

Peak Suppression Facility

A Peak Suppression Facility (PSF) is comprised of dedicated additional recharge capacity, located downstream of a seasonal capacity constraint, that is operated in a manner to allow non-Project water to "move past" the constraint during peak delivery months without harming Project water deliveries. This is accomplished by partnering with a downstream Project water user that is performing Annual Storage and Recovery at a recharge facility that can be expanded to allow a greater proportion of that customer's deliveries to occur during non-peak months. The peak-month capacity that would have otherwise been used to deliver the Project water is thus freed-up and available for non-Project water deliveries. To ensure the benefits of this approach are available across the entire CAP system, the Peak Suppression Facility should be located in the Tucson region.

Example

If improvements to the pumps at Little Harquahala PP and Hassayampa PP were completed, the Certified Additional Annual System Delivery Capacity is estimated to be 40,000 acre-feet (see attached). Consistent with the CAP Staff Proposal, the maximum associated non-Project water deliveries during any peak month would be 4,400 acre-feet (11%; 73 CFS). If the Annual Operating Plan scheduling process indicated there were two months in which the 11% would be enforced, a total of 8,800 acre-feet of suppression would be required (Chart 1). The Peak Suppression Facility would need to be capable of storing that 8,800 acre-feet over the remaining 10 months (880 acre-feet/mo; 15 CFS) (Chart 2). Permitting and constructing ~10,000 acre-feet of PSF capacity at S/CAVSARP is one potential means of accomplishing this level of suppression.

