

## CRITICAL PERIOD MANAGEMENT – STAGE V

The last element of the Phase I Package is the addition of more aggressive reductions in groundwater withdrawals to EAA’s existing Critical Period Management. These additional groundwater withdrawal reductions will be provided through a fifth stage of Critical Period Management, which would be applied in the event spring discharge at Comal Springs is inadequate after application of all other elements of the Phase 1 Package.

The existing Critical Period Management used by the EAA to regulate groundwater withdrawals during periods of drought provide for reductions in groundwater withdrawals from two portions of the Edwards Aquifer denoted as the San Antonio Pool and the Uvalde Pool. The San Antonio Pool consists of that portion of the Edwards Aquifer under EAA’s jurisdictional area in all or part of 8 counties excluding Uvalde County. The Uvalde Pool consists of the portion of the Edwards Aquifer under EAA’s jurisdiction in Uvalde County.

The existing Critical Period Management prescribed in the EAA Act is as follows:<sup>1</sup>

<b>TABLE 1</b>				
<b>CRITICAL PERIOD WITHDRAWAL REDUCTION STAGES FOR THE SAN ANTONIO POOL</b>				
COMAL SPRINGS FLOW CFS	SAN MARCOS SPRINGS FLOW CFS	INDEX WELL J-17 LEVEL, MSL	CRITICAL PERIOD STAGE	WITHDRAWAL REDUCTION – SAN ANTONIO POOL
<225	<96	<660	I	20%
<200	<80	<650	II	30%
<150	N/A	<640	III	35%
<100	N/A	<630	IV	40%

<b>TABLE 2</b>		
<b>CRITICAL PERIOD WITHDRAWAL REDUCTION STAGES FOR THE UVALDE POOL</b>		
WITHDRAWAL REDUCTION- UVALDE POOL	INDEX WELL J-27 LEVEL, MSL	CRITICAL PERIOD STAGE
N/A	N/A	I
5%	<850	II
20%	<845	III
35%	<842	IV

<sup>1</sup> § 1.26A(b).

With the addition of Stage V, Critical Period Management will be as follows:

<b>TABLE 4 NEW CRITICAL PERIOD WITHDRAWAL REDUCTION STAGES FOR THE SAN ANTONIO POOL</b>				
COMAL SPRINGS FLOW CFS	SAN MARCOS SPRINGS FLOW CFS	INDEX WELL J-17 LEVEL, MSL	CRITICAL PERIOD STAGE	WITHDRAWAL REDUCTION – SAN ANTONIO POOL
<225	<96	<660	I	20%
<200	<80	<650	II	30%
<150	N/A	<640	III	35%
<100	N/A	<630	IV	40%
< 50	N/A	<625	V	44%

<b>TABLE 5 NEW CRITICAL PERIOD WITHDRAWAL REDUCTION STAGES FOR THE UVALDE POOL</b>		
WITHDRAWAL REDUCTION- UVALDE POOL	INDEX WELL J-27 LEVEL, MSL	CRITICAL PERIOD STAGE
N/A	N/A	I
5%	<850	II
20%	<845	III
35%	<842	IV
44%	<840	V

It is anticipated that during Stage V, all outdoor use of groundwater withdrawn from the Edwards Aquifer will be prohibited, except for emergency uses such as firefighting. The larger municipal water providers, such as the San Antonio Water System, clearly have sufficient water supplies to withstand groundwater withdrawal reductions from the Edwards Aquifer during Stage V of Critical Period Management. However, even with prohibitions on outdoor use of groundwater withdrawn from the Edwards Aquifer, some of the smaller municipal water providers who are entirely dependent on the Edwards Aquifer may not have sufficient water supplies to meet public health and safety needs with Stage V critical period reductions and perhaps even with Stage IV critical period reductions. In such cases, municipal water providers will not be denied the use of groundwater from the Edwards Aquifer to meet public health and safety needs, but they will incur substantial penalties pursuant to the existing rules of the EAA.

In the event any groundwater user withdraws more water from the Edwards Aquifer than the reduced amounts allowed during Critical Period Management, such user will be assessed an amount of \$600 plus the percent of critical period reductions for each acre-foot of groundwater, or portion thereof, withdrawn beyond the reduced allowable amount. For example, if a groundwater user withdraws one acre-foot more than the reduced amount allowed during Stage V, that user will be assessed \$600 plus \$264 (47% of \$600) or a total of \$864. With such steep penalties for overuse of Edwards groundwater during critical period stages, it will be more cost effective for small municipal providers who are entirely dependent on the Edwards Aquifer to ensure they have sufficient supplies available through lease arrangements with other municipal or industrial permit holders than to pay the penalties for overuse during Stage IV or Stage V critical period reductions.