

California Sportfishing Protection Alliance Recommendations for Optimal Ecological Conditions

Location	Parameter	Description	Year Type(s)	Dates/Values	
Anadromous Salmonid and Sturgeon Survival Recommended Optimal Conditions					
Major Tributary Streams of the Sacramento River Basin: Sacramento, Feather, Yuba, American, Putah Creek, Cosumnes, Calaveras, Mokelumne, Stanislaus, Tuolumne, Merced, San Joaquin	Temperature	Daily mean water temperature not to be exceeded in each Delta tributary stream, measured in degrees Fahrenheit	All	December 1 through May 15 59	
Sacramento River at Rio Vista	Base Flow	Maintain 14-day running average flows, measured in cfs. to provide positive flows for fall and spring run salmonid smolt outmigration.	All	February 1 through October 30	
				6,000	
Sacramento River from Freeport to Chipps Island	Pulse Flows	Flows needed to sustain viable migration corridor for optimal smolt passage and survival, measured in cfs	All	April 1 through June 30	
				30,000	
Stanislaus, Tuolumne, and Merced Rivers at Confluences with the San Joaquin River	Pulse Flows	Recommended flow releases for Stanislaus, Tuolumne and Merced rivers during dry, normal, and wet water year types to provide attraction cues for migrating adult salmon in October;	All	October 20 through 29	
				1,200 cfs	
Stanislaus, Tuolumne, and Merced Rivers at Confluences with the San Joaquin River	Pulse Flows	Recommended flow releases for Stanislaus, Tuolumne and Merced rivers during dry, normal, and wet water year types to provide attraction cues for migrating adult salmon in October; floodplain inundating flows beginning between Feb 15 and March 15, and to maintain mean water temperatures near 59 degrees F and maximum temperatures below 65 degrees F from March 15 to June 15		Beginning Feb 15 to March 15	
				Critical and Dry	3,000 cfs, 2 days
				Below Normal	3,000 cfs, 19 days; 6,000 cfs 2 days
				Above Normal	3,000 cfs, 13 days; 6,000 cfs 5 days
				Wet	3,000 cfs, 17 days; 6,000 cfs 5 days

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Stanislaus, Tuolumne, and Merced Rivers at Confluences with the San Joaquin River	Pulse Flows	Recommended flow releases for Stanislaus, Tuolumne and Merced rivers during dry, normal, and wet water year types to provide attraction cues for migrating adult salmon in October; floodplain inundating flows beginning between Feb 15 and March 15, and to maintain mean water temperatures near 59 degrees F and maximum temperatures below 65 degrees F from March 15 to June 15. Between May 16 and June 15, releases on Stanislaus and Merced should be >= to 3,000 cfs; releases on Tuolumne should exceed 4,000 cfs.		March 15 to 31	April 1 to 15
			Critical, Dry, Blw and Above Normal	1,000 cfs	1,500 cfs
			Wet	3,000 cfs	3,000 cfs
				April 16 to 20	April 21 to 30
			Critical and Dry	2,000 cfs	275 cfs
			Below and Above Normal	2,000 cfs	2,000 cfs
			Wet	3,000 cfs	3,000 cfs
				May 1 to 15	May 16 to June 15
			Critical and Dry	275 cfs	275 cfs
			Below and Above Normal	2,500 cfs	275 cfs
			Wet	3,000 cfs	≥3,000 cfs; ≥4,000 cfs
Old River between Head of Old River to Downstream Confluence with San Joaquin	Base Flows	Maintain daily flow measured in cfs, to provide an outmigration corridor	All	March 15 through May 15 2000 cfs	
San Joaquin River at Jersey Point	Base Flow	Maintain 14-day mean flows at Jersey Point, measured in cfs. In February and March, these flows would expand habitat for Delta smelt and other estuarine species, in addition to providing positive flows for salmonid smolt outmigration.		February 1 through June 30 - Delta smelt	October 1 through June 30 - salmon smolts
			Critical	1,000	1,000
			Dry	1,500	1,000
			Below Norm	2,000	2,000
			Above Norm	2,500	2,000
			Wet	3,000	3,000
Recommended Estuarine and Salmonid Optimal Conditions					

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Major Tributary Streams of the Sacramento River Basin and the San Joaquin River Basin: Sacramento, Feather, Yuba, American, Putah Creek, Cosumnes, Calaveras, Mokelumne, Stanislaus, Tuolumne, Merced and San Joaquin rivers.	Inflow Contributions to Delta Outflow	Determine equitable shares of flow contributions allocated among named streams to determine inflows to the Delta sufficient to meet Delta outflow needs, to occur in all years.		
Chippis Island - Delta Outflow, Late Winter and Early Spring	Flows (Net Delta Outflow Index)	Mean Period Delta outflow, measured as a 14-day running average		<u>February 1 through March 31</u>
			Critical	9,100
			Dry	23,500
			Below Norm	41,000
			Above Norm	90,800
Chippis Island - Delta Outflow, Mid-Spring and Early Summer Months	Flows (Net Delta Outflow Index)	Mean Period Delta outflow, measured as a 14-day running average		<u>April 1 through July 31</u>
			Critical	6,700
			Dry	10,800
			Below Norm	14,400
			Above Norm	23,000
Chippis Island - Delta Outflow, Summer to Early Winter Months	Flows (Net Delta Outflow Index)	Mean Period Delta outflow, measured as a 14-day running average		<u>August 1 through January 31</u>
			Critical	4,100
			Dry	9,200
			Below Norm	12,100
			Above Norm	14,600
	Wet	29,000		

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Location	Parameter	Description	Year Type(s)	Dates/Values
Optimal Range of X2 Positions in Winter and Early Spring (from Western Suisun Bay to Honkers Bay)	X2	14-day running average position of 2 parts per thousand salinity, measured 1 meter from channel bottom, expressed in kilometers upstream from the Golden Gate		<u>February 1 through March 31</u>
			Critical	77 to 79
			Dry	68 to 69
			Below Norm	58 to 64
			Above Norm	52
			Wet	51 to 52
Optimal Range of X2 Positions Spring to Mid-Summer (from Suisun Bay to Chipps Island)	X2	14-day running average position of 2 parts per thousand salinity, measured 1 meter from channel bottom, expressed in kilometers upstream from the Golden Gate		<u>April 1 through July 31</u>
			Critical	80 to 83
			Dry	75 to 78
			Below Norm	70 to 77
			Above Norm	63 to 75
			Wet	54 to 73
Optimal Range of X2 Positions in Late Summer Through Early Winter (from Suisun Bay to Antioch)	X2	14-day running average position of 2 parts per thousand salinity, measured 1 meter from channel bottom, expressed in kilometers upstream from the Golden Gate		<u>August 1 through January 31</u>
			Critical	83 to 90
			Dry	70 to 87
			Below Norm	67 to 84
			Above Norm	64 to 87
			Wet	50 to 84
Water Facilities Optimal Operations				
Delta Cross Channel and Georgiana Slough at Walnut Grove	Closure of gates; installation of acoustic barrier in Geo. Slough	Gates closed; acoustic barrier operating at head of Georgiana Slough at Sacramento River.	All	February 1 through June 30

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Harvey O. Banks Pumping Plant (SWP); Jones Pumping Plant (CVP); and Contra Costa Pumping Plant (CVP)	Pumping rate	Combined export rate, expressed in cfs.	All	February 1 to March 15	March 16 to June 30
				Combined export allowed provided flows at Jersey Point follow base flow schedule shown above.	0