County of Madera Groundwater Sustainability Agencies' Advisory Committee
Items 6 and 7 Report – Allocation of Existing Stored Groundwater and Crediting

Allocations and credits are of great interest to the Madera County Groundwater Sustainability Agencies (GSAs) for the Madera, Chowchilla and Delta-Mendota Subbasins. It is useful to keep two definitions in mind:

Allocation – an amount of water annually provided to lands within the GSA on a per acre basis

Credit – an amount (in dollars or water) granted by the GSA and received by an individual that is above and beyond the allocation because of activities conducted to benefit the GSA (e.g., bringing in new water for use in a recharge basin, or the non-use of an allocation in a given year)

Allocations

Allocations can be divided into two types:

1. A native groundwater allocation exists of approximately (and preliminarily) 0.5 acre-feet per acre

At the March 2019 Advisory Committee meeting, the Advisory Committee recommended distributing the annual native groundwater allocation over irrigated and unirrigated lands equally for all subbasins.

2. An additional allocation potentially exists of "existing stored groundwater," which is essentially "mined" as the economy slowly transitions from 2020 to 2040 to sustainable water use. This allocation may result in continued lowering of groundwater levels throughout the GSAs before reaching sustainability.

The Sustainable Groundwater Management Act (SGMA) has rules regarding allocations. First, allocations can only be authorized in a particular water year "if the total quantity of groundwater extracted … is consistent with the provisions of the [GSP]." (Water Code, § 10726.4, subd. (a)(3).) Second, by establishing "accounting rules," a GSA can allow unused extraction allocations to be carried over "from one year to another" (e.g. creating a credit) and transferred only "if the total quantity of groundwater extracted in any five-year period is consistent with the provisions of the groundwater sustainability plan." (Water Code, § 10726.4, subd. (a)(4).)

Here are questions for discussion:

1. How should allocations of “existing stored groundwater’ be allocated within the GSA?
    a. All acres, irrigated and non-irrigated, or limit to irrigated only?
    b. Should lands that receive an allocation receive the same initial allocation and follow the same ramp-down pattern? Or, should the allocation or ramp-down vary by crop type, recent history or other factor?
    c. Is there another approach worth considering?
2. For each allocation type, a parcel-by-parcel accounting would need to be established:
    a. Should the allocation have a time element associated with it:
        i. Must the allocation be used in the year allocated?
        ii. Can the allocation be carried forward (e.g. as a credit)?
        iii. Can the allocation be used in advance?
    b. Should an allocation decay and/or sunset over time?
    c. Should an allocation be tradeable?
        i. Native groundwater?
        ii. Existing stored groundwater?

Credits

Based on discussion at the March 2019 Advisory Committee, there was general consensus around the idea that a credit could be received for an activity. Activities discussed included installing pipelines, building basins or bringing in (importing) water to the GSA.

While these are all activities that require funding and effort, staff currently recommends that credits be given only for activities that introduce new water into the subbasin that would not otherwise be part of the subbasin’s water supplies. In other words, in order to bring in water, a pipeline might need to be built, but the credit itself shouldn’t be associated with the infrastructure and the associated cost, but with the importation of new water to bring the GSA and Subbasins closer to sustainability.

Staff additionally recommends that an outside non-partisan entity (i.e., a university or non-profit) evaluate applications for credits to establish the quantity of water to be credited.

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