## Summary of Operating Criteria for California Waterfix

Parameter	Criteria
North Delta bypass	Diversion capacity of 9,000 cfs
flows	Bypass flow criteria:
	Bypass flow is the Sacramento River flow downstream of
(flows required to	the intakes
remain in Sacramento	<ul> <li>July – Nov: Minimum 5,000 cfs to 7,000 cfs</li> </ul>
River downstream of the	• Dec – June:
North Delta intakes)	<ul> <li>Pulse flow criteria triggered by observed fish presence and density – low level pumping of up to 300 cfs per intake and no more than 6% of Sacramento River flow</li> <li>Post-pulse diversion dependent on the Level of bypass flow requirement. The specific criteria for transitioning between and among pulse protection Level 1, Level 2, and/or Level 3 operations, will be developed and based on real-time fish monitoring and hydrologic/behavioral cues upstream of and in the Delta.</li> </ul>
	Approach and sweeping velocity restrictions at the intake fish screens.
South Delta	South Delta Intakes
operations	<ul> <li>Oct – Nov: protection of State Water Board D-1641 San</li> </ul>
	Joaquin River (SJR) 2-week pulse flow using real-time
	operations
	<ul> <li>Dec – March and June: Old and Middle River (OMR) flow requirements could range from the current biological opinions to potentially more restrictive requirements.</li> <li>April – May: OMR flow requirement is based on San Joaquin River flows instead of the existing SJR inflow:export ratio         ratio constraint</li> <li>July – September: No OMR flow constraints.</li> </ul>
Head of Old River	Oct-Nov: Determined by real-time operations.
Gate operations	Jan-Jun 15: Closed, subject to real-time operations.
	<ul> <li>December, and June 16 – Sept 30: Open, subject to real-time operations.</li> </ul>
Delta Cross Channel Gates	<ul> <li>Operating criteria as required by NMFS (2009) BiOp Action IV.1 and State Water Board D-1641 and for downstream flood control.</li> </ul>
Spring outflow	<ul> <li>Maintain Delta outflow under existing conditions during March, April and May; outflow requirement capped to 44,500 cfs.</li> </ul>
Fall outflow	September, October, November: Implement the USFWS 2008 biological opinion Fall X2 requirements in wet (W) and above normal (AN) year types.
Winter and summer outflow	<ul> <li>Flow constraints established under State Water Board D- 1641 will be followed if not superseded by criteria listed above.</li> </ul>
Rio Vista minimum flow standard	September – December: flows per State Water Board D-1641.

- Ostobor May Cotoo will continue to be closed up to 20 days
October – May: Gates will continue to be closed up to 20 days
per year.
Same as defined under State Water Board D-1641, and applied
as a maximum 3-day running average.
The State Water Board D-1641 export/inflow (E/I0 ratio
calculation was largely designed to protect fish from south Delta
entrainment. For operations with the WaterFix, Reclamation and
DWR propose that the North Delta diversions be excluded from
the E/l ratio calculation. In other words, Sacramento River inflow
is defined as flows downstream of the North Delta diversions and
only south Delta exports are included for the export component
of the criteria.
Allows for short-term (i.e., daily and weekly) adjustments to the
operations.
RTO is expected to govern:
<ul> <li>Allowable diversion at the proposed north Delta intakes</li> </ul>
based on fish presence.
<ul> <li>Continued management of diversions at the existing south</li> </ul>
Delta export facilities.
<ul> <li>Head of Old River Gate opening and closing based on fish</li> </ul>
presence, water levels and water quality.