Table 1. Summary of Indirect Impacts to Waters of the U.S. Downstream of the Rosemont Project– Barrel Alternative

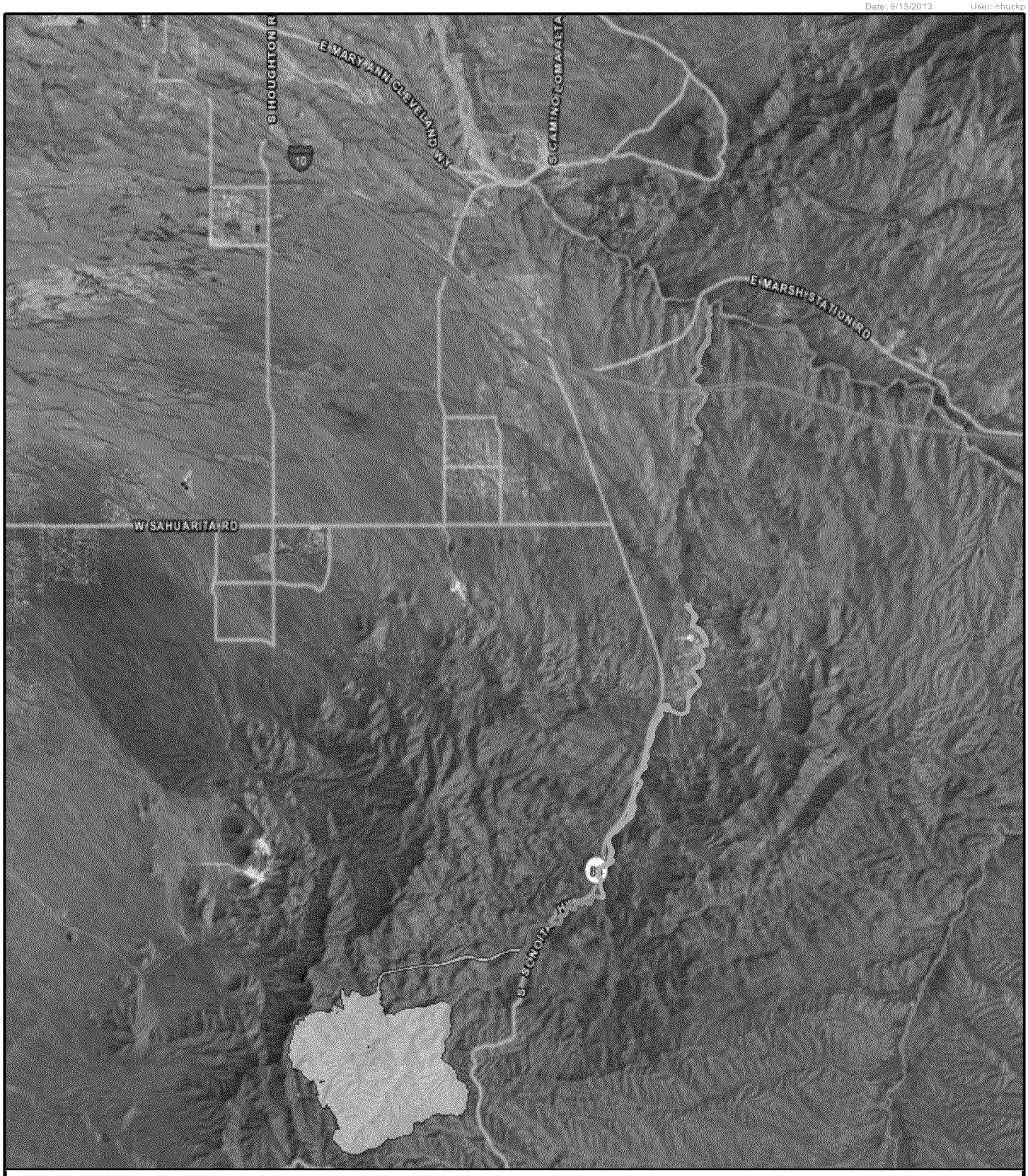
	Barrel Canyon			Davidson Canyon			
	Reach 1A (Waste Dump to McCleary Cyn)[1]	Reach 1B (McCleary Cyn to SR 83)[1]	Reach 2 (SR83 to Davidson Cyn)	Reach 2 (Barrel Cyn to Davidson Spg)	Reach 3 (Davidson Spg to Reach 2 Spg)	Reach 4 (Reach 2 Spg to Cienega Ck)	Total
Estimated Potential Waters of the U.S. (acres)	2.8	22	7.2	43.6	20.5	27.4	**123.5**
Operations (25-30 years)							
Reduction in Average Annual Volume of Stormwater Flow (percent)	100	36[2]	36[2]	26[3]	8[3]	8[3]	---
Peak Indirect Impacts to Offsite Waters during Operation[4] (acres)	2.8	7.9	2.6	11.3	1.6	2.2	**28.4**
Post-Mining							
Reduction in Average Annual Volume of Stormwater Flow (percent)	100	17	17	13	4	4	---
Peak Indirect Impacts to Offsite Waters post Mining[4] (acres)	2.8	3.7	1.2	5.7	0.8	1.1	**15.3**

[1] This definition differs slightly from that within the EIS. Downstream losses within Barrel Canyon are already accounted for between the toe of the waste rock dump and McCleary Canyon in the CWA Section 404 permit application and associated documentation. Please see attached *Figure 1*.

[2] Data provided by SWCA (2013) and estimated from the proportion of watershed acreage lost during operation. The proportion of watershed lost during operation peaks at 36 percent but is much less both before and after this peak during initial construction and following concurrent reclamation. Therefore, assuming 36 percent loss of watershed acreage is a very conservative estimate and likely overstates the actual amount of stormwater flow volume lost.

[3] Data extrapolated from Preliminary Administrative Draft FEIS – Cooperator Review July 2013 and SWCA (2013).

[4] Indirect impacts to offsite waters calculated by multiplying the acres of waters of the U.S. in each drainage reach (Barrel or Davidson Canyons only) by the modeled or extrapolated percent reduction in average annual volume of stormwater flow of that reach. These estimates are considered conservative, as loss of function of these ephemeral reaches of Barrel and Davidson canyons are not anticipated to be significant (no significant change to stream geomorphology, minor loss of aquifer recharge, dominant xeroriparian habitat supported by local storm runoff rather than stream flow).



Barrel Reach 1A
Barrel Reach 1B
Barrel Canyon Reach 2
Davidson Canyon Reach 2
Davidson Canyon Reach 3
Davidson Canyon Reach 4
Barrel Alternative

N

0 2 4 Miles

ROSEMONT PROJECT
PERMIT NO. SPL-2008-00816-MB

Stream Reaches Downstream of Rosemont Project

Figure 1