Simulated effect of incremental stage changes of 0.04 feet on discharge at the USGS gaging station No. 11143010 and flows below 20 cfs.

Break Points for USGS Rating No. 1						
	Gage Height [1]	Discharge (cfs) [1]	Simulated Gage Height [2]	Predicted Flow (cfs)[3]	Delta $Q_{-.04}$	% Reduction
	3.38	0.01	3.38	0.01		
	4.15	20	4.15	20.01		
	4.95	134	4.12	15.30	4.72	-31%
	5.2	185	4.08	10.66	4.64	-44%
	5.5	250	4.04	7.40	3.26	-44%
	6.3	464	4	5.12	2.28	-45%
	7.3	778	3.96	3.53	1.59	-45%
			3.92	2.42	1.11	-46%
			3.88	1.66	0.77	-46%
			3.84	1.13	0.53	-47%
			3.8	0.77	0.36	-47%

[1] Source: Personal Communication, June 8, 2011, Jeff West; USGS hydrologist, USGS Field Office, Marina, CA.

[2] Simulated gage height below 4.12 based on progression of -0.04 foot change in stream elevation, described by P.D. Horton (Exhibit ESR-2) as the theoretical stage reduction associated with El Sur Ranch well production during 2007.

[3] Predicted discharge based on USGS Rating No. 1 for lowest range of break points between 0.01 cfs @ Gage Height 3.38 feet and 20.0 cfs @ Gage Height 4.15 feet