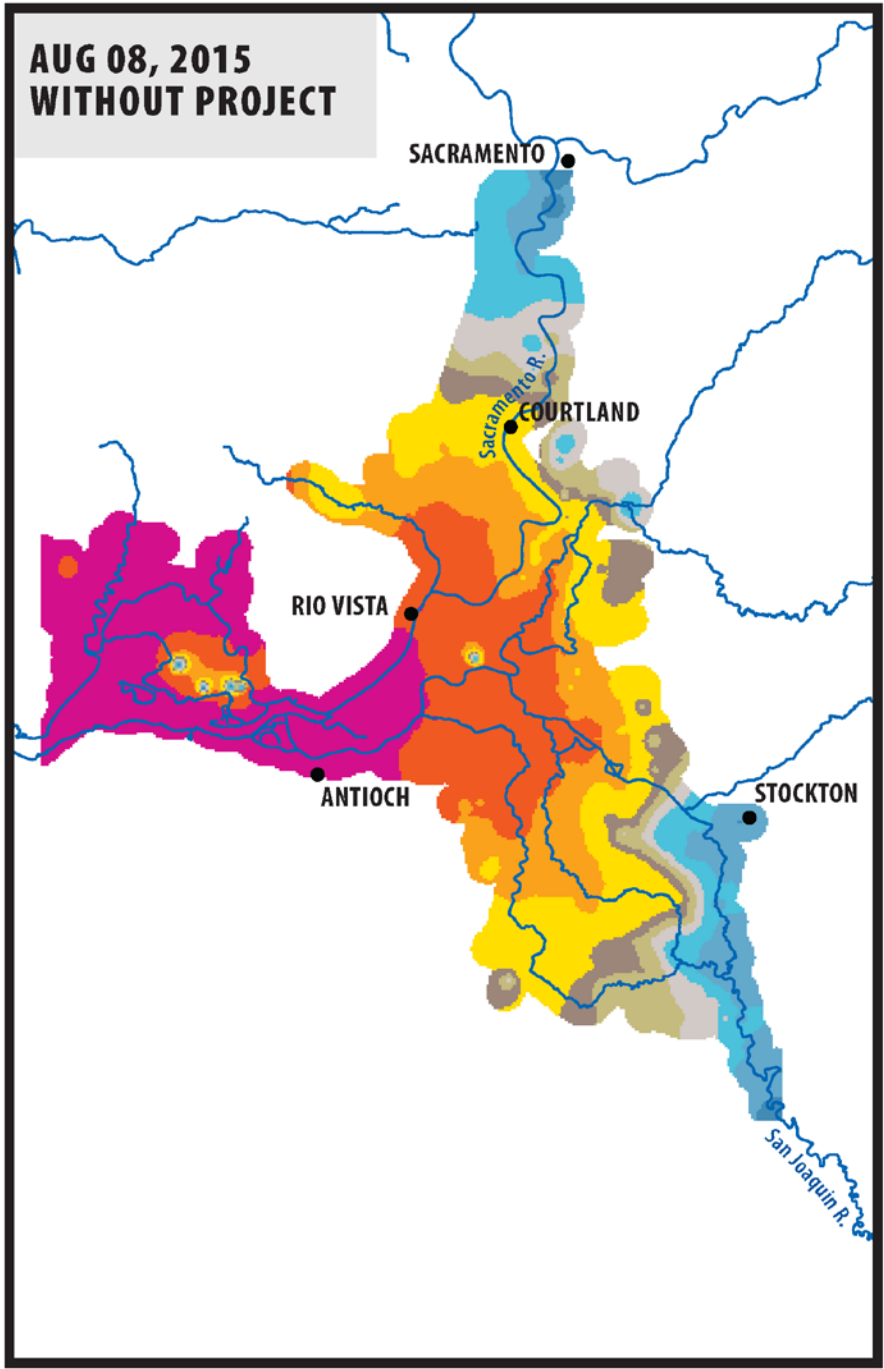
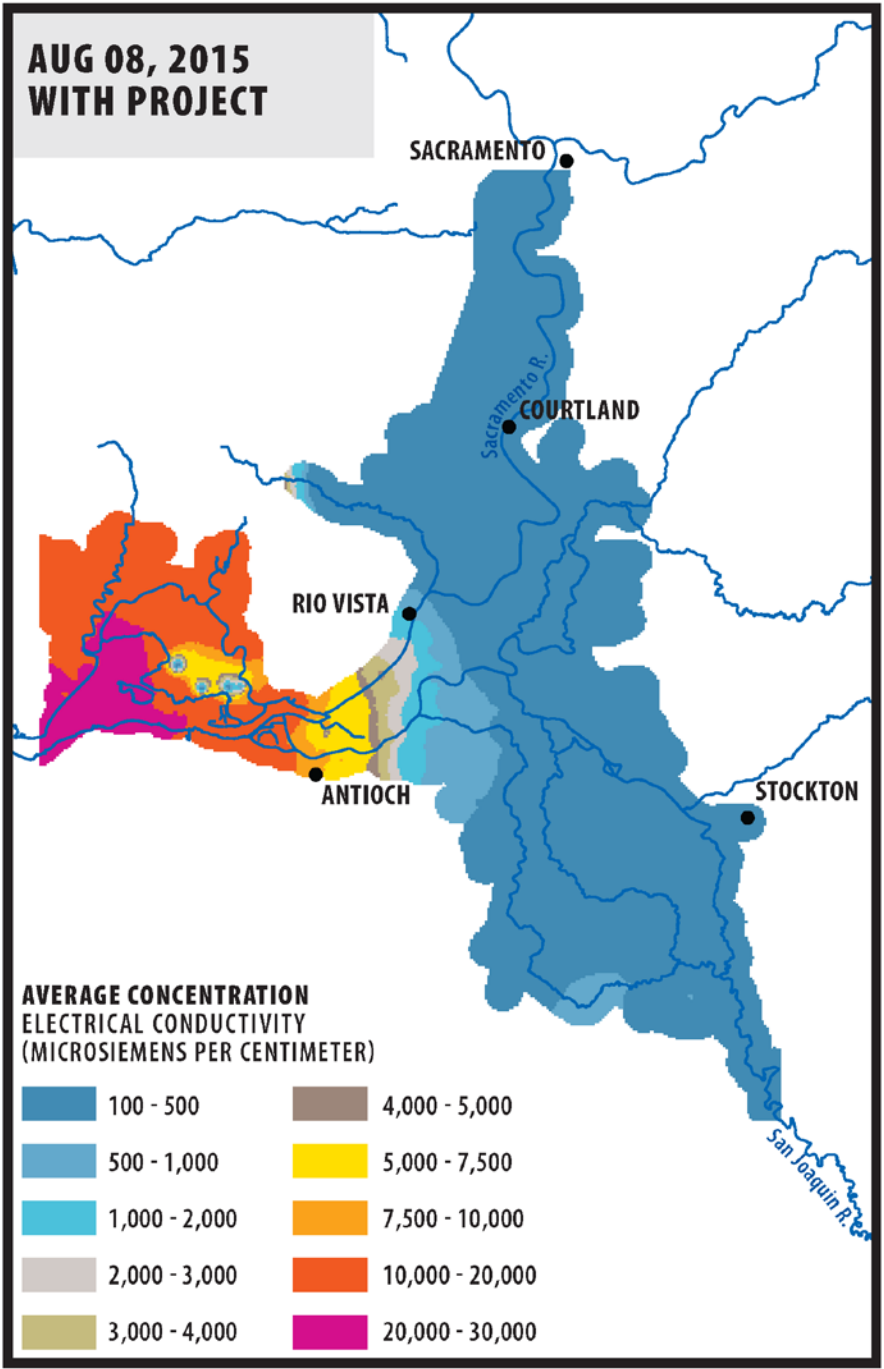
$$\text{Cl}^- = 0.15 \text{ EC} - 5.0 \quad (2a)$$
$$0 < \text{EC} < 500$$

$$\text{Cl}^- = 0.202 \text{ EC} - 31.0 \quad (2b)$$
$$500 < \text{EC} < 2000$$

Rearranging the equations to solve for EC yields:

$$\text{EC} = (\text{Cl}^- + 5.0) / 0.15 \quad 0 < \text{EC} < 500$$

$$\text{EC} = (\text{Cl}^- + 31.0) / 0.202 \quad 500 < \text{EC} < 2000$$





July 23, 2014

Via E-mail

Ms. Barbara L. Evoy, Deputy Director
Division of Water Rights
State Water Resources Control Board
1001 I Street
Sacramento, CA 95814
bevoy@waterboards.ca.gov

Dear Ms. Evoy:

The California Department of Water Resources and United States Bureau of Reclamation ("Project Agencies") submit this letter to request the State Water Resources Control Board ("State Water Board") through the Deputy Director use the authority granted to her under the recently adopted Emergency Regulations, Title 23 to the California Code of Regulations, section 879(c), and order south and central Delta diverters claiming riparian and pre-1914 water rights to provide the State Water Board with information that (1) supports the basis of any asserted right or rights, and (2) reflects the quantity of water diverted and expected to be diverted. The Project Agencies acknowledge that, notwithstanding the general information contained herein and the information already in the State Water Board's possession, consideration of our objections to diversions of water beyond a valid water right would be further informed by information obtained from south and central Delta diverters regarding their asserted rights and actual water use. The Water Agencies submit that absent information to the contrary water stored and released by the State Water Project and the Central Valley Project ("Water Projects") and water acquired by the Project Agencies' contractors through transfer and exchange agreements is likely being diverted by south and/or central Delta diverters asserting riparian and pre-1914 water rights.

Diversions by riparian and pre-1914 water rights holder in the south and central Delta contribute to additional loss of stored water due to depletions and further complicate water

management in this extremely dry year. Where water quality standards are controlling Water Project operations, any diversion of stored water by these diverters results in additional releases of stored water or reductions in Project deliveries, and requires a trade-off in the protection of beneficial uses.

It has long been recognized that there is uncertainty as to the basis for and extent of the riparian and pre-1914 water rights being asserted in the south and central Delta. This uncertainty was recognized in the final report of the Governor's Commission to Review California Water Rights Law, which identified riparian rights statewide as one of the three sources of uncertainty in California water law because riparian water rights are unrecorded and generally unquantifiable based on existing information. (*Governor's Commission to Review California Water Rights Law, Final Report (1978)*, pg. 17.) In 2009, the legislature responded to the need for better information regarding riparian and pre-1914 water rights by adding Water Code section 5100 *et seq.*, requiring statements of diversion from each person who diverts water. Unfortunately, irrespective of these efforts by the legislature and State Water Board, the information obtained from many water users does not enable the State Water Board and the Delta Watermaster¹ to effectively administer the water rights system.²

When acted upon, the additional information required pursuant to the authority granted under the emergency regulations is critical to informing the State Water Board about the nature and extent of the water rights, use, water classification and priority. Based upon the information provided below indicating potential unlawful diversions of stored water by users claiming riparian or pre-1914 appropriative water rights, the State Water Board may request the south and central Delta water diverters to identify each right claimed, the basis for each right, and the rate and quantity of water being diverted pursuant to each right on a monthly basis.

I. Legal Background

California water law states that riparian and appropriative water rights are limited to the natural flow of a river or stream. *Bloss v. Rahilly* (1938) 16 Cal.2d 70, 76; California Water Code sections 1201-2. Additionally, the State Water Board has found that southern Delta riparian right holders have no right, in any year, to natural flow from the Sacramento River. D-1641, pg. 31-33; SWRCB Order WR 89-8, pg. 22-23. These rights of south Delta riparian water users only extend to their correlative share of natural flow in the San Joaquin River. *Id.* Therefore, the

¹ Water Code section 85230 *et seq.* provides for the appointment of a Delta Watermaster tasked with monitoring and enforcement.

² Attached are 20 selected Statement of Diversions. Each contains the same claims to water use, the same year of first use and the same source and a claim that direct measurement using a device is not locally cost effective. The information provided is characteristic of the quality of many statements of diversion.

southern Delta riparian and appropriative rights holders have no right to natural or abandoned flows from the Sacramento River.

Nor are in-Delta riparian and appropriators permitted to divert the Projects stored or purchased water conveyed through channels in the Delta. *Phelps v. State Water Resources Control Board* (2008) 157 Cal.App.4th 89, 111; See also *El Dorado Irrigation Dist. V. State Water Resources Control Bd.* (2006) 142 Cal.App.4th 937, 962. Southern Delta appropriators, absent purchasing other water, are only entitled to excess natural flow and abandoned water. *United States v. SWRCB* (1986) 182 Cal.App.3d, 82, 116 [citing *Meridian, Ltd v. San Francisco* (1939) 13 Cal.2d 424, 455; *Phoenix Water Co. v. Fletcher* (1863)23 Cal. 481, 487]; Water Code § 1202.³ The Project Agencies and their contractors have not abandoned their stored or water transfer water, as they are putting it to beneficial use in meeting regulatory requirements and for delivery to the water contractors.

Some south and central Delta water users appeared to also be seeking to expand California Water Law by asserting rights to water from the "Delta Pool."⁴ The "Delta Pool" concept is that by virtue of the geography in the Delta water from many sources, including the Sacramento River, San Joaquin River, and the Pacific Ocean, mix and becomes a new source of appropriable water. The State Water Board explicitly rejected the idea that water users in the south and central Delta have rights to divert under a "Delta Pool" concept. (See Order WR 2011-0005, pg. 37; Order 2004-0004, pg. 15.)

II. Previous Source Water Analysis

The State Water Board, in recognition that water users in the south Delta only have a right to water from the San Joaquin River, made findings on the availability of San Joaquin River water in the southern Delta. Specifically, in D-1641, the Board concluded:

1. On average, insufficient water is available to supply the southern Delta in Below Normal, Dry and Critical Dry years in August, September and October.
2. On average, sufficient water is available in September only in Wet Years.
3. Insufficient water is available in July during 16 percent of years, in August during 56 percent of years, in September during 78 percent of years, and in October during 70 percent of years. (D-1641, pg. 33).

³ Pre-1914 appropriators in the south and central Delta could potentially divert this foreign water, but only if the foreign water is in excess of the Water Projects' needs. *Stevinson WaterDistrict v. Roduner* (1950) 36 Cal.2d 264; SWRCB Order WR 89-8; California Water Code section 1203.

⁴ During the recent State Water Board proceedings, south Delta diverters claimed a right to divert ocean water. See Order WR 2011-0005, pg. 37; June 30, 2014, letter submitted by South Delta Water Agency to the State Water Board. However, in California, a riparian or appropriative right cannot be established or defined by availability and diversion of ocean water. More importantly, none of the Statements of Diversions filed in the South and Central Delta state ocean water as a source.

The State Water Board summarized those conclusions by stating: riparian [and pre-1914 appropriative] rights to the water of the San Joaquin River are inadequate to meet the agricultural demands in the southern Delta in some months of many years. D-1641, pg. 33. We believe that similar conditions exist in some or all areas of the central Delta.

III. Current Source Water Information Available

To date in July, actual flow in the San Joaquin River flow at Vernalis has only averaged about 250 cfs. Calculated natural flow in San Joaquin River tributaries is an estimated average of 887 cfs to date in July. The southern Delta diversion requirement identified for July in D-1641 (Page 32) is 1,400 cfs and for August is 1,334 cfs. Current and projected flows at Vernalis, as well as natural inflow on upstream San Joaquin River tributaries, are both considerably less than half of the southern Delta diversion requirement. This shortage in water supply from natural flow on the lower San Joaquin River indicates that water is being diverted from other sources, presumably the Projects' stored water or water contracted through transfer and/or exchange agreements, neither of which is available to southern Delta diverters.

Additional irrigation demands by some members of Central Delta Water Agency also rely substantially on San Joaquin River flows. These diversions exacerbate the supply shortage already existing in southern Delta channels and likely result in further diversion from stored water.

Under Water Year 2014 hydrologic conditions in particular, when water users in the south and central Delta divert water in excess of that available under their asserted water rights, they divert stored water and/or water purchased through transfer or exchange agreements. Without additional information that the State Water Board has the authority under the emergency regulations to require, the Project Agencies and their water contractors are presumably injured by diversions in the Delta. Therefore the Project Agencies respectfully request that the State Water Board exercise its statutory authority and obtain information from these Delta water users to support their assumed right to water or require curtailment as unauthorized diversions.

Thank you in advance for your consideration.

Sincerely,



Mark Cowin
Director
California Department of Water Resources



David G. Murillo
Regional Director
Bureau of Reclamation

Attachments

**cc: Felicia Marcus, Chair, State Water Resources Control Board
Tom Howard, Executive Director, State Water Resources Control Board**

[SUMMARY OF FINAL SUBMITTED VERSION]

SUPPLEMENTAL STATEMENT OF WATER DIVERSION AND USE FOR 2012

Primary Owner: ARNAUDO BROS LP
 Statement Number: S017302
 Date Submitted: 2013-02-28

1. Water is used under	Riparian Claim Pre-1914 Claim
2. Year of first use	1800

3-4. Maximum Rate of Diversion for each Month and Amount of Water Diverted and Used			
Month	Rate of diversion (CFS)	Amount directly diverted or collected to storage (Acre-Feet)	Amount beneficially used (Acre-Feet)
January	0	0	0
February	0	0	0
March	0	0	0
April	2.99	346.7	346.7
May	2.99	346.7	346.7
June	2.99	346.7	346.7
July	2.99	346.7	346.7
August	2.99	346.7	346.7
September	2.99	346.7	346.7
October	2.99	178.21	178.21
November	0	0	0
December	0	0	0
Total		2258.41	2258.41
Comments			

5. Water Diversion Measurement

a. Measurement	Direct measurement using a device listed in Section 1 is "not locally cost effective" for water directly diverted and/or diverted to storage
b. Types of measuring devices used	
c. Additional technology used	
d. Description of additional technology used	
e. Who installed your measuring device(s)	
f. Make, model number, and last calibration date of your measuring device(s)	
f. Why direct measurement using a device listed in Section 1 is "not locally cost effective"	Other
f. Explanation of why use of devices and technologies listed in Section 1 are "not locally cost effective"	No meters installed or meter readers hired
g. Method(s) used as an alternative to direct measurement	Other
g. Explanation of method(s) used as an alternative to direct measurement	Past history of crop needs for water

6. Purpose of Use

SUPPLEMENTAL STATEMENT OF WATER DIVERSION AND USE

Irrigation	558.55 Acres
------------	--------------

7. Changes in Method of Diversion

8. Conservation of Water		
a.	Are you now employing water conservation efforts?	Yes
a.	Describe any water conservation efforts you have initiated	Good farming practices, concrete ditches and pipelines, and all excess water recycled to the delta canal
	Amount of water conserved	100 Acre-Feet
b.	I have data to support the above surface water use reductions due to conservation efforts.	Yes

9. Water Quality and Wastewater Reclamation		
a.	Are you now or have you been using reclaimed water from a wastewater treatment facility, desalination facility, or water polluted by waste to a degree which unreasonably affects such water for other beneficial causes?	No
	Amount of reduced diversion	
	Type of substitute water supply	
b.	Amount of substitute water supply used	
	I have data to support the above surface water use reductions due to the use of a substitute water supply	

10. Conjunctive Use of Surface Water and Groundwater		
a.	Are you now using groundwater in lieu of surface water?	No
b.	Amount of groundwater used	
	I have data to support the above surface water use reductions due to the use of groundwater.	

11a. Additional Remarks

Attachments		
File Name	Description	Size
No Attachments		

Contact Information of the Person Submitting the Form	
First Name	Steve
Last Name	Widhalm
Relation to Water Right	Other
Has read the form and agrees the information in the report is true to the best of his/her knowledge and belief	Yes

[SUMMARY OF FINAL SUBMITTED VERSION]

SUPPLEMENTAL STATEMENT OF WATER DIVERSION AND USE FOR 2012

Primary Owner: TUSCANY RESEARCH INSTITUTE

Statement Number: S021005

Date Submitted: 2013-06-24

1. Water is used under	Riparian Claim Pre-1914 Claim
2. Year of first use	1800

3-4. Maximum Rate of Diversion for each Month and Amount of Water Diverted and Used			
Month	Rate of diversion	Amount directly diverted or collected to storage (Acre-Feet)	Amount beneficially used (Acre-Feet)
January		112.43	15.52
February		21.5	13.44
March		61.52	38.45
April		43	26.87
May		62.79	39.24
June		160.43	100.21
July		190.02	118.76
August		132.5	82.81
September		11.63	7.27
October		16.06	10.04
November		110.99	14.62
December		109.79	13.87
Total		1032.66	481.1
Comments			

5. Water Diversion Measurement

a. Measurement	Direct measurement using a device listed in Section 1 is "not locally cost effective" for water directly diverted and/or diverted to storage	
b. Types of measuring devices used		
c. Additional technology used		
c. Description of additional technology used		
d. Who installed your measuring device(s)		
e. Make, model number, and last calibration date of your measuring device(s)		
f. Why direct measurement using a device listed in Section 1	Other	

is "not locally cost effective"	
Explanation of why use of devices and technologies listed in Section 1 are "not locally cost effective"	The cost of acquisition, installation, maintenance (including vandalism and theft deterrence and remediation), collection and compilation of data from measuring devices is not locally cost-effective because the value of the local benefits of installing and maintaining meters is not greater than the value of the local cost of implementing that measure. There are no apparent grants available to otherwise cover costs of water meters and related actions. Moreover, the unique hydrogeological characteristics of the Delta (e.g., tides, seepage, interconnected channels, etc.) indicate that meters are not the best available technology in this region. Any water diverted in the Delta which is not consumed or evaporated is recycled to the Delta Pool for reuse. As further support for the conclusion that measuring devices are not locally cost-effective reference is made to the documentation on file with the SWRCB attesting to the lack of such costeffectiveness submitted in connection with the SWRCB's July 21, 2011 "Water Measurement Workshop" and the SWRCB's follow-up solicitation of comments (due November 18, 2011) re the same.
Method(s) used as an alternative to direct measurement	Crop duty estimates/consumptive use estimates
9. Explanation of method(s) used as an alternative to direct measurement	Used ITRC REPORT 03-001 ETc Table for Irrigation Scheduling and Design, Zone 12 for Surface Irrigation, Typical year adjusted for the reporting year using CIMIS monthly ETo for Manteca. For crops not covered by the ITRC report ETc was determined using ratios to alfalfa from Table A-5, DWR Bulletin 168, October 1978.

6. Purpose of Use

Irrigation	607.3 Acres
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7. Changes in Method of Diversion

8. Conservation of Water

a. Are you now employing water conservation efforts?	Yes
Describe any water conservation efforts you have initiated	Good water management and farming practices, cover crops, mulching, laser leveling. Any diverted water which is not consumed or evaporated is recycled to the Delta Pool. Credit is claimed for these water conservation efforts under section 1011 of the Water Code. A specific amount conserved is not reported due to the lack of a present method to precisely quantify that amount.
Amount of water conserved	Acre-Feet
b. I have data to support the above surface water use reductions due to conservation efforts.	

9. Water Quality and Wastewater Reclamation

a. Are you now or have you been using reclaimed water from a wastewater treatment facility, desalination facility, or water polluted by waste to a degree which unreasonably affects such water for other beneficial causes?	No
b. Amount of reduced diversion	
Type of substitute water supply	
Amount of substitute water supply used	

I have data to support the above surface water use reductions due to the use of a substitute water supply	
---	--

10. Conjunctive Use of Surface Water and Groundwater	
a. Are you now using groundwater in lieu of surface water?	No
b. Amount of groundwater used	
I have data to support the above surface water use reductions due to the use of groundwater.	

11a. Additional Remarks
The amount diverted is a multiple of the reported use amount, plus a factor to account for field flooding (if any). The multiple is to account for additional water that is diverted but not consumed or evaporated. (Note: add the following insertion to the above insertion if you had multiple PODs deliver water to the same field or parcel): The point of diversion that is the subject of this report is one of <u>3</u> (insert number) points of diversion that provided water to an approximate <u>607.30</u> acre field/parcel. For purposes of these reports, the amount of acreage irrigated, water used and water diverted associated with each of those points of diversion has been evenly split along them.

Attachments		
File Name	Description	Size
No Attachments		

Contact Information of the Person Submitting the Form	
First Name	Clint
Last Name	Womack
Relation to Water Right	
Has read the form and agrees the information in the report is true to the best of his/her knowledge and belief	Yes

[SUMMARY OF FINAL SUBMITTED VERSION]

SUPPLEMENTAL STATEMENT OF WATER DIVERSION AND USE FOR 2012

Primary Owner: Farmland Reserve, Inc.
 Statement Number: S017817
 Date Submitted: 2013-06-26

1. Water is used under	Riparian Claim Pre-1914 Claim Other: License 1605,4953 & Overlying & statutory rights (& contract right if applicable)
2. Year of first use	1800

3-4. Maximum Rate of Diversion for each Month and Amount of Water Diverted and Used			
Month	Rate of diversion (CFS)	Amount directly diverted or collected to storage (Acre-Feet)	Amount beneficially used (Acre-Feet)
January	0.00001	0.00001	0.00001
February	0	31.39	31.39
March	7.34	0	0
April	0	29.32	29.32
May	5.29	0	0
June	0	0	0
July	0	0	0
August	0	0	0
September	0	0	0
October	0	0	0
November	0	0	0
December	0	0	0
Total		60.71001	60.71001
Comments			

5. Water Diversion Measurement

a. Measurement	Water directly diverted and/or diverted to storage was measured
b. Types of measuring devices used	Acoustic Meter
c. Additional technology used	Data Logger Flow Totalizer
Description of additional technology used	solar power
d. Who installed your measuring device(s)	Other/Unknown: California Licensed Contractor under the guidance of a California Licensed Civil Engineer
e. Make, model number, and last calibration date of your measuring device(s)	AgriFlo, 3.00.5, 2-17-12
f. Why direct measurement using a device listed in Section 1 is "not locally cost effective"	
Explanation of why use of devices and technologies listed in Section 1 are "not locally cost effective"	
g. Method(s) used as an alternative to direct measurement	

SUPPLEMENTAL STATEMENT OF WATER DIVERSION AND USE

Explanation of method(s) used as an alternative to direct measurement

6. Purpose of Use

Irrigation	2277 Acres
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7. Changes in Method of Diversion

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8. Conservation of Water

Are you now employing water conservation efforts?	Yes
a. Describe any water conservation efforts you have initiated	Good water management and farming practices. Any diverted water which is not consumed or evaporated is recycled to the Delta Pool. Credit is claimed for these water conservation efforts under section 1011 of the Water Code. A specific amount conserved is not reported due to the lack of a present method to precisely quantify that amount.
Amount of water conserved	Acre-Feet
b. I have data to support the above surface water use reductions due to conservation efforts.	

9. Water Quality and Wastewater Reclamation

a. Are you now or have you been using reclaimed water from a wastewater treatment facility, desalination facility, or water polluted by waste to a degree which unreasonably affects such water for other beneficial causes?	No
Amount of reduced diversion	
Type of substitute water supply	
b. Amount of substitute water supply used	
I have data to support the above surface water use reductions due to the use of a substitute water supply	

10. Conjunctive Use of Surface Water and Groundwater

a. Are you now using groundwater in lieu of surface water?	No
b. Amount of groundwater used	
I have data to support the above surface water use reductions due to the use of groundwater.	

11a. Additional Remarks

Because text cannot be entered into the Max. Diversion Rate and Amount Diverted entry boxes, January's input of 0.00001 is a place holder to note that no data is available for the month of January. Flow meters were installed in February of 2012. Estimates of the overall crop evapotranspiration of water can readily be performed for the entire site; however the site specific irrigation practices and irrigation delivery system capabilities and configuration would require excessive speculation to report an amount used under the point of diversion. Therefore, this report presents the amount used the same as the amount diverted.

Attachments

File Name	Description	Size
No Attachments		

Contact Information of the Person Submitting the Form

First Name	Kelly
Last Name	Tryon

SUPPLEMENTAL STATEMENT OF WATER DIVERSION AND USE

Relation to Water Right	Agent
Has read the form and agrees the information in the report is true to the best of his/her knowledge and belief	Yes

[SUMMARY OF FINAL SUBMITTED VERSION]

SUPPLEMENTAL STATEMENT OF WATER DIVERSION AND USE FOR 2012

Primary Owner: Coney Island Farms Inc
 Statement Number: S020858
 Date Submitted: 2013-06-18

1. Water is used under	Riparian Claim Pre-1914 Claim Other: overlying & statutory rights
2. Year of first use	1800

3-4. Maximum Rate of Diversion for each Month and Amount of Water Diverted and Used			
Month	Rate of diversion	Amount directly diverted or collected to storage (Acre-Feet)	Amount beneficially used (Acre-Feet)
January		19.48	12.18
February		10.85	6.78
March		11.37	7.1
April		11.77	7.35
May		30.85	19.28
June		81.03	50.64
July		82.04	51.28
August		49.18	30.74
September		3.98	2.49
October		6.16	3.85
November		8.95	5.59
December		10.31	6.44
Total		325.97	203.72
Comments			

5. Water Diversion Measurement

a. Measurement	Direct measurement using a device listed in Section 1 is "not locally cost effective" for water directly diverted and/or diverted to storage	
b. Types of measuring devices used		
c. Additional technology used		
d. Description of additional technology used		
e. Who installed your measuring device(s)		
f. Make, model number, and last calibration date of your measuring device(s)		
f. Why direct measurement using a device	Other	

listed in Section 1 is "not locally cost effective"	
Explanation of why use of devices and technologies listed in Section 1 are "not locally cost effective"	The cost of acquisition, installation, maintenance (including vandalism and theft deterrence and remediation), collection and compilation of data from measuring devices is not locally cost-effective because the value of the local benefits of installing and maintaining meters is not greater than the value of the local cost of implementing that measure. There are no apparent grants available to otherwise cover costs of water meters and related actions. Moreover, the unique hydrogeological characteristics of the Delta (e.g., tides, seepage, interconnected channels, etc.) indicate that meters are not the best available technology in this region. Any water diverted in the Delta which is not consumed or evaporated is recycled to the Delta Pool for reuse. As further support for the conclusion that measuring devices are not locally cost-effective reference is made to the documentation on file with the SWRCB attesting to the lack of such cost-effectiveness submitted in connection with the SWRCB's July 21, 2011 "Water Measurement Workshop" and the SWRCB's follow-up solicitation of comments (due November 18, 2011) re the same.
Method(s) used as an alternative to direct measurement	Crop duty estimates/consumptive use estimates
9. Explanation of method(s) used as an alternative to direct measurement	Used ITRC REPORT 03-001 ETC Table for Irrigation Scheduling and Design, Zone 12 for Surface Irrigation, Typical year adjusted for the reporting year using CIMIS monthly ETo for Manteca. For crops not covered by the ITRC report ETC was determined using ratios to alfalfa from Table A-5, DWR Bulletin 168, October 1978.

6. Purpose of Use

Irrigation	79 Acres
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7. Changes in Method of Diversion

8. Conservation of Water

Are you now employing water conservation efforts?	Yes
a. Describe any water conservation efforts you have initiated	Good water management and farming practices, lined ditches and pipelines. Any diverted water which is not consumed or evaporated is recycled to the Delta Pool. Credit is claimed for these water conservation efforts under section 1011 of the Water Code. A specific amount conserved is not reported due to the lack of a present method to precisely quantify that amount.
Amount of water conserved	Acre-Feet
b. I have data to support the above surface water use reductions due to conservation efforts.	

9. Water Quality and Wastewater Reclamation

a. Are you now or have you been using reclaimed water from a wastewater treatment facility, desalination facility, or water polluted by waste to a degree which unreasonably affects such water for other beneficial causes?	No
b. Amount of reduced diversion	
Type of substitute water supply	
Amount of substitute water supply used	

SUPPLEMENTAL STATEMENT OF WATER DIVERSION AND USE

' have data to support the above surface water use reductions due to the use of a substitute water supply	
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10. Conjunctive Use of Surface Water and Groundwater	
a. Are you now using groundwater in lieu of surface water?	No
b. Amount of groundwater used	
I have data to support the above surface water use reductions due to the use of groundwater.	

11a. Additional Remarks
The amount diverted is a multiple of the reported use amount, plus a factor to account for field flooding (if any). The multiple is to account for additional water that is diverted but not consumed or evaporated.

Attachments		
File Name	Description	Size
No Attachments		

Contact Information of the Person Submitting the Form	
First Name	Kelly
Last Name	Arceo
Relation to Water Right	Other
Has read the form and agrees the information in the report is true to the best of his/her knowledge and belief	Yes

[SUMMARY OF FINAL SUBMITTED VERSION]

SUPPLEMENTAL STATEMENT OF WATER DIVERSION AND USE FOR 2012

Primary Owner: Coney Island Farms Inc
 Statement Number: S020857
 Date Submitted: 2013-06-18

1. Water is used under	Riparian Claim Pre-1914 Claim Other: overlying & statutory rights
2. Year of first use	1800

3-4. Maximum Rate of Diversion for each Month and Amount of Water Diverted and Used			
Month	Rate of diversion	Amount directly diverted or collected to storage (Acre-Feet)	Amount beneficially used (Acre-Feet)
January		63.01	39.38
February		35.1	21.93
March		37.45	23.41
April		39.5	24.69
May		96.52	60.32
June		258.89	161.81
July		268.27	167.67
August		171.86	107.41
September		13.94	8.71
October		19.92	12.45
November		28.93	18.08
December		33.34	20.84
Total		1066.73	666.7
Comments			

5. Water Diversion Measurement

a. Measurement	Direct measurement using a device listed in Section 1 is "not locally cost effective" for water directly diverted and/or diverted to storage
b. Types of measuring devices used	
c. Additional technology used	
d. Description of additional technology used	
e. Who installed your measuring device(s)	
f. Make, model number, and last calibration date of your measuring device(s)	
f. Why direct measurement using a device	Other

listed in Section 1 is "not locally cost effective"	
Explanation of why use of devices and technologies listed in Section 1 are "not locally cost effective"	The cost of acquisition, installation, maintenance (including vandalism and theft deterrence and remediation), collection and compilation of data from measuring devices is not locally cost-effective because the value of the local benefits of installing and maintaining meters is not greater than the value of the local cost of implementing that measure. There are no apparent grants available to otherwise cover costs of water meters and related actions. Moreover, the unique hydrogeological characteristics of the Delta (e.g., tides, seepage, interconnected channels, etc.) indicate that meters are not the best available technology in this region. Any water diverted in the Delta which is not consumed or evaporated is recycled to the Delta Pool for reuse. As further support for the conclusion that measuring devices are not locally cost-effective reference is made to the documentation on file with the SWRCB attesting to the lack of such cost-effectiveness submitted in connection with the SWRCB's July 21, 2011 "Water Measurement Workshop" and the SWRCB's follow-up solicitation of comments (due November 18, 2011) re the same.
Method(s) used as an alternative to direct measurement	Crop duty estimates/consumptive use estimates
9.	Explanation of method(s) used as an alternative to direct measurement
	Used ITRC REPORT 03-001 ETC Table for Irrigation Scheduling and Design, Zone 12 for Surface Irrigation, Typical year adjusted for the reporting year using CIMIS monthly ETo for Manteca. For crops not covered by the ITRC report ETC was determined using ratios to alfalfa from Table A-5, DWR Bulletin 168, October 1978.

6. Purpose of Use

Irrigation	255.5 Acres
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7. Changes in Method of Diversion

8. Conservation of Water

a.	Are you now employing water conservation efforts?	Yes
a.	Describe any water conservation efforts you have initiated	Good water management and farming practices, lined ditches and pipelines. Any diverted water which is not consumed or evaporated is recycled to the Delta Pool. Credit is claimed for these water conservation efforts under section 1011 of the Water Code. A specific amount conserved is not reported due to the lack of a present method to precisely quantify that amount.
b.	Amount of water conserved	Acre-Feet
b.	I have data to support the above surface water use reductions due to conservation efforts.	

9. Water Quality and Wastewater Reclamation

a.	Are you now or have you been using reclaimed water from a wastewater treatment facility, desalination facility, or water polluted by waste to a degree which unreasonably affects such water for other beneficial causes?	No
b.	Amount of reduced diversion	
	Type of substitute water supply	
	Amount of substitute water supply used	

I have data to support the above surface water use reductions due to the use of a substitute water supply	
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10. Conjunctive Use of Surface Water and Groundwater	
a. Are you now using groundwater in lieu of surface water?	No
b. Amount of groundwater used	
I have data to support the above surface water use reductions due to the use of groundwater.	

11a. Additional Remarks
The amount diverted is a multiple of the reported use amount, plus a factor to account for field flooding (if any). The multiple is to account for additional water that is diverted but not consumed or evaporated.

Attachments		
File Name	Description	Size
No Attachments		

Contact Information of the Person Submitting the Form	
First Name	Kelly
Last Name	Arceo
Relation to Water Right	Other
Has read the form and agrees the information in the report is true to the best of his/her knowledge and belief	Yes

JPPLEMENTAL STATEMENT OF WATER DIVERSION AND USE
[SUMMARY OF FINAL SUBMITTED VERSION]

SUPPLEMENTAL STATEMENT OF WATER DIVERSION AND USE FOR 2012

Primary Owner: Victoria Island LP
 Statement Number: S021293
 Date Submitted: 2013-06-13

1. Water is used under	Riparian Claim Pre-1914 Claim
2. Year of first use	1800

3-4. Maximum Rate of Diversion for each Month and Amount of Water Diverted and Used			
Month	Rate of diversion	Amount directly diverted or collected to storage (Acre-Feet)	Amount beneficially used (Acre-Feet)
January		72.16	45.1
February		71.18	44.69
March		61.9	38.69
April		107.39	67.12
May		212.16	132.6
June		312.56	195.35
July		274.38	171.49
August		146.26	91.41
September		98.02	61.26
October		51.62	32.26
November		46.59	29.12
December		42.82	26.76
Total		1497.04	935.85
Comments			

5. Water Diversion Measurement	
a. Measurement	Direct measurement using a device listed in Section 1 is "not locally cost effective" for water directly diverted and/or diverted to storage
b. Types of measuring devices used	
c. Additional technology used	
c. Description of additional technology used	
d. Who installed your measuring device(s)	
e. Make, model number, and last calibration date of your measuring device(s)	
f. Why direct measurement using a device listed in Section 1 is "not locally cost effective"	Other
f. Explanation of why use of devices and technologies listed in Section 1 are "not locally cost effective"	The cost of acquisition, installation, maintenance, collection and compilation of data from measuring devices cannot be recovered and there is no apparent grant available to cover such costs. Excess water is recycled to the Delta Pool and the only practical way to determine water use is using ETo and ETc to support an estimate.

SUPPLEMENTAL STATEMENT OF WATER DIVERSION AND USE

	Method(s) used as an alternative to direct measurement	Crop duty estimates/consumptive use estimates
g.	Explanation of method(s) used as an alternative to direct measurement	Used ITRC REPORT 03-001 Etc Table for Irrigation Scheduling and Design, Zone 12 for Surface Irrigation, Typical year adjusted for the reporting year using CIMIS monthly ETo for Manteca. For crops not covered by the ITRC report ETo was determined using ratios to alfalfa from Table A-5, DWR Bulletin 168, October 1978.

6. Purpose of Use

Irrigation	292.6 Acres
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7. Changes in Method of Diversion

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8. Conservation of Water

	Are you now employing water conservation efforts?	Yes
a.	Describe any water conservation efforts you have initiated	Good water and farming practices, lined ditches, pipelines and excess water is recycled to the Delta Pool.
	Amount of water conserved	Acre-Feet
b.	I have data to support the above surface water use reductions due to conservation efforts.	No

9. Water Quality and Wastewater Reclamation

a.	Are you now or have you been using reclaimed water from a wastewater treatment facility, desalination facility, or water polluted by waste to a degree which unreasonably affects such water for other beneficial causes?	No
	Amount of reduced diversion	
	Type of substitute water supply	
b.	Amount of substitute water supply used	
	I have data to support the above surface water use reductions due to the use of a substitute water supply	

10. Conjunctive Use of Surface Water and Groundwater

a.	Are you now using groundwater in lieu of surface water?	No
	Amount of groundwater used	
b.	I have data to support the above surface water use reductions due to the use of groundwater.	

11a. Additional Remarks

The amount diverted is a multiple of the reported amount used except that an amount is added to account for field flooding.

Attachments

File Name	Description	Size
No Attachments		

Contact Information of the Person Submitting the Form

First Name	James
Last Name	Jerkovich
Relation to Water Right	Other
Has read the form and agrees the information in the report is true to the best of his/her knowledge and belief	Yes

[SUMMARY OF FINAL SUBMITTED VERSION]

SUPPLEMENTAL STATEMENT OF WATER DIVERSION AND USE FOR 2012

Primary Owner: TUSCANY RESEARCH INSTITUTE

Statement Number: S021003

Date Submitted: 2013-06-24

1. Water is used under	Riparian Claim Pre-1914 Claim Other: overlying and statutory rights
2. Year of first use	1800

3-4. Maximum Rate of Diversion for each Month and Amount of Water Diverted and Used			
Month	Rate of diversion	Amount directly diverted or collected to storage (Acre-Feet)	Amount beneficially used (Acre-Feet)
January		168.79	22.09
February		28.64	17.9
March		83.28	52.05
April		54.09	33.81
May		87.13	54.45
June		243.65	152.28
July		289.05	180.65
August		200.86	125.54
September		17.52	10.95
October		22.87	14.29
November		166.77	20.82
December		164.9	19.66
Total		1527.55	704.49
Comments			

5. Water Diversion Measurement

a. Measurement	Direct measurement using a device listed in Section 1 is "not locally cost effective" for water directly diverted and/or diverted to storage	
b. Types of measuring devices used		
c. Additional technology used		
c. Description of additional technology used		
d. Who installed your measuring device(s)		
e. Make, model number, and last calibration date of your measuring device(s)		
f. Why direct measurement using a device	Other	

<p>listed in Section 1 is "not locally cost effective"</p>	
<p>Explanation of why use of devices and technologies listed in Section 1 are "not locally cost effective"</p>	<p>The cost of acquisition, installation, maintenance (including vandalism and theft deterrence and remediation), collection and compilation of data from measuring devices is not locally cost-effective because the value of the local benefits of installing and maintaining meters is not greater than the value of the local cost of implementing that measure. There are no apparent grants available to otherwise cover costs of water meters and related actions. Moreover, the unique hydrogeological characteristics of the Delta (e.g., tides, seepage, interconnected channels, etc.) indicate that meters are not the best available technology in this region. Any water diverted in the Delta which is not consumed or evaporated is recycled to the Delta Pool for reuse. As further support for the conclusion that measuring devices are not locally cost-effective reference is made to the documentation on file with the SWRCB attesting to the lack of such costeffectiveness submitted in connection with the SWRCB's July 21, 2011 "Water Measurement Workshop" and the SWRCB's follow-up solicitation of comments (due November 18, 2011) re the same.</p>
<p>Method(s) used as an alternative to direct measurement</p>	<p>Crop duty estimates/consumptive use estimates</p>
<p>9. Explanation of method(s) used as an alternative to direct measurement</p>	<p>Used ITRC REPORT 03-001 ETC Table for Irrigation Scheduling and Design, Zone 12 for Surface Irrigation, Typical year adjusted for the reporting year using CIMIS monthly ETo for Manteca. For crops not covered by the ITRC report ETC was determined using ratios to alfalfa from Table A-5, DWR Bulletin 168, October 1978.</p>

6. Purpose of Use

<p>Irrigation</p>	<p>615.5 Acres</p>
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7. Changes in Method of Diversion

8. Conservation of Water

<p>Are you now employing water conservation efforts?</p>	<p>Yes</p>
<p>a. Describe any water conservation efforts you have initiated</p>	<p>Good water management and farming practices cover crops, mulching, laser leveling. Any diverted water which is not consumed or evaporated is recycled to the Delta Pool. Credit is claimed for these water conservation efforts under section 1011 of the Water Code. A specific amount conserved is not reported due to the lack of a present method to precisely quantify that amount.</p>
<p>Amount of water conserved</p>	<p>Acre-Feet</p>
<p>b. I have data to support the above surface water use reductions due to conservation efforts.</p>	

9. Water Quality and Wastewater Reclamation

<p>a. Are you now or have you been using reclaimed water from a wastewater treatment facility, desalination facility, or water polluted by waste to a degree which unreasonably affects such water for other beneficial causes?</p>	<p>No</p>
<p>b. Amount of reduced diversion Type of substitute water supply Amount of substitute water supply used</p>	

SUPPLEMENTAL STATEMENT OF WATER DIVERSION AND USE

I have data to support the above surface water use reductions due to the use of a substitute water supply

10. Conjunctive Use of Surface Water and Groundwater	
a. Are you now using groundwater in lieu of surface water?	No
b. Amount of groundwater used	
I have data to support the above surface water use reductions due to the use of groundwater.	

11a. Additional Remarks
The amount diverted is a multiple of the reported use amount, plus a factor to account for field flooding (if any). The multiple is to account for additional water that is diverted but not consumed or evaporated. (Note: add the following insertion to the above insertion if you had multiple PODs deliver water to the same field or parcel): The point of diversion that is the subject of this report is one of <u>2</u> (insert number) points of diversion that provided water to an approximate <u>615.50</u> acre field/parcel. For purposes of these reports, the amount of acreage irrigated, water used and water diverted associated with each of those points of diversion has been evenly split along them.

Attachments		
File Name	Description	Size
No Attachments		

Contact Information of the Person Submitting the Form	
First Name	Clint
Last Name	Womack
Relation to Water Right	
Has read the form and agrees the information in the report is true to the best of his/her knowledge and belief	Yes

[SUMMARY OF FINAL SUBMITTED VERSION]

SUPPLEMENTAL STATEMENT OF WATER DIVERSION AND USE FOR 2012

Primary Owner: Coney Island Farms Inc
 Statement Number: S020859
 Date Submitted: 2013-06-18

1. Water is used under	Riparian Claim Pre-1914 Claim Other: overlying & statutory rights
2. Year of first use	1800

3-4. Maximum Rate of Diversion for each Month and Amount of Water Diverted and Used			
Month	Rate of diversion	Amount directly diverted or collected to storage (Acre-Feet)	Amount beneficially used (Acre-Feet)
January		9.99	6.24
February		5.56	3.48
March		5.51	3.45
April		5.38	3.36
May		17.3	10.81
June		42.99	26.87
July		40.73	25.45
August		19.39	12.12
September		1.55	0.97
October		3.16	1.97
November		4.59	2.87
December		5.29	3.3
Total		161.44	100.89
Comments			

5. Water Diversion Measurement

a. Measurement	Direct measurement using a device listed in Section 1 is "not locally cost effective" for water directly diverted and/or diverted to storage
b. Types of measuring devices used	
c. Additional technology used	
Description of additional technology used	
d. Who installed your measuring device(s)	
e. Make, model number, and last calibration date of your measuring device(s)	
f. Why direct measurement using a device	Other

<p>listed in Section 1 is "not locally cost effective"</p>	
<p>Explanation of why use of devices and technologies listed in Section 1 are "not locally cost effective"</p>	<p>The cost of acquisition, installation, maintenance (including vandalism and theft deterrence and remediation), collection and compilation of data from measuring devices is not locally cost-effective because the value of the local benefits of installing and maintaining meters is not greater than the value of the local cost of implementing that measure. There are no apparent grants available to otherwise cover costs of water meters and related actions. Moreover, the unique hydrogeological characteristics of the Delta (e.g., tides, seepage, interconnected channels, etc.) indicate that meters are not the best available technology in this region. Any water diverted in the Delta which is not consumed or evaporated is recycled to the Delta Pool for reuse. As further support for the conclusion that measuring devices are not locally cost-effective reference is made to the documentation on file with the SWRCB attesting to the lack of such cost-effectiveness submitted in connection with the SWRCB's July 21, 2011 "Water Measurement Workshop" and the SWRCB's follow-up solicitation of comments (due November 18, 2011) re the same.</p>
<p>Method(s) used as an alternative to direct measurement</p>	<p>Crop duty estimates/consumptive use estimates</p>
<p>9. Explanation of method(s) used as an alternative to direct measurement</p>	<p>Used ITRC REPORT 03-001 ETc Table for Irrigation Scheduling and Design, Zone 12 for Surface Irrigation, Typical year adjusted for the reporting year using CIMIS monthly ET_o for Manteca. For crops not covered by the ITRC report ETc was determined using ratios to alfalfa from Table A-5, DWR Bulletin 168, October 1978.</p>

6. Purpose of Use	
Irrigation	22 Acres

7. Changes in Method of Diversion	

8. Conservation of Water	
<p>Are you now employing water conservation efforts?</p>	<p>Yes</p>
<p>a. Describe any water conservation efforts you have initiated</p>	<p>Good water management and farming practices, lined ditches and pipelines. Any diverted water which is not consumed or evaporated is recycled to the Delta Pool. Credit is claimed for these water conservation efforts under section 1011 of the Water Code. A specific amount conserved is not reported due to the lack of a present method to precisely quantify that amount.</p>
<p>b. Amount of water conserved</p>	<p>Acre-Feet</p>
<p>I have data to support the above surface water use reductions due to conservation efforts.</p>	

9. Water Quality and Wastewater Reclamation	
<p>a. Are you now or have you been using reclaimed water from a wastewater treatment facility, desalination facility, or water polluted by waste to a degree which unreasonably affects such water for other beneficial causes?</p>	<p>No</p>
<p>b. Amount of reduced diversion</p>	
<p>Type of substitute water supply</p>	
<p>Amount of substitute water supply used</p>	

SUPPLEMENTAL STATEMENT OF WATER DIVERSION AND USE

I have data to support the above surface water use reductions due to the use of a substitute water supply	
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10. Conjunctive Use of Surface Water and Groundwater	
a. Are you now using groundwater in lieu of surface water?	No
b. Amount of groundwater used	
I have data to support the above surface water use reductions due to the use of groundwater.	

11a. Additional Remarks
The amount diverted is a multiple of the reported use amount, plus a factor to account for field flooding (if any). The multiple is to account for additional water that is diverted but not consumed or evaporated.

Attachments		
File Name	Description	Size
No Attachments		

Contact Information of the Person Submitting the Form	
First Name	Kelly
Last Name	Arceo
Relation to Water Right	Other
Has read the form and agrees the information in the report is true to the best of his/her knowledge and belief	Yes

[SUMMARY OF FINAL SUBMITTED VERSION]

SUPPLEMENTAL STATEMENT OF WATER DIVERSION AND USE FOR 2012

Primary Owner: ROBERT M ACOSTA
 Statement Number: S016582
 Date Submitted: 2013-04-04

1. Water is used under	Pre-1914 Claim
2. Year of first use	1800

3-4. Maximum Rate of Diversion for each Month and Amount of Water Diverted and Used			
Month	Rate of diversion	Amount directly diverted or collected to storage (Acre-Feet)	Amount beneficially used (Acre-Feet)
January		0	0
February		0	0
March		0	0
April		48	48
May		48	48
June		48	48
July		48	48
August		48	48
September		24	24
October		0	0
November		0	0
December		0	0
Total		264	264
Comments	The water is used for irrigation of row crops and various types of hay. Corn is also produced on a rotating basis. The farm has been in continuous production since the 1800's.		

5. Water Diversion Measurement	
a. Measurement	Direct measurement using a device listed in Section 1 is "not locally cost effective" for water directly diverted and/or diverted to storage
b. Types of measuring devices used	
Additional technology used	
c. Description of additional technology used	
d. Who installed your measuring device(s)	
e. Make, model number, and last calibration date of your measuring device(s)	
f. Why direct measurement using a device listed in Section 1 is "not locally cost effective"	Diversions are infrequent No power at diversion point Other
f. Explanation of why use of devices and technologies listed in Section 1 are "not locally cost effective"	the cost to bring in power is expensive. the diversion is 2 times per month for 6 mo. The farm is not used as a primary source of income and only on a part time basis. This is a family farm/hobby not a business.

SUPPLEMENTAL STATEMENT OF WATER DIVERSION AND USE

Method(s) used as an alternative to direct measurement	Crop duty estimates/consumptive use estimates Modeled/estimated flows
g. Explanation of method(s) used as an alternative to direct measurement	water control via direct visual observations. The amt. of water use is est. using time and water management principles from records for the past 100 years. The amount of water use for 24 ac. is averaged by using accumulated data from previous water use records.

6. Purpose of Use

Irrigation	24 Acres
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7. Changes in Method of Diversion

enlarge diversion dam. Rework , realign old ditches. New slide gates obtained. All surface ditches cleaned with backhoe . All debris removed and sent to land field. All weeds and other dead forge removed .

8. Conservation of Water

a. Are you now employing water conservation efforts?	Yes
Describe any water conservation efforts you have initiated	new gate valves installed on all irrigation flow points. weed control on continuous schedule.
Amount of water conserved	Acre-Feet
b. I have data to support the above surface water use reductions due to conservation efforts.	Yes

9. Water Quality and Wastewater Reclamation

a. Are you now or have you been using reclaimed water from a wastewater treatment facility, desalination facility, or water polluted by waste to a degree which unreasonably affects such water for other beneficial causes?	No
Amount of reduced diversion	
Type of substitute water supply	
b. Amount of substitute water supply used	
I have data to support the above surface water use reductions due to the use of a substitute water supply	

10. Conjunctive Use of Surface Water and Groundwater

a. Are you now using groundwater in lieu of surface water?	No
b. Amount of groundwater used	
I have data to support the above surface water use reductions due to the use of groundwater.	

11a. Additional Remarks

Attachments

File Name	Description	Size
No Attachments		

Contact Information of the Person Submitting the Form

First Name	robert
Last Name	acosta
Relation to Water Right	Owner
Has read the form and agrees the information in the report is true to the best of his/her knowledge and belief	Yes

[SUMMARY OF FINAL SUBMITTED VERSION]

SUPPLEMENTAL STATEMENT OF WATER DIVERSION AND USE FOR 2012

Primary Owner: Berniece L. Silva Trust
 Statement Number: S018507
 Date Submitted: 2013-06-12

1. Water is used under	Riparian Claim Pre-1914 Claim Other: overlying & statutory rights
2. Year of first use	1800

3-4. Maximum Rate of Diversion for each Month and Amount of Water Diverted and Used			
Month	Rate of diversion	Amount directly diverted or collected to storage (Acre-Feet)	Amount beneficially used (Acre-Feet)
January		21.65	13.53
February		12.06	7.54
March		13.34	8.34
April		14.57	9.11
May		30.9	19.32
June		86.75	54.22
July		94.21	58.88
August		67.93	42.46
September		5.53	3.46
October		6.84	4.28
November		9.94	6.21
December		11.46	7.16
Total		375.18	234.51
Comments			

5. Water Diversion Measurement

a. Measurement	Direct measurement using a device listed in Section 1 is "not locally cost effective" for water directly diverted and/or diverted to storage	
b. Types of measuring devices used		
c. Additional technology used		
c. Description of additional technology used		
d. Who installed your measuring device(s)		
e. Make, model number, and last calibration date of your measuring device(s)		
f. Why direct measurement using a device	Other	

SUPPLEMENTAL STATEMENT OF WATER DIVERSION AND USE

<p>listed in Section 1 is "not locally cost effective"</p>	
<p>Explanation of why use of devices and technologies listed in Section 1 are "not locally cost effective"</p>	<p>The cost of acquisition, installation, maintenance (including vandalism and theft deterrence and remediation), collection and compilation of data from measuring devices is not locally cost-effective because the value of the local benefits of installing and maintaining meters is not greater than the value of the local cost of implementing that measure. There are no apparent grants available to otherwise cover costs of water meters and related actions. Moreover, the unique hydrogeological characteristics of the Delta (e.g., tides, seepage, interconnected channels, etc.) indicate that meters are not the best available technology in this region. Any water diverted in the Delta which is not consumed or evaporated is recycled to the Delta Pool for reuse. As further support for the conclusion that measuring devices are not locally cost-effective reference is made to the documentation on file with the SWRCB attesting to the lack of such cost-effectiveness submitted in connection with the SWRCB's July 21, 2011 "Water Measurement Workshop" and the SWRCB's follow-up solicitation of comments (due November 18, 2011) re the same.</p>
<p>Method(s) used as an alternative to direct measurement</p>	<p>Crop duty estimates/consumptive use estimates</p>
<p>9. Explanation of method(s) used as an alternative to direct measurement</p>	<p>Used ITRC REPORT 03-001 ETc Table for Irrigation Scheduling and Design, Zone 12 for Surface Irrigation, Typical year adjusted for the reporting year using CIMIS monthly ETo for Manteca. For crops not covered by the ITRC report ETc was determined using ratios to alfalfa from Table A-5, DWR Bulletin 168, October 1978.</p>

6. Purpose of Use

<p>Irrigation</p>	<p>87.79 Acres</p>
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7. Changes in Method of Diversion

<p> </p>

8. Conservation of Water

<p>Are you now employing water conservation efforts?</p>	<p>Yes</p>
<p>a. Describe any water conservation efforts you have initiated</p>	<p>Good water management and farming practices. Any diverted water which is not consumed or evaporated is recycled to the Delta Pool. Credit is claimed for these water conservation efforts under section 1011 of the Water Code. A specific amount conserved is not reported due to the lack of a present method to precisely quantify that amount.</p>
<p>Amount of water conserved</p>	<p>Acre-Feet</p>
<p>b. I have data to support the above surface water use reductions due to conservation efforts.</p>	<p> </p>

9. Water Quality and Wastewater Reclamation

<p>a. Are you now or have you been using reclaimed water from a wastewater treatment facility, desalination facility, or water polluted by waste to a degree which unreasonably affects such water for other beneficial causes?</p>	<p>No</p>
<p>b. Amount of reduced diversion</p>	<p> </p>
<p>Type of substitute water supply</p>	<p> </p>
<p>Amount of substitute water supply used</p>	<p> </p>

SUPPLEMENTAL STATEMENT OF WATER DIVERSION AND USE

I have data to support the above surface water use reductions due to the use of a substitute water supply	
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10. Conjunctive Use of Surface Water and Groundwater	
a. Are you now using groundwater in lieu of surface water?	No
b. Amount of groundwater used	
I have data to support the above surface water use reductions due to the use of groundwater.	

11a. Additional Remarks
The amount diverted is a multiple of the reported use amount, plus a factor to account for field flooding (if any). The multiple is to account for additional water that is diverted but not consumed or evaporated.

Attachments		
File Name	Description	Size
No Attachments		

Contact Information of the Person Submitting the Form	
First Name	Kelly
Last Name	Arceo
Relation to Water Right	Other
Has read the form and agrees the information in the report is true to the best of his/her knowledge and belief	Yes

[SUMMARY OF FINAL SUBMITTED VERSION]

SUPPLEMENTAL STATEMENT OF WATER DIVERSION AND USE FOR 2012

Primary Owner: Abbate Farms
 Statement Number: S018798
 Date Submitted: 2013-07-24

1. Water is used under	Riparian Claim Pre-1914 Claim Other: OVERLYING AND STATUTORY RIGHTS
2. Year of first use	1800

3-4. Maximum Rate of Diversion for each Month and Amount of Water Diverted and Used			
Month	Rate of diversion	Amount directly diverted or collected to storage (Acre-Feet)	Amount beneficially used (Acre-Feet)
January		0	0
February		0	0
March		14.38	8.99
April		67.79	42.37
May		100.65	62.91
June		109.48	68.42
July		187.14	116.96
August		129.18	80.74
September		103.35	64.6
October		0	0
November		0	0
December		0	0
Total		711.97	444.99
Comments			

5. Water Diversion Measurement

a. Measurement	Direct measurement using a device listed in Section 1 is "not locally cost effective" for water directly diverted and/or diverted to storage	
b. Types of measuring devices used		
c. Additional technology used		
c. Description of additional technology used		
d. Who installed your measuring device(s)		
e. Make, model number, and last calibration date of your measuring device(s)		
f. Why direct measurement using a device	Other	

SUPPLEMENTAL STATEMENT OF WATER DIVERSION AND USE

listed in Section 1 is "not locally cost effective"	
Explanation of why use of devices and technologies listed in Section 1 are "not locally cost effective"	The cost of acquisition, installation, maintenance (including vandalism and theft deterrence and remediation), collection and compilation of data from measuring devices is not locally cost-effective because the value of the local benefits of installing and maintaining meters is not greater than the value of the local cost of implementing that measure. There are no apparent grants available to otherwise cover costs of water meters and related actions. Moreover, the unique hydrogeological characteristics of the Delta (e.g., tides, seepage, interconnected channels, etc.) indicate that meters are not the best available technology in this region. Any water diverted in the Delta which is not consumed or evaporated is recycled to the Delta Pool for reuse. As further support for the conclusion that measuring devices are not locally cost-effective reference is made to the documentation on file with the SWRCB attesting to the lack of such cost-effectiveness submitted in connection with the SWRCB's July 21, 2011 "Water Measurement Workshop" and the SWRCB's follow-up solicitation of comments (due November 18, 2011) re the same.
Method(s) used as an alternative to direct measurement	Crop duty estimates/consumptive use estimates
9. Explanation of method(s) used as an alternative to direct measurement	Used ITRC REPORT 03-001 ETc Table for Irrigation Scheduling and Design, Zone 12 for Surface Irrigation, Typical year adjusted for the reporting year using CIMIS monthly ETo for Manteca. For crops not covered by the ITRC report ETc was determined using ratios to alfalfa from Table A-5, DWR Bulletin 168, October 1978.

6. Purpose of Use

Irrigation	255 Acres
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7. Changes in Method of Diversion

8. Conservation of Water

a. Are you now employing water conservation efforts?	Yes
Describe any water conservation efforts you have initiated	Good water management and farming practices, and/or lined ditches, and/or pipelines, and/or drip irrigation, and/or sprinkler irrigation, and/or low energy spray irrigation, and/or cover crops, and/or mulching, and/or laser leveling. Any diverted water which is not consumed or evaporated is recycled to the Delta Pool. Credit is claimed for these water conservation efforts under section 1011 of the Water Code. A specific amount conserved is not reported due to the lack of a present method to precisely quantify that amount.
Amount of water conserved	Acre-Feet
b. I have data to support the above surface water use reductions due to conservation efforts.	

9. Water Quality and Wastewater Reclamation

a. Are you now or have you been using reclaimed water from a wastewater treatment facility, desalination facility, or water polluted by waste to a degree which unreasonably affects such water for other beneficial causes?	No
b. Amount of reduced diversion	

SUPPLEMENTAL STATEMENT OF WATER DIVERSION AND USE

Type of substitute water supply	
Amount of substitute water supply used	
I have data to support the above surface water use reductions due to the use of a substitute water supply	

10. Conjunctive Use of Surface Water and Groundwater	
a. Are you now using groundwater in lieu of surface water?	No
b. Amount of groundwater used	
I have data to support the above surface water use reductions due to the use of groundwater.	

11a. Additional Remarks

The amount shown as "used" may include months during which any permanent crop was not irrigated and/or months during which any annual crop was not in place. This is done to reflect the actual water used or lost from the land (including weeds) as per the UC Davis/CalPoly data on ET. This is done because any water "consumed" in this area is a net decrease in the Delta Pool. However, the amounts shown as diverted in each month reflects only actual diversions. Hence, the information submitted may show water use in months with no surface water diversion.

Attachments		
File Name	Description	Size
No Attachments		

Contact Information of the Person Submitting the Form	
First Name	JOHN
Last Name	HERRICK
Relation to Water Right	Agent
Has read the form and agrees the information in the report is true to the best of his/her knowledge and belief	Yes

[SUMMARY OF FINAL SUBMITTED VERSION]

SUPPLEMENTAL STATEMENT OF WATER DIVERSION AND USE FOR 2012

Primary Owner: Sarale Farms Inc
 Statement Number: S016653
 Date Submitted: 2013-07-19

1. Water is used under	Riparian Claim Pre-1914 Claim Other: OVERLYING AND STATUTORY RIGHTS
2. Year of first use	1800

3-4. Maximum Rate of Diversion for each Month and Amount of Water Diverted and Used			
Month	Rate of diversion	Amount directly diverted or collected to storage (Acre-Feet)	Amount beneficially used (Acre-Feet)
January		0	0
February		0	0
March		0	0
April		50.22	31.39
May		74.57	46.61
June		81.11	50.7
July		77.35	48.34
August		68.33	42.71
September		51.47	32.17
October		21.68	13.55
November		0	0
December		0	0
Total		424.73	265.47
Comments			

5. Water Diversion Measurement	
a. Measurement	Direct measurement using a device listed in Section 1 is "not locally cost effective" for water directly diverted and/or diverted to storage
b. Types of measuring devices used	
c. Additional technology used	
d. Description of additional technology used	
e. Who installed your measuring device(s)	
f. Make, model number, and last calibration date of your measuring device(s)	
f. Why direct measurement using a device	Other

listed in Section 1 is "not locally cost effective"	
Explanation of why use of devices and technologies listed in Section 1 are "not locally cost effective"	The cost of acquisition, installation, maintenance (including vandalism and theft deterrence and remediation), collection and compilation of data from measuring devices is not locally cost-effective because the value of the local benefits of installing and maintaining meters is not greater than the value of the local cost of implementing that measure. There are no apparent grants available to otherwise cover costs of water meters and related actions. Moreover, the unique hydrogeological characteristics of the Delta (e.g., tides, seepage, interconnected channels, etc.) indicate that meters are not the best available technology in this region. Any water diverted in the Delta which is not consumed or evaporated is recycled to the Delta Pool for reuse. As further support for the conclusion that measuring devices are not locally cost-effective reference is made to the documentation on file with the SWRCB attesting to the lack of such cost-effectiveness submitted in connection with the SWRCB's July 21, 2011 "Water Measurement Workshop" and the SWRCB's follow-up solicitation of comments (due November 18, 2011) re the same.
Method(s) used as an alternative to direct measurement	Crop duty estimates/consumptive use estimates
9. Explanation of method(s) used as an alternative to direct measurement	Used ITRC REPORT 03-001 ETc Table for Irrigation Scheduling and Design, Zone 12 for Surface Irrigation, Typical year adjusted for the reporting year using CIMIS monthly ETc for Manteca. For crops not covered by the ITRC report ETc was determined using ratios to alfalfa from Table A-5, DWR Bulletin 168, October 1978.

6. Purpose of Use

Irrigation	81.5 Acres
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7. Changes in Method of Diversion

8. Conservation of Water

Are you now employing water conservation efforts?	Yes
a. Describe any water conservation efforts you have initiated	Good water management and farming practices, and/or lined ditches, and/or pipelines, and/or drip irrigation, and/or sprinkler irrigation, and/or low energy spray irrigation, and/or cover crops, and/or mulching, and/or laser leveling. Any diverted water which is not consumed or evaporated is recycled to the Delta Pool. Credit is claimed for these water conservation efforts under section 1011 of the Water Code. A specific amount conserved is not reported due to the lack of a present method to precisely quantify that amount.
Amount of water conserved	Acre-Feet
b. I have data to support the above surface water use reductions due to conservation efforts.	

9. Water Quality and Wastewater Reclamation

a. Are you now or have you been using reclaimed water from a wastewater treatment facility, desalination facility, or water polluted by waste to a degree which unreasonably affects such water for other beneficial causes?	No
b. Amount of reduced diversion	

SUPPLEMENTAL STATEMENT OF WATER DIVERSION AND USE

Type of substitute water supply	
Amount of substitute water supply used	
I have data to support the above surface water use reductions due to the use of a substitute water supply	

10. Conjunctive Use of Surface Water and Groundwater	
a. Are you now using groundwater in lieu of surface water?	No
b. Amount of groundwater used	
I have data to support the above surface water use reductions due to the use of groundwater.	

11a. Additional Remarks

The amount shown as "used" may include months during which any permanent crop was not irrigated and/or months during which any annual crop was not in place. This is done to reflect the actual water used or lost from the land (including weeds) as per the UC Davis/CalPoly data on ET. This is done because any water "consumed" in this area is a net decrease in the Delta Pool. However, the amounts shown as diverted in each month reflects only actual diversions. Hence, the information submitted may show water use in months with no surface water diversion.

Attachments		
File Name	Description	Size
No Attachments		

Contact Information of the Person Submitting the Form	
First Name	JOHN
Last Name	HERRICK
Relation to Water Right	Agent
Has read the form and agrees the information in the report is true to the best of his/her knowledge and belief	Yes

[SUMMARY OF FINAL SUBMITTED VERSION]

SUPPLEMENTAL STATEMENT OF WATER DIVERSION AND USE FOR 2012

Primary Owner: TROY DAYAK
 Statement Number: S017590
 Date Submitted: 2013-06-30

1. Water is used under	Riparian Claim Pre-1914 Claim
2. Year of first use	1800

3-4. Maximum Rate of Diversion for each Month and Amount of Water Diverted and Used			
Month	Rate of diversion (CFS)	Amount directly diverted or collected to storage (Acre-Feet)	Amount beneficially used (Acre-Feet)
January	0	0	0
February	0	0	0
March	0	0	0
April	0.51	20.4	20.4
May	0.46	18.4	18.4
June	0.68	27.2	27.2
July	0.78	31.2	31.2
August	0.68	27.2	27.2
September	0.51	20.4	20.4
October	0	0	0
November	0	0	0
December	0	0	0
Total		144.8	144.8
Comments			

5. Water Diversion Measurement

a. Measurement	Direct measurement using a device listed in Section 1 is "not locally cost effective" for water directly diverted and/or diverted to storage
b. Types of measuring devices used	
c. Additional technology used	
Description of additional technology used	
d. Who installed your measuring device(s)	
e. Make, model number, and last calibration date of your measuring device(s)	
f. Why direct measurement using a device listed in Section 1 is "not locally cost effective"	Other
Explanation of why use of devices and technologies listed in Section 1 are "not locally cost effective"	a meter is on this pump to measure electric usage and time usage. the horsepower multiplied by the time usage give us the cubic feet.
g. Method(s) used as an alternative to direct measurement	Electricity records dedicated to the pump
Explanation of method(s) used as an alternative to direct measurement	a meter devoted to this diversion pump gives us the usage.

6. Purpose of Use

SUPPLEMENTAL STATEMENT OF WATER DIVERSION AND USE

Irrigation	40 Acres
Stockwatering	0
Domestic	0

7. Changes in Method of Diversion

8. Conservation of Water

Are you now employing water conservation efforts?		Yes
a.	Describe any water conservation efforts you have initiated	continuing to eliminate seepage, leakage and waste
Amount of water conserved		Acre-Feet
b.	I have data to support the above surface water use reductions due to conservation efforts.	No

9. Water Quality and Wastewater Reclamation

a.	Are you now or have you been using reclaimed water from a wastewater treatment facility, desalination facility, or water polluted by waste to a degree which unreasonably affects such water for other beneficial causes?	No
Amount of reduced diversion		
Type of substitute water supply		
b.	Amount of substitute water supply used	
I have data to support the above surface water use reductions due to the use of a substitute water supply		

10. Conjunctive Use of Surface Water and Groundwater

a.	Are you now using groundwater in lieu of surface water?	No
Amount of groundwater used		
b.	I have data to support the above surface water use reductions due to the use of groundwater.	

11a. Additional Remarks

Attachments		
File Name	Description	Size
No Attachments		

Contact Information of the Person Submitting the Form

First Name	Candy
Last Name	Soares
Relation to Water Right	Other
Has read the form and agrees the information in the report is true to the best of his/her knowledge and belief	Yes

[SUMMARY OF FINAL SUBMITTED VERSION]

SUPPLEMENTAL STATEMENT OF WATER DIVERSION AND USE FOR 2012

Primary Owner: ANTONIO BRASIL

Statement Number: S018081

Date Submitted: 2013-06-25

1. Water is used under	Riparian Claim Pre-1914 Claim Other: overlying and statutory rights
2. Year of first use	1800

3-4. Maximum Rate of Diversion for each Month and Amount of Water Diverted and Used			
Month	Rate of diversion	Amount directly diverted or collected to storage (Acre-Feet)	Amount beneficially used (Acre-Feet)
January		130.73	81.7
February		0	0
March		0	0
April		0	0
May		184.64	115.29
June		517.81	323.63
July		562.32	351.45
August		405.47	253.42
September		33.03	20.64
October		25.26	15.78
November		37.89	23.68
December		38.29	23.93
Total		1935.44	1209.52
Comments			

5. Water Diversion Measurement	
a. Measurement	Direct measurement using a device listed in Section 1 is "not locally cost effective" for water directly diverted and/or diverted to storage
b. Types of measuring devices used	
c. Additional technology used	
c. Description of additional technology used	
d. Who installed your measuring device(s)	
e. Make, model number, and last calibration date of your measuring device(s)	
f. Why direct measurement using a device	Other

listed in Section 1 is "not locally cost effective"	
Explanation of why use of devices and technologies listed in Section 1 are "not locally cost effective"	The cost of acquisition, installation, maintenance (including vandalism and theft deterrence and remediation), collection and compilation of data from measuring devices is not locally cost-effective because the value of the local benefits of installing and maintaining meters is not greater than the value of the local cost of implementing that measure. There are no apparent grants available to otherwise cover costs of water meters and related actions. Moreover, the unique hydrogeological characteristics of the Delta (e.g., tides, seepage, interconnected channels, etc.) indicate that meters are not the best available technology in this region. Any water diverted in the Delta which is not consumed or evaporated is recycled to the Delta Pool for reuse. As further support for the conclusion that measuring devices are not locally cost-effective reference is made to the documentation on file with the SWRCB attesting to the lack of such cost-effectiveness submitted in connection with the SWRCB's July 21, 2011 "Water Measurement Workshop" and the SWRCB's follow-up solicitation of comments (due November 18, 2011) re the same.
Method(s) used as an alternative to direct measurement	Crop duty estimates/consumptive use estimates
9. Explanation of method(s) used as an alternative to direct measurement	Used ITRC REPORT 03-001 ETC Table for Irrigation Scheduling and Design, Zone 12 for Surface Irrigation, Typical year adjusted for the reporting year using CIMIS monthly ET _o for Manteca. For crops not covered by the ITRC report ETC was determined using ratios to alfalfa from Table A-5, DWR Bulletin 168, October 1978.

6. Purpose of Use

Irrigation	524 Acres
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7. Changes in Method of Diversion

8. Conservation of Water

Are you now employing water conservation efforts?	Yes
a. Describe any water conservation efforts you have initiated	Good water management and farming practices, and/or lined ditches, and/or pipelines, and/or drip irrigation, and/or sprinkler irrigation, and/or low energy spray irrigation, and/or cover crops, and/or mulching, and/or laser leveling. Any diverted water which is not consumed or evaporated is recycled to the Delta Pool. Credit is claimed for these water conservation efforts under section 1011 of the Water Code. A specific amount conserved is not reported due to the lack of a present method to precisely quantify that amount.
Amount of water conserved	Acre-Feet
b. I have data to support the above surface water use reductions due to conservation efforts.	

9. Water Quality and Wastewater Reclamation

a. Are you now or have you been using reclaimed water from a wastewater treatment facility, desalination facility, or water polluted by waste to a degree which unreasonably affects such water for other beneficial causes?	No
b. Amount of reduced diversion	

SUPPLEMENTAL STATEMENT OF WATER DIVERSION AND USE

Type of substitute water supply	
Amount of substitute water supply used	
I have data to support the above surface water use reductions due to the use of a substitute water supply	

10. Conjunctive Use of Surface Water and Groundwater	
a. Are you now using groundwater in lieu of surface water?	No
b. Amount of groundwater used	
I have data to support the above surface water use reductions due to the use of groundwater.	

11a. Additional Remarks
The amount shown as "used" may include months during which any permanent crop was not irrigated and/or months during which any annual crop was not in place. This is done to reflect the actual water used or lost from the land (including weeds) as per the UC Davis/CalPoly data on ET. This is done because any water "consumed" in this area is a net decrease in the Delta Pool. However, the amounts shown as diverted in each month reflects only actual diversions. Hence, the information submitted may show water use in months with no surface water diversion.

Attachments		
File Name	Description	Size
No Attachments		

Contact Information of the Person Submitting the Form	
First Name	John
Last Name	Herrick
Relation to Water Right	Agent
Has read the form and agrees the information in the report is true to the best of his/her knowledge and belief	Yes

[SUMMARY OF FINAL SUBMITTED VERSION]

SUPPLEMENTAL STATEMENT OF WATER DIVERSION AND USE FOR 2012

Primary Owner: Roy Mazzanti Revocable Trust
 Statement Number: S017899
 Date Submitted: 2013-06-24

1. Water is used under	Riparian Claim Pre-1914 Claim Other: overlying & statutory rights
2. Year of first use	1800

3-4. Maximum Rate of Diversion for each Month and Amount of Water Diverted and Used			
Month	Rate of diversion	Amount directly diverted or collected to storage (Acre-Feet)	Amount beneficially used (Acre-Feet)
January		70	14.45
February		12.88	8.05
March		14.25	8.91
April		15.56	9.73
May		33	20.63
June		92.64	57.9
July		100.61	62.88
August		72.54	45.34
September		5.91	3.69
October		7.31	4.57
November		10.62	6.64
December		59.11	7.65
Total		494.43	250.44
Comments			

5. Water Diversion Measurement

a. Measurement	Direct measurement using a device listed in Section 1 is "not locally cost effective" for water directly diverted and/or diverted to storage
b. Types of measuring devices used	
c. Additional technology used	
c. Description of additional technology used	
d. Who installed your measuring device(s)	
e. Make, model number, and last calibration date of your measuring device(s)	
f. Why direct measurement using a device	Other

listed in Section 1 is "not locally cost effective"	
Explanation of why use of devices and technologies listed in Section 1 are "not locally cost effective"	The cost of acquisition, installation, maintenance (including vandalism and theft deterrence and remediation), collection and compilation of data from measuring devices is not locally cost-effective because the value of the local benefits of installing and maintaining meters is not greater than the value of the local cost of implementing that measure. There are no apparent grants available to otherwise cover costs of water meters and related actions. Moreover, the unique hydrogeological characteristics of the Delta (e.g., tides, seepage, interconnected channels, etc.) indicate that meters are not the best available technology in this region. Any water diverted in the Delta which is not consumed or evaporated is recycled to the Delta Pool for reuse. As further support for the conclusion that measuring devices are not locally cost-effective reference is made to the documentation on file with the SWRCB attesting to the lack of such cost-effectiveness submitted in connection with the SWRCB's July 21, 2011 "Water Measurement Workshop" and the SWRCB's follow-up solicitation of comments (due November 18, 2011) re the same.
Method(s) used as an alternative to direct measurement	Crop duty estimates/consumptive use estimates
9. Explanation of method(s) used as an alternative to direct measurement	Used ITRC REPORT 03-001 ETC Table for Irrigation Scheduling and Design, Zone 12 for Surface Irrigation, Typical year adjusted for the reporting year using CIMIS monthly ETo for Manteca. For crops not covered by the ITRC report ETC was determined using ratios to alfalfa from Table A-5, DWR Bulletin 168, October 1978.

6. Purpose of Use

Irrigation	93.75 Acres
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7. Changes in Method of Diversion

8. Conservation of Water

Are you now employing water conservation efforts?	Yes
a. Describe any water conservation efforts you have initiated	Good water management and farming practices, lined ditches and pipelines. Any diverted water which is not consumed or evaporated is recycled to the Delta Pool. Credit is claimed for these water conservation efforts under section 1011 of the Water Code. A specific amount conserved is not reported due to the lack of a present method to precisely quantify that amount.
Amount of water conserved	Acre-Feet
b. I have data to support the above surface water use reductions due to conservation efforts.	

9. Water Quality and Wastewater Reclamation

a. Are you now or have you been using reclaimed water from a wastewater treatment facility, desalination facility, or water polluted by waste to a degree which unreasonably affects such water for other beneficial causes?	No
b. Amount of reduced diversion	
Type of substitute water supply	
Amount of substitute water supply used	

SUPPLEMENTAL STATEMENT OF WATER DIVERSION AND USE

I have data to support the above surface water use reductions due to the use of a substitute water supply	
---	--

10. Conjunctive Use of Surface Water and Groundwater	
a. Are you now using groundwater in lieu of surface water?	No
b. Amount of groundwater used	
I have data to support the above surface water use reductions due to the use of groundwater.	

11a. Additional Remarks
The amount diverted is a multiple of the reported use amount, plus a factor to account for field flooding (if any). The multiple is to account for additional water that is diverted but not consumed or evaporated. The point of diversion that is the subject of this report is one of four points of diversion that provided water to an approximate 375 acre field/parcel. For purposes of these reports, the amount of acreage irrigated, water used and water diverted associated with each of those points of diversion has been evenly split among them.

Attachments		
File Name	Description	Size
No Attachments		

Contact Information of the Person Submitting the Form	
First Name	Kelly
Last Name	Arceo
Relation to Water Right	Other
Has read the form and agrees the information in the report is true to the best of his/her knowledge and belief	Yes

[SUMMARY OF FINAL SUBMITTED VERSION]

SUPPLEMENTAL STATEMENT OF WATER DIVERSION AND USE FOR 2012

Primary Owner: TRANSMISSION AGENCY OF NORTHERN CALIFORNIA

Statement Number: S021250

Date Submitted: 2013-06-21

1. Water is used under	Riparian Claim Pre-1914 Claim Other: overlying & statutory rights
2. Year of first use	1800

3-4. Maximum Rate of Diversion for each Month and Amount of Water Diverted and Used			
Month	Rate of diversion	Amount directly diverted or collected to storage (Acre-Feet)	Amount beneficially used (Acre-Feet)
January		308.52	43.39
February		200.53	25.21
March		122.26	27.1
April		66.07	41.29
May		133.01	83.13
June		279.5	174.68
July		261.85	163.65
August		187.04	116.9
September		15.45	9.66
October		100.85	13.71
November		192.08	19.92
December		275.84	22.96
Total		2143	741.6
Comments			

5. Water Diversion Measurement	
a. Measurement	Direct measurement using a device listed in Section 1 is "not locally cost effective" for water directly diverted and/or diverted to storage
b. Types of measuring devices used	
c. Additional technology used	
d. Description of additional technology used	
e. Who installed your measuring device(s)	
f. Make, model number, and last calibration date of your measuring device(s)	
f. Why direct measurement using a device	Other

listed in Section 1 is "not locally cost effective"	
Explanation of why use of devices and technologies listed in Section 1 are "not locally cost effective"	The cost of acquisition, installation, maintenance (including vandalism and theft deterrence and remediation), collection and compilation of data from measuring devices is not locally cost-effective because the value of the local benefits of installing and maintaining meters is not greater than the value of the local cost of implementing that measure. There are no apparent grants available to otherwise cover costs of water meters and related actions. Moreover, the unique hydrogeological characteristics of the Delta (e.g., tides, seepage, interconnected channels, etc.) indicate that meters are not the best available technology in this region. Any water diverted in the Delta which is not consumed or evaporated is recycled to the Delta Pool for reuse. As further support for the conclusion that measuring devices are not locally cost-effective reference is made to the documentation on file with the SWRCB attesting to the lack of such cost effectiveness submitted in connection with the SWRCB's July 21, 2011 "Water Measurement Workshop" and the SWRCB's follow-up solicitation of comments (due November 18, 2011) re the same.
Method(s) used as an alternative to direct measurement	Crop duty estimates/consumptive use estimates
9. Explanation of method(s) used as an alternative to direct measurement	Used ITRC REPORT 03-001 ETC Table for Irrigation Scheduling and Design, Zone 12 for Surface Irrigation, Typical year adjusted for the reporting year using CIMIS monthly ETo for Manteca. For crops not covered by the ITRC report ETC was determined using ratios to alfalfa from Table A-5, DWR Bulletin 168, October 1978.

6. Purpose of Use	
Irrigation	281.5 Acres

7. Changes in Method of Diversion	

8. Conservation of Water	
Are you now employing water conservation efforts?	Yes
a. Describe any water conservation efforts you have initiated	Good water management and farming practices, pipelines, cover crops, mulching, laser leveling. Any diverted water which is not consumed or evaporated is recycled to the Delta Pool. Credit is claimed for these water conservation efforts under section 1011 of the Water Code. A specific amount conserved is not reported due to the lack of a present method to precisely quantify that amount.
Amount of water conserved	Acre-Feet
b. I have data to support the above surface water use reductions due to conservation efforts.	

9. Water Quality and Wastewater Reclamation	
a. Are you now or have you been using reclaimed water from a wastewater treatment facility, desalination facility, or water polluted by waste to a degree which unreasonably affects such water for other beneficial causes?	No
b. Amount of reduced diversion	
Type of substitute water supply	
Amount of substitute water supply used	

SUPPLEMENTAL STATEMENT OF WATER DIVERSION AND USE

I have data to support the above surface water use reductions due to the use of a substitute water supply	
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10. Conjunctive Use of Surface Water and Groundwater	
a. Are you now using groundwater in lieu of surface water?	No
b. Amount of groundwater used	
I have data to support the above surface water use reductions due to the use of groundwater.	

11a. Additional Remarks
The amount diverted is a multiple of the reported use amount, plus a factor to account for field flooding (if any). The multiple is to account for additional water that is diverted but not consumed or evaporated.

Attachments		
File Name	Description	Size
No Attachments		

Contact Information of the Person Submitting the Form	
First Name	DON
Last Name	WAGENET
Relation to Water Right	Other
Has read the form and agrees the information in the report is true to the best of his/her knowledge and belief	Yes

[SUMMARY OF FINAL SUBMITTED VERSION]

SUPPLEMENTAL STATEMENT OF WATER DIVERSION AND USE FOR 2012

Primary Owner: Grunauer Community Property Trust et al
 Statement Number: S017215
 Date Submitted: 2013-06-19

1. Water is used under	Riparian Claim Pre-1914 Claim Other: overlying and statutory rights
2. Year of first use	1800

3-4. Maximum Rate of Diversion for each Month and Amount of Water Diverted and Used			
Month	Rate of diversion	Amount directly diverted or collected to storage (Acre-Feet)	Amount beneficially used (Acre-Feet)
January		0	0
February		0	0
March		0	0
April		6.83	4.27
May		35.61	22.25
June		54.54	34.09
July		173.61	108.51
August		204.79	127.99
September		52.83	33.02
October		0	0
November		0	0
December		0	0
Total		528.21	330.13
Comments			

5. Water Diversion Measurement

a.	Measurement	Direct measurement using a device listed in Section 1 is "not locally cost effective" for water directly diverted and/or diverted to storage
b.	Types of measuring devices used	
c.	Additional technology used	
	Description of additional technology used	
d.	Who installed your measuring device(s)	
e.	Make, model number, and last calibration date of your measuring device(s)	
f.	Why direct measurement using a device	Other

SUPPLEMENTAL STATEMENT OF WATER DIVERSION AND USE

listed in Section 1 is "not locally cost effective"	
Explanation of why use of devices and technologies listed in Section 1 are "not locally cost effective"	The cost of acquisition, installation, maintenance (including vandalism and theft deterrence and remediation), collection and compilation of data from measuring devices is not locally cost-effective because the value of the local benefits of installing and maintaining meters is not greater than the value of the local cost of implementing that measure. There are no apparent grants available to otherwise cover costs of water meters and related actions. Moreover, the unique hydrogeological characteristics of the Delta (e.g., tides, seepage, interconnected channels, etc.) indicate that meters are not the best available technology in this region. Any water diverted in the Delta which is not consumed or evaporated is recycled to the Delta Pool for reuse. As further support for the conclusion that measuring devices are not locally cost-effective reference is made to the documentation on file with the SWRCB attesting to the lack of such cost-effectiveness submitted in connection with the SWRCB's July 21, 2011 "Water Measurement Workshop" and the SWRCB's follow-up solicitation of comments (due November 18, 2011) re the same.
Method(s) used as an alternative to direct measurement	Crop duty estimates/consumptive use estimates
9. Explanation of method(s) used as an alternative to direct measurement	Used ITRC REPORT 03-001 ETC Table for Irrigation Scheduling and Design, Zone 12 for Surface Irrigation, Typical year adjusted for the reporting year using CIMIS monthly ETo for Manteca. For crops not covered by the ITRC report ETC was determined using ratios to alfalfa from Table A-5, DWR Bulletin 168, October 1978.

6. Purpose of Use	
Irrigation	259.94 Acres

7. Changes in Method of Diversion	

8. Conservation of Water	
Are you now employing water conservation efforts?	Yes
a. Describe any water conservation efforts you have initiated	Good water management and farming practices, and/or lined ditches, and/or pipelines, and/or drip irrigation, and/or sprinkler irrigation, and/or low energy spray irrigation, and/or cover crops, and/or mulching, and/or laser leveling. Any diverted water which is not consumed or evaporated is recycled to the Delta Pool. Credit is claimed for these water conservation efforts under section 1011 of the Water Code. A specific amount conserved is not reported due to the lack of a present method to precisely quantify that amount.
Amount of water conserved	Acre-Feet
b. I have data to support the above surface water use reductions due to conservation efforts.	

9. Water Quality and Wastewater Reclamation	
a. Are you now or have you been using reclaimed water from a wastewater treatment facility, desalination facility, or water polluted by waste to a degree which unreasonably affects such water for other beneficial causes?	No
b. Amount of reduced diversion	

SUPPLEMENTAL STATEMENT OF WATER DIVERSION AND USE

Type of substitute water supply	
Amount of substitute water supply used	
I have data to support the above surface water use reductions due to the use of a substitute water supply	

10. Conjunctive Use of Surface Water and Groundwater	
a. Are you now using groundwater in lieu of surface water?	No
b. Amount of groundwater used	
I have data to support the above surface water use reductions due to the use of groundwater.	

11a. Additional Remarks
The amount shown as "used" may include months during which any permanent crop was not irrigated and/or months during which any annual crop was not in place. This is done to reflect the actual water used or lost from the land (including weeds) as per the UC Davis/CalPoly data on ET. This is done because any water "consumed" in this area is a net decrease in the Delta Pool. However, the amounts shown as diverted in each month reflects only actual diversions. Hence, the information submitted may show water use in months with no surface water diversion.

Attachments		
File Name	Description	Size
No Attachments		

Contact Information of the Person Submitting the Form	
First Name	John
Last Name	Herrick
Relation to Water Right	Agent
Has read the form and agrees the information in the report is true to the best of his/her knowledge and belief	Yes

[SUMMARY OF FINAL SUBMITTED VERSION]

SUPPLEMENTAL STATEMENT OF WATER DIVERSION AND USE FOR 2012

Primary Owner: GLORIA A BACCHETTI
 Statement Number: S019076
 Date Submitted: 2013-06-26

1. Water is used under	Riparian Claim Pre-1914 Claim Other: overlying and statutory rights
2. Year of first use	1800

3-4. Maximum Rate of Diversion for each Month and Amount of Water Diverted and Used			
Month	Rate of diversion	Amount directly diverted or collected to storage (Acre-Feet)	Amount beneficially used (Acre-Feet)
January		10.06	6.29
February		29.82	18.64
March		27.39	17.12
April		74.49	46.56
May		144.22	90.13
June		240.5	150.31
July		227.19	141.99
August		102.78	64.24
September		25.74	16.09
October		0	0
November		0	0
December		0	0
Total		882.19	551.37
Comments			

5. Water Diversion Measurement

a. Measurement	Direct measurement using a device listed in Section 1 is "not locally cost effective" for water directly diverted and/or diverted to storage	
b. Types of measuring devices used		
c. Additional technology used		
c. Description of additional technology used		
d. Who installed your measuring device(s)		
e. Make, model number, and last calibration date of your measuring device(s)		
f. Why direct measurement using a device	Other	

<p>listed in Section 1 is "not locally cost effective"</p>	
<p>Explanation of why use of devices and technologies listed in Section 1 are "not locally cost effective"</p>	<p>The cost of acquisition, installation, maintenance (including vandalism and theft deterrence and remediation), collection and compilation of data from measuring devices is not locally cost-effective because the value of the local benefits of installing and maintaining meters is not greater than the value of the local cost of implementing that measure. There are no apparent grants available to otherwise cover costs of water meters and related actions. Moreover, the unique hydrogeological characteristics of the Delta (e.g., tides, seepage, interconnected channels, etc.) indicate that meters are not the best available technology in this region. Any water diverted in the Delta which is not consumed or evaporated is recycled to the Delta Pool for reuse. As further support for the conclusion that measuring devices are not locally cost-effective reference is made to the documentation on file with the SWRCB attesting to the lack of such cost-effectiveness submitted in connection with the SWRCB's July 21, 2011 "Water Measurement Workshop" and the SWRCB's follow-up solicitation of comments (due November 18, 2011) re the same.</p>
<p>Method(s) used as an alternative to direct measurement</p>	<p>Crop duty estimates/consumptive use estimates</p>
<p>9. Explanation of method(s) used as an alternative to direct measurement</p>	<p>Used ITRC REPORT 03-001 Etc Table for Irrigation Scheduling and Design, Zone 12 for Surface Irrigation, Typical year adjusted for the reporting year using CIMIS monthly ETo for Manteca. For crops not covered by the ITRC report Etc was determined using ratios to alfalfa from Table A-5, DWR Bulletin 168, October 1978.</p>

6. Purpose of Use

<p>Irrigation</p>	<p>237.5 Acres</p>
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7. Changes in Method of Diversion

8. Conservation of Water

<p>Are you now employing water conservation efforts?</p>	<p>Yes</p>
<p>a. Describe any water conservation efforts you have initiated</p>	<p>Good water management and farming practices, and/or lined ditches, and/or pipelines, and/or drip irrigation, and/or sprinkler irrigation, and/or low energy spray irrigation, and/or cover crops, and/or mulching, and/or laser leveling. Any diverted water which is not consumed or evaporated is recycled to the Delta Pool. Credit is claimed for these water conservation efforts under section 1011 of the Water Code. A specific amount conserved is not reported due to the lack of a present method to precisely quantify that amount.</p>
<p>Amount of water conserved</p>	<p>Acre-Feet</p>
<p>b. I have data to support the above surface water use reductions due to conservation efforts.</p>	

9. Water Quality and Wastewater Reclamation

<p>a. Are you now or have you been using reclaimed water from a wastewater treatment facility, desalination facility, or water polluted by waste to a degree which unreasonably affects such water for other beneficial causes?</p>	<p>No</p>
<p>b. Amount of reduced diversion</p>	

SUPPLEMENTAL STATEMENT OF WATER DIVERSION AND USE

Type of substitute water supply	
Amount of substitute water supply used	
I have data to support the above surface water use reductions due to the use of a substitute water supply	

10. Conjunctive Use of Surface Water and Groundwater	
a. Are you now using groundwater in lieu of surface water?	No
b. Amount of groundwater used	
I have data to support the above surface water use reductions due to the use of groundwater.	

11a. Additional Remarks
The amount shown as "used" may include months during which any permanent crop was not irrigated and/or months during which any annual crop was not in place. This is done to reflect the actual water used or lost from the land (including weeds) as per the UC Davis/CalPoly data on ET. This is done because any water "consumed" in this area is a net decrease in the Delta Pool. However, the amounts shown as diverted in each month reflects only actual diversions. Hence, the information submitted may show water use in months with no surface water diversion.

Attachments		
File Name	Description	Size
No Attachments		

Contact Information of the Person Submitting the Form	
First Name	JOHN
Last Name	HERRICK
Relation to Water Right	Agent
Has read the form and agrees the information in the report is true to the best of his/her knowledge and belief	Yes

EXHIBIT L

Rebuttal Testimony of Kathy Mrowka

My rebuttal testimony directly addresses certain issues raised by the Written Testimony of Rick Gilmore (BBID-201), Rick Martinez (BBID-60), Nick Bonsignore (BBID-121), Jack Alvarez¹ (BBID -0158) and Greg Young (BBID-392) and is reflective of my role as Program Manager for Enforcement. This testimony is intended to complement the issues evaluated in the rebuttal testimony of Les Grober (WR-213), and supplement the more specific issues evaluated in the rebuttal testimony of Brian Coats (WR-210), Jeff Yeazell (WR-211), and Kathy Bare (WR-216).

My rebuttal testimony specifically addresses the following alleged conclusions of Rick Gilmore:

- BBID always diverts water in June.
- BBID diverts in summer, even when flows are low and salinity is high.
- BBID can divert up to 50,000 acre-feet per annum (afa).
- There was a CH2M Hill report and a State Water Contractors complaint regarding water supply.
- There is an unlimited Delta water supply.
- There was no need to immediately stop using water after being informed that there was no water available under the BBID water right priority.
- Alternate water supplies were sought, but unavailable.

My rebuttal testimony specifically addresses the following alleged conclusions of Rick Martinez:

- Sources of water in Bethany Drain.
- No change in Old River when City of Tracy wastewater is pumped.

My rebuttal testimony specifically addresses the following alleged conclusions of Nick Bonsignore regarding the water availability analysis:

- A water availability analysis was not performed for the WSID or BBID points of diversion.
- Wastewater plant discharges were not considered.
- Large reservoir releases were not considered.

My rebuttal testimony specifically addresses the following alleged conclusions of Jack Alvarez:

- WSID diversions are largely return flow.
- Drainage is needed within WSID.
- Municipal discharges into Bethany Drain are per contract.
- Enumeration of City of Tracy water sources.
- No permit is needed to divert Bethany Drain flows.

My rebuttal testimony specifically addresses the following alleged conclusion of Greg Young:

¹ Mr. Alvarez's substantive testimony was stricken by the Hearing Officers on February 18, 2016, after I had prepared the rebuttal testimony herein. I leave the rebuttal testimony regarding Mr. Alvarez's testimony here on the assumption that WSID will offer similar testimony from Mr. Alvarez or others on rebuttal.

- 2015 Voluntary cutback program for Delta riparian diverters.

Written Testimony of Rick Gilmore

Mr. Gilmore testifies that BBID has historically always diverted water in June. Specifically, in 1931 there was water for BBID to divert. (BBID-201, p. 3 at line 11; p. 8 at line13.)

I developed the table below to evaluate this statement. The table shows BBID's diversions in various year types in and around 1931. The water supply conditions in the San Joaquin Valley in 2015 were critically dry. (WR-244 is a true and correct copy of Department of Water Resources Water Year Hydrologic Classification Indices for the combined Sacramento and San Joaquin Valley.) 2015 is the fourth year of the current drought. The pre-1914 right was developed prior to operation of the State and Federal Water Projects (Projects). Historic drought diversion practices under pre-Project conditions are evaluated in the table. The period 1931 through 1934 was selected for evaluation because Mr. Gilmore refers to 1931, and this period contains critically dry and dry water year types, as well as multi-year low flow conditions. BBID significantly reduced its June diversions from 1931 through 1934. Inasmuch as BBID reduced June diversions during 1931 through 1934, it is reasonable to assume that BBID was aware that there are times when flows are insufficient to fully serve its claimed water right.

		Year										
		Diversions in Acre-feet (af)										
	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	1934	1935
San Joaquin River Water Year Type	Critically Dry	Below Normal	Dry	Above Normal	Below Normal	Dry	Dry	Critically Dry	Dry	Dry	Critically Dry	Above Normal
March								1,176	112		820	
April	1,450		1,368		335	2,867	273	3,485	1,076	2,135	2,743	
May	3,860	1,050	4,029	4,492	4,177	3,131	3,198	1,888	2,199	2,400	1,791	2,161
June	3,740	3,627	4,685	3,235	3,426	1,619	3,387	2,469	2,114	2,035	1,502	2,785
July	4,270	4,094	4,406	3,850	3,376	3,094	3,276	2,847	2,019	1,798	2,205	2,160
August	3,050	3,441	3,180	3,014	3,556	2,662	3,071	2,652	1,903	2,200	1,883	1,845
September	2,250	1,857	2,665	1,989	1,640	2,188	2,787	1,139	1,346	1,375	1,165	1,486
October	429	118	243	157	264	409	569	140	384	748	571	398
Total	19,049	14,187	20,576	16,737	16,774	15,970	16,561	15,796	11,153	12,691	12,680	10,835
Acreage	7,500	9,000	8,976	9,000	10,500	9,181	9,200	7,853	8,150	4,800	4,780	4,595

Numeric data on diversions available beginning in 1924.

(Table sources: WR-235 [true and correct copy of California Dept. of Pub. Works, Bulletin No. 6, dated 1923, 1929, 1930, 1931, 1932, 1933, 1934 and 1935 and Bulletin No. 23, dated 1924-1928]; WR-244.)

I also found relevant information on diversions during the 1976-77 drought, which indicated that diversions reached a low of 5,900 af (monthly data not available). (WR-196, p. 5.) Therefore, BBID's diversions during the 1976-77 drought were only a fraction of its 1931 critically dry year diversions.

Mr. Gilmore testified that BBID has always diverted throughout the summer months, even when flows dropped to near zero and salinity was high. (BBID-201, p. 3 at line 13.)

The table above generally supports this statement, but also supports a finding that starting in 1931 summer diversions were reduced as compared to prior to 1931. However, the 1976-77 data suggests

that BBID may have had very limited summer water available during that drought. Water availability for the pre-1914 right fluctuates in accordance with water supply. The table does not support a finding of unlimited Delta water supply to serve BBID's claimed right.

Although summer diversions may have occurred, during low flow years such diversions were adverse to crops. In the Sacramento-San Joaquin Delta, the historic impacts of salinity can be expressed in terms of crop loss. Prior to operation of the State and Federal water projects, and the release of significant stored quantities of water to maintain Delta water quality standards established by the State Water Board (see Decision 1641, for example) (WR-231 is a true and correct copy of D-1641), Delta water quality resulted in crop losses in the BBID service area during the 1931 low flow conditions. I reviewed a salinity study found in the 1931 Sacramento-San Joaquin Water Supervisor's Report (WR-158), and noted that the lands served by BBID are within the area depicted on Plate 13 as having salinity encroachment of 100 parts per 100,000 (1 ppt or 1.968 mS/cm) and also within the area in which crop losses due to salinity were reported. (Conversion calculator: <https://www.hamzasreef.com/Contents/Calculators/SalinityConversion.php>)

The following information is taken from the 1931 study. The study states that extensive encroachment of salinity from San Francisco Bay caused damage in the Delta in 1920, 1924 and 1926, but particularly in 1924. In the spring of 1931, it was evident that the stream flow to the Delta would probably be as low, if not lower than in 1924 and that a salinity encroachment as great if not greater than in 1924 could be expected. The survey captured the crop losses due to (1) the curtailment of irrigation when the salinity of the irrigation water became too high, (2) the actual application of irrigation water of too high salinity, and (3) the abandonment of a crop, or plans for it, because of high salinity. The market value of the Delta crops estimated to have been lost because of salinity in 1931 totaled \$1,263,716. Of this amount, \$890,906, or 70 percent of the total, is the loss estimated to have resulted from curtailment of irrigation, \$357,640 or 29 percent, the loss due to actual application and use of water of too high salinity, and \$15,170 or one per cent, the loss due to destruction of permanent plantings and to abandonment of crops or plans therefor because of high salinity. The most important intangible crop loss was identified as the effects of 1931 salinity on the crops of 1932 and even subsequent years. Because of high salinity considerable acreages supporting permanent crops were not irrigated when they should have been. The study notes that perhaps as serious as the effects of non-irrigation was the reduction in future yields of all crops due to impregnation of the soil with water of high salinity and the deposits of salt. (WR-158, pp. 52-72.) 71 percent of Delta irrigated acreage was within the area affected by the 100 part salinity encroachment.

The hydrologic conditions in 2015 were the most severe on record (see, for example, the Rebuttal Testimony of Leslie Grober, Exhibit WR-213). Thus, the 1931 report findings regarding crop losses are applicable and may underestimate crop losses that would be expected in 2015 under natural flow conditions. Accordingly, under natural conditions, exercise of the pre-1914 right would likely have resulted in crop loss in 2015. It may be argued that crop loss would only occur after several months of application of highly saline water; accordingly, it would not occur during the June violation period noted in the ACL. However, the timing of crop loss is not at issue, because knowingly applying waters which will harm or kill a crop may be construed as a waste and unreasonable use of water, which is not permitted under any water right.

Mr. Gilmore testified that the location of the BBID diversion facility was changed from Italian Slough, a tributary of Old River, to the Intake Channel to the Harvey O. Banks Pumping Plant. Pursuant to a

2003 Agreement with the Department of Water Resources (DWR), BBID can divert up to 50,000 af per year on a year round basis under its pre-1914 right. (BBID-201, p. 4 at line 20; p. 6 at line 11.)

I reviewed the referenced DWR agreement (BBID-208). The water exchange agreement states that BBID is to make water available to DWR under its pre-1914 right during the period April 1 through October 31. DWR provides a like amount of water under its rights to BBID during the period November 1 through March 31. (BBID-208, p. 2, item E.) Although the Agreement states that 50,000 acre-feet may be diverted throughout the year, the Agreement is for exchange of water to provide water during the period November 1 through March 31, to allow BBID to deliver water to municipal areas within its service area outside the season of BBID's claimed pre-1914 right. The Agreement would not be necessary if the pre-1914 right covered diversions during this time period. Moreover, the Agreement states "This Agreement neither enlarges nor restricts the District's present water rights." (BBID 208, p. 6, item 8.) DWR does not have authority to adjudicate the BBID water right, and appears to have solely made an Agreement to simplify Project operations by setting forth the delivery amounts to BBID. DWR did not make a finding on the scope and validity of the pre-1914 right.

The 2003 contractual finding is substantially different than the documentation provided in the table above regarding the scope and season of the pre-1914 right. It is my understanding that the statutory method of obtaining a pre-1914 right entailed following the requirements of Civil Code sections 1410 through 1422. Civil Code section 1415 required the posting and recording of a notice that contained specified information about a proposed appropriation. Civil Code section 1416 required construction of the diversion works to be commenced within 60 days of posting the notice, and required the work to be conducted and completed with diligence. Both pre-1914 and post-1914 appropriative rights are perfected by applying water to reasonable, beneficial use. The measure of the right is the amount of water actually applied to reasonable, beneficial use, not the amount of water listed in a notice of appropriation, the capacity of an appropriator's diversion works, the amount of water actually diverted, or the amount of water authorized to be diverted in a water right permit. (*Millview County Water District v. State Water Resources Control Board* (2014) 229 Cal.App.4th 879, 890-891, 896-897; *Haight v. Costanich* (1920) 184 Cal. 426, 431; *Trimble v. Heller* (1913) 23 Cal.App. 436, 443-444; *Akin v. Spencer* (1937) 21 Cal.App.2d. 325, 328; Wat. Code, §§ 1240, 1390, 1610.)

It is also my understanding that appropriative rights must be developed with due diligence. (*Maeris v. Bicknell* (1857) 7 Cal. 261, 263; Wat. Code, §§ 1395, 1396, 1397; Civil Code, § 1416.) Under the doctrine of progressive use and development, the development of an appropriative right that was initiated before December 14, 1914, may be completed after that date without obtaining a water rights permit, provided that any increase in the diversion and use of water after December 14, 1914, is within the scope of the original plan of development, and the plan is carried out with due diligence. (*Haight v. Costanich, supra*, 184 Cal.at pp. 431-433.)

Finally, it is my understanding that a pre-1914 "claimant's use rights are limited to the season and even the time of day or week when the claimant actually used water." (*Millview, supra*, 229 Cal.App. 4th at p. 898.)

Given my understanding of the legal background, I believe it is important to understand both the scope and season of BBID's claimed pre-1914 right, in order to confirm the extent of unauthorized diversion subject to the ACL Complaint. To that end, I have identified the various contracts which BBID has entered into to sell portions of its pre-1914 water. Any diversions at locations other than the SWP Intake Channel were not considered in the ACL Complaint.

BBID relies upon its 2003 contract to divert up to 50,000 af. In reality, BBID should rely upon its historic levels of diversion shown in the table. Otherwise, BBID may divert more water than is available under the pre-1914 right. For instance, in 2014 BBID transferred water and made \$2.4 million on the water transfers. (WR-218 is a true and correct copy of BBID's Financial Statements and Independent Auditor's Report for the year ended December 31, 2014.) Transfers should be based on real water, not paper water.

Mr. Gilmore's testimony appears to be for the purpose of reducing or setting aside the penalties proposed in the ACL Complaint. The ACL Complaint identifies diversions on the Intake Channel as the basis for violations. Subsequent to issuance of the ACL Complaint, prosecution staff learned that BBID may also be providing water to other parties at additional diversion locations. The water delivery agreements are listed below. Should it be determined during the hearing that BBID delivered more water than identified in the ACL Complaint, such deliveries should be taken into consideration in determining the final ACL liability amount.

Pre-1914 Right Transfers and Exchanges

BBID Contract to Supply Pre-1914 Water to Westlands Water District

In April 2012, BBID requested that the U.S. Bureau of Reclamation (Reclamation) approve delivery of up to 5,000 afa of their pre-1914 water rights to Westlands Water District (Westlands) via the San Luis Canal. Delivery of BBID's pre-1914 water was scheduled to through February 28, 2016. (WR-197.) Conveyance of 5,000 af BBID's pre-1914 water rights through the Central Valley Project (CVP) facilities was extended through December 31, 2045 through a series of five-year Warrant Act contracts. (WR-191.)

BBID Contract to Supply Pre-1914 Water to Tracy Hills

In April 2014, Reclamation and BBID entered into a draft contract for exchange of water with BBID for Tracy Hills Water Supply Project. Under Contract 11-WC-20-0149, BBID provides up to 4,725 afa of its pre-1914 water to Reclamation during March through October, in exchange for CVP water delivered throughout the year to a portion of the Tracy Hills Development for M&I use. After operational losses of 5 percent, the CVP contract water supply is 4,500 af to Tracy Hills Development. (WR-199, p. 6; WR-198.) The pre-1914 water is delivered from the BBID pipeline into the Delta Mendota Canal at milepost 3.32R.

BBID Contract to Supply Pre-1914 Water to Mountain House

BBID contracts to provide 9,413 afa of its pre-1914 water supply to the Mountain House Project Area for M&I purposes. (WR-196, p. 4.) The water is diverted from a separate pump near the BBID pump on the Banks Intake Channel.

In determining the quantities diverted in the ACL Complaint, prosecution staff looked at whether the diversions were offset by use under other basis of right. Prosecution staff identified two potential sources of water.

Contra Costa Water District

In order 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. (WR-200, p. 1) The water was to be made available through substitution, with Contra Costa using 4,000 af of water stored in Los Vaqueros Reservoir instead of taking their CVP supply from the San Joaquin-Sacramento Delta, and the Contra Costa CVP supply would then be transferred to BBID. The water would be diverted at BBID's point of diversion on the Banks Intake Channel to the Harvey O. Banks pumping facility (Banks Intake Channel). The water would be used for municipal and industrial (M&I) purposes. The environmental document for the transfer documents states that in 2014, the BBID CVP contract allocation was set to zero for agriculture and 50 percent for M&I (WR-200, Section 1.1.).

A portion of the transfer water was used in 2014. During 2015, no transfer water was made available to BBID during the period of alleged unauthorized diversion in the ACL. Transfer water releases occurred on August 4 to 7, and again on August 23 through 30. The total volume transferred was 240 af in 2015. (WR-201; WR-202; WR-203; WR-204.)

U.S. Bureau of Reclamation Contract

BBID contracts with Reclamation for a long-term Central Valley Water Project water supply. (WR-205.) When BBID consolidated with Plain View, the Reclamation contract was amended to reflect the consolidation. The contract is for 20,600 af for irrigation, and M&I uses. The contract water supply may be reduced due to hydrologic conditions. The point or points of delivery of the contract water are on the Delta Mendota Canal and other mutually agreed upon locations. (WR-205, p. 20.) The 20,600 af is comprised of 800 af for M&I and 19,800 af for irrigation. (WR-225 [true and correct copy of CVP contractors list from Reclamation Mid-Pacific Region website].) In 2015, Reclamation provided no water for agricultural users, and at least 25 of historic M&I use. (WR-206.)

BBID also banks water in San Luis Reservoir for summer water supply. In 2015, BBID was notified that there wouldn't be enough water in the Delta Mendota Canal to obtain the San Luis Reservoir water. (WR-207.)

Mr. Gilmore testifies that prior determinations of the State Water Board included references to unlimited quantities of water in the Delta. Thus, the State Water Board's determinations established the universally understood concept of the constant availability of water in the Delta. (BBID-201, p. 7 at line 3.)

Les Grober's rebuttal testimony (WR-213) addresses the technical aspects of BBID and WSID's allegations regarding water quality related to their claims of unlimited Delta flow, but such claims are not supported by modern decisions of the State Water Board regarding water availability for new projects. In three recent decisions regarding new water supply projects the State Water Board evaluated water availability in the Delta. These were Decisions 1629, 1643 and 1650 for the Los Vaqueros Reservoir Project, the Delta Wetlands Properties, and the Davis/Woodland Water Supply Project, respectively. (WR-229, WR-232, and WR-233 are all true and correct copies of these Decisions.) In all three decisions, the availability of water was calculated based on water needed to satisfy holders of prior rights and for protection of other beneficial uses. The water rights were subject to standard water right permit term 80 and other terms to protect prior rights. The projects received either term 91 or a special Delta term in lieu of term 91 where it was deemed that 91 was not adequately protective of the rights of the CVP and SWP. Of particular note is the extensive evaluation of potential impacts on riparian diverters

associated with implementation of the Vernalis Adaptive Management Plan in Decision 1641. (Decision 1641, ¶6.3.2.)

Based on my understanding of the legal framework and the Board's findings of fact in these Decisions, it is my belief that, had there been an unlimited quantity of water in the Delta, there would have been no need for the extensive evaluations of project impacts on prior rights and other beneficial uses of water found in these decisions.

In assessing the relative impacts of change petitions and new appropriations on existing water rights in the Delta, it is my understanding that the State Water Board has consistently relied on unimpaired flow data as a baseline, particularly in relatively recent history with the availability of flow data, monitoring, and modeling. In D1379, the State Water Board determined that Delta diverters in the southern Delta and near the export area had rights to divert San Joaquin River water, because under natural conditions it was questionable that Sacramento River water would have reached these areas. (WR-236, p. 24 [WR-236 is a true and correct copy of State Water Board Water Rights Order 89-08, which examined D1379].) To the degree that Sacramento River water reaches the southern Delta, the State Water Board has ruled that southern Delta diverters may lawfully divert that water only to the extent it exceeds the needs of the Department of Water Resources and the U.S. Bureau of Reclamation for export or for carriage purposes. (WR-236, p. 28.)

Later, in State Water Board Water Right Decision 1641 (D1641), the State Water Board properly approved change petitions for the San Joaquin River Agreement solely using unimpaired flow data for Vernalis. (*State Water Resources Control Bd. Cases, supra* 136 Cal.App.4th 735-745; WR-231, p. 30-34.) It is my understanding that riparian rights attach only to natural flow. (*Lux v. Haggin* (1884) 69 Cal. 255; *Bloss v. Rahilly* (1940) 16 Cal.2d 70.) As a result, for riparian diverters, the State Water Board compared the riparian channel depletion requirements only to unimpaired flows at Vernalis. (WR-231, p. 31 [WR-231 is a true and correct copy of D1641].) It did not include unlimited high-salinity inflows from the San Francisco Bay or the premise that the Delta channels "always have water." (*Id.*)

Furthermore, the BBID water right does not authorize diversion from Delta storage. The 1914 Notice of Appropriation (notice) identifies the source of water for BBID as water "flowing in Old River", at a location designated as Italian Slough. (BBID-202.) Presumably, the language in the notice is intended to distinguish water flowing downstream in Old River from backwatered tidal flows. Clearly, the notice does not identify water stored in the Delta in the winter and/or spring months as a source of supply.

Mr. Gilmore testified that CH2M evaluated the State Water Contractor's (SWC) complaint against Delta diverters on BBID's behalf. The complaint is BBID-218. CH2M's preliminary work for BBID revealed that there would be water of sufficient quality for BBID to divert for at least the entire month of June 2015. (BBID-201, p. 8 at line24.)

The CH2M work product was not entered into evidence, and Mr. Gilmore cannot attest to the SWC analytical work. Thus, Mr. Gilmore's assertion that there would be water of sufficient quality for BBID to divert the entire month of June 2015 is unsupported.

The full natural flow supply and demands analysis conducted by Division prosecution staff to determine whether water was available to divert at BBID's priority of right is consistent with Order WR 89-08 [WR-236], which finds:

Water stored for export is appropriated and is not available to Southern Delta diverters unless it is subsequently abandoned.

The following discussion pertains to water that was not stored for export. Under natural conditions it is questionable whether water from the Sacramento River would reach certain parts of the Delta. Currently water from the Sacramento River reaches the southern Delta primarily because of the action of the export pumps operated by USBR and DWR in the southern Delta. By their export pumping, DWR and USBR are turning water into the channels of the San Joaquin River, commingling it, and then reclaiming it, as authorized by Water Code section 7075. DWR and USBR have points of diversion in the San Joaquin River system. The water pulled into the southern Delta is under the physical control of the Projects, and is appropriated water. We consider the water reaching the southern Delta as a result of DWR and USBR pumping as available to southern Delta diverters, but only to the extent that it is in excess of the water required by DWR and USBR for export or for carriage purposes. (WR-236, pp. 24-28.)

Taking into consideration that San Joaquin River diverters are not entitled to Sacramento River flows appropriated by DWR and USBR, as noted in Order WR 89-08, there is no support for Mr. Gilmore's statement that there would be water of sufficient quality for BBID to divert for at least the month of June. Diversion of sufficient quality is contingent on the underlying ability to divert a specific quantity of water. During June of 2015, there was no unappropriated San Joaquin River water to divert under the priority of the BBID pre-1914 right. Furthermore, since the BBID water right is solely a tributary of Old River, any Sacramento River water used to meet Decision 1641 requirements cannot be diverted under the BBID right because it is a foreign source.

Mr. Gilmore's statement that there would be water available to divert during June is also not consistent with BBID's March 23, 2015 notification to its water users within the Byron and Bethany Service Areas that curtailment orders could be issued by the State Water Board to senior pre-1914 water right diverters as early as mid-June, 2015. (WR-218.)

In 2015, the SWP and CVP were curtailed in accordance with the date when water was deemed to be no longer available under the separate priorities of each water right held by DWR and Reclamation. During the same time period, the State Water Board approved a Temporary Urgency Change Petition (TUCP) which limited export diversions of the Projects to the minimum amounts necessary for health and safety purposes and modified certain requirements of Decision 1641 in recognition of the severity of the drought conditions. (WR-222, WR-223, and WR-224 are true and correct copies of TUCP Orders dated February 3, 2015, March 5, 2015, and April 6, 2015.) It is my opinion that Water Code section 12205 requires the integration, to the maximum extent possible, of releases from storage into the Delta for use outside the area in which such water originates with salinity control and an adequate water supply for Delta diverters. It is also my opinion that the balancing required by this provision occurred through issuance of the TUCP. The direct allocation of specific quantities of water for identified Delta uses, and the fact that such flows had to be obtained through reservoir release rather than natural flows, refutes the argument that there was unlimited Delta flow for diversion in 2015, or that State Water Board orders have recognized an unlimited quantity of water in the Delta.

Mr. Gilmore testified that BBID received the June 12, 2015 Curtailment Notice on June 15, 2015. (Exhibit BBID 219.) He understood that the 7-day certification period contained in the Curtailment Notice meant that all diversions had to cease by the end of that certification period. (BBID 201, p. 14 at line17.)

The Board staff never intended that parties receiving the Unavailability Notices would have 7 days of water availability following issuance of the notices. The June 12 Unavailability Notice plainly states that there was no water for diversion under the priority of the BBID water right as of the date of the notice: “With this notice, the State Water Board is notifying pre-1914 appropriative claims of right with a priority date of 1903 and later within the Sacramento -San Joaquin watersheds and Delta of the need to immediately stop diverting water...” (WR-38.) The notifications were issued by mail, by lyris (electronic mail service), newspaper notification, and posting on the State Water Board’s drought web site, and none of the methods provided any indication that water would become unavailable 7 days following issuance of the notices (and Mr. Gilmore cites no evidence to that effect). There is no evidence to support Mr. Gilmore’s claim that Board staff intended to give or actually gave a 7-day grace period for cessation of diversions.

Mr. Gilmore cites only Exhibit BBID 213, which is not the actual unavailability notice, but is an email from Deputy Director Barbara Evoy to me, and others. BBID did not have this email at the time that it made its decision to continue diverting during June. It obtained this document under a July 21, 2016 Public Records Act request. Accordingly, the email could not have informed BBID’s decision. More importantly, Mr. Gilmore misconstrues the plain discussion in the email, which states that a Stockton Record article is incorrect when it states that the Mountain House community can continue to divert for 7 days. The subject line is “error in article”. Inasmuch as the email points out that immediate curtailment was required, it does not support the claim of a 7-day grace period.

Mr. Gilmore testified about the efforts which BBID made to obtain an alternate water supply, and that alternate supplies were not readily available. (BBID-201, pp. 10 to 13.)

Due to the drought condition, alternate water supplies in 2015 were hard to obtain. Although the Prosecution Team previously assumed that the cost of replacement water supplies was \$250 per acre-foot, this was incorrect. In 2015, replacement water costs ranged from \$250 to \$1,000 per acre-foot depending on where water was purchased from. The going rate for water was \$650 per acre-foot. (WR-100; WR-108.)

Written Testimony of Rick Martinez

Mr. Martinez testifies that the WSID’s Bethany Drain collects irrigation return water from various sources, including municipal drainage from lands within the City of Tracy. He also testifies that there are no sources of water into the Bethany Drain from outside of WSID. (WSID-60, p. 2 at ¶ 8.)

As can be seen on Exhibit WR-165, the drainage system which eventually becomes the Main Drain or Bethany Drain (both names refer to the same facility, as the Bethany Drain is a Main Drain) extends into and serves a 2 square mile area of de-annexed lands which are part of the City of Tracy. As stated in my case-in-chief testimony, the City’s water is foreign in source. (WR-7, pp 10-12.) Drainage from the foreign waters is conveyed into the drain, pursuant to a drainage agreement between West Side and the City of Tracy. (WR-192, p. 2.4.) The drainage agreement does not provide West Side with ownership of the City’s drain water in Bethany Drain.

Mr. Martinez testifies that WSID maintains exclusive control over the Bethany Drain from its origination within the District boundaries along its entire course. Inasmuch as the drains originate outside WSID and convey foreign waters, the facts controvert this testimony. It is my understanding that the State’s

jurisdiction over appropriative rights is not restricted to water flowing in natural channels, but that the diversion of water from artificial channels is also subject to the appropriative water rights system. (*Modesto Properties Co. v. State Water Rights Board* (1960) 179 Cal. App. 2d 856, 4 Cal. Rptr. 226.) Therefore, it is my opinion that the Bethany Drain conveys water subject to appropriation.

More importantly, all waters in Bethany Drain are already taken into account in License 1381. (WR-226 is a true and correct copy of a report prepared by WSID's technical expert as part of an amendment process for License 1381; WR-227 is a true and correct copy of a Division letter confirming that the technical report is part of the public record.) As explained by WSID's consultant in 2009:

The data reported by the WSID on each Report of Licensee is based on detailed water delivery records maintained by the WSID. A copy of the WSID's 1997 water delivery records is provided in Attachment D as an example of the WSID's water delivery record keeping system. As shown in Attachment D, the WSID records daily water deliveries to each customer during each month of the irrigation season. The total deliveries for each month and for the entire irrigation season, less the quantity of Central Valley Project water purchased and used by the WSID in each month, are then reported on the Report of Licensee as the quantity of water used from the Old River.

The WSID also maintains detailed records of its pumping operations from the Old River. Attachment E contains the WSID's Daily Pumping Reports for July 1997 showing on an hourly basis which pumps were used on each day.

Attachment E to the consultant's report is the daily pump reports for the nine WSID pumps on the intake canal (WSID's intake canal is sometimes called Wicklund Cut). Both Old River flow and Bethany Drain water are pumped using the nine pumps. WSID does not have any other diversion facilities on the intake canal. Accordingly, all diversions from both sources are accounted for on the Report of Licensee.

Mr. Martinez testified that only minor amounts of treated wastewater was diverted by WSID under the 2014 Agreement from June 17, 2014 through September 19, 2014. He also testified that he observed water levels in the intake channel as well as Old River, and did not notice any change in levels of water in Old River or the WSID intake channel during 2014 wastewater diversions. (WSID-60, p. 3 at ¶ 16 and 18.)

This testimony is not supported by any dates of observation or measurements. Moreover, if only minor amounts were diverted it would be expected that water surface elevation change would be minimal.

In considering issuance of a final Cease and Desist Order, the State Water Board should take into consideration the extent of past compliance with water shortage notices. On May 18, 1977, WSID was informed that there would be no water available for its license starting on May 1, 1977. (WR-240 is a true and correct copy of a May 18, 1977, letter from the Division to diverters in the Delta notifying them of a shortage of fresh water and directing them to curtail diversions.) The Reports of Licensee document that WSID diverted 42,274 af during February through November. (WR-241 is a true and correct copy of WSID's Reports of Licensee for License 1381 including diversions in 1977.)

Nick Bonsignore

Mr. Bonsignore testified that during the depositions [of the Prosecution Team staff] he learned that the State Water Board did not perform a specific water availability analysis for either WSID or BBID that relates to the specific points of diversion for these two diverters. (WSID-0121, ¶17.)

Preparation of site specific analysis for all of the approximately 5,700 post-1914 water right holders and 7,000 Statement of Water Diversion and Use holders in the Sacramento and San Joaquin River watersheds and Delta would never be possible given the time constraints associated with timely notifying diverters that there was insufficient water available to divert. The consequence of failing to timely make such notification would be total disruption of the water right priority system.

Diverters within a watershed are interspersed, with higher and lower priority water rights located at various points within any given watershed. Under drought conditions, water availability must be determined on a watershed basis in order to ensure that all right holders are taken into consideration and that priority is protected. Evaluating water availability only on a localized stream scale ignores the demands of senior downstream diverters within the watershed. Thus, stream-based analysis provides a false picture of water availability under widespread water scarcity conditions. The State Water Board staff's analysis considered both entire watersheds and major sub-watersheds, in order to comprehensively address senior rights. Both analyses; watershed and major sub-watershed, provide a more comprehensive evaluation of water availability than a localized stream scale analysis for Delta diverters. See also rebuttal testimony of Brian Coats. (WR-210.)

Mr. Bonsignore asserts that additional water would have been available for diversion, had the Division considered wastewater treatment plant discharges. He makes particular note of the Sacramento Regional Water Plant. (WSID-0121, at ¶11; WSID-0122, at ¶4.1.1.)

Water Board staff does not consider wastewater discharges as full natural flow. The water is abandoned from the municipal treatment facilities into the stream system. Including such discharges in the drought analysis presents the following difficulties:

- The Division lacks information on the water sources entering the wastewater plants. The sources of water can be varied, including groundwater, surface flow, and reservoir releases. Depending on diversion practices, municipal water system routing times, and wastewater treatment plant routing times, even directly diverted waters may be foreign in time when they are abandoned to the stream.
- Lack of information on actual quantities abandoned during drought. This has likely changed as compared to historic practices due to urban water conservation during drought and water reuse projects.
- Lack of information on how much of each plant's discharge has previously been assigned to appropriative water rights. (See Decision 1638, for example.) (WR-230 is a true and correct copy of D1638.)
- Insofar as the water is already accounted for in the full natural supply element of the drought modeling, it is inappropriate to double count it.

Mr. Bonsignore testified that in 2015 operators of large reservoirs on major tributaries to the San Joaquin River released water from their respective projects in accordance with regulatory minimum

instream flow requirements. There were periods when these released flows were in excess of the full natural flow (FNF) amounts that the State Water Board used to quantify supply for the combined watersheds. While the availability of these excess flows, after serving their intended regulatory purpose, to any one downstream user would require a detailed analysis of legal and regulatory considerations, reservoir releases in excess of FNF represent a potential source of supply to downstream water users. (WSID-0121, at ¶12.)

Reservoir outflows are operated in two fashions: flow bypasses and reservoir releases. A flow bypass is the passage through a reservoir of incoming flow. The bypass can be set at a specific number, such as 35 cfs, and require that all incoming flow be bypassed up to the amount of the established bypass. The flow bypass is the most common method of establishing downstream flow requirements, and is outside the scope of Mr. Bonsignore's testimony. (WSID-0121.) His testimony is specific to reservoir releases.

A reservoir release is the release of water from reservoir storage. The releases are not abandoned water, but are releases made for specific purposes pursuant to the water right that allowed the storage. Reservoir storage releases are not full natural flow. Such releases are foreign in time when released. Three examples are evaluated below. These are the Friant Project and two example projects identified by Mr. Bonsignore.

A typical example of reservoir release is the release of water to serve downstream customers of the diverter. The State and Federal Water Projects release water from their storage facilities, including the Friant Project on the San Joaquin River, for downstream use by their contractors. In 2015, the Friant Project used reservoir releases to serve the Exchange Contractors through instream conveyance and downstream prior rights in the stream reach between Friant Dam and Gravelly Ford. These releases were for specific downstream purposes, and were not available to other persons. Under the water rights for the Friant Project, a 5 cfs bypass is required downstream to Gravelly Ford for use by senior right holders in the reach from the Dam to Gravelly Ford. The San Joaquin River was dry downstream of the bypass reach.

Section 5.1 of the Bonsignore report (WSID-0122) describes operation of Goodwin Dam on the Stanislaus River. On the Stanislaus River, water flows through New Melones Reservoir (a U.S. Bureau of Reclamation (Reclamation) facility), then through Tulloch Dam and Reservoir and Goodwin Dam. The latter two facilities are owned by Oakdale and South San Joaquin Irrigation Districts (Districts). Below Goodwin Dam, the Stanislaus River flows downstream to where it meets the San Joaquin River. From there, the water flows to the Delta. New Melones Reservoir is operated as a primary facility for meeting the requirements of Decision 1641 by providing flows to meet Delta criteria established by the Board. (See WR-231.) Reclamation maintains a contract with the Districts for flow routing and regarding prior rights. Depending on instream flows, the water passing through Goodwin Dam may be composed of bypassed flows, upstream reservoir releases, or any combination thereof. Insofar as the flows were obtained from New Melones Reservoir, the flows are not abandoned, but must remain instream to meet Delta outflow criteria.

Mr. Bonsignore's Section 5.1 also describes Merced Irrigation District diversions on the Merced River. Decision 979 established the instream flow regime from the uppermost dam, Bagby Dam, to the lowermost dam, Snelling Dam. (WR-228 is a true and correct copy of D979.) The Merced River flows through Bagby Dam, then Exchequer Dam, thence Snelling Dam, thence 41 miles to a confluence with San Joaquin River. All flows listed therein are for "dry" year conditions, unless there were no specific dry year flows. Under specified conditions, a minimum flow of 20 cfs is required immediately below Bagby

Dam. A minimum flow of 25 cfs is required immediately below Exchequer Dam. Downstream of Snelling Dam, the Dry year flow for June 1 through October 15 is 15 cfs as measured at the Shaffer Bridge about 43 miles downstream from Snelling Dam. Inasmuch as the flow is required to remain instream over a 43 mile stream reach, it cannot be considered unappropriated throughout this stream reach.

These three examples demonstrate that: (a) reservoir releases may not be abandoned downstream of a dam; the stream may be serving as a means of conveying water to the diverters customers or the water may be serving a particular purpose such as meeting salinity requirements; (b) reservoir releases may not result in any additional flow downstream of the required measurement location; (c) the point downstream where the releases are tallied may be too far downstream to provide water to other diverters once the release has served its identified purpose.

Greg Young

Mr. Young testified that the State Water Board failed to adjust projected demands based on the anticipated reduction in Delta demands associated with the State Water Board's "Voluntary Cutback Program for Delta Riparian Water Rights". (BBID-392, p. 3 at line 4.)

The 25 percent voluntary reduction program only occurred in 2015, and only in the Delta. North Delta diverters did not participate in the program. Only South and Central Delta diverters participated. The State Water Board accounted for demands of the top 90 percent of reported riparian and pre-1914 demand in the Delta, and the top 90 percent of reported riparian and pre-1914 demand in the Sacramento and San Joaquin watersheds by requiring monthly reporting under Informational Order WR 2015-0002-DWR (WR-30.) The 2015 demand data for these diverters was required to be timely reported in accordance with the Informational Order. All data was obtained one month in arrears (June diversion data was obtained in July). The data was evaluated by Jeff Yeazell. The program participant's changes in riparian diversion did not result in any recommended changes to the water shortage notifications.

Jack Alvarez

Mr. Alvarez testifies that in 1929 the Department of Public Works issued Bulletin No. 21, which discusses WSID diversions and confirmed that the water diverted by WSID pursuant to its license is "largely return flow from diversions farther upstream and water reaching the San Joaquin Delta from Sacramento River through Georgiana Slough and other inter-delta channels." (WSID-0158, at ¶16.)

Bulletin No. 21 actually states: "West Side Irrigation District pumps water from Old River, a branch of the San Joaquin, reaching Old River through a dredged intake canal approximately one mile long...The water in San Joaquin River is largely return flow from diversions farther upstream and water reaching the San Joaquin delta from Sacramento River through Georgiana Slough and other intra-delta channels.

Mr. Alvarez testifies that a 1924 drainage report confirms that drainage is needed within WSID to protect lands from high water tables, and notes that in 1924 water stood at less than 4 feet from the surface within WSID. (WSID-0158 at ¶13; WSID-011 at pp. 14-19.)

The following information is from the report (WSID-011).

In years previous to irrigation by WSID, water level was deep in the entire region now occupied by WSID. Very different conditions were found in 1924. Water level has risen in all the wells. Continued irrigation will cause water to raise still higher. Records are not available as to when the first raise occurred, though it is known that it occurred soon after irrigation commenced. (WSID-011 at p. 12.) In many part of the Naglee-Burk District wells would flow above the ground surface. The fact that artesian conditions are found along the highest part of the district is conclusive evidence that the water does not come from the irrigation in the Naglee-Burk District but from higher land. The WSID is the only other possible source of such water. (WSID-011 at p. 14.) The water was menacing both Naglee-Burk and WSID lands.

Mr. Alvarez states that municipal discharges into the Bethany Drain are allowed pursuant to a contract between the City of Tracy and WSID, as well as other similar contracts between WSID and other municipal and industrial properties. (WSID-0158 at ¶15.)

Only the City of Tracy contract is submitted as evidence (WSID-0012). The testimony states that the other drainage agreements between WSID and others are similar in form. Those documents were not provided, nor were the entities subject to the agreements named.

Mr. Alvarez states that the City of Tracy obtains water supplies from three sources: (1) South San Joaquin Irrigation District, (2) U.S. Bureau of Reclamation, and (3) local groundwater wells. He cites WSI-0021. (WSID-0158 at ¶22.)

The cited document is a public review draft document. Although Mr. Alvarez indicates that the document was finalized, the final version was not provided.

The City of Tracy has more than three sources of water, as identified in my testimony and related 2014 report on Tracy water supplies. (WR-7 at p. 14 and WR-193) In addition to the sources listed above, Tracy obtains pre-1914 water from Byron Bethany Irrigation District, and Reclamation contract water assigned from Banta Carbona Irrigation District, WSID, and BBID.

In describing the water in Bethany Drain, Mr. Alvarez asserts that the water is pumped from a man-made canal. Consequently, WSID has the right to use this water without a permit from the State Water Board. As such, WSID does not need to divert such water under the terms of its license, it does not need to file a new appropriation, and it does not need to provide the Board with copies of agreements entitling it to use this water. (WSID-0158 at ¶19.)

As stated in my testimony, the City's water is foreign in source. (WR-7, pp 10-12.) Drainage from the foreign waters is conveyed into the drain, pursuant to agreement between West Side and the City of Tracy. (WR-192, p. 2.4.) The drain originates outside WSID and conveys foreign waters. It is my understanding that the State's jurisdiction over appropriative rights is not restricted to water flowing in natural channels, but that the diversion of water from artificial channels is also subject to the appropriative water rights system. (*Modesto Properties Co. v. State Water Rights Board* (1960) 179 Cal. App. 2d 856, 4 Cal. Rptr. 226.) Based on this understanding, it is my belief that the Bethany Drain conveys water subject to appropriation, and thus the Draft CDO is appropriately issued.

The Bethany Drain water and any treated wastewater drawn into the WSID pumps is reported as diversions under License 1381. WSID explained its diversion reporting for License 1381 in a 2010 report prepared by West Yost Associates. (WR-226.) Although this report was initially confidential, on August

19, 2010, the confidentiality of the report was lifted and the information placed in the open file. (WR-227 is a true and correct copy.) West Yost provided a detailed example, using 1997 water delivery data. WSID records daily water deliveries to each customer during each month of the irrigation season. The total deliveries for each month and for the entire irrigation season, less the quantity of Central Valley Project water purchased and used by WSID in each month, are then reported on the Report of Licensee as the quantity of water used from Old River. (WR-226, p. 3.) Attachment E of the West Yost report is the 1997 daily pump reports for WSID pumps 1 through 9. (WR-226, Attachment E.) Inasmuch as these pumps are used for all diversions and there are no other WSID pumps, the diversions recorded by the pumps would include any diversion of return flows from the Bethany Drain and any treated wastewater diverted from Old River. The data considered in determining the quantities for amended License 1381, issued as a result of a partial revocation action, is inclusive of all sources diverted by the pumps. No conjunctive use of surface water and groundwater was claimed on the Reports of Licensee. (WR-226, Attachment C.)

EXHIBIT M

EXHIBIT WR-210

REBUTTAL TESTIMONY OF BRIAN COATS

My rebuttal testimony directly addresses certain issues raised by the Written Testimony of Nick Bonsignore, P.E. (Exhibit WSID122) and Greg Young, P.E. (Exhibit BBID392).

Mr. Bonsignore's statement is divided into four main sections (Supply Calculations, Agricultural Return Flows, Treated Water Discharges and Minimum Instream Flows) along with an introduction and conclusion. I will be responding to the introduction, Supply Calculation and Return Flow areas (sections 2.0 and 3.0).

For Mr. Young's statement, seven (7) conclusions were made of which I will be responding to three: (1) Choice of a local versus global analysis along with reported demands from larger diverters (§§7-25); (5) Excess watershed demands (§36) and (6) Tributary demands without a corresponding supply (§37).

The other prominent statement topics by Mr. Bonsignore (sections addressing Treated Water Discharges and Minimum Instream Flows) are addressed in Kathy Mrowka's rebuttal statement while conclusions reached by Mr. Young, namely sections (§§7-35 and 38-42) are addressed in either Jeff Yeazell's or Kathy Mrowka's rebuttal statements.

In the introduction of Mr. Bonsignore's statement, he begins with a general overview of the claimed deficiencies in the Division's supply and demand analysis. The claimed deficiencies include using a globalized demand analysis versus a more localized version, calculation of the supplies available and the impact of temporal and tidal influences on the Delta. Since Mr. Bonsignore discusses these topics in more than one section, for ease of addressing, I will focus on each topic separately.

Bonsignore Statement, Sections 1.0 and 2.0 --Watershed Boundaries and Demand Analysis

In section 1.1 of Nick Bonsignore's statement, Bonsignore says, "For purposes of evaluating water available for diverters within the Delta, the SWRCB's methodology is geographically based on the entire Sacramento-San Joaquin-Delta watershed as a whole, or on large subsets of that watershed (Sacramento River watershed plus Delta, or San Joaquin River watershed plus Delta), hereinafter referred to as "combined watersheds". In its analyses of the combined watersheds, the SWRCB's methodology quantifies Supply and Demand in the aggregate on a watershed-wide basis without regard to where a particular component of Supply accrues to the watershed and whether a particular diverter within the combined watershed has access to that Supply component." (Bonsignore Statement, pg. 1, ¶ 1).

In response to Mr. Bonsignore's statement, I must explain the importance of boundaries and why the boundaries and allocation of demands were chosen differently in 2014 versus 2015.

In order to perform a supply and demand analysis, a boundary must be chosen which defines which supplies and demands are included for comparison. In the case of WSID and BBID, both being within the southern Delta, separate river-specific boundaries can be chosen which include the Sacramento River only with a portion of the Delta, the San Joaquin River with a similar portion of the Delta or a more global boundary which includes the entire Sacramento, San Joaquin and Delta. Since WSID and BBID are located in the southern Delta which had been analyzed in prior droughts as part of the San Joaquin

River watershed, the initial boundary for the supply and demand analysis was chosen as the entire San Joaquin River watershed.

Following the 2014 and prior droughts, the Central and South Delta demands, geographically defined as everything within the legal Delta minus the North Delta area, were allocated to the San Joaquin River watershed. However, in 2015, due to the unusually low water supplies for the San Joaquin River watershed, a pro-rated allocation of the entire Delta demand was pursued which resulted in the majority of Delta demand allocated to the Sacramento River watershed. If the Division had allocated the Central and South Delta demand to the San Joaquin River watershed only as done previously, pre-1914 unavailability notices would have been issued earlier and to a deeper priority as shown in WR-219, which is a chart showing the supply and demand of the San Joaquin River Basin pre-1914 rights as of June 10, 2015, with proportional Delta demand.¹ In the interests of fairness and recognition that the Delta is hydraulically connected to both the Sacramento and San Joaquin Rivers, a global boundary was chosen for the analyses.² Dr. Paulsen should agree we are correct in extending the boundary since her testimony indicates that traces of Sacramento River water were detected at BBID's point of diversion. Now that boundaries have been addressed, I will next explain the treatment of demands on a global and local scale.

Bonsignore, in the above statement, is correct that excess localized demand not capable of being met by available supplies should not be assessed as a "water debt" for the remainder of the watershed. Or, in other words, if farmer John needs 10 gallons of water to irrigate his crop but only has 5 gallons available to him, the other 5 gallons needed shouldn't be counted as a debt for anyone downstream since there is no way to get extra water to farmer John.

To address the concern of not treating demands as local "debts," my staff and I prepared Appendix A and B hereto which are supply and demand charts for May and June of 2015 for each of the 10 Full Natural Flow Stations in the Sacramento and San Joaquin River watersheds. Each chart has intersecting lines which represent the individual streams of the Sacramento and San Joaquin River watersheds. The green numbers are the supplies available with the red numbers as reported demands along that particular stream reach. As you move from a green supply, any red demand encountered as you move toward the downstream Delta must be subtracted. All the green and red supply and demand numbers were obtained from our June 2015 publically-available database. I will discuss the resulting numbers from Appendix A and B later in this statement.

As explained in the Rebuttal Statement of Jeff Yeazell (WR-211), Mr. Young's witness statement claims to have removed all the excess demand from each tributary (see Exhibits BBID273 and BBID385) and compared it to the full natural flow available. As Jeff Yeazell's

¹ WR-219 is a true and correct copy of the supply and demand chart generated from the spreadsheet contained in WR-252. WR-252 is a true and correct copy of the 'San Joaquin Basin PRE-14 Supply-Demand Analysis.xlsx' spreadsheet prepared at my direction on June 10, 2015. The spreadsheet has been previously provided to the parties in response to Public Records Act requests.

² This is not to say that the Division of Water Rights believes that water users in the South Delta normally would be able to divert Sacramento River water, absent Project operations and/or extreme drought conditions such as those occurring in 2014 and 2015. The Division conducted the distribution of Delta water right demand based on proportional inflows from stream systems only for the availability analysis purposes, not as a legal or policy position of the State Board.

rebuttal statement demonstrates, even with these alleged excess demands removed, there was still not enough water to satisfy all of the Delta demand in June 2015.

Bonsignore Statement, Sections 1.0 and 2.0 --Full Natural Flows, Daily and Monthly Uses

The next major topic Mr. Bonsignore addresses is the use of full natural flow in the supply and demand analysis. He first refers to the lack of downstream contributions added to the supply of daily FNF used in our analysis.

Mr. Bonsignore states in section 1.2, *“The ‘point of reckoning’ is the FNF station location. Thus, FNF does not include any contributions to the river that occur downstream of the FNF station location.”* (Bonsignore Statement, pg. 2, ln. 3-4) Mr. Bonsignore is correct that no downstream contributions are included within the FNF value, but neither are **downstream depletions** included within the FNF value. The FNF value only takes into account upstream factors. Natural downstream demands such as evaporation, riparian evapotranspiration as well as seepage losses occur irrespective of location within the watershed and occur alongside any contributions. In performing the supply and demand analysis, SWRCB staff did not subtract these depletions from the supply forecasts, which is of benefit to the diverters.

Mr. Bonsignore then states there is an, *“Inconsistency in how the SWRCB quantifies daily FNF Supply versus forecasted monthly FNF Supply.”* (Bonsignore Statement, pg. 3, ¶ 5).

Due to Mr. Bonsignore’s misunderstanding of how we use the daily FNF, I shall explain: Daily FNF values are used to determine which B120 forecast, oftentimes the 50% or 90% exceedance, to follow at the beginning of the unavailability season. DWR provides many supply exceedance forecasts, but in order to choose one for unavailability analysis, we must use real-time supply information (such as Daily FNF) as a qualifier to determine which forecast is tracking closest to reality. *Daily FNF is not normally used as a total supply for an unavailability determination.* An exception would be in the case where the Daily FNF is greater than the forecasted B120 value, in which case we use the Daily FNF trend as the total supply since a larger supply is of more benefit to water right holders. Towards the end of the irrigation season, and prior to any precipitation events, we sometimes use the Daily FNF trend for release consideration due to, again, the oftentimes higher Daily FNF trend value relative to the B120 summer-fall forecasts which are not normally updated after May of each year.

Then in section 2.2 of Mr. Bonsignore’s statement titled, *“Consideration of Unimpaired Flow (UF) Watersheds as Sources of Supply,”* he states, *“For purpose of computing daily Supply, the SWRCB methodology relies solely on daily FNF data for the 10 FNF stations. It does not include in the calculation of daily Supply any unimpaired runoff from the 13 UF subbasins. The SWRCB did consider monthly flow contributions from 8 of 13 UF subbasins for purposes of making adjustments to DWR’s Bulletin 120 forecasted monthly FNF values, but made no such adjustment to account for flows in these UF subbasins in its daily reckoning of FNF.”* (Bonsignore Statement, pg. 10, ¶ 2).

Mr. Bonsignore is correct that no adjustment was made regarding the UF subbasins. This is due to the lack of official daily unimpaired flow data for these UF subbasins. Since the FNF station values take into account upstream depletions such as evaporation and evapotranspiration,

any official daily unimpaired flow data added from the UF subbasins, which are separate from the FNF station values, would need a corresponding adjustment for the area's depletions.

In summary of the supply concerns, Mr. Bonsignore states, "*The SWRCB's methodology for quantifying FNF and UF Supply has a systemic deficiency that results in overestimates of Demand when evaluating the combined watersheds. The method is therefore inappropriate for this purpose, but to the extent it would be used it is my recommendation that the excess SWRCB Demands shown in the respective subtotals and grand totals in **Tables 2-4 and 2-5** be deducted from the SWRCB's June WRUDS spreadsheet Demand for water availability analyses for the combined watersheds.*" (Bonsignore Statement, pgs. 12,13).

In our localized supply and demand analysis (**Appendices A and B**), discussed in further detail below, we removed the excess demands not satisfied by local supplies as Mr. Bonsignore recommends. The net result is water was still unavailable for both WSID and BBID in June 2015.

In section 2.1.3 of Mr. Bonsignore's statement, he states, "*With reference to **Figures 2B to 2H**, for each FNF basin in each month, wherever the accumulated SWRCB Demand within the basin is greater than the FNF for the basin, the amount of SWRCB Demand in excess of FNF could not have been satisfied, and hence there is no basis to assume that the excess SWRCB Demand could have occurred. If the excess SWRCB Demand within a particular FNF basin could not have been satisfied by the FNF basin Supply, then it should not have been included in the computation of aggregated SWRCB Demand for the Sacramento-San Joaquin-Delta combined watersheds. And yet the SWRCB's methodology does exactly that.*" (Bonsignore Statement, pg. 8, ¶ 4).

Mr. Bonsignore's Figures 2B to 2H are monthly supply and demand bar charts for subbasins depicted in Figure 2A which include the watershed area upstream of the FNF location. However, since the correct demand boundary for WSID and BBID must extend downstream (as explained earlier), in contrast to Figure 2A, due to the priority of downstream hydraulically-connected rights, Figures 2B to 2H are misleading and irrelevant. Instead, Division staff developed a similar analysis incorporating localized demand in Appendices A and B.

As shown in Appendix A, which is the May 2015 supply and demand analysis for the Sacramento, San Joaquin and Delta watershed used for WSID's evaluation, an excess of 426 cfs is available **provided** a 40% return flow credit is applied to the reported Delta demand at the request of the Delta stakeholders. Without the 40% return flow credit, which does not have any data to support its use, the revised senior Delta demand through a 1913 priority would be 2,683 cfs vs the 1,610 listed. Even at the 2,683 cfs demand level, there is a shortage of 647 cfs (2,683 cfs of demand - 2,036 cfs of supply) which indicates there is not enough supply to satisfy all the reported Delta demand through a 1913 priority level. For the June 2015 evaluation for BBID as shown in Appendix B, there is not enough supply to satisfy the Delta demand through a 1913 priority level with or without the 40% Delta return flow credit; water supply was that low.

Bonsignore Statement, Section 1.3 --Residence Time of Delta Water

In section 1.3 of Mr. Bonsignore's statement titled, "Deficiencies in the SWRCB's Supply Methodology," he states, "*In addition to water entering the Delta from the rivers, water moves into Delta channels from the west with the incoming tide and moves out of those channels with*

the outgoing tide, but there is always water in the channels and this back and forth movement results in residence times for the water in the Delta on the order of several months. Because the SWRCB's methodology does not consider this temporal aspect to the occurrence of water in the Delta, or recognize the continued presence of water in Delta channels, it is not the correct tool for evaluating Delta water availability. (Bonsignore Statement, pg. 3, ¶ 2).

Mr. Bonsignore makes this statement with no support or analysis. It appears to related to testimony submitted by Mr. Burke and Dr. Paulsen, addresses residence times in the Delta. The Rebuttal Statement of Les Grober (WR-213) addresses residence times as discussed by Mr. Burke and Dr. Paulsen. Mr. Grober concludes that residence times were an insufficient indicator of water availability for WSID and BBID during 2015.

Bonsignore Statement, Section 3.0 -- Agricultural Return Flows

In the next section, Mr. Bonsignore discusses the Division's inclusion and exclusion of agricultural return flows. Agricultural return flows are excess water returned to the watershed after being applied for irrigation. Many irrigation districts during the drought have implemented policies to reduce return flow with tailwater recirculation systems or outright restrictions as discussed below.

Monthly return flow was added to the 2015 San Joaquin River supply using the 1977 Dry Year report estimates using the same monthly percentages outlined in the 1977 Dry Year report. No return flow adjustments were added to the Sacramento River supply, as they were not considered in the 1977 Dry Year report (see pg. 6 of the 1977 Dry Year report). Further evidence, (see WR-249 [true and correct copy of GCID's Water Management and Conservation Policy], and WR-250 [true and correct copy of Princeton-Cordora-Glenn ID Supplemental Statement of Water Diversion and Use for 2014]) submitted by Glenn-Colusa ID and Princeton-Cordora-Glenn ID, two prominent upper Sacramento River diverters, suggest that the Sacramento River receives minimal return flows, as tailwater is often restricted or recirculated for reuse.

In any event, any additional return flow supplies would be countered with natural depletion losses, since, as Mr. Bonsignore points out, "*FNF does not include any contributions to the river that occur downstream of the FNF station location.*" (Bonsignore Statement, pg. 2, ln. 3-4).

In the next section addressing agricultural return flows, Bonsignore begins by stating, "*The SWRCB's methodology does not consider certain agricultural return flows that occurred in 2015 - The SWRCB's quantification of Supply does not include consideration of any return flows in the Sacramento River system, even though it is a well-established that many water users in the watershed rely on return flows from upstream water users for their Supply.*" (Bonsignore Statement, pg. 14, ¶ 2).

According to Glenn-Colusa ID's 2014 Water Management & Conservation Policy (WR-249), for a water year type with a greater than 25% reduction in water supply, no field spillage is allowed from April 1 to October 31 and all tail boxes are required to be sealed. Similarly,

Princeton-Cordora-Glenn ID, another large upper Sacramento diverter, indicated on their 2014 use report (WR-250) that “lands were served by groundwater and recirculated tail water.”

Unless Mr. Bonsignore has evidence indicating quantity, location and temporal data of the 2015 return flows, Division staff were correct in omitting Sacramento River return flows as a substantial source of supply.

Mr. Bonsignore then focuses on the San Joaquin River system for months outside those of the WSID and BBID unavailability determination with the following quote, “*The SWRCB’s methodology does not accurately account for return flows it did consider - In the San Joaquin River system the SWRCB’s methodology assumes that return flows occurred only in the months of April through June of 2015, however, based on information I have reviewed and analyzed return flows did accrue to the San Joaquin River system in the months of July through October 2015.* (Bonsignore Statement, pg. 14, ¶ 3).

While possible, the substantive issue here is whether water was available for WSID beginning in May of 2015 and for BBID in June of 2015; not in July through October.

Regarding the San Joaquin River watershed, according to the Newman gage, which is located just above the Merced River confluence but downstream of the substantial exchange contractor irrigation diversions, no appreciable increases or quantities of flow were observed from May 2015 through September 2015 (WR-251 is a true and correct copy of San Joaquin River above Merced River (Newman) flow data from May 3, 2015, through 9/30/2015); quite the contrary, the flows actually *decrease*, to an average of just 15 cfs. If San Joaquin River return flows, during a severe drought, were so substantial as to merit acknowledgement, we should see substantial increases in flows, yet no evidence has been submitted to support that argument.

Mr. Bonsignore then states, “*The SWRCB’s methodology considers certain return flows in an inconsistent manner - The SWRCB methodology considers contributions from certain return flows in its forecast of monthly Supply, but does not include these contributions in its daily reckoning of FNF Supply. It is unclear why the SWRCB includes return flows for forecasting monthly Supply but does not include them in its reckoning for daily Supply.*” (Bonsignore Statement, pg. 14, ¶ 4).

As was explained above, any daily source of return flow must be quantified and localized with evidence supporting it as return flow versus any other source type (i.e. reservoir release, natural accretions already addressed using the 2007 DWR Unimpaired Flow report, etc.). In addition, any daily FNF adjustment for return flows must be countered by accretion losses for the area downstream of the FNF location for a net adjustment to supply. Mr. Bonsignore offers no data in support of this point.

In the last bulleted point, Mr. Bonsignore states, “*The SWRCB’s methodology does not consider spatial aspects of return flows – By ignoring spatial aspects of where return flows occur, the SWRCB’s methodology incorrectly assumes that these flows are available to diverters that are located upstream of where the return flows are released. A fundamental problem with the SWRCB’s methodology is that it only considers volume and priority, not when and where the*

water occurs. An appropriate water availability analysis would allocate Supply based on both location and time." (Bonsignore Statement, pg. 14, ¶ 4).

As demonstrated in our localized network analysis using the June WRUDS dataset (**Appendices A and B**), the end result is the same; water was not available to WSID as of May 1, 2015 without the 40% Delta return flow credit nor WSID or BBID as of June 12, 2015.

In section 3.1, Mr. *Bonsignore states*, "*Return flows to the Delta are assumed to be 40 percent of senior Demand (riparian plus pre-1914) for the months of March through September.*" (Bonsignore Statement, pg. 15, blt. 2).

To address the issue of Delta diverters pumping water off the irrigated islands resulting in a net consumptive quantity less than that diverted, the Division agreed to apply a 40% reduction in reported Delta demand as suggested by stakeholders representing San Joaquin River interests prior to June 2015. No data was provided to support the use of the 40% reduction factor, nor water quality data comparing the diverted water to that of the excess pumped off the island.

In other words, for a true reduction in demand to be warranted, as the result of pumping excess diverted water back into the source, the returned water must be of the same water quality or better than that diverted so that it is useable by another party. For example, if a farmer pumped water from the Delta with a saline content compatible with irrigation but returned excess water with a high and incompatible salt content, that returned water should not be credited towards the 40% demand reduction since no one can use it without treating it.

Despite the lack of data to support the 40% Delta return flow credit, the Division used the full 40% value in its analysis at the request of San Joaquin River stakeholders, and to the benefit of those stakeholders.

In section 3.1.1 titled, "*Daily FNF not Adjusted for Return Flows*," Mr. *Bonsignore states*, "*I have not found anything in the information provided by the SWRCB that explains why adjustments were made to forecasted monthly FNF but not to Daily FNF.*" (Bonsignore Statement, pg. 15, ¶ 3, lns. 8-10).

As stated previously, the Daily FNF was used to evaluate which monthly B120 supply forecast to use, whether it be the 50% or 90%. While we could have adjusted the Daily FNF levels with a daily-averaged return flow credit, we would also have to counter with a daily-averaged depletion losses. Since the unadjusted Daily FNF was trending between the 50% and 90% forecasts, and we based our unavailability decision using the more generous 50% supply forecast, any net adjustments to the Daily FNF, after taking into consideration downstream depletion losses, would unlikely be greater than the next higher B120 supply forecast (25% exceedance).

Mr. *Bonsignore then states* in Section 3.2, "*The water supply available to satisfy pre-1914 demands in the basin is equal to the total residual natural supply after riparian demands in the basin are satisfied plus the return flow from the use of ground and project (stored or imported) water.*" [Emphasis added] (Bonsignore Statement, pg. 15, ¶ 5). He goes on to say, "*While agricultural irrigation operations may have changed since 1977, with more water*

users and irrigation districts implementing tailwater capture and reuse systems, irrigation return flows still occur in the San Joaquin River system.” (Bonsignore Statement, pg. 15, ¶ 8).

As discussed earlier, if San Joaquin River return flows were so substantial, especially in the case of the exchange contractor operations in the Upper San Joaquin River, why is there no evidence of a large return flow component, registered at a downstream gage and available for use by others (see WR-251)? While return flow may still occur, if they are small in comparison to the overall water supply, the benefit is minimal. Again, proof of the quantity, location and original source is necessary for additional amounts above the percentages used in the 1977 analysis. In addition, any downstream depletion losses, which are not a reported demand, would need to be included to determine if any net supply benefit is warranted.

Mr. Bonsignore then describes example cases of water right holders, such as Modesto Irrigation District, in Section 3.2.1 where canal system spillage resulted in a minor contribution.

Using Mr. Bonsignore’s Table 3-1 as provided, we see that 1,668 acre-feet was “spilled through Canal System” for May 2015 and 1,408 acre-feet in June 2015. These values represent an average 27 cfs for May and 24 cfs for June. As was stated previously, a 10% return flow credit (based on the percentages outlined in the 1977 report) was added to the total San Joaquin River watershed supply using the reported demand. For May’s reported demand of 97,000 acre-feet, a credit of 9,700 acre-feet (10%) was added while June’s demand of 135,000 acre-feet resulted in a 13,500 acre-feet credit. On a cfs basis, the 9,700 acre-feet May credit calculates to a daily average of 158 cfs with the same calculation for June resulting in a 227 cfs rate.

While these 158 cfs and 227 cfs credits are for the May and June global watershed versus a single party like Modesto Irrigation District, the localized credits (27 cfs and 24 cfs) would already be included in the global San Joaquin River watershed numbers (158 cfs and 227 cfs).

In addition, as noted previously, we need to counter any return flow credits with downstream depletion losses, which are present but not reported by any water right holder, resulting in a net lower credit, possibly even a net loss for an accurate representation.

Unfortunately, in the case of Oakdale Irrigation District, Mr. Bonsignore fails to supply a return flow amount for 2015, since the monthly breakdown for 2015 data is unavailable. Therefore, we cannot subtract any claimed credit from the May and June global 158 cfs and 227 cfs return flow adjustments calculated above. Similarly, we would need to include downstream depletion losses of Oakdale ID’s point of diversion along the Stanislaus River as a debit against any return flow adjustments.

For the Colusa Basin Drain and Ridge Cut Slough return flow analysis Mr. Bonsignore addresses, he quotes a large disparity between the cited May 1977 and June 1977 value (28,000 and 83 acre-feet), along with acknowledged improvements in irrigation practices since 1977. When you take into account the recent operational restrictions of the cited upper Sacramento River irrigation districts (WR-249 and WR-250), official return flow data is necessary to augment the supply available.

Mr. Bonsignore then quotes in the second paragraph under 3.3.1, *‘To the extent that the gates were open in 2015 CBD flows would have accrued to the Sacramento River, but the SWRCB methodology does not account for this source of Supply.’*

To consider the 2015 Colusa Basin Drain flows as a supply, a quantity and time must be provided, supported by data, along with proof the flows are abandoned and available for appropriation. No such evidence was supplied.

Mr. Bonsignore then refers to the diversion of flows into Ridge Cut Slough and states, *“Also, it appears that there were periods in 2015 when CBD flows were being directed into Ridge Cut Slough from upstream of the control structure; Ridge Cut Slough accrues to the Yolo Bypass. The data as posted (which I understand is unofficial) indicates that flows were in the range of about 200 cfs in March, 0 to about 100 cfs in April, 0 to about 150 cfs in portions of May, and generally in excesses of 100 cfs starting around the first of August and continuing thereafter (Attachment #9 is a CDEC graph showing 2015 Ridge Cut Slough flows). Based on my conversation with DWR staff, gaps in the record in early May and from mid-June to early August are likely attributable to low flows in Ridge Cut Slough that are below DWR’s instrumentation.”*¹²

Since the range provided by Mr. Bonsignore starts with 0 cfs and is unofficial data with gaps during the May and June time period, Division staff stands by the omission of these supply flows.

In section 3.3.2 titled, “Omission of Irrigation Tailwater as Source of Supply,” Mr. Bonsignore states, *“There are a number of diverters in the Sacramento River basin that hold appropriative rights or have filed claims of right naming “drains” and/or “canals” as sources of water diverted and used under those rights. The SWRCB’s methodology counts Demand under these rights in its water availability analysis. However, by omitting return flows from the analysis the methodology does not account for the Supply needed to support these Demands. This means that Supply is underestimated (or Demand is overestimated) in the SWRCB’s aggregated analyses of water availability for the Delta.*

With respect to the Sacramento River watershed, as has been rebutted frequently, the large irrigation districts are quoted as restricting tailwater runoff during a dry year. If there are substantial tailwater supplies, there should be substantial 2015 data, quantified and localized, to include in the supply and demand analysis, but there is not.

Regarding the issue of the Delta return flow supply, in section 3.4 Mr. Bonsignore says, *“The SWRCB’s methodology assumes that, for purposes of adjusting DWR’s forecasted monthly FNF, return flows in the Delta are assumed to be 40 percent of senior Delta Demand in the months of March through September. This source of Supply occurs in the Delta and thus it is available only to Delta diverters. It is not available to diverters on tributaries to the Delta that are upstream of tidal influences. However, the SWRCB’s methodology does not distinguish Supply and Demand spatially.”*

At the request of San Joaquin River stakeholders who met with the Division staff in May of 2015, it was proposed to include a 40% reduction in reported demand to account for the

Delta's "unique situation" where diverters are constantly pumping water off the islands resulting in an estimated 60% net consumption of the amount diverted. While no evidence was offered to support this percentage, Division staff used it to increase the supply available to both the larger watershed boundary as noted and to also reduce the reported Delta demand to 60% of what was reported. Again, this was to the Delta stakeholders' benefit, including WSID and BBID.

Rebuttal Statement to Witness Statement of Greg Young, P.E. –

Mr. Young indicates in his statement that, "The Delta, as a unique geographic area that receives inflow from both the Sacramento and San Joaquin River (and tributary) watersheds, would best be analyzed for water availability by evaluating the supplies available to the Delta in comparison to the demands within the Delta to more accurately determine water availability." (Young Statement, pg. 6, ln. 17-21).

In the above statement, Mr. Young argues that the Delta should be analyzed separately from the global boundary that Division staff used. As demonstrated by Appendix B and WR-219 (and WR-252), if you assign all of the Central and South demand (as was done in 2014 and in prior years), to the San Joaquin River supplies only, a much larger number of claimed rights would have been issued a notice in June 2015.

Due to the priority system of water rights, any hydraulically connected area must be included within a supply and demand analysis for equitable evaluation. To determine what parties have access to limited water resources, and which parties receive unavailability notices, the supply and demand boundary must include parties in the same hydraulically connected watershed. As outlined above, for WSID and BBID, that analysis requires the extension of the boundary to the global Sacramento and San Joaquin watersheds, given that a San Joaquin-only analysis would only result in deeper supply cuts and Dr. Paulsen has confirmed that Sacramento River water enters the BBID and WSID diversion area.

On page 9 of Mr. Young's statement, he indicates that we should have reduced the San Joaquin Exchange Contractor demand, in contrast to their self-reported answer to our informational order, since they received less water in 2015 than 2014. Since June 12, 2015, the Division has adjusted our demands for the top 90% of statement holders, which includes the San Joaquin Exchange Contractors, based on their monthly reported uses under their claims of right. Any allegations of misreporting should be directed to the respective party.

Young's Discussion of the San Joaquin Exchange Contractors:

Shortly after the March 6, 2015 deadline for the initial response to the February 2015 informational Order, I contacted a representative of the San Joaquin Exchange Contractors since they failed to provide a projected 2015 estimate of demand. The San Joaquin River Exchange Contractors Water Authority representative verbally indicated their 2014 reported uses would best represent 2015 projected uses.

Young's Discussion of Excess Demands:

Mr. Young then indicates on pg. 23 of his statement that it is physically not possible for tributary demands to be met by FNF when sufficient FNF does not exist and the excess demands should be removed. In response, and as discussed in the Rebuttal Statement of Jeff Yeazell, the Division prepared Appendices A and B which localize demands with the available local supply. As you can see, even with the excess demands removed for both the Sacramento River and San Joaquin River watershed tributaries,

there is insufficient net water available for WSID (without the 40% Delta return flow credit) and BBID's points of diversion in the Delta for the May and June 2015 periods.

Young's Discussion of Additional UF Supplies:

Lastly, Mr. Young states on pgs. 23 and 24 that additional unimpaired flow should have been added from UF basins 12, 15, 20, 21 and 24 to supplement supply for demands that had no access to the FNF used. We didn't incorporate the additional UF basin flows due to insignificant value. As I explained in my witness statement on the use of the 1977 year type for the unimpaired flow adjustments from the 2007 DWR report, which reference the UF basins 12, 15, 20, 21 and 24, we find that an additional 2,000 acre-feet (using 1977 as the referenced year type) per month would be realized. On a daily basis, using an average of 30 days per month, this equates to 66 acre-feet per day or 33.6 cfs. Since the localized supply and demand charts provided in Appendix A (without the 40% return flow credit) and B show a net demand in the Delta well in excess of the 33.6 cfs level, the end result is no change in the unavailability determination for WSID and BBID.

EXHIBIT N

Tauriainen, Andrew@Waterboards

From: Tauriainen, Andrew@Waterboards
Sent: Saturday, January 23, 2016 11:30 PM
To: wrhearing@waterboards.ca.gov; Dan Kelly (dkelly@somachlaw.com); Jeanne Zolezzi; Karna Harrigfeld; Janelle Krattiger; Jonathan Knapp (jonathan.knapp@sfgov.org); Rob Donlan; 'Jennifer Spaletta' (jennifer@spalettalaw.com); ngmplcs@pacbell.net; "Dante Nomellini, Jr." (dantejr@pacbell.net); McGinnis, Robin C.@DWR; rjmorat@gmail.com; Valerie Kincaid; Linda Wood (lwood@olaughlinparis.com); 'towater@olaughlinparis.com'; Herrick, John @aol.com (jherrlaw@aol.com); Dean Ruiz (dean@hprlaw.net); Stefanie Morris (smorris@swc.org); O'Hanlon, Daniel; Akroyd, Rebecca; Philip Williams (pwilliams@westlandswater.org); Kuenzi, Nicole@Waterboards; Farwell Jensen, Jane; Mona, Ernie@Waterboards; Buckman, Michael@Waterboards
Subject: WSID CDO Hearing BBID ACL Hearing - PT Objections to WSID Amended NOI
Attachments: wr_subpoena_harrigfeld.pdf

TO THE HEARING TEAMS AND PARTIES IN THE WSID CDO AND BBID ACL PROCEEDINGS:

The Prosecution Team objects to the Amended Notice of Intent to Appear submitted by the West Side Irrigation District (WSID) on January 19, 2015. WSID's Amended Notice of Intent to Appear lists Greg Young and Karna Harrigfeld, neither of whom were on WSID's original Notice of Intent to Appear in the WSID CDO matter. This is the first indication at any point in either the WSID CDO proceeding or the BBID ACL proceeding that WSID seeks to call Mr. Young or Ms. Harrigfeld as witnesses. The deadline for submitting the WSID CDO Notice of Intent to Appear was October 2, 2015. As a general matter, the Hearing Team should not allow any party to so blatantly disregard Hearing Notice deadlines.

Objection to Greg Young

The Prosecution Team specifically objects to the addition of Greg Young because it appears that WSID seeks to add Mr. Young for the sole purpose of providing more time for his direct testimony. Mr. Young has been listed as a BBID witness in the BBID ACL proceeding since October 22, 2015. WSID has not submitted any testimony or exhibits for Mr. Young. Instead, WSID claims in its January 19 cover letter to have reached an agreement regarding sharing Mr. Young's testimony with BBID, and also claims to have a general coordination agreement with BBID, CDWA and SDWA regarding submittal of exhibits offered by any of those parties. If those parties have agreed to coordinate their witnesses and evidence, they should be required to coordinate their direct testimony and cross examination time, and be together subject to the same time limits imposed on the Prosecution Team or any of the other party groups. It would be prejudicial to the Prosecution Team and the other party groups to allow WSID, BBID, SDWA and CDWA others to expand witness examination time by agreeing to share witnesses and exhibits without also sharing time limits.

The Prosecution Team respectfully requests that the Hearing Team require WSID, BBID, SDWA and CDWA to coordinate their direct and cross examination time, and limit that time to the amount granted to the Prosecution team and any other party group. In the alternative, the Prosecution Team requests that the Hearing Team deny WSID's request to add Mr. Young as a witness. WSID would be able to elicit testimony from Mr. Young on cross examination, if so desired.

Objection to Karna Harrigfeld

The Prosecution Team specifically objects to the addition of Karna Harrigfeld because the late addition seems to be aimed squarely at preventing the Prosecution Team from conducting effective discovery. Ms. Harrigfeld is an attorney at Herum\Crabtree\Suntag, and also apparently serves as WSID's general counsel. It is highly unusual for a party to place its attorney on the witness stand in a contested proceeding. Ms. Harrigfeld's proposed testimony covers a wide

range of topics, including WSID's jurisdictional area, facilities, water right and operations. Government Code section 11513, subdivision (b), provides that parties may cross examine opposing witnesses on any relevant topic, whether or not that topic was part of the direct testimony. Moreover, when a party places its attorney on the witness stand, that party waives the attorney-client communication privilege, and the attorney waives the work product privilege where necessary to allow other parties to effectively prepare cross-examination. (*Handgards, Inc. v. Johnson & Johnson* (1976) 413 F.Supp. 926, 929-931.) Had WSID listed Ms. Harrigfeld as a witness in a timely manner, the Prosecution Team certainly would have sought discovery of her records, and likely sought deposition. At this late date, the Prosecution Team is severely prejudiced in its ability to prepare effective rebuttal or cross-examination of Ms. Harrigfeld.

The Prosecution Team respectfully request that the Hearing Team deny WSID's request to add Ms. Harrigfeld as a witness, and that the Hearing Team strike Ms. Harrigfeld's proposed testimony and referenced exhibits from WSID's proposed exhibits. In the meantime, the Prosecution Team has no choice but to serve the attached Subpoena *duces tecum* on Ms. Harrigfeld and WSID via this message. The Subpoena provides WSID ten working days to disclose the responsive documents, which is exceedingly fair given the rapidly approaching hearing date.

This message is served to the Hearing Team and the Parties in the BBID and WSID Service Lists.

Andrew Tauriainen, Attorney III
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Jeanne M. Zolezzi
jzolezzi@herumcrabtree.com

VIA EMAIL

January 26, 2016

Hearing Officer Frances Spivy-Weber
State Water Resources Control Board
P.O. Box 100
Sacramento, CA 95812-2000

Re: The West Side Irrigation District Cease and Desist Order Hearing

Dear Hearing Officer Spivy-Weber:

The purpose of this letter is to respond to the following Prosecution Team emails:

- January 23, 2016 at 11:30 p.m.
- January 23, 2016 at 11:51 p.m.
- January 25, 2016 at 11:27 a.m.
- January 25, 2016 12:37 p.m.

As illustrated by the Prosecution Team's flurry of emails, it appears to be more interested in procedure and harassment than addressing the key issues in the hearing.

Objection to WSID Amended NOI

The Prosecution Team objects to WSID's amended NOI because the deadline for submitting the WSID CDO Notice of Intent to Appear was October 2, 2015. The objection lacks merit. WSID filed its original notice of intent to appear in October including all witnesses that it was aware of at that time. It also reserved "the right to amend or supplement this draft witness list any time prior to the hearing based upon relevant information discovered or developed subsequent to the submittal of this draft witness list". The amendment was necessary in order to (1) ensure the witnesses that testify have the required factual knowledge regarding WSID operations, and (2) coordinate expert testimony with BBID for the Phase 1 hearing to avoid duplication and improve efficiency.

WSID notes that other parties have filed amended Notices of Intent without objection. The Prosecution Team has not provided any evidence that it is prejudiced from WSID's amended witness list, and neither the Prosecution Team nor any other party is so prejudiced, nor can it.

Objection to Greg Young

As noted in the email, WSID's Amended Notice of Intent to Appear lists Greg Young and Karna Harrigfeld, neither of whom were on WSID's original Notice of Intent to Appear in the WSID CDO matter. The Prosecution Team objects to the addition of Greg Young because it believes that WSID's sole purpose in adding MrnYoung is to obtain more time for his direct testimony. WSID has no such intention. In fact, despite adding witnesses to its list, WSID has reduced the time of testimony for its other witnesses so that the time requested for testimony has increased only 5 minutes.

WSID includes MrnYoung as a witness only to clarify that he will be providing direct testimony on the issue of water availability as to *both* BBID and WSID. As has been represented to the Hearing officer and the Prosecution Team since the first pre-hearing conference, BBID and WSID intend to coordinate their direct testimony and cross examination. As set forth in the December 16, 2015 Procedural Ruling from Hearing Officers Spivy-Weber and Doduc, hearing time limits will be addressed at the Second Pre-hearing Conference on February 8, 2016 and the Prosecution Team's attempt to limit testimony at this time is premature.

Objection to Karna Harrigfeld

WSID is taken aback by the Prosecution Team's allegation that its intention in adding Ms. Harrigfeld as a witness "seems to be aimed squarely at preventing the Prosecution Team from conducting effective discovery," as this allegation makes little sense.

- Ms. Harrigfeld is an attorney at Herum\Crabtree\Suntag, and is WSID's general counsel. WSID originally listed its part-time General Manager Dave Kaiser as its witness on factual issues in its NOI. However, when preparing direct testimony WSID learned that MrnKaiser, who has been with the district for less than 3 years, did not have the requisite factual knowledge regarding the district's day-to-day operations or history. As a result, in order to provide factual testimony regarding the district's day to day operations WSID listed its operations manager, Rick Martinez, as a factual witness, and in order to provide factual testimony regarding the district's historical operations, WSID listed its general counsel Karna Harrigfeld. Ms. Harrigfeld's written testimony is expressly limited to factual testimony and without her as a witness, WSID does not have another witness to provide this testimony.
- Despite the Prosecution Team's assertions, it is not unusual for a party to place its attorney on the witness stand in a contested proceeding to testify on factual issues. Rather, a general counsel who has significant institutional knowledge regarding an entity is often required to do so.
- The Prosecution Team correctly states that Government Code §11513(b), provides that parties may cross examine opposing witnesses on any relevant topic, whether or not that topic was part of the direct testimony. However, the Prosecution Team fails to mention subdivision (e) which reads "The rules of privilege shall be effective to the extent that they are otherwise required by statute to be recognized at the hearing." Therefore, even if a witness is allowed to be cross-examined, the attorney-client privilege is not extinguished and can still be invoked.
- The Prosecution Team misstates the law when it asserts that when a party places its attorney on the witness stand that party waives the attorney-client communication privilege, and the attorney waives the work product privilege where necessary to allow other parties to

effectively prepare cross-examination. This is simply not the rule. The case cited by the Prosecution Team, *Handgards, Inc. v. Johnson & Johnson* (1976) 413 F.Supp. 926, does not support this proposition, and is inapplicable as WSID is not asserting an issue or defense based on advice or communication by counsel. *Wellpoint Health Networks v. Superior Court*, 59 Cal. App. 4th 110, 127 (1997); *S. Cal. Gas Co. v. Pub. Utils. Com.*, 50 Cal. 3d 31, 43 (1990); *Transamerica Title Ins. Co. v. Superior Court*, 188 Cal. App. 3d 1047, 1053 (1987).

First, *Handgards* addresses only attorney-client privilege, holding that a "waiver of the attorney-client privilege does not necessarily mean that the protection afforded by the work product doctrine is also breached." (*Id.* at 929). The intent of the work product doctrine under California law is to allow attorneys to "prepare cases for trial with that degree of privacy necessary to encourage them to prepare their cases thoroughly and to investigate not only the favorable but the unfavorable aspects of their cases" as well as to "prevent attorneys from taking undue advantage of their adversary's industry and efforts. CCP §2018.020. Its purpose is to (2018.020(a)), and to "[p]revent attorneys from taking undue advantage of their adversary's industry and efforts." Any "writing that reflects an attorney's impressions, conclusions, opinion, or legal research or theories" is not discoverable under any circumstances. Section 2018.030(a).

Second, *Handgards* addressed a situation of an implied waiver of the privilege, not present here, and found that waiver only:

where a party asserts that it relied on the advice of counsel or counsel's conduct, thus putting the attorney's state of mind or otherwise privileged communication directly at issue. See *Weil v. Investment/Indicators, Research and Management, Inc.*, 647 F.2d 18, 24-25 (9th Cir. 1981); see *Handgards, Inc. v. Johnson & Johnson*, 413 F. Supp. 926, 929 (N.D. Cal. 1976) ("The deliberate injection of the advice of counsel into a case waives the attorney-client privilege as to communications and documents relating to the advice"). "[T]he person or entity seeking to discover privileged information can show waiver by demonstrating that the client has put the otherwise privileged communication directly at issue and [9] that disclosure is essential for a fair adjudication of the action." *S. Cal. Gas Co. v. Pub. Util. Comm'n*, 50 Cal.3d 31, 40, 265 Cal. Rptr. 801, 784 P.2d 1373 (1990).

The scope of either a statutory or implied waiver is narrowly defined and the information required to be disclosed must fit strictly within the confines of the waiver." *Transamerica Title Ins. Co.*, 188 Cal.App.3d at 1052-1053.

Liberty Mut. Ins. Co. v. Cal. Auto. Assigned Risk Plan U.S. Dist. LEXIS 34547, 2012 WL 892188 (N.D. Cal. Mar. 14, 2012).

WSID has not waived the attorney-client privilege. Under Evidence Code § 912, it is the holder of the privilege who may waive the privilege, either by disclosing a significant part of the communication in question or by manifesting through words or conduct consent that the communication may be disclosed by another. WSID has not placed any legal advice communication between WSID and its attorneys at issue, and there is no "waiver of the attorney-client privilege where the substance of the protected communication is not itself tendered in issue, but instead simply represents one of several forms of indirect evidence in the matter." *S. Cal. Gas Co.*, 50 Cal.3d at 41. Implied waivers are limited to situations where the client has placed into issue the decisions, conclusions, and mental state of the attorney who will

be called as a witness to prove such matters. However, WSID does not waive the attorney-client privilege where it is not defending itself on the basis of the advice it received. *Transamerica Title Ins. Co.*, 188 Cal.App.3d at 1048.

The burden of overcoming the privilege lies with the Prosecution Team. The party opposing the attorney-client privilege bears the burden of showing that the claimed privilege does not apply or that an exception exists or that there has been an expressed or implied waiver. *Wellpoint Health Networks v. Superior Court*, 59 Cal. App. 4th 110, 114 (1997). Where there is doubt about its application, we will construe it liberally. *Kroll & Tract v. Paris & Paris*, 72 Cal. App. 4th 1537, 1545 (1999). Under the theory of implied waiver of attorney-client privilege, the person or entity seeking to discover privileged information can show waiver by demonstrating that the client has put the otherwise privileged communication directly at issue and that disclosure is essential for a fair adjudication of the action. There is no waiver of the attorney-client privilege where the substance of the protected communication is not itself tendered in issue, but instead simply represents one of several forms of indirect evidence in the matter. *S. Cal. Gas Co.*, 50 Cal. 3d at 34.

- The Prosecution Team asserts that had WSID listed Ms. Harrigfeld as a witness in a timely manner, the Prosecution Team certainly would have sought discovery of her records. In fact, the Prosecution Team has conducted discovery of all relevant WSID records, which included all records held by Herum\Crabtree\Suntag that are not protected by privilege. The Prosecution Team is entitled to nothing more; Government Code §11507.6 states that "Nothing in this section shall authorize the inspection or copying of any writing or thing which is privileged from disclosure by law or otherwise made confidential or protected as the attorney's work product." There has been no waiver of this protection.
- The Prosecution Team also indicates that had WSID listed Ms. Harrigfeld as a witness in a timely manner, the Prosecution Team "likely" would have sought deposition, and argues that because it was not able to do so it is "severely prejudiced in its ability to prepare effective rebuttal or cross-examination of Ms. Harrigfeld". To the contrary, the Prosecution Team has not sought deposition of any witnesses listed by WSID, and has previously indicated to WSID that it did not intend to conduct deposition until after witness statements were submitted. Ms. Harrigfeld, along with other witnesses listed by WSID, is available for deposition.

WSID is interested in nothing more than insuring it receives a fair hearing before the State Water Resources Control Board, and that includes an opportunity to present the witnesses necessary to present its defense. WSID has no intentions of playing games, or making it difficult for any party to obtain information or conduct discovery. Once again, other than blustering, the Prosecution Team has not provided any evidence that it is prejudiced from WSID's witnesses, nor can it. To the contrary, denying WSID's requests to add Ms. Harrigfeld as a witness, and striking her testimony would severely prejudice WSID and prevent it from providing required factual testimony.

Motions

The Prosecution Team also objects to WSID's submittal of two motions to dismiss and its motion for summary judgment and statement of undisputed facts supporting the summary judgment motion. The Prosecution Team asserts that the Hearing Team's January 14, 2016, email provides that WSID "may submit a motion to dismiss or motion for summary judgment, or a combined motion, not exceeding ten pages of total briefing". Actually, the January 14, 2016 email provides:

(1) Motions to dismiss and/or motions for summary judgment.

Motions to dismiss or motions for summary judgment may be submitted by BBID in the BBID proceeding and by WSID in the WSID proceeding. The Prosecution Team may file a motion for summary judgment in both proceedings. The motions must be received by the Board by Noon, January 25, 2016. The briefs may not exceed ten pages in length. The motions may include a motion for summary judgment. . . .

The language is clear that the Board anticipated "motions" would be filed, and that it anticipated both motions to dismiss "and/or" motions for summary judgment would be filed. The page limit is expressly applicable to "briefs" – in the plural – and does not state that all motions must be presented in one combined brief, nor would that make any sense.

In addition, and as discussed at the September 25, 2015 prehearing conference, the State Board represented to the Santa Clara Superior Court that WSID would have a full opportunity to raise *all* issues, including due process issues, before the State Board at its Enforcement Hearing. However, to the extent the Hearing Team considers the Prosecution Team's objection or motion to strike, WSID requests a formal hearing on the objection / motion to strike in order to develop a proper record for judicial review.

Subpoena Duces Tecum

All nonprivileged records of Herum\Crabtree\Suntag have already been reviewed and disclosed to comply with the October, 2015 subpoena served by the Prosecution Team. There is nothing further to be disclosed by WSID or Herum\Crabtree\Suntag in response to the Subpoena served by the Prosecution Team on January 25, 2016. The subpoena's direction to "produce all DOCUMENTS responsive to this Subpoena *duces tecum*, regardless of any claim of attorney-client communication and/or attorney work product privilege" is outrageous, and would subject the Prosecution Team to sanctions in a court of law. Neither Ms. Harrigfeld nor WSID has waived the attorney client privilege or the attorney work-product doctrine simply by submitting Ms. Harrigfeld's testimony on factual circumstances surrounding WSID.

Conclusion

WSID respectfully request that the hearing officer dismiss the Prosecution Team's objections and allow WSID to proceed with the merits of its case.

Very truly yours,



JEANNE M. ZOLEZZI
Attorney-at-Law

**SERVICE LIST OF PARTICIPANTS
 THE WEST SIDE IRRIGATION DISTRICT
 CEASE AND DESIST ORDER HEARING
 (October 8, 2015)**

<p>DISISION OF WATER RIGHTS Prosecution Team Andrew Tauriainen, Attorney Ill SWRCB Office of Enforcement 1001 I Street, 16th Floor Sacramento, CA 95814 Andrew.Tauriainen@waterboardF.ca.gov</p>	<p>THE WEST SIDE IRRIGATION DISTRICT Jeanne M. Zolezzi Karna Harrigfeld Janelle Krattiger Herum\Crabtree\Suntag 5757 Pacific Ave., Suite 222 Stockton, CA 95207 jzolezzi@herumcrabtree.com kharrigfeld@herumcrabtree.com jkrattiger@herumcrabtree.com</p>
<p>STATE WATER CONTRACTORS Stephanie Morris 1121 L Street, Suite 1050 Sacramento, CA 95814 smorris@swc.org</p>	<p>WESTLANDS WATER DISTRICT Daniel O'Hanlon Rebecca Akroyd Kronick Moskovitz Tiedemann & Girard 400 Capitol Mall, 27th Floor Sacramento, CA 95814 dohanlon@kmtg.com rakroyd@kmtg.com Philip WilliamF of WeFtlandF Water DiFtrict pwilliamF@weFtlandFwater.org</p>
<p>SOUTH DELTA WATER AGENCY John Herrick, EFq. 4255 Pacific Ave., Suite 2 Stockton, CA 95207 jherrlaw@aol.com Dean Ruiz HarriF, PeriFho & Ruiz, AttorneyF at Law 3439 BrookFide Road, Suite 210 Stockton, CA 95219 dean@hRrlaw.ne</p>	<p>CENTRAL DELTA WATER AGENCY Jennifer SRaletta SRaletta Law PC PO Box 2660 Lodi, CA 95241 jennifer@FRalettalaw.com Dante Nomellini and Dante Nomellini, Jr. Nomellini, Grilli & McDaniel ngmRlcf@Racbell.net dantejr@Racbell.net</p>
<p>CITY AND COUNTY OF SAN FRANCISCO Jonathan KnaRR Office of the City Attorney 1390 Market Street, Suite 418 San FranciFco, CA 94102 jonathan.knaRR@Ffgov.org Robert E. Donlan ElliFon, Schneider & HarriF L.L.P. 2600 CaRitol Avenue, Suite 400 Sacramento, CA 95816 (916) 447-2166 red@eFlawfirm.com</p>	<p>SAN JOAQUIN TRIBUTARIES AUTHORITY Valerie Kincaid O'Laughlin & Paris LLP 2617 K Street, Suite 100 Sacramento, CA 95814 vkincaid@olaughlinRariF.com</p>

Ms. Frances Spivy-Weber
January 26, 2016
Page 7 of 7

CALIFORNIA DEPARTMENT OF WATER RESOURCES Robin McGinnis, Attorney PO Box 942836 Sacramento, CA 94236-0001 robin.mcgininis@water.ca.gov	BYRON BETHANY IRRIGATION DISTRICT Daniel Kelly Somach Simmons & Dunn 500 Capitol Mall, Suite 1000, Sacramento, CA 95814 dkelly@somachlaw.com
SAN JOAQUIN TRIBUTARIES AUTHORITY Valerie Kincaid O'Laughlin & Paris LLP 2617 K Street, Suite 100 Sacramento, CA 95814 vkincaid@olaughlinparis.com lwood@olaughlinparis.com	STATE WATER RESOURCES CONTROL BOARD HEARING TEAM Nicole.Kuenzi@waterboards.ca.gov Ernie.mona@waterboards.ca.gov Jane.farwell-jensen@waterboards.cagov

From: **Dan Kelly** dkelly@somachlaw.com
Subject: Fwd: BBID ACL and WSID CDO Hearings
Date: January 26, 2016 at 6:28 PM
To: **Michael Vergara** mvergara@somachlaw.com, **Uoxina Santos-Aguirre** usantos-aguirre@somachlaw.com, **Yolanda De la Cruz** ydelacruz@somachlaw.com



Begin forwarded message:

From: "Tauriainen, Andrew@Waterboards" <Andrew.Tauriainen@waterboards.ca.gov>
Date: January 26, 2016 at 6:01:22 PM PST
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Subject: BBID ACL and WSID CDO Hearings

TO THE BBID ACL AND WSID CDO HEARING TEAMS AND PARTIES:

1. Request for Expedited Ruling on Prosecution Team's Objection Regarding Karna Harrigfeld Testimony and WSID's January 19 Amended Notice of Intent to Appear

The Prosecution Team requests that the Hearing Officers rule as quickly as possible on the threshold issue raised in the Prosecution Team's January 23, 2016, email objections to WSID's January 19 Amended Notice of Intent to Appear. Namely, the Prosecution Team asks that the Hearing Officers strike Karna Harrigfeld's written testimony, along with the exhibits she purports to authenticate in her testimony, as untimely.

As the January 23 email describes, and as Ms. Zolezzi's letter of earlier today confirms, the Prosecution Team and WSID have a significant difference of opinion over the efficacy and effect of WSID's late addition of Ms. Harrigfeld, who is WSID's General Counsel and a partner or shareholder at Herum/Crabtree/Suntag. I have attached copies of the January 23 email and Ms. Zolezzi's letter here for reference.

There is ample authority holding that a party who places their attorney on the witness stand waives the attorney-client communication privilege, and the attorney waives the work product privilege where necessary to allow the other parties to prepare effective cross-examination. The Prosecution Team will brief this authority on a motion to compel, if necessary. But an expedited ruling on the Prosecution Team's objection to Ms. Harrigfeld's witness statement may obviate that need.

The urgency of this request reflects the substantial prejudice caused to the Prosecution Team by WSID's attempt to amend its Notice of Intent to Appear at this late date. There can be no doubt that attorney-client communications between WSID and Ms. Harrigfeld, if waived, might be directly relevant or could lead to relevant evidence in the Prosecution Team's case-in-chief. The Prosecution Team most certainly would have sought discovery on Ms. Harrigfeld's records, and perhaps her deposition, in advance of the case-in-chief. By adding Ms. Harrigfeld to their witness list on the same day the parties submitted their cases-in-chief, WSID cut off all potential discovery in advance of the

case-in-chief deadline. Moreover, Ms. Harrigfeld's written testimony addresses relevant substantive issues, for which discovery is necessary to allow the Prosecution Team to prepare effective cross-examination. WSID's late addition leaves nearly no time to conduct discovery in advance of the rebuttal deadline. There will be even less time if the parties must first brief and oppose a Prosecution Team motion to compel, and wait for the Hearing Officers' ruling.

Ms. Zolezzi improperly compares WSID's January 19 Amended Notice of Intent to Appear with other amended notices by the parties in these proceedings. The Department of Water Resources and the San Joaquin Tributaries Authority each amended their notices on January 19 to remove all witnesses, and to state their intention to go from case-in-chief parties to cross-examination or rebuttal only. These amendments do not prejudice any other party. Prior to that, WSID submitted an Amended Notice of Intent to Appear in the BBID matter on October 5, 2015. That amendment aligned WSID's witness list in the BBID matter with its October 2, 2015, Notice of Intent to Appear in the WSID matter (except the October 2 notice also lists David Kaiser). BBID and CDWA submitted amended notices in the BBID matter on October 22, 2015, as directed by the Hearing Officer. SDWA submitted an amended notice in the BBID proceeding on October 28, but that notice only added counsel, it did not change witnesses. In other words, no party has added witnesses in the last three months, and only WSID attempted to add significant new witnesses on the same day as the case-in-chief submittal. WSID appears to be more interested in flouting procedure than providing fair hearing for all parties.

In the interest of reaching a fair and rapid resolution, the Prosecution Team would not object if the Hearing Team strikes Ms. Harrigfeld's testimony but allows WSID to identify another witness, not an attorney, who can authenticate the exhibits referenced in Ms. Harrigfeld's testimony. Surely WSID has a custodian of records or other staff who would be able to authenticate items from WSID's files. Such a witness should not be allowed to submit any substantive testimony, as that would also be untimely and prejudicial.

Finally, the Prosecution Team notes that although CDWA and SDWA jointly filed a case-in-chief along with WSID, neither appear to have submitted an Amended Notice of Intent to Appear to add Ms. Harrigfeld. The Prosecution Team's objections and requests here apply equally to any such effort on their part to do so.

2. Request for Ruling on Prosecution Team's Objections to BBID and WSID Excessive Motion Briefing

The Prosecution Team reiterates its objections raised in separate emails on January 25, 2015, to the attempts by BBID and WSID to submit multiple motions to dismiss and/or motions for summary judgment cumulatively well in excess of the 10-page briefing limit. I have attached copies of those emails here for reference. The Prosecution Team requests ruling on these objections as soon as possible, because all parties who might oppose those motions face a February 22 deadline.

3. Prosecution Team Objection to WSID addition of Greg Young

Ms. Zolezzi's letter appears to confirm that WSID, BBID, SDWA and CDWA are coordinating their hearing time limits, at least in some phase of these proceedings. If so, the Prosecution Team agrees that the time limits and related matters may be addressed at the February 8 pre-hearing conference. The Prosecution Team maintains its position that the coordinated WSID/BBID/SDWA/CDWA group

must not receive more time than the Prosecution Team or other coordinated groups. The Hearing Officers' ruling to that effect would assuage the Prosecution Team's concerns regarding the Greg Young testimony described in the January 23, 2015, email.

4. Prosecution Team Request for Clarification Regarding Online Storage Service

Finally, in the interest of bringing all pending issues under one email heading, the Prosecution Team reiterates its request for clarification regarding online storage electronic service, such as that proffered by BBID for its case-in-chief and motions. The Prosecution Team does not object to this method, and would like to use it for future filings, but seeks the Hearing Team's guidance.

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20150125 PT Objection
BBID Motions.pdf



20150125 PT Objection
WSID Motions.pdf



20150123 PT WSID NOI
Objections ... bpoena.pdf



WSID Response to
Prosecution... ections.pdf

EXHIBIT O



EDMUND G. BROWN JR.
GOVERNOR



MATTHEW RODRIGUEZ
SECRETARY FOR
ENVIRONMENTAL PROTECTION

State Water Resources Control Board

February 1, 2016

VIA ELECTRONIC MAIL

TO: ENCLOSED SERVICE LIST OF PARTICIPANTS

PROCEDURAL RULING: THE WEST SIDE IRRIGATION DISTRICT DRAFT CEASE AND DESIST ORDER HEARING (ENFORCEMENT ACTION (ENF01949)) AND THE BYRON-BETHANY IRRIGATION DISTRICT ADMINISTRATIVE CIVIL LIABILITY COMPLAINT HEARING (ENFORCEMENT ACTION (ENF01951))

This letter addresses matters raised by the Division of Water Rights Prosecution Team (Prosecution Team) regarding electronic service by way of online storage; The West Side Irrigation District's (WSID) amended Notice of Intent to Appear; and the motions filed by Byron-Bethany Irrigation District (BBID) and WSID on January 25, 2016. This letter also confirms the opportunity for parties to supplement their exhibits based on the public documents produced by the Board on January 20, 2016, pursuant to the Public Records Act.

ELECTRONIC SERVICE BY ONLINE STORAGE

On January 19 and January 25, 2016, respectively, BBID served exhibits and motions by e-mailing a link to the parties and the hearing team for an online document storage service. This method of delivery is acceptable and may be used by all parties for future service. Upon request by any party, the serving party must provide an electronic copy of the served documents by another acceptable means, such as e-mail or a disc sent by overnight delivery.

THE WEST SIDE IRRIGATION DISTRICT'S AMENDED NOTICE OF INTENT TO APPEAR

On January 19, 2016, WSID submitted an amended Notice of Intent to Appear (NOI) that adds Ms. Karna Harrigfeld and Mr. Greg Young as witnesses.

To the extent that the Prosecution Team objects to the addition of Mr. Young as a witness for WSID, that objection is overruled. Mr. Young was already identified by BBID to testify regarding water availability in the BBID proceeding. WSID could therefore elicit the same testimony from Mr. Young on cross-examination as on direct examination, because the subject matter of cross-examination is not limited in these proceedings to the scope of direct testimony. Because the water availability portion of the two proceedings is now consolidated, there is no basis to distinguish between testimony offered in the BBID proceeding from that in the WSID proceeding on the issue of water availability. The exhibits and testimony in the consolidated portions of the proceedings are to be included in the records for both. Therefore, we cannot perceive how the addition of Mr. Young to WSID's witness list would prejudice any other party.

The time limits for direct testimony and cross-examination will be addressed in more detail at the pre-hearing conference on February 8, 2016, so we will not address it here.

The addition of Ms. Karna Harrigfeld to WSID's list of witnesses is a different matter. Ms. Harrigfeld was not previously listed by any party as a witness. Her late addition to WSID's

FELICIA MARCUS, CHAIR | THOMAS HOWARD, EXECUTIVE DIRECTOR

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witness list means that the Prosecution Team and other parties had no opportunity to conduct discovery concerning Ms. Harrigfeld prior to the deadline to submit a case-in-chief. The Prosecution Team stated in their objection that they would have sought discovery of Ms. Harrigfeld's records and possibly her deposition had she previously been identified as a witness. WSID explains in justification of the late addition that WSID's general manager, who was initially included on their witness list, has been in his position for less than three years and does not have the "requisite factual knowledge regarding the district's day-to-day operations or history." (Letter, January 26, 2016, Ms. Jeanne Zolezzi to Hearing Officer Spivy-Weber.)

We find this explanation to be insufficient. WSID does not state when it learned that its general manager did not have the "requisite factual knowledge" and why it did not immediately request to amend its NOI. We conclude that the risk that the Prosecution Team and other parties would be prejudiced by the late addition of Ms. Harrigfeld, after the deadline for submission of cases-in-chief, is not justified by WSID's rationale for the late amendment. The Prosecution Team's objection to the addition of Ms. Harrigfeld to WSID's witness list and request to strike her written testimony, is sustained. Ms. Harrigfeld's written testimony will not be included in the record at this time. WSID may, however, identify an alternate witness as necessary to authenticate the exhibits referenced in Ms. Harrigfeld's testimony.

BYRON-BETHANY IRRIGATION DISTRICT'S AND THE WEST SIDE IRRIGATION DISTRICT'S JANUARY 25, 2016 SUBMITTALS

In our ruling of December 16, 2015, we established a deadline of January 25, 2016, for service and receipt of motions to dismiss or motions for summary judgment from BBID, WSID, and the Prosecution Team. The hearing team confirmed in an e-mail to the parties of January 14, 2016, that the submitted briefings were not to exceed ten pages in length. On January 25, 2016, BBID filed five motions to dismiss and WSID filed two motions to dismiss and one motion for summary judgment, each of which is up to ten pages in length. The Prosecution Team objected to the filing by BBID and WSID of more than ten pages of briefs.

It was our intent in our rulings of October 30, 2015, December 16, 2015, and clarifying e-mail of January 14, 2016, to allow BBID and WSID to file a single document, including a motion (or motions) and supporting memorandum of points and authorities, not to exceed ten pages in length *in total*. The reading of our instruction by BBID and WSID to allow an unlimited number of motions and briefs each up to ten pages in length would undermine the purpose of imposing page limits. But to the extent that our direction may not have been clear, it is now clarified.

The Board has the authority and discretion to conduct an adjudicatory proceeding "in a manner as the Board deems most suitable to the particular case with a view toward securing relevant information expeditiously without unnecessary delay and expense to the parties and the Board." (23 Cal. Code Regs. § 648.5.) Limitation on pages of briefing promotes efficiency in the Board's adjudicatory process and fairness to opposing parties.

We construe BBID's and WSID's over-length filings as a request to submit additional pages of briefing. Accordingly, we will allow BBID and WSID to each submit one document in their respective proceedings that includes a motion (or motions, if the parties choose to style their requests as separate motions) to dismiss or for summary judgment, and any supporting memorandum or brief, all of which must not exceed **twenty pages** in length *in total*. The amended motions must be received by the Board by **noon on February 3, 2016**. If the parties elect not to file amended motions, we will exercise our discretion to exclude pages in excess of the page limit. We note, and reject, BBID's assertion that our enforcement of page limitations would violate rights protected by the United States Constitution.

The Prosecution Team may submit one brief in each proceeding in response to the respective motions, of up to **twenty pages** in length *in total*, to be received by the Board by noon on February 22, 2016. The page limits applicable to all other parties remain the same. The page limits do not include exhibits, declarations, attachments, a table of contents, a table of authorities, or the proof of service.

BBID responded to Hearing Officer Doduc's request for legal briefing on the two specific legal issues identified in her request, with a motion to dismiss and supporting brief of ten pages in length. This motion and brief is acceptable in response to the request for legal briefing and does not need to be resubmitted. The additional two pages of briefing, titled "Notice of Position on Curtailments" are also accepted into the record.

The parties may raise arguments addressing the jurisdiction and authority of the Board to hold these proceedings. But we conclude that these arguments can be concisely briefed within the page limits allowed. The parties will also have the opportunity to make legal arguments in their opening and closing briefs. If the Board finds that additional briefing may be helpful, the Board may allow the parties to submit supplemental briefs at an appropriate time.

PRODUCTION OF DOCUMENTS BY THE STATE WATER RESOURCES CONTROL BOARD

We are aware that a final production of documents has been made by our legal office in response to the requests for public records by BBID and WSID. This production was made on January 20, 2016, the day after the deadline for submission of cases-in-chief. The parties may supplement their exhibits based on these most recently produced documents, if the amendments or additional exhibits are received by the Board by **noon on February 4, 2016**. Those parties seeking to supplement their submitted exhibits must demonstrate why the information or document could not have been submitted by the deadline of January 19, 2016.

EX PARTE COMMUNICATIONS

We would like to remind the parties that *ex parte* communications concerning substantive or controversial procedural issues relevant to this hearing are prohibited. Please be sure to copy the service list on any correspondence to us, the other Board Members, and the hearing team related to this matter.

Thank you for your continued cooperation. Questions regarding non-controversial procedural matters should be directed to Staff Counsel Nicole Kuenzi at (916) 322-4142 or by email to Nicole.Kuenzi@waterboards.ca.gov; or Ernie Mona at (916) 341-5359 or by email to Ernie.Mona@waterboards.ca.gov or to Jane Farwell-Jensen at (916) 341-5349 or by email to Jane.Farwell-Jensen@waterboards.ca.gov (Gov. Code, § 11430.20, subd. (b).)

Sincerely,



Frances Spivy-Weber, Vice-Chair
WSID Hearing Officer



Tam M. Doduc, Board Member
BBID Hearing Officer

Enclosure: Service Lists

**SERVICE LIST OF PARTICIPANTS
THE WEST SIDE IRRIGATION DISTRICT
CEASE AND DESIST ORDER HEARING
(October 8, 2015, Revised 12/18/15)**

Parties	
THE FOLLOWING <u>MUST BE SERVED</u> WITH WRITTEN TESTIMONY, EXHIBITS AND OTHER DOCUMENTS. (All have AGREED TO ACCEPT electronic service, pursuant to the rules specified in the hearing notice.)	
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**SERVICE LIST OF PARTICIPANTS
BYRON-BETHANY IRRIGATION DISTRICT
ADMINISTRATIVE CIVIL LIABILITY HEARING**

(09/02/15; Revised: 09/10/15; Revised 10/06/15; Revised 10/22/15, 12/18/15)

<p align="center">PARTIES</p>	
<p>THE FOLLOWING <u>MUST BE SERVED</u> WITH WRITTEN TESTIMONY, EXHIBITS AND OTHER DOCUMENTS. (All have AGREED TO ACCEPT electronic service, pursuant to the rules specified in the hearing notice.)</p>	
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EXHIBIT P

BEFORE THE
CALIFORNIA STATE WATER RESOURCES CONTROL BOARD

IN RE THE MATTERS OF:

SWRCB Enforcement Action
ENF01951; ENF01949

WEST SIDE IRRIGATION
DISTRICT CEASE AND DESIST
ORDER HEARING,

and

BYRON-BETHANY IRRIGATION
DISTRICT ADMINISTRATIVE
CIVIL LIABILITY HEARING.

DEPOSITION OF BRIAN COATS

November 12, 2015

Reported by: THRESHA SPENCER, CSR No. 11788

kathryndavis & associates
deposition reporting

BEFORE THE
CALIFORNIA STATE WATER RESOURCES CONTROL BOARD

IN RE THE MATTERS OF:

SWRCB Enforcement Action
ENF01951; ENF01949

WEST SIDE IRRIGATION
DISTRICT CEASE AND DESIST
ORDER HEARING,

and

BYRON-BETHANY IRRIGATION
DISTRICT ADMINISTRATIVE
CIVIL LIABILITY HEARING.

DEPOSITION OF BRIAN COATS

November 12, 2015

Reported by: THRESHA SPENCER, CSR No. 11788

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DEPOSITION OF BRIAN COATS

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DEPOSITION OF BRIAN COATS

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HSI HYDROLOGIC SYSTEMS

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KENNETH R. HENNEMAN CONSULTING

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DEPOSITION OF BRIAN COATS

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DEPOSITION OF BRIAN COATS

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DEPOSITION OF BRIAN COATS

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INSTRUCTED NOT TO ANSWER

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DEPOSITION OF BRIAN COATS

1 BE IT REMEMBERED, that on Thursday, November 12,
2 2015, commencing at the hour of 9:31 a.m. thereof, at the
3 Law Offices of Somach, Simmons & Dunn, 500 Capitol Mall,
4 Suite 1000, Sacramento, California, before me, THRESHA
5 SPENCER, a Certified Shorthand Reporter in the State of
6 California, duly authorized to administer oaths and
7 affirmations, there personally appeared

8 BRIAN COATS,
9 called as witness herein, who, having been duly sworn, was
10 thereupon examined and interrogated as hereinafter set
11 forth.

12 --o0o--

13 MS. TEMPLE: Before the questions start, I just
14 wanted to mark as an exhibit, if I could, the objections
15 that we served to the deposition notice.

16 MS. SPALETTA: That's fine.

17 MS. TEMPLE: We do intend to end the deposition
18 today after seven hours given that the Hearing Officer has
19 ruled that we're not likely to make a witness appear more
20 than once, and the documents that have been produced to date
21 have been produced on schedule. So once seven hours is
22 complete, we intend to end the deposition.

23 MS. SPALETTA: Before we get into deposition
24 marking, I think it would be helpful for the record for us
25 to introduce everyone in the room, and I will start.

DEPOSITION OF BRIAN COATS

1 Q Okay. Do we have a copy of that model in the
2 documents that have been produced to date, do you know?

3 A I don't know.

4 Q Does that model have anything to do with the West
5 Side enforcement action?

6 A No.

7 Q Does it have anything to do with the BBID
8 enforcement action?

9 A No.

10 Q Why not?

11 A Those models have not been developed yet. The Eel
12 River isn't the same as the Sacramento River. The Eel River
13 has been completed last year, the Russian River model was
14 completed in the summer 2015, and the U.C. Davis group is
15 currently working on the Sacramento River water -- River
16 model right now.

17 Q The Eel River model that was completed, was it used
18 for curtailment efforts in either 2014 or 2015?

19 MS. TEMPLE: Objection. Compound.

20 Q BY MS. SPALETTA: You can answer.

21 A Okay. So, in 2014, since the model was not
22 developed, it was not used.

23 In 2015, we looked at the results of that model, and
24 the model conflicted with the supply sources that we saw,
25 and we decided not to take action against that.

DEPOSITION OF BRIAN COATS

1 Q So it was not used for curtailment purposes?

2 A No.

3 Q Why are you participating in this effort on
4 developing the U.C. Davis curtailment-related models?

5 A As it stands right now, I'm the only senior engineer
6 remaining that's worked on curtailment in both 2014 and
7 2015, and I've just participated in a lot of the U.C. Davis
8 group meetings in fielding, you know, answers to their
9 questions on how they need to develop the model and with
10 respect to questions about basic water right principles,
11 such as pre-14s, riparians, water right demands, things of
12 that nature.

13 Q Why are these models being developed, the U.C. Davis
14 models?

15 MS. TEMPLE: Objection. Vague.

16 Q BY MS. SPALETTA: You can answer.

17 A Okay. So the U.C. Davis models are being developed
18 to proceed with the future in the event, you know, we can
19 allocate supplies to localize the demands on a HUC 12 level
20 versus a global watershed. The problem with that is we
21 still need to refine the prototype models once they even are
22 developed and then for the stakeholders for their comments
23 and refinement.

24 Q Was the U.C. Davis curtailment-related model effort
25 instigated by the State Board or by U.C. Davis?

DEPOSITION OF BRIAN COATS

1 MS. TEMPLE: Objection. Calls for speculation.

2 You can answer to the extent you know.

3 THE WITNESS: I don't know.

4 Q BY MS. SPALETTA: Okay. Has the State Board
5 retained or hired U.C. Davis or funded their effort?

6 A Yes.

7 Q And what was the source of the funding, do you know?

8 A I don't know.

9 Q Who is heading up the work at U.C. Davis?

10 A Jay Lund.

11 Q Other than the experience that you have described to
12 me so far in the deposition, do you have any other
13 professional experience regarding hydrology?

14 A No.

15 Q Do you have any professional experience regarding
16 water quality?

17 A No.

18 Q Have you performed a water availability analysis?

19 A To the extent that you're referring to the supply
20 and demand analysis we've undertaken in the last two years,
21 yes. But as to a formal water availability analysis prior
22 to 2014, no.

23 Q Have you ever been to the West Side Irrigation
24 District service area?

25 A We may have passed through it over the last 13,

DEPOSITION OF BRIAN COATS

1 A The water availability determination with respect to
2 the supply and demand analysis.

3 Q Anything else?

4 A No.

5 Q So when it says "Key issues 1 and 2," do you
6 understand that that testimony simply relates to the water
7 availability determination?

8 A Correct.

9 Q Now, I asked you previously what work you had done
10 as part of the Prosecution Team, and it did not include
11 water availability determination. So was that work done
12 outside the scope of your role on the Prosecution Team?

13 A Can you clarify the question?

14 Q Sure. I asked you what you did as part of the
15 Prosecution Team, and you told me all you had done was
16 reviewed the draft CDO?

17 A Uh-huh.

18 Q The subject of your proposed testimony, however, is
19 broader. It relates to a water availability determination.

20 A Correct.

21 Q Did you make the water availability determination as
22 part of your work on the Prosecution Team or in some other
23 role at the State Board?

24 A Could you separate the questions?

25 Q Did you do your work on the water availability

DEPOSITION OF BRIAN COATS

1 A Correct.

2 Q Why?

3 A So for our supply analysis, we need to know how much
4 water is available for all diverters. In the case of a
5 wastewater discharge that may be subject to appropriation,
6 the source of that water -- let me rephrase that.

7 There's no way to quantify the exact amount that we
8 can forecast for a source of supply. So for our supply and
9 demand analysis, we used exclusively full natural flows.
10 Additional flows that we can't quantify or support from a
11 credible source, we didn't use.

12 Q So are you saying that the State Board doesn't have
13 any information about the amount of the City of Tracy's
14 wastewater discharges?

15 A No. No. We may have an amount of water that we
16 know has been discharged into that area, but it is not full
17 natural flow.

18 Q So my question was, why did you only look at full
19 natural flow for the water availability analysis?

20 A That's what we were instructed to do by management.

21 Q Who instructed you to do that?

22 A John O'Hagan.

23 Q Anyone else?

24 A No.

25 Q Did you have any input in that decision?

DEPOSITION OF BRIAN COATS

1 A No.

2 Q Did you agree with that decision?

3 A Yes.

4 Q Why do you agree with it?

5 A Because our supervisor told me to, for one thing.

6 The second thing, all sources of natural supply are

7 available to all diverters, both riparian and pre-14. The

8 wastewater discharges would be available for appropriation

9 by pre-14s and post-14s but not riparians because they're

10 not natural in origin.

11 It is hard to quantify the exact amount that's going

12 to be available on a monthly basis or weekly basis for our

13 supply/demand analysis, and it is also subject to change if

14 the City of Tracy decides to stop diverting water or

15 discharging water into the stream.

16 Q What type of water right does West Side have?

17 A West Side has a post-1914 right.

18 Q So what type of water is available for West Side to

19 divert under that right?

20 A Appropriative water.

21 Q And that includes sources other than natural flow,

22 correct?

23 A Correct.

24 Q And then what type of water right does BBID have?

25 A Has a pre-14 right.

DEPOSITION OF BRIAN COATS

- 1 Q And then did you review his calculation?
- 2 A We reviewed the resulting graphs. I reviewed the
3 resulting graphs.
- 4 Q Now, you said there was also a return flow factor
5 for the Valley Floor.
- 6 A Correct.
- 7 Q And what factor was that?
- 8 A The factor varied by month.
- 9 Q And where did that number come from?
- 10 A 1977 Drought Report.
- 11 Q Was there any correspondence with stakeholders over
12 the selection of those numbers?
- 13 A Not that I can recall.
- 14 Q Why not?
- 15 A I don't recall.
- 16 Q Do you have confidence in the return flow factors
17 that were used in the analysis?
- 18 MS. TEMPLE: Objection. Vague.
- 19 THE WITNESS: Define "confidence."
- 20 Q BY MS. SPALETTA: Do you think that they're
21 accurate?
- 22 A We used what was available to us. As far as the
23 accuracy, I'd have to actually go out and measure that.
- 24 Q Was there any measurement done?
- 25 A No.

DEPOSITION OF BRIAN COATS

1 Q We've now talked about four sources of information
2 for the supply analysis. Are there any others?

3 A Not that I can recall, no.

4 Q Was there any attempt or discussion, I should say --
5 let's ask it that way.

6 Was there any discussion regarding including a
7 return flow for groundwater?

8 A There was a discussion in 2014, I think, brought up
9 by Jeanne Zolezzi in regard to including some additional
10 groundwater for the Valley Floor.

11 Q And was that ever discussed at the State Water
12 Resources Control Board staff level?

13 A I don't recall it being in 2014.

14 Q Why wasn't a groundwater return flow included in the
15 analysis?

16 A We didn't have a third party source from a public
17 agency to support using that number in addition to any way
18 to qualify those numbers.

19 Q Was there a discussion about the fact that it should
20 be included?

21 A I don't recall.

22 Q Do you understand return flows from groundwater to
23 be a source of supply in the channels of the San Joaquin
24 River Basin?

25 A It's possible, sure.

DEPOSITION OF BRIAN COATS

1 Q Did you or anyone you worked with seek any peer
2 review of the water availability analysis to verify the
3 methodology?

4 MS. TEMPLE: Objection. Vague and ambiguous.

5 THE WITNESS: Once we prepared our supply and demand
6 analysis, Les Grober, I think, reviewed our analysis to
7 determine whether or not it was similar to what he was
8 seeing, but that was just on occasion. It wasn't a regular
9 thing.

10 Q When you say "similar to what he was seeing," what
11 does that mean?

12 A He deals predominantly with the Delta, so a
13 comparison of the reported eWRIMS demand for the Delta in
14 comparison to the net Delta consumptive use models that he
15 was using to see if the numbers matched or if they were
16 close.

17 Q So he performed that comparison?

18 A He didn't perform the comparison. We provided our
19 results to him, and then as to whether or not he commented
20 on them, I can't say.

21 Q So when you say you provided your results, what
22 exactly did you provide to him?

23 A We provided our supply and demand chart, which
24 summarized all of our numerical data.

25 Q Uh-huh. And then you understand that he conducted

DEPOSITION OF BRIAN COATS

1 MS. TEMPLE: Objection. Calls for speculation.

2 You can answer.

3 THE WITNESS: We were -- I was directed by upper
4 management.

5 Q BY MS. SPALETTA: You don't have an understanding of
6 why that was done?

7 A No.

8 Q Is there a specific definition of water availability
9 that you are operating under?

10 A No.

11 Q No?

12 A Not a specific definition, no.

13 Q There's no written definition?

14 A No.

15 Q What do you understand water availability to mean in
16 the context of the work that you did?

17 A For our supply and demand analysis work, we compare
18 the available full natural flow supply for a particular
19 watershed against the known demands and make a determination
20 based off of those known demands whether there is enough
21 water to service their needs.

22 Q And where does your understanding that you just
23 described to me come from?

24 A Practical knowledge over the past two years.

25 Q Is it anything more than just what you've been

DEPOSITION OF BRIAN COATS

1 directed to do by your supervisors?

2 A No.

3 Q Was there any water quality analysis that was used
4 as part of the water availability determinations?

5 A No.

6 Q For the demand data that was utilized, you testified
7 that the demand data came from eWRIMS --

8 A Uh-huh.

9 Q -- with certain modifications?

10 A Correct.

11 Q Which year's demand data was used for the 2014 water
12 availability?

13 A For the 2014 water availability, we used a
14 combination. For the Sacramento Watershed, we used the 2010
15 and 2012 data set.

16 For the San Joaquin and the Scott River and the Eel
17 River, we used the 2010 data set.

18 Q And how about for the 2015 analysis?

19 A For the 2015 analysis, we used a little bit
20 different demand data set. We used the years 2010 to 2014.
21 Basically averaging out whatever years were reported to us
22 for those -- for that four-year respective time period
23 averaging an amount. For the recipients of the
24 February 2015 informational order, we used whatever 2014
25 demand they reported to us as a basis, and then we took into

DEPOSITION OF BRIAN COATS

1 to evaluate. And right now we are still evaluating the
2 efficacy, I guess you could say, of the data that was
3 submitted.

4 Q So the review is continuing, but that specific
5 information did not play into the specific curtailment
6 decision, for example, on May 1st?

7 A Correct.

8 Q Or on June 12th?

9 A Correct.

10 Q We are going to mark Exhibit No. 9.

11 (Whereupon, Exhibit No. 9 was
12 marked for identification.)

13 Q BY MS. SPALETTA: I've marked, as Exhibit No. 9, a
14 map of the Sacramento River Watershed --

15 A Uh-huh.

16 Q -- that was produced by the State Water Resources
17 Control Board, with a date on the bottom of April 14th,
18 2015.

19 Do you recognize this map?

20 A Yes. It's a map that my staff prepared.

21 Q And what does it represent?

22 A The location of all of the points of diversions for
23 riparian, pre-14, and post-1914 rights with the combined
24 Sacramento and Delta Watershed.

25 Q And so does this represent the geographic area that

DEPOSITION OF BRIAN COATS

1 was the scope of your water availability analysis applicable
2 to West Side and Byron-Bethany?

3 A I'm not sure. I'd have to verify the -- I'd have to
4 actually review my files to verify that, but it looks as if
5 it is.

6 Q Who made the decision on the scope of this
7 geographic area?

8 MS. TEMPLE: Objection. Vague.

9 THE WITNESS: John O'Hagan.

10 Q BY MS. SPALETTA: Did you have any input on that
11 decision?

12 A No.

13 Q Did you have any input on the scope of the
14 geographic area for any of the water availability analyses
15 in 2015?

16 A For some of the tributary level watershed boundaries
17 within the San Joaquin Watershed, yes, and also the
18 Sacramento for that report.

19 Q What do you mean by "tributary boundaries"?

20 A The tributary level boundaries that are within these
21 global boundaries that are individual watersheds, such as
22 the Stanislaus, the Tuolumne, Merced, Feather, American
23 River.

24 Q Why were you looking at those tributary boundaries?

25 A For senior-level evaluation.

DEPOSITION OF BRIAN COATS

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REPORTER'S CERTIFICATE

State of California)
) ss.
County of Sacramento)

I certify that the witness in the foregoing deposition,

BRIAN COATS,

was by me duly sworn to testify in the within-entitled cause; that said deposition was taken at the time and place therein named; that the testimony of said witness was reported by me, a duly Certified Shorthand Reporter of the State of California authorized to administer oaths and affirmations, and said testimony was thereafter transcribed into typewriting.

I further certify that I am not of counsel or attorney for either or any of the parties to said deposition, nor in any way interested in the outcome of the cause named in said deposition.

IN WITNESS WHEREOF, I have hereunto set my hand this day of November 17, 2015.

THRESHA SPENCER
Certified Shorthand Reporter
Certificate No. 11788

DEPOSITION OF BRIAN COATS

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DISPOSITION OF ORIGINAL TRANSCRIPT

Date _____

Check One

Signature waived.

**I certify that the witness was given the
statutory allowable time within which to read and sign the
deposition, and the witness failed to appear for such
reading and signing.**

**I certify that the witness has read and
signed the deposition and has made any changes indicated
therein.**

By _____
KATHRYN DAVIS & ASSOCIATES

---c0o---

DEPOSITION OF BRIAN COATS

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KATHRYN DAVIS & ASSOCIATES
Certified Shorthand Reporters
555 University Avenue, Suite 160
Sacramento, California 95825
(916) 567-4211

November 17, 2015

BRIAN COATS, Witness
Department of Justice, Office of the Attorney General
Attn: Jennifer Kalnins Temple, Attorney
300 S. Spring Street, Suite 1702
Los Angeles, California 90013

Re: West Side Irrigation District Cease and Desist Order
and Byron-Bethany Irrigation District Civil Hearing

Date Taken: November 12, 2015

Dear Mr. Coats:

Your deposition transcript is now available for review and signature, and will be available for the next 30 days. This review is optional. An appointment is required to review your transcript. Please bring this letter with you.

You may wish to discuss with your attorney whether he/she requires that it be read, corrected, and signed, before it is filed with the Court.

If you are represented by an attorney, you may read his or her copy of the transcript. If you read your attorney's copy of the transcript, please send us a photocopy of the Signature Line and Deponent's Change Sheet.

If you choose not to read your deposition, please sign here and return this letter to our office.

Signature

Date

Sincerely,

THRESHA SPENCER, CSR No. 11788

cc: Ms. Spaletta; Mr. Vergara; Ms. Zolezzi; Ms. Akroyd;
Mr. Williams; Mr. O'Laughlin; Mr. Tauriainen;
Mr. Prager; Ms. McGinnis; Ms. Morris

EXHIBIT Q

Mona, Ernie@Waterboards

From: Tauriainen, Andrew@Waterboards
Sent: Wednesday, September 02, 2015 11:27 AM
To: Unit, Wr_Hearing@Waterboards
Subject: BBID ACL Hearing
Attachments: pt_notice_of_intent.pdf

Hearing Team:

Attached please find an electronic copy of the Prosecution Team's Notice of Intent to Appear in the Byron-Bethany Irrigation District (BBID) ACL Hearing. An original copy will follow.

The Prosecution Team notes that BBID's Hearing Request indicates that BBID will seek to conduct discovery in this matter. Correspondence from the Hearing Team earlier today indicates that at least one other party seeking designated party status will request discovery. The Prosecution Team is open to conducting limited discovery in this matter, and requests that the parties and the Hearing Team discuss the scope and extent of discovery in a pre-hearing conference as soon as possible.

The Prosecution Team also notes that the Hearing Team has scheduled the West Side Irrigation District (WSID) CDO matter for hearing in November. There is some commonality of issues between the BBID and WSID matters, particularly with respect to the Division of Water Rights' methodology to determine water availability in the Delta. It is reasonable to assume that some or all of the parties seeking discovery in the BBID matter may also seek discovery in the WSID matter on the common issues. The Prosecution Team initially requests that any discovery on the common issues should be coordinated for administrative efficiency. The parties and the Hearing Team should also discuss the possibility of coordinating the proceedings on the common issues in a manner that would promote efficiency in resolving both matters.

Andrew Tauriainen, Attorney III
State Water Resources Control Board
Office of Enforcement
1001 I Street, 16th Floor
Sacramento, CA 95814
tel: (916) 341-5445
fax: (916) 341-5896
andrew.tauriainen@waterboards.ca.gov

*****CONFIDENTIALITY NOTICE:** This communication with its contents may contain confidential and/or legally privileged information. It is solely for the use of the intended recipient(s). Unauthorized interception, review, use or disclosure is prohibited and may violate applicable laws including the Electronic Communications Privacy Act. If you are not the intended recipient, please contact the sender and destroy all copies of the communication.

NOTICE OF INTENT TO APPEAR

Division of Water Rights Prosecution Team plans to participate in the water right hearing regarding

Administrative Civil Liability
against
Byron-Bethany Irrigation District

scheduled to commence
**Wednesday, October 28, 2015 and continue, if necessary,
on October 29 and 30, 2015
at 9:00 a.m.**

1) Check only one (1) of the following:

- I/we intend to present a policy statement only.
 I/we intend to participate by cross-examination or rebuttal only.
 I/we plan to call the following witnesses to testify at the hearing:

NAME	SUBJECT OF PROPOSED TESTIMONY	ESTIMATED LENGTH OF DIRECT TESTIMONY	EXPERT WITNESS (YES/NO)
Brian Coats, Sr.WRCE	Water availability determination; Key Issues 1 and 2	15	Yes
Paul Wells, Sr.WRCE	BBID diversions; Key Issues 1 and 2	15	Yes
Jeff Yeazel, WRCE	Water availability determination; Key Issues 1 and 2	15	Yes
Kathy Mrowka, Sr.WRCE	Water availability determination; Key Issues 1 and 2	10	Yes
Stephen Nemeth, Department of Water Resources	Department of Water Resources stream flow data and full natural flow calculations used in water availability determinations; CDEC.	5	Yes
Rebuttal Witnesses TBD	The Prosecution Team will call rebuttal witnesses as necessary to address legal argument, evidence or testimony presented by the other parties.		

(If more space is required, please add additional pages or use reverse side.)

2) Fill in the following information of the Participant, Party, Attorney, or Other Representative:

Name (Print): Andrew Tauriainen, Attorney III

Mailing Address: SWRCB Office of Enforcement
1001 I Street, 16th Floor
Sacramento, CA 95814

Phone Number: (916) 341-5445

Fax Number: (916) 341-5896

E-mail: Andrew.Tauriainen@waterboards.ca.gov

Optional:

I/we decline electronic service of hearing-related materials. **[PT accepts electronic service]**


Signature:  Dated: September 2, 2015

EXHIBIT R

NOTICE OF INTENT TO APPEAR

Division of Water Rights Prosecution Team plans to participate in the water right hearing regarding

Draft Cease and Desist Order
against
West Side Irrigation District

scheduled to commence
**Thursday, November 12, 2015 and continue, if necessary,
on November 13 and 16, 2015
at 9:00 a.m.**

1) Check only one (1) of the following:

- I/we intend to present a policy statement only.
 I/we intend to participate by cross-examination or rebuttal only.
 I/we plan to call the following witnesses to testify at the hearing:

NAME	SUBJECT OF PROPOSED TESTIMONY	ESTIMATED LENGTH OF DIRECT TESTIMONY	EXPERT WITNESS (YES/NO)
Victor Vasquez, Sr. WRCE (Sup.)	WSID Diversions; Key Issues 1 and 2	5	Yes
Kathy Bare, WRCE	WSID Diversions; Key Issues 1 and 2	10	Yes
Michael George, Delta Watermaster	WSID Diversions; Key Issues 1 and 2	5	Yes
John Collins, Env. Scientist (Spec.)	WSID Diversions; Key Issues 1 and 2	10	Yes
Brian Coats, Sr.WRCE (Sup.)	Water availability determination; Key Issues 1 and 2	10	Yes
Jeff Yeazell, WRCE	Water availability determination; Key Issues 1 and 2	10	Yes
Kathy Mrowka, Manager, Enforcement Section	Key Issues 1 and 2	5	Yes
Stephen Nemeth, Department of Water Resources	Department of Water Resources stream flow data and full natural flow calculations used in water availability determinations; CDEC.	5	Yes

Rebuttal Witnesses TBD	The Prosecution Team will call rebuttal witnesses as necessary.		
---------------------------	---	--	--

(If more space is required, please add additional pages or use reverse side.)

2) Fill in the following information of the Participant, Party, Attorney, or Other Representative:

Name (Print): Andrew Tauriainen, Attorney III

Mailing Address: SWRCB Office of Enforcement
1001 I Street, 16th Floor
Sacramento, CA 95814

Phone Number: (916) 341-5445

Fax Number: (916) 341-5896

E-mail: Andrew.Tauriainen@waterboards.ca.gov

Optional:

I/we decline electronic service of hearing-related materials. **[PT accepts electronic service]**

Signature:  Dated: October 2, 2015

EXHIBIT S

State Water Resources Control Board

June 12, 2015

NOTICE OF UNAVAILABILITY OF WATER AND NEED FOR IMMEDIATE CURTAILMENT FOR THOSE DIVERTING WATER IN THE SACRAMENTO-SAN JOAQUIN WATERSHEDS AND DELTA WITH A PRE-1914 APPROPRIATIVE CLAIM COMMENCING DURING OR AFTER 1903

On January 23, 2015 and again on April 2, 2015, the State Water Resources Control Board (State Water Board) issued a Notice of Surface Water Shortage and Potential for Curtailment due to dry conditions throughout the State. On April 1, 2015, the Governor issued an executive order, order B-29-15, continuing the state of emergency, initially enacted on January 17, 2014, due to drinking water shortages, diminished water for agriculture production, degraded habitat for fish and wildlife, increased wildfire risk and the threat of saltwater contamination to fresh water supplies in the Sacramento-San Joaquin Delta (Delta).

On April 23, 2015 and May 1, 2015, the State Water Board issued curtailment notices to all post-1914 appropriative water rights in the Sacramento and San Joaquin River watersheds, inclusive of the Delta, due to insufficient projected water supplies. Based on updated water supply projections provided by the Department of Water Resources in early May, the State Water Board is now notifying pre-1914 claims of right, with a priority date of 1903 and later for the Sacramento-San Joaquin watersheds and the Delta, that, due to ongoing drought conditions, there is insufficient water in the system to service their claims of right.

Curtailment of Certain Pre-1914 Claims of Right Commenced During or After 1903:

Based upon the most recent reservoir storage and inflow projections, along with forecasts for future precipitation events, the existing water supply in the Sacramento-San Joaquin watersheds and Delta watersheds is insufficient to meet the needs of some pre-1914 claims of right. With this notice, the State Water Board is notifying pre-1914 appropriative claims of right with a priority date of 1903 and later within the Sacramento -San Joaquin watersheds and Delta of the need to immediately stop diverting water with the exceptions discussed below. This condition of curtailment will continue until water conditions improve. Even if there is water physically available at your point of diversion, that water is necessary to meet more senior water right holders' needs or the water may be released previously stored water which must continue instream to serve its intended beneficial use. If precipitation occurs in the following weeks or months, you should not commence diversion before being notified by the State Water Board that water is legally available for diversion under your priority of right. Evaluations for additional curtailments of more senior rights will be made every two weeks through September.

Compliance Certification Required:

Holders of pre-1914 water right claims with priority dates equal to or later than 1903 are required to document receipt of this notice by completing an online Curtailment Certification Form (Form) within seven days. The Form confirms your cessation of diversion under the specific pre-1914 claim of right. Completion of the Form is mandatory to avoid unnecessary potential enforcement proceedings. You are required to complete the Form for each pre-1914 claim of right identified through this notice at:
http://www.waterboards.ca.gov/waterrights/water_issues/programs/ewrims/curtailment/2015curt_form.php

Exceptions to Curtailment:

If your diversion is for hydroelectric generation by direct diversion only and all water diverted is returned to the same stream system, you may continue to divert under your pre-1914 claim of right. If you continue to divert under the above circumstances, you must identify that on the Form and provide the information requested. If you have previously collected water to storage in a reservoir covered by a pre-1914 claim of right prior to this curtailment notice, you still may beneficially use that previously stored water. However, you must bypass all inflow into the reservoir at all times during the period this notice remains in effect.

No Exception for Health and Safety:

There is no exception to this notice for health and safety needs. However, we are aware that some water users must comply with directives issued by the Division of Drinking Water (DDW), or local health or drinking water regulation to provide continued water service to meet minimum health and safety standards. Should you continue to divert water under a claim of right subject to this notice to meet human health and safety needs, you must complete the Form identifying your health and safety needs, whether there is an applicable DDW, state or local regulation and your attempts at securing an alternate water supply. The State Water Board will carefully analyze the non-exempted continued diversions for minimum health and safety needs on a case-by-case basis.

Potential Enforcement:

Those who are found to be diverting water beyond what is legally available to them may be subject to administrative penalties, cease and desist orders, or prosecution in court. If the State Water Board finds following an adjudicative proceeding that a person or entity has diverted or used water water unlawfully, the State Water Board may assess penalties of \$1,000 per day of violation and \$2,500 for each acre-foot diverted or used in excess of a valid water right. (See Water Code, §§ 1052, 1055.) Additionally, if the State Water Board issues a Cease and Desist Order against an unauthorized diversion, violation of any such order can result in a fine of \$10,000 per day. (See Water Code, §§ 1831, 1845.)

The State Water Board is encouraging diverters to work together to reach local voluntary agreements that not only provide solutions that help local communities with water shortages, but also prevent injury to other legal users of water and do not cause unreasonable effects on fish and wildlife. If you have any questions, please call our Curtailment Hotline at (916) 341-5342, contact us by email at: SWRCB-Curtailment-Certification@waterboards.ca.gov, or review our drought year webpage at: http://www.waterboards.ca.gov/waterrights/water_issues/programs/drought/index.shtml#notices The State Water Board also encourages water right holders to assist in the prevention of unlawful diversion of water and in discouraging any waste or unreasonable use of water. To assist the State Water Board, you may file a complaint at:

http://www.dtsc.ca.gov/database/CalEPA_Complaint/index.cfm

We recognize the burden the drought creates, and want to assure that others do not illegally benefit from your curtailments.

Sincerely,



Thomas Howard
Executive Director