

## **THE GLENN COUNTY PRIVATE PUMPER ADVISORY COMMITTEE**

**Glenn County Department of Agriculture, 720 North Colusa Street, Willows, CA 95988  
TELEPHONE: 530-934-6501**

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## **MEETING OF THE GLENN COUNTY PRIVATE PUMPER ADVISORY COMMITTEE**

**LOCATION: The Glenn County Farm Bureau, 831 5<sup>th</sup> Street, Orland, CA 95963  
DATE: January 9, 2017  
TIME: 1:00 pm**

## **AGENDA**

**ALL ITEMS ARE OPEN FOR PUBLIC COMMENT**

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Members of the public may appear before the Glenn County Private Pumper Advisory Committee and present evidence and/or make comments concerning any Private Pumper Advisory Committee business. If the matter is not listed on the agenda, such comments shall be presented during the unscheduled matters portion of the agenda. If the matter concerns an item listed on the agenda, the comments must be made at the time the agenda item is considered by the Private Pumper Advisory Committee. In the event that the agenda item gathers a large audience and/or group with the same or similar views, we encourage that one individual be assigned to speak on behalf of that group. Comments may be limited to three (3) minutes by the Chairman in the interest of time. Additional comments may be submitted in writing. The purpose of this procedure is to allow members of the public to provide information to the Private Pumper Advisory Committee.

If you wish to receive an agenda by mail, you may submit self-addressed stamped envelopes to the Glenn County Department of Agriculture, 720 North Colusa Street, Willows, CA 95988. A complete agenda packet, including back-up information, is available for public inspection during normal work hours at 720 North Colusa Street, Willows, CA 95988.

After posting of this Meeting Agenda, the public may request copies of support information for public agenda items listed.

- 1. CALL TO ORDER**
  - 2. INTRODUCTIONS**
-

### **3. UNSCHEDULED MATTERS**

Comments from the Committee and the Public on Unscheduled Matters (No action)

### **4. REGULAR AGENDA**

- a. Approval of December 9, 2016 minutes.
- b. Flowmeter presentation by TechnoFlo representative Steve Huth.
- c. Review DWR Water Transfer Flow Meter Specifications.
- d. Discuss and adopt regular meeting times.
- e. Review the Colusa County area Draft MOU titled "Draft Memorandum of Understanding Defining Colusa Subbasin Groundwater Sustainability Interests Version 3- December 8, 2016" presented at the December 8, 2016 Glenn SGMA Working Group Meeting-Discussion and Possible Action
- f. Suggestions for future agenda items.

### **5. COMMUNICATION**

### **6. ADJOURNMENT**

In compliance with the Americans with Disabilities Act, The Private Pumper Advisory Committee will make available to persons with a disability disability-related modification or accommodations. Notification three days prior to the meeting will enable the Private Pumper Advisory Committee to make arrangements to provide reasonable accommodations. If requested, this document and other agenda materials can be made available in an alternative format for persons with a disability who are covered by the Americans with Disabilities Act. Contact Lisa Hunter, Water Resource Coordinator at: 530-934-6501.

**CERTIFICATION: Pursuant to Government Code § 54954.2 the agenda for this meeting was properly posted on or before 1:00 pm on January 6, 2016.**

## THE GLENN COUNTY PRIVATE PUMPER ADVISORY COMMITTEE

Glenn County Department of Agriculture, 720 North Colusa Street, Willows,  
CA 95988 TELEPHONE: 530-934-6501

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## MINUTES

LOCATION: The Glenn County Farm Bureau, 831 5<sup>th</sup> Street, Orland,  
CA 95963 DATE: December 9, 2016  
TIME: 1:00 pm

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### 1. CALL TO ORDER

John Viegas, Glenn County Board of Supervisors representative, called the meeting to order at 1:11 PM and the Pledge of Allegiance was recited.

### 2. INTRODUCTIONS

Those in attendance introduced themselves as shown below.

	Private Pumper Advisory Committee Members Present <input type="checkbox"/> :	Others in Attendance:
<input checked="" type="checkbox"/>	Rick Beale	John Viegas, Glenn County Board of Supervisors
<input checked="" type="checkbox"/>	Sharron Ellis	Lisa Hunter, Glenn County Department of Agriculture
<input checked="" type="checkbox"/>	Geoff Fulks	Sharla Stockton, Glenn County Department of Agriculture
<input checked="" type="checkbox"/>	Ben Kermen	Marcie Skelton, Glenn County Department of Agriculture
<input checked="" type="checkbox"/>	Larry Maben	Chuck Schonauer, Private Pumper/Orland-Artois WD
<input checked="" type="checkbox"/>	Richard Olney	Mark Lohse
<input checked="" type="checkbox"/>	Ronald Stilwell	George Pendell, Stony Creek
		Erin Smith, Department of Water Resources
		Dave Ceppos, Center for Collaborative Policy
		Matt Gomes, Glenn County Planning and Public Works
		Lisa Humphreys, Glenn County Farm Bureau

### 3. UNSCHEDULED MATTERS

None.

### 4. REGULAR AGENDA

#### a. Elect officers.

Chair Nominations:

Sharron Ellis- Motion: Rick Beale, Second: Larry Maben

Close nominations- Motion: Geoff Fulks, Second: Ron Stilwell

Approved: 7-0

Vice Chair Nominations:

Ron Stilwell- Motion: Richard Olney, Second: Ben Kermen  
Close nominations- Motion: Geoff Fulks, Second: Larry Maben  
Approved: 7-0

**b. Discuss and adopt regular meeting times.**

It was suggested that the PPAC meet monthly. By consensus, the next meeting date was set for Monday, January 9, 2017 at 1:00 PM at the Glenn County Farm Bureau. Staff will prepare a proposed meeting schedule for consideration at the next meeting.

**c. Discuss roles and responsibilities of the committee.**

Supervisor Viegas reviewed the Private Pumper Advisory Committee Purpose and Responsibility handout. He shared that the Board of Supervisors and County staff are currently working on Sustainable Groundwater Management Act (SGMA) implementation and participate in several SGMA workgroup meetings including efforts with adjacent counties. The PPAC is an advisory committee to the Board of Supervisors representing private pumper concerns and interest regarding the impacts of SGMA. Supervisor Viegas expects the PPAC to be educated on SGMA and advise the Board on issues affecting private pumpers as it pertains to SGMA at the County and subbasin level. The Board of Supervisors will have the ultimate task of implementing SGMA.

**d. Presentation on the Sustainable Groundwater Management Act (SGMA).**

Lisa Hunter provided a general overview of SGMA, how it relates to Glenn County and the three subbasins with the County, and the private pumper role as stated in the Act. Key points are mentioned below.

The law defines sustainability as: Manage groundwater to prevent undesirable results (significant and unreasonable): Chronic lowering of groundwater levels, reduction of groundwater storage, seawater intrusion, degraded water quality, land subsidence, depletions of interconnected surface waters.

There are multiple GSA Notifications in Glenn County. All notifications are in "overlap" status. The agencies are working with a facilitation team to resolve the overlap.

Key Implementation Milestones:

- June 30, 2017 – GSAs must be formed
- July 1, 2017 – State affirms GSA status
- January 31, 2022 – All other GSPs complete

**e. SGMA process update.**

Glenn County has three high or medium priority subbasins that are required to be managed under SGMA: Corning Subbasin, Colusa Subbasin, and West Butte Subbasin. The County has committed that all areas within the County boundaries will be covered, but the details are still being developed. There are several entities that have submitted notices to be GSAs within the County. The County is currently working with these agencies to resolve overlap issues through facilitated support services provided by DWR. The County is participating in coordination meetings for

each of the subbasins and neighboring counties.

Glenn County was awarded a Proposition 1 grant for a data management system and hydrogeologic conceptual modeling project. The Board approved the consultant to assist in the technical work on December 6.

Supervisor Viegas added that he is also coordinating with the Orland Unit Water Users Association.

Discussion also took place regarding the appointment of the RD 2106 Board and the new water district being formed (Glenn Ground Water District).

**f. Discuss and consider outreach to private pumpers in Corning, Colusa, and West Butte Subbasins.**

Private pumpers expressed their opinions on SGMA funding, metering, and surface water agency influence on SGMA. Some are concerned about the surface water purveyors having a greater input than groundwater users, and are also concerned about agencies' lack of interaction with their landowners. Surface water purveyors and private pumpers need to work together and manage the basin and collect data. Data collecting and sharing will protect the interest of private pumpers.

Outreach ideas include:

- Resource Conservation District and Glenn County Farm Bureau publications and mailings
- Create a handout of SGMA information to provide to growers when they come to renew pesticide permits
- Newspaper publications-Ag Section, editorials, features, series of articles
- Colusa Farm Show Presentation/Booth
- Posts on water resources web page

**g. Suggestions for future agenda items.**

It was suggested to include a presentation on water meters, DWR meter standards, proposed meeting schedule, and fee development on a future agenda.

**5. COMMUNICATION**

None discussed.

Ron Stilwell noted that in the spirit of full disclosure, he communicated that he is in the water well business.

**6. ADJOURNMENT**

The meeting was adjourned at 3:19 PM.

**EXCERPT SECTION 3.4-DETERMINING THE AMOUNT OF  
TRANSFERABLE WATER  
METER REQUIREMENTS LISTED IN SECTION 3.4.1 AND 3.4.2**

**DRAFT  
Technical Information  
for Preparing Water Transfer Proposals**

**(Water Transfer White Paper)**

**Information for Parties Preparing  
Proposals for Water Transfers  
Requiring Department of Water Resources  
or Bureau of Reclamation Approval**

**November 2014**

Prepared By:  
CALIFORNIA DEPARTMENT OF WATER RESOURCES  
AND  
BUREAU OF RECLAMATION, MID-PACIFIC REGION



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9. Pump power: Wells powered by an electric source are eligible for use in transfers. Wells powered by diesel or natural gas engines are eligible for use in the transfer if applicable air quality and other environmental laws and regulations are complied with and appropriate mitigation is provided.

The amount of information submitted for each well will depend on its location relative to surface water features (criteria shown in Appendix D) and other areas that may be sensitive to groundwater pumping effects. Transfer proponents can resubmit data for wells used for groundwater substitution based transfers in prior years, for Project Agency consideration, if there have been no changes to the wells. However, certification of proper flow meter installation and calibration needs to be submitted for each well consistent ~~with manufacturer's specifications~~<sup>item 4 above</sup>. Additional information may be needed by the Project Agencies following review of the information submitted. The Project Agencies will need site access for field verification of the above information and collection of additional data during the program.

### **3.4 Determining the Amount of Transferable Water**

Transferable water equals the incremental increase in Sacramento River flow to the Delta created by transfer operations during balanced Delta conditions. Balanced Delta conditions occur when the Project Agencies agree that releases from upstream reservoirs plus unregulated flow approximately equal the water supply needed to meet Sacramento Valley in-basin uses plus exports. Sacramento River flow increases as sellers use groundwater pumped from wells to replace surface water provided by river diversions. The resulting increase in streamflow is reduced by varying degrees as transfer-related groundwater pumping affects streamflow.

Information provided in the water transfer proposal will be used in conjunction with previous monitoring reports and other available data to calculate the amount of water the transfer operations make available. The amount of transferable water credited to a groundwater substitution water transfer will be determined as follows.

1. Establish the baseline groundwater pumping for the transfer operation.
2. Determine the difference between the proposed groundwater substitution pumping in the transfer year and the baseline.
3. Determine the reduction in streamflow during balanced Delta conditions resulting from pumping groundwater to make surface water available for transfer (streamflow depletion factor).
4. Calculate the difference between 2 and 3, above.
5. The following formula summarizes the above four steps:

$$(\text{Transfer Year Groundwater Substitution Pumping}) - (\text{Baseline Groundwater Pumping}) = \text{Gross Transfer Pumping}$$

Gross Transfer Pumping – (Estimated Streamflow Reduction) = (Surface Water Made Available for Transfer).

The following sections describe these steps.

### **3.4.1 Determining the Baseline Groundwater Pumping**

The baseline is the amount of groundwater pumping that would have occurred during the transfer period without the transfer. The Project Agencies will use the records of groundwater pumping submitted by the transfer proponents for the year prior to the transfer to establish the baseline. Transfer proponents are requested to submit the following information for non-transfer pumping years.

- Identify all wells that discharge to the contiguous surface water delivery system within which a well is proposed for use in the transfer program.
- The amount of groundwater pumped monthly during the proposed transfer window for the three years prior to the transfer for each well that discharges to the contiguous surface water delivery system. Wells in operation less than three years should provide data available from the initial use.

Totalizing flow meter records are the most accurate way to determine baseline pumping. Newly participating sellers may be allowed to use records of power consumption (KWH or engine hours) along with well pump efficiency test data (from a test conducted within the past two years) to estimate baseline groundwater pumping. The Project Agencies will calculate baseline groundwater pumping based on the total volume pumped in non-transfer years from all proposed participating transfer wells (typically July through September) that discharge to a contiguous surface water delivery system.

To participate in future groundwater substitution transfers, transfer and non-transfer wells that discharge to a contiguous surface water delivery system should be metered and recorded on a monthly basis during transfer and non-transfer years so that a representative groundwater pumping baseline can be properly established.

If sellers experienced cutbacks to their normal surface water allocation in the most recent non-transfer years or in the year of the transfer, the amount of baseline groundwater pumping will be determined on a case-by-case basis after consultation with the seller.

### **3.4.2 Measuring Groundwater Pumped**

Sellers should provide pumping records from all participating wells that discharge to a contiguous surface water delivery system used in groundwater substitution transfers. An instantaneous reading and totalizing flow meter shall be installed on each well participating in groundwater substitution transfers. The flow meter shall be installed such that:

- The flow meter is in good working order and properly sized, positioned, and oriented on the discharge piping to ensure accurately measured flows.
- Discharge piping is configured to ensure that full pipe flow conditions are met where the meter is installed.
- The manufacturer's standards for sizing, positioning, orienting, and calibrating the meter are followed.

Sellers should have a qualified professional engineer or professional geologist certify that the proposed transfer well's flow meter ~~installation and calibration conforms to is installed in accordance with~~ the manufacturer's specifications ~~and calibrated~~ prior to use, consistent with Section 3.3.1. Sellers may download the Flow Meter Certification Template available on DWR's Water Transfers Website (include link). Sellers need to provide photographs clearly showing each participating well's, flow meter installation and associated plumbing. ~~If flow straightening vanes are installed, the Seller shall provide the manufacturer's specifications for installation, whether bolt-on or weld-in type, and model number. The seller shall certify that the installation is consistent with the manufacturer's specifications.~~ Project Agencies may conduct independent field checks of flow meter installations to verify the information provided.

An exception to the above accounting method for groundwater substitution transfers applies to districts that can provide water from their own reservoir(s) and replace it with groundwater pumping. If a reservoir controls flow to a stream where gages and/or weirs are sufficiently accurate, and streamflow is sufficiently low that the Project Agencies can use stream gage and/or weir data to determine how much water is being provided for transfer, the stream gage or weir data may be used in place of totalizing flow meters on individual wells. In these cases, additional analysis of reservoir operations may be required to determine whether transfer operations must consider reservoir refill criteria (see Section 4). Data requirements for transfer proponents that can operate a groundwater basin in conjunction with their own reservoir will be determined on a case-by-case basis.

The development of a water transfer proposal must take into account that a district's total diversion of surface water during the year shall not exceed the maximum amount provided under its water service or settlement contract with the United States, or its water service contract with DWR, or their appropriative water rights, less the total quantity of groundwater provided by wells within a district pumping under a groundwater substitution transfer agreement.

#### **3.4.3 Estimating the Effects of Transfer Operations on Streamflow**

Groundwater pumping for transfer operations will yield water at the expense of current and future streamflow. Flow reduction in a river, stream, canal, or drain could injure other legal users of water if it occurs when the Delta is in balanced conditions (see section 1.1) or there is limited streamflow in the channel from which the water is being transferred. However, if transfer-related streamflow losses occur when the Delta is in excess conditions and there is sufficient flow in the stream channel from

which the water is being transferred, the streamflow depletions should not impact the water supply available to other legal users of water.

Although real-time streamflow depletion due to groundwater substitution pumping cannot be directly measured, impacts on streamflow due to groundwater pumping can be estimated using analytical and numerical groundwater modeling. Project Agencies have applied incorporated the results from prior the modeling efforts conducted for Reclamation's Long-Term Water Transfers Environmental Impact Statement/Environmental Impact Report (Long-Term EIS/EIR) dated March 2015<sup>5</sup> ~~to evaluate potential groundwater substitution transfers in the Sacramento Valley~~ to establish an estimated average streamflow depletion factor (SDF) for single year transfers requiring the use of Project Facilities. To account for the anticipated streamflow depletion, Project Agencies will apply an SDF to the amount of water pumped pursuant to each transfer proposal in the Project Agency's respective conveyance contract or letter of agreement.

Project Agencies will evaluate transfer proposals along with any available monitoring data. Project Agencies will apply a minimum~~42-13~~ percent SDF to each project meeting the criteria contained in this chapter unless available information analyzed by Project Agencies supports the need for the development of a site-specific SDF.

Transfer proponents may submit site-specific technical analysis supporting a proposed SDF for review and consideration by Project Agencies, in the event Project Agencies determine that a site-specific SDF is required for the proposed transfer proposal. It is recommended that transfer proponents provide Project Agencies with adequate time to review proposed data supporting an alternate SDF.

Project Agencies are developing tools to more accurately evaluate the impacts of groundwater substitution transfers on streamflow. These tools may be implemented in the future and may include a site-specific analysis that could be applied to each transfer proposal.

### 3.5 Monitoring Program

Groundwater substitution transfers have the potential to cause injury to local groundwater users due to the additional groundwater pumping needed to allow the substitution transfer to take place. Injury to other surface water users could also occur if the additional groundwater pumping results in a significant reduction in streamflow when those users need it.

The purpose of the seller's groundwater substitution monitoring program is to identify any changes in groundwater levels or quality so that the seller can take actions to avoid or mitigate any injury to legal users of water due to the water transfer. Sellers need to review and analyze the monitoring data as it is collected to

<sup>5</sup> [http://www.usbr.gov/mp/nepa/nepa\\_projdetails.cfm?Project\\_ID=18361](http://www.usbr.gov/mp/nepa/nepa_projdetails.cfm?Project_ID=18361)

# Private Pumper Advisory Committee Proposed 2017 Meeting Schedule

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*Generally 4<sup>th</sup> Monday of the month at 1:00 PM at the Glenn County Farm Bureau  
(831 5<sup>th</sup> Street, Orland, CA 95963)*

- January 23, 2017
- February 27, 2017
- March 27, 2017
- April 24, 2017
- May 22, 2017
- June 26, 2017
- July 24, 2017
- August 28, 2017
- September 25, 2017
- October 23, 2017
- November 27, 2017
  - Thanksgiving is the Thursday prior to this date-consider combining the November and December meetings. Options for afternoon meetings:
    - Friday, December 1, 2017
    - Tuesday, December 5, 2017
    - Thursday, December 7, 2017
    - Friday, December 15, 2017
- December 25, 2017
  - Christmas falls on the 4<sup>th</sup> Monday- consider cancelling the December meeting or combining with the November meeting.

**DRAFT**  
**Memorandum of Understanding**  
**Defining Colusa Subbasin Groundwater Sustainability Interests**  
**Version 3 – December 7, 2016**

This Memorandum of Understanding (MOU) is made and entered into by and among the (names of parties to be updated week of 12/13/16) which are referred to herein individually as a “Party” and collectively as “Parties,” for the purposes of potentially forming a joint powers agency to serve as the Groundwater Sustainability Agency in the Colusa County portion of the Colusa Subbasin in support of Senate Bills 1168, 1319 and 13, and Assembly Bill 1739, known collectively as the Sustainable Groundwater Management Act (the Act). This MOU shall hereinafter be known as the Colusa County Groundwater Sustainability Agency MOU.

**Recitals**

WHEREAS, on September 16, 2014 Governor Jerry Brown signed the Act into law; and

WHEREAS, the Act went into effect on January 1, 2015; and

WHEREAS, the Act was amended on January 1, 2016; and

WHEREAS, the Act seeks to provide sustainable management of groundwater basins, enhance local management of groundwater, establish minimum standards for sustainable groundwater management, and provide local groundwater agencies with the authority and the technical and available financial assistance necessary to sustainably manage groundwater; and

WHEREAS, section 10720.7 of the Act requires all basins designated as high-or-medium priority basins designated in Bulletin 118 be managed under a Groundwater Sustainability Plan or coordinated Groundwater Sustainability Plans pursuant to the Act; and

WHEREAS, the Colusa Subbasin within the Sacramento Valley Basin is a Bulletin 118 designated medium priority basin; and

WHEREAS, a local public agency is defined in Section 10721 of the Act as a having water supply, water management, or land use responsibilities within a groundwater basin; and

WHEREAS any local public agency is an eligible Groundwater Sustainability Agency; and

WHEREAS, each of the Parties to this MOU is a local public agency within or partially within the jurisdictional footprint of the County of Colusa; and

WHEREAS, groundwater extractors in the County portion of the Colusa Subbasin also include private individuals and corporations unaffiliated with local public agencies within or the County; and

WHEREAS, groundwater extractors in the County portion of the Colusa Subbasin also include Tribes and other Federal agencies; and

WHEREAS, The State of California is a Correlative Rights State, (any property over a groundwater basin has a equal right to the water in the basin based on their current and beneficial need for water) and:

WHEREAS, the parties acting through this MOU intend to maintain an open line of communication and to work cooperatively with local Tribes and other Federal agencies during SGMA planning and implementation: and

WHEREAS, the Parties, acting through this MOU intend to work cooperatively with other Groundwater Sustainability Agencies operating in the Colusa Subbasin to manage the subbasin in a sustainable manner pursuant to the requirements set forth in the Act; and

WHEREAS, any parties that have noticed themselves as independent Groundwater Sustainability Agencies plan to withdraw said notices and will agree to be part of a multi-agency Groundwater Sustainability Agency and eliminate all jurisdictional overlaps by June 30, 2017 (as per section 10723.8(c) of the Act),

WHEREAS pursuant to mutual execution of this MOU, the Parties intend to prepare a Joint Powers Agreement and create a Joint Powers Authority to serve as the multi-agency Groundwater Sustainability Agency for the County portion of the Colusa Subbasin;

WHEREAS upon future request and notification, the Parties will add other local public agencies as signatories to the intended joint powers agreement and members of the Groundwater Sustainability Agency;

NOW, THEREFORE, ~~in consideration of the promises, terms, conditions, and covenants contained herein~~, the Parties hereby agree as follows.

#### Section 1. Definitions

As used in this MOU, unless context requires otherwise, the meanings of the terms set forth below shall be as follows:

1. "Act" refers to the Sustainable Groundwater Management Act.
2. "Agency" means the Colusa County Groundwater Sustainability Agency.
3. "Beneficial Use and Users" is defined in Section 10723.2 of the Act as holders of overlying groundwater rights, including: Agricultural users, Domestic well owners, Municipal well operators, Public water systems, Local land use planning agencies, Environmental users of groundwater, Surface water users, if there is a hydrologic connection between surface and groundwater bodies, the federal government, including, but not limited to, the military and managers of federal lands, California Native American tribes, Disadvantaged communities, including, but not limited to, those served by private domestic wells or small community water systems, Entities listed in Section 10927 of the Act that are monitoring and reporting groundwater elevations in all or a part of a groundwater basin managed by the groundwater sustainability agency.
4. "Committee" shall mean any committee established pursuant to this MOU
5. "County" shall mean the County of Colusa in its role as a local public agency (as defined in the Act) and as a governing jurisdiction.
6. "Effective Date" means the date on which the last Party executes this MOU.

7. "Fiscal Year" means July 1 through June 30.
8. "Governing Board" means the governing body of the Agency.
9. "Member's Governing Body" means the Board of Directors or other voting body that controls the individual local public agencies that are signatory to this MOU.
10. "Party" and "Parties" shall mean all organizations, individual and collective that are signatories to this MOU.
11. "Plan" refers to one or more Groundwater Sustainability Plans
12. "State" means the State of California
13. "Subbasin" means the Colusa Subbasin as defined in State of California Bulletin 118.

## Section 2. Purpose

1. 2.1The purpose of this MOU is to define general and specific principles that reflect mutual understanding by the Parties about commitments and requirements associated with implementing the Act and creating a multi-party Joint Powers AuthorityAgency that will serve as the Agency.
- 2.1 2.2This MOU also defines mutually understood tasks and associated potential costs of tasks that may be necessary as the Parties implement the Act through an multi-party Agency (as described in Section 6). (TBD)

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## Section 3. Term

1. 3.1This MOU shall become effective upon execution by each of the Parties and shall continue in full force and effect until terminated pursuant to the provisions of a subsequent joint powers agreement (JPA)(as per California Government Code Section 6500).

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## Section 4. General Principles of Understanding

1. 4.1A partnered approach should be fostered for groundwater management that: supports the Act; achieves sustainable conditions in the Subbasin; reflects mutual respect for each Party's discretion, governmental authority, expertise, knowledge of groundwater conditions, demands and concerns; and ensures a balanced representation of beneficial users.
2. 4.2Local control of groundwater must be ensured, locally controlled compliance with the Act must be ensured, and State intervention to implement the Act must be avoided.
3. 4.3Implementation of the Act may be expensive and all beneficial users will need to contribute to implementation. Failure to implement the Act locally would result in State intervention and even more excessive costs and regulation.
4. 4.4A partnered approach to groundwater management and implementation of the Act is in the best interest of beneficial users within the Agency boundaries because it will maximize efficiencies, keep costs at a minimum and capitalize on skills and strengths of various partners provided such partnership also creates and maintains collegial relationships and flexible implementation of the Act.

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- 5.** 4.5As allowed for in Section 10723.6 (5) of the Act, the Parties support formation of, and participation in, one (1), multi-agency GSA covering the portions of the Subbasin that lies within the County.
- 6.** 4.6All beneficial users of groundwater will be required to cooperate with the Agency and abide by the guidelines put forth in the Plan(s) for the County and the Subbasin.
- 7.** 4.7Being a Party to this MOU is not a condition to participate in Plan development. All beneficial users have an equal opportunity to participate in Plan development.
- 8.** 4.8No Party's land use or other authority is limited by this MOU.
- 9.** 4.9Sustainable groundwater conditions must support, preserve, and enhance the economic viability, and social well-being and culture of all beneficial uses and users including Tribal, domestic, municipal, agricultural, and industrial users.
- 10.** 4.10Increased extractions threaten the groundwater resources of all well owners with smaller, shallow wells and such impacts must be avoided and/or mitigated.
- 11.** 4.11Aquifers within the basin can be threatened by unsustainable management of groundwater resources.
- 12.** 4.12The ~~e~~Economic property and natural resources and cultural future of agriculture in the County can be threatened by the lack of available groundwater and surface water resources and said threats must be avoided.
- 13.** 4.13Threats to the natural resources of the County resulting from impacts to groundwater resources must be avoided.
- 14.** 4.14All beneficial users must have an open, transparent, timely opportunity to be engaged with the Agency and provide their input on Plan development and implementation of the Act. Extensive outreach ~~shall is be~~ a priority of all Agency Parties to inform and update all beneficial users about SGMA implementation and potential impacts, and to ensure beneficial users are involved in the SGMA process where applicable.
- 15.** 4.15Implementation and enforcement of the Plan should take place at the most local level possible and should allow each Party to approve its Plan chapter or section, and to preserve the Party's respective authority to manage the water resources available to their constituents or customers as long as said conditions are consistent with sustainability requirements of the Act and Plan.
- 16.** 4.16All overlying landowners in the Colusa Subbasin have a right to share the Subbasin's natural recharge for beneficial use on their overlying land.
- 17.** 4.17Act implementation is new for all County beneficial users and there are many unknowns. Willingness by all participants to adapt and adjust during Agency formation and Plan development and implementation is crucial to success.

**17. 4.18**Achieving and maintaining groundwater sustainability for the good of all groundwater beneficial users in the County and is should be the Agency's first priority and main focus, especially in the early stages of Act implementation while all beneficial users work together and strive to alleviate any existing fear and distrust.

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## Section 5. Specific Principles of Understanding

### 5.1 Governance and Implementation of the Act

**1.** **5.1.1**The Agency will represent the common and unique interests of groundwater beneficial users located in the unmanaged areas of the County's portion of the Subbasin as per Section 10724 of the Act

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**2.** **5.1.2**The Agency will implement the Act in a manner that optimizes the Act's beneficial opportunities to achieve sustainable groundwater conditions to support our vital agricultural economy, other industry, and domestic and public water uses.

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**3.** **5.1.3**The Agency Board will reflect diverse representation of beneficial users and will include all local public agencies willing to serve, mutual water companies as invited by the conveners of the Agency, and private groundwater pumpers that are unaffiliated with any other organization and as appointed by the County.

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**4.** **5.1.4**The Agency will pursue financial and infrastructure solutions and beneficial partnerships with other Parties to provide sustainable water supplies for all constituents.

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**5.** **5.1.5**Local public agencies retain discretion to determine whether to be an individual Agency, and reserve the right to withdraw from the Joint Powers Authority if the Authority is failing to meet the requirements of sustainability defined in the GSP or as determined by the Department of Water Resources or the State Water Resources Control Board. Newly formed agencies will also have the right to join the JPA-Joint Powers Authority at a time after the initial formation of the Agency., join in an Agency created by another party that to this MOU, or where a separate JPA is created, to have the JPA serve as the Agency for the local agency's area (and, if desired, to include the member on the JPA's governing board).

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**6.** **5.1.6**Governance and implementation must avoid duplicative or conflicting governmental authorities. Each Party will have the right to approve the provisions of the Plan governing Act implementation within its own boundaries and to implement the Act within its boundaries. Subject to those limitations, each Party retains and preserves any police powers or other authority it has to regulate groundwater use within its boundaries so long as its actions are achieving sustainability consistent with the GSP.

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**7.** **5.1.7**As parties implement the Act within their respective boundaries, they will coordinate efforts with any adjacent white areas.

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**2.** 5.2.2 Groundwater impacts throughout the County and Subbasin are not equal. Conditions will vary by location and water year type. While all beneficial users will share the burden to achieve sustainability, solutions will need to reflect these differences.

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**3.** 5.2.3 Surface water supplies should be used conjunctively with groundwater. All water users should be encouraged to utilize surface water to its full extent as available and feasible and groundwater (attributable to leakage of surface water from canals and distribution and drainage systems, and the deep percolation of applied surface water for crop irrigation) should be availableshould be conserved for use during dry periods when surface water is not readily available or affordable.

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**5.2.4** Surface water users will have access to use the recharge attributable to leakage of surface water from canals and distribution and drainage systems, and the deep percolation of applied surface water for crop irrigation

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**1.** 5.2.5 All Parties recognize the interconnectedness of groundwater and surface water resources, and contributions to the system from surface water applications.

**2.** 5.2.6 All beneficial users, whether using surface water or groundwater in the basin, have an obligation to use water consistent with their respective rights, which may include an obligation to mitigate impacts on waterways, creeks, streams and rivers.

**6.** 5.2.7 Districts act on behalf of and represent all landowners within their service area to ensure collective compliance with the Act. Districts will coordinate with their landowners on the use of the natural recharge of the Subbasin, while respecting groundwater law.

**7.** 5.2.8 Districts recharge the groundwater basin with surface water recharges groundwater through leakage from canals and distribution and drainage systems and deep percolation of applied crop water. If When cutbacks reductions of surface water supplies occur occur to the extent that Districts must supplement their supplies with groundwater, Districts reserve the right to manage surface water users may access and use water attributable to such recharge. Studies will quantify the availability of such recharge, and provisions will be in place through the Plan, such as targeted monitoring and mitigation programs to ensure that future groundwater extractions are consistent with quantified recharge and the sustainable yield of the Subbasin.

**8.** Districts anticipate that groundwater use within their boundaries may be necessary to offset dedication of surface water to environmental requirements in reservoirs, rivers, or the Bay-Delta, which is a shared obligation of all groundwater users.

**9.** 5.2.9 Districts Surface water users will use surface water and groundwater for in-basin transfers to meet local demands. , following transfers will also occur both in and outside of the groundwater subbasin, with transfer quantities based on avoided consumptive use.

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**5.2.10** Surface water transfers will potentially serve as a tool to settle disputes over environmental obligations such as -dedication of surface water to environmental requirements in reservoirs, rivers, or the Bay-Delta or to mitigate impacts during drought periods which will include increased reliance on groundwater by surface water users. Districts and Agency members agree to

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coordinate and partner on actions that attempt to balance environmental solutions with groundwater sustainability.

Potential Projects and Costs

10. 5.3.1 Mary/Dave work on language related to Work Plan projects and associated costs

5.3 Agency Financing and Support

1. 5.3.1 Provisions are included for Party contributions of capital and operating funds, personnel, services, equipment or property to convening the Agency and Plan development.

2. 5.3.2 Recognizing that there will be costs for the development, implementation and administration of the Plan, the Parties must agree on governance that maximizes the potential for State funding, and to allocate the local share of these costs by one or more mutually agreeable and equitable formulas (to be determined)

5.4 Future Modifications to this Memorandum

5.4.1 Maximum flexibility will be provided to adapt to changes in Agency membership, funding, planning oversight, et cetera, as the parties build their relationships and mutual trust.

Section 6. Potential Projects and Costs

To be added week of 12/13/16 as per work between the County and Facilitation Consultant

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