Notice and Agenda of a Workshop of the Yucaipa Sustainable Groundwater Management Agency

Sustainable Pumping Allocation Workshop

Wednesday, November 20, 2024 at 10:30 a.m.

(909) 797-2489 | www.yucaipasgma.org

City of Yucaipa, 34272 Yucaipa Boulevard Yucaipa, California 92399

Meeting Broadcast Information

Zoom Online Access - https://dudek.zoom.us/j/7101150223
Meeting ID: 710-115-0223
Telephone Access: (929) 205-6099

I. **Call to Order**

II. **Public Comments** At this time, members of the public may address the representatives of the Yucaipa Groundwater Sustainability Agency on matters within its jurisdiction.

III. **Welcome** - Mark Iverson, Yucaipa Sustainable Groundwater Management Agency

IV. **Introductions by Yucaipa Sustainable Groundwater Management Agency Members and Meeting Participants** - Steven Stuart, Dudek

V. **Presentation of Management Action #2, Sustainable Yield Pumping Allocations and Pumping Credits**

VI. **Discussion of Initial Concepts, Scenarios, and Procedures Managing Pumping Credits**

VII. **Next Steps and Future Meetings**

VIII. **Concluding Remarks** - Mark Iverson, Yucaipa Sustainable Groundwater Management Agency

IX. **Announcements - Future Meetings**

A. Wednesday, January 22, 2025 at 10:30 am - Board Meeting

X. **Adjournment**

4.2.2 Management Action No. 2 –Sustainable Yield Pumping Allocations and Groundwater Replenishment

Groundwater sustainable yield pumping allocations will be assigned to YVWD and private water users in the North Bench Management Area, to South Mountain, South Mesa, YVWD and private water users in the Calimesa Management Area, and to WHWC in the Western Heights Management Area per the subsections below when this GSP is adopted. No sustainable yield pumping allocations were assigned in the San Timoteo management area at this time because the Yucaipa GSA needs to confirm the location and volume of private pumping from the principal aquifer and determine whether sustainable yield pumping allocations are appropriate to manage groundwater production in this management area. The pumping allocations are designed to regulate the annual volume of groundwater produced by each groundwater user and maintain the total groundwater produced at or below the estimated sustainable yields for these management areas. The sustainable yield pumping allocations will be reevaluated within three months (i.e., every December) of the end of a water year.

As an incentive to manage groundwater production at or below the sustainable yield pumping allocation, a groundwater user may earn pumping credits in the amount of the sustainable yield pumping allocation less the groundwater pumped. For example, if water purveyor A pumped 1,000 AF in a water year and the sustainable yield pumping allocation is 1,200 AFY, then water purveyor A earned a 200 AF pumping credit. The Yucaipa GSA will apply a 5-year rolling pumping credit system to keep account of the pumping credits earned by each water purveyor, meaning pumping credits that are earned and not used after 5 years will be lost. Pumping credits, if available, may be used to offset the volume of groundwater produced in excess of the sustainable yield pumping allocation to the extent that the credits equal the pumping exceedance. Any remaining deficit will be charged a replenishment fee. Any pumping credits remaining will carry over into the next water year under the 5-year rolling pumping credit system.

The assessment for pumping credits will begin with the 2022 WY. The volume of water pumped per user will be accounted for on a monthly basis beginning October 1, 2021. Pumping credits will be earned by users that pump less than their respective sustainable yield pumping allocations for the 2022 WY. The Yucaipa GSA is continuing discussions on implementing a policy that will allow the transferability of pumping credits between groundwater users within a given management area or within the Subbasin.

As an alternative to using pumping credits to offset a pumping exceedance, a water purveyor may use surplus supplemental water that directly recharged the Subbasin (see Management Action No. 3, Section 4.2.3). If such water is available and accessible to the water purveyor, then this water may be used instead of pumping credits to offset the pumping exceedance.

The following provides a description of how the pumping allocations were assigned to each purveyor, and the management actions that will be implemented when a groundwater user exceeds their respective sustainable yield pumping allocation.

4.2.2.1 North Bench Management Area

YVWD and private users are the two groundwater users in the North Bench Management Area. From the 1966 WY to the 2018 WY, the average annual production rates for YVWD and private users were 2,647 AFY and 778 AFY, respectively (Figure 4-23, Table 4-4). Groundwater production by YVWD accounted for 77.3% of the total production,

private users accounted for 22.7%. Applying these allocations to the estimated sustainable yield of 3,940 AFY for the North Bench Management Area, the sustainable yield pumping allocations for YVWD and private users are 3,045 AFY and 895 AFY, respectively (Table 4-4).

Table 4-4. Sustainable Yield Pumping Allocations in the North Bench Management Area

Groundwater User	Average Historical Pumping (AFY)	Historical Pumping Allocation (%)	Sustainable Yield Pumping Allocation (AFY)
YVWD	2,647	77.3%	3,045
Private	778	22.7%	895
Total	**3,425**	**100.0%**	**3,940**

Notes: AFY = acre-feet per year; YVWD = Yucaipa Valley Water District.

The volume of groundwater produced will be quantified per water year (October 1 to September 30) with the total volumes reported to the Yucaipa GSA by the end of the calendar year. If a groundwater user exceeds their respective sustainable yield pumping allocation, then the groundwater user will be charged a replenishment fee equivalent to the volume of groundwater that exceeds the sustainable yield pumping allocation multiplied by the rate per AF to purchase supplemental water at San Bernardino Valley Municipal Water District (SBVMWD) rates for imported SWP water. If the groundwater user has accrued pumping credits or has surplus supplemental water available in the aquifer, then the pumping credits or surplus supplemental water may be applied up to the pumping exceedance. If there continues to be a deficit, then a replenishment fee will be charged to the groundwater user. The supplemental water required under this management action will be purchased in the subsequent water year, if available, and used to artificially recharge and replenish the Subbasin at the Wilson Creek spreading basins.

The historical production by private users was based on data from the USGS that was incorporated into the YIHM. Figure 4-23 indicates that groundwater production by private users has been steadily declining since the early 1980s to where the average rate over the last 10 years has been approximately 160 AFY. The Yucaipa GSA will make efforts to contact private well users in this management area to confirm the estimated rate of groundwater production per private user. This will provide the Yucaipa GSA with information to characterize the influence of each individual private user on conditions in the management area, and to apply the appropriate pumping allocation. The sustainable yield pumping allocations between YVWD and private users will be reassessed when data on the current and projected usage by private users is collected and analyzed.

4.2.2.1.1 Measurable Objective Expected to Benefit

The measurable objective established for the sustainability indicators of chronic lowering of groundwater levels, reduction in groundwater storage, and land subsidence would benefit from the implementation of this management action.

4.2.2.1.2 Expected Benefits and Evaluation

The goal of this management action is to replenish the management area when groundwater withdrawals exceed the sustainable yield pumping allocation assigned to a groundwater user. This action will prevent long-term declines in groundwater elevations and storage due to groundwater production above the sustainable yield, and help prevent conditions from falling below the historical low in groundwater levels that potentially cause significant and

unreasonable effects due to land subsidence. Currently, groundwater extractions from the North Bench Management Area are below the estimated sustainable yield of 3,940 AFY (Figure 3-3).

The benefit of this management action will be evaluated after the purchase of replenishment water and subsequent discharge to the Wilson Creek and Oak Glen Creek spreading basins to replenish the Subbasin.

4.2.2.1.3 Circumstances for Implementation

This management action would be implemented when the volume of groundwater produced by a water purveyor and/or private user per water year exceeds their respective sustainable yield pumping allocation, and the use of pumping credits and/or surplus supplemental water (Section 4.2.3) was insufficient to offset the pumping exceedance. The groundwater user will be required to purchase supplemental water in the subsequent water year for replenishment purposes via the Wilson Creek and Oak Glen Creek spreading basins. If no supplemental water is available, then the volume to replenish will be held in account for up to 5 years until water is available or the groundwater user has earned pumping credits to offset this exceedance. If after 5 years there is no supplemental water available to replenish the management area and the groundwater user has not earned pumping credits to offset the exceedance, then a reassessment of the sustainable yield and pumping allocations will be conducted for the management area.

4.2.2.1.4 Public Noticing

Public noticing is not required for this management action, which would be undertaken under the Yucaipa GSA's authority to control groundwater production from the North Bench Management Area and acquire surface water to direct to spreading basins and/or other purposes per the California Water Code Sections 10726.2 and 10726.4.

4.2.2.1.5 Permitting and Regulatory Process

No additional permitting or regulatory oversight is necessary to implement this management action, which would be undertaken under the Yucaipa GSA's authority per the California Water Code Sections 10726.2 and 10726.4.

4.2.2.1.6 Implementation Schedule

This management action requires the purchase of supplemental water for replenishment purposes in the subsequent water year after the management action is implemented and the application of pumping credits and/or surplus supplemental water, if any, do not offset the pumping exceedance. If no supplemental water is available to replenish the Subbasin in the subsequent water year, then the replenishment water volume will be held in account for up to 5 years until there is supplemental water available or pumping credits are earned to offset the pumping exceedance.

4.2.2.1.7 Legal Authority

Yucaipa GSA has the legal authority to operate and regulate the production from water supply wells in the Plan Area per the California Water Code, Section 10726.4; and to import surface water (e.g., SWP water) or other supplemental water per the California Water Code, Section 10726.2. No additional legal authority is required.

4.2.2.1.8 Estimated Costs

The costs associated with the implementation of this management action are based on the volume of groundwater in excess of the sustainable yield pumping allocation and the rate of SWP water by SBVMWD per acre-foot. Additional costs may be incurred for the distribution and delivery to the Wilson Creek and Oak Glen Creek spreading basins. The estimated costs may vary annually depending on the rate charged by SBVMWD for supplemental water to replenish the Subbasin.

4.2.2.2 Calimesa Management Area

The four groundwater users in the Calimesa Management Area are South Mountain, South Mesa, YVWD and private users. From the 1966 WY to the 2018 WY, the average annual production rates for South Mountain, South Mesa, YVWD and private users were 544 AFY, 2,056 AFY, 2,457 AFY and 143 AFY, respectively (Figure 4-24; Table 4-5). Historically, groundwater production by South Mountain, South Mesa, YVWD and private users accounted for 10.5%, 39.5%, 47.2%, and 2.8%, respectively, of the average annual production of 5,200 AFY. Applying these allocations to the estimated sustainable yield of 4,955 AFY for the Calimesa Management Area, the sustainable yield pumping allocations for South Mountain, South Mesa, YVWD and private users are 518 AFY, 1,959 AFY, 2,341 AFY, and 137 AFY, respectively[1] (Table 4-5).

Table 4-5. Sustainable Yield Pumping Allocations in the Calimesa Management Area

Groundwater User	Average Historical Pumping (AFY)	Historical Pumping Allocation (%)	Sustainable Yield Pumping Allocation (AFY)
YVWD	2,457	47.2%	2,341
South Mesa	2,056	39.5%	1,959
South Mountain	544	10.5%	518
Private	143	2.8%	137
Total	**5,200**	**100.0%**	**4,955**

Notes: AFY = acre-feet per year; YVWD = Yucaipa Valley Water District.

The volume of groundwater produced will be quantified per water year (October 1 to September 30) with the total volumes reported to the Yucaipa GSA by the end of the calendar year. If a groundwater user exceeds their respective sustainable yield pumping allocation, then the groundwater user will be charged a fee equivalent to the volume of groundwater that exceeds their respective sustainable yield pumping allocation multiplied by the rate per AF of supplemental water supplied by SBVMWD and/or San Gorgonio Pass Water Agency (SGPWA) depending on the availability of supplemental water for purchase. The Calimesa Management Area straddles the boundary between San Bernardino County and Riverside County, which includes the service areas of SBVMWD and SGPWA. SWP water supplied by these two regionals may be available as a supplemental water source under this management action. If a groundwater user has accrued pumping credits and/or surplus supplemental water that directly recharged the Calimesa Management Area, then the pumping credits and/or surplus supplemental water may be applied to offset the pumping exceedance. If there continues to be a deficit, then a fee will be charged to the groundwater user to purchase supplemental water. The supplemental water will be purchased in the subsequent water year, if available, and used to artificially replenish the Calimesa Management Area, if applicable, or as in lieu use to offset the

[1] In accordance with Water Code Section 10720.5, the sustainable yield allocations set forth in Management Action No. 2 are neither intended to nor actually comprise any determination of water rights.

pumping exceedance. If no supplemental water is available, then the groundwater user may reduce pumping, implement programs (e.g., water conservation programs) and/or projects that will reduce the net use of groundwater from the Calimesa Management Area to offset the pumping exceedance above their respective sustainable yield pumping allocation.

Currently, there are no spreading basins in the Calimesa Management Area, but the Yucaipa GSA member agencies are evaluating two potential sites to develop surface water spreading basins for the purposes of artificially recharging the Subbasin. The Yucaipa GSA will utilize the YIHM as a tool to evaluate the feasibility of operating spreading basis at the two proposed sites. The feasibility studies will evaluate the beneficial impact of recharging the aquifer at these two potential locations.

The historical production by private users was based on data from the USGS that was incorporated into the YIHM. Figure 4-24 indicates that groundwater production by private users has been steady at approximately 200 AFY since 2000. The Yucaipa GSA will make efforts to contact private well users in this management area to confirm the locations and estimated rates of groundwater extraction for the active private groundwater users. The sustainable yield pumping allocations between the water purveyors and individual private users will be reassessed when data on the current and projected usage by private users is collected and analyzed.

4.2.2.2.1 Measurable Objective Expected to Benefit

The measurable objective established for the sustainability indicators of chronic lowering of groundwater levels, reduction in groundwater storage, and land subsidence would benefit from the implementation of this management action.

4.2.2.2.2 Expected Benefits and Evaluation

The goal of this management action is to replenish the management area or reduce groundwater withdrawals when groundwater production exceeds the sustainable yield pumping allocation assigned to a groundwater user. This action will prevent long-term declines in groundwater elevations and storage due to groundwater production above the sustainable yield, and help prevent conditions from falling below the historical low in groundwater levels that potentially cause significant and unreasonable effects due to land subsidence. Currently, groundwater extractions from the Calimesa Management Area are below the sustainable yield of 4,955 AFY (Figure 3-19). Because there are no spreading basins in the Calimesa Management Area, the supplemental water may be used as in lieu use to offset the pumping exceedance. If no supplemental water is available, then the groundwater user may reduce pumping, implement programs (e.g., water conservation programs) and/or projects that will reduce the net use of groundwater from the Calimesa Management Area to offset the pumping exceedance above their respective sustainable yield pumping allocation.

4.2.2.2.3 Circumstances for Implementation

This management action would be implemented when the volume of groundwater produced by a water purveyor and/or private user per water year exceeds their respective sustainable yield pumping allocation. The groundwater user will be assessed a fee to purchase supplemental water if the application of pumping credits and/or surplus supplemental water, if available, do not offset the production exceedance. If no supplemental water is available to replenish the aquifer, then the volume to replenish will be held in account for up to 5 years until water is available or the groundwater user has earned pumping credits to offset this exceedance. If after 5 years there is no

supplemental water available and the groundwater user has not earned pumping credits to offset the exceedance, then a reassessment of the sustainable yield and pumping allocations will be conducted for the management area.

4.2.2.2.4 Public Noticing

Public noticing is not required for this management action, which would be undertaken under the Yucaipa GSA's authority to control groundwater production from the Calimesa Management Area and acquire surface water to import into the Plan Area per California Water Code Sections 10726.2 and 10726.4.

4.2.2.2.5 Permitting and Regulatory Process

No additional permitting or regulatory oversight is necessary to implement this management action, which would be undertaken under the Yucaipa GSA's authority per California Water Code Sections 10726.2 and 10726.4.

4.2.2.2.6 Implementation Schedule

This management action requires the purchase of supplemental water in the subsequent water year after the management action is implemented and the application of pumping credits and/or surplus supplemental water, if any, do not offset the pumping exceedance. If no supplemental water is available in the subsequent water year to replenish the aquifer, then the supplemental water volume will be held in account for up to 5 years until there is supplemental water available or pumping credits are earned to offset the pumping exceedance.

4.2.2.2.7 Legal Authority

Yucaipa GSA has the legal authority to operate and regulate the production from water supply wells in the Plan Area per the California Water Code, Section 10726.4; and to import surface water (e.g., SWP water) or other supplemental water per the California Water Code, Section 10726.2. No additional legal authority is required.

4.2.2.2.8 Estimated Costs

The costs associated with the implementation of this management action are based on the volume of supplemental water required to offset the pumping exceedance after pumping credits and/or surplus supplemental water, if any, have been applied. The cost for supplying supplemental water for replenishment purposes or as in lieu water will be based on the rate of SWP water per AF by SBVMWD and/or SGPWA. Additional costs may be incurred for the distribution and delivery of supplemental water to the management area. The estimated costs may vary annually depending on the rate charged by the Regionals for supplemental water.

4.2.2.3 Western Heights Management Area

WHWC is the only groundwater user in the Western Heights Management Area. The sustainable yield pumping allocation to WHWC is the sustainable yield of 1,760 AFY. The volume of groundwater produced will be quantified per water year (October 1 to September 30) with the total volume reported to the Yucaipa GSA by the end of the calendar year. If WHWC exceeds the sustainable yield, then WHWC will be charged a fee equivalent to the volume of groundwater that exceeds the sustainable yield multiplied by the rate per AF to purchase supplemental water at SBVMWD rates for imported SWP water. The supplemental water will be purchased in the subsequent water year, if available, and used as in lieu water to offset the pumping exceedance in the subsequent water year. There are no spreading basins in the Western Heights Management Area to receive SWP water.

4.2.2.3.1 Measurable Objective Expected to Benefit

The measurable objective established for the sustainability indicators of chronic lowering of groundwater levels, reduction in groundwater storage, and land subsidence would benefit from the implementation of this management action.

4.2.2.3.2 Expected Benefits and Evaluation

The goal of this management action is to replenish the management area or reduce groundwater withdrawals when groundwater production exceeds the sustainable yield. This action will prevent long-term declines in groundwater elevations and storage due to groundwater production above the sustainable yield, and help prevent conditions from falling below the historical low in groundwater levels that potentially cause significant and unreasonable effects due to land subsidence. Currently, groundwater extractions from WHWC in the Western Heights Management Area are below the sustainable yield of 1,760 AFY (Figure 3-37).

4.2.2.3.3 Circumstances for Implementation

This management action would be implemented when the volume of groundwater produced by WHWC per water year exceeds the sustainable yield. WHWC will be assessed a fee to purchase supplemental water if WHWC cannot apply pumping credits to offset the production exceedance. If no supplemental water is available, then the volume of supplemental water will be held in account for up to 5 years until water is available or the groundwater user has earned pumping credits to offset this exceedance. If after 5 years there is no supplemental water available and the groundwater user has not earned pumping credits to offset the exceedance, then a reassessment of the sustainable yield and pumping allocations will be conducted for the management area.

4.2.2.3.4 Public Noticing

Public noticing is not required for this management action, which would be undertaken under the Yucaipa GSA's authority to control groundwater production and acquire surface water to import into the Plan Area per California Water Code Sections 10726.2 and 10726.4.

4.2.2.3.5 Permitting and Regulatory Process

No additional permitting or regulatory oversight is necessary to implement this management action, which would be undertaken under the Yucaipa GSA's authority per California Water Code Sections 10726.2 and 10726.4.

4.2.2.3.6 Implementation Schedule

This management action requires the purchase of supplemental water as in lieu water in the subsequent water year after the management action is implemented. If no supplemental water is available, then the volume of supplemental water will be held in account for up to 5 years until there is supplemental water available or a reevaluation of the sustainable yield is conducted at the end of the 5-year limit.

4.2.2.3.7 Legal Authority

Yucaipa GSA has the legal authority to operate and regulate the production from water supply wells in the Plan Area per the California Water Code, Section 10726.4; and to import surface water (e.g., SWP water) or other supplemental water per the California Water Code, Section 10726.2. No additional legal authority is required.

4.2.2.3.8 Estimated Costs

The costs associated with the implementation of this management action are based on the volume of groundwater produced in excess of the sustainable yield and the rate of SWP water by SBVMWD per acre-foot. Additional costs may be incurred for the distribution and delivery to the Western Heights Management Area. The estimated costs may vary annually depending on the rate charged by SBVMWD for supplemental water to replenish the Subbasin.

4.2.2.4 San Timoteo Management Area

This management action does not apply to the San Timoteo Management Area.

4.2.3 Management Action No. 3 – Surplus Supplemental Water Spreading

YVWD has purchased SWP water, when available, to artificially recharge the Subbasin via the Wilson Creek and Oak Glen Creek spreading basins (Section 2.5.4; Figure 2-21). This water has helped contribute to the recovery of the North Bench Management Area since it was first used to artificially recharge the Subbasin in 2009. The Yucaipa GSA will continue to obtain, when available, surplus supplemental water to artificially recharge the Subbasin to help maintain groundwater in storage above historical lows.

Surplus supplemental water discharged directly to a spreading basin to facilitate the artificial recharge of the Subbasin will have a separate accounting by the Yucaipa GSA. The surplus supplemental water will be accessible to the water purveyor that purchased the water and percolated it at a spreading basin. This water will be available to help offset production exceedances above the sustainable yield pumping allocations instead of pumping credits earned via Management Action No. 2.

The Yucaipa GSA will conduct a study within the first year of adopting the GSP to estimate the amount of water lost from the point of discharge at a spreading basin to the water table. This study will estimate monthly losses due to evaporation of water from a spreading basin to water retained in the soil column between the bottom of a spreading basin and the underlying water table. The estimate of water loss will be applied to the volume of surplus supplemental water discharged on a monthly basis to a spreading basin. Monthly estimates of water loss are appropriate because evaporative losses in the summer are higher than in the winter. The remaining water will directly recharge the aquifer and be available to the water purveyor that purchased the water. The study will include the existing spreading basins and stormwater capture basins, and proposed basins that may be constructed in the Subbasin. Potential basins in the Calimesa Management Area would be evaluated to assess the effect of artificial recharge on the projected declines in groundwater in storage under the Future Baseline with Climate Change II scenario.

The YIHM was used to simulate the flow of water from the Wilson Creek and Oak Glen Creek spreading basins over the 50-year implementation and planning horizon. The YIHM indicated that water originating from these two spreading basins will remain in the North Bench Management Area over the 50-year period. The YIHM also indicated that water originating at the locations of two potential basins in the Calimesa Management Area would remain in the management area. Consequently, the accounting of surplus supplemental water that directly recharges the aquifer does not include additional losses when the water is in the aquifer.