



# United States Department of the Interior



FISH AND WILDLIFE SERVICE  
Pacific Southwest Region  
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FWS/R8/FAC

**FEB 21 2017**

## Memorandum

From: Regional Director, Pacific Southwest Region  
Sacramento, California

Subject: Determination Under Component 2, Action 3 of the 2008 OCAP Biological Opinion

**Determination:** The Service determines that temperatures triggering Action 3 have been met and therefore Action 3, intended to protect larval and juvenile Delta Smelt, has been initiated. OMR should be no more negative than -5000 cfs on a 14-day running average, with a simultaneous 5-day running average no more negative than -6250 cfs (within 25 percent).

**Previous Determination:** On January 6, the Service determined under Action 2 that OMR flow should be no more negative than -5000 cfs on a 14-day running average, with a simultaneous 5-day running average no more negative than -6250 cfs (within 25 percent).

**Rationale:** Action 2 ends and Action 3 begins when temperatures at Antioch, Rio Vista, and Mossdale average 12°C or when spent females have been detected, indicating the start of the spawning season has commenced. Under the Biological Opinion, 12°C is called out as the temperature at which Delta Smelt can be reasonably assumed to have initiated spawning. The Action ends when the daily average temperature at Clifton Court Forebay reaches 25°C for three consecutive days or on June 30, whichever is earlier. Action 3 does not have any suspension criteria that can be triggered by environmental conditions such as high flows. Under Action 3, the range of OMR flow may be set between -1250 and -5000 cfs based on an assessment of conditions. Based on water temperatures in the estuary that are consistent with spawning and hatching of larval Delta Smelt, the Service determines OMR flows should be no more negative than -5000 cfs on the 14-day running average, with a simultaneous 5-day running average no more negative than -6250 cfs (within 25 percent). Observations of spent males and gravid females in surveys and salvage indicate that spawning activity has begun, marking the beginning of the spawning season. Due to recent and forecasted storm activity, current high outflow conditions in the Delta are expected to persist for the next two weeks or longer, resulting in a low risk of entrainment to larval Delta Smelt that may hatch in the near future. We will continue to monitor conditions, including weather forecasts, flow conditions, salvage, and results from fish monitoring surveys and will reevaluate this determination if necessary.