RTD-1023
Comparison of Fish Screen Design Criteria

In streams and rivers:	CDFW	NMFS	BDCP/Tunnels Project
Approach velocity (the water velocity vector component perpendicular to the screen face)	For self-cleaning screens, 0.33 feet per second, where exposure to the fish screen shall not exceed 15 minutes; for "screens which are not self-cleaning, 1/4th of the river/ stream approach velocity, or about 0.0825 feet per second. The screen shall be cleaned before the approach velocity exceeds the approach velocity" of 0.33 feet per second.	Shall not exceed 0.33 feet per second for fry; for all locations, fingerling criteria are 0.8 feet per second.	0.33 feet per second for salmonid fry, except in the presence of Delta smelt when approach velocity shall be 0.2 feet per second. One cleaning system per screen operating 0.5 to 2 feet per second with a cycle time of approximately 5 minutes (maximum). (6 cleaners per cleaning system at each intake.)
Sweeping velocity (the water velocity vector component parallel and adjacent to the screen face)	At least two times the allowable approach velocity in streams and rivers.	Sweeping velocity shall be greater than approach velocity.	Greater than the approach velocity under NMFS criteria and "at least double the approach velocity per the CDFW (2000) criteria."
Other	Screen face shall be parallel to flow and adjacent bankline. No explicit criteria for small fish like Delta smelt.	Screen face "should be generally parallel to river flow and aligned with the adjacent bankline."	"Unused sections of the fish screens will be covered to provide operational flexibility as necessary."

Sources: RTD-1021; RTD-1022; RTD-1020, Table 6-2; SWRCB-3, p. 5.B-7:28-43.