

Conjunctive Use Topic Summary

A. List of Projects from the Solutions Planning Team that Contemplate Conjunctive Use

1. Yankee Lake Regional Water Supply Facility
2. SJR-TCR Water Supply Project

(Note City of Cocoa's existing water supply system is an example of an existing conjunctive use system that utilizes water from the Floridan aquifer, surface water from the Taylor Creek Reservoir and ASR water to manage and prevent environmental impacts and to provide improved system reliability, operational flexibility and emergency backup capability.)

B. Examples of Potential Conjunctive Use Project Scenarios:

1. Allocation from multiple groundwater sources, potentially different quality
2. Allocation from surface and ground water sources
 - a. Base groundwater allocation with seasonal surface water augmentation
 - b. Seasonal surface water and groundwater allocation
 - b. Year-round surface and ground water allocation
3. Seawater use in combination with surface and groundwater sources
4. Reclaimed water supplemented with surface / stormwater / ground water

C. Existing Agency Rules:

See attached Table.

D. Considerations Regarding Allocation of Water from Multiple Sources:

1. Need regulatory, infrastructure and operational flexibility to timely meet demands, potentially for multiple users
2. Need for system reliability that combines multiple sources with different reliabilities
3. User's flexibility to choose source (e.g. resource constraint and costs) and permit conditions that foster the flexibility
4. Maximize reasonable-beneficial use of available sources
5. Time varying or longer duration temporal evaluation of constraints on supply source availability that consider altering uses from various sources
6. Applicability of water shortage restrictions
7. Groundwater allocation cannot simply be reduced by the full amount of a new surface water allocation since surface water availability is seasonal. Groundwater allocation must include additional groundwater needed during times when surface water is not available and the corresponding quantities of groundwater needed for these periods.

E. Options for Draft of Conjunctive Use Definition:

Option #1: The term "conjunctive use" means the use and management of multiple water supply sources to better meet water demands while avoiding the potential adverse effects associated with the individual sources. This is particularly applicable where one or more water supplies is weather dependent or has significant variation and other supplies have a higher degree of reliability.

Option #2: The term "conjunctive use" means the integrated operation and use of multiple water supply sources to meet reasonable-beneficial water demands.

Existing WMD Rules Related to Conjunctive Uses

Existing WMD Conjunctive Use - Related Rules Re: Identified Topics	SFWMD	SWFWMD	SJRWMD
Option to Request Allocation of Secondary or Standby Source	Criterion 2.2	<p>A.H. 2.1.1 – applicants for WUPs with 100,000 gpd or greater must evaluate AWS.</p> <p>A.H. 2.1.1.1 – applicants must demonstrate whether AWS are available and appropriate.</p> <p>A.H. 2.1.1.2 – applicants must evaluate feasibility of using reclaimed water.</p> <p>A.H. 2.1.1.4 – for WUPs in the SWUCA or DPC WUCA, non-AWS source may be put on standby status.</p> <p>A.H. 2.2.2 – AWS shall be used in lieu of non-AWS to the greatest extent practical.</p>	
Allocation categorized and allocated separately (i.e. Primary, Secondary, Back-up / Standby)	Criterion 2.2	<p>A.H. 2.1.1 – evaluation must determine whether AWS is available to off-set all or part of non-AWS quantities.</p> <p>A.H. 2.1.1.3 – for golf course communities, when AWS is implemented, primary water sources will be permitted for standby purposes.</p> <p>A.H. 2.2.2 – AWS shall be used in lieu of non-AWS to the greatest extent practical.</p>	
Secondary source allocation volume	Criterion 2.2.1	<p>A.H. 2.1.1 – evaluation must determine whether AWS is available to off-set all or part of non-AWS quantities.</p> <p>A.H. 2.1.1.4 -- Non-AWS standby quantities are limited to permitted quantities that would be permitted without AWS.</p>	

<p>Back-up / Emergency Source Allocation</p> <p>Need for secondary allocation documented</p> <p>Anticipated time of secondary source use (e.g. high stress period)</p> <p>Linkage to wellfield operations plan(s)</p> <p>Limiting conditions identifying time periods and conditions associated with use of secondary, standby, or back up source</p>		Standby quantities are an amount equal to the quantity offset by the AWS.	
	Criterion 2.2.1	A.H. 2.2.4 – if AWS becomes insufficient or unsuitable, withdrawal of standby quantities is allowed to meet authorized use.	
	Criterion 2.2.1	A.H. 2.1.1.4 – in the SWUCA and DPC WUCA, permittees must demonstrate AWS is vulnerable to becoming unavailable, insufficient or unsuitable for reasons outside permittee’s control.	
	Criterion 2.2.1	A.H. 2.1.1 – evaluation of AWS must include whether off-set is available seasonally or on a time-limited basis. A.H. 2.2.4 – if AWS becomes temporarily insufficient or unsuitable, non-AWS may be used. Permittee must notify SWFWMD within 15 days of event and monthly for each 30 days thereafter, for up to one year from the date of the first loss.	
	Criterion 2.2.2	Nothing specific other than application review	
	Criterion 5.2	A.H. 2.1.1 – evaluation of AWS must include whether off-set is available seasonally or on a time-limited basis. A.H. 2.2.4 – if loss of the AWS exceeds one year, a permit modification must be submitted to modify the non-AWS quantities. If the permit is within the SWUCA or DPC WUCA, a modification must be submitted to modify the quantities	

		even if the quantities to be withdrawn exceed the quantity thresholds in Rule 40D-2.331(2).	
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