

DOCUMENTATION OF IMPACTS

Documentation of the impacts that the BMPs had on the demonstration sites and surrounding areas has been conducted using photo documentation, PPS evaluations, and the Revised Universal Soil Loss Equation (RUSLE) 2 software program. This documentation has been submitted to the RWQCB on a quarterly basis and in the year one summary report. In addition, **Appendix C** provides a summary of each site including: before and after (BMP implementation) photos, yearly PPS scores, and RUSLE 2 scores.

Using the RUSLE 2 model, estimated soil erosion reduction as a result of the project was 995.40 tons. On average, soil loss ranged from 16.91 tons/acre/year prior to BMP implementation to 1.67 tons/acre/year after BMP implementation. The biggest decreases were seen in sites that previously had no cover verses ones that had some cover prior to BMP implementation. For example, the road at PC vineyard had an estimated soil loss of 42.00 tons/acre/year prior to the implementation of the BMP. With the BMP, the estimated soil loss was 0.21 tons/acre/year. A reduction of 41.79 tons/acre/year! **Table 4.3** and **Figure 4.3** document the impacts of the implemented BMPs at the sites using the RUSLE 2 equation.

Table 4.3
Documentation of Impact
Revised Universal Soil Loss Equation (RUSLE) 2 Results

Vineyard	Acres	Soil Loss for the Demo Area with Current BMP (tons/acre/year)	Soil Loss for the Demo Area w/out Current BMP (tons/acre/year)	Total Soil Loss Prevented for the Demo Area (all acres)	Number of Years Participated in Project	Total Soil Loss Prevented From Demo Area (tons)
SM	2	0.75	32.50	65.00	2.00	130.00
BF	2	0.90	24.50	49.00	2.00	98.00
PC	2	0.21	42.00	84.00	2.00	168.00
ST	2	5.75	7.00	14.00	2.00	28.00
SW	2	0.22	2.35	4.70	2.00	9.40
GY	5	1.00	20.00	100.00	1.00	100.00
PC	50	2.67	3.87	193.50	2.00	387.00
VG	4	1.50	3.00	12.00	2.00	24.00
SB	3	2.00	17.00	51.00	1.00	51.00
Averages:	-	1.67	16.91	-	-	-
Totals:	-	-	-	-	-	995.40

Notes:

* RUSLE 2 only measures sheet and rill erosion. Therefore, RUSLE 2 could not be used to calculate approximate soil loss for HS Vineyard because of the gullies along the road. In addition, the road used as the demonstration site at BR Vineyard was too

Figure 4. 3 Estimated Changes in Erosion Using RUSLE 2

