

**MID-KAWEAH GROUNDWATER SUB-BASIN JOINT POWERS AUTHORITY
GROUNDWATER SUSTAINABILITY AGENCY BOARD**

SUMMARY MINUTES

December 11, 2018 – 3:00 p.m.

Tulare Public Library & Council Chambers
491 North M Street – Tulare, CA 93274

MEMBERS PRESENT: Jose Sigala^{3:02 p.m.}, David Bixler, Dave Martin, Steve Nelsen, Howard Stroman;
Greg Collins

ALTERNATES PRESENT: Jim Pennington

STAFF PRESENT: Aaron Fukuda, Leslie Caviglia, Randy Groom, Kathi Artis, Paul Hendrix,
Roxanne Yoder, Valerie Kincaid

OTHERS PRESENT: Chris Petersen, GEI Consultants; Tim Nicely, GSI Water Solutions

1. CALL TO ORDER REGULAR SESSION:

Chair Nelsen opened the meeting at 3:01 p.m.

2. PUBLIC COMMENT:

Chair Nelsen called for comments from any members of the public present at the meeting. None were forthcoming.

3. GENERAL BUSINESS

a. Approval of Minutes of Regular Meeting on October 9, 2018

It was moved by Director Bixler, seconded by Director Martin, and carried 4 to 0 (Director Sigala absent to approve the minutes of the October 9th meeting; Vice Chair Collins abstained (due to absence at prior meeting)).

b. Financial Report

i. Financial Statements – Year-to-Date

K. Artis provided a report for the Board's consideration and approval. She highlighted certain line items on the balance sheet and profit & loss statement, including total income of \$466,433 of income and \$436,497 in expenses for the fiscal year. Director Collins inquired as to the contributions towards the flight-line project, to which Ms. Artis said all three GSAs have done so. Ms. Artis next reviewed the list of recent transactions, pointing out a selected few. It was then moved by Vice Chair Collins, seconded by Director Sigala and unanimously carried, to approve the statements as presented.

ii. FY 2017-18 Audit Report

K. Artis provided an audit report for the Board's consideration and approval. She indicated that the audit findings were that the financial statements fairly represent the

financial position of the organization and the audit is thus considered as being unqualified. It was then moved by Director Sigala, seconded by Director Stroman and unanimously carried to approve the audit report as presented.

iii. Call for Funds

P. Hendrix explained the need for a third call for funds for the current fiscal year, noting that \$240,000 has been invoiced to the Members to-date. He stated that another \$150,000 would be needed in total for the near future, in the absence yet of any grant reimbursements. He also noted that another \$16,005 was due from Tulare ID for the SkyTEM flight-line project. It was moved by Director Martin, seconded by Director Bixler and unanimously carried, to approve a call for funds in the amount of \$166,005.

c. Future Grant Funding for SGMA Compliance

P. Hendrix made mention of Prop 3's failure to pass in the November general election, but that \$50 million for GSP preparation and \$100 million for GSP implementation are allocated within Prop 68, which legislation passed last summer. He indicated that staff will be aggressively pursuing these grant funds in the near future. Director Collins asked if we will have identified projects for the GSA by the time the implementation grant funds are made available, and Mr. Hendrix indicated that we will.

d. Kaweah Sub-Basin Coordination – Status Report

i. Basin Setting, Numeric Model

C. Petersen provided a PowerPoint presentation for the Board's review and consideration. He covered the draft Basin Setting component of the GSP, noting that it should fully comply with the DWR Regulations and serve as a solid foundation for GSP preparations. He reviewed a few maps and charts contained therein depicting groundwater conditions. Mr. Petersen next reviewed a water budget chart displaying groundwater inflow and outflow components. He indicated that the sub-basin overdraft is historically shown to be about 70 taf per year but, in more recent times reflecting drier conditions, upwards of 160 taf per year. Mr. Petersen further added that the region's projected water budget would need to be addressed as well.

Questions and discussion by the Board ensued regarding the water budget information. Director Collins asked if the values cited included Friant water coming into the region and whether sub-surface flows are reflected as well. Mr. Petersen answered yes to both inquiries. Director Nelsen asked if subsidence has been accelerating as of late, to which Mr. Petersen replied in the affirmative. Director Collins followed up with asking if recharge could be conducted in areas subject to subsidence, and the response was that it depends mainly on the characteristics of the soil and clay layers near the ground surface.

Mr. Petersen then summarized progress made on the sub-basin numeric simulation model. He stated that it is founded on the MODFLOW platform developed under previous work for KDWCD, and has since been updated to include the entire Kaweah Sub-Basin. He added that water-level plots of simulated versus observed trends show a high degree of correlation. P. Hendrix commented that an important application of the model will be to demonstrate to DWR that the simulated projects and management actions of all three GSAs will bring the sub-basin into a sustainable state by 2040. Mr. Petersen ended with a review of the GSP completion schedule, pointing out that an

early draft of the GSP is to be produced by the end of March 2019. He pointed out the key sections of the GSP and associated completion dates.

Director Martin asked about inter-basin coordination and the degree to which it has been occurring. Mr. Petersen and Mr. Hendrix responded that it has been occurring, and that a state-funded facilitation program has been underway to foster such communications. V. Kincaid asked to what degree all three Kaweah GSAs have been coordinating, and Mr. Hendrix said that they are converging on a common sub-basin water budget as identified in the Basin Setting, but that work needs to begin on preparing a SGMA-mandated Coordination Agreement among them. E. Osterling with Greater Kaweah GSA affirmed the collective progress being made. Board discussions then resumed on monitoring criteria and joint use of the numeric model.

ii. GSA Water Budgets

Referring back to the Mid-Kaweah position statement regarding the water budget approved by the Board at its October meeting, P. Hendrix said that its principles have been under consideration by the other GSAs, and that a meeting of the managers and respective attorneys of each is being scheduled for late December or early January next year.

iii. Sustainable Management Criteria

P. Hendrix provided a PowerPoint slide presentation for the Board's review and consideration. He reviewed the Undesirable Results to be eliminated along with achieving Sustainable Yield by 2040, groundwater levels serving as a proxy for many of the Undesirable Results, and the various other agencies involved in water quality regulations. He next discussed GEI's data regarding water level trends and approaches to define Measurable Objectives, Interim Milestones and the concept of Optimal Objectives. He then described the consensus building over the use of GEI's downward trend at the year 2040 as a Minimum Threshold and the possible mitigation measures for domestic well owners and small water systems which could be employed during the intervening time span. Mr. Hendrix emphasized that a Minimum Threshold needs to provide ample time for a GSA to implement the various projects and management actions as identified in its GSP. He added that the first five years of GSP implementation may be devoted to such preparatory steps.

Director Collins asked how many disadvantaged rural communities and pumpers exist within the region. Mr. Hendrix responded that Okieville remains as the one such DAC not now connected to a larger water supply system within the Mid-Kaweah area, but that a number of others exist within the Greater and East Kaweah GSA areas. Regarding his question as to concerns over lowered water levels over time, Advisory Committee Chair B. Wilbur commented that there hasn't been much talk over this as among the Committee members as it relates to the agricultural community, but that water quality issues and associated mitigation have been at the forefront thus far.

e. GSP Development – Status Report

i. Annotated Outline

P. Hendrix referred the Board to the outline as attached to his staff report on the subject. He pointed out his direct involvement in drafting sections 6 and 7 of the GSP, dealing with water supply accounting/GSA coordination and projects and management

actions. He noted that the outline was tied to the completion schedule as previously reviewed by C. Petersen.

ii. Projects & Management Actions

P. Hendrix summarized a process being undertaken by the Technical Advisory Sub-Committee to document water recharge and other projects for inclusion in the GSP. He noted that input is expected by the end of the year.

f. Advisory Committee – Outreach Activities

P. Hendrix provided a listing of outreach meetings and presentations for the Board’s consideration. He commented that the purpose of extensive outreach was two-fold: One, to satisfy the state’s mandates in SGMA regarding stakeholder outreach and, two, to ensure that the GSA Board can confidently adopt a GSP with the understanding that the public has been fully informed as to its content.

4. BOARD/STAFF UPDATES, FUTURE AGENDA ITEMS OR OTHER TOPICS OF INTEREST

Director Sigala inquired as to the frequency of future board meetings and whether bi-monthly will be sufficient to meet upcoming deadlines. P. Hendrix responded that the bi-monthly regular meeting schedule should be sufficient, but that the Board should anticipate special meetings to be called as needed when policy decisions need to be made regarding certain GSP and Coordination Agreement elements.

5. ADJOURNMENT: Next Regular Meeting – February 12, 2019

Chair Nelsen adjourned the meeting at 4:41 p.m.

Groundwater Sustainability Agency
Board Chair

Attest:

Groundwater Sustainability Agency
Board Secretary

Mid-Kaweah GSA

Agenda Item Report

February 12, 2019

Agenda Item Wording: Fiscal – Financial Statements Year To Date

Report Author: Kathi Artis – Tulare ID

Background Discussion:

The GSA's financial policies require a financial overview and Profit & Loss Statement through the end of the previous month are to be provided to the Board of Directors at each Board meeting.

Attachments:

Balance Sheet as of February 7, 2019

Profit & Loss Statement for period July 1, 2018 through February 7, 2019

Accounts Receivable Aging Summary as of February 7, 2019

Transaction Detail by Account for checking and money market accounts for period December 8, 2018 through February 7, 2019

Mid-Kaweah Groundwater Sustainability Agency
Balance Sheet
As of February 7, 2019

	<u>Feb 7, 2019</u>
ASSETS	
Current Assets	
Checking/Savings	
Checking	11,260.10
Money Market	36,935.21
Total Checking/Savings	<u>48,195.31</u>
Accounts Receivable	
Accounts Receivable	183,763.41
Total Accounts Receivable	<u>183,763.41</u>
Total Current Assets	<u>231,958.72</u>
TOTAL ASSETS	<u><u>231,958.72</u></u>
LIABILITIES & EQUITY	
Current Liabilities	
Account Payable	210,742.76
Total Accounts Payable	<u>210,742.76</u>
Equity	
Retained Earnings	40,044.06
Net Incom(Loss)	(18,828.10)
Total Equity	<u>21,215.96</u>
TOTAL LIABILITIES & EQUITY	<u><u>231,958.72</u></u>

Mid-Kaweah Groundwater Sustainability Agency

Profit & Loss

July 2018 through January 2019

	Jul 1, 2018 - Feb 7, 2019	2018-2019 Budget	Variance
Ordinary Income/Expense			
Income			
Call For Funds			
Administration	74,999.70	98,465	-23,465.3
GEI Planning	315,000.30	229,751	85,249
Total Call For Funds	390,000.00	328,216	61,784
Prop 1 GSP Grant	0.00	699,600	-699,600
Reimbursed Expenses			
Aqua Geo Frameworks - SkyTEM	108,740.55	125,800	-17,059.45
Kaweah Sub Basin Expenses	130,015.06		130,015.06
Prop 1 Grant Application Exp	3,624.76		3,624.76
Total Reimbursed Expenses	242,380.37	125,800	116,580
Total Income	632,380.37	1,153,616	-521,236
Expense			
Audit Expense	3,900.00	3,200	700.00
Conference & Meetings	695.00		695.00
Consulting Fees			0.00
Consulting Fees-GEI	0.00		0.00
GEI Fees - Grant Applic 01-201	5,437.14		5,437.14
GEI Fees - MKGSA - 02.2017			0.00
GSP	107,422.73	283,300	-175,877.27
Sub-Basin Coordination	269,250.50	421,100	-151,849.50
Total GEI Fees - MKGSA - 02.2017	376,673.23	704,400	-327,727
Total Consulting Fees	382,110.37	704,400	-322,289.63
Flight Lines	127,034.69	175,000	-47,965.31
Insurance	972.40	1,500	-527.60
Legal	9,090.00	50,000	-40,910.00
Membership Dues	0.00	750	-750.00
Office Expense	1,687.29	1,200	487.29
Payroll, Benefits and Travel Expenses	123,777.20	254,800	-131,022.80
Rent	2,000.00	3,000	-1,000.00
Total Expense	651,266.95	1,193,850	-542,583
Net Ordinary Income	-18,886.58	-40,234	21,347
Other Income/Expense			
Other Income			
Interest Income	58.48	200	-141.52
Total Other Income	58.48	200	-142
Net Other Income	58.48	200	-142
Net Income	-18,828.10	-40,034	21,206

Mid-Kaweah Groundwater Sustainability Agency
A/R Aging Summary
As of February 7, 2019

	<u>Current</u>	<u>1 - 30</u>	<u>31 - 60</u>	<u>61 - 90</u>	<u>> 90</u>	<u>TOTAL</u>
City of Visalia	0.00	50,000.00	0.00	33,333.00	0.00	83,333.00
East Kaweah GSA	0.00	0.00	0.00	100,430.41	0.00	100,430.41
Tulare Irrigation Dist	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	0.00	50,000.00	0.00	133,763.41	0.00	183,763.41

Mid-Kaweah Groundwater Sustainability Agency
Transactions by Account
As of February 7, 2019

Type	Date	Num	Name	Memo	Account	Amount
Checking						
Check	12/11/2018	1083	Capital One	Office supplies, fees	Office Expense	(79.17)
Check	12/17/2018	1084	O'Laughlin & Paris LLP	Invoice #8892	Legal	(1,050.00)
Check	01/10/2019	1085	Capital One		Office and Travel Expenses	(510.42)
Check	01/10/2019	1086	AT&T Mobility	Acct #838932126	Office Expense	(46.48)
Check	01/10/2019	1087	AT&T	Acct #559 686-2166 944 1	Office Expense	(86.09)
Transfer	01/24/2019			Funds Transfer	Money Market	220,000.00
Check	01/25/2019	1088	GEI Consultants	August-October	Sub Basin Coordination	(178,805.20)
				August-October	GSP	(29,394.11)
				August-October	Grant Application	(1,061.64)
Check	01/25/2019	1089	AT&T	Acct #559 686-2166 944 1	Office Expense	(98.84)
Check	01/25/2019	1090	O'Laughlin & Paris LLP	Invoice #8921	Legal	(1,610.00)
Check	02/05/2019	1091	AT&T Mobility	Acct #838932126	Office Expense	(46.33)
Check	02/05/2019	1092	Aliamo Properties	February and March 2019 rent	Rent	(500.00)
Total Checking						<u>6,711.72</u>
Money Market						
Deposit	12/19/2018		East Kaweah GSA	Deposit	Portion of Flight Lines	4,500.00
Deposit	12/26/2018		Tulare Irrigation District	Deposit	Call for Funds & Flight Line costs	66,005.00
Deposit	01/14/2019		Greater Kaweah GSA	Deposit	Expense Reimbursement	121,444.96
Deposit	01/17/2019		City of Tulare	Deposit	Call for Funds	50,000.00
Transfer	01/24/2019			Funds Transfer	Checking	(220,000.00)
Total Money Market						<u>21,949.96</u>
TOTAL						<u><u><u>28,661.68</u></u></u>

Mid-Kaweah GSA

Agenda Item Report

February 6, 2019

Agenda Item 4.d.ii: GSA Water Budgets

Report Author: Paul Hendrix

Background Discussion:

At its October 2018 meeting, the GSA Board approved the “Position Statement Regarding Sub-Basin Groundwater Budget Apportionment,” the purposes of which were to document Mid-Kaweah’s views regarding the groundwater budget components and to foster a dialogue among the three GSAs regarding its apportionment among them. That statement, along with the East and Greater Kaweah GSA considerations and opinion papers of their own, has brought us to a recommended apportionment of the sub-basin water budget along the lines of Mid-Kaweah’s recommended approach, depicted in the attached schematic. It is further recognized that this water budget and its apportionment is subject to further refinement as we enter into GSP implementation commencing in 2020 and beyond.

The sub-basin water budget is an important component of the Basin Setting document, a required element of all GSPs as called for in DWR’s Regulations for GSP content. The consultant under contract with all three GSAs for coordination work (GEI) and its sub-consultants have spent long hours preparing the Basin Setting, and the second draft thereof has been under review since December 2018. It is an extension of the prior Water Resources Investigation (WRI) reports prepared by Kaweah Delta WCD, the last such report being issued in 2012. The Basin Setting extended the data sets in the WRI out to 2017 as well as the incorporation of new data from the eastern portion of the sub-basin not previously covered by the WRI. A number of refinements, data updates and other edits are being sought by the technical reviewers from each GSA, and a final product is anticipated by early March.

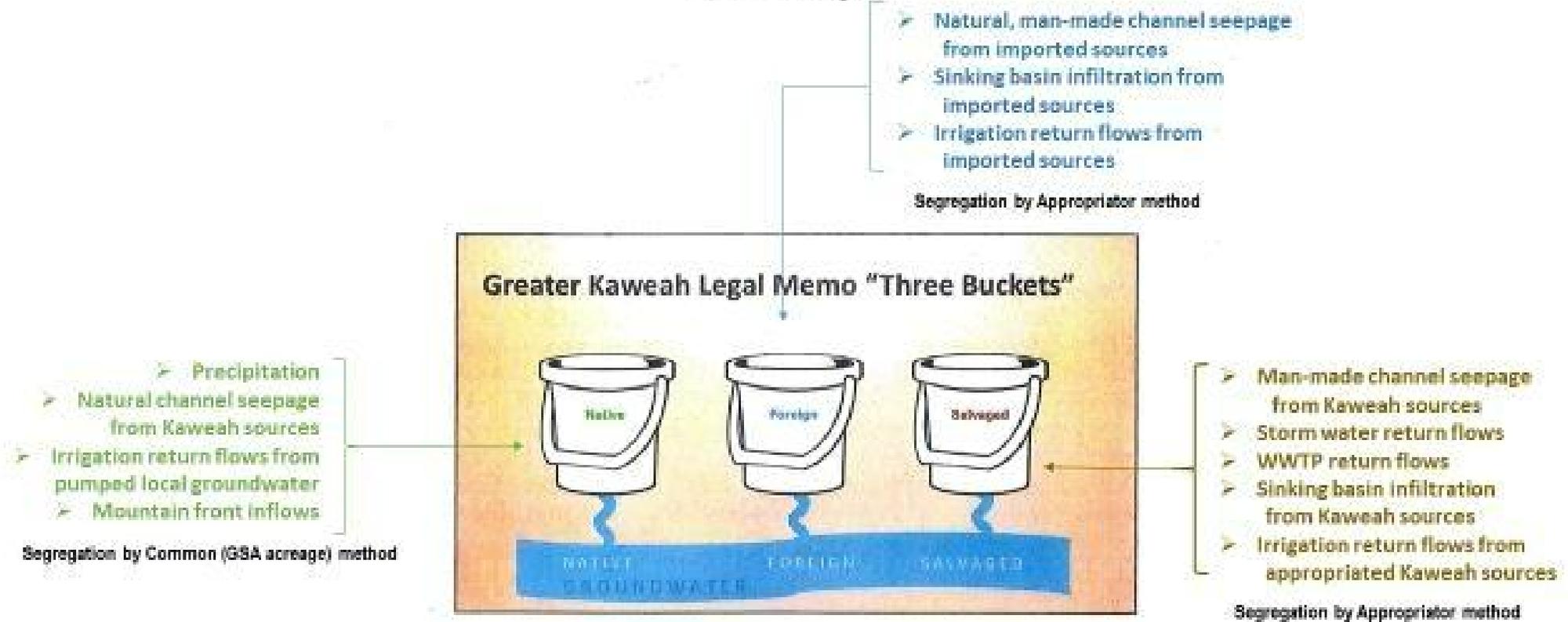
Until the Basin Setting and its associated water budget is finalized and deemed acceptable to all three GSAs, the apportionment of the sub-basin’s water budget as among them cannot be conducted and embraced. Both the GSA representatives and GEI are giving high priority to finalizing the document and proceeding on with the recommended apportionment. With this three-way split, the GSAs can proceed with preparation of each and all chapters of their respective GSPs, in particular the one dealing with projects and management actions to be undertaken post January 2020 during the implementation stage.

Attachments:

GSA Water Budget Apportionment Schematic

Next Step - Water Budget Allocation

Groundwater Budget Components – Overlayw/ Native/Foreign/Salvaged Concepts GEI Task Analysis



Mid-Kaweah GSA
Agenda Item Report

February 6, 2019

Agenda Item 4.f.i: Advisory Committee Resignation

Report Author: Paul Hendrix

Staff Recommendation:

It is recommended that staff continue in its search for someone to replace Irene Lemons, an Advisory Committee member who recently resigned.

Background Discussion:

Attached is a listing of members of the Advisory Committee, a body created per the Joint Powers Agreement for the purpose of “soliciting information from the other Kaweah agencies and potentially affected stakeholders utilizing groundwater within the jurisdictional boundaries of the Members and potentially subject to the GSP to be developed by the Authority (GSA).” Shown in red is Irene Lemons, who resigned in early January.

A search for a replacement for Ms. Lemons commenced shortly after her resignation and the submittal period ran until Feb 1st. A solicitation was posted on the Mid-Kaweah website and Facebook account, and an announcement was sent to all stakeholders registered on the Kaweah Sub-Basin’s Groundwater Communications Portal. Three candidates, along with their affiliations, applied as listed following:

- Noelia Silva del Rio – Tulare resident; PhD in dairy science, retired UCCE Dairy Advisor. Also applied in June 2018 to fill vacancy left by resignation of Eric Charles (filled by appointment of Lee Johnson).
- Carole Mederos – Tulare resident; Superintendent at Buena Vista School District. Also applied in Feb 2018 to fill vacancy left by resignation of Brett Taylor (filled by appointment of Ed Henry).
- Fred Mason – Woodlake resident; practicing geologist operating out of Woodlake.

In addition, 16 other applications are still on file going back two or more years consisting of individuals from Visalia and Tulare, possessing various backgrounds and affiliations, but which applicants have been previously considered but not appointed to the Committee.

The Management Committee recently reviewed and discussed the qualifications and orientation of each of the three recent applicants, only two of which meet policy requirements to serve on the Advisory Committee. Because of the dearth of responses in January, as well as the time lapse since the prior applications were first received, the consensus of the Management Committee was to not make a recommendation to fill the current vacancy for Board consideration at this time. The search will otherwise be renewed, this time with more targeted outreach to both urban and rural/agricultural audiences.

Attachment:

Listing of GSA Advisory Committee members



Advisory Committee Members

B. Wilbur – Chair J. Nichols – Vice Chair

- Mark Boyes – At-large, Tulare (ag.-related business)
- Lee Johnson – At-large, Visalia (Enviro. Health Officer)
- Eric Furtado – At-large, Visalia (Calif. Water Service Co.)
- Richard Garcia – Environmental, Visalia (Sierra Club)
- Mike Lane – At-large, Tulare (Building Industry Assn.)
- Irene Lemons – At-large, Okieville (Okieville-Highland Acres MWC) RESIGNED
- Sopac Mulholland – Environmental, Visalia (Sequoia Riverlands Trust)
- Jim Nichols – Agriculture, Tulare (Nichols Farms)
- Jessi Snyder – DAC, Visalia (Self-Help Enterprises)
- Blake Wilbur – Agriculture, Tulare (SBS Ag.)
- Edward Henry – At-large, Tulare (retired, CA Dept. of Food & Ag.)

Mid-Kaweah GSA

Agenda Item Report

February 7, 2019

Agenda Item 4.f.iv: Sustainability Goal and Undesirable Results

Report Author: Paul Hendrix

Background Discussion:

The Advisory Committee has met over the last several months and, among other topics, has been discussing the development of a Sustainability Goal narrative and listing of Undesirable Results to be adopted by the three GSAs within the Kaweah Sub-Basin. SGMA and the companion GSP Regulations require that these statements be common to all GSAs within a sub-basin.

The attached white paper is a product of this GSA and reflects numerous comments from Advisory Committee members, and was approved by the Committee at its February meeting for consideration by the GSA Board. The paper is also being considered and discussed among the stakeholder committees of the Greater Kaweah and East Kaweah GSAs. No board action is required at this juncture, as it is anticipated that the other GSAs may have edits or provide additional content to the document. Also DWR, in its Best Management Practices for Sustainable Management Criteria, encourages that a description of Undesirable Results be included in a sub-basin Coordination Agreement.

Particular focus and discussion of the Committee has revolved around the Goal statements concerning the role of a GSA with respect to water quality as it relates to the underlying groundwater aquifer system. A report will be given by the Committee Chair to the Board at the February 12th meeting regarding this and other discussion topics of the Committee related to this white paper.

Attachments:

Mid-Kaweah white paper – Sub-Basin Sustainability Goal & Undesirable Results

Kaweah Sub-Basin

Sustainable Management Criteria: Sustainability Goal & Undesirable Results

Sustainability Goal:

Main focus per SGMA: Implementation of GSPs such that a basin is operated within its sustainable yield. Driver for sustainable yield is chronic lowering of groundwater levels deemed to be a significant and unreasonable depletion of supply or cause of other undesirable results. [SGMA §10721(t); Regs §354.24]]

The broadly stated Sustainability Goal for the Kaweah Sub-Basin is, through implementation of measures tailored to each GSA and described in each corresponding GSP, to ensure that groundwater production will preserve the viability of existing agricultural enterprises of the region as well as the smaller communities that provide much of their job base in the sub-basin, to and including school districts serving these communities. The Goal will also strive to fulfill the water needs of existing and amended county and city general plans that commit to continued economic and population growth within Tulare County.

The Sustainability Goal is derived from the Basin Setting and its characterization as described in the Hydrogeologic Conceptual Model, the historical and current groundwater conditions, and its water budget. To accomplish this Goal, the Sub-Basin's underlying aquifer supply will be managed such that long-term overdraft is eliminated within the SGMA-mandated time frame. This Goal will be achieved by:

- The implementation of the EKGSA, GKGSA and MKGSA GSPs, all designed to identify phased implementation of measures (Projects & Management Actions) targeted to ensure that the Kaweah Sub-Basin is operated within its Sustainable Yield by 2040 or as may be otherwise extended by DWR, thereby avoiding Undesirable Results as herein defined.
- Projects to sustain and maximize the delivery of local and imported water supplies into the sub-basin for beneficial use, including groundwater recharge via sinking basins, incentivized on-farm programs, and natural and man-made water conveyance systems. It is recognized that maximizing deliveries of Sierra watershed surface supplies into the sub-basin will provide inherent water quality improvements for all beneficial uses.
- Where necessary, Management Actions to ensure that the rate of groundwater hydrostatic pressure/water level decline in semiconfined zones and rate of groundwater level decline in the unconfined zone reaches zero on a rolling 10-yr average basis in GSAs and Management Areas as identified herein {herein being the

Coordination Agreement} by 2040 or as otherwise extended by DWR. Management Actions may include land fallowing or other land-use conversion alternatives and will incorporate a demand reduction program.

- Implementation of water conservation measures consistent with state mandates and as reflected in urban water management plans.
- Where feasible, modification of wastewater treatment facilities where effluent discharges reach the underlying aquifer, all as approved and authorized by the owner/operator of such facilities.
- Placement of recharge projects and management of pumping regimes in each GSA/Management Area such that acceleration of contaminant plume migration that impairs domestic and municipal supply well production as induced by GSP Projects and Management Actions is avoided. Where technologically and economically feasible as determined by the GSA, consideration may be given to those projects and pumping regimes that could result in key water quality constituent improvements for potable uses, consistent with any MCLs as established by applicable regulatory agencies.
- Placement of recharge projects and management of pumping regimes and adherence to Minimum Thresholds in each GSA/Management Area such that newly induced subsidence is not causing significant and unreasonable harm to surface and sub-surface infrastructure, including water conveyance systems, or contributing to significant and unreasonable sub-surface water quality degradation.
- Application of the Kaweah Sub-Basin Hydrologic Model (KSHM) and the initial selection of Projects and Management Actions by the sub-basin GSAs and its simulation output is summarized herein {herein being the Coordination Agreement} to explain how the Sustainability Goal is to be achieved within 20 years of GSP implementation.
- Assessments at each Interim Milestone of those Projects & Management Actions that were implemented and their achievements towards avoiding Undesirable Results as defined herein {herein being the Coordination Agreement}.
- Continuance of Projects & Management Action implementation through the Planning Horizon to maintain this Sustainability Goal.

Undesirable Results:

- *Must cite (1) causes, (2) criteria (Min. Thresholds), and (3) effects on beneficial uses. [SGMA §10721(w); Regs §354.26]*
 - o Causes leading to Undesirable Results
 - § Causes are over-pumping or nominal groundwater recharge operations such that groundwater levels fall

and remain below Min. Thresholds. This applies for the following Sustainability Indicators: Groundwater levels and, by proxy, for changes in storage and differential land subsidence.

§ Cause is pumping localities and rates, as well as other induced effects by implementation of a GSP, such that known migration plumes and contaminant concentrations are threatening production well viability. This applies for the following Sustainability Indicator: Degraded water quality.

§ The Kaweah Sub-Basin GSAs have concluded that Sustainability Indicators for seawater intrusion are non-existent; and for depletions of interconnected surface water are minimal and, to the extent they occur, impact only vegetation along the banks of unlined channels.

o Criteria to define Undesirable Results

§ Min. Thresholds are defined such that, when Sustainability Indicators within 30% of Management Areas and corresponding monitoring sites as among all three GSAs are exceeded, an Undesirable Result occurs. Should this occur, a determination shall be made of the then-current GSA water budget and its resulting indication of net reduction in storage. Similar determinations shall be made of adjacent GSA water budgets in neighboring sub-basins to ascertain the causes for the occurrence of the Undesirable Result.

§ Groundwater elevations shall serve as the Sustainability Indicator for chronic lowering of groundwater levels and, by proxy, for reductions in groundwater storage and differential land subsidence.

§ Worsening groundwater quality measurements shall serve as the Sustainability Indicator for degraded water quality.

o Potential effects on beneficial uses and users

§ The potential effects of lowered groundwater levels, when exceeding Min. Thresholds and becoming an Undesirable Result, is reduced irrigation water supplies for agriculture and for municipal systems through loss of well capacity, loss or degradation of water supplies for smaller community water systems and domestic wells due to well failures, increased energy consumption due to lowered water levels, induced land subsidence if water levels fall below historical lows, and the adverse economic consequences of the aforementioned effects such as increased energy usage to extract groundwater from deeper levels.

- o The potential effects of degraded water quality from migrating plumes include municipal, small community and domestic well sites rendered unfit for potable supplies and associated uses, and/or the costs to treat groundwater supplies at the wellhead or point of use so that they are compliant with state and federal regulations.

DRAFT