CA Department of Fish and Wildlife response to Panel inquiry

Q. *Changes in salvage operation at pumps: the 20 mm cut off for salvage monitoring does not appear to provide good population estimate for Longfin smelt entrainment. Are there any plans to modify operations to address this issue?*

A. The decision to focus on fish 20-mm and larger, even though fish smaller than that are routinely encountered in salvage, is based on the fact that (1) the louvers and screens are not the least bit efficient for fish less than 20-mm and (2) keying-out fish less than 20-mm is quite time consuming due to their size and number. Fish smaller than 20-mm observed during routine salvage could be keyed-out and enumerated for the purposes of documenting take, but barring intensive research into efficiency, it would be very difficult to interpret such a data with regard to assessing population-level impact.

The present larval sampling during salvage is not used to index or estimate the number of Longfin Smelt entrained. Instead, that data is used (1) as an early warning for presence-absence purposes when assessing entrainment risk and (2) as information used by the Smelt Working Group in providing advice regarding the risk posed by various operating levels (OMRs between -5,000 and -1,250) identified in the 2008 Delta Smelt Biological Opinion and the 2009 Longfin Smelt Incidental Take Permit. Risk of entrainment is also evaluated based on bi-weekly smelt larval survey results, because that data describes the relative abundance of Longfin Smelt larvae and their distribution in the Delta.

There are no plans to change the current salvage monitoring program or the larval sampling during salvage.