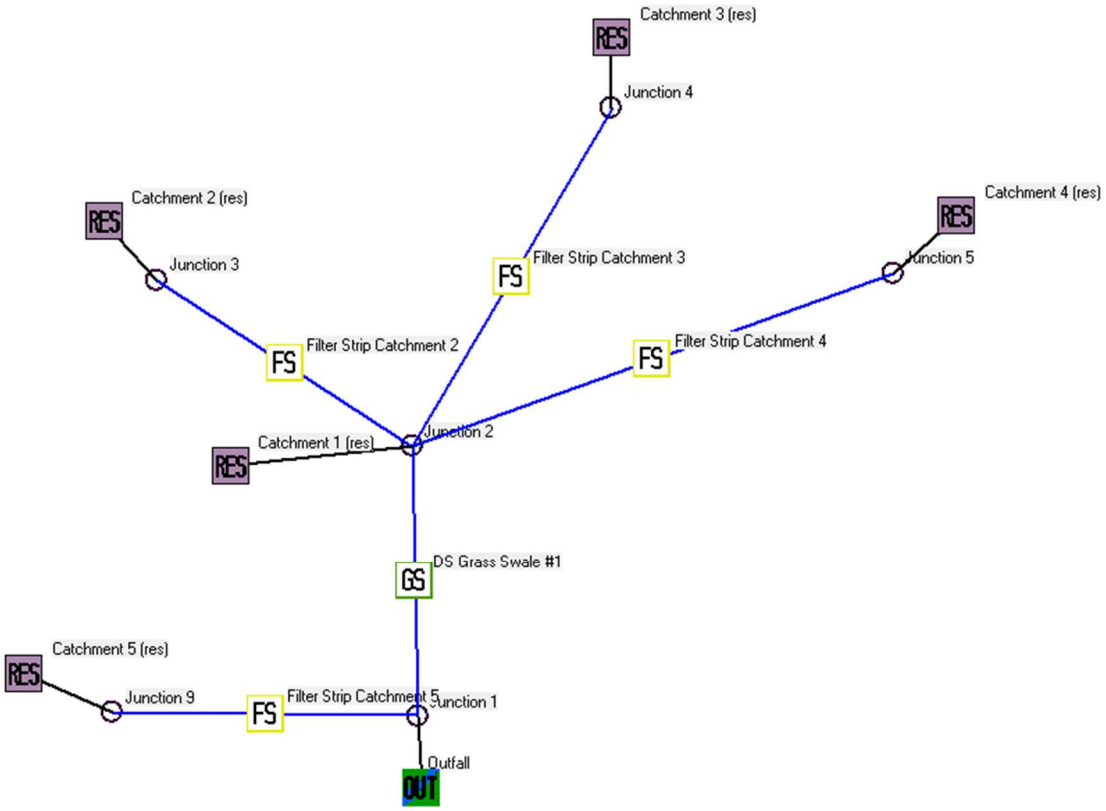
2023 CARROLL PARK IMPROVEMENTS

MODELING SUMMARY

JANUARY, 2023



Data file name: \\WDMYCLOUD\Public\Makepeace Engineering\2 Clients\Uploaded\City of La Crosse 45\2023 Carroll Field Concession Building Project\SLAMM\TSS_F
WinSLAMM Version 10.4.1
Rain file name: C:\WinSLAMM Files\Rain Files\WisReg - Madison WI 1981.RAN
Particulate Solids Concentration file name: C:\WinSLAMM Files\v10.1 WI_AVG01.pscx
Runoff Coefficient file name: C:\WinSLAMM Files\WI_SL06 Dec06.rsvx
Residential Street Delivery file name: C:\WinSLAMM Files\WI_Res and Other Urban Dec06.std
Institutional Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
Commercial Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
Industrial Street Delivery file name: C:\WinSLAMM Files\WI_Com Inst Indust Dec06.std
Other Urban Street Delivery file name: C:\WinSLAMM Files\WI_Res and Other Urban Dec06.std
Freeway Street Delivery file name: C:\WinSLAMM Files\Freeway Dec06.std
Apply Street Delivery Files to Adjust the After Event Load Street Dirt Mass Balance: False
Pollutant Relative Concentration file name: C:\WinSLAMM Files\WI_GEO03.ppdx
Source Area PSD and Peak to Average Flow Ratio File: C:\WinSLAMM Files\NURP Source Area PSD Files.csv
Cost Data file name:
If Other Device Pollutant Load Reduction Values = 1, Off-site Pollutant Loads are Removed from Pollutant Load % Reduction calculations
Seed for random number generator: -42
Study period starting date: 01/01/81 Study period ending date: 12/31/81
Start of Winter Season: 12/02 End of Winter Season: 03/12
Date: 01-09-2023 Time: 11:27:11
Site information:

LU# 1 - Residential: Catchment 1 (res) Total area (ac): 0.116
25 - Driveways 1: 0.006 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz
45 - Large Landscaped Areas 1: 0.110 ac. Severely Compacted Clayey PSD File: C:\WinSLAMM Files\NURP.cpz

LU# 2 - Residential: Catchment 2 (res) Total area (ac): 0.502
45 - Large Landscaped Areas 1: 0.502 ac. Severely Compacted Clayey PSD File: C:\WinSLAMM Files\NURP.cpz

LU# 3 - Residential: Catchment 3 (res) Total area (ac): 0.218
1 - Roofs 1: 0.034 ac. Pitched Connected PSD File: C:\WinSLAMM Files\NURP.cpz
45 - Large Landscaped Areas 1: 0.184 ac. Severely Compacted Clayey PSD File: C:\WinSLAMM Files\NURP.cpz

LU# 4 - Residential: Catchment 4 (res) Total area (ac): 0.106
1 - Roofs 1: 0.034 ac. Pitched Connected PSD File: C:\WinSLAMM Files\NURP.cpz
31 - Sidewalks 1: 0.012 ac. Connected PSD File: C:\WinSLAMM Files\NURP.cpz
45 - Large Landscaped Areas 1: 0.060 ac. Severely Compacted Clayey PSD File: C:\WinSLAMM Files\NURP.cpz

LU# 5 - Residential: Catchment 5 (res) Total area (ac): 0.129
31 - Sidewalks 1: 0.017 ac. Disconnected Severely Compacted Clayey PSD File: C:\WinSLAMM Files\NURP.cpz
45 - Large Landscaped Areas 1: 0.112 ac. Severely Compacted Clayey PSD File: C:\WinSLAMM Files\NURP.cpz

Control Practice 1: Grass Swale CP# 1 (DS) - DS Grass Swale #1
Total drainage area (acres)= 0.942
Fraction of drainage area served by swales (ac) = 1.00
Swale density (ft/ac) = 112.53
Total swale length (ft) = 106
Average swale length to outlet (ft)= 53
Typical bottom width (ft) = 2.0
Typical swale side slope (_H:1V) = 4.0
Typical longitudinal slope (ft.H/ft.V) = 0.003
Swale retardance factor: B
Typical grass height (in) = 12.0
Swale dynamic infiltration rate (in/hr)= 0.000
Typical swale depth (ft) for cost analysis (optional) = 0.0
Particle size distribution file name: Not needed - calculated by program
Use total swale length instead of swale density for infiltration calculations: True
Control Practice 2: Filter Strip CP# 1 (DS) - Filter Strip Catchment 2
Total drainage area (acres)= 0.502
Fraction of drainage area served by filter strips (ac) = 1.00
Total filter strip width (ft) = 230.0
Effective flow length (ft) = 70
Infiltration rate (in/hr)= 0.010
Typical longitudinal slope (ft.H/ft.V) = 0.040
Typical grass height (in) = 6.0
Swale retardance factor = C
Use stochastic analysis to determine infiltration rate: False
Infiltration rate coeficient of variation (COV) = 0.00
Particle size distribution file name: Not needed - calculated by program
Surface Clogging Load (lbs/sf) = 3.50

SLAMM for Windows Version 10.4.1

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Seed for random number generator: -42
Study period starting date: 01/01/81 Study period ending date: 12/31/81
Start of Winter Season: 12/02 End of Winter Season: 03/12
Model Run Start Date: 01/01/81 Model Run End Date: 12/31/81
Date of run: 01-09-2023 Time of run: 11:25:12
Total Area Modeled (acres): 1.071
Years in Model Run: 1.00

	Runoff Volume (cu ft)	Percent Runoff Volume Reduction	Particulate Solids Conc. (mg/L)	Particulate Solids Yield (lbs)	Percent Particulate Solids Reduction
Total of all Land Uses without Controls:	82651	-	207.6	1071	-
Outfall Total with Controls:	71630	13.33%	80.30	359.1	66.47%
Annualized Total After Outfall Controls:	71827			360.1	