

Table 6.1-3. Effects of Muni/Western Diversion of up to 1,500 cfs in Sub-Area 2

	<i>Peak Flow Below Cuttle Weir (cfs)</i>	<i>Peak Flow near Mill Creek Confluence (cfs)</i>	<i>Sub-Area 2 Main Channel Velocity ^a (ft/s)</i>	<i>Sub-Area 2 Main Channel Depth ^b (ft)</i>	<i>Upper Reach Overbank Velocity ^{c, g} (ft/s)</i>	<i>Upper Reach Overbank Hydraulic Flood Depth ^d (ft)</i>	<i>Middle Reach Overbank Velocity ^{c, g} (ft/s)</i>	<i>Middle Reach Overbank Hydraulic Flood Depth ^{d, g} (ft)</i>	<i>Sub-Area 2 Area of Inundation Santa Ana River only ^e (acres)</i>
5-YEAR FLOOD									
No Project	500	2,000	3.6	5.2	0.0	0.0	1.6	0.8	361
Project ^f	0	1,500	3.1	4.8	0.0	0.0	1.3	0.5	296
Effect of Project ^{h, i, j}	-500	-500	-0.5	-0.4	0.0	0.0	-0.3	-0.3	-65
Percent Change	-100.0%	-25.0%							-18.1%
10-YEAR FLOOD									
No Project	500	4,200	4.1	6.3	0.0	0.0	2.3	1.1	496
Project ^f	0	3,700	3.6	6.1	0.0	0.0	2.3	1.0	461
Effect of Project ^{h, i, j}	-500	-500	-0.5	-0.2	0.0	0.0	0	-0.1	-35
Percent Change	-100.0%	-11.9%							-6.9%
20-YEAR FLOOD									
No Project	2,500	8,000	4.8	7.7	0.0	0.0	2.7	2.0	623
Project ^f	1,000	6,500	4.5	7.1	0.0	0.0	2.5	1.6	579
Effect of Project ^{h, i, j}	-1,500	-1,500	-0.3	-0.6	0.0	0.0	-0.2	-0.4	-44
Percent Change	-60.0%	-18.8%							-7.1%
50-YEAR FLOOD									
No Project	3,800	15,500	5.8	9.0	0.0	0.0	1.0	0.4	764
Project ^f	2,300	14,000	5.5	8.8	0.0	0.0	0.5	0.2	735
Effect of Project ^{h, i, j}	-1,500	-1,500	-0.3	-0.2	0.0	0.0	-0.5	-0.2	-29
Percent Change	-39.5%	-9.7%							-3.8%

Table 6.1-3. Effects of Muni/Western Diversion of up to 1,500 cfs in Sub-Area 2 (continued)

	<i>Peak Flow Below Cuttle Weir (cfs)</i>	<i>Peak Flow near Mill Creek Confluence (cfs)</i>	<i>Sub-Area 2 Main Channel Velocity^a (ft/s)</i>	<i>Sub-Area 2 Main Channel Depth^b (ft)</i>	<i>Upper Reach Overbank Velocity^{c, g} (ft/s)</i>	<i>Upper Reach Overbank Hydraulic Flood Depth^d (ft)</i>	<i>Middle Reach Overbank Velocity^{c, g} (ft/s)</i>	<i>Middle Reach Overbank Hydraulic Flood Depth^{d, g} (ft)</i>	<i>Sub-Area 2 Area of Inundation Santa Ana River only^e (acres)</i>
100-YEAR FLOOD									
No Project	5,000	25,000	6.5	10.3	0.0	0.0	1.3	0.5	862
Project ^f	3,500	23,500	6.3	10.1	0.0	0.0	1.3	0.5	841
Effect of Project ^{h, i, j}	-1,500	-1,500	-0.2	-0.2	0.0	0.0	0.0	0.0	-21
Percent Change	-30.0%	-6.0%							-2.4%
<p><i>Notes:</i></p> <p>^a Main channel velocity is median value of cross section average velocities.</p> <p>^b Main channel depth is median value of the maximum depths of the cross section.</p> <p>^c Overbank velocity is average velocity of the cross section velocities.</p> <p>^d Overbank hydraulic flood depth is the median value of the hydraulic flood depths for each cross section. The hydraulic flood depth is the cross section area of the flow divided by the top width of the flow.</p> <p>^e Inundation Area is only approximate and includes only the Santa Ana River. Mill Creek, City Creek and Plunge Creek inundation areas would be unaffected.</p> <p>^f Project is diversion of up to 1,500 cfs by Muni/Western.</p> <p>^g Average for main overbank area (right side as one looks downstream) in the vicinity of the Woolly Star Preserve.</p> <p>^h Small positive effects of Project due to calculation methods (including tolerance levels) and do not reflect significant differences.</p> <p>ⁱ Effects of Project may not appear to be the difference between baseline and Project because of displayed rounding.</p> <p>^j Under 5- and 10-year floods, water available for Muni/Western diversion is estimated to be no more than 500 cfs.</p>									