

COMMUNITY DEVELOPMENT DEPARTMENT, WATER RESOURCES DIVISION 100 Sunrise Boulevard Suite A, Colusa, CA 95932 | 530-458-0719

COLUSA COUNTY GROUNDWATER COMMISSION SPECIAL MEETING

Darrin Williams, Dist. 1 | Deke Dormer, Dist. 2 | Matt LaGrande, Dist. 3 | Tom Charter, Dist. 4 | Jeff Moresco, Dist. 5

Meeting Agenda

Location: Colusa Industrial Properties Conference Room, 100 Sunrise Blvd., Colusa, CA 95932

NOTE: There will be limited in-person seating available. Physical distancing will be enforced.

Groundwater Commissioners and Staff will have first priority for in-person seating.

Attendees may participate via teleconference, pursuant to the Governor's Executive Order N-29-20. Members of the Public are encouraged to participate in the meeting via teleconference. Attendees on the teleconference will be able to listen to the meeting and provide any comments by dialing in to the teleconference at the number below:

Dial: 1-800-356-8278

Code: 877875 (Please keep your phone on **mute** unless speaking)

Date: June 29, 2020 Time: 1:00 p.m.

* Indicates Action Item

1. CALL TO ORDER

- a. Pledge of Allegiance
- b. Roll Call of Commissioners
- c. Introduction of Others
- d. *Approval of Minutes from the June 3, 2020 Meeting
- e. Period of Public Comment

Any person wishing to address the Commission on any item not on today's Agenda may do so at this time. The Commission will not be making a decision or determination on items brought up during Public Comment.

2. <u>DISCUSSION/ACTION ITEMS</u>

a. REQUEST FOR PERMIT FOR GROUNDWATER TRANSFER

i. * Consider the adoption of a resolution taking formal action to deny the out-of-county Groundwater Substitution Water Transfer Permit and Agreement from the Sycamore Mutual Water Company. Alternatively, consider the approval of resolution approving the out-of-county Groundwater Substitution Water Transfer Permit and Agreement from the Sycamore Mutual Water Company based on the addition of specific mitigation measures and a reduced project alternative.

3. UPDATES AND REMINDERS

a. Commissioner Comments and Updates



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4. ADJOURNMENT

Next Regular meeting date: August 5, 2020

TO THOSE WHO PARTICIPATE IN COMMISSION PROCEEDINGS: California Government Code Section 84308 requires you to disclose campaign contributions to Groundwater Management Commissioners if they amount to \$250 or more and were made within the last twelve months. Please announce your applicable campaign contributions when you speak.

In compliance with the Americans with Disability Act, if you require special accommodations to participate in this meeting, please contact the Colusa County Water Resources Division at 530-458-0719 prior to the meeting and arrangements will be made to accommodate you.



COMMUNITY DEVELOPMENT DEPARTMENT, WATER RESOURCES DIVISION

100 Sunrise Boulevard Suite A, Colusa, CA 95932 530-458-0719

COLUSA COUNTY GROUNDWATER COMMISSION

Darrin Williams, Dist. 1 | Deke Dormer, Dist. 2 | Matt LaGrande, Dist. 3 | Tom Charter, Dist. 4 | Jeff Moresco, Dist. 5

Meeting Minutes

Location: Colusa Industrial Properties Conference Room

100 Sunrise Blvd., Colusa, CA 95932 and via conference call

Date: June 3, 2020 Time: 1:00-3:00 p.m.

CALL TO ORDER

Chair Williams opened the meeting at 1:05 p.m. The meeting began with the Pledge of Allegiance, a Roll Call of Officers and introductions of others in attendance.

Introductions

Staff and public in attendance:

| Mary Fahey, Colusa County Water Resources | Darren Cordova, MBK Engineers |
|---|-------------------------------|
| Greg Plucker, Director of Community Development | Patrick Neu, MBK Engineers |
| Denise Carter, Supervisor, District V | Dan Ruiz |
| Christy Scofield | Sajit Singh |
| Emily James, SMWC | Pat Velines, DWR |
| John Brennan, SMWC | Bob Kirsten |
| Dan Griffith, SMWC | Shelly Murphy |
| Alison Yerxa | Elizabeth Yerxa |
| Jeff Sutton, TCCA | Mike Reinhard |
| Larry Neils | Andrew Wallace |

Roll Call

Commissioners Present: Dormer, Moresco, LaGrande, Williams and Charter (arrived at 1:15)

Approval of Minutes from the February 2, 2020 Meeting

Motion: Commissioner LaGrande moved to approve the February 2, 2020 meeting minutes. Commissioner Moresco seconded. The motion passed 4-0 (1 absent).

Period of Public Comment

There was no public comment.



COMMUNITY DEVELOPMENT DEPARTMENT, WATER RESOURCES DIVISION

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DISCUSSION/ACTION ITEMS

Public Hearing

Discuss and consider a request from Sycamore Mutual Water Company for a permit to participate in a short-term (less than one year) groundwater substitution water transfer to San Luis and Delta-Mendota Water Authority, outside of the County

Chair Williams opened the Public Hearing.

John Brennan, representing Sycamore Mutual Water Company (SMWC), provided a history of SMWC. He also described the water use and farming operations within SMWC. Their reasons for requesting a permit to transfer water to San Luis and Delta-Mendota Water Authority are mostly economic – infrastructure repairs are needed and they need to build reserves that they have spent down on past repairs that benefit not only SMWC landowners, but also landowners outside of the Company.

At Davis Ranches, the largest landholder in SMWC, they plan to still be farming in the year 2100 and they are interested in long-term solutions for water availability which is the most important component of their operations. Through the proposed transfer, they are interested in tracking groundwater recharge and flow and gathering data.

Commissioner Charter expressed some concern that this is a very different year as far as weather patterns and it is hard to predict how things will play out over the growing season.

Commissioner Williams asked about the monitoring that will occur during the proposed transfer. Darren Cordova, MBK Engineers, explained the monitoring components of the proposal. DWR only includes monitoring wells that are very close to the pumping wells. If monitoring occurs too far from the participating wells, it is hard to know where any potential issues are coming from. He stated that if the Commission wanted to add other monitoring wells to the Plan, they could do that separately.

Commissioner Williams asked how they would know if any neighboring landowners were being affected by the pumping. Discussion was held regarding the monitoring and mitigation Plan.

Commissioner Moresco stated that in 2014 and 2015 during a groundwater substitution transfer from SMWC to the Tehama Colusa Canal, there were a couple of landowners that had to lower the bowls in their wells. Mr. Cordova said that 2014/15 was at the height of the drought and groundwater levels were at their lowest level.

Commissioner Charter suggested that as part of the Mitigation Plan, SMWC could spread out the pumping hours instead of pumping 24 hours a day, 7 days a week.

Commissioner Williams expressed concern about neighbors having well issues during the growing season and Commissioner Moresco pointed out that the current Mitigation Plan allows 27 days from a complaint to any action having to take place. It is not feasible for a grower to be without water for that long.

Commissioner Williams opened the floor to public comment. Andrew Wallace said that he had concerns about water leaving the area. His farming operation has already had to replace wells along the slough.



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100 Sunrise Boulevard Suite A, Colusa, CA 95932 530-458-0719

Chairman Williams closed the Public Hearing.

Consider Resolution 2020-01: A Resolution of the Colusa County Groundwater Commission approving an out-of-county Groundwater Substitution Water Transfer Permit and Agreement from the Sycamore Mutual Water Company

Discussion was held regarding the proposed Mitigation Plan. Greg Plucker, Director of Community Development for Colusa County offered an idea for additional mitigation measures which would include:

- Prior to transfer commencing, notify all landowners within a specified number of miles from the pumping wells about the transfer, the mitigation measures and who to contact should they experience any impacts.
- Notice shall be reviewed and approved by County Staff prior to being sent out
- County Staff shall be immediately notified if there is a complaint filed

Mitigation:

- Determine if any 3rd party claim is reasonably related to the groundwater transfer pumping. County Staff shall make the determination if such a claim is reasonably likely to be caused by the groundwater transfer pumping. Should Staff determine that the impact is of such magnitude that it deems immediate action, those mitigation measures shall be activated within 24 hours upon determination.
- County Staff will have the authority to address any complaints so there is no confusion about first party, third party, etc.

Mr. Brennan said that that those terms were acceptable for SMWC.

Mr. Charter suggested that SMWC could spread out the pumping so there is less daily pumping and weight the pumping more in August and September so that the neighbors could get to harvest with less likelihood of any issues occurring.

Motion: Commissioner Charter moved to approve the permit for Sycamore Mutual Water Company to participate in a short-term (less than one year) groundwater substitution water transfer to San Luis and Delta-Mendota Water Authority with the addition of the specified mitigation measures subject to final review by the Commission Chair. Mr. Moresco seconded.

Yes: Commissioner Charter

No: Commissioners LaGrande, Dormer, Moresco

Abstain: Commissioner Williams

Motion failed.



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UPDATES AND REMINDERS

Legislative Update

Ms. Fahey referred the Commissioners to the update provided in the agenda packet.

Commissioner Comments and Updates

Mr. Charter reported that growers on the west side have to rely on transfers in drier years. This is unique year. There is water available on the west side this year. He has been working with Colusa County Water District (CCWD) to try to get service to parcels that are outside of the District, but just on the fringe. It would be beneficial to be able to get surface water to those lands rather than pumping groundwater. CCWD is working with their legal counsel to develop a draft contract for this type of "second class" service to growers on the exterior of CCWD's service area. If the District has water available, this would be beneficial and could take pressure off of the groundwater system.

Items for Next Agenda

DWR update - Spring groundwater levels

ADJOURNMENT

Next Regular meeting date: May 6, 2020 at 10:00 am.

The meeting was adjourned at 11:34 p.m.

Colusa County Groundwater Commission Meeting

June 29, 2020

STAFF REPORT

<u>Agenda Item 2a:</u> i. Consider the adoption of a resolution taking formal action to deny the out-of-county Groundwater Substitution Water Transfer Permit and Agreement from the Sycamore Mutual Water Company. Alternatively, consider the approval of resolution approving the out-of-county Groundwater Substitution Water Transfer Permit and Agreement from the Sycamore Mutual Water Company based on the addition of specific mitigation measures and a reduced project alternative.

BACKGROUND:

On April 14, 2020, Sycamore Mutual Water Company (SMWC) provided the Colusa County Groundwater Commission (Commission), via Staff, with a letter of intent to seek a permit to transfer a maximum of 5,000 acre-feet of water through an out-of-county groundwater substitution transfer to San Luis and Delta-Mendota Water Authority in 2020.

SMWC is a party to the Long-term Groundwater Transfer Plan developed by the United States Bureau of Reclamation and the San Luis and Delta-Mendota Water Authority. In this Plan, SMWC is approved to transfer up to a maximum of 20,000 acre-feet of water each year. Links to the Long-Term Water Transfers Environmental Impact Statement/Environmental Impact Report and Mitigation Plan are provided at the end of this report in the "Attachments" section. The required CEQA documentation is included in these documents.

On June 3, 2020, the Groundwater Commission held a Public Hearing regarding SMWC's proposed groundwater substitution transfer. Pursuant to Section 43-8 of Colusa County code, prior to the Public Hearing, a 30-day comment period was opened on May 1, 2020 and closed May 30, 2020. The Groundwater Commission received three comment letters which are attached at the end of this report in the "Attachments" section.

Pursuant to section 43-10 of County Code, the Commission is required to make the seven findings listed below in order to approve a permit application:

43-10 Findings required for permit approval or denial by the commission.

- (a) The application for a groundwater transfer permit may be approved and recommended for approval only upon findings of a majority of the membership of the commission present at the required public meeting, and a majority of the total membership of the commission, that the proposed groundwater extraction will not have significant adverse impacts on the affected groundwater basin, and specifically that:
 - (1) The proposed extraction will not cause or increase any undesirable effects in the groundwater basins underlying the county;

- (2) The proposed extraction will not adversely affect the long-term storage capacity or transmissivity of the groundwater basins underlying the county;
- (3) The proposed extraction will not cause the groundwater basins underlying the county to exceed their sustainable yield and will not otherwise injure or unreasonably impact other beneficial uses of the groundwater within the county;
- (4) The proposed extraction will not result in an injury or adverse impact to a water replenishment, storage, or restoration project currently operating in accordance with statutory authorization;
- (5) The proposed extraction is in compliance with Water Code Section 1220;
- (6) The proposed extraction will not be otherwise detrimental to the health, safety and welfare of the county or property owners overlying groundwater basins within the county in the vicinity of the proposed extraction site(s); and
- (7) The proposed extraction will not cause adverse impacts to water quality conditions in the groundwater basins underlying the county, or result in compactions, subsidence or other undesirable results in the groundwater basins underlying the county.

The applicant bears the burden of establishing all facts necessary for the Commission to make the required findings.

At the June 3 Public Hearing, John Brennan, representing Sycamore Mutual Water Company, provided a history of SMWC. He also described the water use and farming operations within SMWC, their reasons for requesting a permit to transfer water to San Luis and Delta-Mendota Water Authority and documents and information that they felt supported the seven findings in the County Ordinance. Mr. Brennan along with Darren Cordova from MBK Engineers held discussion with the Commission and answered several questions from the Commissioners.

During the Public Hearing, one member of the public spoke against the proposed transfer, stating that he had concerns about water leaving the area this year, and stated that, over the last ten to twelve years, his family's farming operation has had to replace at least four wells in the area near the proposed transfer.

During the Public Hearing, the Commissioners expressed the following concerns:

- There are too many unknowns about the groundwater system to be able to predict whether there will be any significant impacts from the proposed transfer.
- This is an unusually warm and dry year which makes it difficult to predict how the aquifers are going to react.
- If a neighboring well is affected by the transfer pumping, it is difficult to determine where the impacts are coming from and whether the cause is the pumping from the transfer wells, pumping from a combination of wells in the area, and/or impacts from dry conditions.
- If there is an issue with a well going dry during the growing season, there could be total crop loss. Even 24 hours without irrigation could ruin a crop depending on weather conditions. The current Mitigation Plan provides a 27 day process before any action would be taken to mitigate for impacts to neighbors.

• The current Mitigation Plan is incomplete and it was difficult to approve an updated Mitigation Plan without having a draft to review.

Additional mitigation measures that could be stipulated by the Commission were discussed as suggested by Greg Plucker, Director of Colusa County Community Development. These measures included:

- Prior to transfer commencing, notify all landowners within a specified number of miles from the pumping wells about the transfer, the mitigation measures and who to contact should they experience any impacts
- Notice to neighboring landowners shall be reviewed and approved by County Staff prior to being sent out
- County Staff shall be immediately notified if there is a complaint filed

Mitigation:

- Determine if 3rd party claim is reasonably related to the groundwater transfer pumping. County Staff shall make the determination if such a claim is reasonably likely to be caused by the groundwater transfer pumping. Should Staff determine that the impact is of such magnitude that it deems immediate action, those mitigation measures shall be activated within 24 hours upon determination.
- County Staff will have the authority to address any complaints so there is no confusion about first party, third party, etc.

Commissioner Charter suggested that, additionally, SMWC could spread out the groundwater pumping so it is not occurring 24/7, which is the current plan. He also suggested that SMWC could weight the bulk of pumping towards August and September so that the neighbors could get to harvest with less likelihood of any issues occurring.

Mr. Brennan said that Sycamore Mutual Water Company was agreeable to those terms.

After much discussion, Commissioner Charter moved to approve the permit for Sycamore Mutual Water Company to participate in a short-term (less than one year) groundwater substitution water transfer to San Luis and Delta-Mendota Water Authority with the addition of the specified mitigation measures subject to final review by the Commission Chair. Mr. Moresco seconded. The vote was as follows:

Yes: Commissioner Charter

No: Commissioners LaGrande, Dormer, Moresco

Abstain: Commissioner Williams

The motion failed.

On June 9, 2020, Sycamore Mutual Water Company provided a letter to the Colusa County Board Clerk requesting a hearing before the Board of Supervisors of an Appeal of the Commission's decision. It was subsequently determined by Mr. Plucker, after conferring with County Counsel, that the Commission did

not formally, through a motion, deny the permit request with specific reasons stated for the denial, and that a Resolution denying the Permit should be approved by the Commission at their next meeting.

Since that time, Sycamore Mutual Water Company has provided an updated proposal that amends their original proposal in several ways to address the concerns expressed at the June 3 Commission meeting. The updated proposal is attached as "Exhibit D" to the Transfer Agreement, and is also provided below. As stated in the attached Transfer Agreement, if approved by the Commission, Sycamore's final proposal shall be amended to fully comply with this updated "Plan B" proposal.

SMWC 2020 – Plan B

GW Transfer/Recharge Trial (6.15.2020)

Sycamore Mutual Water Company (Sycamore) is committed to being a good neighbor and resource manager, while finding ways to exercise our right to access groundwater. To that end, Sycamore proposes to make the following adjustments to our original transfer proposal in consideration to the feedback we received at the June 3rd meeting with the Colusa County Groundwater Commission and the input we received from Colusa County Planning Department.

- 1. Sycamore will reduce total net transfer amount to approximately 2,500-acre feet (total 2,862).
- 2. Sycamore will establish a set pumping schedule that will minimize potential impacts to neighbors:
 - a. To Be Approved by Water Resources Division Manager Prior to Transfer
 - b. Three Stage Pumping July, August, September
 - c. Adjust the pumping schedule weighted to August and September, which is afterpeak demand for neighborhood groundwater pumpers.

July: 12 hrs/day
 August: 18 hrs/day
 September: 24 hrs/day

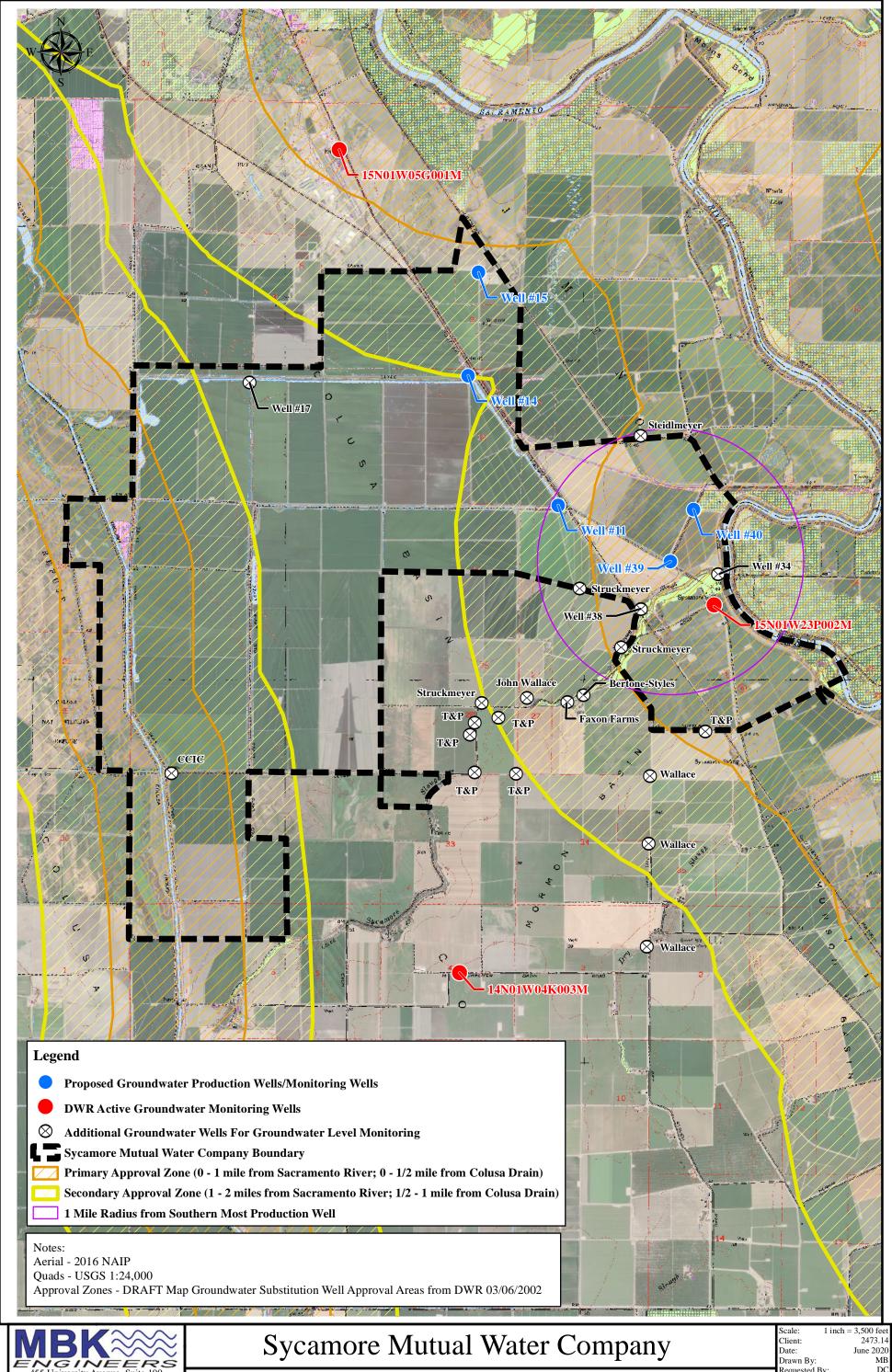
- d. Regularly Review Pumping Numbers and Adjust Schedule Accordingly
- 3. Notify neighboring landowners of the transfer, with written notice of our intent to transfer. This notification will clearly state who to contact should there be any negative and unforeseen influence in their ability to access ground water. The Colusa County Water Resources Division will develop the notice and complete the mailing of notices to all owners of agricultural lands within a one-mile radius of the transfer wells. Sycamore will reimburse the Water Resources Division for all expenses for mailing the notices.
- 4. Sycamore will adopt the 24-hour shut off amendment formulated at the Groundwater Commission as part of the mitigation plan, and as described in the Transfer Agreement between Sycamore and Colusa County. This will supersede the DWR/BOR mitigation action that will only be initiated should the 24-hr approach not be successful.
- 5. Additional wells will be added to the groundwater monitoring network to the south along Sycamore Slough. To-date we have consent from the following neighboring landowners/farming entities that are within 2 miles of our most southerly production well: T&P Farms (Bedart), Alex Struckmeyer (Struckmeyer), Bill Wallace Jr. (Wallace), Faxon Farms (Bertone-Styles), John Wallace (Farnsworth/Bushnell). Written notice and monitoring procedure will be given to all landowners prior to transfer beginning.
- 6. Sycamore will invest in pressure transducers for the production wells to capture real-time water levels throughout the transfer and through March 2021. All data will be shared with the Colusa County Groundwater Commission.
- 7. Davis Ranches, landowner member of Sycamore, will participate in TNC's multi-benefit recharge project in fall, 2020 and gather data through Spring, 2021. This program will be the same as last year's pilot; a total of 575 acre-feet of surface water were applied to the fields and an estimated 366 acrefeet (119 million gallons) percolated below the root zone. Sycamore will provide all accumulated data collected through our monitoring program during the transfer as well as the data collected during the TNC multi-benefit recharge program to the Colusa County Water Resources Division and the Colusa Groundwater Authority.

Sycamore Mutual Water Company 2020 Delta Mendota Sale

PROPOSED PUMPING SCHEDULE

6.15.2020

| | | | | July | August | Sept |
|------------------|---------------|-----------|---------|---------|---------|---------|
| | | | Hr./Day | 12 | 18 | 24 |
| Pump # | GPM | ac-ft/day | Days | 31 | 31 | 17.5 |
| 11 | 1,500 | 6.9 | | 107.0 | 160.5 | 120.8 |
| 14 | 1,500 | 6.9 | | 107.0 | 160.5 | 120.8 |
| 15 | 1,750 | 8.1 | | 124.8 | 187.2 | 140.9 |
| 39 | 3,000 | 13.8 | | 214.0 | 320.9 | 241.6 |
| 40 | 3,000 | 13.8 | | 214.0 | 320.9 | 241.6 |
| | 10,750 | 49.5 | | 797.7 | 1,181.0 | 883.1 |
| Streamflow Dep | letion Factor | (13%) | | (103.7) | (153.5) | (114.8) |
| Monthly Transfe | er Quantity | | | 694.0 | 1,027.5 | 768.3 |
| Total Transfer C | Quantity | | | | | 2,490 a |



Sacramento, CA 95825 Phone: 916-456-4400 Fax: 916-456-0253 www.mbkengineers.com

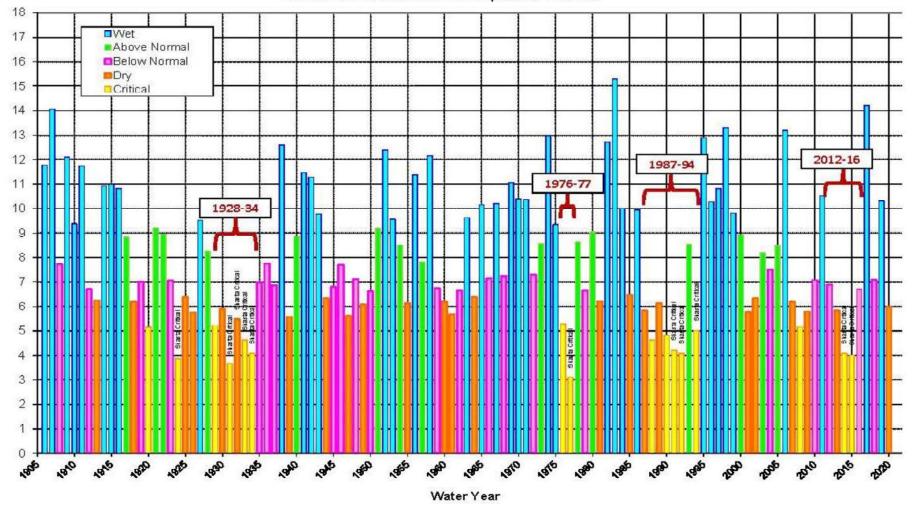
2020 Water Transfer

MB DC 3,500

2020 Water Year

Sacramento Valley Water Year Type Index (40-30-30) 1906 - 2020

Based on Observed Unimpaired Runoff





PENDING LAWSUIT

It should be noted that on May 11, AquAlliance sued the U.S. Bureau of Reclamation (USBR) and San Luis and Delta-Mendota Water Authority in federal District Court over their long term water transfer program. The lawsuit asks the court to declare that the Agencies' Environmental Impact Statement/Report was arbitrary and capricious, ignored relevant new information and failed to meet minimum requirements of the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA).

The County of Colusa has concerns that, if the Transfer Permit for SMWC is approved and AquAlliance prevails in court, the County could be named in the lawsuit and would therefore be liable for attorney costs and any other potential costs. In light of this, the County has included an Indemnification Clause in the Transfer Agreement, and Sycamore Mutual Water Company must agree to cover any and all costs that may be levied against the County as a result of the pending lawsuit.

ACTIONS

Should the Commission approve the amended request for a permit for an out-of-county groundwater substitution water transfer from Sycamore Mutual Water Company to San Luis and Delta-Mendota Water Authority:

- 1. The attached Resolution 2020-01 will be signed by the Commission Chair
- 2. The attached Groundwater Transfer Permit and out of county Groundwater Transfer Agreement will be signed by the Chair of the Sycamore Mutual Water Company Board of Directors
- The Colusa County Water Resources Manager will follow up with Sycamore Mutual Water Company to ensure that all conditions of approval are followed.

Should the Commission deny the amended request for a permit for an out-of-county groundwater substitution water transfer from Sycamore Mutual Water Company to San Luis and Delta-Mendota Water Authority:

- 1. Groundwater Commissioners will clearly state their reasons for denial, especially as they relate to the seven findings listed under Article 43.10 of Colusa County Code
- 2. The attached Resolution 2020-02 will be signed by the Commission Chair

ATTACHMENTS (See next page):

- Resolution 2020-01: A Resolution of the Colusa County Groundwater Commission Approving an Out-of-County Groundwater Substitution Water Transfer Permit and Agreement from the Sycamore Mutual Water Company
- 2. **Resolution 2020-02:** A Resolution of the Colusa County Groundwater Commission Denying an Out-of-County Groundwater Substitution Water Transfer Permit and Agreement from the Sycamore Mutual Water Company
- 3. Groundwater Transfer Permit and Agreement

The following links to documents were provided at the June 3, 2020 Groundwater Commission meeting:

- 1. Long-Term Water Transfers Environmental Impact Statement/Environmental Impact Report: https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc ID=40932
- 2. Long-Term Water Transfers, Appendix V: Mitigation, Monitoring and Reporting Plan https://www.usbr.gov/mp/nepa/includes/documentShow.php?Doc_ID=40952
- 3. Long-Term Water Transfers All documents: https://www.usbr.gov/mp/nepa/nepa_project_details.php?Project_ID=18361
- 4. Colusa County Code, Chapter 43: Groundwater Management: https://www.codepublishing.com/CA/ColusaCounty/#!/ColusaCounty43.html

The following documents were provided in the June 3, 2020 Groundwater Commission Meeting Agenda Packet, and can be accessed on the Colusa County Water Resources webpage at: http://countyofcolusa.org/659/Meetings

- 1. SMWC Cover Letter
- 2. SMWC Supporting Documents
- 3. TNC Colusa Recharge Analysis TM 191220 Final Draft
- 4. Comment Letter received from California Department of Fish and Wildlife
- 5. Comment Letter received from Colusa Groundwater Authority
- 6. Comment Letter received from Andrew Wallace

RESOLUTION NO. 2020-01

A RESOLUTION OF THE COLUSA COUNTY GROUNDWATER COMMISSION APPROVING AN OUT-OF-COUNTY GROUNDWATER SUBSTITUTION WATER TRANSFER PERMIT AND AGREEMENT FROM THE SYCAMORE MUTUAL WATER COMPANY

WHEREAS, Section 43-2(g) of the County Code specifies that "Groundwater Transfer" means the direct pumping and transfer of groundwater from an existing place of use to another place of use, or the substitution of new or additional groundwater pumping to replace surface water transferred from an existing place of use to another place of use;

WHEREAS, Section 43-4 of Colusa County Code specifies that it shall be unlawful to extract groundwater underlying lands in Colusa for any "Groundwater Transfer" use outside county boundaries, without first obtaining a permit as provided for in Chapter 43 of the County Code;

WHEREAS, Sycamore Mutual Water Company in Colusa County has requested a "Groundwater Transfer" permit to transfer a maximum of 4,023 acre feet of water through a groundwater substitution water transfer to the San Luis and Delta-Mendota Water Authority, outside of the county;

WHEREAS, Section 43-7 et seq. of the Colusa County Code details the steps by which a "Groundwater Transfer" permit shall be processed;

WHEREAS, Pursuant to Section 43-7 et seq. of the Colusa County Code the Water Resources Division staff acting on behalf of the Colusa County Groundwater Commission has processed the application for the Sycamore Mutual Water Company's "Groundwater Transfer" permit;

WHEREAS, The Water Resources Division staff duly noticed the public hearing for the Sycamore Mutual Water Company's "Groundwater Transfer" permit for June 3, 2020;

WHEREAS, During the public hearing the Colusa County Groundwater Commission received, reviewed, and considered: (1) the Water Resources Division staff report and recommendation; (2) all public and agency written and oral comments and testimony; and (3) documents provided by the Sycamore Mutual Water Company including the Notice of Intent, its Transfer Plan, the EIR, and the Mitigation and Monitoring Plan;

WHEREAS, During the public hearing the Colusa County Groundwater Commission discussed potential impacts to the nearby wells, the ability to timely resolve such impacts, potential impacts to agricultural crops should any well impacts not be timely resolved, and potential additional mitigation measures which may be added to address said concerns;

WHEREAS, At the conclusion of the public hearing a motion was made and seconded to approve the Groundwater Transfer Permit and the Out-of-County Groundwater Transfer Agreement with the addition of conditions to address the discussed concerns;

WHEREAS, The motion to approve the Groundwater Transfer Permit and the Out-of-County Groundwater Transfer Agreement failed by a vote of 3 Noes, 1 Aye, and 1 abstention;

WHEREAS, The Water Resources Division staff scheduled a Groundwater Commission meeting for June 29, 2020 for the purpose of allowing the Commission to consider the adoption of a resolution denying the proposed "Groundwater Transfer" Permit and the Out-of-County Groundwater Transfer Agreement;

WHEREAS, In advance of the Groundwater Commission June 29, 2020 meeting, Sycamore Mutual Water Company submitted an amended proposal to add additional mitigation to further safe guard the groundwater levels of the surrounding area from the groundwater pumping that would occur as a result of the proposed Groundwater Transfer Permit and the Out-of-County Groundwater Transfer Agreement; and

WHEREAS, The Groundwater Commission at its June 29, 2020 meeting reconsidered the June 3, 2020 approval resolution with the additional mitigation measures incorporated at the June 3, 2020 meeting in light of Sycamore Mutual Water Company's amended proposal that would add additional mitigation to further safe guard the groundwater levels of the surrounding area from the groundwater pumping that would occur as a result of the proposed Groundwater Transfer Permit and the Out-of-County Groundwater Transfer Agreement.

NOW, THEREFORE, BE IT RESOLVED that the Colusa County Groundwater Commission does hereby find and determine the following:

- 1. The proposed Groundwater Transfer Permit and Out-of-County Groundwater Transfer Agreement application have been processed pursuant to the provisions of Chapter 43 (Groundwater Management) of the County Code.
- 2. The Final Environmental Impact Statement/Environmental Impact Report entitled, "Long-Term Water Transfers Environmental Impact Report/Environmental Impact Statement" prepared by the United States Department of the Interior, Bureau of Reclamation, Mid-Pacific Region for the San Luis & Delta-Mendota Water Authority dated September, 2019 has addressed the environmental consequences of the proposed project.

- 3. The Groundwater Commission finds that the proposed conditions developed at the June 2, 2020 hearing in conjunction with the additional mitigation measures proposed by Sycamore Mutual Water Company would further safe guard the groundwater levels of the surrounding area from the groundwater pumping that would occur as a result of the proposed Groundwater Transfer Permit and the Out-of-County Groundwater Transfer Agreement and as a result:
 - a. The proposed extraction will not cause or increase any undesirable effects in the groundwater basins underlying the county;
 - b. The proposed extraction will not adversely affect the long-term storage capacity or transmissivity of the groundwater basins underlying the county;
 - c. The proposed extraction will not cause the groundwater basins underlying the county to exceed their sustainable yield and will not otherwise injure or unreasonably impact other beneficial uses of the groundwater within the county;
 - d. The proposed extraction will not result in an injury or adverse impact to a water replenishment, storage, or restoration project currently operating in accordance with statutory authorization;
 - e. The proposed extraction is in compliance with Water Code Section 1220;
 - f. The proposed extraction will not be otherwise detrimental to the health, safety and welfare of the county or property owners overlying groundwater basins within the county in the vicinity of the proposed extraction site(s); and
 - g. The proposed extraction will not cause adverse impacts to water quality conditions in the groundwater basins underlying the county, or result in compactions, subsidence or other undesirable results in the groundwater basins underlying the county.
- 4. The Groundwater Commission does hereby approve Sycamore Mutual Water Company's Groundwater Transfer Permit and Out-of-County Groundwater Transfer Agreement, dated June 29, 2020, subject to all conditions contained therein.

/ / / /

| of California, this 29th day of June 20 | 20, by the following vote: |
|---|--|
| AYES: | |
| NOES: | |
| ABSENT: | |
| | |
| | Darrin Williams, Chair Colusa County Groundwater Commission |
| ATTEST: | |
| | |
| Mary M. Fahey, Secretary Clerk to the Colusa County Groundw | vater Commission |

PASSED AND APPROVED by the Colusa County Groundwater Commission, State

RESOLUTION NO. 2020-02

A RESOLUTION OF THE COLUSA COUNTY GROUNDWATER COMMISSION DENYING AN OUT-OF-COUNTY GROUNDWATER SUBSTITUTION WATER TRANSFER PERMIT AND AGREEMENT FROM THE SYCAMORE MUTUAL WATER COMPANY

WHEREAS, Section 43-2(g) of the County Code specifies that "Groundwater Transfer" means the direct pumping and transfer of groundwater from an existing place of use to another place of use, or the substitution of new or additional groundwater pumping to replace surface water transferred from an existing place of use to another place of use;

WHEREAS, Section 43-4 of Colusa County Code specifies that it shall be unlawful to extract groundwater underlying lands in Colusa for any "Groundwater Transfer" use outside county boundaries, without first obtaining a permit as provided for in Chapter 43 of the County Code;

WHEREAS, Sycamore Mutual Water Company in Colusa County has requested a "Groundwater Transfer" permit to transfer a maximum of 4,023 acre feet of water through a groundwater substitution water transfer to the San Luis and Delta-Mendota Water Authority, outside of the county;

WHEREAS, Section 43-7 et seq. of the Colusa County Code details the steps by which a "Groundwater Transfer" permit shall be processed;

WHEREAS, Pursuant to Section 43-7 et seq. of the Colusa County Code the Water Resources Division staff acting on behalf of the Colusa County Groundwater Commission has processed the application for the Sycamore Mutual Water Company's "Groundwater Transfer" permit;

WHEREAS, The Water Resources Division staff duly noticed the public hearing for the Sycamore Mutual Water Company's "Groundwater Transfer" permit for June 3, 2020;

WHEREAS, During the public hearing the Colusa County Groundwater Commission received, reviewed, and considered: (1) the Water Resources Division staff report and recommendation; (2) all public and agency written and oral comments and testimony; and (3) documents provided by the Sycamore Mutual Water Company including the Notice of Intent, its Transfer Plan, the EIR, and the Mitigation and Monitoring Plan;

WHEREAS, During the public hearing the Colusa County Groundwater Commission discussed potential impacts to the nearby wells, the ability to timely resolve such impacts, potential impacts to agricultural crops should any well impacts not be timely resolved, and potential additional mitigation measures which may be added to address said concerns;

WHEREAS, At the conclusion of the public hearing a motion was made and seconded to approve the Groundwater Transfer Permit and the Out-of-County Groundwater Transfer Agreement with the addition of conditions to address the discussed concerns;

WHEREAS, The motion to approve the Groundwater Transfer Permit and the Out-of-County Groundwater Transfer Agreement failed by a vote of 3 Noes, 1 Aye, and 1 abstention;

WHEREAS, The Water Resources Division staff scheduled a Groundwater Commission meeting for June 29, 2020 for the purpose of allowing the Commission to consider the adoption of a resolution denying the proposed "Groundwater Transfer" Permit and the Out-of-County Groundwater Transfer Agreement;

WHEREAS, In advance of the Groundwater Commission June 29, 2020 meeting, Sycamore Mutual Water Company submitted an amended proposal to add additional mitigation to further safe guard the groundwater levels of the surrounding area from the groundwater pumping that would occur as a result of the proposed Groundwater Transfer Permit and the Out-of-County Groundwater Transfer Agreement; and

WHEREAS, The Groundwater Commission at its June 29, 2020 meeting reconsidered the June 3, 2020 approval resolution with the additional mitigation measures incorporated from the June 3, 2020 meeting in light of Sycamore Mutual Water Company's amended proposal that would add additional mitigation to further safe guard the groundwater levels of the surrounding area from the groundwater pumping that would occur as a result of the proposed Groundwater Transfer Permit and the Out-of-County Groundwater Transfer Agreement.

NOW, THEREFORE, BE IT RESOLVED that the Colusa County Groundwater Commission does hereby find and determine the following:

- 1. The proposed Groundwater Transfer Permit and Out-of-County Groundwater Transfer Agreement application have been processed pursuant to the provisions of Chapter 43 (Groundwater Management) of the County Code.
- 2. The Final Environmental Impact Statement/Environmental Impact Report entitled, "Long-Term Water Transfers Environmental Impact Report/Environmental Impact Statement" prepared by the United States Department of the Interior, Bureau of Reclamation, Mid-Pacific Region for the San Luis & Delta-Mendota Water Authority dated September, 2019 has addressed the environmental consequences of the proposed project.

- 3. Based on the information provided by Sycamore and in consideration of the entire record that the Groundwater Commission is unable to find that the groundwater pumping as a result of the Groundwater Transfer Permit and the Out-of-County Groundwater Transfer Agreement would not have significant adverse impacts on the affected groundwater basin, and specifically that it is unable to find that:
 - (a) The proposed extraction will not cause or increase any undesirable effects in the groundwater basins underlying the county;
 - (b) The proposed extraction will not adversely affect the long-term storage capacity or transmissivity of the groundwater basins underlying the county;
 - (c) The proposed extraction will not cause the groundwater basins underlying the county to exceed their sustainable yield and will not otherwise injure or unreasonably impact other beneficial uses of the groundwater within the county;
 - (d) The proposed extraction will not result in an injury or adverse impact to a water replenishment, storage, or restoration project currently operating in accordance with statutory authorization;
 - (e) The proposed extraction is in compliance with Water Code Section 1220;
 - (f) The proposed extraction will not be otherwise detrimental to the health, safety and welfare of the county or property owners overlying groundwater basins within the county in the vicinity of the proposed extraction site(s); and
 - (g) The proposed extraction will not cause adverse impacts to water quality conditions in the groundwater basins underlying the county, or result in compactions, subsidence or other undesirable results in the groundwater basins underlying the county.
- 4. Based on the inability to make the County Code required findings that the Groundwater Commission must deny Sycamore Mutual Water Company's Groundwater Transfer Permit and Out-of-County Groundwater Transfer Agreement.

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| of California, this 29th day of June 20 | 020, by the following vote: |
|---|--|
| AYES: | |
| NOES: | |
| ABSENT: | |
| | |
| | Darrin Williams, Chair Colusa County Groundwater Commission |
| ATTEST: | |
| | |
| Mary M. Fahey, Secretary Clerk to the Colusa County Groundy | vater Commission |

PASSED AND APPROVED by the Colusa County Groundwater Commission, State

Colusa County Board of Supervisors Groundwater Transfer Permit and Out-of-County Groundwater Transfer Agreement Sycamore Mutual Water Company, June 29, 2020

This Groundwater Transfer Permit ("Permit") and Out-of-County Groundwater Transfer Agreement ("Agreement") is between the County of Colusa Groundwater Commission ("County") and Sycamore Mutual Water Company, Inc., a California corporation ("Sycamore").

- Sycamore agrees to comply with each and every term of this Permit and Agreement in exchange for the County authorizing Sycamore to transfer up to a maximum of 2,500 acre-feet of water (2,862 acre-feet pumped) to the San Luis and Delta-Mendota Water Authority. This Permit and Agreement shall not become effective until signed by an authorized representative of Sycamore.
- 2. Any non-compliance or violation of any term of this Permit and Agreement as determined by the County shall be grounds for immediate termination of this Permit and Agreement. The County will notify Sycamore of any noncompliance or violation and give Sycamore a workable opportunity to cure the violation. If Sycamore fails to cure the violation in three (3) days of notice, the County at its sole discretion may elect to proceed with any or all of the following remedies for violation of this chapter: (a) A civil action against the violator, including injunctive relief; (b) A civil fine of up to five thousand dollars for each separate violation of any term or condition of any groundwater transfer permit issued pursuant to this chapter, except when pursuant to Condition #13 the Water Resources Manager determines that the groundwater pumping must be stopped or altered within twenty-four (24) hours, Condition #13 shall govern the time requirement. A person or entity shall be deemed to have committed a separate violation for each and every day or portion thereof during which any such violation is committed, continued, or permitted as well as for each and every separate groundwater well within which any such violation is committed, continued or permitted; and (c) A misdemeanor punishable by a fine not exceeding one thousand dollars per each violation of this chapter or any term or condition of any groundwater transfer permit issued pursuant to this chapter, or by imprisonment not exceeding six months for each violation, or both. Each and every day shall be a separate violation; and (d) termination of this Agreement.
- 3. For the purposes of the Mitigation and Monitoring Reporting Program, Appendix "V", of the Environmental Impact Statement/Environmental Impact Report entitled, "Long-Term Water Transfers Environmental Impact Report/Environmental Impact Statement" prepared by the United States Department of the Interior, Bureau of Reclamation, Mid-Pacific Region for the San Luis & Delta-Mendota Water Authority dated September, 2019, Sycamore

- shall be considered a "Participating Seller" and shall comply with all "Participating Seller" mitigation measure requirements. Said Mitigation and Monitoring Reporting Program is attached as Exhibit "A" hereto.
- 4. A copy of the Final Transfer Proposal shall be submitted to the County's Water Resources Manager prior to transfer commencing.
- 5. A copy of all reports required by the Mitigation and Monitoring Reporting Program, Exhibit "A", and any other report required by a State or Federal approving agency shall be submitted concurrently to the County's Water Resources Manager.
- 6. A copy of all monitoring data associated with the transfer collected as required by the Mitigation and Monitoring reporting program, Exhibit "A", including data from before, during and after the groundwater transfer, including all available groundwater elevation data shall be submitted to the County's Water Resources Manager within thirty (30) days of data development.
- 7. A copy of the final transfer report shall be submitted to the County's Water Resources Manager within thirty (30) days of the preparation of the report.
- 8. Transfer water will be used exclusively for agricultural purposes.
- 9. Prior to groundwater pumping commencing, a schedule of the anticipated duration and volume of groundwater to be pumped shall be submitted to the Water Resources Division Manager for final review and approval. The schedule shall be designed so that the duration and volume of groundwater pumping is generally evenly spread throughout the pumping period in order to avoid concentrating the duration and volume of groundwater pumping to a short time period. The pumping schedule will be weighted more heavily in the months of August and September to help ensure that crops can make it to harvest if any issues should occur.
- 10. Prior to the water transfer or groundwater pumping commencing as a result of this permit, the Water Resources Manager shall first send a written notice to all agricultural property owners within one (1) mile of the wells that will be used informing them of the groundwater transfer and the projected duration of the groundwater pumping. The notice shall include the Water Resources Manager contact information and a designated contact from the Sycamore Mutual Water Company on how to report a complaint relating to off-site well impacts that may be associated with the groundwater pumping as a result of this permit. The applicant shall reimburse the Water Resources Manager of the cost of this mailing within thirty (30) days of written demand.
- 11. Sycamore shall fully comply with the Groundwater Level Monitoring Program (Exhibit "B") and the Groundwater Substitution Mitigation Plan (Exhibit "C")

attached hereto and incorporated by reference.

- 12. With respect to the determination of a Third Party Claim as determined within Exhibit "C", Groundwater Substitution Mitigation Plan, the County's Water Resources Manager shall be responsible for making the determination of whether a Third Party Claim is reasonably likely to have been caused by the groundwater pumping authorized by this permit. Should the Water Resources Manager determine that the Third Party Claim is valid, Sycamore shall implement the Groundwater Substitution Mitigation Plan specified in Exhibit "C."
- 13. Should the Water Resources Manager determine that the impacts of a Third Party Claim is of such magnitude that immediate cessation of the groundwater pumping is necessary to avoid the negative impacts, Sycamore shall alter and/or stop the groundwater pumping within twenty-four hours of notification from the Water Resources Manager. Said alteration and/or stoppage shall be at the direction of the Water Resources Manager and shall continue until such time as any such alteration and/or stoppage are allowed to resume at the discretion of the Water Resources Manager.
- 14. Prior to the water transfer or groundwater pumping commencing as a result of this permit, a defense and indemnification agreement suitable to the County Counsel shall be entered into to defend, indemnify and protect the County and Groundwater Commission from and against any and all costs, damages, liability or loss, or claim of damage, liability or loss, including attorneys' fees and staff time, connected with or arising out of the granting this approval. This agreement shall include an initial surety guarantee of a minimum of \$150,000 to implement the terms of the indemnification agreement to the satisfaction of the County Counsel.
- 15. Sycamore's proposal shall be amended to fully comply with its "Plan B" proposal attached hereto as Exhibit "D" and incorporated by reference.

| Sycamore Mutual Water Company | |
|-------------------------------|-------|
| Signature | Date: |
| | |
| Printed Name and Title | |
| | |

Table V-1.
Mitigation Measures

| Measure No. | Mitigation Measure | Responsible Party | Monitoring Party | Method of Verification | Timing of Verification | Verification of Completion Initials | Date |
|----------------|--|----------------------|---------------------|-----------------------------------|---------------------------|--|------|
| WS-1 | The purpose of Mitigation Measure WS-1 is to address potential streamflow depletion effects to Central Valley Project (CVP) and State Water Project (SWP) water supply. Reclamation will apply a streamflow depletion factor to mitigate potential water supply impacts from the additional groundwater pumping due to groundwater substitution transfers. The streamflow depletion factor equates to a percentage of the total groundwater substitution transfer that will not be credited to the transferor and is intended to offset the streamflow effects of the added groundwater pumping due to transfer. | Reclamation | Reclamation and DWR | CVP and SWP operations reporting. | Ongoing. | | |
| | As described in the impact analysis, the magnitude of the potential water supply impact depends on hydrologic conditions surrounding the transfer period (both before and after). The exact percentage of the streamflow depletion factor will be assessed and determined on a regular basis by Reclamation and California Department of Water Resources (DWR), in consultation with buyers and sellers, based on the best technical information available at that time. The percentage will be determined based on hydrologic conditions, groundwater and surface water modeling, monitoring information, and past transfer data. | | | | | | |
| | Application of the streamflow depletion factor will offset potential water supply effects and reduce them to a less than significant level. The streamflow depletion factor may not change every year, but will be refined as new information becomes available and may become more site specific as better data and groundwater modeling becomes available. The minimum streamflow depletion factor (based on modeling completed for this EIS/EIR) will be 13 | | | | | | |

| Measure No. | Mitigation Measure | Responsible Party | Monitoring Party | Method of Verification | Timing of Verification | Verification of Completion Initials | Date |
|----------------|---|--------------------------|---------------------|--------------------------------------|---------------------------|--|------|
| | percent, but this factor may be adjusted based on additional information on local conditions. Reclamation and DWR require the imposition of a streamflow depletion factor because they will not move transfer water if doing so will violate the no injury rule. This process to evaluate and determine the streamflow depletion factor will help verify that the factor reduces potential impacts to avoid legal injury to CVP or SWP water supplies and a substantial impact or injury. | | | | | | |
| GW-1 | The objective of Mitigation Measure GW-1 is to avoid potentially significant adverse environmental effects from groundwater level declines such as (1) impacts to other legal users of water; (2) land subsidence; (3) adverse effects to groundwater-dependent vegetation and or (4) migration of reduced quality groundwater. The mitigation measure also requires prompt corrective action so that impacts discussed previously will be reduced to less than significant in the event unanticipated effects occur. The measure accomplishes this by monitoring groundwater levels and land subsidence in the period during which groundwater is being pumped in lieu of diverting the surface water. Additionally, the mitigation plan identifies necessary preventative action measures if monitoring shows that identified trigger points are reached during transfer-related pumping Reclamation will verify that sellers implement the monitoring program and mitigation plan to avoid potentially significant adverse effects of transfer-related groundwater extraction. In addition, each entity making surface water available for transfer through groundwater substitution actions must confirm that the proposed groundwater pumping will be compatible with state and local regulations and Groundwater Management Plans (GMPs). As | Participating Sellers | Reclamation | Seller transfer application package. | Prior to water transfers. | | |

| Measure No. | Mitigation Measure | Responsible Party | Monitoring Party | Method of Verification | Timing of Verification | Verification of Completion Initials | Date |
|----------------|---|-----------------------|---------------------|---|--|--|------|
| | Groundwater Sustainability Plans (GSPs) are developed by Groundwater Sustainability Agencies, potential sellers must confirm that the proposed pumping and the following Monitoring Program and Mitigation Plan verified by Reclamation is compatible with applicable GSPs. | | | | | | |
| GW-1 | Well Review Process Potential sellers must submit well data for Reclamation and, where appropriate, DWR review, as part of the transfer approval process. Required information will be detailed in the most current version of the DRAFT Technical Information for Preparing Water Transfer Proposals (Reclamation and DWR 2014). | Participating sellers | Reclamation | Seller transfer application package. | Prior to water transfers. | | |
| GW-1 | Monitoring Program Potential sellers must complete and implement a monitoring program subject to Reclamation's approval that shall include, at a minimum, the following components: | Participating sellers | Reclamation | Seller transfer application package and monitoring reports. | Prior to, during, and after water transfers. | | |
| GW-1 | Monitoring Well Network The monitoring program shall incorporate a sufficient number of monitoring wells, as determined by Reclamation, to accurately characterize groundwater levels from the appropriate aquifers and their response in the area before, during, and after transfer pumping takes place. Depending on local conditions, additional groundwater level monitoring may be required near ecological resource areas. It should be noted that monitoring well networks have been established for some of the participating pumping wells that have participated in water transfers in previous years. For wells that have not participated in water transfers previously, the sellers would identify suitable monitoring wells as defined below for review and approval by Reclamation prior to transfer. If a suitable monitoring well(s) is not identified for a participating pumping well, the participating | Participating sellers | Reclamation | Seller transfer application package and monitoring data. | Plan submitted prior to water transfers; monitoring information submitted during and after transfer. | | |

Page 3 of 19

| Measure No. | Mitigation Measure | Responsible Party | Monitoring Party | Method of Verification | Timing of Verification | Verification of Completion Initials | Date |
|----------------|--|----------------------|---------------------|---------------------------|---------------------------|--|------|
| | pumping well will not be allowed to participate in water transfer until a suitable monitoring well(s) is identified. The monitoring well network would include the participating pumping well and a suitable groundwater level monitoring well(s) in the vicinity of the participating pumping well(s). Suitable monitoring well(s) would: (1) be within a two-mile radius of the seller's transfer pumping well; (2) be located within the same Bulletin 118 subbasin as the pumping well; and (3) have a screen depth(s) in the same aquifer level (shallow, intermediate, or deep) as the pumping well. Wells with short historic records could be considered, but short records (that do not extend to 2014 or earlier) could limit the transfer because the historic low would not reflect the persistent dry weather from 2011 to 2015. In this situation, the lowest groundwater level for the short period of record would be used, but because the groundwater level would likely be higher than the historic low during the prior drought period, the groundwater level triggers (described below) would be more restrictive (i.e., the lowest recorded groundwater level could be reached more quickly during transfer-related pumping than occurred in the short period of record when groundwater levels were higher. Monitoring requirements at the participating pumping well and suitable monitoring well(s) would detect impacts to third parties and land subsidence. Monitoring and mitigation for impacts to groundwater dependent deep-rooted vegetation and migration of reduced quality groundwater are | | | | | | |

| Measure No. | Mitigation Measure | Responsible Party | Monitoring Party | Method of Verification | Timing of Verification | Verification of Completion Initials | Date |
|----------------|--|-----------------------|---------------------|---|---|--|------|
| GW-1 | Sellers will collect measurements of groundwater levels in both the participating wells (those wells being used in lieu of diverting surface water that is being made available for transfer) and monitoring wells. Groundwater level measurements will be used to identify potential concerns for both third party impacts and irreversible subsidence based on the identified trigger points. Groundwater level monitoring will include measurements before, during, and after transfer-related substitution pumping. The seller will measure groundwater levels as follows: • Prior to transfer: Groundwater levels will be measured in both the participating pumping well(s) and the monitoring well(s) monthly from March in the year of the proposed transfer-related substitution pumping until the start of the transfer. Monitoring will also be conducted on the day that the transfer-related substitution pumping begins, prior to the pump being turned on. • During transfer-related substitution pumping: Groundwater levels will be measured in both the participating pumping well(s) and the monitoring well(s) weekly throughout the transfer-related substitution pumping period. • Post-transfer pumping: Groundwater levels will be measured in both the participating well(s) and the monitoring well(s) weekly for one month after the end of transfer-related substitution pumping well(s) and the monitoring well(s) weekly for one month after the end of transfer-related substitution pumping harch of the year following the transfer. | Participating sellers | Reclamation | Seller transfer application package with field spot-checks and monitoring data. | Prior to, during, and after water transfers. | | |
| GW-1 | Groundwater Level Triggers The primary criteria used to identify potentially significant impacts to groundwater levels are the BMOs set by GMPs. In the Sacramento Valley, | Participating sellers | Reclamation | Regular inspection, monitoring data, and report if triggers are | Plan submitted prior to water transfers; monitoring | | |

Page 5 of 19

| Measure No. | Mitigation Measure | Responsible Party | Monitoring Party | Method of Verification | Timing of Verification | Verification of Completion Initials | Date |
|----------------|--|----------------------|---------------------|---------------------------|--|--|------|
| | Shasta, Tehama, Glenn, Butte, Colusa, Sutter, Yuba, Nevada, Placer, Sacramento and Yolo counties have established GMPs to provide guidance in managing the resource. In areas where quantitative BMO groundwater level triggers exist, sellers will manage groundwater levels to these triggers and initiate the mitigation plan (discussed below) if groundwater levels reach the trigger. In areas where quantitative BMOs do not exist, sellers will manage groundwater levels to maintain them above the identified historic low groundwater level (trigger) and will initiate the mitigation plan (discussed below) if groundwater levels reach the trigger. Most of the quantitative BMOs within the Seller Service Area are tied to historic low groundwater levels. Therefore, the use of historic low groundwater levels in areas without quantitative BMOs is consistent with the approach for areas with quantitative BMOs. As part of a seller's transfer proposal subject to Reclamation's review and approval, the seller will need to identify the monitoring wells and the specific groundwater level trigger for each well (established through the local BMO or the historic low groundwater level for that well). Groundwater level declines due to pumping occur initially at the pumping well and then propagate outward from that location. The magnitude of groundwater level decline caused by pumping also decreases with increasing distance from the pumping well. Therefore, groundwater level declines caused by pumping would be measured first at the pumping well and subsequently at the monitoring well. The decline would be greatest at the pumping well and lower at the monitoring well. Therefore, it is likely that groundwater levels in the pumping well would decline to the historic low level sooner than at the | | | exceeded, if necessary. | information submitted during and after transfer. | | |

| Measure No. | Mitigation Measure | Responsible Party | Monitoring Party | Method of Verification | Timing of Verification | Verification of Completion Initials | Date |
|----------------|--|-----------------------|---------------------|---|--|--|------|
| | monitoring well(s). The monitoring well(s) would provide information surrounding the well to avoid potential cumulative impacts. | | | | | | |
| GW-1 | Groundwater Quality For municipal sellers, the comprehensive water quality testing requirements of Title 22 are considered sufficient for the water transfer monitoring program. Agricultural sellers shall measure specific conductance in samples from each participating production well. Samples shall be collected when the seller first initiates pumping, monthly during the transfer pumping period, and at the termination of transfer pumping. | Municipal sellers | Reclamation | Inspections during transfer period and monitoring data. | Prior to, during, and after water transfers. | | |
| GW-1 | Groundwater Pumping Measurements All wells pumping to replace surface water made available for transfer shall be configured with a permanent instantaneous and totalizing flow meter capable of accurately measuring well discharge rates and volumes. Flow meter readings will be recorded just prior to initiation of transfer related pumping and no less than monthly throughout the duration of the transfer, as close as practical to the last day of the month. Readings will also be recorded just after cessation of transfer-related pumping. Flow meter installation and calibration, in accordance with recommendation by manufacturer, will be submitted by the seller. | Participating sellers | Reclamation | Inspections during transfer period and monitoring data. | Prior to, during, and after water transfers. | | |
| GW-1 | Shallow Groundwater Level Monitoring for Deep Rooted Vegetation To avoid significant effects to vegetation and allow sellers to modify actions before significant effects occur, sellers will monitor groundwater level data to verify that significant adverse effects to deep-rooted vegetation are avoided. This monitoring is only required in areas with deep-rooted vegetation (i.e. oak trees and riparian trees that would have tap roots greater than 10 feet deep) within a one-half mile radius of the participating pumping well and | Participating sellers | Reclamation | Inspection, monitoring data, and report if deep rooted vegetation are impacted (only required in areas with deep-rooted vegetation). | Plan submitted prior to water transfers; monitoring information submitted during and after transfer. | | |

| Measure No. | Mitigation Measure | Responsible Party | Monitoring Party | Method of Verification | Timing of Verification | Verification of Completion Initials | Date |
|----------------|---|----------------------|---------------------|---------------------------|------------------------|--|------|
| | areas where groundwater levels are between 10 to 25 feet below ground surface prior to starting the transfer of surface water made available from groundwater substitution actions. This monitoring is not required in areas with no deep-rooted vegetation (i.e., areas without oak trees and riparian trees that would have tap roots greater than 10 feet deep) within one-half mile of the participating wells or in areas where vegetation is located along waterways or irrigated fields that will continue to have water during the period of transfer. The seller would be required to identify if monitoring for deep rooted vegetation is required in their transfer proposal to Reclamation and DWR. Existing resources such as DWR's groundwater dependent ecosystem maps (https://gis.water.ca.gov/app/NCDatasetViewer/) or any existing biological survey data in the area could be used to identify deep rooted vegetation near the participating pumping well. If deep rooted vegetation is identified near the participating pumping well, a groundwater level monitoring well with the following requirements would need to be identified and monitored: (1) monitoring well is within a one-half mile radius of the deep-rooted vegetation; (2) monitoring well would measure shallow groundwater level changes (within the interval between 10 to 25 feet below ground surface). The participating production well can function as the monitoring well if previously mentioned requirements are met. If monitoring data at the well indicate that groundwater levels have dropped below root zones (i.e., more than 10 feet, where groundwater was 10 to 25 feet below ground surface prior to starting the transfer of surface water made available from groundwater substitution actions), the seller must implement actions set forth | | | | | | |

| Measure No. | Mitigation Measure | Responsible Party | Monitoring Party | Method of Verification | Timing of Verification | Verification of Completion Initials | Date |
|----------------|---|-----------------------|---------------------|---|---------------------------|--|------|
| | groundwater levels in the area where actions are being taken to make water available for transfer have typically varied by more than this amount annually during the proposed transfer period, then the transfer may be allowed to proceed. The seller must submit historic data showing groundwater variances to Reclamation prior to transfer pumping. If no monitoring wells with the requirements discussed in the previous paragraph exist, monitoring would be based on visual observations by a qualified plant ecologist/certified arborist of the health of these areas of deep-rooted vegetation until it is feasible to obtain or install shallow groundwater monitoring. Monitoring of these areas would include a pre-pumping vegetation assessment within a half-mile radius of the pumping well followed by an assessment near the end of the pumping season but prior to fall/autumn leaf-drop. The assessment of post-pumping impacts on deeprooted vegetation will be conducted by a qualified plant ecologist/arborist and will take into account the existing health conditions of the vegetation prior to pumping, species present, size-class of trees, and rainfall data from the previous water years. If Reclamation the qualified plant ecologist/certified arborist determines, based on site-specific circumstances in consultation with a plant ecologist/arborist, that groundwater pumping has caused significant adverse impacts to deep-rooted vegetation (that is, any loss of the deep-rooted vegetation), the seller must implement restoration actions set forth in the mitigation plan . Findings from the pre-pumping and post pumping assessment will be reported to Reclamation. | | | | | | |
| GW-1 | Coordination Plan The monitoring program will include a plan to coordinate the collection and organization of monitoring data. This plan will describe how input from third parties (i.e. groundwater wells not | Participating sellers | Reclamation | Seller transfer application package with Coordination Plan. | Prior to water transfers. | | |

| Measure No. | Mitigation Measure | Responsible Party | Monitoring Party | Method of Verification | Timing of Verification | Verification of Completion Initials | Date |
|----------------|---|-----------------------|---------------------|---|--|--|------|
| | participating in water transfers) will be incorporated into the monitoring program and will include a plan for communication with Reclamation as well as other decision makers and third parties. Additionally, Reclamation, SLDMWA, and potential seller(s) will coordinate closely with potentially affected third parties to collect and monitor groundwater data. If a third party expects that it may be affected by a proposed transfer, that party should contact Reclamation and the seller with its concern. The burden of collecting groundwater data will not be the responsibility of the third party. If warranted, additional groundwater level monitoring to address the third-party's concern may be incorporated in the monitoring and mitigation plans required by Mitigation Measure GW-1. | | | | | | |
| GW-1 | Evaluation and Reporting The monitoring program will describe the method of reporting monitoring data. At a minimum, sellers will provide data summary tables to Reclamation, both during and after transfer-related substitution pumping. Post-transfer reporting will continue through March of the year following the transfer. Sellers will provide a final summary report to Reclamation evaluating the effects of the water transfer. The final report will identify transfer-related effects on groundwater and surface water (both during and after pumping), and the extent of effects, if any, on local groundwater users. It shall include groundwater level contour maps for the area in which transfer related pumping action is located, showing pre-transfer groundwater levels, groundwater levels at the end of the transfer period, and recovered groundwater levels in March of the year following the transfer. Groundwater level contour maps for different aquifer depths should also be included where data is available. The summary report shall also identify the extent of | Participating sellers | Reclamation | Seller transfer application package and monitoring data and report. | Plan submitted prior to water transfers; monitoring information submitted during and after transfer. | | |

| Measure No. | Mitigation Measure | Responsible Party | Monitoring Party | Method of Verification | Timing of Verification | Verification of Completion Initials | Date |
|----------------|--|-----------------------|---------------------|--|--|--|------|
| | transfer-related effects, if any, to ecological resources such as fish, wildlife, and vegetation resources. | | | | | | |
| GW-1 | Mitigation Plan Potential sellers must complete and implement a mitigation plan to avoid potentially significant groundwater impacts and ensure prompt corrective action in the event unanticipated effects occur. This plan must document the planned actions if there are unanticipated impacts to groundwater resources or groundwater-dependent vegetation. This plan must be submitted to Reclamation as part of the transfer approval process. | Participating sellers | Reclamation | Mitigation plan, monitoring data for mitigation activities, and regular inspections of mitigation activities. | Submit Mitigation Plan to Reclamation prior to water transfers. | | |
| GW-1 | If groundwater Resource Mitigation If groundwater level triggers are reached at the participating pumping well(s) or the suitable monitoring well (s) (either BMO triggers or historic low groundwater levels), transfer-related pumping would stop from the participating pumping well that reached the trigger. Transfer related pumping would be stopped when the trigger is first reached at either the participating pumping well(s) or the suitable monitoring well(s). Transfer-related pumping could not continue from this well (in the same year or a future year) until groundwater levels recovered to above the groundwater level trigger. Implementation of the mitigation plan thus avoids any potentially significant groundwater impacts. Other corrective actions could include: • Lowering of pumping bowls in nontransferring wells affected by substitution pumping. • Reimbursement to non-transferring third parties for significant increases in their groundwater pumping costs due to the groundwater substitution pumping action, as compared with their costs absent the transfer. | Participating sellers | Reclamation | Mitigation plan, monitoring data for mitigation activities, and regular inspections of mitigation activities. | Prior to, during and after water transfers | | |

V-12 – September 2019

Page 11 of 19 38

| Measure No. | Mitigation Measure | Responsible Party | Monitoring Party | Method of Verification | Timing of Verification | Verification of Completion Initials | Date |
|----------------|---|-----------------------|---------------------|---|---|--|------|
| | Reimbursement to non-transferring third parties for modifications to infrastructure that may be affected. Other appropriate actions based on local conditions. | | | | | | |
| | If shallow groundwater levels monitoring suggests that groundwater levels have dropped below root zones, the seller must stop transfer-related pumping at the participating pumping well. Transfer-related pumping from the participating pumping well would be stopped until groundwater levels have recovered to levels above the root zones. If historic data at the location indicates shallow groundwater levels typically dropped and remained below the root zones (i.e., more than 10 feet, where groundwater was 10 to 25 feet below ground surface prior to starting the transfer of surface water made available from groundwater substitution actions) over the proposed transfer period, then the transfer may be allowed to proceed. In areas where visual monitoring is conducted to monitor health of deep-rooted vegetation, the seller must stop transfer-related pumping at the participating well if the qualified plant ecologist/arborist, determines a loss or substantial risk of loss of vegetation. If adverse impacts to deep-rooted vegetation occur, the seller will perform restoration activities by replanting similar vegetation at a 1:1 ratio (for every 1 inch diameter at breast height (dbh) lost, 1 inch in dbh will be planted. For example if 12-inch dbh of oak is lost then the seller would have to plant 12 gallon oak sapling at around 1-inch dbh. Therefore, the seller would plant more trees than lost.). The seller will plant, irrigate, maintain, and monitor restoration of vegetation for 3 years to replace the losses. All plantings will be fitted with exclusion | Participating sellers | Reclamation | Mitigation plan, monitoring data for mitigation activities, and regular inspections of mitigation activities. | Prior to, during and after water transfers | | |

| Measure No. | Mitigation Measure | Responsible Party | Monitoring Party | Method of Verification | Timing of Verification | Verification of Completion Initials | Date |
|----------------|---|----------------------|---------------------|---------------------------|---------------------------|--|------|
| | cages or other suitable protection from herbivores. Plantings will be irrigated for 3 years or until the survival criterion is met. If 75% of the plants survive at the end of the 3-year monitoring period, the revegetation will be considered successful. If the survival criterion is not met at the end of the monitoring period, planting and monitoring will be repeated after mortality causes have been identified and corrected. Annual monitoring reports, prepared by a qualified plant ecologist/arborist, will document the status of the plantings and recommendations for remediation as necessary. The monitoring reports will be provided to the seller and Reclamation by August 31 following each year of monitoring (generally July 1 through June 30) to allow time for additional planting activities, if necessary. Transfer-related pumping could not continue at the subject well while vegetation restoration activities consistent with the requirements above are ongoing (i.e. 3 years or until the survival criterion is met). Transfer-related pumping at the subject well could not resume after restoration unless the seller provides evidence that resuming pumping will not affect deep-rooted vegetation (such as data from the installation of a new shallow groundwater level monitoring well within a one-half mile radius of the deep-rooted vegetation that indicates stable shallow groundwater levels at less than 10 feet). | | | | | | |

Page 13 of 19

Appendix V Mitigation Monitoring and Reporting Program

| Measure No. | Mitigation Measure | Responsible Party | Monitoring Party | Method of Verification | Timing of Verification | Verification of Completion Initials | Date |
|----------------|---|----------------------|---------------------|---|---------------------------|--|------|
| AQ-1 | Selling agency would reduce pumping at diesel or natural gas wells to reduce emissions to below the thresholds. If an agency is transferring water through cropland idling and groundwater substitution in the same year, the reduction in vehicle emissions can partially offset groundwater substitution pumping at a rate of 4.25 acre-feet (AF) of water produced by idling to one acre-foot of groundwater pumped. Agencies may also decide to replace old diesel or natural gas wells to reduce emission below the thresholds. Any selling agencies with potentially significant emissions, as determined by this EIS/EIR, will be required to maintain daily recordkeeping logs that document the specific engine to be used for groundwater substitution transfers, the power rating (hp), and applicable emission factors. Emission calculations will be completed daily for comparison to the significance thresholds determined for each selling agency. The recordkeeping logs will be sent to Reclamation monthly for verification that emissions are within the allowable limits. Reclamation will also work with the water agencies to inform individual growers of incentive funding available through the Natural Resources Conservation Service's Environmental Quality Incentives Program. Funded conservation practices including the replacement of internal combustion engines in irrigation pumps; therefore, the program may be used by growers to further reduce criteria pollutant emissions. | Selling agency | Reclamation | Daily recordkeeping logs specifying the engines operated by each selling agency with potentially significant emissions and calculated criteria pollutant emissions. | Monthly during transfer. | | |

| Measure No. | Mitigation Measure | Responsible Party | Monitoring Party | Method of Verification | Timing of Verification | Verification of Completion Initials | Date |
|-------------------|--|--------------------------|---------------------|--|--|--|------|
| AQ-2 | Any engines operating in the area of analysis that are capable of operating as either electric or natural gas engines would only operate with electricity during any groundwater transfers. Any selling agencies with these engines will be required to maintain daily recordkeeping logs that document the engines used for groundwater substitution transfers and the type of fuel used. The recordkeeping logs will be sent to Reclamation monthly for verification that the engines are operating in compliance with the mitigation measure. | Selling agency | Reclamation | Daily recordkeeping logs documenting the engines used for groundwater substitution transfers and the fuel type used. | Monthly during transfer. | | |
| LU-1 | Water would not be acquired from a particular parcel of land if idling the land would result in a lower classification of Important Farmland as defined under the Farmland Mapping and Monitoring Program (FMMP). The selling agency will provide cropping history of specific parcels to be idled for the transfer to Reclamation to determine if idling will result in a change in classification from Important Farmland. | Selling agency | Reclamation | Maps of fields to be idled with land classification and past cropping patterns for field to be idled. | Prior to water transfer. | | |
| VEG and WILD-1 | Mitigation Measure VEG and WILD-1 includes measures to avoid potentially significant impacts to terrestrial species associated with cropland idling transfers and reduce any potential impacts to less than significant: As part of the review and approval process for proposed water transfers, Reclamation will have access to the land to verify how the water for transfer is being made available and to verify that actions to protect the giant garter snake are being implemented. | Participating Sellers | Reclamation | Seller transfer package with maps of fields to be idled. | Ongoing during transfer season. | | |
| VEG and WILD-1 | Movement corridors for aquatic species (including pond turtle and giant garter snake) include major irrigation and drainage canals. The water seller will keep adequate water in major irrigation and drainage canals. Canal water depths should be similar to years when transfers do not occur or, where information on existing water depths is | Participating Sellers | Reclamation | Seller transfer application package with field spot- checks. | Ongoing during transfer season. | | |

Page 15 of 19 42

Appendix V Mitigation Monitoring and Reporting Program

| Measure No. | Mitigation Measure | Responsible Party | Monitoring Party | Method of Verification | Timing of Verification | Verification of Completion Initials | Date |
|-------------------|--|--------------------------|---------------------|---|--------------------------------------|--|------|
| | limited, at least two feet of water will be considered sufficient. | | | | | | |
| VEG and WILD-1 | Maintaining water in smaller drains and conveyance infrastructure supports key habitat attributes such as emergent vegetation for giant garter snake escape cover and foraging habitat. If cropland idling/shifting occurs, Reclamation will work with sellers to document that adequate water remains in drains and canals. Documentation may include flow records, photo documentation, or other means of documentation subject to approval by Reclamation and USFWS. | Participating Sellers | Reclamation | Seller transfer application package with field spotchecks. | Ongoing during transfer season. | | |
| VEG and WILD-1 | Fields abutting or immediately adjacent to areas with known important giant garter snake populations (Appendix N) will not be permitted to participate in cropland idling/shifting transfers. Important giant garter snake populations are defined for purposes of this mitigation measure as populations previously identified by biologists from USFWS, USGS, and possibly contract biologists. These populations of giant garter snakes were identified early on as identified in previous consultations and are in, or connected to, areas that are considered public or protected. Most of these areas have specific management plans for giant garter snakes either for mitigation or as wildlife refuges. One factor influencing the importance of these areas is that they can provide a refuge for snakes independent of rice production. Fields abutting or immediately adjacent to the following areas are considered important giant garter snake populations: | Participating Sellers | Reclamation | Seller transfer application package, maps of fields to be idled, and field spot-checks of land idled. | Prior to and during water transfers. | | |

| Measure No. | Mitigation Measure | Responsible Party | Monitoring Party | Method of Verification | Timing of Verification | Verification of Completion Initials | Date |
|-------------------|--|----------------------|---------------------|--|---------------------------|--|------|
| | Little Butte Creek between Llano Seco and Upper Butte Basin Wildlife Area Butte Butt | | | | | | |
| | Butte Creek between Upper Butte Basin and Gray Lodge Wildlife areas | | | | | | |
| | Colusa Basin drainage canal between Delevan and Colusa National Wildlife Refuges | | | | | | |
| | Gilsizer Slough | | | | | | |
| | Colusa Drainage Canal | | | | | | |
| | Land side of the Toe Drain along the Sutter Bypass | | | | | | |
| | Willow Slough and Willow Slough Bypass in Yolo County | | | | | | |
| | Hunters and Logan Creeks between Sacramento and Delevan National Wildlife Refuges | | | | | | |
| | Lands in the Natomas Basin | | | | | | |
| VEG and WILD-1 | At the end of the water transfer year, Reclamation will prepare an annual monitoring report that contains the following: | Reclamation | Reclamation | Review of monitoring report and annual meeting | After water transfers. | | |
| | Maps of rice production and all cropland idling actions within the seller district that occurred within the range of potential transfer methods analyzed in this EIS/EIR. | | | with USFWS | | | |
| | Results of current scientific research, summary of monitoring pertinent to water transfer actions, and new giant garter snake detections. | | | | | | |
| | Discussion of conservation measure effectiveness. | | | | | | |

Page 17 of 19 44

Appendix V Mitigation Monitoring and Reporting Program

| Measure No. | Mitigation Measure | Responsible Party | Monitoring Party | Method of Verification | Timing of Verification | Verification of Completion Initials | Date |
|-------------------|--|----------------------|---------------------|---|---|--|------|
| | Cumulative history of crop idling and crop shifting specifically to make water available for transfers within the sellers area. | | | | | | |
| | The report will be submitted to the USFWS and CDFW no later than January 31, prior to the next year of potential transfers. | | | | | | |
| VEG and WILD-1 | Reclamation will establish annual meetings with the Service to discuss the contents and findings of the annual report. These meetings will be scheduled following the distribution of the monitoring report and prior to February 28. | Reclamation | Reclamation | Distribution of monitoring report to USFWS and occurrence of annual meeting. | Meeting occurs prior to the next transfer season. | | |
| VEG and WILD-1 | If, upon Reclamation's review of monitoring reports or other scientific literature, it appears that the Project is having unanticipated effects on the giant garter snake, Reclamation will contact the Service to discuss the information available and effectiveness of Project conservation measures. | Reclamation | Reclamation | Review of monitoring report by Reclamation and occurrence of annual meeting with USFWS. | Meeting occurs prior to the next transfer season. | | |
| VEG and WILD-1 | Reclamation will monitor the effectiveness of the conservation measures by funding giant garter snake distribution and occupancy research. The research, conducted by USGS, includes annual sampling of giant garter snake within the action area and focuses on their distribution and occupancy dynamics. The research is designed to evaluate the effectiveness of the conservation measures to maintain giant garter snake occupancy at sites transferring water via this program. | Reclamation | Reclamation | Reclamation funding of giant garter snake research. | Ongoing. | | |

Long-Term Water Transfers Final EIS/EIR

1 V.3 List of Acronyms

- 2 AF Acre-feet
- 3 BMOs Basin Management Objectives
- 4 CDFW California Department of Fish and Game
- 5 CEQA California Environmental Quality Act
- 6 CVP Central Valley Project
- 7 DWR California Department of Water Resources
- 8 EIR Environmental Impact Report
- 9 EIS Environmental Impact Statement
- 10 FMMP Farmland Mapping and Monitoring Program
- 11 GIS Geographic Information System
- 12 GMP Groundwater Management Plan
- 13 GSP Groundwater Sustainability Plan
- 14 GPS Global Positioning System
- 15 MMRP Mitigation and Monitoring Program
- 16 PRC Public Resources Code
- 17 Reclamation Bureau of Reclamation
- 18 SLDMWA San Luis & Delta–Mendota Water Authority
- 19 SWP State Water Project
- 20 USFWS United States Fish and Wildlife Service

21 V.4 References

- Bureau of Reclamation (Reclamation) and California Department of Water Resources (DWR).
- 23 2014. DRAFT Technical Information for Preparing Water Transfer Proposals-
- 24 Information to Parties Interested In Making Water Available for Water Transfers in
- 25 2014. October 2013. Accessed on 08 02 2019. Available at:
- 26 https://water.ca.gov/LegacyFiles/watertransfers/docs/DTIWT 2014 Final Draft.pdf

V-20 - September 2019

Page 19 of 19 46

Attachment Sycamore Mutual Water Company Proposed 2020 Water Transfer

Groundwater Level Monitoring Program

In accordance with the *Draft Technical Information for Preparing Water Transfer Proposals* dated December 2019 (Draft Technical Information), prepared by the Department of Water Resources (DWR) and U.S. Bureau of Reclamation (Reclamation), the purpose of this attachment is to detail Sycamore Mutual Water Company's (Company) Groundwater Level Monitoring Program (Program) for the proposed 2020 Water Transfer. The information contained in this attachment supplements the additional information submitted through DWR's Water Transfer Information Management System (WTIMS). The objective of the Program is to avoid significant adverse environmental effects and ensure prompt corrective action in the event unanticipated effects occur. The Program accomplishes this by monitoring groundwater levels during the transfer to avoid potential effects. The Program, identified below, will be implemented together with the Company's Groundwater Mitigation Plan, which specifies the process to address reports of purported third-party impacts.

The Company will implement groundwater level monitoring consistent with the Draft Technical Information, as identified in other attachments submitted for the Company's proposed 2020 Water Transfer. Throughout the monitoring period for the 2020 Water Transfer, the Company will compare the groundwater level measurements obtained at its five participating production groundwater wells and suitable nearby monitoring wells with the historic low groundwater levels for those wells. Based on a review of all available groundwater level data for the wells listed in the table below, the historic low groundwater levels (measured as feet below ground surface) are shown in the table.

| Production Well & Suitable Monitoring Well(s) | Historic Low Groundwater Level (ft below ground surface) | Measurement Date of Historic Low Level |
|---|--|---|
| Well #40 (Well 2a) | N/A | N/A |
| 15N01W23P002M | 15.6 | 10/26/1977 |
| Well #39 (Well 2b) | N/A | N/A |
| 15N01W23P002M | 15.6 | 10/26/1977 |
| Well #11 | N/A | N/A |
| 15N01W23P002M | 15.6 | 10/26/1977 |
| Well #14 | N/A | N/A |
| 15N01W05G001M | 24.5 | 8/4/2014 |

| Production Well & Suitable Monitoring Well(s) | Historic Low Groundwater Level (ft below ground surface) | Measurement Date of Historic Low Level |
|---|--|---|
| Well #15 | N/A | N/A |
| 15N01W05G001M | 24.5 | 8/4/2014 |

There is limited recent data available at nearby groundwater wells for the proposed 2020 water transfer the Company. The Company has attempted to identify suitable monitoring wells for each production well participating in the transfer, however, based on available information the identification of suitable monitoring wells is limited at this time. A review of historic groundwater levels at surrounding monitoring wells show seasonal variation but generally remain stable over time. Based on a review of the available groundwater level data, groundwater substitution pumping by the Company for the 2020 Water Transfer is not considered to pose a significant potential risk. Once historic low groundwater levels are established with DWR and Reclamation, in the event that measured groundwater levels fall below the historic low level at participating production well or its suitable monitoring wells, the Company will cease pumping at the production well until such time that groundwater levels recover above the historic low level.

Attachment Sycamore Mutual Water Company Proposed 2020 Water Transfer

Groundwater Substitution Mitigation Plan

The purpose of this Groundwater Mitigation Plan (Third-Party Impacts Action Plan) is to describe actions that will be undertaken by Sycamore Mutual Water Company (Company) to respond to any significant adverse impacts to Third Parties that occur due to groundwater pumping for the Company's proposed 2020 Water Transfer at participating groundwater wells. Third Parties may include local groundwater users that could be affected by changes in groundwater levels or quality because of groundwater pumping performed for the 2020 Water Transfer. The Company agrees that prompt responses to and mitigation of any significant adverse impacts to Third Parties are an important requirement for the 2020 Water Transfer and any similar transfers that may occur in the future.

This action plan includes a series of steps that will be taken to address any adverse impacts that groundwater pumping performed for the 2020 Water Transfer may cause (unmitigated impacts to Third Parties). Under this action plan, groundwater pumping must not produce significant unmitigated impacts on Third Parties, impacts must be identified and mitigated within a timely manner, and there must be ongoing, open communications with the potentially affected Third Parties. Because not all potential impacts can be known in advance, this plan provides a process for responding to concerns expressed by local groundwater users who reasonably determine that their water production facilities are being or will be impacted by increased groundwater pumping as a result of this water transfer. In the case that the measured groundwater level falls below the historic low level at a participating production well or its associated monitoring wells, the Company will cease pumping at the production well until such time that groundwater levels recover above the historic low level.

The Company will identify a contact person or persons who will be responsible for initially responding to a notification of a potential Third Party impact, and take the other action specified in this section. Upon the Company receiving notification of a potential Third Party impact, the Company will contact the Third Party within two (2) business days and obtain all available information regarding the nature and extent of the potential impact, and provide that information to the Department of Water Resources (DWR) and the U.S. Bureau of Reclamation (Reclamation) within five (5) business days. The Company will regularly update DWR and Reclamation on the status of Third Party impact concerns.

After the Third Party has been contacted and the relevant information regarding the potential impact has been received, the Company will develop an approach to: (a) determine whether the Third Party has actually been impacted by groundwater pumping performed for the 2020 Water Transfer, and, if so; (b) mitigate for the impact. The Company will coordinate with DWR and Reclamation to strive in developing the foregoing approach, documented in a report, within ten (10) business days of contacting the Third Party.

The Company will promptly mitigate any Third Party impacts that are reasonably likely to have been caused by groundwater pumping under the 2020 Water Transfer. The Company will be responsible for the implementation of mitigation actions. Due to the limitation of the Company's groundwater monitoring well network, if a Third Party claim is reasonably likely to have been caused by groundwater pumping for the 2020 Water Transfer, the Company may have to immediately implement actions including the discontinuation of groundwater pumping for an indefinite period of time (during the transfer period) at one or more transfer wells listed above, until the claim can be validated or mitigated by the Company. Actions that may be taken to mitigate an impact include, but are not limited to: reduction in hours of groundwater pumping per day at one or more wells listed above, cessation of groundwater pumping at one or more groundwater wells listed above, or other reasonable measures determined to be appropriate by the Company. Mitigation actions will be developed through consultation with the claimant, DWR, and Reclamation, and will be approved by the Company. A copy of the mitigation actions will be submitted to DWR and Reclamation. The Company will strive to develop the agreed upon mitigation actions within ten (10) business days of meeting with the claimant. The mitigation actions will be implemented and the results of the mitigation will be monitored and documented by the Company. In the case that an impact is determined to have occurred, the Company is committed to avoiding or mitigating such impacts during a future water transfer.

If there are any Third Party impacts that are not reasonably likely to have been caused by increased groundwater pumping from the wells listed above, then the Company will provide the Third Party, DWR, and Reclamation with information to reasonably demonstrate the reasons that there were no impacts.

SMWC 2020 – Plan B

GW Transfer/Recharge Trial (6.15.2020)

Sycamore Mutual Water Company (Sycamore) is committed to being a good neighbor and resource manager, while finding ways to exercise our right to access groundwater. To that end, Sycamore proposes to make the following adjustments to our original transfer proposal in consideration to the feedback we received at the June 3rd meeting with the Colusa County Groundwater Commission and the input we received from Colusa County Planning Department.

- 1. Sycamore will reduce total net transfer amount to approximately 2,500-acre feet (total 2,862).
- 2. Sycamore will establish a set pumping schedule that will minimize potential impacts to neighbors:
 - a. To Be Approved by Water Resources Division Manager Prior to Transfer
 - b. Three Stage Pumping July, August, September
 - c. Adjust the pumping schedule weighted to August and September, which is afterpeak demand for neighborhood groundwater pumpers.

July: 12 hrs/day
 August: 18 hrs/day
 September: 24 hrs/day

- d. Regularly Review Pumping Numbers and Adjust Schedule Accordingly
- 3. Notify neighboring landowners of the transfer, with written notice of our intent to transfer. This notification will clearly state who to contact should there be any negative and unforeseen influence in their ability to access ground water. The Colusa County Water Resources Division will develop the notice and complete the mailing of notices to all owners of agricultural lands within a one-mile radius of the transfer wells. Sycamore will reimburse the Water Resources Division for all expenses for mailing the notices.
- 4. Sycamore will adopt the 24-hour shut off amendment formulated at the Groundwater Commission as part of the mitigation plan, and as described in the Transfer Agreement between Sycamore and Colusa County. This will supersede the DWR/BOR mitigation action that will only be initiated should the 24-hr approach not be successful.
- 5. Additional wells will be added to the groundwater monitoring network to the south along Sycamore Slough. To-date we have consent from the following neighboring landowners/farming entities that are within 2 miles of our most southerly production well: T&P Farms (Bedart), Alex Struckmeyer (Struckmeyer), Bill Wallace Jr. (Wallace), Faxon Farms (Bertone-Styles), John Wallace (Farnsworth/Bushnell). Written notice and monitoring procedure will be given to all landowners prior to transfer beginning.
- 6. Sycamore will invest in pressure transducers for the production wells to capture real-time water levels throughout the transfer and through March 2021. All data will be shared with the Colusa County Groundwater Commission.
- 7. Davis Ranches, landowner member of Sycamore, will participate in TNC's multi-benefit recharge project in fall, 2020 and gather data through Spring, 2021. This program will be the same as last year's pilot; a total of 575 acre-feet of surface water were applied to the fields and an estimated 366 acrefeet (119 million gallons) percolated below the root zone. Sycamore will provide all accumulated data collected through our monitoring program during the transfer as well as the data collected during the TNC multi-benefit recharge program to the Colusa County Water Resources Division and the Colusa Groundwater Authority.

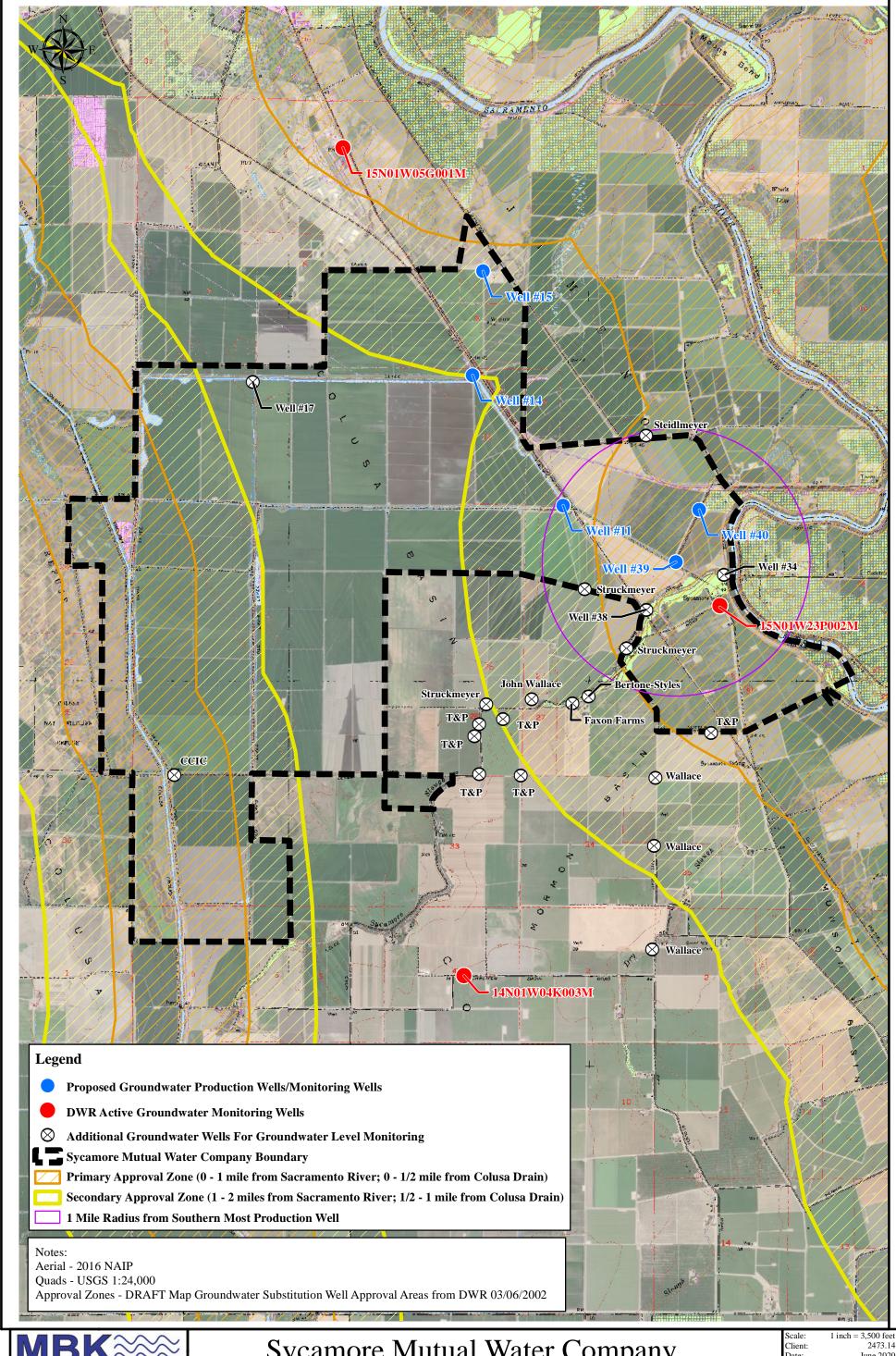
Sycamore Mutual Water Company

2020 Delta Mendota Sale

PROPOSED PUMPING SCHEDULE

6.15.2020

| | | | July | August | Sept |
|---------------|--|---|---|--|--|
| | | Hr./Day | 12 | 18 | 24 |
| GPM | ac-ft/day | Days | 31 | 31 | 17.5 |
| 1,500 | 6.9 | | 107.0 | 160.5 | 120.8 |
| 1,500 | 6.9 | | 107.0 | 160.5 | 120.8 |
| 1,750 | 8.1 | | 124.8 | 187.2 | 140.9 |
| 3,000 | 13.8 | | 214.0 | 320.9 | 241.6 |
| 3,000 | 13.8 | | 214.0 | 320.9 | 241.6 |
| 10,750 | 49.5 | | 797.7 | 1,181.0 | 883.1 |
| letion Factor | (13%) | | (103.7) | (153.5) | (114.8) |
| er Quantity | | | 694.0 | 1,027.5 | 768.3 |
| uantity | | | | | 2,490 a |
| | 1,500 1,500 1,750 3,000 3,000 10,750 letion Factor | 1,500 6.9 1,500 6.9 1,750 8.1 3,000 13.8 3,000 13.8 10,750 49.5 | GPM ac-ft/day 1,500 6.9 1,500 6.9 1,750 8.1 3,000 13.8 3,000 13.8 10,750 49.5 | Hr./Day 12 GPM ac-ft/day Days 31 1,500 6.9 107.0 107.0 1,750 8.1 124.8 214.0 3,000 13.8 214.0 214.0 10,750 49.5 797.7 Iletion Factor (13%) (103.7) 694.0 | Hr./Day 12 18 GPM ac-ft/day Days 31 31 1,500 6.9 107.0 160.5 1,750 8.1 124.8 187.2 3,000 13.8 214.0 320.9 3,000 13.8 214.0 320.9 10,750 49.5 797.7 1,181.0 Ietion Factor (13%) (103.7) (153.5) er Quantity 694.0 1,027.5 |



Sacramento, CA 95825 Phone: 916-456-4400 Fax: 916-456-0253 www.mbkengineers.com

Sycamore Mutual Water Company

2020 Water Transfer

2020 Water Year

Sacramento Valley Water Year Type Index (40-30-30) 1906 - 2020

Based on Observed Unimpaired Runoff

