

APPENDIX A – RUSLE2 Analysis for Laughlin Loam Soil Type (May 4, 2007)

RUSLE2 estimated weighted average soil loss and sediment delivery for Laughlin Loam soil type (tons/acre/year) using post vineyard development management practice templates described in the July 2006 Soil Loss White Paper prepared for Preservation Ranch.							
Slope Slope Length	20% (up/down cultivation)		30% (up/down cultivation)		40% (up/down cultivation)		Vineyard Management Practice
	Soil Loss	Sediment Delivery	Soil Loss	Sediment Delivery	Soil Loss	Sediment Delivery	
250-ft	1.1	1.1	1.7	1.7	2.2	2.2	No Vegetated Buffer
	1.1	0.47	1.7	0.7	2.2	0.91	10-ft wide Vegetated Barrier at Slope Bottom
500-ft	1.2	1.2	1.8	1.8	2.4	2.4	No Vegetated Buffer
	1.2	0.51	1.8	0.76	2.4	1.0	10-ft wide Vegetated Barrier at Slope Bottom
750-ft	1.3	1.3	1.9	1.9	2.5	2.5	No Vegetated Buffer
	1.3	0.53	1.9	0.8	2.5	1.0	10-ft wide Vegetated Barrier at Slope Bottom
1,000-ft	1.4	1.4	2.0	2.0	2.6	2.6	No Vegetated Buffer
	1.4	0.55	2.0	0.83	2.6	1.1	10-ft wide Vegetated Barrier at Slope Bottom

NOTES:
 Vineyard planted up and down the slope (parallel to overland flow path).
 Acceptable USDA-NRCS Soil Loss T-Value for Laughlin Loam (LgE) = 2 tons/acre/year
 Vegetated Barrier used in RUSLE2 Model assumes an above ground bio-mass at peak canopy of 6,000 lbs/ac/year.