

Appendix F - Watershed Treatment Model (WTM)

TMDLs for FIB in Santa Maria River Watershed
Appendix F - Watershed Treatment Model

Microsoft Excel - WTM_bradleychannel

File Edit View Insert Format Tools Data Window Help

Type a question for help

85%

Reply with Changes... End Review...

Arial 10

A21 fx

Green cells need to be completed by the user
Blue cells have default or calculated values but may be substituted
Grey cells should generally not be changed
Purple Cells Reflect "Bottom Line" Loads or Load Reductions

PRIMARY SOURCES - Land Use				Concentrations				Annual Loading Rates				Annual Load			
		Area (Acres)	Impervious Cover %	TN mg/l	TP mg/l	TSS mg/l	FC MPN/100 ml	TN lb/acre	TP lb/acre	TSS lb/acre	FC # billion/acre	TN lb/yr	TP lb/yr	TSS lb/yr	FC # billion/year
Residential	LDR (<1du/acre)	1740	26.8	2	0.26	55	3455	1.6	0.2	90	13	##	###	##	21,940
	MDR (1-4 du/acre)		21	2	0.26	55	20000	1.3	0.2	90	60	#	-	#	-
	HDR (>4 du/acre)		33	2	0.26	55	20000	1.9	0.2	90	87	#	-	#	-
	Multifamily		44	2	0.26	55	20000	2.5	0.3	90	112	#	-	#	-
								1.3	0.1	90	12	#	-	#	-
								1.3	0.1	90	12	#	-	#	-
								1.3	0.1	90	12	#	-	#	-
								1.3	0.1	90	12	#	-	#	-
								1.3	0.1	90	12	#	-	#	-
								1.3	0.1	90	12	#	-	#	-
Total		1740	26.8					1.602	0.2	90	12.60944141	##	###	##	21,940

Partitioning Coefficients for Rural and Forest Land				
Pollutant	TN	TP	TSS	FC
Fraction as Storm Load	50%	70%	90%	###

Watershed Data	
Annual Rainfall (inches)	13.52
Watershed Area (acres)	1740
Stream Length (miles)	
Planning Horizon (years)	

Primary Sources Secondary Sources Existing Management Practices Future Management Practice

Ready Sum=0 NUM

TMDLs for FIB in Santa Maria River Watershed
Appendix F - Watershed Treatment Model

Microsoft Excel - WTM_greencanyon

File Edit View Insert Format Tools Data Window Help

Type a question for help

85%

Reply with Changes... End Review...

Arial 10

E3 fx

Green cells need to be completed by the user
Blue cells have default or calculated values but may be substituted
Grey cells should generally not be changed
Purple Cells Reflect "Bottom Line" Loads or Load Reductions

PRIMARY SOURCES - Land Use		Area (Acres)	Impervious Cover %	Concentrations				Annual Loading Rates				Annual Load				
				TN	TP	TSS	FC	TN	TP	TSS	FC	TN	TP	TSS	FC	
				mg/l	mg/l	mg/l	MPN/100 ml	b/acre	acrb/acre	b/acre	# billion/acre	lb/ye	lb/ye	lb/ye	# billion/year	FC MPN/y
Residential	LDR (<1du/acre)	3380	26.8	2	0.3	55	3455	1.6	0.2	90	13	###	##	####	42,620	4.26E+1
	MDR (1-4 du/acre)		21	2	0.3	55	20000	1.3	0.2	90	60	-	#	-	-	-
	HDR (>4 du/acre)		33	2	0.3	55	20000	1.9	0.2	90	87	-	#	-	-	-
	Multifamily		44	2	0.3	55	20000	2.5	0.3	90	112	-	#	-	-	-
								1.3	0.1	90	12	-	#	-	-	-
								1.3	0.1	90	12	-	#	-	-	-
								1.3	0.1	90	12	-	#	-	-	-
								1.3	0.1	90	12	-	#	-	-	-
								1.3	0.1	90	12	-	#	-	-	-
	Total	3380	26.8					1.6	0.2	90	12.60944141	###	##	####	42,620	

Partitioning Coefficients for Rural and Forest Land				
Pollutant	TN	TP	TSS	FC
Fraction as Storm Load	50%	70%	90%	###

Watershed Data	
Annual Rainfall (inches)	13.52
Watershed Area (acres)	3380
Stream Length (miles)	
Planning Horizon (years)	

Primary Sources / Secondary Sources / Existing Management Practices / Future Management Practice

Ready NUM

TMDLs for FIB in Santa Maria River Watershed
 Appendix F - Watershed Treatment Model

Microsoft Excel - WTM_mainst

File Edit View Insert Format Tools Data Window Help

Type a question for help

85%

Reply with Changes... End Review...

Arial 10

E2 fx

Green cells need to be completed by the user
 Blue cells have default or calculated values but may be substituted
 Grey cells should generally not be changed
 Purple Cells Reflect "Bottom Line" Loads or Load Reductions

PRIMARY SOURCES - Land Use				Concentrations				Annual Loading Rates				Annual Load			
	Area (Acres)	Impervious Cover %		TN mg/l	TP mg/l	TSS mg/l	FC MPN/100 ml	TN lb/acre	TP lb/acre	TSS lb/acre	FC # billion/acre	TN lb/ye	TP lb/ye	TSS lb/ye	FC # billion/year
Residential	LDR (<1du/acre)	1224	26.8	2	0.3	55	3455	1.6	0.2	90	13	##	##	##	15,434
	MDR (1-4 du/acre)		21	2	0.3	55	20000	1.3	0.2	90	60	#	#	#	-
	HDR (>4 du/acre)		33	2	0.3	55	20000	1.9	0.2	90	87	#	#	#	-
	Multifamily		44	2	0.3	55	20000	2.5	0.3	90	112	#	#	#	-
								1.3	0.1	90	12	#	#	#	-
								1.3	0.1	90	12	#	#	#	-
								1.3	0.1	90	12	#	#	#	-
								1.3	0.1	90	12	#	#	#	-
								1.3	0.1	90	12	#	#	#	-
								1.3	0.1	90	12	#	#	#	-
Total		1224	26.8					1.6	0.21	90	12.60944141	##	##	##	15,434

Partitioning Coefficients for Rural and Forest Land				
Pollutant	TN	TP	TSS	FC
Fraction as Storm Load	50%	70%	90%	##

Watershed Data	
Annual Rainfall (inches)	13.52
Watershed Area (acres)	1224
Stream Length (miles)	
Planning Horizon (years)	

Primary Sources / Secondary Sources / Existing Management Practices / Future Management Practice

Ready NUM

TMDLs for FIB in Santa Maria River Watershed
Appendix F - Watershed Treatment Model

Microsoft Excel - WTM_orcuttorsolomon

File Edit View Insert Format Tools Data Window Help

Type a question for help

85%

Reply with Changes... End Review...

Arial 10

A21 fx

Green cells need to be completed by the user
Blue cells have default or calculated values but may be substituted
Grey cells should generally not be changed
Purple Cells Reflect "Bottom Line" Loads or Load Reductions

PRIMARY SOURCES - Land Use				Concentrations				Annual Loading Rates				Annual Load			
	Area (Acres)	Impervious Cover %		TN mg/l	TP mg/l	TSS mg/l	FC MPN/100 ml	TN b/acre	TP b/acre	TSS b/acre	FC # billion/acre	TN lb/ye	TP lb/ye	TSS lb/ye	FC # billion/year
Residential	LDR (<1 du/acre)	3347	16.6	2	0.26	55	3455	1.3	0.1	90	12	##	##	###	40,164
	MDR (1-4 du/acre)		21	2	0.26	55	20000	1.3	0.2	90	60	#	#	-	-
	HDR (>4 du/acre)		33	2	0.26	55	20000	1.9	0.2	90	87	#	#	-	-
	Multifamily		44	2	0.26	55	20000	2.5	0.3	90	112	#	#	-	-
								1.3	0.1	90	12	#	#	-	-
								1.3	0.1	90	12	#	#	-	-
								1.3	0.1	90	12	#	#	-	-
								1.3	0.1	90	12	#	#	-	-
								1.3	0.1	90	12	#	#	-	-
Total		3347	16.6					1.25	0.1	90	12	##	##	###	40,164

Partitioning Coefficients for Rural and Forest Land				
Pollutant	TN	TP	TSS	FC
Fraction as Storm Load	50%	70%	90%	##

Watershed Data	
Annual Rainfall (inches)	13.52
Watershed Area (acres)	3347
Stream Length (miles)	
Planning Horizon (years)	

Primary Sources / Secondary Sources / Existing Management Practices / Future Management Practice

Ready Sum=0 NUM

TMDLs for FIB in Santa Maria River Watershed
 Appendix F - Watershed Treatment Model

Microsoft Excel - WTM_santamariariver

File Edit View Insert Format Tools Data Window Help

Type a question for help

85%

Arial 10

G4 fx

Green cells need to be completed by the user
 Blue cells have default or calculated values but may be substituted
 Grey cells should generally not be changed
 Purple Cells Reflect "Bottom Line" Loads or Load Reductions

PRIMARY SOURCES - Land Use				Concentrations				Annual Loading Rates				Annual Load			
	Area (Acres)	Impervious Cover %		TN mg/l	TP mg/l	TSS mg/l	FC MPN/100 ml	TN b/acre	TP b/acre	TSS b/acre	FC # billion/acre	TN lb/y	TP lb/y	TSS lb/y	FC # billion/year
Residential	LDR (<1du/acre)	2795	26.8	2	0.26	55	3455	1.6	0.2	90	13	##	##	##	35,243
	MDR (1-4 du/acre)		21	2	0.26	55	20000	1.3	0.2	90	60	#	#	#	-
	HDR (>4 du/acre)		33	2	0.26	55	20000	1.9	0.2	90	87	#	#	#	-
	Multifamily		44	2	0.26	55	20000	2.5	0.3	90	112	#	#	#	-
								1.3	0.1	90	12	#	#	#	-
								1.3	0.1	90	12	#	#	#	-
								1.3	0.1	90	12	#	#	#	-
								1.3	0.1	90	12	#	#	#	-
								1.3	0.1	90	12	#	#	#	-
								1.3	0.1	90	12	#	#	#	-
Total		2795	26.8					1.6	0.2	90	12.60944141	##	##	##	35,243

Partitioning Coefficients for Rural and Forest Land				
Pollutant	TN	TP	TSS	FC
Fraction as Storm Load	50%	70%	90%	100%

Watershed Data	
Annual Rainfall (inches)	13.52
Watershed Area (acres)	2795
Stream Length (miles)	
Planning Horizon (years)	

Primary Sources / Secondary Sources / Existing Management Practices / Future Management Practice

Ready NUM

TMDLs for FIB in Santa Maria River Watershed
 Appendix F - Watershed Treatment Model

Microsoft Excel - WTM_sntamariacity

File Edit View Insert Format Tools Data Window Help

Type a question for help

85%

Reply with Changes... End Review...

Arial 10

A21 fx

Green cells need to be completed by the user
 Blue cells have default or calculated values but may be substituted
 Grey cells should generally not be changed
 Purple Cells Reflect "Bottom Line" Loads or Load Reductions

PRIMARY SOURCES - Land Use				Concentrations				Annual Loading Rates				Annual Load			
		Area (Acres)	Impervious Cover %	TN mg/l	TP mg/l	TSS mg/l	FC MPN/100 ml	TN lb/acre	TP lb/acre	TSS lb/acre	FC # billion/acre	TN lb/yr	TP lb/yr	TSS lb/yr	FC # billion/yr
Residential	LDR (<1 du/acre)	12653	26.8	2	0.3	55	3455	1.6	0.2	90	13	##	##	###	159,311
	MDR (1-4 du/acre)		21	2	0.3	55	20000	1.3	0.2	90	60	#	#	-	-
	HDR (>4 du/acre)		33	2	0.3	55	20000	1.9	0.2	90	87	#	#	-	-
	Multifamily		44	2	0.3	55	20000	2.4	0.3	90	112	#	#	-	-
								1.3	0.1	90	12	#	#	-	-
								1.3	0.1	90	12	#	#	-	-
								1.3	0.1	90	12	#	#	-	-
								1.3	0.1	90	12	#	#	-	-
								1.3	0.1	90	12	#	#	-	-
								1.3	0.1	90	12	#	#	-	-
Total		12653	26.8					1.599	0.21	90	12.59078839	##	##	###	159,311

Partitioning Coefficients for Rural and Forest Land				
Pollutant	TN	TP	TSS	FC
Fraction as Storm Load	50%	70%	90%	##

Watershed Data	
Annual Rainfall (inches)	13.5
Watershed Area (acres)	12653
Stream Length (miles)	
Planning Horizon (years)	

Primary Sources / Secondary Sources / Existing Management Practices / Future Management Practice

Ready Sum=0 NUM