

Cropland Idling Issue No. 8 - DRAFT Establishing a Baseline for Determining Transferable Water Amounts in a Year When Contract Deliveries are Cut

Background

Issue

A baseline for crop shifting transfers must be established to determine the amount of water available for transfer. The baseline is typically based on previous cropping patterns by the District or individual sellers. This approach may not be adequate if sellers face reduced water allocations in subsequent years that the baseline was established. A Crop Shifting Baseline for water sellers facing reduced 2010 surface water allocations should be developed to estimate the allowable size of the transfer by participating sellers.

Discussion

This paper proposes a procedure for developing a Crop Shifting Baseline for water Sellers facing reduced 2010 surface water allocations and intends to initiate further discussion with potential sellers of water in 2010.

Recommendation for 2010

The following proposed process will be used if there are cuts to Water District allocations in 2010. The Bureau of Reclamation (Reclamation) will analyze Water District transfers based on their unique circumstance.

Is the Seller Facing a Reduced Surface Water Supply During 2010?

If no, and the seller transferred water in 2009, the 2008 crop pattern is the baseline. If the seller did not transfer water in 2009, an appropriate baseline must be determined.

If yes, will the reduced supply require reduced consumptive use?

If no, submit data to the California Department of Water Resources (DWR) and Reclamation to illustrate how the District will accomplish meeting full consumptive use with reduced surface water supply; include historical diversion data, additional recycling, or other conservation measures. Additional groundwater pumping is an increase to the groundwater baseline for transfer purposes.

If yes, then the baseline for the District will be based on a calculated ratio of the “District efficiency” (crop evapo-transpiration pattern of applied water [ETAW]/Diversions).

Example 1: District A in 2009 diverted 100,000 acre-feet and irrigated crops with a total consumptive use of 70,000 acre-feet; efficiency would then be 70%.

Supposing the District’s 2010 surface water allocation was 80,000 acre-feet.

- A. The District total consumptive use baseline would be 70% of the 80,000 acre-foot; i.e. 56,000 acre-feet. Any consumptive use reduction below the 56,000 acre-feet would be transferable water. It will also be possible for the District to present information as to how they would improve the District efficiency in 2010 to increase this 56,000 acre-foot baseline. This would be evaluated and subject to approval by DWR and Reclamation.
- B. As a check on crop idling and shifting water transfers the District would then be able to participate in the water bank by reducing their diversion quantity below this 80,000 acre-foot quantity; however, the transferable quantity would only be 70% of that figure. For example, if the District ended up diverting only 60,000 acre-feet it would be eligible to transfer 70% of 20,000 acre-feet.

Under no circumstances will a seller be able to transfer more water through crop substitution than the difference between their 2010 surface water allocation and their 2010 actual diversions.

2010 Groundwater baseline will be based on 2009 (adjusted for participation in groundwater transfer) unless modified to meet consumptive use requirements.

The ability of each District to absorb allocation cuts and their potential to make up those cuts with groundwater is unique. An agreed upon baseline for both idling and groundwater substitution water transfers will be based on each Water District’s unique circumstance. The more data that is available for groundwater pumping, surface water diversions, and tail water recovery, the easier it will be to set baselines under deficit allocation conditions.

Future Discussions for the Long-Term Program

Revisit this issue after trying the process in an allocation cut year and we identify weakness in the process.