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7	Attorneys for the California Department of Fish and Wildlife		
8	BEFORE THE STATE WATER RESOURCES CONTROL BOARD		
	STATE OF CALIFORNIA		
9			
10	In the Matter of:		
11	DOUGLAS AND HEIDI COLE AND ) DECLARATION OF JENNIFER BULL MARBLE MOUNTAIN RANCH		
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14	I, Jennifer Bull, declare as follows:		
15	1. My testimony, herein provided and offered into evidence as CDFW <b>Exhibit CDFW-1</b> , <sup>1</sup>		
16	identifies my personal knowledge of the adverse impacts on public trust resources by		
17	Douglas and Heidi Cole and Marble Mountain Ranch (collectively "the Diverter" or		
	"Diverters") associated with the Diverters' water diversion on Stanshaw Creek. My		
18	testimony is based on my personal observations and a review of CDFW records.		
19	2. I have been an employee of the California Department of Fish and Wildlife ("CDFW") for		
20	the past 29 years. I am currently employed as a Senior Environmental Scientist Supervisor		
21	for the Yreka Fisheries Program. I was previously the Siskiyou County Fisheries District		
22	Biologist for CDFW for five years, which is one of the positions I currently supervise. My		
23	statement of qualifications is offered into evidence as CDFW-2.		
24	3. In a letter dated March 17, 2000 to the State Water Resources Control Board ("State Water		
	Board"), CDFW filed a protest against Application 29449 alleging the project "could		
25	adversely affect fish resources or other sensitive species by reducing stream flows during		
26	critical periods. CDFW asserted that maintaining sufficient flows in Stanshaw Creek was		
27	important to maintain thermal refuge for salmonids and voiced strong concern that the		
28	Further references to CDFW exhibits will be "CDFW-[Exhibit Number]"		

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- Flow volume influences water temperature, wetted rearing area, macroinvertebrate 4. production, and attraction and fish passage flows. Water temperature is one of the most important factors in the survival of juvenile Coho Salmon (Onchorhynchus kisutch) and other salmonids, especially during the late-spring and summer. During this time, water temperature conditions in the Klamath River become inhospitable and salmonids migrate into tributaries to over summer in the cooler temperatures to survive. Salmonids are coldblooded organisms, regulating body temperature by external conditions. Dissolved oxygen is more available to aquatic organisms at colder temperatures. Water temperature influences growth, physiology, and behavior, and optimal conditions for Coho Salmon are confined to a narrow range: 10-15.5°C. Sub-optimal temperatures are within the range of 15.6-20.3°C. Growth may still occur, but salmonids are more susceptible to disease, behavioral changes, and predation. Detrimental is above 20.3°C. A published paper by Yreka Fisheries Program staff, "Water temperature thresholds for coho salmon in a spring-fed river, Siskiyou County, California," Stenhouse et al. (California Fish and Game 98(1):19-37; 2012), provides the information used to establish these thresholds. A true and correct copy of this paper is offered into evidence as CDFW-4.
- I conducted field visits of the Diverters' diversion and ditch system in June 2012 and May 14, 2015. The Diverters' point of diversion ("POD") is located approximately three-quarters of a mile upstream of the Highway 96 crossing, on United States Forest Service property. The POD consists of a handmade rock wing diversion dam located on the east creek bank of the Stanshaw Creek channel. The rock wing diversion dam extends about halfway across the channel. An unlined ditch conveys the water approximately one-half mile to Marble Mountain Ranch ("MMR"). The water is run through the penstocks of a hydropower unit into another ditch that conveys the water to a man-made pond on MMR's property, which then exits and discharges in to another watershed, Irving Creek.
- 6. While both juvenile Coho Salmon and steelhead (*O. mykiss*) have been documented in Stanshaw Creek below the Highway 96 culverts, to my knowledge, a comprehensive evaluation of adult steelhead passage at high flows through the culverts has not been completed. However, during my May 14, 2015 field visit, I observed fish in the pond down-ditch of the hydropower unit that appeared to me to be salmonids based on their markings.

- At the time, Mr. Cole told me the fish in the pond come from Stanshaw Creek. Based on my observation and Mr. Cole's comment, I concluded that the fish were salmonids.
- 7. I reviewed a memorandum from CDFW Associate Fisheries Biologist Dennis Maria to CDFW's Stanshaw Creek File dated May 30, 2000, summarizing a survey Mr. Maria and others conducted in lower of Stanshaw Creek on May 25, 2000. According to Mr. Maria, "The survey was prompted by a water rights application [(Application 29449)] ... filed by Mr. Doug Cole who owns and operates Marble Mountain Ranch .... The purpose of the survey was to evaluate the aquatic resources supported by Stanshaw Creek and the minimum flow needed to protect these resources." (May 30, 2000 Memorandum, p. 1.) Mr. Maria also states that 27 juvenile putative steelhead were captured using a "back-pack electro-shocker unit" that were positively identified as steelhead. (*Ibid.*) Mr. Maria also stated that the culverts are a barrier to juvenile steelhead, but he had not determined at the time whether the culverts were a barrier to adult steelhead, and therefore recommended "further evaluation in terms of [the culverts] hindrance to adult steelhead spawners." (*Id.* at p. 2.) A true and correct copy of Mr. Maria's May 30, 2000 Memorandum is offered into evidence as CDFW-5.
- I reviewed another memorandum from Mr. Maria to CDFW's Stanshaw Creek File dated July 31, 2000, summarizing a "brief electro-shocking survey" Mr. Maria made in lower Stanshaw Creek on July 26, 2000. According to Mr. Maria, the purpose of the survey was to confirm the presence of Coho Salmon after Karuk Tribal representatives reported visually spotting juvenile Coho Salmon in the lower creek. Mr. Maria reported that a number of other individuals were present during the survey, including Mr. Cole and Ms. Margaret Tauzer with NOAA's National Marine Fisheries Service. Mr. Maria stated he conducted a brief electrofishing survey and found several juvenile steelhead in the pool just below the culverts and one Coho Salmon approximately 150 feet below the pool in Stanshaw Creek, thereby confirming Coho Salmon presence in the creek. After Mr. Maria found the Coho Salmon, he ended the survey. A true and correct copy of Mr. Maria's July 31, 2000 Memorandum is offered into evidence as CDFW-6.
- 9. I reviewed a report prepared by Ross Taylor and Associates ("RTA"), "Findings Report for Stanshaw Creek Habitat and Instream Flow Assessment," dated January 2015, which reports that two fish were observed upstream of Highway 96 and were "most likely resident coastal rainbow trout or juvenile steelhead." (RTA, p. 3.) The report goes on to state, "The

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1		Create and making improvements to the Divertors' ditch system. A true and sometimes	
1		Creek and making improvements to the Diverters' ditch system. A true and correct copy of the two memoranda are offered into evidence as <b>CDFW-9</b> and <b>CDFW-10</b> , respectively.	
2	14.	In another memorandum by CDFW to the State Water Board dated October 15, 2009,	
3		concerning a small domestic use registration by Mr. Cole (No. D030945), CDFW again	
4		recommended a minimum bypass of 2.5 cfs. A true and correct copy of the October 15,	
5		2009 memorandum is offered into evidence as CDFW-11.	
6	15.	CDFW continues to recommend that the Diverters return the non-consumptive portion of	
7		their diverted water to Stanshaw Creek, as evidenced by the draft SAA (Notification No.	
8		1600-2017-0135-R1) offered into evidence as <b>CDFW-37</b> .	
9	16.	By letter dated August 3, 2016, NOAA's National Marine Fisheries Service ("NMFS")	
10		provided the State Water Resources Control Board a flow recommendation for Stanshaw	
11		Creek ("NMFS Flow Recommendation"). The recommendation is for a minimum 2.0 cfs bypass at the POD and the non-consumptive diversion returned to Stanshaw Creek and 90%	
12		bypass at the POD and the non-consumptive diversion returned to Stanshaw Creek and 90% bypass of the unimpaired flow. A true and correct copy of the NMFS Flow	
13		Recommendation is offered into evidence as <b>CDFW-12</b> .	
14	17.	In May 2016, Mr. Holmes stated in a telephone call with myself and CDFW's Ms. Caitlin	
15		Bean that Mr. Holmes supported the methodology and results of the instream flow needs	
16	evaluation in the NMFS Flow Recommendation.  I declare under penalty of perjury to the laws of the State of California that the foregoing is true and correct. Executed October 6, 2017, at Fort Jones, California.		
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