

**JOINT MEETING OF THE  
WEST TURLOCK SUBBASIN GROUNDWATER SUSTAINABILITY AGENCY AND  
THE EAST TURLOCK SUBBASIN GROUNDWATER SUSTAINABILITY AGENCY**

**NOVEMBER 15, 2021 – 5:00PM  
SPECIAL MEETING AGENDA**

Join Zoom Meeting

<https://zoom.us/j/91693429652?pwd=KzVLaEI4RHJ5cVg2a2lMSFB2WmlPZz09>

Zoom Meeting ID: 916 9342 9652

Passcode: 005749

Or call in: 1 669 900 9128

**IMPORTANT NOTICE: DUE TO THE COVID-19 PANDEMIC AND PURSUANT TO ASSEMBLY BILL (AB) 361 SIGNED INTO LAW SEPTEMBER 16, 2021, THIS MEETING WILL BE HELD VIA REMOTE TELECONFERENCE WITHOUT A PHYSICAL MEETING LOCATION. MEMBERS OF THE PUBLIC WHO WISH TO PROVIDE COMMENT OR OBSERVE THE MEETING ARE ENCOURAGED TO JOIN THE REMOTE TELECONFERENCE.**

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**WEST TURLOCK SUBBASIN GROUNDWATER SUSTAINABILITY AGENCY BOARD MEMBERS**

**Joe Alamo, Turlock Irrigation District**

**Chair**

**Curtis Jorritsma, Hilmar County Water District**

**Vice Chair**

**Javier Lopez, City of Ceres**

**Leandro Maldonado, Delhi County Water District**

**David Odom, Denair Community Services District**

**Michael Buck, City of Hughson**

**Rodrigo Espinoza, Merced County**

**Miguel Alvarez, City of Modesto**

**Vito Chiesa, Stanislaus County**

**Nicole Larson, City of Turlock**

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**EAST TURLOCK SUBBASIN GROUNDWATER SUSTAINABILITY AGENCY BOARD MEMBERS**

**Al Rossini, Eastside Water District**

**Chair**

**Lloyd Pareira, Merced County**

**Vice-Chair**

**Vito Chiesa, Stanislaus County**

**Dirk Ulrich, Ballico-Cortez Water District**

**Hicham ElTal, Merced Irrigation District**

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**NOTICE REGARDING NON-ENGLISH SPEAKERS:** West Turlock Subbasin and East Turlock Subbasin Groundwater Sustainability Agency meetings are conducted in English and translation to other languages may be provided when requested ahead of time. To request interpretation services, please call (209) 883-8353 and the Agencies will make every effort to provide an interpreter.

**REASONABLE ACCOMMODATIONS:** In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please call (209) 883-8353. Notification 72 hours prior to the meeting will enable the Agencies to make reasonable arrangements to ensure accessibility to this meeting. If requested, the agenda and meeting materials will be made available in alternative formats to persons with disabilities.

**AGENDA PACKETS:** Prior to the meeting, an agenda packet is available for review online at: [www.turlockgroundwater.org](http://www.turlockgroundwater.org).

**A. CALL TO ORDER / CHAIRS' WELCOME**

**B. ROLL CALL OF BOARD MEMBERS / PARTICIPANT LIST INTRODUCTIONS**

- West Turlock Subbasin Groundwater Sustainability Agency  
*Six (6) agency representatives from the West Turlock Subbasin GSA Board are needed for a quorum*
- East Turlock Subbasin Groundwater Sustainability Agency  
*Three (3) agency representatives from the East Turlock Subbasin GSA Board are needed for a quorum*

**C. PUBLIC COMMENT PERIOD**

Interested persons in the audience are welcome to introduce any topic within each Agency's jurisdiction. No action may be undertaken on any item not appearing on the posted agenda, except that the Boards may briefly respond to the comments, refer the matter to staff, or request it be placed on a future agenda.

**D. STAFF UPDATES**

- Budget Update – *Michael Clipper, WTS GSA Treasurer*

**E. CONSENT CALENDAR – RECOMMENDED ACTIONS BY THE WEST TURLOCK SUBBASIN GSA:**

*Information concerning the consent calendar items has been included within the agenda packet. All items listed below will be acted upon by a single roll call vote of the WTS GSA Board. There will be no individual discussion of these items unless a member of the Board or public has questions concerning an item(s), at which time the item(s) will be removed for separate consideration by the Board.*

1. **Motion:** Approving Minutes of the October 19, 2021 Special Joint Meeting of the West Turlock Subbasin and East Turlock Subbasin Groundwater Sustainability Agencies
2. **Resolution No. 2021-4:** Adopting a Resolution of the West Turlock Subbasin Groundwater Sustainability Agency (WTS GSA) Board of Directors (Board) recognizing the state of emergency proclaimed by the Governor on March 4, 2020 which remains in effect and reauthorizing remote teleconference meetings of the WTS GSA Board for the period November 16, 2021 through December 15, 2021 pursuant to Brown Act provisions
3. **Resolution No. 2021-5:** Adopting a Resolution of the West Turlock Subbasin Groundwater Sustainability Agency (WTS GSA) Board of Directors (Board) appointing Debbie Montalbano, of the Turlock Irrigation District, as the Plan Manager for the Turlock Subbasin
4. **Resolution No. 2021-6:** Adopting a Resolution of the West Turlock Subbasin Groundwater Sustainability Agency (WTS GSA) Board of Directors (Board) determining no sustainable management criteria needs to be developed for seawater intrusion in the Turlock Subbasin Groundwater Sustainability Plan (GSP)
5. **Resolution No. 2021-7:** Adopting a Resolution of the West Turlock Subbasin Groundwater Sustainability Agency (WTS GSA) Board of Directors (Board) establishing regular board meeting dates for 2022

**F. CONSENT CALENDAR – RECOMMENDED ACTIONS BY THE EAST TURLOCK SUBBASIN GSA:**

*Information concerning the consent calendar items has been included within the agenda packet. All items listed below will be acted upon by a single roll call vote of the ETS GSA Board. There will be no individual discussion of these items unless a member of the Board or public has questions concerning an item(s), at which time the item(s) will be removed for separate consideration by the Board.*

1. **Motion:** Approving Minutes of the October 19, 2021 Special Joint Meeting of the West Turlock Subbasin and East Turlock Subbasin Groundwater Sustainability Agencies

2. **Resolution No. 2021-04:** Adopting a Resolution of the East Turlock Subbasin Groundwater Sustainability Agency Board of Directors acknowledging a local emergency persists, re-ratifying the proclamation of a state of emergency by N-12-21 issued on August 16, 2021, and re-authorizing remote teleconference meetings of Legislative Bodies of the East Turlock Subbasin Groundwater Sustainability Agency for the period from November 15, 2021 to December 15, 2021 pursuant to Brown Act provisions
3. **Resolution No. 2021-05:** Adopting a Resolution of the East Turlock Subbasin Groundwater Sustainability Agency Board of Directors appointing Debbie Montalbano, of the Turlock Irrigation District, as the Plan Manager for the Turlock Subbasin
4. **Resolution No. 2021-06:** Adopting a Resolution of the East Turlock Subbasin Groundwater Sustainability Agency Board of Directors determining no sustainable management criteria needs to be developed for seawater intrusion in the Turlock Subbasin Groundwater Sustainability Plan (GSP)
5. **Motion:** Accepting an increase in ETS GSA's share of the budget to prepare the Groundwater Sustainability Plan (GSP) First Annual Report for the Turlock Subbasin

**G. AGENDA ITEMS** (including regular business items, action, reports, or public hearings)

**1. FIRST AMENDMENT TO THE MEMORANDUM OF AGREEMENT BETWEEN THE WEST TURLOCK SUBBASIN AND EAST TURLOCK SUBBASIN GROUNDWATER SUSTAINABILITY AGENCIES**

***Recommended Action by the West Turlock Subbasin GSA:***

**Resolution No. 2021-8:** Adopting a Resolution of the West Turlock Subbasin Groundwater Sustainability Agency (WTS GSA) Board of Directors (Board) approving the First Amendment to the Memorandum of Agreement (MOA) between the West Turlock Subbasin Groundwater Sustainability Agency and the East Turlock Subbasin Groundwater Sustainability Agency

***Recommended Action by the East Turlock Subbasin GSA:***

**Resolution No. 2021-07:** Adopting a Resolution of the East Turlock Subbasin Groundwater Sustainability Agency Board of Directors approving the First Amendment to the Memorandum of Agreement (MOA) between the West Turlock Subbasin Groundwater Sustainability Agency and the East Turlock Subbasin Groundwater Sustainability Agency

**2. GROUNDWATER SUSTAINABILITY PLAN (REVIEW OF CHAPTER 8 – PROJECTS AND MANAGEMENT ACTIONS AND CHAPTER 9 – IMPLEMENTATION AND SUPPORT ACTIVITIES)**

Presentation by Woodard & Curran on Chapter 8 (Projects and Management Actions) and Chapter 9 (Implementation and Support Activities) of the draft Groundwater Sustainability Plan. (*Ali Taghavi & Dominick Amador, Woodard & Curran*)

***Recommended Actions by the West Turlock Subbasin GSA:***

**Motion:** Authorizing the release of Chapter 8 of the draft Groundwater Sustainability Plan for public review and comment

**Motion:** Authorizing the release of Chapter 9 of the draft Groundwater Sustainability Plan for public review and comment

***Recommended Actions by the East Turlock Subbasin GSA:***

***Motion:*** Authorizing the release of Chapter 8 of the draft Groundwater Sustainability Plan for public review and comment

***Motion:*** Authorizing the release of Chapter 9 of the draft Groundwater Sustainability Plan for public review and comment

**3. GROUNDWATER SUSTAINABILITY PLAN (REVIEW OF CHAPTER 3 – COMMUNICATION AND OUTREACH CHAPTER)**

Presentation by WTS GSA Technical Advisory Committee on Chapter 3 (Communication and Outreach Chapter) of the draft Groundwater Sustainability Plan. (WTS GSA TAC Member Herb Smart)

***Recommended Action by the West Turlock Subbasin GSA:***

***Motion:*** Authorizing the release of Chapter 3 of the draft Groundwater Sustainability Plan for public review and comment

***Recommended Action by the East Turlock Subbasin GSA:***

***Motion:*** Authorizing the release of Chapter 3 of the draft Groundwater Sustainability Plan for public review and comment

**4. PUBLIC HEARING DATE TO CONSIDER ADOPTING THE TURLOCK SUBBASIN GROUNDWATER SUSTAINABILITY PLAN AND DIRECTING THE TECHNICAL ADVISORY COMMITTEES TO PUBLISH THE REQUIRED NOTICES**

***Recommended Action by the West Turlock Subbasin GSA:***

***Resolution No 2021-9:*** Adopting a Resolution of the West Turlock Subbasin Groundwater Sustainability Agency (WTS GSA) Board of Directors (Board) establishing a public hearing date to consider adopting the Turlock Subbasin Groundwater Sustainability Plan and directing its Technical Advisory Committee to publish the required notices

***Recommended Action by the East Turlock Subbasin GSA:***

***Resolution No. 2021-08:*** Adopting a Resolution of the East Turlock Subbasin Groundwater Sustainability Agency Board of Directors establishing a public hearing date to consider adopting the joint Turlock Subbasin Groundwater Sustainability Plan and directing its Technical Advisory Committee to publish the required notices

**H. COMMENTS FROM THE BOARDS**

Board Members may provide a brief report on notable topics of interest. The Brown Act does not allow discussion or action by the Legislative Body.

**I. ADJOURNMENT**

The next special joint meeting of the West Turlock Subbasin and East Turlock Subbasin GSAs will be held on December 15, 2021. Additional details will be provided as the meeting date nears.

**MINUTES OF THE SPECIAL JOINT MEETING  
OF THE BOARD OF DIRECTORS OF THE  
WEST TURLOCK SUBBASIN GROUNDWATER SUSTAINABILITY AGENCY AND  
EAST TURLOCK SUBBASINGROUNDWATER SUSTAINABILITY AGENCY**

October 19, 2021  
5:00 p.m.

**A. CALL TO ORDER / CHAIRS WELCOME**

West Turlock Subbasin (WTS) Groundwater Sustainability Agency (GSA) Chair Alamo called the meeting to order at 5:00 p.m.

East Turlock Subbasin (ETS) Groundwater Sustainability Agency (GSA) Vice Chair Pareira called the meeting to order at 5:01 p.m.

The Special Joint Meeting of the West Turlock Subbasin and East Turlock Subbasin GSAs was held via remote teleconference call due to the COVID-19 Pandemic and pursuant to Assembly Bill (AB 361) signed into law September 16, 2021.

**B. ROLL CALL – WEST TURLOCK SUBBASIN GSA**

PRESENT: Directors Miguel Alvarez (Modesto), Nicole Larson (Turlock), Bret Silveira (Ceres Alternate), Leandro Maldonado (Delhi CWD), David Odom (Denair CSD), Vice Chair Curtis Jorritsma (Hilmar CWD), and Chair Joe Alamo (Turlock ID)

Director Odom stated he will only be on the teleconference until 6:00 p.m.

Directors Michael Buck (Hughson) and Vito Chiesa (Stanislaus County) arrived at 5:05 p.m.

ABSENT: Directors Javier Lopez (Ceres) and Rodrigo Espinoza (Merced County)

**C. APPROVAL OF MINUTES**

***Action by the West Turlock Subbasin GSA:***

Motion by Vice Chair Jorritsma, seconded by Director Chiesa, Approving Minutes of the August 30, 2021 Special Joint Meeting of the West Turlock Subbasin and East Turlock Subbasin Groundwater Sustainability Agencies as submitted. All voted in favor with none opposed. Chair Alamo declared the motion carried.

**D. PUBLIC COMMENT PERIOD**

Member of the public Rhett Calkins addressed the GSA Boards.

**E. STAFF UPDATES**

- Budget Update

WTS GSA Treasurer Michael Clipper provided a financial update (September 2021) for the basin-wide account (East and West GSAs) including cash balance, revenue, and expenditures.

- Public Outreach Update

WTS GSA TAC Member Herb Smart provided information regarding the virtual Groundwater Office Hours to be held on October 28, 2021, continued work on chapter 3 (notice and outreach of the draft GSP), looking at options for in-person discussions with the public in November and December, and information available on the website.

## F. AGENDA ITEMS

### 1. RESOLUTION OF THE WEST TURLOCK SUBBASIN GROUNDWATER SUSTAINABILITY AGENCY (WTS GSA) BOARD OF DIRECTORS (BOARD) RECOGNIZING THE STATE OF EMERGENCY PROCLAIMED BY THE GOVERNOR ON MARCH 4, 2020 WHICH REMAINS IN EFFECT AND AUTHORIZING REMOTE TELECONFERENCE MEETINGS OF THE WTS GSA BOARD FOR THE PERIOD OCTOBER 19, 2021 THROUGH NOVEMBER 18, 2021 PURSUANT TO BROWN ACT PROVISIONS

WTS GSA TAC Chair Michael Cooke provided an overview of this item including information regarding the recently passed Assembly Bill (AB) 361 pertaining to remote teleconferencing as a result of the pandemic/state of emergency and noted resolutions must be renewed every 30 days.

There were no public comments.

#### ***Action by the West Turlock Subbasin GSA:***

**Resolution No. 2021-3:** Motion by Director Larson, seconded by Director Alvarez, Adopting a Resolution of the West Turlock Subbasin Groundwater Sustainability Agency (WTS GSA) Board of Directors (Board) recognizing the state of emergency proclaimed by the Governor on March 4, 2021 which remains in effect and authorizing remote teleconference meetings of the WTS GSA Board for the period October 19, 2021 through November 18, 2021 pursuant to Brown Act provisions.

Upon roll call, the following vote was had:

Ayes: Directors Alvarez, Buck, Chiesa, Larson, Maldonado, Odom, Alternate Director Silveira, Vice Chair Jorritsma, and Chair Alamo  
Noes: None  
Absent: None

Chair Alamo declared the resolution adopted.

### 2. RESOLUTION OF THE EAST TURLOCK SUBBASIN GROUNDWATER SUSTAINABILITY AGENCY PROCLAIMING A LOCAL EMERGENCY, RATIFYING THE PROCLAMATION OF A STATE OF EMERGENCY BY N-12-21 ISSUED ON AUGUST 16, 2021, AND AUTHORIZING REMOTE TELECONFERENCE MEETINGS OF THE EAST TURLOCK SUBBASIN GROUNDWATER SUSTAINABILITY AGENCY FOR THE PERIOD FROM OCTOBER 19, 2021 TO NOVEMBER 18, 2021 PURSUANT TO BROWN ACT PROVISIONS

Jessica Johnson for ETS GSA General Counsel Lauren Layne provided information regarding the proposed resolution which allows the Board to continue holding remote meetings during the state of emergency due to Covid-19.

There were no public comments.

***Action by the East Turlock Subbasin GSA:***

The East Turlock Subbasin GSA took action to adopt a Resolution proclaiming a local emergency, ratifying the proclamation of a state of emergency by N-12-21 issued on August 16, 2021, and authorizing remote teleconference meetings of the East Turlock Subbasin Groundwater Sustainability Agency for the period from October 19, 2021 to November 18, 2021 pursuant to Brown Act provisions

**3. GROUNDWATER SUSTAINABILITY PLAN (REVIEW OF CHAPTER 6 – SUSTAINABLE MANAGEMENT CRITERIA AND CHAPTER 7 – MONITORING NETWORKS)**

Phyllis Stanin, Todd Groundwater presented information regarding Chapter 6 (Sustainable Management Criteria) and Chapter 7 (Monitoring Networks) of the draft Groundwater Sustainability Plan including an overview of the following information:

- Sustainable Management Criteria (SMC) – six sustainability indicators:
  - According to SGMA, if conditions are determined to be significant and unreasonable, they are defined as undesirable results. Based on available technical information and regulations, it has been determined that seawater intrusion is not applicable to Turlock Subbasin (a resolution will be presented to the GSA Boards regarding this finding).
  - Minimum thresholds (MT) and measurable objectives (MO) have been selected for the other five sustainability indicators.
- Sustainability indicators for the Turlock Subbasin – overdraft and declining water levels, impacts to water supply wells (levels and water quality), potential for future subsidence, and projected increases in streamflow depletion.
- Sustainable Management Approach:
  - According to SGMA, the GSAs are not required to address undesirable results that occurred before and have not been corrected by January 1, 2015.
  - SMC selected to eliminate any current or future projected undesired results, and recognize the need for adaptive management.
- Historical groundwater level declines in the Eastern Subbasin.
- Future projected water budget in the Turlock Subbasin.
- Historical water quality data – identified six constituents of concern. The GSAs are responsible for degraded water quality resulting from GSA projects, management actions, or management of levels/extractions, and are required to track and analyze annually.
- No documented impacts from land subsidence in the Turlock Subbasin. Managing groundwater levels at or above historic low levels to protect against future impacts from land subsidence.
- InSAR data used for land subsidence screening. Setting the minimum thresholds at or above historic low water levels as a representation for a rate of subsidence and adjusting the monitoring program as needed.
- Interconnected surface water.
- Minimum threshold approach is based on the five applicable sustainability indicators -- Tuolumne River set at Fall 2015 groundwater levels and Merced River set at Spring 2014 groundwater levels.
- Monitoring network for the Western and Eastern Principal Aquifers.

- Water levels allowed to fall below the minimum threshold in the initial implementation period if the interim milestones anticipate a glide path toward sustainability. As a result, 2027 interim milestones have been set below minimum threshold for selected areas.
- Concepts of adaptive management. The draft GSP provides reasonable estimates for sustainable management criteria based on available data. Conditions will be analyzed in annual reports and criteria reevaluated in the 5-year assessment.

Ms. Stanin also provided information regarding the public comment process for GSP chapters and the revised GSP schedule.

Amanda Monaco, Water Policy Coordinator at Leadership Counsel for Justice and Accountability, addressed the GSA Boards.

Discussion included clarification regarding the minimum thresholds, undesirable results, and measurable objectives for water quality and groundwater levels, as well as information regarding development of a well mitigation program to address issues.

***Actions by the West Turlock Subbasin GSA:***

Motion by Vice Chair Jorritsma, seconded by Director Maldonado, Authorizing the release of Chapter 6 of the draft Groundwater Sustainability Plan for public review and comment. All voted in favor with none opposed. Chair Alamo declared the motion carried.

Motion by Vice Chair Jorritsma, seconded by Director Maldonado, Authorizing the release of Chapter 7 of the draft Groundwater Sustainability Plan for public review and comment. All voted in favor with none opposed. Chair Alamo declared the motion carried.

***Actions by the East Turlock Subbasin GSA:***

The East Turlock Subbasin GSA took actions to authorize the release of Chapters 6 and 7 of the draft Groundwater Sustainability Plan for public review and comment.

**G. COMMENTS FROM THE BOARDS:**

There were no Board Member comments.

**H. MEETING ADJOURNMENT BY THE EAST TURLOCK SUBBASIN GSA**

ETS GSA Vice Chair Pereira adjourned the Special Meeting of the East Turlock Subbasin GSA at approximately 6:22 p.m.

**I. ADJOURN TO CLOSED SESSION BY THE WEST TURLOCK SUBBASIN GSA**

Motion by Vice Chair Jorritsma, seconded by Director Larson, adjourning the Special Meeting of the West Turlock Subbasin GSA to Closed Session.

**1. Conference with Legal Counsel – Anticipated Litigation**

California Government Code Section 54956.9(d)(2)

Potential Case(s): 1

(Valerie Kincaid, WTS GSA General Counsel)



**I. REPORT OUT OF CLOSED SESSION**

WTS GSA Chair Alamo reported there was no action taken in closed session.

**J. MEETING ADJOURNMENT BY THE WEST TURLOCK SUBBASIN GSA**

WTS GSA Chair Alamo adjourned the Special Meeting of the West Turlock Subbasin GSA at 7:00 p.m.

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Jennifer Land, Secretary  
West Turlock Subbasin  
Groundwater Sustainability Agency

DRAFT

**RESOLUTION NO. 2021-4**

**RESOLUTION OF THE WEST TURLOCK SUBBASIN GROUNDWATER SUSTAINABILITY AGENCY (WTS GSA) BOARD OF DIRECTORS (BOARD) RECOGNIZING THE STATE OF EMERGENCY PROCLAIMED BY THE GOVERNOR ON MARCH 4, 2020 WHICH REMAINS IN EFFECT AND REAUTHORIZING REMOTE TELECONFERENCE MEETINGS OF THE WTS GSA BOARD FOR THE PERIOD NOVEMBER 16, 2021 THROUGH DECEMBER 15, 2021 PURSUANT TO BROWN ACT PROVISIONS**

WHEREAS, the West Turlock Subbasin GSA is committed to preserving and nurturing public access and participation in meetings of the Board of Directors; and

WHEREAS, all meetings of the West Turlock Subbasin GSA bodies, including the WTS GSA Board of Directors, are open and public, as required by the Ralph M. Brown Act (Cal. Gov. Code 54950 – 54963), so that any member of the public may attend, participate, and watch the GSA bodies conduct their business; and

WHEREAS, the Brown Act, Government Code section 54953(e), makes provisions for remote teleconferencing participation in meetings by members of a legislative body, without compliance with the requirements of Government Code section 54953(b)(3), subject to the existence of certain conditions; and

WHEREAS, a required condition is that a state of emergency is declared by the Governor pursuant to Government Code section 8625, proclaiming the existence of conditions of disaster or of extreme peril to the safety of persons and property within the state caused by conditions as described in Government Code section 8558; and

WHEREAS, a proclamation is made when there is an actual incident, threat of disaster, or extreme peril to the safety of persons and property within the jurisdictions that are within the GSA boundaries, caused by natural, technological, or human-caused disasters; and

WHEREAS, it is further required that state or local officials have imposed or recommended measures to promote social distancing, or the legislative body meeting in person would present imminent risks to the health and safety of attendees; and

WHEREAS, the Governor proclaimed a State of Emergency on March 4, 2020 for the entire state of California, including the boundaries of the GSA; and

WHEREAS, as a consequence of the Governor’s proclamation of emergency and the Stanislaus and Merced County Health Services Agencies recommendations to promote social distancing, the Board of Directors adopted Resolution No. 2021-3 on October 19, 2021 finding that the Board shall conduct meetings without compliance with paragraph (3) of subdivision (b) of Government Code section 54953, as authorized by subdivision (e) of section 54953, and that such legislative bodies shall comply with the requirements to provide the public with access to the meetings as prescribed in paragraph (2) of subdivision (e) of section 54953; and

WHEREAS, as a condition of extending the use of the provisions found in section 54953(e), the Board of Directors must reconsider the circumstances of the state of emergency that exists in the District, and the Board has done so; and

WHEREAS, the Board of Directors meetings will be made available to the public via Zoom or telephone, and posted pursuant to the Brown Act.

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the WTS GSA that:

Section 1. Recitals. The Recitals set forth above are true and correct and are incorporated into this Resolution by this reference.

Section 2. Proclamation of Emergency. The Board hereby acknowledges and observes the statewide proclamation of a state of emergency dated March 4, 2020, which remains in effect; the Board further acknowledges and observes the social distancing recommendations of its local health officials.

Section 3. Social Distancing Recommendation. As of the date of this Resolution, the Stanislaus and Merced County Health Services Agencies continue to recommend measures to promote social distancing.

Section 4. Remote Teleconference Meetings. The staff and the West Turlock Subbasin GSA Board are hereby authorized and directed to take all actions necessary to carry out the intent and purpose of this Resolution including, conducting open and public meetings in accordance with Government Code section 54953(e) and other applicable provisions of the Brown Act.

Section 5. Effective Date of Resolution. This Resolution shall take effect immediately upon its adoption and shall be effective November 16, 2021 through December 15, 2021, or such time the Board of Directors adopts a subsequent resolution in accordance with Government Code section 54953(e)(3) to extend the time during which the West Turlock Subbasin GSA Board may continue to teleconference without compliance with paragraph (3) of subdivision (b) of section 54953.

Moved by Director \_\_\_\_\_ seconded by Director \_\_\_\_\_, that the foregoing resolution be adopted.

Upon roll call, the following vote was had:

Ayes:  
Noes:  
Absent:

The Chair declared the resolution adopted.

I, Joe Alamo, Chair of the Board of Directors of the WEST TURLOCK SUBBASIN GROUNDWATER SUSTAINABILITY AGENCY, do hereby CERTIFY that the foregoing is a full, true, and correct copy of a resolution duly adopted at a special meeting of said Board held the 15<sup>th</sup> day of November, 2021.

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Joe Alamo, Chair  
Board of Directors  
West Turlock Subbasin GSA

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ATTEST: Jennifer Land, Secretary  
Board of Directors  
West Turlock Subbasin GSA



WEST TURLOCK SUBBASIN GROUNDWATER SUSTAINABILITY AGENCY

NOVEMBER 15, 2021
SPECIAL MEETING
AGENDA REPORT

TO: West Turlock Subbasin GSA Board
FROM: Debbie Montalbano, WTS GSA Technical Advisory Committee & TID
SUBJECT: Groundwater Sustainability Plan Manager

ACTION: Adopting a Resolution of the West Turlock Subbasin Groundwater Sustainability Agency (WTS GSA) Board of Directors (Board) appointing Debbie Montalbano, of the Turlock Irrigation District, as the Plan Manager for the Turlock Subbasin

Background

In August 2014, the California Legislature passed, and in September 2014 the Governor signed, legislation creating the Sustainable Groundwater Management Act ("SGMA") "to provide local groundwater sustainability agencies with the authority and technical and financial assistance necessary to sustainably manage groundwater" (Wat. Code, § 10720, (d)). SGMA requires sustainable management through the development of groundwater sustainability plans ("GSP") (Wat. Code, § 10727). Additionally, SGMA requires a groundwater sustainability agency ("GSA") to manage groundwater in all basins designated by the Department of Water Resources ("DWR") as a medium or high priority, including the Turlock Subbasin (designated basin number 5-22.03).

The West Turlock Subbasin Groundwater Sustainability Agency ("WTS GSA") is the GSA for a portion of the Turlock Subbasin and holds responsibility for sustainably managing groundwater within its' portion in the Turlock Subbasin, pursuant to the requirements of SGMA. The East Turlock Subbasin Groundwater Sustainability Agency ("ETS GSA") is the other GSA within the Turlock Subbasin responsible for sustainably managing the subbasin pursuant to the requirements of SGMA. The WTS GSA and the ETS GSA (collectively referred to as the "GSAs") are collaborating to develop one GSP for the Turlock Subbasin, and plan to work collaboratively to implement the GSP within their respective areas of the subbasin as outlined in the draft GSP.

DWR requires GSPs and their supporting documentation, as well as future Annual Reports and Periodic Evaluations to be submitted into an online portal. The information submitted will be reviewed by the DWR for completeness and evaluated for compliance with SGMA. Through the evaluation process, DWR may need to contact the subbasin for clarification or information from the GSAs. Since most subbasins involve multiple agencies and/or GSAs, DWR included a requirement in the SGMA regulations for each subbasin to appoint one Plan Manager as a point of contact between the subbasin agencies and DWR. (California Code of Regulations, Title 23, section 351(z)) The Plan Manager has no authority regarding the GSP or implementation. The



position does facilitate submittal of GSA approved documentation, and serves as a central contact point for coordination between GSAs and the DWR.

As the GSAs finalize the GSP in the coming months, a Plan Manager must be delegated the authority to submit the GSP and subsequent Annual Reports and Periodic Evaluations on behalf of the GSAs, and to serve as a central point of contact between the GSAs and DWR. On November 4, 2021, the Technical Advisory Committees of each GSA acted to recommend that their respective GSAs appoint Debbie Montalbano, of the Turlock Irrigation District, as Plan Manager for the Turlock Subbasin.

**Recommendation**

The Technical Advisory Committees recommend the GSA Boards appoint Debbie Montalbano, of the Turlock Irrigation District, as the Plan Manager for the Turlock Subbasin.

**RESOLUTION NO. 2021-5**

**RESOLUTION OF THE WEST TURLOCK SUBBASIN GROUNDWATER SUSTAINABILITY AGENCY (WTS GSA) BOARD OF DIRECTORS (BOARD) APPOINTING DEBBIE MONTALBANO, OF THE TURLOCK IRRIGATION DISTRICT, AS THE PLAN MANAGER FOR THE TURLOCK SUBBASIN**

WHEREAS, in August 2014, the California Legislature passed, and in September 2014 the Governor signed, legislation creating the Sustainable Groundwater Management Act (“SGMA”) “to provide local groundwater sustainability agencies with the authority and technical and financial assistance necessary to sustainably manage groundwater” (Wat. Code, § 10720, (d)); and

WHEREAS, SGMA requires sustainable management through the development of groundwater sustainability plans (“GSP”) (Wat. Code, § 10727); and

WHEREAS, SGMA requires a groundwater sustainability agency (“GSA”) to manage groundwater in all basins designated by the Department of Water Resources (“DWR”) as a medium or high priority, including the Turlock Subbasin (designated basin number 5-22.03); and

WHEREAS, the West Turlock Subbasin Groundwater Sustainability Agency (“WTS GSA”) is the GSA for a portion of the Turlock Subbasin and holds responsibility for sustainably managing groundwater within its’ portion in the Turlock Subbasin, pursuant to the requirements of SGMA; and

WHEREAS, the East Turlock Subbasin Groundwater Sustainability Agency (“ETS GSA”) is the other GSA within the Turlock Subbasin responsible for sustainably managing the subbasin pursuant to the requirements of SGMA; and

WHEREAS, the WTS GSA and the ETS GSA (collectively referred to as the “GSAs”) collaborated to develop one GSP for the Turlock Subbasin, and plans to work collaboratively to implement the GSP within their respective areas of the subbasin as outlined in the draft GSP; and

WHEREAS, the SGMA requires each subbasin appoint a Plan Manager who has been delegated management authority for submitting the GSP and serves as the point of contact between the GSA and DWR (California Code of Regulations, Title 23, section 351(z)); and

WHEREAS, on November 4, 2021 the technical advisory committees of each GSA acted to recommend that their respective GSAs appoint Debbie Montalbano, of the Turlock Irrigation District, as Plan Manager for the Turlock Subbasin.

NOW, THEREFORE, BE IT RESOLVED that the Board of Directors of the WTS GSA finds as follows:

Section 1. The Recitals set forth above are true and correct and are incorporated into this Resolution by this reference.

Section 2. The West Turlock Subbasin Groundwater Sustainability Agency hereby appoints Debbie Montalbano as the Plan Manager, responsible for submitting the Turlock Subbasin GSP and future submittals such as subsequent Annual Reports and Periodic Evaluations to DWR on behalf of the GSAs, and serving as the central point of contact for coordination between the GSAs and DWR.

Section 3. The appointment has no specific term; Ms. Montalbano shall serve as the Plan Manager until Ms. Montalbano resigns her post or the West Turlock Subbasin and East Turlock Subbasin Groundwater Sustainability Agencies appoint a new Plan Manager.

Moved by Director \_\_\_\_\_ seconded by Director \_\_\_\_\_, that the foregoing resolution be adopted.

Upon roll call, the following vote was had:

Ayes:

Noes:

Absent:

The Chair declared the resolution adopted.

I, Joe Alamo, Chair of the Board of Directors of the WEST TURLOCK SUBBASIN GROUNDWATER SUSTAINABILITY AGENCY, do hereby CERTIFY that the foregoing is a full, true, and correct copy of a resolution duly adopted at a special meeting of said Board held the 15<sup>th</sup> day of November, 2021.

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Joe Alamo, Chair  
Board of Directors  
West Turlock Subbasin GSA

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ATTEST: Jennifer Land, Secretary  
Board of Directors  
West Turlock Subbasin GSA





## WEST TURLOCK SUBBASIN GROUNDWATER SUSTAINABILITY AGENCY

NOVEMBER 15, 2021  
SPECIAL MEETING  
AGENDA REPORT

**TO:** West Turlock Subbasin GSA Board

**FROM:** Debbie Montalbano, WTS GSA Technical Advisory Committee & TID

**SUBJECT:** Seawater Intrusion Sustainability Indicator

**ACTION:** Adopting a Resolution of the West Turlock Subbasin Groundwater Sustainability Agency (WTS GSA) Board of Directors (Board) determining no sustainable management criteria needs to be developed for seawater intrusion in the Turlock Subbasin Groundwater Sustainability Plan (GSP)

### Background

The Sustainable Groundwater Management Act (SGMA) identifies six sustainability indicators that describe potential adverse groundwater conditions. The Department of Water Resources (DWR) Best Management Practices (BMPs) for Sustainable Management Criteria (SMC) (DWR, 2017) state that the default position for GSAs should be that all six sustainability indicators apply to their basin. However, if evidence shows that an undesirable result does not exist and is not likely to occur in the future, then that sustainability indicator can be removed from further consideration as stated in the below GSP regulations (§354.26 (d)):

*“An agency that is able to demonstrate that undesirable results related to one or more sustainability indicators are not present and are not likely to occur in a basin shall not be required to establish criteria for undesirable results related to those sustainability indicators.”*

The GSP regulations define seawater intrusion as “the advancement of seawater into a groundwater supply that results in degradation of water quality in the basin and includes seawater from any source.” The minimum threshold for the indicator “shall be defined by a chloride concentration isocontour... where seawater intrusion may lead to undesirable results.” (§354.28 (c)(3)). The BMPs document developed by DWR for SMC (DWR, 2017) provides direct guidance regarding this issue, stating that:

*“GSAs in basins not adjacent to the Pacific Ocean, bays, deltas, or outlets may determine that seawater intrusion is not an applicable sustainability indicator because seawater intrusion does not exist and could not occur.”*

Todd Groundwater, in coordination with the joint Technical Advisory Committees (TACs), evaluated the applicability of the seawater intrusion sustainability indicator in the Turlock Subbasin as memorialized in the attached technical memorandum. The analysis showed that the Turlock Subbasin is not a coastal basin and does not have a direct connection to the ocean. Basement rocks of the Coast Ranges separate the Subbasin from any connectivity with the



Pacific Ocean. The Subbasin is not adjacent to the ocean or interconnected waterways, and the Subbasin groundwater is not affected by current or projected sea levels.

However, the joint TACs recognized that water quality data (as analyzed in the Basin Setting of the draft GSP) shows that saline water has been reported to occur at depth beneath the Turlock Subbasin. The joint TACs considered whether the potential for upconing of deep saline water was applicable to seawater intrusion. While these conditions could result in saline water impacting groundwater quality locally, as described in the draft Basin Setting, the deep saline brine beneath the freshwater aquifers in the subbasin is a result of ancient marine sediments from a sea that once covered the central valley. It is not as a result of ongoing or potential future communication with the Pacific Ocean. Without a direct connection to the ocean, the Turlock Subbasin is not and will not be affected by current or future projected ocean levels, and cannot be defined by a chloride isocontour.

These limitations indicate that the conditions within the Turlock Subbasin are not as a result of a direct connection with the ocean, which is what is intended to be monitored under the seawater intrusion sustainability indicator. Therefore, the joint TACs agreed with the technical team that seawater intrusion is not occurring in the Turlock Subbasin and has no potential to occur in the future. Furthermore, the joint TACs and technical teams recommend that the deep saline water beneath the Subbasin can be more appropriately managed under the degraded water quality sustainability indicators, as needed, and was considered when developing the Sustainable Management Criteria in Section 6 of the draft GSP. This approach is also consistent with both the DWR guidance on SMC, and how other subbasins within the Central Valley have addressed this sustainability indicator.

### **Recommendation**

Staff recommends that the GSA Boards adopt a Resolution making the determination that the seawater intrusion sustainability indicator as defined by the Sustainable Management Groundwater Management Act (SGMA) does not exist and is not likely to occur in the future and, therefore, no sustainable management criteria needs to be developed for that sustainability indicator in the Turlock Subbasin Groundwater Sustainability Plan (GSP).

**RESOLUTION NO. 2021-6**

**RESOLUTION OF THE WEST TURLOCK SUBBASIN GROUNDWATER SUSTAINABILITY AGENCY (WTS GSA) BOARD OF DIRECTORS (BOARD) DETERMINING NO SUSTAINABLE MANAGEMENT CRITERIA NEEDS TO BE DEVELOPED FOR SEAWATER INTRUSION IN THE TURLOCK SUBBASIN GROUNDWATER SUSTAINABILITY PLAN (GSP)**

WHEREAS, the Sustainable Groundwater Management Act (SGMA) identifies six sustainability indicators that describe potential adverse groundwater conditions; and

WHEREAS, if a groundwater sustainability agency (GSA) is able to demonstrate that an undesirable result related to a sustainability indicator is not present and is not likely to occur in the future, then the GSA shall not be required to establish sustainable criteria for that sustainability indicator (§354.26 (d)); and

WHEREAS, SGMA defines seawater intrusion as the advancement of seawater into a groundwater supply that results in degradation of water quality in the basin and includes seawater from any source; and

WHEREAS, the Best Management Practices guidance document from the Department of Water Resources (DWR) states that GSAs in subbasins not adjacent to the Pacific Ocean, bays, deltas, or inlets may determine that seawater intrusion is not applicable because seawater intrusion does not exist and could not occur; and

WHEREAS, Todd Groundwater, the technical consultant developing the GSP, in coordination with the joint Technical Advisory Committees (TACs), has demonstrated to the WTS GSA that seawater intrusion is not present and is not likely to occur in the future; and

WHEREAS, the analyses presented to the WTS GSA established the Subbasin is not a coastal basin, does not have a direct connection to the ocean, is not adjacent to the ocean or interconnected waterways, and the groundwater is not affected by current or projected sea levels; and

WHEREAS, the joint TACs also recognized that saline water has been reported to occur at depth beneath the Turlock Subbasin and considered whether the potential for upconing of deep saline water was applicable to seawater intrusion; and

WHEREAS, while these conditions could result in saline water impacting groundwater quality locally, the mechanism does not result from communication with ocean water, would not be affected by current or projected sea levels, and cannot be defined by a chloride isocontour.

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the WTS GSA does hereby make the determination that the seawater intrusion sustainability indicator does not presently exist and is not likely to occur in the future and, therefore, SGMA does not require the WTS GSA to develop sustainable management criteria for that sustainability indicator in the Turlock Subbasin Groundwater Sustainability Plan (GSP).

Moved by Director \_\_\_\_\_ seconded by Director \_\_\_\_\_, that the foregoing resolution be adopted.

Upon roll call, the following vote was had:

Ayes:

Noes:

Absent:

The Chair declared the resolution adopted.

I, Joe Alamo, Chair of the Board of Directors of the WEST TURLOCK SUBBASIN GROUNDWATER SUSTAINABILITY AGENCY, do hereby CERTIFY that the foregoing is a full, true, and correct copy of a resolution duly adopted at a special meeting of said Board held the 15<sup>th</sup> day of November, 2021.

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Joe Alamo, Chair  
Board of Directors  
West Turlock Subbasin GSA

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ATTEST: Jennifer Land, Secretary  
Board of Directors  
West Turlock Subbasin GSA

May 27, 2020

## REVISED DRAFT MEMORANDUM

**To:** Turlock Subbasin Joint Technical Advisory Committees (TACs)

**From:** Phyllis Stanin, Vice President/Principal Geologist

**Re:** Consideration of the Seawater Intrusion Sustainability Indicator  
Turlock Subbasin GSP







Over the last several months, the joint TACs have been discussing technical information on the six sustainability indicators as defined in the Sustainable Groundwater Management Act (SGMA). During these meetings, the joint TACs considered whether one of the six sustainability indicators – seawater intrusion – was applicable to the Turlock Subbasin.

To assist the joint TACs in their consideration of this sustainability indicator, the consulting team prepared a memorandum summarizing the technical and regulatory issues. That memorandum, along with supporting information, was presented at a public webinar as part of the joint TACs monthly meeting on April 23, 2020. At that meeting, the joint TACs directed the technical team to revise the memorandum to document the process by which the joint TACs considered the seawater intrusion indicator. Recognizing that the decision on a sustainability indicator’s applicability resides with the GSAs, this memorandum also describes a process for a final determination on the applicability of this sustainability indicator to the Turlock Subbasin by the GSA Board of Directors.

### BACKGROUND

In its definition of undesirable results, SGMA identifies six sustainability indicators, which describe potential adverse groundwater conditions as summarized below.

#### SGMA Sustainability Indicators

					
<b>Chronic Lowering of Water Levels</b>	<b>Reduction of Groundwater in Storage</b>	<b>Degraded Water Quality</b>	<b>Seawater Intrusion</b>	<b>Inelastic Land Subsidence</b>	<b>Depletion of Inter-connected Surface Water</b>

DWR's Best Management Practices (BMPs) for sustainable management criteria state that the default position for GSAs should be that all six sustainability indicators apply to their basin. However, if evidence shows that an undesirable result does not exist and could not occur in the future for a sustainability indicator, the sustainability indicator can be removed from further consideration as stated in the GSP regulations below.

An agency that is able to demonstrate that undesirable results related to one or more sustainability indicators are not present and are not likely to occur in a basin shall not be required to establish criteria for undesirable results related to those sustainability indicators (§354.26 (d)).

## **SEAWATER INTRUSION SUSTAINABILITY INDICATOR**

GSP regulations define *Seawater Intrusion* as "the advancement of seawater into a groundwater supply that results in degradation of water quality in the basin and includes seawater from any source." The minimum threshold for the indicator "shall be defined by a chloride concentration isocontour...where seawater intrusion may lead to undesirable results." Further, the seawater intrusion minimum threshold must consider the effects of "current and projected sea levels" (§354.28 (c)(3)).

Typically, these conditions would occur in a *coastal* groundwater basin where aquifers can be in communication with ocean water, either directly or by interconnected waterways. The BMP for sustainable management criteria (DWR, 2017) provides the example below:

GSAs in basins not adjacent to the Pacific Ocean, bays, deltas, or inlets may determine that seawater intrusion is not an applicable sustainability indicator because seawater intrusion does not exist and could not occur.

The example description above is applicable to conditions in the inland Turlock Subbasin where basement rocks of the Coast Ranges separate the Subbasin from any connectivity with the Pacific Ocean. The Subbasin is not adjacent to the ocean or interconnected waterways, and Subbasin groundwater is not affected by current or projected sea levels.

However, the joint TACs recognized that saline water has been reported to occur at depth beneath the Turlock Subbasin<sup>1</sup>. Groundwater containing elevated total dissolved solids (TDS) has been reported in deep deltaic and marine sediments where either older groundwater or connate water<sup>2</sup> contains elevated total dissolved solids (TDS) below the base of freshwater as mapped by the U.S. Geological Survey (USGS). The potential exists for this deeper water to move upward in the water column along undefined vertical pathways if hydraulic heads are lowered from deeper pumping wells (a process generally referred to as

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<sup>1</sup> And other subbasins in the Central Valley.

<sup>2</sup> Connate water refers to water trapped in the pores of the sediments at the time they were deposited. Deep saline water in the Turlock Subbasin may also result from non-connate groundwater that has dissolved solids from local sediments over time.

upconing). The joint TACs considered whether the potential for upconing of deep saline water was applicable to seawater intrusion.

While these conditions could result in saline water impacting groundwater quality locally, the mechanism does not result from communication with ocean water, would not be affected by current or projected sea levels, and cannot be defined by a chloride concentration isocontour. These limitations indicate that the conditions beneath the Turlock Subbasin are not a good fit for the intent of the seawater intrusion sustainability indicator. Based on the definitions and usage of the seawater intrusion sustainability indicator in SGMA, GSP regulations, and BMPs, and recognizing the inland location of the Subbasin, the joint TACs agreed with the technical team that seawater intrusion is not occurring in the Turlock Subbasin and has no potential to occur in the future.

Further, the potential for impacts related to deep saline water in the Turlock Subbasin can be addressed under SGMA with more applicable sustainability indicators including degraded water quality and chronic lowering of water levels. The occurrence of saline water and the depth to the base of fresh water are discussed in the Basin Setting of the GSP and acknowledged as a potential future impact to local groundwater quality. These potential impacts will be considered during development of the GSP monitoring network. Thereby the potential for future saline water impacts can be managed with water levels and monitoring.

As an additional comment, the adjacent Merced Subbasin GSP also concluded that this sustainability indicator was not applicable to that Subbasin because of a lack of connection to a seawater source. Similar to the Turlock Subbasin, the Merced Subbasin also contains saline water in deeper sediments, with some indications that the saline water has mixed with fresh water in local aquifers. Those conditions were addressed through the degraded water quality indicator in the Merced Subbasin GSP (Woodard & Curran, November 2019).

## **RECOMMENDATION**

A process to inform the GSA Boards and seek a final determination from the GSAs that the sustainability indicator of seawater intrusion is not applicable in the Turlock Subbasin is provided as follows:

- The joint TACs make a finding that the seawater intrusion sustainability indicator is not applicable to the inland Turlock Subbasin.
- The joint TACs also find that the deep saline water beneath the Subbasin can be more appropriately managed under the degraded water quality sustainability indicator, as needed.
- The GSA Board of Directors will consider the recommendation by the joint TACs, and, if in agreement, will officially make a finding that:
  - the seawater intrusion sustainability indicator as defined by SGMA is not applicable to the Turlock Subbasin and, therefore, no sustainable management criteria need be developed for that sustainability indicator in the Turlock Subbasin GSP.

**RESOLUTION NO. 2021-7**

**RESOLUTION OF THE WEST TURLOCK SUBBASIN  
GROUNDWATER SUSTAINABILITY AGENCY (WTS GSA) BOARD OF DIRECTORS  
(BOARD) ESTABLISHING REGULAR BOARD MEETING DATES FOR 2022**

WHEREAS, the Sustainable Groundwater Management Act (SGMA) was signed into law on September 16, 2014 and adopted as California Water Code, section 10720, et. seq.; and

WHEREAS, the West Turlock Subbasin Groundwater Sustainability Agency (WTS GSA) was formed as a joint powers authority pursuant to Government Code section 6500, et. seq., by agencies that qualify to be groundwater sustainability agencies (Members); and

WHEREAS, Article 12.2 of the Joint Powers Agreement forming the WTS GSA requires the Governing Board to meet at least quarterly at a time and place set by the Governing Board, and as such other times as determined by the Governing Board and listed in the Agency’s bylaws; and

WHEREAS, Article 3.1 of the Bylaws adopted by the WTS GSA on June 1, 2017 states that the Board shall hold at least one regular meeting each calendar quarter at 6:00 PM, at Turlock Irrigation District, 333 E. Canal Drive, Turlock CA, or as set forth in the meeting agenda; and

WHEREAS, the Brown Act, Government Code section 54953(e), makes provisions for remote teleconferencing participation in meetings by members of a legislative body, without compliance with the requirements of Government Code section 54953(b)(3), subject to the existence of certain conditions; and

WHEREAS, a required condition is that a state of emergency is declared by the Governor pursuant to Government Code section 8625, proclaiming the existence of conditions of disaster or of extreme peril to the safety of persons and property within the state caused by conditions as described in Government Code section 8558; and

WHEREAS, the Governor proclaimed a State of Emergency on March 4, 2020 for the entire state of California, including the boundaries of the GSA; and

WHEREAS, as a consequence of the Governor’s proclamation of emergency and the Stanislaus and Merced County Health Services Agencies recommendations to promote social distancing, the Board of Directors does hereby find that the Board shall conduct meetings without compliance with paragraph (3) of subdivision (b) of Government Code section 54953, as authorized by subdivision (e) of section 54953, and that such legislative bodies shall comply with the requirements to provide the public with access to the meetings as prescribed in paragraph (2) of subdivision (e) of section 54953; and

WHEREAS, in accordance with Government Code section 54953(e), the WTS GSA Board shall temporarily hold at least one regular meeting each calendar quarter at 5:00 PM, via remote teleconference, or as set forth in the meeting agenda, until such time that the proclamation of emergency is lifted.



NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the WTS GSA that the following regular Board meeting dates shall be adopted for 2022:

Thursday, February 10, 2022

Thursday, May 12, 2022

Thursday, August 11, 2022

Thursday, November 3, 2022

Moved by Director \_\_\_\_\_, seconded by Director \_\_\_\_\_, that the foregoing resolution be adopted.

Upon roll call, the following vote was had:

Ayes:

Noes:

Absent:

The Chair declared the resolution \_\_\_\_\_.

I, Joe Alamo, Chair of the Board of Directors of the WEST TURLOCK SUBBASIN GROUNDWATER SUSTAINABILITY AGENCY, do hereby CERTIFY that the foregoing is a full, true, and correct copy of a resolution duly adopted at a special meeting of said Board held the 15<sup>th</sup> day of November, 2021.

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Joe Alamo, Chair  
Board of Directors  
West Turlock Subbasin GSA

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ATTEST: Jennifer Land, Secretary  
Board of Directors  
West Turlock Subbasin GSA

**Meeting Minutes**  
**Joint Meeting of the West Turlock Groundwater Sustainability Agency**  
**East Turlock Subbasin Groundwater Sustainability Agency**

October 19, 2021 5:00 pm

Meeting held virtually

**A. CALL TO ORDER / CHAIRS' WELCOME**

ETSGSA Vice Chairman Pareira called the meeting to order at 5:01 pm.

**B. ROLL CALL OF BOARD MEMBERS / PARTICIPANT LIST INTRODUCTIONS**

East Turlock Subbasin Groundwater Sustainability Agency  
 Vice Chair Pareira, Director ElTal, Director Ulrich, alternate Ward and alternate Burroughs attended, which constitutes a quorum. Alternate Director Yotsuya arrived at 5:06pm.

**C. APPROVAL OF MINUTES**

1. APPROVING MINUTES OF THE AUGUST 30, 2021 SPECIAL JOINT MEETING OF THE WEST AND EAST TURLOCK SUBBASIN GROUNDWATER SUSTAINABILITY AGENCIES

Motion: Approving Minutes of the August 30, 2021 Special Joint Meeting of the West Turlock Subbasin and East Turlock Subbasin Groundwater Sustainability Agencies.  
 Motion made and seconded by ETSGSA.

ETSGSA Directors Pareira, ElTal, and Burroughs voted aye.

**D. PUBLIC COMMENT PERIOD**

There was no public comment

**E. Budget Update**

Michael Clipper, WTSGSA Treasurer gave an update that included the updated cost share agreement for the GSP that was previously approved by the ETSGSA Board. No Action was taken.

**F. Public Outreach Update**

Herb Smart, WTSGSA reported on the Boards' outreach activities including the closing comment period for chapter five of the GSP.

**G. AGENDA ITEMS**

1. RESOLUTION OF THE EAST TURLOCK SUBBASIN GROUNDWATER SUSTAINABILITY AGENCY PROCLAIMING A LOCAL EMERGENCY, RATIFYING THE PROCLAMATION OF A STATE OF EMERGENCY BY N-12-21 ISSUED ON AUGUST 16, 2021, AND AUTHORIZING REMOTE TELECONFERENCE MEETINGS OF THE EAST TURLOCK SUBBASIN GROUNDWATER SUSTAINABILITY AGENCY FOR THE PERIOD FROM OCTOBER 19, 2021 TO NOVEMBER 18, 2021 PURSUANT TO BROWN ACT PROVISIONS (Jessica Johnson for Lauren D. Layne, ETS GSA General Counsel)

Resolution No. 2021-03: Adopting a Resolution of the East Turlock Subbasin Groundwater Sustainability Agency proclaiming a local emergency, ratifying the proclamation of a state of emergency by N-12-21 issued on August 16, 2021, and authorizing remote teleconference meetings of the East Turlock Subbasin Groundwater Sustainability Agency for the period from October 19, 2021 to November 18, 2021 pursuant to Brown Act provisions

Vice Chair ElTal moved to approve the resolution, seconded by Director Ulrich and it passed unanimously.

(ElTal/Ulrich/Ward/Pareira – aye)

## 2. GROUNDWATER SUSTAINABILITY PLAN (REVIEW OF CHAPTER 6 – SUSTAINABLE MANAGEMENT CRITERIA AND CHAPTER 7 – MONITORING

Phyllis Stanton (Todd Groundwater) gave a presentation to the Boards on chapters six and seven of the GSP as well as a timeline update.

- Chapter Six (Sustainable Management Criteria) Update

Ms. Stanton gave a brief overview of the SGMA regulations and the undesirable results that the GSAs are required to avoid. She provided a brief overview of the minimum thresholds and sustainability indicators included in the chapters.

There was significant discussion about the inclusion of adaptive management and the factors that will influence management decisions. Adaptive management is reliant on the implementation of the monitoring network and will be updated on an annual basis in the annual review. This is to ensure management actions are made based on the most current and accurate data.

Ms. Stanton presented on how each of the undesirable results is provided for within chapter six of the GSP.

The water budget was presented and demonstrated a historic annual overdraft of ~68,000AFY.

The 2027 interim milestone is set below the minimum threshold to provide a glidepath while projects are being brought on line.

- Chapter Seven (Monitoring Networks) Update

Ms. Stanton reported that there are 21 wells in the Eastern Principal Aquifer, five more that are planned, two of which are under construction.

The East Turlock Subbasin GSA took action (by roll call vote) to authorize the release of Chapters 6 and 7 of the draft Groundwater Sustainability Plan for public review and comment.

Vice Chair ElTal moved to approve the action, seconded by alternate Director Ward and it passed unanimously.

(ElTal/Ulrich/Ward/Pareira – aye)

## H. COMMENTS FROM THE BOARDS

No Board members provided further comment.

## I. Adjournment

The East Turlock GSA adjourned the meeting at approximately 6:22 pm

November           , 2021

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KAREN L. WHIPP  
EAST TURLOCK SUBBASIN GROUNDWATER SUSTAINABILITY AGENCY BOARD  
SECRETARY

**RESOLUTION NO. 2021-04**

**EAST TURLOCK SUBBASIN GROUNDWATER SUSTAINABILITY AGENCY**

**A RESOLUTION OF THE BOARD OF DIRECTORS OF THE EAST TURLOCK SUBBASIN GROUNDWATER SUSTAINABILITY AGENCY ACKNOWLEDGING A LOCAL EMERGENCY PERSISTS, RE-RATIFYING THE PROCLAMATION OF A STATE OF EMERGENCY BY N-12-21 ISSUED ON AUGUST 16, 2021, AND RE-AUTHORIZING REMOTE TELECONFERENCE MEETINGS OF LEGISLATIVE BODIES OF THE EAST TURLOCK SUBBASIN GROUNDWATER SUSTAINABILITY AGENCY FOR THE PERIOD FROM NOVEMBER 15, 2021 TO DECEMBER 15, 2021 PURSUANT TO BROWN ACT PROVISIONS**

The EAST TURLOCK SUBBASIN GROUNDWATER SUSTAINABILITY AGENCY (the “Agency”) of Stanislaus and Merced Counties does resolve as follows:

**WHEREAS**, the Agency is committed to preserving and nurturing public access and participation in meetings of its Board of Directors; and

**WHEREAS**, all meetings of the Agency’s legislative bodies are open and public, as required by the Ralph M. Brown Act (Cal. Gov. Code §§ 54950 – 54963), so that any member of the public may attend, participate, and watch the Agency’s legislative bodies conduct their business; and

**WHEREAS**, the Brown Act, specifically Government Code section 54953(e), makes provisions for remote teleconferencing participation in meetings by members of a legislative body, without compliance with the requirements of Government Code section 54953(b)(3), subject to the existence of certain conditions; and

**WHEREAS**, a required condition is that a state of emergency is declared by the Governor pursuant to Government Code section 8625, proclaiming the existence of conditions of disaster or of extreme peril to the safety of persons and property within the state caused by conditions as described in Government Code section 8558; and

**WHEREAS**, a proclamation is made when there is an actual incident, threat of disaster, or extreme peril to the safety of persons and property within the jurisdictions that are within the Agency’s boundaries, caused by natural, technological, or human-caused disasters; and

**WHEREAS**, it is further required that state or local officials have imposed or recommended measures to promote social distancing, or, the legislative body meeting in person would present imminent risks to the health and safety of attendees; and

**WHEREAS**, the Board of Directors previously adopted a Resolution No 2021-03 on October 19, 2021, finding that the requisite conditions exist for all legislative bodies of the Agency to conduct remote teleconference meetings without compliance with Government Code section 54953(b)(3); and

**WHEREAS**, as a condition of extending the use of the provisions found in Government Code section 54953(e), the Board of Directors must reconsider the circumstances of the state of emergency that exists in Merced and Stanislaus Counties, and the Board of Directors has done so; and

**WHEREAS**, emergency conditions persist within the Agency boundaries, specifically, Governor Newsom has signed Order N-12-21 declaring a state of emergency in the State of California; and

**WHEREAS**, meeting in person would present imminent risk to the health and safety of all attendees due to the continued prevalence of the COVID-19 pandemic; and

**WHEREAS**, the Board of Directors does hereby find that the state of emergency declared by the Governor of California and the persistence of the COVID-19 pandemic has caused, and will continue to cause, conditions of peril to the safety of persons within the Agency that are likely to be beyond the control of services, personnel, equipment, and facilities of the Agency, and desires to affirm a local emergency exists and re-ratify the proclamation of state of emergency by the Governor of the State of California; and

**WHEREAS**, as a consequence of the local emergency persisting, the Board of Directors does hereby find that the legislative bodies of the Agency shall continue to conduct their meetings without compliance with Government Code section 54953(b)(3), as authorized by section 54953(e), and that such legislative bodies shall comply with the requirements to provide the public with access to the meetings as prescribed in section 54953(e)(2); and

**WHEREAS**, the Agency shall ensure that the public has the opportunity to participate live in all electronic meetings of the Board of Directors and all its legislative bodies during all public comment periods.

**NOW, THEREFORE, THE BOARD OF DIRECTORS OF THE EAST TURLOCK SUBBASIN GROUNDWATER SUSTAINABILITY AGENCY DOES HEREBY RESOLVE AS FOLLOWS:**

Section 1. Recitals. The Recitals set forth above are true and correct and are incorporated into this Resolution by this reference.

Section 2. Affirmation that Local Emergency Persists. The Board of Directors (the “Board”) hereby proclaims that a local emergency continues to exist throughout Merced and Stanislaus Counties due to the COVID-19 pandemic, and full in-person meetings could cause an imminent risk to the Directors, staff and public.

Section 3. Re-ratification of Governor’s Proclamation of a State of Emergency. The Board hereby re-ratifies the Governor of the State of California’s Proclamation of State of Emergency, effective as of its issuance date of August 16, 2021.

Section 4. Remote Teleconference Meetings. The Agency staff and legislative bodies of the Agency are hereby re-authorized and directed to take all actions necessary to carry out the intent and purpose of this Resolution including, conducting open and public meetings in accordance with Government Code section 54953(e) and other applicable provisions of the Brown Act.

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Section 5. Effective Date of Resolution. This Resolution shall take effect immediately, and shall be effective until the earlier of (i) December 15, 2021, or (ii) such time the Board adopts a subsequent resolution in accordance with Government Code section 54953(e)(3) to extend the time during which the legislative bodies of the Agency may continue to teleconference without compliance with section 54953(b)(3).

PASSED, APPROVED, AND ADOPTED this 15th day of November, 2021, by a motion from Director \_\_\_\_\_ and a second by Director \_\_\_\_\_, with the following vote to wit:

AYES:  
NOES:  
ABSTAIN:  
ABSENT:

\_\_\_\_\_  
Al Rossini, Chair

**CERTIFICATE OF SECRETARY  
OF  
EAST TURLOCK SUBBASIN GROUNDWATER SUSTAINABILITY AGENCY**

I, Karen L. Whipp, do hereby certify that I am the duly authorized and appointed Secretary of the East Turlock Subbasin Groundwater Sustainability Agency, a joint powers authority (the “Agency”); that the foregoing is a true and correct copy of that certain resolution duly and unanimously adopted and approved by the Board of Directors of the Agency on the 15th day of November, 2021; and that said resolution has not been modified or rescinded and remains in full force and effect as the date hereof:

**IN WITNESS WHEREOF**, I have executed this Certificate on this \_\_\_\_\_ day of \_\_\_\_\_, 2021.

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Karen L. Whipp  
Secretary of East Turlock Subbasin  
Groundwater Sustainability Agency



## EAST TURLOCK SUBBASIN GROUNDWATER SUSTAINABILITY AGENCY

NOVEMBER 15, 2021  
SPECIAL MEETING  
AGENDA REPORT

**TO:** East Turlock Subbasin GSA Board

**FROM:** Mike Tietze, ETS GSA Coordinator

**SUBJECT:** Groundwater Sustainability Plan Manager

**ACTION:** Adopting a Resolution of the East Turlock Subbasin Groundwater Sustainability Agency Board of Directors appointing Debbie Montalbano, of the Turlock Irrigation District, as the Plan Manager for the Turlock Subbasin

### Background

In August 2014, the California Legislature passed, and in September 2014 the Governor signed, legislation creating the Sustainable Groundwater Management Act (“SGMA”) “to provide local groundwater sustainability agencies with the authority and technical and financial assistance necessary to sustainably manage groundwater” (Wat. Code, § 10720, (d)). SGMA requires sustainable management through the development of groundwater sustainability plans (“GSP”) (Wat. Code, § 10727). Additionally, SGMA requires a groundwater sustainability agency (“GSA”) to manage groundwater in all basins designated by the Department of Water Resources (“DWR”) as a medium or high priority, including the Turlock Subbasin (designated basin number 5-22.03).

The East Turlock Subbasin Groundwater Sustainability Agency (“ETS GSA”) is the GSA for a portion of the Turlock Subbasin and holds responsibility for sustainably managing groundwater within its’ portion in the Turlock Subbasin, pursuant to the requirements of SGMA. The West Turlock Subbasin Groundwater Sustainability Agency (“WTS GSA”) is the other GSA within the Turlock Subbasin responsible for sustainably managing the subbasin pursuant to the requirements of SGMA. The ETS GSA and the WTS GSA (collectively referred to as the “GSAs”) are collaborating to develop one GSP for the Turlock Subbasin, and plan to work collaboratively to implement the GSP within their respective areas of the subbasin as outlined in the draft GSP.

DWR requires GSPs and their supporting documentation, as well as future Annual Reports and Periodic Evaluations to be submitted into an online portal. The information submitted will be reviewed by DWR for completeness and evaluated for compliance with SGMA. Through the evaluation process, DWR may need to contact the subbasin for clarification or information from the GSAs. Since most subbasins involve multiple agencies and/or GSAs, DWR included a requirement in the SGMA regulations for each subbasin to appoint one Plan Manager as a point of contact between the subbasin agencies and DWR. (California Code of Regulations, Title 23, section 351(z)) The Plan Manager has no authority regarding the GSP or implementation. The





position does facilitate submittal of GSA approved documentation, and serves as a central contact point for coordination between GSAs and the DWR.

As the GSAs finalize the GSP in the coming months, a Plan Manager must be delegated the authority to submit the GSP and subsequent Annual Reports and Periodic Evaluations on behalf of the GSAs, and to serve as a central point of contact between the GSAs and DWR. On November 4, 2021, the Technical Advisory Committees of each GSA acted to recommend that their respective GSAs appoint Debbie Montalbano, of the Turlock Irrigation District, as Plan Manager for the Turlock Subbasin.

**Recommendation**

The Technical Advisory Committees recommend the GSA Boards appoint Debbie Montalbano, of the Turlock Irrigation District, as the Plan Manager for the Turlock Subbasin.

**RESOLUTION NO. 2021-05**

**RESOLUTION OF THE EAST TURLOCK SUBBASIN GROUNDWATER SUSTAINABILITY AGENCY BOARD OF DIRECTORS APPOINTING DEBBIE MONTALBANO, OF THE TURLOCK IRRIGATION DISTRICT, AS THE PLAN MANAGER FOR THE TURLOCK SUBBASIN**

**WHEREAS**, in August 2014, the California Legislature passed, and in September 2014 the Governor signed, legislation creating the Sustainable Groundwater Management Act (“SGMA”) “to provide local groundwater sustainability agencies with the authority and technical and financial assistance necessary to sustainably manage groundwater” (Wat. Code, § 10720(d)); and

**WHEREAS**, SGMA requires sustainable management through the development of groundwater sustainability plans (“GSP”) (Wat. Code, § 10727); and

**WHEREAS**, SGMA requires a groundwater sustainability agency (“GSA”) to manage groundwater in all basins designated by the Department of Water Resources (“DWR”) as a medium or high priority, including the Turlock Subbasin (designated basin number 5-22.03) (“Subbasin”); and

**WHEREAS**, the East Turlock Subbasin Groundwater Sustainability Agency (“ETS GSA”) is the GSA for a portion of the Subbasin and holds responsibility for sustainably managing groundwater within its portion in the Subbasin, pursuant to the requirements of SGMA; and

**WHEREAS**, the West Turlock Subbasin Groundwater Sustainability Agency (“WTS GSA”) is the other GSA within the Subbasin responsible for sustainably managing groundwater within its portion of the Subbasin pursuant to the requirements of SGMA; and

**WHEREAS**, the WTS GSA and the ETS GSA (collectively referred to as the “GSAs”) collaborated to develop one GSP for the entire Subbasin, and plan to work collaboratively to implement the joint GSP within their respective portions of the Subbasin as outlined in the draft GSP; and

**WHEREAS**, the SGMA requires each subbasin appoint a Plan Manager who has been delegated management authority for submitting the GSP and serves as the point of contact between the GSA and DWR (California Code of Regulations, Title 23, section 351(z)); and

**WHEREAS**, on November 4, 2021, the technical advisory committees of each GSA took action to recommend that their respective GSAs appoint Debbie Montalbano, of Turlock Irrigation District, as Plan Manager for the Subbasin.

**NOW, THEREFORE, BE IT RESOLVED** that the Board of Directors (“Board”) of the East Turlock Subbasin Groundwater Sustainability Agency finds as follows:

1. The Recitals set forth above are true and correct and are incorporated into this Resolution by this reference.
2. The East Turlock Subbasin Groundwater Sustainability Agency Board hereby appoints Debbie Montalbano as the Plan Manager, responsible for submitting the Turlock Subbasin GSP and future submittals such as subsequent Annual Reports and Periodic Evaluations to DWR on behalf of the GSAs, and serving as the central point of contact for coordination between the GSAs and DWR.

3. The appointment has no specific term; Ms. Montalbano shall serve as the Plan Manager until Ms. Montalbano resigns her post or the East Turlock Subbasin Groundwater Sustainability Agency and the West Turlock Subbasin Groundwater Sustainability Agency appoint a new Plan Manager.

PASSED, APPROVED, AND ADOPTED this \_\_\_\_\_ day of November, 2021, by a motion from Director \_\_\_\_\_ and a second by Director \_\_\_\_\_, with the following vote to wit:

AYES:  
NOES:  
ABSTAIN:  
ABSENT:

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Al Rossini, Chair

**CERTIFICATE OF SECRETARY  
OF  
EAST TURLOCK SUBBASIN GROUNDWATER SUSTAINABILITY AGENCY**

I, Karen L. Whipp, do hereby certify that I am the duly authorized and appointed Secretary of the East Turlock Subbasin Groundwater Sustainability Agency, a joint powers authority (the "ETSGSA"); that the foregoing is a true and correct copy of that certain resolution duly and unanimously adopted and approved by the Board of Directors of the Agency on the 15th day of November, 2021; and that said resolution has not been modified or rescinded and remains in full force and effect as the date hereof:

**IN WITNESS WHEREOF**, I have executed this Certificate on this \_\_\_\_\_ day of \_\_\_\_\_, 2021.

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Karen L. Whipp  
Secretary of East Turlock Subbasin  
Groundwater Sustainability Agency



## EAST TURLOCK SUBBASIN GROUNDWATER SUSTAINABILITY AGENCY

NOVEMBER 15, 2021  
SPECIAL MEETING  
AGENDA REPORT

**TO:** East Turlock Subbasin GSA Board  
**FROM:** Mike Tietze, ETS GSA Coordinator  
**SUBJECT:** Seawater Intrusion Sustainability Indicator

**ACTION:** Adopting a Resolution of the East Turlock Subbasin Groundwater Sustainability Agency Board of Directors determining no sustainable management criteria needs to be developed for seawater intrusion in the Turlock Subbasin Groundwater Sustainability Plan (GSP)

### Background

The Sustainable Groundwater Management Act (SGMA) identifies six sustainability indicators that describe potential adverse groundwater conditions. The Department of Water Resources (DWR) Best Management Practices (BMPs) for Sustainable Management Criteria (SMC) (DWR, 2017) state that the default position for GSAs should be that all six sustainability indicators apply to their basin. However, if evidence shows that an undesirable result does not exist and is not likely to occur in the future, then that sustainability indicator can be removed from further consideration as stated in the below GSP regulations (§354.26 (d)):

*“An agency that is able to demonstrate that undesirable results related to one or more sustainability indicators are not present and are not likely to occur in a basin shall not be required to establish criteria for undesirable results related to those sustainability indicators.”*

The GSP regulations define seawater intrusion as “the advancement of seawater into a groundwater supply that results in degradation of water quality in the basin and includes seawater from any source.” The minimum threshold for the indicator “shall be defined by a chloride concentration isocontour... where seawater intrusion may lead to undesirable results.” (§354.28 (c)(3)). The BMPs document developed by DWR for SMC (DWR, 2017) provides direct guidance regarding this issue, stating that:

*“GSAs in basins not adjacent to the Pacific Ocean, bays, deltas, or outlets may determine that seawater intrusion is not an applicable sustainability indicator because seawater intrusion does not exist and could not occur.”*

Todd Groundwater, in coordination with the joint Technical Advisory Committees (TACs), evaluated the applicability of the seawater intrusion sustainability indicator in the Turlock Subbasin as memorialized in the attached technical memorandum. The analysis showed that the Turlock Subbasin is not a coastal basin and does not have a direct connection to the ocean. Basement rocks of the Coast Ranges separate the Subbasin from any connectivity with the



Pacific Ocean. The Subbasin is not adjacent to the ocean or interconnected waterways, and the Subbasin groundwater is not affected by current or projected sea levels.

However, the joint TACs recognized that water quality data (as analyzed in the Basin Setting of the draft GSP) shows that saline water has been reported to occur at depth beneath the Turlock Subbasin. The joint TACs considered whether the potential for upconing of deep saline water was applicable to seawater intrusion. While these conditions could result in saline water impacting groundwater quality locally, as described in the draft Basin Setting, the deep saline brine beneath the freshwater aquifers in the subbasin is a result of ancient marine sediments from a sea that once covered the central valley. It is not as a result of ongoing or potential future communication with the Pacific Ocean. Without a direct connection to the ocean, the Turlock Subbasin is not and will not be affected by current or future projected ocean levels, and cannot be defined by a chloride isocontour.

These limitations indicate that the conditions within the Turlock Subbasin are not as a result of a direct connection with the ocean, which is what is intended to be monitored under the seawater intrusion sustainability indicator. Therefore, the joint TACs agreed with the technical team that seawater intrusion is not occurring in the Turlock Subbasin and has no potential to occur in the future. Furthermore, the joint TACs and technical teams recommend that the deep saline water beneath the Subbasin can be more appropriately managed under the degraded water quality sustainability indicators, as needed, and was considered when developing the Sustainable Management Criteria in Section 6 of the draft GSP. This approach is also consistent with both the DWR guidance on SMC, and how other subbasins within the Central Valley have addressed this sustainability indicator.

### **Recommendation**

Staff recommends that the GSA Boards adopt a Resolution making the determination that the seawater intrusion sustainability indicator as defined by the Sustainable Management Groundwater Management Act (SGMA) does not exist and is not likely to occur in the future and, therefore, no sustainable management criteria needs to be developed for that sustainability indicator in the Turlock Subbasin Groundwater Sustainability Plan (GSP).

**RESOLUTION NO. 2021-06**

**RESOLUTION OF THE  
EAST TURLOCK SUBBASIN GROUNDWATER SUSTAINABILITY AGENCY BOARD  
OF DIRECTORS DETERMINING NO SUSTAINABLE MANAGEMENT CRITERIA  
NEEDS TO BE DEVELOPED FOR SEAWATER INTRUSION IN THE TURLOCK  
SUBBASIN GROUNDWATER SUSTAINABILITY PLAN**

**WHEREAS**, the Sustainable Groundwater Management Act (“SGMA”) identifies six sustainability indicators that describe potential adverse groundwater conditions; and

**WHEREAS**, if a groundwater sustainability agency (“GSA”) is able to demonstrate that an undesirable result related to a sustainability indicator is not present and is not likely to occur in the future, then the GSA shall not be required to establish sustainable criteria for that sustainability indicator (23 Cal. Code Regs. § 354.26(d)); and

**WHEREAS**, SGMA defines seawater intrusion as the advancement of seawater into a groundwater supply that results in degradation of water quality in the basin and includes seawater from any source; and

**WHEREAS**, the Best Management Practices guidance document from the Department of Water Resources (“DWR”) states that GSAs in subbasins not adjacent to the Pacific Ocean, bays, deltas, or inlets may determine that seawater intrusion is not applicable because seawater intrusion does not exist and could not occur; and

**WHEREAS**, Todd Groundwater, the technical consultant developing the joint Turlock Subbasin Groundwater Sustainability Plan (“GSP”), in coordination with the joint Technical Advisory Committees (“TACs”) of the East Turlock Subbasin GSA (“ETS GSA”) and the West Turlock Subbasin GSA (“WTS GSA”), has demonstrated to the ETS GSA that seawater intrusion is not present and is not likely to occur in the future; and

**WHEREAS**, the analyses presented to the ETS GSA established that the Turlock Subbasin is not a coastal basin, does not have a direct connection to the ocean, is not adjacent to the ocean or interconnected waterways, and the groundwater therein is not affected by current or projected sea levels; and

**WHEREAS**, the joint TACs also recognized that saline water has been reported to occur at depth beneath the Turlock Subbasin and considered whether the potential for upconing of deep saline water was applicable to seawater intrusion; and

**WHEREAS**, while these conditions could result in saline water impacting groundwater quality locally, the mechanism does not result from communication with ocean water, would not be affected by current or projected sea levels, and cannot be defined by a chloride isocontour.

**NOW, THEREFORE, BE IT RESOLVED** by the Board of Directors of the ETS GSA, which incorporates the recitals above and does hereby make the determination that the seawater intrusion sustainability indicator does not presently exist and is not likely to occur in the future in the Turlock Subbasin and, therefore, SGMA does not require the ETS GSA to develop sustainable management criteria for that sustainability indicator in the Turlock Subbasin GSP.

PASSED, APPROVED, AND ADOPTED this 15th day of November, 2021, by a motion from Director \_\_\_\_\_ and a second by Director \_\_\_\_\_, with the following vote to wit:

AYES:

NOES:

ABSTAIN:

ABSENT:

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Al Rossini, Chair



**CERTIFICATE OF SECRETARY  
OF  
EAST TURLOCK SUBBASIN GROUNDWATER SUSTAINABILITY AGENCY**

I, Karen L. Whipp, do hereby certify that I am the duly authorized and appointed Secretary of the East Turlock Subbasin Groundwater Sustainability Agency, a joint powers authority (the “Agency”); that the foregoing is a true and correct copy of that certain resolution duly and unanimously adopted and approved by the Board of Directors of the Agency on the 15th day of November, 2021; and that said resolution has not been modified or rescinded and remains in full force and effect as the date hereof:

IN WITNESS WHEREOF, I have executed this Certificate on this \_\_\_\_\_ day of \_\_\_\_\_, 2021.

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Karen L. Whipp  
Secretary of East Turlock Subbasin  
Groundwater Sustainability Agency

May 27, 2020

## REVISED DRAFT MEMORANDUM

**To:** Turlock Subbasin Joint Technical Advisory Committees (TACs)

**From:** Phyllis Stanin, Vice President/Principal Geologist

**Re:** Consideration of the Seawater Intrusion Sustainability Indicator  
Turlock Subbasin GSP







Over the last several months, the joint TACs have been discussing technical information on the six sustainability indicators as defined in the Sustainable Groundwater Management Act (SGMA). During these meetings, the joint TACs considered whether one of the six sustainability indicators – seawater intrusion – was applicable to the Turlock Subbasin.

To assist the joint TACs in their consideration of this sustainability indicator, the consulting team prepared a memorandum summarizing the technical and regulatory issues. That memorandum, along with supporting information, was presented at a public webinar as part of the joint TACs monthly meeting on April 23, 2020. At that meeting, the joint TACs directed the technical team to revise the memorandum to document the process by which the joint TACs considered the seawater intrusion indicator. Recognizing that the decision on a sustainability indicator’s applicability resides with the GSAs, this memorandum also describes a process for a final determination on the applicability of this sustainability indicator to the Turlock Subbasin by the GSA Board of Directors.

### BACKGROUND

In its definition of undesirable results, SGMA identifies six sustainability indicators, which describe potential adverse groundwater conditions as summarized below.

#### SGMA Sustainability Indicators

					
<b>Chronic Lowering of Water Levels</b>	<b>Reduction of Groundwater in Storage</b>	<b>Degraded Water Quality</b>	<b>Seawater Intrusion</b>	<b>Inelastic Land Subsidence</b>	<b>Depletion of Inter-connected Surface Water</b>

DWR's Best Management Practices (BMPs) for sustainable management criteria state that the default position for GSAs should be that all six sustainability indicators apply to their basin. However, if evidence shows that an undesirable result does not exist and could not occur in the future for a sustainability indicator, the sustainability indicator can be removed from further consideration as stated in the GSP regulations below.

An agency that is able to demonstrate that undesirable results related to one or more sustainability indicators are not present and are not likely to occur in a basin shall not be required to establish criteria for undesirable results related to those sustainability indicators (§354.26 (d)).

## **SEAWATER INTRUSION SUSTAINABILITY INDICATOR**

GSP regulations define *Seawater Intrusion* as "the advancement of seawater into a groundwater supply that results in degradation of water quality in the basin and includes seawater from any source." The minimum threshold for the indicator "shall be defined by a chloride concentration isocontour...where seawater intrusion may lead to undesirable results." Further, the seawater intrusion minimum threshold must consider the effects of "current and projected sea levels" (§354.28 (c)(3)).

Typically, these conditions would occur in a *coastal* groundwater basin where aquifers can be in communication with ocean water, either directly or by interconnected waterways. The BMP for sustainable management criteria (DWR, 2017) provides the example below:

GSAs in basins not adjacent to the Pacific Ocean, bays, deltas, or inlets may determine that seawater intrusion is not an applicable sustainability indicator because seawater intrusion does not exist and could not occur.

The example description above is applicable to conditions in the inland Turlock Subbasin where basement rocks of the Coast Ranges separate the Subbasin from any connectivity with the Pacific Ocean. The Subbasin is not adjacent to the ocean or interconnected waterways, and Subbasin groundwater is not affected by current or projected sea levels.

However, the joint TACs recognized that saline water has been reported to occur at depth beneath the Turlock Subbasin<sup>1</sup>. Groundwater containing elevated total dissolved solids (TDS) has been reported in deep deltaic and marine sediments where either older groundwater or connate water<sup>2</sup> contains elevated total dissolved solids (TDS) below the base of freshwater as mapped by the U.S. Geological Survey (USGS). The potential exists for this deeper water to move upward in the water column along undefined vertical pathways if hydraulic heads are lowered from deeper pumping wells (a process generally referred to as

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<sup>1</sup> And other subbasins in the Central Valley.

<sup>2</sup> Connate water refers to water trapped in the pores of the sediments at the time they were deposited. Deep saline water in the Turlock Subbasin may also result from non-connate groundwater that has dissolved solids from local sediments over time.

upconing). The joint TACs considered whether the potential for upconing of deep saline water was applicable to seawater intrusion.

While these conditions could result in saline water impacting groundwater quality locally, the mechanism does not result from communication with ocean water, would not be affected by current or projected sea levels, and cannot be defined by a chloride concentration isocontour. These limitations indicate that the conditions beneath the Turlock Subbasin are not a good fit for the intent of the seawater intrusion sustainability indicator. Based on the definitions and usage of the seawater intrusion sustainability indicator in SGMA, GSP regulations, and BMPs, and recognizing the inland location of the Subbasin, the joint TACs agreed with the technical team that seawater intrusion is not occurring in the Turlock Subbasin and has no potential to occur in the future.

Further, the potential for impacts related to deep saline water in the Turlock Subbasin can be addressed under SGMA with more applicable sustainability indicators including degraded water quality and chronic lowering of water levels. The occurrence of saline water and the depth to the base of fresh water are discussed in the Basin Setting of the GSP and acknowledged as a potential future impact to local groundwater quality. These potential impacts will be considered during development of the GSP monitoring network. Thereby the potential for future saline water impacts can be managed with water levels and monitoring.

As an additional comment, the adjacent Merced Subbasin GSP also concluded that this sustainability indicator was not applicable to that Subbasin because of a lack of connection to a seawater source. Similar to the Turlock Subbasin, the Merced Subbasin also contains saline water in deeper sediments, with some indications that the saline water has mixed with fresh water in local aquifers. Those conditions were addressed through the degraded water quality indicator in the Merced Subbasin GSP (Woodard & Curran, November 2019).

## **RECOMMENDATION**

A process to inform the GSA Boards and seek a final determination from the GSAs that the sustainability indicator of seawater intrusion is not applicable in the Turlock Subbasin is provided as follows:

- The joint TACs make a finding that the seawater intrusion sustainability indicator is not applicable to the inland Turlock Subbasin.
- The joint TACs also find that the deep saline water beneath the Subbasin can be more appropriately managed under the degraded water quality sustainability indicator, as needed.
- The GSA Board of Directors will consider the recommendation by the joint TACs, and, if in agreement, will officially make a finding that:
  - the seawater intrusion sustainability indicator as defined by SGMA is not applicable to the Turlock Subbasin and, therefore, no sustainable management criteria need be developed for that sustainability indicator in the Turlock Subbasin GSP.



EAST TURLOCK SUBBASIN GROUNDWATER SUSTAINABILITY AGENCY

NOVEMBER 15, 2021
SPECIAL MEETING
AGENDA REPORT

TO: East Turlock Subbasin GSA Board
FROM: Mike Tietze, ETS GSA Coordinator
SUBJECT: Adjustment of the East Turlock Subbasin GSA's share of the budget to prepare the GSP First Annual Report for the Turlock Subbasin

ACTION: Approval by the East Turlock Subbasin Groundwater Sustainability Agency Board of Directors accepting an increase in ETS GSA's share of the budget to prepare the Groundwater Sustainability Plan (GSP) First Annual Report for the Turlock Subbasin.

Background

The Sustainable Groundwater Management Act ("SGMA") requires a groundwater sustainability agencies ("GSA") to submit annual reports documenting implementation of its GSP to the Department of Water Resources ("DWR"). The First Annual Report for the Turlock Subbasin is due to be submitted by April 1, 2022. The ETS GSA is collaborating with the West Turlock Subbasin Groundwater Sustainability Agency ("WTS GSA") to develop one Annual Report for the Turlock Subbasin, and have requested Todd Groundwater to perform this work.

In April 2021, Todd provided a proposed amendment to their budget to cover preparation of the GSP First Annual Report which would have increased Todd's budget by \$216,273 for preparation of the First Annual Report and supporting activities, of which the ETS GSA share would have been \$106,752. The Technical Advisory Committees (TACs) for the GSAs asked Todd to re-examine some of the costs of that proposal, which appeared to be greater than the amount budgeted by GSAs in the surrounding subbasins for similar reports. In the meantime, the ETS GSA Board adopted a budget for its share of report preparation of \$62,500 as a place holder in its Proposition 218 assessment, recognizing that the final costs would need to be determined in the future.

In August 2021, the ETS GSA Board directed the TAC Chair and GSA Coordinator to work with their counterparts in WTS GSA to resolve the budget amendment questions remaining regarding Todd's proposal, and make a recommendation to the Board. In response to the joint TAC request, Todd re-examined the scope of work for preparation of the First Annual Report and revised its estimated budget to \$181,414, of which the ETS GSA share would be \$89,546. This total includes necessary supporting activities including updating the groundwater model for the subbasin, development of reporting templates, meetings and coordination, data compilation and analysis, report preparation and processing. They indicate that the actual amount required may be less than this amount, because some funds currently allocated to GSP finalization may be made available if they can be paid using remaining grant funds. As such, the final charges against this proposed budget remain uncertain, but Todd has requested that the full budget



change be approved at this time to assure timely completion of the work in compliance with the DWR deadline.

ETS GSA staff and the TAC Chair find that the requested costs appear generally reasonable. They do include some items that could potentially be deferred to support of the Second Annual Report, thus decreasing the current budget request; however, deferral of these tasks would raise efficiency concerns and could increase future budgets by a greater amount. Costs for production of annual reports are expected to decrease in the future.

**Recommendation**

The GSA Coordinator and TAC Chair recommend the ETS GSA Board approve the proposed amendment to the ETS GSA share of the budget to prepare the First Annual Report, and work closely with the WTS GSA TAC and the consulting team to perform the work as efficiently as possible.



**EAST TURLOCK SUBBASIN GROUNDWATER SUSTAINABILITY AGENCY  
WEST TURLOCK SUBBASIN GROUNDWATER SUSTAINABILITY AGENCY**

**NOVEMBER 15, 2021  
SPECIAL MEETING  
AGENDA REPORT**

**TO:** East Turlock Subbasin and West Turlock Subbasin GSA Boards

**FROM:** Lauren D. Layne, ETS GSA General Counsel and Valerie Kincaid, WTS GSA General Counsel

**SUBJECT:** First Amendment to the Memorandum of Understanding between the West Turlock Subbasin and East Turlock Subbasin Groundwater Sustainability Agencies

**ACTION:** Adopting Resolutions of the West Turlock Subbasin and East Turlock Subbasin Groundwater Sustainability Agencies Board of Directors approving the First Amendment to the Memorandum of Agreement (MOA) between the West Turlock Subbasin and the East Turlock Subbasin Groundwater Sustainability Agencies

**Background**

In September 2014, the Governor signed legislation creating the Sustainable Groundwater Management Act ("SGMA") "to provide local groundwater sustainability agencies with the authority and technical and financial assistance necessary to sustainably manage groundwater" (Wat. Code § 10720(d)). SGMA requires sustainable management through the development of groundwater sustainability plans ("GSPs") (Wat. Code § 10727). Additionally, SGMA requires one or more groundwater sustainability agencies (each, a "GSA") to manage groundwater in all basins designated by the Department of Water Resources ("DWR") as a medium or high priority, including the Turlock Subbasin (designated basin number 5-22.03). One or more GSPs covering the Turlock Subbasin must be submitted to DWR for review by January 31, 2022 (Wat. Code §§ 10720.7(a)(2), 10733.4).

The East Turlock Subbasin Groundwater Sustainability Agency ("ETS GSA") and the West Turlock Subbasin Groundwater Sustainability Agency ("WTS GSA") are collaborating to develop one GSP for the Turlock Subbasin, and plan to work collaboratively to implement the GSP within their respective areas of the subbasin as outlined in the draft GSP. To that end, on December 14, 2017, the ETS GSA and the WTS GSA entered into a Memorandum of Agreement ("MOA") outlining the respective understandings and responsibilities regarding preparation and implementation of the GSP in their respective portions of the Turlock Subbasin.

ETS GSA and the WTS GSA have been in discussions for several months, but have not been able to agree on how an accounting of groundwater, surface water stored in basin aquifers and/or the sustainable yield of the Subbasin should be allocated to each GSA ("Groundwater Accounting Structure"). However, they have reached an agreement to resolve that issue immediately after the GSP is submitted to DWR for review. To memorialize this understanding,



the ETS GSA and the WTS GSA have drafted a First Amendment to the MOA, a copy of which is attached to the Resolutions accompanying this staff report as **Exhibit "A"**.

**Recommendation**

The Technical Advisory Committees and agency counsels recommend that the GSA Boards:  
1) approve of and adopt the First Amendment to the MOA; 2) authorize its execution; and  
3) authorize staff and consultants to take further steps as may be necessary to implement the terms of the First Amendment to the MOA.



**RESOLUTION NO. 2021-8**

**RESOLUTION OF THE WEST TURLOCK SUBBASIN GROUNDWATER SUSTAINABILITY AGENCY (WTS GSA) BOARD OF DIRECTORS (BOARD) ADOPTING THE FIRST AMENDMENT TO MEMORANDUM OF AGREEMENT (MOA) BETWEEN THE WEST TURLOCK SUBBASIN GROUNDWATER SUSTAINABILITY AGENCY AND THE EAST TURLOCK SUBBASIN GROUNDWATER SUSTAINABILITY AGENCY**

WHEREAS, in August 2014, the California Legislature passed, and in September 2014 the Governor signed, legislation creating the Sustainable Groundwater Management Act (“SGMA”) “to provide local groundwater sustainability agencies with the authority and technical and financial assistance necessary to sustainably manage groundwater” (Wat. Code, § 10720(d)); and

WHEREAS, SGMA requires sustainable management through the development of groundwater sustainability plans (“GSP”) (Wat. Code, § 10727); and

WHEREAS, SGMA requires a groundwater sustainability agency (“GSA”) to manage groundwater in all basins designated by the Department of Water Resources (“DWR”) as a medium or high priority, including the Turlock Subbasin (designated basin number 5-22.03) (“Subbasin”), by submitting one or more GSPs covering the entire groundwater basin by January 31, 2022 (Wat. Code §§ 10720.7(a)(2), 10733.4); and

WHEREAS, the West Turlock Subbasin Groundwater Sustainability Agency (“WTS GSA”) is the GSA for a portion of the Subbasin and holds responsibility for sustainably managing groundwater within its portion in the Subbasin, pursuant to the requirements of SGMA; and

WHEREAS, the East Turlock Subbasin Groundwater Sustainability Agency (“ETS GSA”) is the other GSA within the Subbasin responsible for sustainably managing groundwater within its portion of the Subbasin pursuant to the requirements of SGMA; and

WHEREAS, pursuant to that certain Memorandum of Agreement dated December 14, 2017 (“MOA”), the WTS GSA and the ETS GSA have collaborated to develop one GSP for the entire Subbasin, and plan to work collaboratively to implement the joint GSP within their respective portions of the Subbasin as outlined in the draft GSP; and

WHEREAS, the WTS GSA and the ETS GSA have not been able to agree on an accounting of groundwater, surface water stored in basin aquifers and/or the sustainable yield of the Subbasin be allocated to each GSA (“Groundwater Accounting Structure”), but have agreed to resolve that issue immediately after the GSP is submitted to DWR for review; and

WHEREAS, the WTS GSA desires to enter into a first amendment to the MOA to establish the steps needed to resolve the Groundwater Accounting Structure issue (“First Amendment to MOA”).

NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the WTS GSA that:

Section 1. The Recitals set forth above are true and correct and are incorporated into this Resolution by this reference.

Section 2. The West Turlock Subbasin Groundwater Sustainability Agency (WTS GSA) Board hereby adopts that certain First Amendment to MOA attached hereto and incorporated herein as Exhibit "A".

Section 3. The WTS GSA Board further directs and authorizes its Chairman to take all further actions necessary to enter into the First Amendment to MOA, including executing it on behalf of the ETS GSA.

Section 4. The WTS GSA Board further directs and authorizes its staff and consultants to take all further actions necessary to implement the intent of this First Amendment to MOA.

Moved by Director \_\_\_\_\_ seconded by Director \_\_\_\_\_, that the foregoing resolution be adopted.

Upon roll call, the following vote was had:

Ayes:

Noes:

Absent:

The Chair declared the resolution adopted.

I, Joe Alamo, Chair of the Board of Directors of the WEST TURLOCK SUBBASIN GROUNDWATER SUSTAINABILITY AGENCY, do hereby CERTIFY that the foregoing is a full, true, and correct copy of a resolution duly adopted at a special meeting of said Board held the 15<sup>th</sup> day of November, 2021.

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Joe Alamo, Chair  
Board of Directors  
West Turlock Subbasin GSA

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ATTEST: Jennifer Land, Secretary  
Board of Directors  
West Turlock Subbasin GSA

**FIRST AMENDMENT TO  
MEMORANDUM OF AGREEMENT  
BETWEEN THE WEST TURLOCK SUBBASIN GROUNDWATER SUSTAINABILITY  
AGENCY AND THE EAST TURLOCK SUBBASIN GROUNDWATER  
SUSTAINABILITY AGENCY**

THIS FIRST AMENDMENT TO AGREEMENT (“First **Amendment**”) is entered into and effective this 15th day of November, 2021 (“**Effective Date**”), by and among the West Turlock Subbasin Groundwater Sustainability Agency (“**WTS GSA**”) and the East Turlock Subbasin Groundwater Sustainability Agency (“**ETS GSA**”) as an amendment to that Memorandum of Agreement between the Parties dated December 14, 2017 (“**MOA**”). Capitalized terms in this First Amendment shall have the meaning assigned in the MOA.

**RECITALS**

A. As contemplated by the MOA, the Parties are collaborating to develop a joint GSP for the Basin.

B. The Parties acknowledge that implementation of the GSP will require that an accounting of groundwater, surface water stored in basin aquifers and/or the sustainable yield of the basin be allocated to each GSA (“Groundwater Accounting Structure”).

C. The Parties have not been able to agree on an Groundwater Accounting Structure between the two GSAs, but have agreed to resolve that issue immediately after the GSP is submitted to the Department of Water Resources (“DWR”) for review.

THEREFORE, in consideration of the mutual promises, covenants and conditions herein set forth, the Parties agree as follows:

**1. METHOD TO RESOLVE THE GROUNDWATER ACCOUNTING STRUCTURE.**  
The Parties agree that they will undertake the following steps to resolve the accounting framework:

A. Continue to collaborate on the development of a single GSP for the Turlock Subbasin;

B. Suspend current negotiations over the Groundwater Accounting Structure until after the GSP is adopted by both GSAs;

C. Include an appendix in the GSP that includes the documents produced so far by both GSAs on the concept of the Groundwater Accounting Structure, which are attached hereto as **EXHIBIT A-1** and **EXHIBIT A-2** for the WTS GSA and **EXHIBIT B-1** and **EXHIBIT B-2** for the ETS GSA;

D. Include text in the appropriate sections of the GSP stating that the Groundwater Accounting Structure is an outstanding issue to be resolved, and that the current positions of each GSA is provided in the appendix; and

E. Add an Implementation Support Activity (or mutually acceptable equivalent) to the GSP requiring the development of an agreed upon Groundwater Accounting Structure by the GSAs, along with a timeline for doing so.

2. **CONTINUED VALIDITY.** Except as expressly provided in this First Amendment, the MOA shall continue unmodified and in full force and effect.

3. **RESERVATION OF SECTION 2.3.** To the extent the development of an agreed-upon Groundwater Accounting Structure is not achievable within a reasonable timeframe or otherwise impedes either Party's ability to implement the GSP or achieve sustainability within its respective GSA boundary, the Parties agree that any one Party may develop a separate GSP pursuant to section 2.3 of the MOA. Further, the Parties agree that the development of separate GSPs is allowable at any time under this First Amendment and that no action, including the submittal of a joint GSP to DWR, the development of annual reports, the acceptance of basin-level grant funding, shall preclude any Party from developing and submitting to DWR a separate GSP pursuant to this section and section 2.3 of the MOA.

4. **COUNTERPARTS AND ELECTRONIC SIGNATURES.** This First Amendment may be executed simultaneously in one or more counterparts, each of which shall be an original, but all of which together shall constitute one and the same document. A facsimile of .pdf signature of the Agreement shall be considered an original signature of this Agreement for all purposes.

**IN WITNESS WHEREOF,** the Parties have executed this Agreement on the day and year first above-written.

**“ETS GSA”**

EAST TURLOCK SUBBASIN  
GROUNDWATER SUSTAINABILITY AGENCY

By: \_\_\_\_\_ Date: \_\_\_\_\_  
Al Rossini, Chairman  
East Turlock Subbasin GSA

**“WTS GSA”**

WEST TURLOCK SUBBASIN  
GROUNDWATER SUSTAINABILITY AGENCY

By: \_\_\_\_\_ Date: \_\_\_\_\_  
Joe Alamo, Chairman  
West Turlock Subbasin GSA

## **EXHIBIT A-1**

### **WTS GSA**

#### **Turlock Subbasin Proposed Water Accounting Framework**

##### **Purpose/Objective**

This framework is intended to generally define groundwater supply sources throughout the Turlock Subbasin, but do not represent an allocation between the ETS and the WTS GSAs or to individual landowners. The accounting framework will facilitate development of solutions to ensure the Turlock subbasin is able to achieve sustainability.

##### **Native Groundwater Supply**

Native groundwater supply (native supply) is water that occurs naturally in the subbasin and is subject to extraction by overlying water right holders or appropriators. However, the Turlock Subbasin is currently in a state of overdraft, as determined by DWR, and as such, the native supply is not subject to new appropriation. Proposed accounting of the native supply yield is generally the total native supply divided by acres in the Turlock Subbasin. Native supply includes the following sources:

- Percolation from rain and precipitation
- Streambed percolation, from natural flow in channels
- Return flows from applied native groundwater
- Subsurface flows or underflows from deep aquifers, the Sierra-Nevada foothills and adjacent subbasins

##### **Imported Water**

Imported water is surface water that is brought from outside the subbasin, that is stored, conveyed, and applied to land within the subbasin with the intent of reclaiming it. Unless otherwise agreed to, imported water and the seepage therefrom is owned by the importer. Proposed accounting: seepage and storage

of imported water remains owned by the importing party. Subject to current law<sup>1</sup> and any contractual agreements stating otherwise, supply of imported water includes:

- Seepage and percolation from imported stored water in natural watercourses
- Seepage and percolation from imported water in conveyance facilities (canals, reservoirs, etc.)
- Percolation from application of imported water on irrigated lands

### **Salvaged Water**

Salvaged water is water that is saved from waste and reclaimed by conservation or investment. Proposed accounting: Unless otherwise agreed to, salvaged water and seepage/percolation from salvaged water is owned by salvaging party. Supply of salvaged water includes:

- Water recaptured from stormwater return flows
- Water that is recharged from treated wastewater discharge
- Conserved water from infrastructure improvements

### **Measurement**

Any imported or salvaged water reclaimed must be reported, in accordance with GSP requirements.<sup>2</sup>

### **Living Document**

This Water Accounting Framework is a living document that shall be revisited by the GSAs at least every five years as part of the GSP update.

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<sup>1</sup> See City of Santa Maria v. Adam, 149 Cal. Rptr. 3d. 491, 520–25 (Cal. Ct. App. 2012); City of Los Angeles v. City of Glendale, 142 P.2d 289, 294–95 (Cal. 1943); City of Los Angeles v. City of San Fernando, 537 P.2d 1250, 1294 – 95 (Cal. 1975).

<sup>2</sup> Water Code § 10726.

**EXHIBIT A-2**

## TECHNICAL MEMORANDUM

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**DATE:** September 13, 2021 **PROJECT #:** 9602.0101

**TO:** Debbie Montalbano, Turlock Irrigation District  
Michael Cooke, Turlock Irrigation District  
  
Valerie Kincaid, O'Laughlin & Paris LLP

**FROM:** Derrik Williams, P.G., C.Hg., Louis Wersan, P.G.

**PROJECT:** GSP Technical Support

**SUBJECT:** Updated Water Accounting Framework White Paper

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### INTRODUCTION

Montgomery & Associates (M&A) is developing a Water Accounting Framework (Framework) for the Turlock Subbasin on behalf of the Turlock Irrigation District (TID). The Framework classifies various components of the Subbasin's groundwater budget, consistent with commonly accepted rules regarding surface water and groundwater rights. The Framework provides a defensible and logical approach to allocating water and recognizes the investments made by various entities in the Subbasin to secure dependable and reliable water supplies.

The Framework is not an assessment or quantification of water rights. All groundwater extraction and use must comply with Article X, Section 2 of the California constitution, and conform to all other state and local laws.

### WATER ACCOUNTING FRAMEWORK CONCEPTS

The Framework classifies groundwater supplies based on generalized concepts of groundwater rights. The three generalized water rights concepts included in this memorandum include:

1. Common pool groundwater. Groundwater recharge that results from natural processes and conditions is common pool water. Examples include rainfall percolation, percolation of natural river flows, mountain front recharge, and inflow from neighboring subbasins. All overlying landowners in the Subbasin have a correlative right to extract and use common pool groundwater, and put it to beneficial use.
2. Imported Water. Water percolating to the groundwater as a result of importing water into the subbasin is imported water. Examples of percolation from imported water include



water that percolates to the groundwater through canal leakage, is intentionally recharged by ponds or wells, or percolates past the root zone after being applied for irrigation. The water that percolates from imported water is not divided among all groundwater users, but rather, belongs to the importer. Only the entity that imported the water has the right to extract imported water and put it to beneficial use.

3. Salvaged groundwater. Water that would otherwise leave the Subbasin or not otherwise be available for use but for the efforts of an entity is salvaged water. Examples include captured stormwater, treated wastewater, efficiency improvements, or percolation from the release of previously stored water. Any salvaged water that percolates to the groundwater through canal leakage, is intentionally recharged by ponds or wells, or percolates past the root zone after being applied for irrigation is salvaged groundwater. Only the entity that salvaged the water has the right to extract salvaged groundwater and put it to beneficial use.

The Framework is not a water budget. It does not address change in groundwater storage and does not concern groundwater flow directions within the Subbasin. The Framework only classifies groundwater inflows into the three water rights classifications listed above. Once groundwater is assigned one of the three classifications, it retains that classification regardless of where it flows in the Subbasin.

The Framework presented in this memorandum divides the groundwater inflows between two entities: the West Turlock Subbasin GSA (WTSGSA) and the East Turlock Subbasin GSA (ETSGSA). Further refinement of the Framework within each GSA could be possible with additional data and analysis.

## **WATER ACCOUNTING FRAMEWORK DATA**

The initial Framework is derived from detailed groundwater and land-surface budget data provided by Woodard Curran on December 8, 2020, and updated on February 24, 2021 and July 8, 2021 (D. Liebersbach, emails to D. Williams, December 8, 2020, and February 25, 2021). The groundwater and land-surface budget terms were extracted from the C2VSim-based model used by the Modesto and Turlock Subbasins for developing Groundwater Sustainability Plans (GSPs). Data from both the land surface budget and groundwater budget were used to develop the Framework.

The initial Framework was updated with data from the Draft Turlock Subbasin GSP released on July 8, 2021. Framework calculations and water supply data presented in this memorandum reflect the updated data. Water budget data from the draft GSP was only available for the historical and baseline averages as well as the year 2010. No other year-specific data were available for this update.

# GROUNDWATER ACCOUNTING FRAMEWORK ASSUMPTIONS AND CALCULATIONS

Montgomery & Associates estimated the Framework components shown in the list below. These are the terms that could be extracted or calculated from the C2VSim output. The groundwater budget terms extracted from the C2VSim model do not strictly correlate with the Framework components. Some assumptions and calculations were necessary to estimate the Framework components.

## Common Pool Components

- Mountain front recharge
- Subsurface flow from neighboring subbasins
- River gains and losses
- Deep percolation of precipitation on agricultural land
- Recharge from land covered with native vegetation
- Recharge in urban areas
- Deep percolation of agricultural irrigation water from private wells
- Deep percolation of applied agricultural irrigation water from TID wells
- Canal infiltration from groundwater pumped by TID

## Imported Water Components

- Canal and reservoir infiltration of diverted water
- Deep percolation of agricultural irrigation water from river diversions

## Salvaged Water Components

- Treated wastewater and recharged stormwater in urban settings
  - This is not currently differentiated from other urban recharge. This may be included in future versions of the Framework when more detailed model data are available

## Common Pool Components

This Framework calculates common pool components for the entire Subbasin rather than for the West Turlock and East Turlock GSAs. This is in accordance with groundwater case law, which apportions common pool groundwater among all users in the subbasin.

## Mountain Front Recharge and Subsurface Flow from Adjacent Subbasins

Mountain front recharge and subsurface flow from adjacent subbasins are both natural processes and are included in the common pool. Net subsurface flows (inflows minus outflows) for both

mountain front recharge and adjacent subbasins were extracted directly from C2VSim output spreadsheets.

### **Net Recharge or Discharge from River Gains and Losses**

River losses and gains, although influenced by reservoir releases and groundwater elevations, are considered natural processes that are included in the common pool. The annual net recharge or discharge from river gains and losses was extracted directly from C2VSim output. This single value represents the net recharge and discharge from the Tuolumne, Merced, and San Joaquin rivers.

### **Deep Percolation of Precipitation on Agricultural, and Native Vegetation Land**

Recharge of precipitation is a natural process and is included in the common pool. This Framework assumes that all recharge beneath lands covered with native vegetation is from precipitation, because there is no irrigation on these lands. Annual total recharge on lands with native vegetation and deep percolation of precipitation on agricultural lands were extracted directly from C2VSim output spreadsheets.

### **Deep Percolation Beneath Urban Land**

This Framework assumes that all deep percolation beneath urban lands has historically been derived from either precipitation or groundwater pumped by urban water agencies. Both sources are common pool sources and therefore all deep percolation beneath urban land remains common pool water. Annual deep percolation of water beneath urban land was extracted directly from C2VSim output spreadsheets.

In the future, some deep percolation beneath urban lands may be derived from imported surface waters, and this calculation will need to be adjusted to reflect the source of the urban water percolation. Currently, there is no estimate of how much future urban percolation may be from imported surface water supplies.

### **Deep Percolation of Irrigation Water Applied to Agricultural Land from Private Agricultural Wells and Agricultural Agency Wells**

This Framework assumes all wells extract common pool water, and therefore deep percolation of irrigation return flow from this pumping remains common pool water. This assumption likely results in an overestimate of common pool water and underestimate of imported water. Annual deep percolation of return flow from pumped groundwater was extracted directly from C2VSim output spreadsheets.

## Canal Infiltration of Groundwater Pumped by Agricultural Agencies

TID pumps groundwater into its canal system for delivery to growers. This Framework assumes the TID wells extract common pool water, and therefore any of this water that infiltrates through the bottom or sides of canals remains common pool water. This assumption likely results in an overestimate of common pool water and underestimate of imported water. The C2VSim model output does not differentiate between canal infiltration of pumped groundwater and canal infiltration of diverted water. This Framework estimates the amount of canal infiltration from pumped water by multiplying the total canal infiltration below the broad-crested weir at Turlock Lake by the percentage of water in canals derived from groundwater.

*Canal Infiltration of Ag. Agency Pumping =*

$$\text{Canal Infiltration Below Turlock Lake} \times \frac{\text{Ag. Agency Pumping}}{(\text{Ag. Agency Pumping}) + (\text{Ag. Agency Diversions})}$$

This may overestimate the canal infiltration of TID's pumped water, and therefore overestimate the amount of water in the common pool. A significant amount of infiltration from TID's canals below Turlock Lake likely occurs before groundwater is added to the canal system. Therefore, the canal and reservoir losses are mainly diverted river water, not pumped groundwater. This approach, however, provides a reasonable first estimate that could be refined with additional data and model outputs.

## Total Common Pool Supply

The average available common pool supplies for both the historical simulated period and the future baseline simulated period are shown in Table 1. Negative values represent a loss of groundwater from the Subbasin; positive values represent a gain of groundwater in the Subbasin.

- Table 1. Average Amounts of Common Pool Supplies

<b>Component</b>	<b>Historical Average (acre-feet/year)</b>	<b>Baseline Average (acre-feet/year)</b>
Mountain front recharge	2,200	2,100
Subsurface inflow/outflow	35,900	27,900
River gains/losses	-56,600	38,400
Percolation beneath native vegetation	11,800	6,500
Percolation of precipitation on ag. land	62,400	56,900
Percolation beneath urban lands	5,100	11,700
Percolation from private well pumping irrigating ag. land	47,500	47,200
Percolation from ag. agency well pumping irrigating ag. land	22,900	12,200
Infiltration of ag. agency pumping through canals	5,659	3,850
<b>Totals</b>	136,859	206,750

## Imported Water Components

Once surface water is lawfully diverted from a stream or river, the water becomes the possessory right of the diverter. Any infiltration of this diverted water through canals remains the possession of the diverter. This Framework calculates imported water components separately for the West Turlock and East Turlock GSAs. This is in accordance with groundwater case law, which allocates imported water to the importer.

### Canal and Reservoir Infiltration of Diverted Surface Water

This Framework assumes that all canal infiltration of diversions in the West Turlock subarea are from TID’s canal system, and all canal infiltration of diversions in the East Turlock subarea are from Merced Irrigation District’s (MID’s) canal system.

This Framework assumes that all water in the MID canal is diverted river water, and therefore all infiltration of MID’s canal water is imported water. Annual infiltration from East Turlock subarea canals was extracted directly from C2VSim output spreadsheets.

TID conveys both diverted river water and pumped groundwater through its canal system. The C2VSim model output does not differentiate between canal/reservoir infiltration of pumped groundwater and canal/reservoir infiltration of diverted water. This Framework estimates the amount of canal and reservoir infiltration from diverted water by multiplying the total canal infiltration below the broad-crested weir at Turlock Lake by the percentage of water in canals and reservoirs derived from diversions.

Canal Infiltration of Diversions =

$$\text{Canal Infiltration Below Turlock Lake} \times \frac{\text{West Turlock Diversions}}{(\text{TID Pumping}) + (\text{West Turlock Diversions})}$$

This likely underestimates the canal infiltration of TID’s diversions, and therefore underestimates the amount of imported water that belongs to the WTSGSA. A significant amount of infiltration from TID’s canals below Turlock Lake likely occurs before groundwater is added to the canal system. Therefore, the canal and reservoir losses are mainly diverted river water, not pumped groundwater. This approach, however, provides a reasonable first estimate that could be refined with additional data and model outputs.

### Deep Percolation of Irrigation Water Applied to Agricultural Land from Diversions

Any deep percolation of irrigation return flow from this diverted water remains the possession of the diverter. Annual deep percolation of return flow from diverted water was extracted directly from C2VSim output spreadsheets for both the West Turlock and East Turlock subareas.

### Total Imported Water Supplies

The average available imported water supplies for both the historical simulated period, and the future baseline simulated period are shown in [Table 2](#) for the West Turlock Subarea, and [Table 3](#) for the East Turlock Subarea.

- [Table 2. Average Amounts of Imported Water Supplies: West Turlock Subarea](#)

Component	Historical Average (acre-feet/year)	Baseline Average (acre-feet/year)
Canal and reservoir infiltration of diverted water	67,966	76,305
Percolation of diverted water applied for irrigation	129,000	116,500
<b>Total</b>	196,966	192,805

- [Table 3. Average Amounts of Imported Water Supplies: East Turlock Subarea](#)

Component	Historical Average (acre-feet/year)	Baseline Average (acre-feet/year)
Canal and reservoir infiltration of diverted water	4,888	5,223
Percolation of diverted water applied for irrigation	1,900	1,600
<b>Total</b>	6,788	6,823

## Salvaged Water

The C2VSim model output did not include any data for potential salvaged water, such as irrigation with recycled water from the Modesto wastewater treatment plant, recharge of stormwater capture, or seepage from stored water flowing in a natural water course.

## Unclear Model Output

The C2VSim model output provides values for water budget components that are unclear, such as agricultural runoff and return flow. The updated water budget data do not separate the terms labeled agricultural return and agricultural surface runoff; the fate of the return flow component is also unknown, and therefore, this Framework has not yet assigned this runoff and return flow to any one of the three Framework classifications. This runoff and return flow Subbasin-wide is small compared to some of the other water budget components: approximately 16,700 acre-feet per year. Therefore, although this component will have some influence on the Framework, the general results of this analysis will not be substantially changed by adding the return flow component later.

Deep percolation data presented in the updated Framework is based on data from the C2VSim model Land System Budget output. The updated Water budget data presented in the July 8, 2021 update to the Turlock Sub-Basin GSP resolved a discrepancy between the Groundwater Budget and Land System Budget used to build previous versions of the Framework. However, since the updated data only includes historical and baseline averages and the year 2010, other annual data presented in this version of the Framework are still based on the original C2VSim model outputs used in previous versions, described below.

Deep percolation data for the previous Framework versions were derived from both groundwater and land surface budgets of the C2VSim model Groundwater Budget. The percolation in the Land System Budget, however, included percolating water that remains in storage within the vadose zone and does not recharge the local aquifer. The Framework used percolation data from the Land System Budget to differentiate water ownership, however this leads to an overestimation of basin-wide recharge. From 1991-2015 the average difference between the Land System Budget Percolation Term and the Groundwater Budget Deep Percolation term was 13,287 AF.

To account for this discrepancy in the Framework, the difference between the percolation data from the Land System and Groundwater Budgets was calculated for each year. This difference is assumed to be water that remains as soil moisture, so it is subtracted from the Land System Budget data categories to calculate percolation that reaches the groundwater table. The soil moisture is subtracted from the various percolation components in proportion to each component's percentage of total percolation. An example of this calculation is shown below to calculate the Native Net Deep Percolation for the Water Accounting Framework.

LSB: Land System Budget  
 GWB: Groundwater Budget

Water Accounting Framework Native Net Deep Percolation =

$$LSB \text{ Native Percolation} - \left[ \left( \frac{LSB \text{ Native Percolation}}{LSB \text{ Total Percolation}} \right) * (LSB \text{ Percolation} - GWB \text{ Deep Percolation}) \right]$$

## COMPLETE WATER ACCOUNTING FRAMEWORK

The complete Framework combines the common pool, imported water, and salvaged water classifications. For these allocations, common pool water is apportioned between the WTSGSA and ETSGSA based on total net acreage. A per-acre allocation is first calculated for the entire Subbasin. The per-acre allocation is then multiplied by the number of acres in each GSA to arrive at a GSA specific allocation of the common pool water. The calculations showing the division of common pool supply between WTSGSA and ETSGSA is shown in [Table 4](#).

- [Table 4. Common Pool Supply Divided Between WTSGSA and ETSGSA](#)

	Historical Average (acre-feet/year)	Baseline Average (acre-feet/year)
<b>Subbasin-Wide</b>		
Average amount of available common pool water	136,859	206,750
Acres	348,511	348,511
Common pool allocation (acre-feet/acre)	0.393	0.593
<b>Subareas</b>		
West Turlock GSA (212,476 acres)	83,439	126,049
East Turlock GSA (136,035 acres)	53,420	80,701

The complete Water Accounting Framework accounting is shown in [Table 5](#). This allocation combines the common pool and imported water allocations to estimate the total amount of water each GSA is allocated under the historical and baseline conditions. [Table 5](#) also includes estimates of historical and future pumping in the ETSGSA and WTSGSA. The difference between the actual pumping and the allocation is an estimate of the overdraft or surplus that the ETSGSA and WTSGSA contribute to the Subbasin.



- Table 5. Water Accounting Framework Allocations

	Historical Average (acre-feet/year)		Baseline Average (acre-feet/year)	
	WTSGSA	ETSGSA	WTSGSA	ETSGSA
Common Pool	83,439	53,420	126,049	80,701
Imported Water	196,966	6,788	192,805	6,823
Total Allocation	280,405	60,209	318,853	87,524
Estimated Pumping	190,867	213,580	165,426	248,611
Surplus (positive) or overdraft (negative)	89,538	-153,371	153,427	-161,087

## **EXHIBIT B-1**

### **ETS GSA**

#### **Turlock Subbasin Proposed Water Accounting Framework**

##### **Purpose/Objective**

This framework is intended to generally define groundwater supply sources throughout the Turlock Subbasin, but does not represent an allocation between the ETS and the WTS GSAs, or to individual landowners. The accounting framework will facilitate development of solutions to ensure the Turlock subbasin is able to achieve sustainability.

##### **Native Groundwater Supply**

Native groundwater supply (native supply) is water that occurs naturally in the subbasin and is subject to extraction by overlying water right holders or appropriators. However, the Turlock Subbasin is currently in a state of overdraft, as determined by DWR, and as such, the native supply is not subject to new appropriation. Proposed accounting of the native supply yield is generally the total native supply divided by acres in the Turlock Subbasin. Native supply includes the following sources:

- Percolation from rain and precipitation
- Streambed percolation, from natural flow in channels
- Return flows from applied native groundwater
- Subsurface flows or underflows from deep aquifers, the Sierra-Nevada foothills and adjacent subbasins

##### **Imported Water**

Imported water is surface water that is brought from outside the subbasin, that is stored, conveyed, and applied to land within the subbasin. Imported surface water is owned by the importer. In most instances, the seepage percolation from imported water is also owned by the importer, but there are exceptions to this rule. The GSAs agree to complete in 2022 a proposed accounting for the following:

- Seepage and percolation from imported stored water in natural watercourses
- Seepage and percolation from imported water in conveyance facilities (canals, reservoirs, etc.)
- Percolation from application of imported water on irrigated lands.

### **Salvaged Water**

Salvaged water is water that is saved from waste and reclaimed by conservation or investment. Proposed accounting: Unless otherwise agreed to, salvaged water and seepage/percolation from salvaged water is owned by salvaging party. Supply of salvaged water includes:

- Water recaptured from stormwater return flows
- Water that is recharged from treated wastewater discharge
- Conserved water from infrastructure improvements

### **Measurement**

Any imported or salvaged water reclaimed will be measured using acceptable industry standards/methods of the then-current time and in a manner consistent with GSP requirements.<sup>3</sup>

### **Living Document**

This Water Accounting Framework is a living document that shall be revisited by the GSAs at least every five years as part of the GSP update.

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<sup>3</sup> Water Code § 10726.

## **EXHIBIT B-2**

**EAST TURLOCK SUBBASIN GSA**  
**TURLOCK SUBBASIN WATER ALLOCATION FRAMEWORK**  
Legal Issues November 10, 2021

**BACKGROUND**

**Part of the problem is that the September 13, 2021 Technical Memorandum prepared by Derrick Williams and Louis Wersan inaccurately characterizes water that leaks from project facilities or deep percolation of project irrigation water as Imported Water. Once recharged, such water meets the definition of Salvaged Water, as described below.**

**IMPORTED WATER**

Imported or foreign water are used interchangeably in California law:

If foreign waters are brought by artificial means into a watershed from another watershed, the person or organization constructing the diversion works and importing the water owns the right to use the water. This is true even when a natural watercourse is used as a conduit for foreign waters.<sup>4</sup> The importer of foreign waters has full rights to their use.<sup>5</sup>

Furthermore, as pointed out in *Haun v. DeVours*,<sup>6</sup> an importer of water can sell or transfer foreign waters before their abandonment. In fact, the importer can dispose of such return foreign waters by contract prior to abandonment.<sup>7</sup>

Native water is water which, without human intervention, historically provided replenishment to any given source. Accordingly, rainfall, stream channel infiltration, and tributary runoff all comprise the natural or native water supply.

Rights to imported or foreign water are those rights which attach to water that does not originate within a given watershed or groundwater basin.<sup>8</sup>

There is a tendency to refer to native water held in storage as “developed water” even though it may originate from within the watershed and is not technically imported. This is because the stored flow may augment the quantity of water that would otherwise be available from natural conditions in a different season or from year to year.

For the developed water supply to be classified as “foreign,” it must originate from outside the boundaries of the watershed into which the water supply is imported for its ultimate use. The water supply is considered to be foreign, because it does not naturally originate within the watershed of its use.<sup>9</sup>

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<sup>4</sup> See Wat. Code §7075

<sup>5</sup> *City of Los Angeles v. City of Glendale* (1943) 23 Cal. 2d 68, 76-78; *Stevens v. Oakdale Irrig. District* (1939) 13 Cal. 2d 343, 348-353.

<sup>6</sup> *Haun v. DeVours* (1950) 97 Cal. App 2d 841, 844.

<sup>7</sup> *Stevinson Water Dist. v. Roduner* (1950) 36 Cal. 2d 264, 267-671; Rogers & Nichols *Water for California* Volume I, Chapter XI §263.

<sup>8</sup> *City of Los Angeles v. City of San Fernando* (1975) 14 Cal.3d 199, 255-256; Slater, California Water Law and Policy, 7-3.

<sup>9</sup> Slater, California Water Law and Policy, 7-7 – 7-8.

## **SALVAGED WATER**

Salvaged water may be native to the extent it would naturally flow within the stream to which it is released, but it is “foreign in time.”<sup>10</sup> As such, it may include water that would have occurred in the aquifer under natural, pre-development conditions. This has important implications that limit a developer’s ability to lay claim to salvaged water recharged from its water importation facilities.

Salvaged waters are waters that are saved from loss in a stream or water source.<sup>11</sup> In general, the person who undertakes artificial works obtains the benefit of the waters thus developed or salvaged, as long as he does not infringe prior rights of others.

Thus, developers are entitled to waters that were not part of the natural flow. As to such waters, the court in *Vineland Irrigation Dist. v. Azusa Irrigating Co.*<sup>12</sup> pointed out that one is not entitled to developed waters that would naturally have gone into the watercourse or where their development injures the rights of others.<sup>13</sup>

The determination of whether one may enjoy the use of salvaged or conserved water originating from native supplies still depends on whether injury will result to existing lawful users.<sup>14</sup>

Water comprising a portion of the natural flow of a stream or comprising a portion of the natural, pre-development safe yield of a local groundwater basin, but which is salvaged through conservation efforts, is available to use by the salvager provided that no injury will result to other lawful users.<sup>15</sup>

## **SPECIFIC LEGAL ISSUES**

### **1. SALVAGED WATER CAN ONLY BE RECOVERED IF IT DOES NOT INJURE ANOTHER USER OF WATER.**

As is the case with return flows of imported water, a priority right to salvaged water *may* belong to the party salvaging the water and making it available to use, subject to certain limitations.

The general rule governing rights to the use of salvaged water is that the person who by his own efforts makes waters available that would have been part of the pre-development native yield, is entitled to use them, provided that in doing so he is not infringing the prior rights of other legal users.<sup>16</sup> The essential feature of the right to the use of salvaged waters is that its

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<sup>10</sup> See Attwater and Markle, Overview of California Water Rights and Water Quality Law (1988) 19 Pacific L.J. 957, 966.

<sup>11</sup> *Vernon Irrig. Co. v. Los Angeles* (1895) 106 Cal. 237, 253.

<sup>12</sup> (1899) 126 Cal 486.

<sup>13</sup> Rogers & Nichols *Water for California* Volume I, Chapter XII §265.

<sup>14</sup> Slater, California Water Law and Policy, 7-10.

<sup>15</sup> *Scott v. Fruit Growers Supply Co.* (1927) 202 Cal. 47, 51-55; Slater, California Water Law and Policy, 7-1.

<sup>16</sup> Hutchins, *The California Law of Water Rights*, at p. 383.

exercise does not cause injury to any pre-existing right.<sup>17</sup> If return flows available to lawful users are diminished by salvage operations, the actions of the salvager may be enjoined.<sup>18</sup>

Historically, before the dam(s) were constructed, and the Tuolumne River flowed freely, the flow was absorbed in the valley stretch of the stream as groundwater recharge. That pre-development groundwater recharge from uncontrolled winter and spring flows was decreased when the dam(s) were constructed, but overlying pumpers are entitled to pump the originally available recharge prior to development, and a salvager may not lay claim to such water. To the extent that such water originates in the Tuolumne River under natural conditions, the groundwater users are entitled to protection from depletion of the supply as the result of project operation. No challenge was brought to construction of the dam(s) on these grounds. However, canals that convey the surface water and the applied water from the Tuolumne River also recharge the groundwater basin, and overlying users within the basin have been using that water for decades. **If TID now makes a claim to that recharged water, these overlying users of pre-existing native groundwater would be injured.**

- Therefore, TID can make a claim to its salvaged water only to the extent that its operations create recharge over and above natural recharge that would have occurred without its storage project. Further hydrologic studies, including an analysis of pre-development conditions and simulation of pre-development versus post development recharge would have to take place to document this number. Alternative approaches may be agreed to in recognition of the fact that all such modeling studies are limited by the availability of data and other factors, and are inherently uncertain.
- Further, TID cannot make a claim at this late date on recapturing salvaged water from the groundwater basin without injury to existing groundwater users. Historically, TID has relinquished dominion and control of its surface water after it is used by landowners within its jurisdiction or lost to leakage from its facilities. Consequently, those supplies have become available for appropriation by overlying pumpers. TID cannot now attempt to recapture those waters without injury to the historic overlying users, who have a right to their equivalent share of the pre-development native yield.

## **2. TID HAS NOT OBTAINED A PERMIT TO RECOVER THE SALVAGED WATER IT CLAIMS.**

The State Water Resources Control Board takes the position that under existing California law a salvager must obtain a permit before appropriation of salvaged water; in others words, TID cannot store and recapture water in the underground (i.e., lay an ownership claim to it) without supplementing its existing water rights with an Underground Storage Supplement. In addition, it is unclear under California law what priority a salvager receives after salvage and

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<sup>17</sup> *Id.* at p. 385.

<sup>18</sup> Slater, *California Water Law and Policy*, at p. 7-15, citing *Scott v. Fruit Growers Supply Co.* (1927) 202 Cal. 47, 51-55.

diversion. Under existing administrative practice, the State Water Resources Control Board grants salvagers permit rights subject to claims by senior users.<sup>19</sup>

### **3. IN THE ALTERNATIVE, GROUNDWATER PUMPERS MAY HAVE ACQUIRED A PRESCRIPTIVE RIGHT TO THE WATER.**

If no prescriptive rights have attached to imported water used to recharge a basin, the imported water generally belongs solely to the importer, who may extract it (even if the basin is in overdraft) and use or export it without liability to other basin users. However, there is an open question as to whether prescription of imported water from the subbasin has occurred.<sup>20</sup>

### **4. THERE SHOULD BE A LEAVE BEHIND OF SALVAGED WATER FOR PROTECTION OF THE GROUNDWATER BASIN.**

In order to insure that a groundwater banking project protects the health of the basin, a leave-behind requirement from 10 to 30 percent is ordinarily imposed. “There are well defined rules regarding leave behinds to address migration of water necessary to keep the subbasin whole.”<sup>21</sup> In the case of Salvaged Water, a leave behind is necessary so as not to injure the rights of overlying pumpers to extract their correlative share of the pre-project native yield. This would further reduce the amount of groundwater recharge from project facilities that is available for salvage.

## **CONCERNS WITH TURLOCK SUBBASIN PROPOSED WATER ACCOUNTING FRAMEWORK AND TECHNICAL MEMORANDUM (“Framework”)**

The Framework defines Native groundwater supply as “water that occurs naturally in the subbasin and is subject to extraction by overlying water right holders of appropriators.” Native supply is stated to include (among other things):

- Streambed percolation, from natural flow in channels
- Return flows from applied native groundwater

It is important to remember that, historically, “natural flow in channels” included all flows now impounded by the New Don Pedro Project. Historically, high winter and spring flows regularly topped the Tuolumne River’s banks and supplied extensive recharge water to the Subbasin. This historical recharge volume should be considered part of the native groundwater supply. As noted in the water accounting framework concepts: “All overlying landowners in the Subbasin have a correlative right to extract and use common pool groundwater, and put it to beneficial use.”

Imported Water is defined as “surface water that is brought from outside the subbasin.” This is stated to include:

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<sup>19</sup> *Governor’s Commission to Review California Water Rights Law*, at p. 61 (December, 1978).

<sup>20</sup> Environmental Defense Fund and New Current Water and Land, LLC, *Groundwater Pumping Allocations under California’s Sustainable Groundwater Management Act* (July 2018) at p. 3.

<sup>21</sup> *Id.*



- Seepage and percolation from imported stored water in natural watercourses;
- Seepage and percolation from imported water in conveyance facilities (canals, reservoirs, etc.); and
- Percolation from application of imported water on irrigated lands.

These definitions are legally correct; however, in the technical memorandum, canal and reservoir infiltration of diverted Tuolumne River water and deep percolation of agricultural irrigation water from Tuolumne River diversions are incorrectly classified only as imported water components and allocated solely and exclusively to TID. Clearly, use of Tuolumne River water does not meet the stated definition of Imported Water that is “brought from outside the subbasin.” The Framework states that all water in canals is diverted river water, and therefore all infiltration of canal water is imported water – a questionable conclusion. In fact, since project water originates from within the Tuolumne River basin and is diverted within the subbasin, seepage and percolation of this water is not imported water, but abandoned salvage water, and subject to appropriation only to the extent it does not harm an overlying pumpers right to extract their correlative share of the pre-development native yield.

## CONCLUSIONS AND NEXT STEPS

1. WTSGSA continues to characterize water from their projects as “imported water.” There is no imported water in the basin; all of the water WTSGSA is referring to as imported water is legally categorized as salvaged water.
2. The WTSGSA Framework reaches the following conclusions regarding baseline averages:

	WTSGSA	ETSGSA
Common Pool	126,486	80,981
Imported Water	192,029	6,879
Total Allocation	318,515	87,859
Estimated Pumping	165,389	248,611
Surplus (positive) or overdraft (negative)	<b>153,137</b>	<b>-160,751</b>

Of the 192,029 acre feet of incorrectly labelled “imported water,” 76,305 acre feet is from canal and reservoir infiltration of Tuolumne River water diverted into canals and reservoirs, and 116,500 acre feet is from percolation of Tuolumne River water applied for irrigation.

3. Under the law, the ETSGSA has a strong legal claim to a significant portion of the native Tuolumne River water.
4. In order to make an informed argument as to which portion of the salvaged water ETSGSA is entitled to, additional information is needed to determine:

- What portion of the claimed water is attributable to historical natural flow in or flood events from, the river;
- What portion of the claimed seepage and percolation should be left behind for the basin; and
- What portion of the claimed seepage and percolation has been historically abandoned and/or used within the groundwater basin?

**RESOLUTION NO. 2021-07**

**RESOLUTION OF THE EAST TURLOCK SUBBASIN GROUNDWATER  
SUSTAINABILITY AGENCY BOARD OF DIRECTORS**

**ADOPTING THE FIRST AMENDMENT TO MEMORANDUM OF AGREEMENT  
BETWEEN THE WEST TURLOCK SUBBASIN GROUNDWATER SUSTAINABILITY  
AGENCY AND THE EAST TURLOCK SUBBASIN GROUNDWATER  
SUSTAINABILITY AGENCY**

The EAST TURLOCK SUBBASIN GROUNDWATER SUSTAINABILITY AGENCY of Stanislaus and Merced Counties does resolve as follows:

**WHEREAS**, in August 2014, the California Legislature passed, and in September 2014 the Governor signed, legislation creating the Sustainable Groundwater Management Act (“SGMA”) “to provide local groundwater sustainability agencies with the authority and technical and financial assistance necessary to sustainably manage groundwater” (Wat. Code, § 10720(d)); and

**WHEREAS**, SGMA requires sustainable management through the development of groundwater sustainability plans (“GSP”) (Wat. Code, § 10727); and

**WHEREAS**, SGMA requires a groundwater sustainability agency (“GSA”) to manage groundwater in all basins designated by the Department of Water Resources (“DWR”) as a medium or high priority, including the Turlock Subbasin (designated basin number 5-22.03 (“Subbasin”), by submitting one or more GSPs covering the entire groundwater basin by January 31, 2022 (Wat. Code §§ 10720.7(a)(2), 10733.4); and

**WHEREAS**, the East Turlock Subbasin Groundwater Sustainability Agency (“ETS GSA”) is the GSA for a portion of the Subbasin and holds responsibility for sustainably managing groundwater within its portion in the Subbasin, pursuant to the requirements of SGMA; and

**WHEREAS**, the West Turlock Subbasin Groundwater Sustainability Agency (“WTS GSA”) is the other GSA within the Subbasin responsible for sustainably managing groundwater within its portion of the Subbasin pursuant to the requirements of SGMA; and

**WHEREAS**, pursuant to that certain Memorandum of Agreement dated December 14, 2017 (“MOA”), the ETS GSA and the WTS GSA have collaborated to develop one GSP for the entire Subbasin, and plan to work collaboratively to implement the joint GSP within their respective portions of the Subbasin as outlined in the draft GSP; and

**WHEREAS**, the ETS GSA and the WTS GSA have not been able to agree on an accounting of groundwater, surface water stored in basin aquifers and/or the sustainable yield of the Subbasin be allocated to each GSA (“Groundwater Accounting Structure”), but have agreed to resolve that issue immediately after the GSP is submitted to DWR for review; and

**WHEREAS**, the ETS GSA desires to enter into a first amendment to the MOA to establish the steps needed to resolve the Groundwater Accounting Structure issue (“First Amendment to MOA”).

**NOW, THEREFORE, BE IT RESOLVED** that the Board of Directors of the East Turlock Subbasin Groundwater Sustainability Agency (“Board”) finds as follows:

1. The Recitals set forth above are true and correct and are incorporated into this Resolution by this reference.
2. The East Turlock Subbasin Groundwater Sustainability Agency (“ETS GSA”) Board hereby adopts that certain First Amendment to MOA attached hereto and incorporated herein as **Exhibit “A”**.
3. The ETS GSA Board further directs and authorizes its Chairman to take all further actions necessary to enter into the First Amendment to MOA, including executing it on behalf of the ETS GSA.
4. The ETS GSA Board further directs and authorizes its staff and consultants to take all further actions necessary to implement the intent of this First Amendment to MOA.

PASSED, APPROVED, AND ADOPTED this 15th day of November, 2021, by a motion from Director \_\_\_\_\_ and a second by Director \_\_\_\_\_, with the following vote to wit:

AYES:  
NOES:  
ABSTAIN:  
ABSENT:

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Al Rossini, Chair

**CERTIFICATE OF SECRETARY  
OF  
EAST TURLOCK SUBBASIN GROUNDWATER SUSTAINABILITY AGENCY**

I, Karen L. Whipp, do hereby certify that I am the duly authorized and appointed Secretary of the East Turlock Subbasin Groundwater Sustainability Agency, a joint powers authority (the “Agency”); that the foregoing is a true and correct copy of that certain resolution duly and unanimously adopted and approved by the Board of Directors of the Agency on the 15th day of November, 2021; and that said resolution has not been modified or rescinded and remains in full force and effect as the date hereof:

**IN WITNESS WHEREOF**, I have executed this Certificate on this \_\_\_\_\_ day of \_\_\_\_\_, 2021.

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Karen L. Whipp  
Secretary of East Turlock Subbasin  
Groundwater Sustainability Agency

**FIRST AMENDMENT TO  
MEMORANDUM OF AGREEMENT  
BETWEEN THE WEST TURLOCK SUBBASIN GROUNDWATER SUSTAINABILITY  
AGENCY AND THE EAST TURLOCK SUBBASIN GROUNDWATER  
SUSTAINABILITY AGENCY**

THIS FIRST AMENDMENT TO AGREEMENT (“First **Amendment**”) is entered into and effective this 15th day of November, 2021 (“**Effective Date**”), by and among the West Turlock Subbasin Groundwater Sustainability Agency (“**WTS GSA**”) and the East Turlock Subbasin Groundwater Sustainability Agency (“**ETS GSA**”) as an amendment to that Memorandum of Agreement between the Parties dated December 14, 2017 (“**MOA**”). Capitalized terms in this First Amendment shall have the meaning assigned in the MOA.

**RECITALS**

A. As contemplated by the MOA, the Parties are collaborating to develop a joint GSP for the Basin.

B. The Parties acknowledge that implementation of the GSP will require that an accounting of groundwater, surface water stored in basin aquifers and/or the sustainable yield of the basin be allocated to each GSA (“Groundwater Accounting Structure”).

C. The Parties have not been able to agree on an Groundwater Accounting Structure between the two GSAs, but have agreed to resolve that issue immediately after the GSP is submitted to the Department of Water Resources (“DWR”) for review.

THEREFORE, in consideration of the mutual promises, covenants and conditions herein set forth, the Parties agree as follows:

**1. METHOD TO RESOLVE THE GROUNDWATER ACCOUNTING STRUCTURE.**  
The Parties agree that they will undertake the following steps to resolve the accounting framework:

A. Continue to collaborate on the development of a single GSP for the Turlock Subbasin;

B. Suspend current negotiations over the Groundwater Accounting Structure until after the GSP is adopted by both GSAs;

C. Include an appendix in the GSP that includes the documents produced so far by both GSAs on the concept of the Groundwater Accounting Structure, which are attached hereto as **EXHIBIT A-1** and **EXHIBIT A-2** for the WTS GSA and **EXHIBIT B-1** and **EXHIBIT B-2** for the ETS GSA;

D. Include text in the appropriate sections of the GSP stating that the Groundwater Accounting Structure is an outstanding issue to be resolved, and that the current positions of each GSA is provided in the appendix; and

E. Add an Implementation Support Activity (or mutually acceptable equivalent) to the GSP requiring the development of an agreed upon Groundwater Accounting Structure by the GSAs, along with a timeline for doing so.

2. **CONTINUED VALIDITY.** Except as expressly provided in this First Amendment, the MOA shall continue unmodified and in full force and effect.

3. **RESERVATION OF SECTION 2.3.** To the extent the development of an agreed-upon Groundwater Accounting Structure is not achievable within a reasonable timeframe or otherwise impedes either Party's ability to implement the GSP or achieve sustainability within its respective GSA boundary, the Parties agree that any one Party may develop a separate GSP pursuant to section 2.3 of the MOA. Further, the Parties agree that the development of separate GSPs is allowable at any time under this First Amendment and that no action, including the submittal of a joint GSP to DWR, the development of annual reports, the acceptance of basin-level grant funding, shall preclude any Party from developing and submitting to DWR a separate GSP pursuant to this section and section 2.3 of the MOA.

4. **COUNTERPARTS AND ELECTRONIC SIGNATURES.** This First Amendment may be executed simultaneously in one or more counterparts, each of which shall be an original, but all of which together shall constitute one and the same document. A facsimile of .pdf signature of the Agreement shall be considered an original signature of this Agreement for all purposes.

**IN WITNESS WHEREOF,** the Parties have executed this Agreement on the day and year first above-written.

**“ETS GSA”**

EAST TURLOCK SUBBASIN  
GROUNDWATER SUSTAINABILITY AGENCY

By: \_\_\_\_\_ Date: \_\_\_\_\_  
Al Rossini, Chairman  
East Turlock Subbasin GSA

**“WTS GSA”**

WEST TURLOCK SUBBASIN  
GROUNDWATER SUSTAINABILITY AGENCY

By: \_\_\_\_\_ Date: \_\_\_\_\_  
Joe Alamo, Chairman  
West Turlock Subbasin GSA

## **EXHIBIT A-1**

### **WTS GSA**

#### **Turlock Subbasin Proposed Water Accounting Framework**

##### **Purpose/Objective**

This framework is intended to generally define groundwater supply sources throughout the Turlock Subbasin, but do not represent an allocation between the ETS and the WTS GSAs or to individual landowners. The accounting framework will facilitate development of solutions to ensure the Turlock subbasin is able to achieve sustainability.

##### **Native Groundwater Supply**

Native groundwater supply (native supply) is water that occurs naturally in the subbasin and is subject to extraction by overlying water right holders or appropriators. However, the Turlock Subbasin is currently in a state of overdraft, as determined by DWR, and as such, the native supply is not subject to new appropriation. Proposed accounting of the native supply yield is generally the total native supply divided by acres in the Turlock Subbasin. Native supply includes the following sources:

- Percolation from rain and precipitation
- Streambed percolation, from natural flow in channels
- Return flows from applied native groundwater
- Subsurface flows or underflows from deep aquifers, the Sierra-Nevada foothills and adjacent subbasins

##### **Imported Water**

Imported water is surface water that is brought from outside the subbasin, that is stored, conveyed, and applied to land within the subbasin with the intent of reclaiming it. Unless otherwise agreed to, imported water and the seepage therefrom is owned by the importer. Proposed accounting: seepage and storage



of imported water remains owned by the importing party. Subject to current law<sup>1</sup> and any contractual agreements stating otherwise, supply of imported water includes:

- Seepage and percolation from imported stored water in natural watercourses
- Seepage and percolation from imported water in conveyance facilities (canals, reservoirs, etc.)
- Percolation from application of imported water on irrigated lands

### **Salvaged Water**

Salvaged water is water that is saved from waste and reclaimed by conservation or investment. Proposed accounting: Unless otherwise agreed to, salvaged water and seepage/percolation from salvaged water is owned by salvaging party. Supply of salvaged water includes:

- Water recaptured from stormwater return flows
- Water that is recharged from treated wastewater discharge
- Conserved water from infrastructure improvements

### **Measurement**

Any imported or salvaged water reclaimed must be reported, in accordance with GSP requirements.<sup>2</sup>

### **Living Document**

This Water Accounting Framework is a living document that shall be revisited by the GSAs at least every five years as part of the GSP update.

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<sup>1</sup> See City of Santa Maria v. Adam, 149 Cal. Rptr. 3d. 491, 520–25 (Cal. Ct. App. 2012); City of Los Angeles v. City of Glendale, 142 P.2d 289, 294–95 (Cal. 1943); City of Los Angeles v. City of San Fernando, 537 P.2d 1250, 1294 – 95 (Cal. 1975).

<sup>2</sup> Water Code § 10726.

**EXHIBIT A-2**

## TECHNICAL MEMORANDUM

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**DATE:** September 13, 2021 **PROJECT #:** 9602.0101

**TO:** Debbie Montalbano, Turlock Irrigation District  
Michael Cooke, Turlock Irrigation District  
  
Valerie Kincaid, O'Laughlin & Paris LLP

**FROM:** Derrik Williams, P.G., C.Hg., Louis Wersan, P.G.

**PROJECT:** GSP Technical Support

**SUBJECT:** Updated Water Accounting Framework White Paper

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### INTRODUCTION

Montgomery & Associates (M&A) is developing a Water Accounting Framework (Framework) for the Turlock Subbasin on behalf of the Turlock Irrigation District (TID). The Framework classifies various components of the Subbasin's groundwater budget, consistent with commonly accepted rules regarding surface water and groundwater rights. The Framework provides a defensible and logical approach to allocating water and recognizes the investments made by various entities in the Subbasin to secure dependable and reliable water supplies.

The Framework is not an assessment or quantification of water rights. All groundwater extraction and use must comply with Article X, Section 2 of the California constitution, and conform to all other state and local laws.

### WATER ACCOUNTING FRAMEWORK CONCEPTS

The Framework classifies groundwater supplies based on generalized concepts of groundwater rights. The three generalized water rights concepts included in this memorandum include:

1. Common pool groundwater. Groundwater recharge that results from natural processes and conditions is common pool water. Examples include rainfall percolation, percolation of natural river flows, mountain front recharge, and inflow from neighboring subbasins. All overlying landowners in the Subbasin have a correlative right to extract and use common pool groundwater, and put it to beneficial use.
2. Imported Water. Water percolating to the groundwater as a result of importing water into the subbasin is imported water. Examples of percolation from imported water include

water that percolates to the groundwater through canal leakage, is intentionally recharged by ponds or wells, or percolates past the root zone after being applied for irrigation. The water that percolates from imported water is not divided among all groundwater users, but rather, belongs to the importer. Only the entity that imported the water has the right to extract imported water and put it to beneficial use.

3. Salvaged groundwater. Water that would otherwise leave the Subbasin or not otherwise be available for use but for the efforts of an entity is salvaged water. Examples include captured stormwater, treated wastewater, efficiency improvements, or percolation from the release of previously stored water. Any salvaged water that percolates to the groundwater through canal leakage, is intentionally recharged by ponds or wells, or percolates past the root zone after being applied for irrigation is salvaged groundwater. Only the entity that salvaged the water has the right to extract salvaged groundwater and put it to beneficial use.

The Framework is not a water budget. It does not address change in groundwater storage and does not concern groundwater flow directions within the Subbasin. The Framework only classifies groundwater inflows into the three water rights classifications listed above. Once groundwater is assigned one of the three classifications, it retains that classification regardless of where it flows in the Subbasin.

The Framework presented in this memorandum divides the groundwater inflows between two entities: the West Turlock Subbasin GSA (WTSGSA) and the East Turlock Subbasin GSA (ETSGSA). Further refinement of the Framework within each GSA could be possible with additional data and analysis.

## **WATER ACCOUNTING FRAMEWORK DATA**

The initial Framework is derived from detailed groundwater and land-surface budget data provided by Woodard Curran on December 8, 2020, and updated on February 24, 2021 and July 8, 2021 (D. Liebersbach, emails to D. Williams, December 8, 2020, and February 25, 2021). The groundwater and land-surface budget terms were extracted from the C2VSim-based model used by the Modesto and Turlock Subbasins for developing Groundwater Sustainability Plans (GSPs). Data from both the land surface budget and groundwater budget were used to develop the Framework.

The initial Framework was updated with data from the Draft Turlock Subbasin GSP released on July 8, 2021. Framework calculations and water supply data presented in this memorandum reflect the updated data. Water budget data from the draft GSP was only available for the historical and baseline averages as well as the year 2010. No other year-specific data were available for this update.

# GROUNDWATER ACCOUNTING FRAMEWORK ASSUMPTIONS AND CALCULATIONS

Montgomery & Associates estimated the Framework components shown in the list below. These are the terms that could be extracted or calculated from the C2VSim output. The groundwater budget terms extracted from the C2VSim model do not strictly correlate with the Framework components. Some assumptions and calculations were necessary to estimate the Framework components.

## Common Pool Components

- Mountain front recharge
- Subsurface flow from neighboring subbasins
- River gains and losses
- Deep percolation of precipitation on agricultural land
- Recharge from land covered with native vegetation
- Recharge in urban areas
- Deep percolation of agricultural irrigation water from private wells
- Deep percolation of applied agricultural irrigation water from TID wells
- Canal infiltration from groundwater pumped by TID

## Imported Water Components

- Canal and reservoir infiltration of diverted water
- Deep percolation of agricultural irrigation water from river diversions

## Salvaged Water Components

- Treated wastewater and recharged stormwater in urban settings
  - This is not currently differentiated from other urban recharge. This may be included in future versions of the Framework when more detailed model data are available

## Common Pool Components

This Framework calculates common pool components for the entire Subbasin rather than for the West Turlock and East Turlock GSAs. This is in accordance with groundwater case law, which apportions common pool groundwater among all users in the subbasin.

## Mountain Front Recharge and Subsurface Flow from Adjacent Subbasins

Mountain front recharge and subsurface flow from adjacent subbasins are both natural processes and are included in the common pool. Net subsurface flows (inflows minus outflows) for both

mountain front recharge and adjacent subbasins were extracted directly from C2VSim output spreadsheets.

### **Net Recharge or Discharge from River Gains and Losses**

River losses and gains, although influenced by reservoir releases and groundwater elevations, are considered natural processes that are included in the common pool. The annual net recharge or discharge from river gains and losses was extracted directly from C2VSim output. This single value represents the net recharge and discharge from the Tuolumne, Merced, and San Joaquin rivers.

### **Deep Percolation of Precipitation on Agricultural, and Native Vegetation Land**

Recharge of precipitation is a natural process and is included in the common pool. This Framework assumes that all recharge beneath lands covered with native vegetation is from precipitation, because there is no irrigation on these lands. Annual total recharge on lands with native vegetation and deep percolation of precipitation on agricultural lands were extracted directly from C2VSim output spreadsheets.

### **Deep Percolation Beneath Urban Land**

This Framework assumes that all deep percolation beneath urban lands has historically been derived from either precipitation or groundwater pumped by urban water agencies. Both sources are common pool sources and therefore all deep percolation beneath urban land remains common pool water. Annual deep percolation of water beneath urban land was extracted directly from C2VSim output spreadsheets.

In the future, some deep percolation beneath urban lands may be derived from imported surface waters, and this calculation will need to be adjusted to reflect the source of the urban water percolation. Currently, there is no estimate of how much future urban percolation may be from imported surface water supplies.

### **Deep Percolation of Irrigation Water Applied to Agricultural Land from Private Agricultural Wells and Agricultural Agency Wells**

This Framework assumes all wells extract common pool water, and therefore deep percolation of irrigation return flow from this pumping remains common pool water. This assumption likely results in an overestimate of common pool water and underestimate of imported water. Annual deep percolation of return flow from pumped groundwater was extracted directly from C2VSim output spreadsheets.

## Canal Infiltration of Groundwater Pumped by Agricultural Agencies

TID pumps groundwater into its canal system for delivery to growers. This Framework assumes the TID wells extract common pool water, and therefore any of this water that infiltrates through the bottom or sides of canals remains common pool water. This assumption likely results in an overestimate of common pool water and underestimate of imported water. The C2VSim model output does not differentiate between canal infiltration of pumped groundwater and canal infiltration of diverted water. This Framework estimates the amount of canal infiltration from pumped water by multiplying the total canal infiltration below the broad-crested weir at Turlock Lake by the percentage of water in canals derived from groundwater.

*Canal Infiltration of Ag. Agency Pumping =*

$$\text{Canal Infiltration Below Turlock Lake} \times \frac{\text{Ag. Agency Pumping}}{(\text{Ag. Agency Pumping}) + (\text{Ag. Agency Diversions})}$$

This may overestimate the canal infiltration of TID's pumped water, and therefore overestimate the amount of water in the common pool. A significant amount of infiltration from TID's canals below Turlock Lake likely occurs before groundwater is added to the canal system. Therefore, the canal and reservoir losses are mainly diverted river water, not pumped groundwater. This approach, however, provides a reasonable first estimate that could be refined with additional data and model outputs.

## Total Common Pool Supply

The average available common pool supplies for both the historical simulated period and the future baseline simulated period are shown in Table 1. Negative values represent a loss of groundwater from the Subbasin; positive values represent a gain of groundwater in the Subbasin.

- Table 1. Average Amounts of Common Pool Supplies

<b>Component</b>	<b>Historical Average (acre-feet/year)</b>	<b>Baseline Average (acre-feet/year)</b>
Mountain front recharge	2,200	2,100
Subsurface inflow/outflow	35,900	27,900
River gains/losses	-56,600	38,400
Percolation beneath native vegetation	11,800	6,500
Percolation of precipitation on ag. land	62,400	56,900
Percolation beneath urban lands	5,100	11,700
Percolation from private well pumping irrigating ag. land	47,500	47,200
Percolation from ag. agency well pumping irrigating ag. land	22,900	12,200
Infiltration of ag. agency pumping through canals	5,659	3,850
<b>Totals</b>	136,859	206,750

## Imported Water Components

Once surface water is lawfully diverted from a stream or river, the water becomes the possessory right of the diverter. Any infiltration of this diverted water through canals remains the possession of the diverter. This Framework calculates imported water components separately for the West Turlock and East Turlock GSAs. This is in accordance with groundwater case law, which allocates imported water to the importer.

### Canal and Reservoir Infiltration of Diverted Surface Water

This Framework assumes that all canal infiltration of diversions in the West Turlock subarea are from TID’s canal system, and all canal infiltration of diversions in the East Turlock subarea are from Merced Irrigation District’s (MID’s) canal system.

This Framework assumes that all water in the MID canal is diverted river water, and therefore all infiltration of MID’s canal water is imported water. Annual infiltration from East Turlock subarea canals was extracted directly from C2VSim output spreadsheets.

TID conveys both diverted river water and pumped groundwater through its canal system. The C2VSim model output does not differentiate between canal/reservoir infiltration of pumped groundwater and canal/reservoir infiltration of diverted water. This Framework estimates the amount of canal and reservoir infiltration from diverted water by multiplying the total canal infiltration below the broad-crested weir at Turlock Lake by the percentage of water in canals and reservoirs derived from diversions.



Canal Infiltration of Diversions =

$$\text{Canal Infiltration Below Turlock Lake} \times \frac{\text{West Turlock Diversions}}{(\text{TID Pumping}) + (\text{West Turlock Diversions})}$$

This likely underestimates the canal infiltration of TID’s diversions, and therefore underestimates the amount of imported water that belongs to the WTSGSA. A significant amount of infiltration from TID’s canals below Turlock Lake likely occurs before groundwater is added to the canal system. Therefore, the canal and reservoir losses are mainly diverted river water, not pumped groundwater. This approach, however, provides a reasonable first estimate that could be refined with additional data and model outputs.

### Deep Percolation of Irrigation Water Applied to Agricultural Land from Diversions

Any deep percolation of irrigation return flow from this diverted water remains the possession of the diverter. Annual deep percolation of return flow from diverted water was extracted directly from C2VSim output spreadsheets for both the West Turlock and East Turlock subareas.

### Total Imported Water Supplies

The average available imported water supplies for both the historical simulated period, and the future baseline simulated period are shown in [Table 2](#) for the West Turlock Subarea, and [Table 3](#) for the East Turlock Subarea.

- [Table 2. Average Amounts of Imported Water Supplies: West Turlock Subarea](#)

Component	Historical Average (acre-feet/year)	Baseline Average (acre-feet/year)
Canal and reservoir infiltration of diverted water	67,966	76,305
Percolation of diverted water applied for irrigation	129,000	116,500
<b>Total</b>	196,966	192,805

- [Table 3. Average Amounts of Imported Water Supplies: East Turlock Subarea](#)

Component	Historical Average (acre-feet/year)	Baseline Average (acre-feet/year)
Canal and reservoir infiltration of diverted water	4,888	5,223
Percolation of diverted water applied for irrigation	1,900	1,600
<b>Total</b>	6,788	6,823

## Salvaged Water

The C2VSim model output did not include any data for potential salvaged water, such as irrigation with recycled water from the Modesto wastewater treatment plant, recharge of stormwater capture, or seepage from stored water flowing in a natural water course.

## Unclear Model Output

The C2VSim model output provides values for water budget components that are unclear, such as agricultural runoff and return flow. The updated water budget data do not separate the terms labeled agricultural return and agricultural surface runoff; the fate of the return flow component is also unknown, and therefore, this Framework has not yet assigned this runoff and return flow to any one of the three Framework classifications. This runoff and return flow Subbasin-wide is small compared to some of the other water budget components: approximately 16,700 acre-feet per year. Therefore, although this component will have some influence on the Framework, the general results of this analysis will not be substantially changed by adding the return flow component later.

Deep percolation data presented in the updated Framework is based on data from the C2VSim model Land System Budget output. The updated Water budget data presented in the July 8, 2021 update to the Turlock Sub-Basin GSP resolved a discrepancy between the Groundwater Budget and Land System Budget used to build previous versions of the Framework. However, since the updated data only includes historical and baseline averages and the year 2010, other annual data presented in this version of the Framework are still based on the original C2VSim model outputs used in previous versions, described below.

Deep percolation data for the previous Framework versions were derived from both groundwater and land surface budgets of the C2VSim model Groundwater Budget. The percolation in the Land System Budget, however, included percolating water that remains in storage within the vadose zone and does not recharge the local aquifer. The Framework used percolation data from the Land System Budget to differentiate water ownership, however this leads to an overestimation of basin-wide recharge. From 1991-2015 the average difference between the Land System Budget Percolation Term and the Groundwater Budget Deep Percolation term was 13,287 AF.

To account for this discrepancy in the Framework, the difference between the percolation data from the Land System and Groundwater Budgets was calculated for each year. This difference is assumed to be water that remains as soil moisture, so it is subtracted from the Land System Budget data categories to calculate percolation that reaches the groundwater table. The soil moisture is subtracted from the various percolation components in proportion to each component's percentage of total percolation. An example of this calculation is shown below to calculate the Native Net Deep Percolation for the Water Accounting Framework.

LSB: Land System Budget  
 GWB: Groundwater Budget

Water Accounting Framework Native Net Deep Percolation =

$$LSB \text{ Native Percolation} - \left[ \left( \frac{LSB \text{ Native Percolation}}{LSB \text{ Total Percolation}} \right) * (LSB \text{ Percolation} - GWB \text{ Deep Percolation}) \right]$$

## COMPLETE WATER ACCOUNTING FRAMEWORK

The complete Framework combines the common pool, imported water, and salvaged water classifications. For these allocations, common pool water is apportioned between the WTSGSA and ETSGSA based on total net acreage. A per-acre allocation is first calculated for the entire Subbasin. The per-acre allocation is then multiplied by the number of acres in each GSA to arrive at a GSA specific allocation of the common pool water. The calculations showing the division of common pool supply between WTSGSA and ETSGSA is shown in [Table 4](#).

- [Table 4. Common Pool Supply Divided Between WTSGSA and ETSGSA](#)

	Historical Average (acre-feet/year)	Baseline Average (acre-feet/year)
<b>Subbasin-Wide</b>		
Average amount of available common pool water	136,859	206,750
Acres	348,511	348,511
Common pool allocation (acre-feet/acre)	0.393	0.593
<b>Subareas</b>		
West Turlock GSA (212,476 acres)	83,439	126,049
East Turlock GSA (136,035 acres)	53,420	80,701

The complete Water Accounting Framework accounting is shown in [Table 5](#). This allocation combines the common pool and imported water allocations to estimate the total amount of water each GSA is allocated under the historical and baseline conditions. [Table 5](#) also includes estimates of historical and future pumping in the ETSGSA and WTSGSA. The difference between the actual pumping and the allocation is an estimate of the overdraft or surplus that the ETSGSA and WTSGSA contribute to the Subbasin.

- Table 5. Water Accounting Framework Allocations

	Historical Average (acre-feet/year)		Baseline Average (acre-feet/year)	
	WTSGSA	ETSGSA	WTSGSA	ETSGSA
Common Pool	83,439	53,420	126,049	80,701
Imported Water	196,966	6,788	192,805	6,823
Total Allocation	280,405	60,209	318,853	87,524
Estimated Pumping	190,867	213,580	165,426	248,611
Surplus (positive) or overdraft (negative)	89,538	-153,371	153,427	-161,087

## **EXHIBIT B-1**

### **ETS GSA**

#### **Turlock Subbasin Proposed Water Accounting Framework**

##### **Purpose/Objective**

This framework is intended to generally define groundwater supply sources throughout the Turlock Subbasin, but does not represent an allocation between the ETS and the WTS GSAs, or to individual landowners. The accounting framework will facilitate development of solutions to ensure the Turlock subbasin is able to achieve sustainability.

##### **Native Groundwater Supply**

Native groundwater supply (native supply) is water that occurs naturally in the subbasin and is subject to extraction by overlying water right holders or appropriators. However, the Turlock Subbasin is currently in a state of overdraft, as determined by DWR, and as such, the native supply is not subject to new appropriation. Proposed accounting of the native supply yield is generally the total native supply divided by acres in the Turlock Subbasin. Native supply includes the following sources:

- Percolation from rain and precipitation
- Streambed percolation, from natural flow in channels
- Return flows from applied native groundwater
- Subsurface flows or underflows from deep aquifers, the Sierra-Nevada foothills and adjacent subbasins

##### **Imported Water**

Imported water is surface water that is brought from outside the subbasin, that is stored, conveyed, and applied to land within the subbasin. Imported surface water is owned by the importer. In most instances, the seepage percolation from imported water is also owned by the importer, but there are exceptions to this rule. The GSAs agree to complete in 2022 a proposed accounting for the following:

- Seepage and percolation from imported stored water in natural watercourses
- Seepage and percolation from imported water in conveyance facilities (canals, reservoirs, etc.)
- Percolation from application of imported water on irrigated lands.

### **Salvaged Water**

Salvaged water is water that is saved from waste and reclaimed by conservation or investment. Proposed accounting: Unless otherwise agreed to, salvaged water and seepage/percolation from salvaged water is owned by salvaging party. Supply of salvaged water includes:

- Water recaptured from stormwater return flows
- Water that is recharged from treated wastewater discharge
- Conserved water from infrastructure improvements

### **Measurement**

Any imported or salvaged water reclaimed will be measured using acceptable industry standards/methods of the then-current time and in a manner consistent with GSP requirements.<sup>3</sup>

### **Living Document**

This Water Accounting Framework is a living document that shall be revisited by the GSAs at least every five years as part of the GSP update.

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<sup>3</sup> Water Code § 10726.

## **EXHIBIT B-2**

**EAST TURLOCK SUBBASIN GSA**  
**TURLOCK SUBBASIN WATER ALLOCATION FRAMEWORK**  
Legal Issues November 10, 2021

**BACKGROUND**

**Part of the problem is that the September 13, 2021 Technical Memorandum prepared by Derrick Williams and Louis Wersan inaccurately characterizes water that leaks from project facilities or deep percolation of project irrigation water as Imported Water. Once recharged, such water meets the definition of Salvaged Water, as described below.**

**IMPORTED WATER**

Imported or foreign water are used interchangeably in California law:

If foreign waters are brought by artificial means into a watershed from another watershed, the person or organization constructing the diversion works and importing the water owns the right to use the water. This is true even when a natural watercourse is used as a conduit for foreign waters.<sup>4</sup> The importer of foreign waters has full rights to their use.<sup>5</sup>

Furthermore, as pointed out in *Haun v. DeVours*,<sup>6</sup> an importer of water can sell or transfer foreign waters before their abandonment. In fact, the importer can dispose of such return foreign waters by contract prior to abandonment.<sup>7</sup>

Native water is water which, without human intervention, historically provided replenishment to any given source. Accordingly, rainfall, stream channel infiltration, and tributary runoff all comprise the natural or native water supply.

Rights to imported or foreign water are those rights which attach to water that does not originate within a given watershed or groundwater basin.<sup>8</sup>

There is a tendency to refer to native water held in storage as “developed water” even though it may originate from within the watershed and is not technically imported. This is because the stored flow may augment the quantity of water that would otherwise be available from natural conditions in a different season or from year to year.

For the developed water supply to be classified as “foreign,” it must originate from outside the boundaries of the watershed into which the water supply is imported for its ultimate use. The water supply is considered to be foreign, because it does not naturally originate within the watershed of its use.<sup>9</sup>

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<sup>4</sup> See Wat. Code §7075

<sup>5</sup> *City of Los Angeles v. City of Glendale* (1943) 23 Cal. 2d 68, 76-78; *Stevens v. Oakdale Irrig. District* (1939) 13 Cal. 2d 343, 348-353.

<sup>6</sup> *Haun v. DeVours* (1950) 97 Cal. App 2d 841, 844.

<sup>7</sup> *Stevinson Water Dist. v. Roduner* (1950) 36 Cal. 2d 264, 267-671; Rogers & Nichols *Water for California* Volume I, Chapter XI §263.

<sup>8</sup> *City of Los Angeles v. City of San Fernando* (1975) 14 Cal.3d 199, 255-256; Slater, California Water Law and Policy, 7-3.

<sup>9</sup> Slater, California Water Law and Policy, 7-7 – 7-8.



## **SALVAGED WATER**

Salvaged water may be native to the extent it would naturally flow within the stream to which it is released, but it is “foreign in time.”<sup>10</sup> As such, it may include water that would have occurred in the aquifer under natural, pre-development conditions. This has important implications that limit a developer’s ability to lay claim to salvaged water recharged from its water importation facilities.

Salvaged waters are waters that are saved from loss in a stream or water source.<sup>11</sup> In general, the person who undertakes artificial works obtains the benefit of the waters thus developed or salvaged, as long as he does not infringe prior rights of others.

Thus, developers are entitled to waters that were not part of the natural flow. As to such waters, the court in *Vineland Irrigation Dist. v. Azusa Irrigating Co.*<sup>12</sup> pointed out that one is not entitled to developed waters that would naturally have gone into the watercourse or where their development injures the rights of others.<sup>13</sup>

The determination of whether one may enjoy the use of salvaged or conserved water originating from native supplies still depends on whether injury will result to existing lawful users.<sup>14</sup>

Water comprising a portion of the natural flow of a stream or comprising a portion of the natural, pre-development safe yield of a local groundwater basin, but which is salvaged through conservation efforts, is available to use by the salvager provided that no injury will result to other lawful users.<sup>15</sup>

## **SPECIFIC LEGAL ISSUES**

### **1. SALVAGED WATER CAN ONLY BE RECOVERED IF IT DOES NOT INJURE ANOTHER USER OF WATER.**

As is the case with return flows of imported water, a priority right to salvaged water *may* belong to the party salvaging the water and making it available to use, subject to certain limitations.

The general rule governing rights to the use of salvaged water is that the person who by his own efforts makes waters available that would have been part of the pre-development native yield, is entitled to use them, provided that in doing so he is not infringing the prior rights of other legal users.<sup>16</sup> The essential feature of the right to the use of salvaged waters is that its

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<sup>10</sup> See Attwater and Markle, Overview of California Water Rights and Water Quality Law (1988) 19 Pacific L.J. 957, 966.

<sup>11</sup> *Vernon Irrig. Co. v. Los Angeles* (1895) 106 Cal. 237, 253.

<sup>12</sup> (1899) 126 Cal 486.

<sup>13</sup> Rogers & Nichols *Water for California* Volume I, Chapter XII §265.

<sup>14</sup> Slater, California Water Law and Policy, 7-10.

<sup>15</sup> *Scott v. Fruit Growers Supply Co.* (1927) 202 Cal. 47, 51-55; Slater, California Water Law and Policy, 7-1.

<sup>16</sup> Hutchins, *The California Law of Water Rights*, at p. 383.

exercise does not cause injury to any pre-existing right.<sup>17</sup> If return flows available to lawful users are diminished by salvage operations, the actions of the salvager may be enjoined.<sup>18</sup>

Historically, before the dam(s) were constructed, and the Tuolumne River flowed freely, the flow was absorbed in the valley stretch of the stream as groundwater recharge. That pre-development groundwater recharge from uncontrolled winter and spring flows was decreased when the dam(s) were constructed, but overlying pumpers are entitled to pump the originally available recharge prior to development, and a salvager may not lay claim to such water. To the extent that such water originates in the Tuolumne River under natural conditions, the groundwater users are entitled to protection from depletion of the supply as the result of project operation. No challenge was brought to construction of the dam(s) on these grounds. However, canals that convey the surface water and the applied water from the Tuolumne River also recharge the groundwater basin, and overlying users within the basin have been using that water for decades. **If TID now makes a claim to that recharged water, these overlying users of pre-existing native groundwater would be injured.**

- Therefore, TID can make a claim to its salvaged water only to the extent that its operations create recharge over and above natural recharge that would have occurred without its storage project. Further hydrologic studies, including an analysis of pre-development conditions and simulation of pre-development versus post development recharge would have to take place to document this number. Alternative approaches may be agreed to in recognition of the fact that all such modeling studies are limited by the availability of data and other factors, and are inherently uncertain.
- Further, TID cannot make a claim at this late date on recapturing salvaged water from the groundwater basin without injury to existing groundwater users. Historically, TID has relinquished dominion and control of its surface water after it is used by landowners within its jurisdiction or lost to leakage from its facilities. Consequently, those supplies have become available for appropriation by overlying pumpers. TID cannot now attempt to recapture those waters without injury to the historic overlying users, who have a right to their equivalent share of the pre-development native yield.

## **2. TID HAS NOT OBTAINED A PERMIT TO RECOVER THE SALVAGED WATER IT CLAIMS.**

The State Water Resources Control Board takes the position that under existing California law a salvager must obtain a permit before appropriation of salvaged water; in others words, TID cannot store and recapture water in the underground (i.e., lay an ownership claim to it) without supplementing its existing water rights with an Underground Storage Supplement. In addition, it is unclear under California law what priority a salvager receives after salvage and

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<sup>17</sup> *Id.* at p. 385.

<sup>18</sup> Slater, *California Water Law and Policy*, at p. 7-15, citing *Scott v. Fruit Growers Supply Co.* (1927) 202 Cal. 47, 51-55.

diversion. Under existing administrative practice, the State Water Resources Control Board grants salvagers permit rights subject to claims by senior users.<sup>19</sup>

### **3. IN THE ALTERNATIVE, GROUNDWATER PUMPERS MAY HAVE ACQUIRED A PRESCRIPTIVE RIGHT TO THE WATER.**

If no prescriptive rights have attached to imported water used to recharge a basin, the imported water generally belongs solely to the importer, who may extract it (even if the basin is in overdraft) and use or export it without liability to other basin users. However, there is an open question as to whether prescription of imported water from the subbasin has occurred.<sup>20</sup>

### **4. THERE SHOULD BE A LEAVE BEHIND OF SALVAGED WATER FOR PROTECTION OF THE GROUNDWATER BASIN.**

In order to insure that a groundwater banking project protects the health of the basin, a leave-behind requirement from 10 to 30 percent is ordinarily imposed. “There are well defined rules regarding leave behinds to address migration of water necessary to keep the subbasin whole.”<sup>21</sup> In the case of Salvaged Water, a leave behind is necessary so as not to injure the rights of overlying pumpers to extract their correlative share of the pre-project native yield. This would further reduce the amount of groundwater recharge from project facilities that is available for salvage.

## **CONCERNS WITH TURLOCK SUBBASIN PROPOSED WATER ACCOUNTING FRAMEWORK AND TECHNICAL MEMORANDUM (“Framework”)**

The Framework defines Native groundwater supply as “water that occurs naturally in the subbasin and is subject to extraction by overlying water right holders of appropriators.” Native supply is stated to include (among other things):

- Streambed percolation, from natural flow in channels
- Return flows from applied native groundwater

It is important to remember that, historically, “natural flow in channels” included all flows now impounded by the New Don Pedro Project. Historically, high winter and spring flows regularly topped the Tuolumne River’s banks and supplied extensive recharge water to the Subbasin. This historical recharge volume should be considered part of the native groundwater supply. As noted in the water accounting framework concepts: “All overlying landowners in the Subbasin have a correlative right to extract and use common pool groundwater, and put it to beneficial use.”

Imported Water is defined as “surface water that is brought from outside the subbasin.” This is stated to include:

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<sup>19</sup> *Governor’s Commission to Review California Water Rights Law*, at p. 61 (December, 1978).

<sup>20</sup> Environmental Defense Fund and New Current Water and Land, LLC, *Groundwater Pumping Allocations under California’s Sustainable Groundwater Management Act* (July 2018) at p. 3.

<sup>21</sup> *Id.*

- Seepage and percolation from imported stored water in natural watercourses;
- Seepage and percolation from imported water in conveyance facilities (canals, reservoirs, etc.); and
- Percolation from application of imported water on irrigated lands.

These definitions are legally correct; however, in the technical memorandum, canal and reservoir infiltration of diverted Tuolumne River water and deep percolation of agricultural irrigation water from Tuolumne River diversions are incorrectly classified only as imported water components and allocated solely and exclusively to TID. Clearly, use of Tuolumne River water does not meet the stated definition of Imported Water that is “brought from outside the subbasin.” The Framework states that all water in canals is diverted river water, and therefore all infiltration of canal water is imported water – a questionable conclusion. In fact, since project water originates from within the Tuolumne River basin and is diverted within the subbasin, seepage and percolation of this water is not imported water, but abandoned salvage water, and subject to appropriation only to the extent it does not harm an overlying pumpers right to extract their correlative share of the pre-development native yield.

## CONCLUSIONS AND NEXT STEPS

1. WTSGSA continues to characterize water from their projects as “imported water.” There is no imported water in the basin; all of the water WTSGSA is referring to as imported water is legally categorized as salvaged water.
2. The WTSGSA Framework reaches the following conclusions regarding baseline averages:

	WTSGSA	ETSGSA
Common Pool	126,486	80,981
Imported Water	192,029	6,879
Total Allocation	318,515	87,859
Estimated Pumping	165,389	248,611
Surplus (positive) or overdraft (negative)	<b>153,137</b>	<b>-160,751</b>

Of the 192,029 acre feet of incorrectly labelled “imported water,” 76,305 acre feet is from canal and reservoir infiltration of Tuolumne River water diverted into canals and reservoirs, and 116,500 acre feet is from percolation of Tuolumne River water applied for irrigation.

3. Under the law, the ETSGSA has a strong legal claim to a significant portion of the native Tuolumne River water.
4. In order to make an informed argument as to which portion of the salvaged water ETSGSA is entitled to, additional information is needed to determine:

- What portion of the claimed water is attributable to historical natural flow in or flood events from, the river;
- What portion of the claimed seepage and percolation should be left behind for the basin; and
- What portion of the claimed seepage and percolation has been historically abandoned and/or used within the groundwater basin?



**EAST TURLOCK SUBBASIN GROUNDWATER SUSTAINABILITY AGENCY  
WEST TURLOCK SUBBASIN GROUNDWATER SUSTAINABILITY AGENCY**

**NOVEMBER 15, 2021  
SPECIAL MEETING  
AGENDA REPORT**

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**TO: East Turlock Subbasin and West Turlock Subbasin GSA Boards**

**FROM: Lauren D. Layne, ETS GSA General Counsel and Valerie Kincaid, WTS GSA General Counsel**

**SUBJECT: Public Hearing Date to Adopt GSP and Required Notices**

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**ACTION:** Adopting Resolutions of the West Turlock Subbasin and East Turlock Subbasin Groundwater Sustainability Agencies Board of Directors establishing a public hearing date to consider adopting the Turlock Subbasin Groundwater Sustainability Plan and directing their Technical Advisory Committees to publish the required notices

**Background**

In August 2014, the California Legislature passed, and in September 2014 the Governor signed, legislation creating the Sustainable Groundwater Management Act (“SGMA”) “to provide local groundwater sustainability agencies with the authority and technical and financial assistance necessary to sustainably manage groundwater” (Wat. Code, § 10720, (d)). SGMA requires sustainable management through the development of groundwater sustainability plans (“GSP”) (Wat. Code, § 10727). Additionally, SGMA requires a groundwater sustainability agency (“GSA”) to manage groundwater in all basins designated by the Department of Water Resources (“DWR”) as a medium or high priority, including the Turlock Subbasin (designated basin number 5-22.03).

The West Turlock Subbasin Groundwater Sustainability Agency (“WTS GSA”) is the GSA for a portion of the Turlock Subbasin and holds responsibility for sustainably managing groundwater within its’ portion in the Turlock Subbasin, pursuant to the requirements of SGMA. The East Turlock Subbasin Groundwater Sustainability Agency (“ETS GSA”) is the other GSA within the Turlock Subbasin responsible for sustainably managing the subbasin pursuant to the requirements of SGMA. The WTS GSA and the ETS GSA (collectively referred to as the “GSAs”) are collaborating to develop one GSP for the Turlock Subbasin, and plan to work collaboratively to implement the GSP within their respective areas of the subbasin as outlined in the draft GSP.

SGMA requires that a GSA hold a public hearing to consider adopting its GSP and take public comments, held at least 90 days after providing notice to affected cities and counties within the GSP area (Wat. Code § 10728.4). The WTS GSA and the ETS GSA jointly provided written notice to the affected cities and counties within the Subbasin on September 10, 2021. In preparation for adopting the GSP for the Subbasin by the statutory deadline and to provide sufficient time to upload and submit the GSP, it may be helpful to establish a joint public hearing



date of January 6, 2022 to review and consider comments from the public regarding the GSP and to consider adopting the GSP.

**Recommendation**

The Technical Advisory Committees (TACs) recommend the GSA Boards establish a public hearing date of January 6, 2022 to consider adopting the Turlock Subbasin Groundwater Sustainability Plan and direct the TACs to publish the required notices.

**RESOLUTION NO. 2021-9**

**RESOLUTION OF THE WEST TURLOCK SUBBASIN GROUNDWATER SUSTAINABILITY AGENCY (WTS GSA) BOARD OF DIRECTORS (BOARD) ESTABLISHING A PUBLIC HEARING DATE TO CONSIDER ADOPTING THE TURLOCK SUBBASIN GROUNDWATER SUSTAINABILITY PLAN AND DIRECTING ITS TECHNICAL ADVISORY COMMITTEE TO PUBLISH THE REQUIRED NOTICES**

WHEREAS, in August 2014, the California Legislature passed, and in September 2014 the Governor signed, legislation creating the Sustainable Groundwater Management Act (“SGMA”) “to provide local groundwater sustainability agencies with the authority and technical and financial assistance necessary to sustainably manage groundwater” (Wat. Code, § 10720(d)); and

WHEREAS, SGMA requires sustainable management through the development of groundwater sustainability plans (“GSP”) (Wat. Code, § 10727); and

WHEREAS, SGMA requires a groundwater sustainability agency (“GSA”) to manage groundwater in all basins designated by the Department of Water Resources (“DWR”) as a medium or high priority, including the Turlock Subbasin (designated basin number 5-22.03) (“Subbasin”), by submitting one or more GSPs covering the entire groundwater basin by January 31, 2022 (Wat. Code §§ 10720.7(a)(2), 10733.4); and

WHEREAS, the West Turlock Subbasin Groundwater Sustainability Agency (“WTS GSA”) is the GSA for a portion of the Subbasin and holds responsibility for sustainably managing groundwater within its portion in the Subbasin, pursuant to the requirements of SGMA; and

WHEREAS, the East Turlock Subbasin Groundwater Sustainability Agency (“ETS GSA”) is the other GSA within the Subbasin responsible for sustainably managing groundwater within its portion of the Subbasin pursuant to the requirements of SGMA; and

WHEREAS, the WTS GSA and the ETS GSA collaborated to develop one GSP for the entire Subbasin, and plan to work collaboratively to implement the GSP within their respective portions of the Subbasin as outlined in the draft GSP; and

WHEREAS, the WTS GSA and the ETS GSA have each established Technical Advisory Committees (each, a “TAC”) to assist and advise their respective Boards of Directors on technical aspects of the draft GSP; and

WHEREAS, SGMA requires that a GSA hold a public hearing to consider adopting its GSP and take public comments, held at least 90 days after providing notice to affected cities and counties within the GSP area (Wat. Code § 10728.4); and

WHEREAS, the WTS GSA and the ETS GSA jointly provided written notice to the affected cities and counties within the Subbasin on September 10, 2021; and

WHEREAS, the WTS GSA and the ETS GSA, in preparation for adopting their GSP for the Subbasin by the statutory deadline, now desire to establish a joint public hearing date to so review and consider comments from the public regarding the GSP and to consider adopting the GSP.



NOW, THEREFORE, BE IT RESOLVED by the Board of Directors of the WTS GSA that:

Section 1. Recitals. The Recitals set forth above are true and correct and are incorporated into this Resolution by this reference.

Section 2. Public Hearing Date. The West Turlock Subbasin Groundwater Sustainability Agency Board hereby establishes a joint public hearing to review and consider comments from the public regarding the GSP and to consider adopting the GSP on January 6, 2022.

Section 3. Public Hearing Notice. 3. The West Turlock Subbasin Groundwater Sustainability Agency Board further directs its Technical Advisory Committee members to take all further action necessary to provide notice to the public and interested parties of the aforementioned public hearing.

Moved by Director \_\_\_\_\_ seconded by Director \_\_\_\_\_, that the foregoing resolution be adopted.

Upon roll call, the following vote was had:

Ayes:

Noes:

Absent:

The Chair declared the resolution adopted.

I, Joe Alamo, Chair of the Board of Directors of the WEST TURLOCK SUBBASIN GROUNDWATER SUSTAINABILITY AGENCY, do hereby CERTIFY that the foregoing is a full, true, and correct copy of a resolution duly adopted at a special meeting of said Board held the 15<sup>th</sup> day of November, 2021.

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Joe Alamo, Chair  
Board of Directors  
West Turlock Subbasin GSA

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ATTEST: Jennifer Land, Secretary  
Board of Directors  
West Turlock Subbasin GSA

**RESOLUTION NO. 2021-08**

**RESOLUTION OF THE EAST TURLOCK SUBBASIN GROUNDWATER  
SUSTAINABILITY AGENCY BOARD OF DIRECTORS**

**ESTABLISHING A PUBLIC HEARING DATE TO CONSIDER ADOPTING THE  
JOINT TURLOCK SUBBASIN GROUNDWATER SUSTAINABILITY PLAN AND  
DIRECTING ITS TECHNICAL ADVISORY COMMITTEE TO PUBLISH THE  
REQUIRED NOTICES**

The EAST TURLOCK SUBBASIN GROUNDWATER SUSTAINABILITY AGENCY of Stanislaus and Merced Counties does resolve as follows:

**WHEREAS**, in August 2014, the California Legislature passed, and in September 2014 the Governor signed, legislation creating the Sustainable Groundwater Management Act (“SGMA”) “to provide local groundwater sustainability agencies with the authority and technical and financial assistance necessary to sustainably manage groundwater” (Wat. Code, § 10720(d)); and

**WHEREAS**, SGMA requires sustainable management through the development of groundwater sustainability plans (“GSP”) (Wat. Code, § 10727); and

**WHEREAS**, SGMA requires a groundwater sustainability agency (“GSA”) to manage groundwater in all basins designated by the Department of Water Resources (“DWR”) as a medium or high priority, including the Turlock Subbasin (designated basin number 5-22.03) (“Subbasin”), by submitting one or more GSPs covering the entire groundwater basin by January 31, 2022 (Wat. Code §§ 10720.7(a)(2), 10733.4); and

**WHEREAS**, the East Turlock Subbasin Groundwater Sustainability Agency (“ETS GSA”) is the GSA for a portion of the Subbasin and holds responsibility for sustainably managing groundwater within its portion in the Subbasin, pursuant to the requirements of SGMA; and

**WHEREAS**, the West Turlock Subbasin Groundwater Sustainability Agency (“WTS GSA”) is the other GSA within the Subbasin responsible for sustainably managing groundwater within its portion of the Subbasin pursuant to the requirements of SGMA; and

**WHEREAS**, the ETS GSA and the WTS GSA collaborated to develop one GSP for the entire Subbasin, and plan to work collaboratively to implement the joint GSP within their respective portions of the Subbasin as outlined in the draft GSP; and

**WHEREAS**, the ETS GSA and the WTS GSA have each established Technical Advisory Committees (each, a “TAC”) to assist and advise their respective Boards of Directors on technical aspects of the draft GSP; and

**WHEREAS**, SGMA requires that a GSA hold a public hearing to consider adopting its GSP and take public comments, held at least 90 days after providing notice to affected cities and counties within the GSP area (Wat. Code § 10728.4); and

**WHEREAS**, the ETS GSA and the WTS GSA jointly provided written notice to the affected cities and counties within the Subbasin on September 10, 2021; and

**WHEREAS**, the ETS GSA and the WTS GSA, in preparation for adopting their joint GSP for the Subbasin by the statutory deadline, now desire to establish a joint public hearing date to so review and consider comments from the public regarding the GSP and to consider adopting the joint GSP.

**NOW, THEREFORE, BE IT RESOLVED** that the Board of Directors of the East Turlock Subbasin Groundwater Sustainability Agency (“Board”) finds as follows:

1. The Recitals set forth above are true and correct and are incorporated into this Resolution by this reference.
2. The East Turlock Subbasin Groundwater Sustainability Agency Board hereby establishes a joint public hearing to review and consider comments from the public regarding the GSP and to consider adopting the joint GSP on January 6, 2022.
3. The East Turlock Subbasin Groundwater Sustainability Agency Board further directs its Technical Advisory Committee members to take all further action necessary to provide notice to the public and interested parties of the aforementioned public hearing.

PASSED, APPROVED, AND ADOPTED this 15th day of November, 2021, by a motion from Director \_\_\_\_\_ and a second by Director \_\_\_\_\_, with the following vote to wit:

AYES:  
NOES:  
ABSTAIN:  
ABSENT:

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Al Rossini, Chair

**CERTIFICATE OF SECRETARY  
OF  
EAST TURLOCK SUBBASIN GROUNDWATER SUSTAINABILITY AGENCY**

I, Karen L. Whipp, do hereby certify that I am the duly authorized and appointed Secretary of the East Turlock Subbasin Groundwater Sustainability Agency, a joint powers authority (the “Agency”); that the foregoing is a true and correct copy of that certain resolution duly and unanimously adopted and approved by the Board of Directors of the Agency on the 15th day of November, 2021; and that said resolution has not been modified or rescinded and remains in full force and effect as the date hereof:

**IN WITNESS WHEREOF**, I have executed this Certificate on this \_\_\_\_\_ day of \_\_\_\_\_, 2021.

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Karen L. Whipp  
Secretary of East Turlock Subbasin  
Groundwater Sustainability Agency