1 2 3 4	STEPHEN PUCCINI (SBN 186105) NATHAN VOEGELI (SBN 279481) OFFICE OF THE GENERAL COUNSEL CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE 1416 Ninth Street Sacramento, CA 95814
5	Tel: (916) 653-6590 Fax: (916) 654-3805 Email: stephen.puccini@wildlife.ca.gov
7	Attorneys for the California Department of Fish and Wildlife
8	BEFORE THE STATE WATER RESOURCES CONTROL BOARD
9	STATE OF CALIFORNIA
10)
11	In the Matter of: DOUGLAS AND HEIDI COLE AND DECLARATION OF ROBERT HOLMES MARRIE MOURTARY PANCH
12	MARBLE MOUNTAIN RANCH)
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15	I, Robert Holmes, declare as follows:
16 17 18 19	1. My testimony, herein provided and offered into evidence as CDFW Exhibit CDFW-24 , is in regard to my review of the flow recommendation for Stanshaw Creek that NOAA's National Marine Fisheries Service's made to the State Water Resources Control Board by letter from Alicia Van Atta to Barbara Evoy, dated August 3, 2016 ("NMFS's Flow
	Recommendation"). A true and correct copy of the Flow Recommendation is offered into
20	evidence as CDFW-12.
21 22	2. I have been an employee of the California Department of Fish and Wildlife ("CDFW") for
23	9 ½ years. I am currently employed as Senior Environmental Scientist Supervisor in
24	CDFW's Water Branch Instream Flow Program. My statement of qualifications is offered into evidence as CDFW-25 .
25	3. In May 2016, I was asked by CDFW's Caitlin Bean to review the NMFS's Flow
26	Recommendation. The flow recommendation is for no more than 10% of estimated
27	unimpaired flow to be diverted throughout the low-flow season to maintain water quality
28	¹ Further references to CDFW exhibits will be "CDFW-[Exhibit Number]."

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- and food supply for over-summering coho salmon. This recommendation applies to all diverters on Stanshaw Creek.
- 4. The methodology NMFS used to identify the flow recommendation is based upon the "presumptive standard" from "A Presumptive Standard for Environmental Flow Protection" (Richter et al. 2011) ("Presumptive Standard"). This method is based on a large number of studies from around the world to make a case for protecting a portion of the instantaneous daily hydrograph for the ecosystem. This approach recognizes the importance of natural flow variability and sets protection standards that allow changes from natural conditions, which are expressed as percent alterations. The percent of allowable alteration is based on instantaneous flow. The concept is that individuals withdrawing water are to be required to maintain downstream river flows within the sustainability boundaries. Richter et al. in the Presumptive Standard identify a high level of ecological protection with < 10% daily flow alteration from the natural flow. Richter et al. further relate that a 10% reduction in instantaneous daily flow may have minor environmental effects, but a 20% reduction may have notable effects. A true and correct copy of "A Presumptive Standard for Environmental Flow Protection" is offered into evidence as CDFW-26.
- 5. These thresholds are embraced by a national instream flow policy crafted by the Canadian Department of Fisheries and Oceans ("DFO") in the "Framework for Assessing the Ecological Flow Requirements to Support Fisheries in Canada." (DFO, 2013). Similar to the Richter et al. in the Presumptive Standard, DFO allows for cumulative flow alterations < 10% of the instantaneous flow, in addition to a low-flow cut-off component. DFO indicates that alterations < 10% of the instantaneous flow threshold will have a low probability of detectable impacts to ecosystems that support fisheries. A true and correct copy of the Framework for Assessing the Ecological Flow Requirements to Support Fisheries in Canada is offered into evidence as CDFW-27.
- 6. Based upon my experience with conducting environmental studies in California and the Richter et al. (2011) and DFO (2013) reports, I concur that the NMFS's Flow Recommendation will provide flows for a high level of protection for over-summering coho salmon in Stanshaw Creek.

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