

**Attachment 1: CalSim 3 Model Assumptions Callouts**

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### 4K-1.1 Introduction

The assumptions for all CalSim 3 model simulations are summarized in Section 2. CalSim 3 model delivery specifications, including CVP and SWP contracts amounts, are identical to those presented in Appendix 4A.

### 4K-1.2 CalSim 3 Modeling Assumptions Callouts

The following matrix summarized the assumptions used for the CalSim 3 models:

- Baseline Conditions
- Proposed Project
- ITP Spring Outflow
- March VA Following Flows

Due to the limited changes between the Proposed Project and each of the alternative scenarios, only the assumptions that differ from the Proposed Project are highlighted below. All other parameters are unchanged. For more information on the full list of assumptions between the Baseline Conditions and Proposed Project, refer to Appendix 4A.

	Baseline Conditions	Proposed Project	ITP Spring Outflow	March VA Following Flows
<b>FACILITIES</b>				
<b>San Joaquin River Region</b>				
SWP Banks Pumping Plant (South Delta)	Physical capacity is 10,300 cfs but 6,680 cfs permitted capacity in all months; up to 10,300 cfs during December 15–March 15, depending on Vernalis flow conditions <sup>1</sup> ; additional capacity of 500 cfs (up to 7,180 cfs) allowed July–September for reducing impact of export restrictions for ESA or CESA.	Physical capacity is 10,300 cfs but 6,680 cfs permitted capacity in all months; up to 10,300 cfs during <b>December 1–March 31</b> , depending on Vernalis flow conditions; additional capacity of 500 cfs (up to 7,180 cfs) allowed July–September for reducing impact of export restrictions for ESA or CESA.	Same as Baseline Conditions	Same as Baseline Conditions
<b>REGULATORY STANDARDS</b>				
<b>Feather River</b>				
Land fallowing	No action	Assume land fallowing occurs in Above Normal, Below Normal and Dry water years. This results in a 50 TAF total increase (dedicated to Delta outflow) to Delta inflow between March and May depending on water year type as follows: <ul style="list-style-type: none"> <li>• <b>Above Normal:</b> <ul style="list-style-type: none"> <li>○ March: 25 TAF</li> <li>○ April: 12.5 TAF</li> <li>○ May: 12.5 TAF</li> </ul> </li> <li>• <b>Below Normal:</b> <ul style="list-style-type: none"> <li>○ March: 12.5 TAF</li> <li>○ April: 25 TAF</li> <li>○ May: 12.5 TAF</li> </ul> </li> <li>• <b>Dry:</b> <ul style="list-style-type: none"> <li>○ March: 16.66 TAF</li> <li>○ April: 16.67 TAF</li> <li>○ May: 16.67 TAF</li> </ul> </li> </ul>	Same as Baseline Conditions	Assume land fallowing occurs in Above Normal, Below Normal and Dry water years. This results in a 50 TAF increase (dedicated to Delta outflow) to Delta inflow in <b>March</b> . The 50 TAF volume is assumed to originate from water purchases made possible through the collection of diversion fees from SWP contractors. For modeling purposes, the 50 TAF is introduced at Freeport.

	<b>Baseline Conditions</b>	<b>Proposed Project</b>	<b>ITP Spring Outflow</b>	<b>March VA Following Flows</b>
		The 50 TAF volume is assumed to originate from water purchases made possible through the collection of diversion fees from SWP contractors. For modeling purposes, the 50 TAF is introduced at Freeport.		
<b>Sacramento River–San Joaquin Delta Region</b>				
Spring Outflow Requirement	<p>Spring Maintenance Flow, modeled as maximum allowable SWP export is the maximum of 600 cfs or 40% of the total export under the SJR:IE regulation (listed below) when Delta outflow is less than 44,500 cfs.</p> <ul style="list-style-type: none"> <li>• April to May when SJR &lt; 21,750 cfs</li> <li>• Wet and Above Normal: SJR IE = 4:1</li> <li>• Below Normal: SJR IE = 3:1</li> <li>• Dry: SJR IE = 2:1</li> <li>• Critical: SJR IE = 1:1</li> </ul> <p>The Spring Outflow requirement may limit SWP exports by up to 150 TAF in San Joaquin Valley 60-20-20 Wet years.</p>	<p>As part of the SWP Delta Voluntary Agreement (VA), reduce SWP Exports during Delta Excess (or Restricted) Conditions OR</p> <p>Balanced Conditions when UWFE &gt; 0 to increase Delta Outflow</p> <p>SWP export reduction by water year type (in TAF) are listed below:</p> <ul style="list-style-type: none"> <li>• 0 in <b>W</b></li> <li>• 117.5 in <b>AN</b></li> <li>• 92.5 in <b>BN</b></li> <li>• 92.5 in <b>D</b></li> <li>• 0 in <b>C</b></li> </ul> <p>Decision based on dynamic monthly Sacramento Valley 40-30-30 water year type. Based on 90% Exceedance Forecast in March, 75% in April, and 50% in May.</p>	Same as Baseline Conditions; 2020 ITP Condition of Approval 8.17	Same as Proposed Project

Notes:

<sup>1</sup> Current ACOE permit for Banks PP allows for an average diversion rate of 6,680 cfs in all months. Diversion rate can increase up to 1/3 of the rate of San Joaquin River flow at Vernalis during Dec 15–Mar 15 up to a maximum diversion of 10,300 cfs, if Vernalis flow exceeds 1,000 cfs.