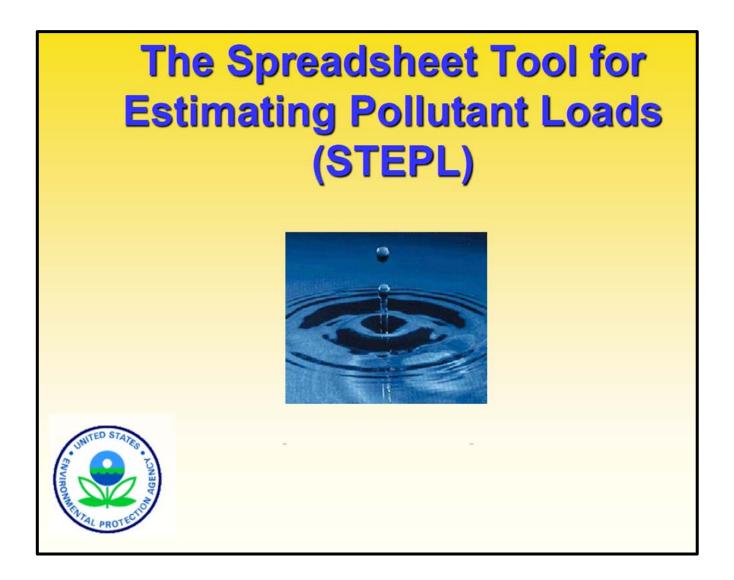
## Appendix C STEPL Spreadsheet Results

The purpose of this appendix is to present screen captures of the US Environmental Protection Agency's Spreadsheet Tool for Estimating Pollutant Loads, version 4.0 (STEPL), illustrating all input values and output results derived in development of this TMDL project. STEPL spreadsheet tools, and user manuals can be downloaded from <a href="http://it.tetratech-ffx.com/steplweb/models\$docs.htm">http://it.tetratech-ffx.com/steplweb/models\$docs.htm</a>



## Appendix C - STEPL Spreadsheet Results

State		County		Weather Sta	tion (for rei	n correction f	actors)						
California	•	San Benito	*	CA SAN FR			actors						
										Dain corror	ction factors		
1. Input wate	rshed land u	se area (ac) a	nd precipitat							0.869	0.421		
Watershed	Urban and Built Up	Cropland	Range Land		User Defined	Feedlots	Feedlot Perce Paved		Total	Annual Rainfall	Rain Days	Avg. Rain/Event	
Clear Creek-	Duit op	oropiana	runge Luna	rioodiana	Donned	reculoto	0-24%	-	Total			Runzvent	
San Benito River	0	0	13205	21625		0	0 0-24%		34830	22.2	46	0.996	
Hernandez Reservoir-							0-24%	-					
San Benito River	0	178	8821	9888		0	0 0-24%		18887	21.3	46	0.956	
James Creek-		170	0021	3000		•	0-24%	-	10007			0.950	
San Benito River	0	10	16330	12401		0	0 0-24%		28741	20	46	0.897	
Rock Springs Creek-San							0-24%	-		18.4	46		
Benito River Sulphur Creek-	0	303	23080	6397		0	0 0-24%		29780			0.826	
San Benito	1						0-24%	-		16	46		
River Willow Creek	0	461	20911 15962	2802 2583			0 0-24% 0 0 0-24%	-	24174 18586	17.6	46	0.718	
Stone Creek Upper Tres	0	5	8133	1922		0	0 0-24%		10060	17.9	46	0.803	
Pinos Creek	0	81	20916	2243		0	0 0-24% 0 0-∠4‰		23240	18.2	46	0.817	
Middle Tres Pinos Creek	0	19	22470	508		0	0 0-24% 0 0-24%	-	22997	16.4	46	0.736	
Pescadero Creek	87	672	13486	11420		0	010-24%	-	25665	17.8	46	0.799	
Las Aguilas Creek	0	072	24509	220			010-24%	=		18	46		
Los Muertos	Ĭ						0-24%		24729	16.1	46	0.808	
Creek Paicines	0	42	18176	710		0	0 ju-∠4‰ 0 0-24%		18928	10.1	40	0.722	
Reservoir- San Benito							0.2470			15.2	46		
River	16	4354	26909	2610		0	0 0-24%		33889			0.682	
Lower Tres Pinos Creek	231	2179	13973	1468		0	0 0-24%	÷	17851	14.8	46	0.664	
San Juan Canyon	927	6136	11360	5774			0 0-24%		24197	19.5	50	0.805	
Bird Creek- San Benito	021	0.00		0111		<u> </u>	0 0-24%	=	21101	17	50	0.000	
River	3034	3779	17505	8424		0	0 0-24%		32742		50	0.702	
Quien Sabe Creek	0	3172	29268	116		0	0 0-24%	<b>H</b>	32556	17.2	50	0.710	
Santa Ana Creek	853	7084	24603	1177		0	010-24%	=	33717	15.7	50	0.648	
Tequisquita Slough	1966	8966	12638	2393			0.0-24%	=	25963	17.8	50	0.735	
Watsonville							0-24%	=		23.1	58		
Slough Lower Pajaro	4178	5049	292	5952			0 U-24%		15471	23.2	58	0.822	
River Arroyo De	963	11321	11680	9321		0	0 0-24%		33285			0.826	
Las Viboras Salsipuedes	0	327	14229	184		0	0 0-24%		14740	20.2	50	0.834	
Creek	1342	4019	2344	7993		0	0 0-24% 0 0-24%		15698	26.2	58	0.932	
Lower Pacheco							0-24%	=		21.5	58		
Creek South Fork	192	4172	15796	1717		0	0 0-24%	=	21877			0.765	
Pacheco Creek	0	0	11497	10		0	0 0-24%		11507	21.6	58	0.769	
Lower Uvas Creek	, v	4142					0-24%	=		24.4	58		
Upper Pajaro	1602		13677	6269			010-24‰ 0-24%	=	25690	19.4	58	0.868	
River Corralitos	1313	19596	13487	1070		-	0 U-24% 0 0-24%	=	35466		58	0.690	
Creek Upper	1108	2594	178	13909		0	0 0-24%		17789	32.5	28	1.157	
Pacheco Creek			18094	222		0	0 0-24%		18316	20.3	58	0.722	
Lower Llagas							0-24%	-		21	58		
Creek Cedar Creek	5442 0	5378 0	4721 7890	4467 4876		0	0 0-24% 0 0-24%	I	20008 12766	21.2	58	0.747	
Upper Uvas Creek	201	316	15576	13491			O 0-24% 0 0-24%		29584	32.7	57	1.184	
Little Llagas Creek							0-24%			21.2	57		
Upper Llagas	5257	2216	5284	2636			0 0-24%	-	15393		57	0.768	
Creek Lower North	1232	505	14056	2713		0	0 0-24%	-	18506	28.8	57	1.043	
Fork Pacheco Creek	0	0	24891	688		0	0 0-24%	_	05570	20	58	0.740	
CICCN	. 0	. 0	24891	0880		VI	010-24%		25579		1	0.712	

	ultural anima								# of months manure
Watershed Clear Creek-	Beef Cattle	Dairy Cattle	Swine (Hog)	Sheep	Horse	Chicken	Turkey	Duck	applied
San Benito River	0	0	0	0	0	0	0	0	
Hernandez	0	0	0	U	v	0	0		
Reservoir- San Benito									
River	0	0	0	0	0	0	0	0	(
James Creek- San Benito									
River	0	0	0	0	0	0	0	0	(
Rock Springs Creek-San									
Benito River	123	18	13	16	4	0	0	0	(
Sulphur Creek- San Benito									
River	6	1	0	1	1	0	0	0	(
Willow Creek Stone Creek	0	0	0	0	0 9	0	0	0	0
Upper Tres	00	10	0	,	9	2	v	0	
Pinos Creek Middle Tres	0	0	0	0	0	0	0	0	(
Pinos Creek	0	0	0	0	0	0	0	0	(
Pescadero									(
Creek Las Aguilas	0	0	0	0	0	0	0	0	
Creek	0	0	0	0	0	0	0	0	(
Los Muertos Creek	0	0	0	0	0	0	0	0	(
Paicines									
Reservoir- San Benito									
River	1980	285	3	202	264	66	0	0	(
Lower Tres Pinos Creek	841	121	1	86	112	28	0	3	
San Juan									
Canyon Bird Creek-	115	17	0	12	15	4	0	0	(
San Benito									
River Quien Sabe	647	93	1	66	86	22	0	2	(
Creek	0	0	0	0	0	0	0	0	(
Santa Ana Creek	1789	258	2	182	238	59	0	5	c
 Tequisquita		Ì		102	200				
Slough Watsonville	2230	322	3	227	297	74	0	7	(
Slough	225	0	0	117	682	0	0	10	(
Lower Pajaro River	581	23	5	04	405	60	4	5	(
Arroyo De	160	23	C	84	405	69	1	5	
Las Viboras Salsipuedes	101	8	1	10	24	9	0	0	(
Creek	0	0	0	0	0	0	0	0	(
Lower Pacheco									
Creek	2043	56	25	211	677	275	6	7	(
South Fork Pacheco									
Creek	0	0	0	0	0	0	0	0	(
Lower Uvas	647		_		007				
Creek Upper Pajaro	617	4	9	64	227	94	2	2	(
River	3625	196	35	373	1037	403	2	12	(
Corralitos Creek	27	0	0	14	78	0	0	1	(
Upper		-							
Pacheco Creek	0	0	0	0	0	0	0	0	
Lower Llagas									
Creek Cedar Creek	62 0	0		6 0	23 0	9	0	0	
Upper Uvas									
Creek Little Llagas	115	1	2	12	42	18	0	0	(
Creek	992	6	14	103	365	152	3	3	
Upper Llagas Creek	80	0	1	8	29	12	0	0	
Lower North		, v		0	20	12			· · · · · ·
Fork Pacheco Creek	0	0	0	0	0	0	0	0	
Upper North	0	V	0	v	v	0	0	0	'
Fork Pacheco Creek	0	0	0	0	0	0	0	0	

115	3. Input septi	eptic system and illegal direct wastewater discharge data									
116	Watershed	No. of Septic Systems	Population per Septic System	Septic Failure Rate, %	Wastewate r Direct Discharge, # of People	Direct Discharge Reduction, %					
	Clear Creek- San Benito										
117	River	0	2.43	2	0	0					
	Hernandez										
	Reservoir- San Benito										
118	River	0	2.43	2	0	0					
	James Creek-										
119	San Benito River	0	2.43	2	0	0					
110	Rock Springs		2.40	2							
400	Creek-San										
120	Benito River Sulphur Creek-	0	2.43	2	0	0					
	San Benito										
121 122	River Willow Creek	0	2.43 2.43	2	0	0					
122	Stone Creek	0	2.43	2	0	0					
	Upper Tres										
124	Pinos Creek Middle Tres	0	2.43	2	0	0					
125	Pinos Creek	0	2.43	2	0	0					
	Pescadero	_									
126	Creek Las Aguilas	0	2.43	2	0	0					
127	Creek	0	2.43	2	0	0					
100	Los Muertos Creek		0.40	2		0					
128	Paicines	0	2.43	2	0	0					
	Reservoir-										
100	San Benito River	0	2.42	2	0	0					
129	Lower Tres	0	2.43	2	0	0					
130	Pinos Creek	0	2.43	2	0	0					
131	San Juan Canyon	0	2.43	2	0	0					
131	Bird Creek-	0	2.43	2	0	0					
	San Benito										
132	River Quien Sabe	100	3	2	0	0					
133	Creek	0	2.43	2	0	0					
40.4	Santa Ana Creek		0.40								
134	Tequisquita	0	2.43	2	0	0					
135	Slough Watsonville	31	3	2	0	0					
136	Slough	70	2.5	2	0	0					
	Lower Pajaro										
137	River Arroyo De	125	2.5	2	0	0					
138	Las Viboras	0	2.43	2	0	0					
400	Salsipuedes		0.5	2		0					
139	Creek Lower	0	2.5	2	0	0					
	Pacheco										
140	Creek South Fork	0	2.43	2	0	0					
	Pacheco										
141	Creek	0	2.43	2	0	0					
142	Lower Uvas Creek	0	2.43	2	0	0					
	Upper Pajaro										
143	River Corralitos	0	2.43	2	0	0					
144	Creek	200	2.5	2	0	0					
	Upper										
145	Pacheco Creek	0	2.43	2	0	0					
	Lower Llagas										
146	Creek	150	2.77	2	0	0					
147	Cedar Creek Upper Uvas	0	2.43	2	0	0					
148	Creek	0	2.43	2	0	0					
149	Little Llagas Creek	0	2.43	2	0	0					
149	Upper Llagas	U	2.43	2	0						
150	Creek	150	2.77	2	0	0					
	Lower North Fork Pacheco										
151	Creek	0	2.43	2	0	0					
	Upper North Fork Pacheco										
152	Creek	0	2.43	2	0	0					
			2.10	-							

## Appendix C - STEPL Spreadsheet Results

164		the Universa	I Soil Loss	Equation (l	JSLE) parai	neters																-
165 166	Watershe	Cropland B	K	LS	C		Pasturelan B	d K	LS	C	P	Forest B	ĸ	LS	C	P	User Define B	ed K	LS	c I	P	
100	Clear Creek-				<u> </u>			ĸ	20	0	•				<u> </u>					-		
167	San Benito River	31.552	0.326	11.394	0.200	1.000	31,552	0.326	11.394	0.040	1.000	31.552	0.326	11.394	0.003	1.000	31,552	0.326	11.394	0.062	1.000	
	Hernandez																					
	Reservoir-San Benito River																					
168	James Creek-	31.552	0.326	11.394	0.200	1.000	31.552	0.326	11.394	0.040	1.000	31.552	0.326	11.394	0.003	1.000	31.552	0.326	11.394	0.062	1.000	
	San Benito																					
	River Rock Springs	31.552	0.326	11.394	0.200	1.000	31.552	0.326	11.394	0.040	1.000	31.552	0.326	11.394	0.003	1.000	31.552	0.326	11.394	0.062	1.000	
	Creek-San																					
170	Benito River Sulphur Creek-	31.552	0.326	11.394	0.200	1.000	31.552	0.326	11.394	0.040	1.000	31.552	0.326	11.394	0.003	1.000	31.552	0.326	11.394	0.062	1.000	
-	San Benito	31,552		11.394		1.000	31.552					31,552					31552					
	River Willow Creek	31.552	0.326	11.394	0.200	1.000	31.552	0.326	11.394	0.040	1.000	31,552	0.326	11.394	0.003	1.000	31.552	0.326	11.394 11.394	0.062	1.000	
	Stone Creek	31,552	0.326	11.394	0.200	1.000	31,552	0.326	11.394 11.394	0.040	1.000	31.552	0.326	11.394	0.003	1.000	31.552	0.326	11.394	0.062	1.000	
174	Upper Tres Pinos Creek	31,552	0.326	11.394	0.200	1.000	31,552	0.326	11.394	0.040	1.000	31,552	0.326	11.394	0.003	1.000	31,552	0.326	11.394	0.062	1.000	
	Middle Tres Pinos Creek	31.552	0.326	11.394	0.200	1.000	31.552	0.326	11.394	0.040	1.000	31.552	0.326	11.394	0.003	1.000	31.552	0.326	11.394	0.062	1.000	
	Pescadero	31,552	0.326		0.200		31.552	0.326	11.394		1.000	31.552					31,552	0.326	11.394		1.000	
	Creek Las Aguilas			11.394		1.000				0.040			0.326	11.394	0.003	1.000				0.062		
177	Creek Los Muertos	31.552	0.326	11.394	0.200	1.000	31.552	0.326	11.394	0.040	1.000	31.552	0.326	11.394	0.003	1.000	31.552	0.326	11.394	0.062	1.000	=
178	Creek	31.552	0.326	11.394	0.200	1.000	31.552	0.326	11.394	0.040	1.000	31.552	0.326	11.394	0.003	1.000	31.552	0.326	11.394	0.062	1.000	
	Paicines																					
17.9	Reservoir-San Benito River	31.552	0.326	11.394	0.200	1.000	31552	0.326	11.394	0.040	1000	31.552	0.326	11 3 94	0.003	1.000	31552	0.326	11.394	0.062	1000	
	Lower Tres																					
	Pinos Creek San Juan	31.552	0.326	11.394	0.200	1.000	31.552	0.326	11.394	0.040	1.000	31.552	0.326	11.394	0.003	1.000	31.552	0.326	11.394	0.062	1.000	
181	Canyon	31,552	0.326	11.394	0.200	1.000	31,552	0.326	11.394	0.040	1.000	31.552	0.326	11.394	0.003	1.000	31.552	0.326	11.394	0.062	1.000	
	Bird Creek- San Benito																					
	River Quien Sabe	31.552	0.326	11.394	0.200	1.000	31.552	0.326	11.394	0.040	1.000	31.552	0.326	11.394	0.003	1.000	31.552	0.326	11.394	0.062	1.000	
	Creek	31.552	0.326	11.394	0.200	1.000	31,552	0.326	11.394	0.040	1.000	31.552	0.326	11.394	0.003	1.000	31.552	0.326	11.394	0.062	1.000	
184	Santa Ana Creek	31.552	0.326	11.394	0.200	1.000	31.552	0.326	11.394	0.040	1.000	31.552	0.326	11.394	0.003	1.000	31.552	0.326	11.394	0.062	1.000	
	Tequisquita Slough	31,552	0.326	11.394	0.200	1.000	31,552	0.326	11.394	0.040	1.000	31,552	0.326	11.394	0.003	1.000	31,552	0.326	11.394	0.062	1.000	
	Watsonville																					
	Slough Lower Pajaro	240.535	0.234	0.895	0.277	0.981	240.535	0.234	0.895	0.040	1.000	240.535	0.234	0.895	0.003	1.000	240.535	0.234	0.895	0.277	1.000	
187	River Arroyo De Las	240.535	0.234	0.895	0.277	0.981	240.535	0.234	0.895	0.040	1.000	240.535	0.234	0.895	0.003	1.000	240.535	0.234	0.895	0.277	1.000	
188	Viboras	31.552	0.326	11.394	0.200	1.000	31.552	0.326	11.394	0.040	1.000	31.552	0.326	11.394	0.003	1.000	31.552	0.326	11.394	0.062	1.000	
189	Salsipuedes Creek	240.535	0.234	0.895	0.277	0.981	240.535	0.234	0.895	0.040	1.000	240.535	0.234	0.895	0.003	1.000	240.535	0.234	0.895	0.277	1.000	
	Lower Pacheco																					
	Creek	60.825	0.290	10.765	0.200	1.000	60.825	0.290	10.765	0.040	1.000	60.825	0.290	10.765	0.003	1.000	60.825	0.290	10.765	0.100	1.000	
	South Fork Pacheco																					
191	Creek	60.825	0.290	10.765	0.200	1.000	60.825	0.290	10.765	0.040	1.000	60.825	0.290	10.765	0.003	1.000	60.825	0.290	10.765	0.100	1.000	
192	Lower Uvas Creek	60.825	0.290	10.765	0.200	1.000	60.825	0.290	10.765	0.040	1.000	60.825	0.290	10.765	0.003	1.000	60.825	0.290	10.765	0.100	1.000	
193	Upper Pajaro River	31.552	0.326	11.394	0.200	1.000	31.552	0.326	11.394	0.040	1.000	31.552	0.326	11.394	0.003	1.000	31,552	0.326	11.394	0.062	1.000	
	Corralitos Creek	240.535	0.234	0.895	0.277	0.981	240.535	0.234	0.895	0.040	1.000	240.535	0.234	0.895	0.003	1.000	240.535	0.234	0.895	0.277	1.000	
104	Upper	240.000	0.204	0.000	warr	0.001	270.000	0.204	0.000	0.010		240.000	0.204	0.000	0.000		210.000	0.204	0.000	Vier f		
195	Pacheco Creek	60.825	0.290	10.765	0.200	1.000	60.825	0.290	10.765	0.040	1.000	60.825	0.290	10.765	0.003	1.000	60.825	0.290	10.765	0.100	1.000	
100	Lower Llagas Creek	60.825	0.290	10.765	0.200	1.000	60.825	0.290	10.765	0.040	1.000	60.825	0.290	10,765	0.003	1.000	60.825	0.290	10.765	0.100	1.000	
197	Cedar Creek	60.825	0.290	10.765	0.200	1.000	60.825	0.290	10.765	0.040	1.000	60.825	0.290	10.765	0.003	1.000	60.825	0.290	10.765	0.100	1.000	
	Upper Uvas Creek	60.825	0.290	10,765	0.200	1.000	60.825	0.290	10.765	0.040	1.000	60.825	0.290	10,765	0.003	1.000	60.825	0.290	10.765	0.100	1.000	
	Little Llagas	60.825	0.290	10.765			60.825		10.765		1000	60.825	0.290	10.765	0.003			0.290		0.100	1.000	
	Creek Upper Llagas				0.200	1.000		0.290		0.040						1.000	60.825		10.765			
200	Creek Lower North	60.825	0.290	10.765	0.200	1.000	60.825	0.290	10.765	0.040	1.000	60.825	0.290	10.765	0.003	1.000	60.825	0.290	10.765	0.100	1.000	
	Fork Pacheco																					
201	Creek Upper North	60.825	0.290	10.765	0.200	1.000	60.825	0.290	10.765	0.040	1.000	60.825	0.290	10.765	0.003	1.000	60.825	0.290	10.765	0.100	1.000	
202	Fork Pacheco Creek	31,552	0.326	11 3 94	0.200	1000	31552	0.326	11.394	0.040	1000	31552	0.326	11 3 94	0.003	1000	31552	0.326	11.394	0.062	1000	
203	Miller Canal	31.552	0.326	11.394	0.200	1.000	31.552	0.326	11.394	0.040	1.000	31,552	0.326	11.394	0.003	1.000	31.552	0.326	11.394	0.062	1.000	
	McGowan D Beach Boad		0.326	11.394	0.200	1.000	31.552 31.552	0.326	11.394	0.040	1.000	31.552 31.552	0.326	11.394	0.003	1.000	31.552 31.552	0.326	11.394 11.394	0.062	1.000	
206	Watsonville 8	31.552	0.326	11.394	0.200	1.000	31,552	0.326	11.394	0.040	1.000	31.552	0.326	11.394	0.003	1.000	31.552	0.326	11.394	0.062	1.000	
207	Struve Sloug Gallighan Slo		0.326	11.394	0.200	1.000	31.552 31.552	0.326	11.394	0.040	1.000	31.552	0.326	11.394 11.394	0.003	1.000	31.552 31.552	0.326	11.394	0.062	1.000	
209	Hanson Slou	31.552	0.326	11.394	0.200	1.000	31.552	0.326	11.394 11.394	0.040	1.000	31.552 31.552	0.326	11.394	0.003	1.000	31.552	0.326	11.394 11.394	0.062	1.000	
210	Harkins Slou	31.552	0.326	11.394	0.200	1.000	31,552	0.326	11.394	0.040	1.000	31.552	0.326	11.394	0.003	1.000	31,552	0.326	11.394	0.062	1.000	
211	W45	31,552	0.326	11.394	0.200	1.000	31,552	0.326	11.394	0.040	1.000	31.552	0.326	11.394	0.003	1.000	31.652	0.326	11.394	0.062	1.000	

5	Optional Da	ica input:	Indrologia	aroun (SHC	a eue a .	highest infi	Itration and	SHG D = lowest in	diltration
,	Vatershe	SHG A	SHG B	SHG C	SHG D	SHG	Soil N	Soil P conc.%	Soil BOE
6	d	ondra			Sild D	Selected	conc.%	Son'r conc.si	conc.%
	Clear Creek-								
	San Benito				0	_			
7	River					D	0.068	0.038	0.16
	Hernandez								
	Reservoir-San				•				
3	Benito River					D	0.068	0.038	0.16
-	James Creek-								
	San Benito			0					
э	River					c c	0.068	0.038	0.1
	Rock Springs								
	Creek-San			•					
0	Benito River					С	0.068	0.038	0.1
	Sulphur Creek-			0	<u> </u>				
1	San Benito River			<b>•</b>	<b>1</b>	c	0.068	0.038	0.1
2	Willow Creek		0		<u> </u>	В	0.068	0.038	0.1
3	Stone Creek		<b>0</b>			B	0.068	0.038	0.1
-	Upper Tres						0.000	0.000	0.1
4	Pinos Creek			•		c	0.068	0.038	0.1
-	Middle Tres	_			â				
5	Pinos Creek				<b>~</b>	D	0.068	0.038	0.1
	Pescadero		0						
6	Creek		<b>—</b>	<u> </u>	<u> </u>	В	0.068	0.038	0.1
7	Las Aguilas			9		с	0.068	0.000	
<i>(</i>	Creek Los Muertos					L L	0.068	0.038	0.1
8	Creek			•		c	0.068	0.038	0.1
×							0.000	0.000	
	Paicines								
	Reservoir-San			۲					
9	Benito River					C	0.068	0.038	0.1
	Lower Tres			0					
0	Pinos Creek		<u> </u>	<u> </u>	<u> </u>	С	0.068	0.038	0.1
	San Juan			9		_			
1	Canyon Bird Creek-					С	0.068	0.038	0.1
	San Benito		0						
2	River		- <b>-</b>	1 1	<b>1</b>	в	0.068	0.038	0.1
	Quien Sabe						0.000	0.000	
3	Creek				0	D	0.068	0.038	0.1
	Santa Ana	•		Ö	<u>_</u>				
4	Creek		<u> </u>	<u> </u>	<u> </u>	С	0.068	0.038	0.1
-	Tequisquita				0	_			
5	Slough					D	0.068	0.038	0.1
6	Watsonville Slough				•	D	0.068	0.038	0.1
×	Lower Pajaro						0.000	0.000	
7	River			•		c	0.068	0.038	0.1
-	Arroyo De Las	_		â					
8	Viboras			<b>•</b>		C	0.068	0.038	0.1
	Salsipuedes	•	0						
9	Creek		<b>—</b>	<u> </u>	<u> </u>	В	0.068	0.038	0.1
	Lower			0					
0	Pacheco Creek			• •		с	0.068	0.038	0.1
0	South Fork		┼──┫──				0.066	0.030	0.1
	Pacheco			0					
1	Creek					c	0.068	0.038	0.1
	Lower Uvas		1 🗖			1	1		
2	Creek	•		•		c	0.068	0.038	0.
	Upper Pajaro				ø				
3	River	<u> </u>	<u> </u>		- <b>-</b>	D	0.068	0.038	0.
	Corralitos		6			_			
4	Creek		<b></b>	<b>— —</b>	—— <b>—</b> —	В	0.068	0.038	0.
	Upper Pacheco			0					
5	Creek		L	<b>~</b>	L 🖌	c c	0.068	0.038	0.
5	Lower Llagas	_	+			<u> </u>	0.066	0.030	0.
6	Creek				•	D	0.068	0.038	0.
7	Cedar Creek				0		0.068	0.038	0.
	Upper Uvas			0					
8	Creek	<u> </u>		<b></b>		C	0.068	0.038	0.
	Little Llagas				ø				
9	Creek		┥──┣──	└──┣──	<b>└──</b> ─	D	0.068	0.038	0.
	Upper Llagas			•		-			
0	Creek		┼──┣─	₋	┝──┣─	C C	0.068	0.038	0.
	Lower North Fork Pacheco				0	1			
1	Fork Pacheco Creek		1 🖬 -	I 🖬	I 🞽	D	0.068	0.038	0.1
	Upper North		┼──┫─	┼──┫─	┼──┫─	+ <sup>0</sup>	0.068	0.038	0.
	Fork Pacheco				0	1			
			· •	1 🖬	i 🔛	D D	0.068	0.038	

6. Reference	ce runoff cu	irve numbei	(may be m	odified) 👘
SHG	Α	В	C	D
Urban	83	89	92	9:
Cropland	67	78	85	8:
Rangeland	49	69	79	84
Forest	39	60	73	75
User Defined	50	70	80	8

Land use	N	P	BOD
1. L-Cropla	11.4	0.64	4
1a. w/ manure	8.1	2	12.3
2. M-Crop	11.4	0.64	6.
2a. w/ manure	12.2	3	18.
3. H-Crop	11.4	0.64	9.2
3a. w/ manure	18.3	4	24.
4. Rangela	0.25	0.21	1:
5. Forest	0.2	0.1	0.9
6. User Del	0	0	(

UrbantSH	Α	В	C	D
Commercial	89	92	94	95
Industrial	81	88	91	93
Institutional	81	88	91	93
Transportatio	98	98	98	98
Multi-Family	77	85	90	92
Single-Family	57	72	81	86
Urban-Cultiva	67	78	85	89
Vacant-Deve	77	85	90	92
Open Space	49	69	79	84

7a. Nutrient concentration in shallow groundwater (mg/l) (may be modified)

N	Р	ROD
1.8	0.04	0
5.93	0.04	0
0.14	0.04	0
0.14	0.04	0
6	0.07	0
0	0	0
	1.8 5.93 0.14 0.14 6	1.8 0.04 5.33 0.04 0.14 0.04 0.14 0.04 6 0.07

8 9 1 1 5 6 7 7 8	Vatershe d Clear Creek- San Benito River Hernandez Reservoir-San Benito River James Creek- San Benito River Rock Springs Creek-San Benito River Sulphur Creek- San Benito River Willow Creek Stone Creek Villow Creek Middle Tres Pinos Creek Middle Tres Pinos Creek Middle Tres Pinos Creek Las Aguilas	Urban Area (ac.) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Commere ial % 15 15 15 15 15 15 15 15 15 15	× 10 10 10 10 10 10 10 10	Institutio nal % 10 10 10 10 10 10 10 10 10 10	Transport ation % 10 10 10 10 10	Multi- Famile 2 10 10	Single-Family × 30 30 30 30	Urban- Cultivate 5 5 5 5	Vacant Idevelope 5 5 5 5 5	Open Space X 5 5 5 5 5	Total % <u>Area</u> 10 10
8 9 1 1 5 5 6 7 7 8	San Benito River Hernandez Reservoir-San Benito River James Creek- San Benito River Rock Springs Creck-San Benito River Sulphur Creek- San Benito River Willow Creek Willow Creek Villow Creek Middle Tres Pinos Creek Middle Tres Pinos Creek Pessadero Creek Las Aguilas	0 0 0 0 0 0	15 15 15 15 15 15 15	10 10 10 10 10 10	10 10 10 10 10 10	10	10	30	5	5	Ĭ	10
	River Hernandez Reservoir-San Benito River James Creek- San Benito River Rock Springs Creek-San Benito River Sulphur Creek- San Benito River Villow Creek Stone Creek Villow Creek Stone Creek Middla Tres Pinos Creek Middla Tres Pinos Creek Pessadero Creek Las Aguilas	0 0 0 0 0 0	15 15 15 15 15 15 15	10 10 10 10 10 10	10 10 10 10 10 10	10	10	30	5	5	Ĭ	10
	Hernandez Reservoir-San Benito River James Creek- San Benito River Rock Springs Creek-San Benito River Sulphur Creek- San Benito River Willow Creek Stone Creek Middle Tres Pinos Creek Middle Tres Pinos Creek Pessadero Creek Las Aguilas	0 0 0 0 0 0	15 15 15 15 15 15 15	10 10 10 10 10 10	10 10 10 10 10 10	10	10	30	5	5	Ĭ	10
	Reservoir-San Benito River James Creek- San Benito River Rock Springs Creek-San Benito River Sulphur Creek- San Benito River Willow Creek Stone Creek Middle Tres Pinos Creek Middle Tres Pinos Creek Pescadero Creek Las Aguilas	0 0 0 0 0 0	15 15 15 15 15 15	10 10 10 10 10	10 10 10 10	10	10	30	5	5	Ĭ	10
	Benito River James Creek- San Benito River Rock Springs Creek-San Benito River Sulphur Creek- San Benito River Willow Creek Stone Creek Middle Tres Pinos Creek Pinos Creek Pessadero Creek Las Aguilas	0 0 0 0 0 0	15 15 15 15 15 15	10 10 10 10 10	10 10 10 10	10	10	30	5	5	Ĭ	10
	James Creck- San Benito River Rock Springs Creck-San Benito River Sulphur Creck- San Benito River Willow Creck Upper Tres Pinos Creck Middla Tres Pinos Creck Middla Tres Pinos Creck Addia Tres Pinos Creck Las Aguilas	0 0 0 0 0 0	15 15 15 15 15 15	10 10 10 10 10	10 10 10 10	10	10	30	5	5	Ĭ	10
	San Benito River Rock Springs Creek-San Benito River Sulphur Creek- San Benito River Willow Creek Upper Tres Pinos Creek Middle Tres Pinos Creek Pescadero Creek Las Aguilas	0 0 0 0	15 15 15 15	10 10 10 10	10 10 10	10				5	Ĭ	
	River Rock Springs Creck-San Benito River Sulphur Creck- San Benito River Willow Creck Stone Creck Diose Creck Middle Tres Pinos Creck Pinos Creck Pescadero Creck Las Aguilas	0 0 0 0	15 15 15 15	10 10 10 10	10 10 10	10				5	Ĭ	
	Rock Springs Creek-San Benito River Sulphur Creek- San Benito River Willow Creek Upper Tres Pinos Creek Pinos Creek Pinos Creek Pescadero Creek Las Aguilas	0 0 0 0	15 15 15 15	10 10 10 10	10 10 10	10				5	Ĭ	
	Creek-San Benito River Sulphur Creek- San Benito River Willow Creek Upper Tres Pinos Creek Pinos Creek Pinos Creek Pescadero Creek Las Aguilas	0 0 0	15 15 15	10 10 10	10		10	30	5	5	5	1
	Benito River Sulphur Creek- San Benito River Willow Creek Stone Creek Upper Tres Pinos Creek Middle Tres Pinos Creek Pescadero Creek Las Aguilas	0 0 0	15 15 15	10 10 10	10		10	30	5	5	5	1
	San Benito River Willow Creek Stone Creek Upper Tres Pinos Creek Middle Tres Pinos Creek Pescadero Creek Las Aguilas	0	15 15	10 10	10	10				-		
	River Willow Creek Stone Creek Upper Tres Pinos Creek Pinos Creek Pescadero Creek Las Aguilas	0	15 15	10 10	10	10			1		I	
	Willow Creek Stone Creek Upper Tres Pinos Creek Middle Tres Pinos Creek Pescadero Creek Las Aguilas	0	15 15	10 10	10	10						
	Stone Creek Upper Tres Pinos Creek Middle Tres Pinos Creek Pescadero Creek Las Aguilas	0	15	10			10	30	5	5	5	1
	Upper Tres Pinos Creek Middle Tres Pinos Creek Pescadero Creek Las Aguilas	0				10		30	5	5	5	1
	Pinos Creek Middle Tres Pinos Creek Pescadero Creek Las Aguilas		15		10	10	10	30	5	5	5	1
	Middle Tres Pinos Creek Pescadero Creek Las Aguilas		10	10	10	10	10	30	5	5	5	1
	Pinos Creek Pescadero Creek Las Aguilas	0		10	10	10	10					
	Pescadero Creek Las Aguilas		15	10	10	10	10	30	5	5	5	1
	Las Aguilas											
		87	15	10	10	10	10	30	5	5	5	1
									-	-	5	
	Creek Los Muertos	0	15	10	10	10	10	30	5	5	5	1
	Los iviuertos Creek	0	15	10	10	10	10	30	5	5	5	1
1 F									Ť	Ť	i i	
	Paicines Reservoir-San											
	Reservoir-san Benito River											
L L		16	15	10	10	10	10	30	5	5	5	1
	Lower Tres	231	15	10	10	10	10	30	5	-	5	1
	Pinos Creek San Juan	231	01	10	10	10	10	30	0	0	9	
	Canyon	927	15	10	10	10	10	30	5	5	5	1
	Bird Creek-										-	
	San Benito											
	River	3034	15	10	10	10	10	30	5	5	5	1
	Quien Sabe									_	_	
	Creek	0	15	10	10	10	10	30	5	5	5	1
	Santa Ana Creek	853	15	10	10	10	10	30	5	5	5	1
	Creek Tequisquita	000	10	10	10	10	10		5	0	5	
	Slough	1966	15	10	10	10	10	30	5	5	5	1
	Watsonville											
	Slough	4178	15	10	10	10	10	30	5	5	5	1
	Lower Pajaro								_	-	_	
	River Arroyo De Las	963	15	10	10	10	10	30	5	5	5	1
	Arroyo De Las Viboras	0	15	10	10	10	10	30	5	5	5	1
	Salsipuedes											
	Creek	1342	15	10	10	10	10	30	5	5	5	1
	Lower											
	Pacheco								_	_	_	
	Creek South Fork	192	15	10	10	10	10	30	5	5	5	1
	South Fork Pacheco											
	Creek	0	15	10	10	10	10	30	5	5	5	1
	Lower Uvas		10		10							
	Creek	1602	15	10	10	10	10	30	5	5	5	1
	Upper Pajaro											
	River	1313	15	10	10	10	10	30	5	5	5	1
	Corralitos								-	-	_	
	Creek Upper	1108	15	10	10	10	10	30	5	5		1
	Opper Pacheco											
	Creek	0	15	10	10	10	10	30	5	5	5	1
	Lower Llagas											
	Creek	5442	15	10		10	10	30	5		-	1
	Cedar Creek	0	15	10	10	10	10	30	5	5	5	1
	Upper Uvas								-	_		
	Creek Linde Hanne	201	15	10	10	10	10	30	5	5	5	1
	Little Llagas Creek	5257	15	10	10	10	10	30	5	F	5	1
+	Upper Llagas	0207	10	10	10	10	10		0	0	- °	
	Creek	1232	15	10	10	10	10	30	5	5	5	1
	Lower North								-	-		
	Fork Pacheco											
	Creek	0	15	10	10	10	10	30	5	5	5	1
	Upper North											
	Fork Pacheco Creek	0	15	10	10	10	10	30	5	5	5	1

1		Total Load	-	This is the su	mmary of anni	ual nutrient ar
103	1 1					
104		1. Total loa	d by sub <del>y</del> a	tershed(s)		
105		₩atershe d	N Load (no BMP)	P Load (no BMP)	BOD Load (no BMP)	Sediment Load (no BMP)
106			lb/year	lb/year	lb/year	t/year
107		W1	19313.6	11604.9		2202.0
108		W2	15689.7	7109.0	203073.0	1552.3
109		W3	16615.1	9736.5	270113.6	2570.7
110		W4	24812.9	11978.8	331768.6	3723.8
111		W5	22397.1	9719.2	241084.8	3478.9
112		W6	12698.5	6695.6	145723.9	2429.7
113		W7	6410.3	3489.6	76392.8	1233.0
114		W8	17435.1	9956.4	291894.7	3191.4
115		W9	16222.1	10342.6	328765.2	3356.8
116		W10	25600.3	7831.2	134556.3	2634.9
117		W11	17753.1	11096.1	334009.2	3642.3
118		W12	13075.0	7661.2	207731.6	2738.4
119		W13	86775.5	18611.3	318388.5	7258.4
120		W14	43292.5	9457.0	160625.0	3723.7
121		W15	146067.1	19161.5	247003.8	6391.3
122		W16	90814.2	15156.1	205392.1	5689.0
123		W17	83089.8	20011.4	470184.8	6702.5
124		W18	131947.4	22765.1	325437.0	8982.4
125		W19	205065.4	26291.0	327143.3	8737.3
126		W20	167708.4	14594.8	154098.1	2750.4
127		W21	293026.6	26565.5	329660.2	5802.1
128		W22	18289.1	7605.8	224189.8	2358.0
129		W23	124894.5	9863.6	97142.1	2078.1
130		W24	117935.3	21973.0	315317.6	8874.6
131		W25	11800.9	7225.9	186368.2	2768.0
132		W26	146596.7	24277.5	367341.5	8582.0
133		W27	441210.4	49576.6	459733.1	16687.3
134		W28	114847.6	9558.5	70718.6	1369.8
135		W29	18011.7	10932.0	266230.2	4360.0
136		W30	177779.7	23851.0	273914.0	8277.4
137		W31	9755.0	6002.1	157068.2	1987.5
138		W32	44351.8	18632.6	516300.4	4410.1
139		W33	98191.5	14550.3	237953.4	4565.8
140		W34	48257.3	14729.3	405759.2	4227.5
141		W35	25321.8	16045.9	444181.0	6004.7
142		W36	5707.1	2915.7	35880.0	378.3

254	2. Total loa	id by land u	ses (with B	MP)	
	Sources	NLoad	PLoad	BOD Load	Sediment
		(Ib/yr)	(lb/yr)	(lb/yr)	Load
255					(t/yr)
256	Urban	182,542	21,565	544,347	3,196
257	Cropland	1,869,231	204,350	1,051,823	72,706
258	Grazing Land	377,410	249,930	7,778,577	87,727
259	Woodland	44,199	22,434	109,661	2,091
260	Feedlots	0	0	0	0
261	User Defined	0	0	0	0
262	Septic	566	222	2,311	0
263	Gully	0	0	0	0
264	Streambank	0	0	0	0
265	Groundwater	384,812	19,074	0	0
266	Total	2,858,760	517,575	9,486,719	165,720
267					
268					
269					
270					
271					
272					
273					
274					
275					
276					
277					
278					
279					
$H \rightarrow H$	🗏 Input 🏑	General Ir	nput Data	/ Land&Ra	ain 🖉 Animal
Ready				*	