

**APPENDIX WQ-1 – Summary table of annual average suspended sediment, total phosphorus, and total nitrogen concentrations for 10 monitored streams in the Lake Tahoe Basin, California and Nevada, 1980 to 2010.**

<b>California LTIMP Streams</b>															
Note: * symbol means greater than 10% of samples exceed standard; ** symbol means no data for one or more water years															
Annual average concentrations in <b>bold</b> indicate standard exceeded for water year															
[Abbreviations: mg/L, milligrams per liter; ≥, greater than or equal to]															
Water Year	Upper Truckee River			Trout Creek			General Creek			Blackwood Creek			Ward Creek		
	Suspended Sediment annual average concentration <sup>1</sup> 6 (mg/L)	Total Phosphorus annual average concentration <sup>2</sup> (mg/L)	Total Nitrogen annual average concentration <sup>3</sup> 7 (mg/L)	Suspended Sediment annual average concentration <sup>1</sup> 6 (mg/L)	Total Phosphorus annual average concentration <sup>2</sup> (mg/L)	Total Nitrogen annual average concentration <sup>3</sup> 7 (mg/L)	Suspended Sediment annual average concentration <sup>1</sup> 6 (mg/L)	Total Phosphorus annual average concentration <sup>2</sup> (mg/L)	Total Nitrogen annual average concentration <sup>3</sup> 7 (mg/L)	Suspended Sediment annual average concentration <sup>1</sup> 6 (mg/L)	Total Phosphorus annual average concentration <sup>2</sup> (mg/L)	Total Nitrogen annual average concentration <sup>3</sup> 7 (mg/L)	Suspended Sediment annual average concentration <sup>1</sup> 6 (mg/L)	Total Phosphorus annual average concentration <sup>2</sup> (mg/L)	Total Nitrogen annual average concentration <sup>3</sup> 7 (mg/L)
1980	53*												273*		
1981	58*	<b>0.088*</b>		29*	<b>0.065*</b>		24	<b>0.122*</b>		177*	<b>0.065*</b>		34*	<b>0.075*</b>	
1982	56*	<b>0.062*</b>		88*	<b>0.087*</b>		52*	<b>0.069*</b>		187*	<b>0.160*</b>		193*	<b>0.115*</b>	
1983	46*	<b>0.076*</b>		60*	<b>0.091*</b>		9	<b>0.039*</b>		45*	<b>0.094*</b>		47*	<b>0.077*</b>	
1984	58*	<b>0.056*</b>		77*	<b>0.072*</b>		10	<b>0.030*</b>		42*	<b>0.065*</b>		129*	<b>0.078*</b>	
1985	45*	<b>0.054*</b>		27	<b>0.065*</b>		5	<b>0.032*</b>		24	<b>0.039*</b>		12	<b>0.049*</b>	
1986	71*	<b>0.077*</b>					25*	<b>0.055*</b>		141*	<b>0.130*</b>		66*	<b>0.077*</b>	
1987	19	<b>0.041*</b>			<b>0.041*</b>		3	<b>0.031*</b>		18	<b>0.145*</b>		35	<b>0.045*</b>	
1988	9	<b>0.041*</b>	<b>0.21*</b>		<b>0.039*</b>	0.17*	2	<b>0.025*</b>		7	<b>0.033*</b>		5	<b>0.032*</b>	
1989	41*	<b>0.042*</b>	<b>0.30*</b>	7	<b>0.039*</b>	<b>0.21*</b>	5	<b>0.022*</b>	<b>0.17*</b>	21	<b>0.034*</b>	<b>0.20*</b>	43	<b>0.033*</b>	<b>0.17*</b>
1990	12	<b>0.034*</b>	<b>0.20*</b>	6	<b>0.041*</b>	0.18*	4	<b>0.023*</b>	0.14*	10	<b>0.036*</b>	0.15*	7	<b>0.037*</b>	0.13*
1991	48	<b>0.036*</b>	<b>0.20*</b>	10	<b>0.031*</b>	0.17*	4	<b>0.026*</b>	0.14*	47*	<b>0.059*</b>	<b>0.22*</b>	20	<b>0.046*</b>	<b>0.17*</b>
1992	10	<b>0.024*</b>	<b>0.22*</b>	5	<b>0.032*</b>	<b>0.24*</b>	4	<b>0.021*</b>	0.13*	11	<b>0.031*</b>	0.16*	14	<b>0.033*</b>	<b>0.17*</b>
1993	24	<b>0.033*</b>	<b>0.26*</b>	10	<b>0.039*</b>	<b>0.25*</b>	10	<b>0.024*</b>	<b>0.16*</b>	51*	<b>0.054*</b>	<b>0.25*</b>	28*	<b>0.046*</b>	<b>0.19*</b>
1994	10	<b>0.027*</b>	0.16*	12	<b>0.035*</b>	0.16*	7	<b>0.022*</b>	0.13*	10	<b>0.027*</b>	0.12*	63*	<b>0.130*</b>	<b>0.21*</b>
1995	34*	<b>0.048*</b>	<b>0.29*</b>	45*	<b>0.066*</b>	<b>0.35*</b>	16	<b>0.028*</b>	<b>0.24*</b>	77*	<b>0.072*</b>	<b>0.30*</b>	46*	<b>0.065*</b>	<b>0.24*</b>
1996	42*	<b>0.047*</b>	<b>0.21*</b>	28*	<b>0.055*</b>	<b>0.27*</b>	28	<b>0.032*</b>	<b>0.20*</b>	151*	<b>0.135*</b>	<b>0.28*</b>	180*	<b>0.145*</b>	<b>0.26*</b>
1997	38*	<b>0.056*</b>	0.17*	23	<b>0.052*</b>	0.19*	88*	<b>0.046*</b>	<b>0.16*</b>	289*	<b>0.218*</b>	<b>0.27*</b>	211*	<b>0.203*</b>	<b>0.17*</b>
1998	20*	<b>0.036*</b>	0.17*	18	<b>0.042*</b>	<b>0.23*</b>	24*	<b>0.030*</b>	0.15*	81*	<b>0.072*</b>	<b>0.21*</b>	36*	<b>0.054*</b>	0.15*
1999	22	<b>0.033*</b>	<b>0.21*</b>	19	<b>0.040*</b>	0.19*	14	<b>0.025*</b>	<b>0.17*</b>	50*	<b>0.080*</b>	0.16*	30	<b>0.045*</b>	<b>0.16*</b>
2000	62*	<b>0.087*</b>	<b>0.24*</b>	23*	<b>0.049*</b>	0.18*	12	<b>0.026*</b>	0.15*	57*	<b>0.075*</b>	0.17*	82*	<b>0.146*</b>	<b>0.16*</b>
2001	12	<b>0.023*</b>	0.18*	8	<b>0.024*</b>	0.16*	5	<b>0.019*</b>	0.14*	18*	<b>0.027*</b>	0.14*	19	<b>0.034*</b>	0.15*
2002	13	<b>0.024*</b>	<b>0.30*</b>	6	<b>0.025*</b>	<b>0.25*</b>	5	<b>0.025*</b>	<b>0.25*</b>	17	<b>0.031*</b>	<b>0.34*</b>	8	<b>0.027*</b>	<b>0.25*</b>
2003	36*	<b>0.046*</b>	<b>0.23*</b>	17	<b>0.040*</b>	<b>0.27*</b>	9	<b>0.024*</b>	<b>0.24*</b>	45*	<b>0.078*</b>	<b>0.30*</b>	18	<b>0.034*</b>	<b>0.23*</b>
2004	9	<b>0.025*</b>	<b>0.22*</b>	9	<b>0.031*</b>	<b>0.23*</b>	9	<b>0.020*</b>	0.15*	17	<b>0.028*</b>	0.17*	11	<b>0.024*</b>	0.15*
2005	40*	<b>0.038*</b>	<b>0.22*</b>	32	<b>0.044*</b>	<b>0.25*</b>	29*	<b>0.026*</b>	0.15*	138*	<b>0.085*</b>	<b>0.32*</b>	92*	<b>0.080*</b>	<b>0.29*</b>
2006	38*	<b>0.049*</b>	<b>0.24*</b>	24	<b>0.047*</b>	<b>0.24*</b>	82*	<b>0.056*</b>	<b>0.23*</b>	265*	<b>0.201*</b>	<b>0.63*</b>	106*	<b>0.090*</b>	<b>0.24*</b>
2007	13	<b>0.036*</b>	<b>0.20*</b>	10	<b>0.033*</b>	0.16*	11	<b>0.038*</b>	0.13*	20	<b>0.044*</b>	0.13*	10	<b>0.030*</b>	0.10*
2008	18	<b>0.046*</b>	0.17*	19	<b>0.054*</b>	<b>0.20*</b>	11	<b>0.030*</b>	0.12*	49*	<b>0.053*</b>	0.16*	17*	<b>0.046*</b>	0.10*
2009	30	<b>0.043*</b>	0.19*	25*	<b>0.056*</b>	<b>0.29*</b>	21*	<b>0.028*</b>	<b>0.19*</b>	153*	<b>0.082*</b>	<b>0.23*</b>	50*	<b>0.049*</b>	<b>0.24*</b>
2010	22	<b>0.046*</b>	<b>0.25*</b>	21	<b>0.058*</b>	<b>0.29*</b>	17*	<b>0.029*</b>	<b>0.18*</b>	71*	<b>0.072*</b>	<b>0.31*</b>	60*	<b>0.068*</b>	<b>0.29*</b>
Water Years	Percent Exceedance <sup>5</sup>			Percent Exceedance <sup>5</sup>			Percent Exceedance <sup>5</sup>			Percent Exceedance <sup>5</sup>			Percent Exceedance <sup>5</sup>		
1980-1989	80	≥90**		≥40**	≥80**		≥20**	≥90**		60	≥90**		60	100	
1990-1999	40	100	70	20	100	50	100	100	50	70	100	60	60	100	80
2000-2009	40	100	70	20	100	70	30	100	40	70	100	50	50	100	60
Footnote with the Water Quality Standard values															
1	Suspended Sediment Standard: Attain a 90th percentile value for suspended sediment concentration of 60 milligrams per liter														
2	Total Phosphorus Standard: Annual average value/90th percentile value = 0.015 milligrams per liter														
3	Total Nitrogen Standard: Annual average value/90th percentile value = 0.19 milligrams per liter for Trout, Upper Truckee River and Blackwood														
4	Total Nitrogen Standard: Annual average value/90th percentile value = 0.15 milligrams per liter for General and Ward														
5	Percent exceedance of annual average value for total phosphorus and total nitrogen, and percent exceedance of suspended sediment standard.														
6	When the percent of samples exceeding 60 mg/L was calculated, if the percent was 10.5 or higher the final value was rounded up to 11 percent. If the percent was lower than 10.4, the value was rounded down to 10 percent.														
7	When annual averages were calculated, if the last significant figure (thousandth of a mg/L) was 5 or higher then the final value was rounded up to the next hundredth of a mg/L. If the last significant figure was lower than 5, then the final value was rounded down. For example 0.157 mg/L was reported as 0.16 mg/L while 0.153 mg/L was reported as 0.15 mg/L														

## Nevada LTIMP Streams

Note: \* symbol means greater than 10% of samples exceed standard; \*\* symbol means no data for one or more water years  
 Annual average concentrations in **bold** indicate standard exceeded for water year  
 [Abbreviations: mg/L, milligrams per liter; ≥, greater than or equal to]

Water Year	Third Creek		Incline Creek		Glenbrook Creek		Logan House Creek		Edgewood Creek	
	Suspended Sediment annual average concentration <sup>1</sup> , 4 (mg/L)	Total Phosphorus annual average concentration <sup>2</sup> , 5 (mg/L)	Suspended Sediment annual average concentration <sup>1</sup> , 4 (mg/L)	Total Phosphorus annual average concentration <sup>2,5</sup> , (mg/L)	Suspended Sediment annual average concentration <sup>1</sup> , 4 (mg/L)	Total Phosphorus annual average concentration <sup>2,5</sup> , (mg/L)	Suspended Sediment annual average concentration <sup>1</sup> , 4 (mg/L)	Total Phosphorus annual average concentration <sup>2</sup> , 5 (mg/L)	Suspended Sediment annual average concentration <sup>1</sup> , 4 (mg/L)	Total Phosphorus annual average concentration <sup>2</sup> , 5 (mg/L)
1980	369*									
1981	52*	<b>0.072</b>								
1982	143*	<b>0.178</b>								
1983	83*	<b>0.121</b>								
1984	175*	<b>0.079</b>					25			
1985	23	<b>0.056</b>					44			
1986							19			
1987							38			
1988		0.013		0.028		0.022				
1989	295*	<b>0.181</b>	138*	<b>0.119</b>	46*	<b>0.073</b>	11	0.032		
1990	115*	<b>0.310</b>	41*	<b>0.091</b>	7	0.051	3	0.030		
1991	653*	<b>0.315</b>	167*	<b>0.128</b>	36*	<b>0.133</b>	3	0.026		
1992	400*	<b>0.167</b>	38*	<b>0.085</b>	6	0.043	4	0.020	3	
1993	571*	<b>0.147</b>	70*	<b>0.090</b>	12	0.049	7	0.024	13	0.050
1994	78*	<b>0.121</b>	44*	<b>0.110</b>	19	<b>0.071</b>	3	0.020	10	0.049
1995	250*	<b>0.256</b>	107*	<b>0.133</b>	27*	<b>0.077</b>	35*	0.037	13	<b>0.065</b>
1996	58*	<b>0.079</b>	54*	<b>0.088</b>	23	<b>0.093</b>	15	0.029	19*	<b>0.072</b>
1997	76*	<b>0.087</b>	69*	<b>0.111</b>	23	<b>0.085</b>	8	0.032	17	<b>0.070</b>
1998	43*	<b>0.085</b>	38*	<b>0.072</b>	18	<b>0.066</b>	12	0.030	14	<b>0.057</b>
1999	154*	<b>0.240</b>	72*	<b>0.132</b>	17	0.053	24*	0.028	6	0.034
2000	41*	<b>0.097</b>	17	0.045	15	0.051	11	0.017	8	0.040
2001	9	0.032	15	0.049	8	0.042	6	0.016	24	0.027
2002	32*	<b>0.084</b>	22	0.052	9	0.033	5	0.016	5	0.042
2003	34*	<b>0.058</b>	46*	<b>0.108</b>	7	0.028	6	0.016	4	0.033
2004	15	0.038	15	0.041	5	0.038	3	0.015	5	0.032
2005	28*	0.045	46*	<b>0.056</b>	14	0.047	15	0.022	4	0.030
2006	39*	<b>0.055</b>	113*	<b>0.086</b>	23	<b>0.080</b>	12	0.031	27	<b>0.059</b>
2007	8	0.035	5	0.034	8	<b>0.069</b>	3	0.018	4	0.030
2008	12	0.047	12	0.053	7	<b>0.061</b>	3	0.032	6	0.045
2009	21*	0.047	16	0.049	6	0.051	3	0.024	21	0.044
2010	59*	0.053	40*	<b>0.065</b>	18	<b>0.080</b>	13	0.030	8	0.046
Water Years	Percent Exceedance <sup>3</sup>		Percent Exceedance <sup>3</sup>		Percent Exceedance <sup>3</sup>		Percent Exceedance <sup>3</sup>		Percent Exceedance <sup>3</sup>	
1980-1989	≥60**	≥60**	100	100	20	60	≥0**	0	≥10**	≥40**
1990-1999	100	100	100	100	20	60	20	0	≥10**	≥40**
2000-2009	60	40	30	30	0	30	0	0	0	10

Footnote with the Water Quality Standard values

1 Suspended Sediment Standard: Attain a 90th percentile value for suspended sediment concentration of 60 milligrams per liter

2 Total Phosphorus Standard: Annual average value = 0.05 milligrams per liter

3 Percent exceedance of annual average value for total phosphorus, and percent exceedance of suspended sediment standard.

4 When the percent of samples exceeding 60 mg/L was calculated, if the percent was 10.5 or higher the final value was rounded up to 11 percent.

5 When annual averages were calculated, if the last significant figure (thousandth of a mg/L) was 5 or higher then the final value was rounded up to the next hundredth of a mg/L when deciding if the value exceeded the standard. If the last significant figure was lower than 5, then the final value was rounded down.

For example 0.053 mg/L was rounded to 0.05 mg/L and determined to meet the standard, while 0.055 mg/L was rounded to 0.06 mg/L and determined to not meet the