

WWHM2012
PROJECT REPORT

General Model Information

Project Name: 7'CombinedPermeablePavementSidewalk
Site Name:
Site Address:
City:
Report Date: 1/23/2018
Gage:
Data Start: 10/01/1901
Data End: 09/30/2059
Timestep: 15 Minute
Precip Scale: 1.000
Version Date: 2017/10/31
Version: 4.2.13

POC Thresholds

| | |
|-------------------------------|--------------------------|
| Low Flow Threshold for POC1: | 50 Percent of the 2 Year |
| High Flow Threshold for POC1: | 50 Year |

Landuse Basin Data

Predeveloped Land Use

Basin 1

Bypass: No

GroundWater: No

Pervious Land Use acre
C, Forest, Flat 0.072

Pervious Total 0.072

Impervious Land Use acre

Impervious Total 0

Basin Total 0.072

| | | |
|-------------------|-----------|-------------|
| Element Flows To: | | |
| Surface | Interflow | Groundwater |

Mitigated Land Use

Lateral Basin 1

Bypass: No

GroundWater: No

Pervious Land Use acre

C, Lawn, Mod .016

Element Flows To:

| | | |
|--------------------|--------------------|-------------|
| Surface | Interflow | Groundwater |
| Permeable Pavement | Permeable Pavement | 1 |

Routing Elements

Predeveloped Routing

Mitigated Routing

Permeable Pavement 1

Pavement Area: 0.0562 acre. Pavement Length: 7.00 ft.
 Pavement Width: 350.00 ft.
 Pavement slope 1:0.02 To 1
 Pavement thickness: 0
 Pour Space of Pavement: 0
 Material thickness of second layer: 0.5
 Pour Space of material for second layer: 0.2
 Material thickness of third layer: 0
 Pour Space of material for third layer: 0
 Infiltration On
 Infiltration rate: 0.2
 Infiltration safety factor: 1
 Total Volume Infiltrated (ac-ft.): 23.115
 Total Volume Through Riser (ac-ft.): 0
 Total Volume Through Facility (ac-ft.): 23.115
 Percent Infiltrated: 100
 Total Precip Applied to Facility: 0
 Total Evap From Facility: 2.179
 Element Flows To:
 Outlet 1 Outlet 2

Permeable Pavement Hydraulic Table

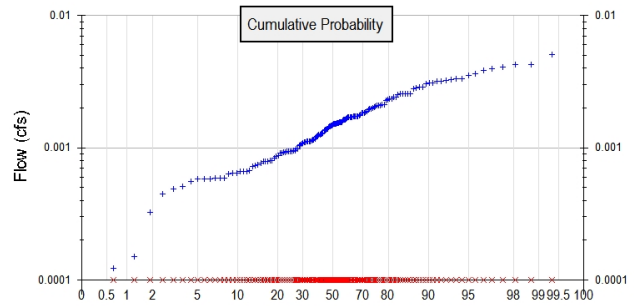
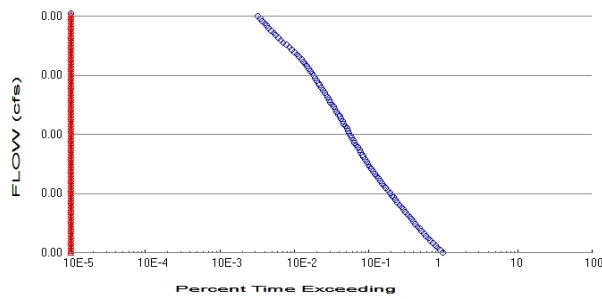
| Stage(feet) | Area(ac.) | Volume(ac-ft.) | Discharge(cfs) | Infilt(cfs) |
|-------------|-----------|----------------|----------------|-------------|
| 0.0000 | 0.056 | 0.000 | 0.000 | 0.000 |
| 0.0167 | 0.056 | 0.000 | 0.000 | 0.011 |
| 0.0333 | 0.056 | 0.000 | 0.000 | 0.011 |
| 0.0500 | 0.056 | 0.000 | 0.000 | 0.011 |
| 0.0667 | 0.056 | 0.000 | 0.000 | 0.011 |
| 0.0833 | 0.056 | 0.000 | 0.000 | 0.011 |
| 0.1000 | 0.056 | 0.001 | 0.000 | 0.011 |
| 0.1167 | 0.056 | 0.001 | 0.000 | 0.011 |
| 0.1333 | 0.056 | 0.001 | 0.000 | 0.011 |
| 0.1500 | 0.056 | 0.001 | 0.000 | 0.011 |
| 0.1667 | 0.056 | 0.001 | 0.000 | 0.011 |
| 0.1833 | 0.056 | 0.002 | 0.000 | 0.011 |
| 0.2000 | 0.056 | 0.002 | 0.000 | 0.011 |
| 0.2167 | 0.056 | 0.002 | 0.000 | 0.011 |
| 0.2333 | 0.056 | 0.002 | 0.000 | 0.011 |
| 0.2500 | 0.056 | 0.002 | 0.000 | 0.011 |
| 0.2667 | 0.056 | 0.003 | 0.000 | 0.011 |
| 0.2833 | 0.056 | 0.003 | 0.000 | 0.011 |
| 0.3000 | 0.056 | 0.003 | 0.000 | 0.011 |
| 0.3167 | 0.056 | 0.003 | 0.000 | 0.011 |
| 0.3333 | 0.056 | 0.003 | 0.000 | 0.011 |
| 0.3500 | 0.056 | 0.003 | 0.000 | 0.011 |
| 0.3667 | 0.056 | 0.004 | 0.000 | 0.011 |
| 0.3833 | 0.056 | 0.004 | 0.000 | 0.011 |
| 0.4000 | 0.056 | 0.004 | 0.000 | 0.011 |
| 0.4167 | 0.056 | 0.004 | 0.000 | 0.011 |
| 0.4333 | 0.056 | 0.004 | 0.000 | 0.011 |
| 0.4500 | 0.056 | 0.005 | 0.000 | 0.011 |
| 0.4667 | 0.056 | 0.005 | 0.000 | 0.011 |

| | | | | |
|--------|-------|-------|-------|-------|
| 0.4833 | 0.056 | 0.005 | 0.000 | 0.011 |
| 0.5000 | 0.056 | 0.005 | 0.000 | 0.011 |
| 0.5167 | 0.056 | 0.006 | 0.000 | 0.011 |
| 0.5333 | 0.056 | 0.007 | 0.000 | 0.011 |
| 0.5500 | 0.056 | 0.008 | 0.000 | 0.011 |
| 0.5667 | 0.056 | 0.009 | 0.000 | 0.011 |
| 0.5833 | 0.056 | 0.010 | 0.000 | 0.011 |
| 0.6000 | 0.056 | 0.011 | 0.000 | 0.011 |
| 0.6167 | 0.056 | 0.012 | 0.035 | 0.011 |
| 0.6333 | 0.056 | 0.013 | 0.101 | 0.011 |
| 0.6500 | 0.056 | 0.014 | 0.186 | 0.011 |
| 0.6667 | 0.056 | 0.015 | 0.286 | 0.011 |
| 0.6833 | 0.056 | 0.016 | 0.400 | 0.011 |
| 0.7000 | 0.056 | 0.016 | 0.526 | 0.011 |
| 0.7167 | 0.056 | 0.017 | 0.663 | 0.011 |
| 0.7333 | 0.056 | 0.018 | 0.810 | 0.011 |
| 0.7500 | 0.056 | 0.019 | 0.967 | 0.011 |
| 0.7667 | 0.056 | 0.020 | 1.132 | 0.011 |
| 0.7833 | 0.056 | 0.021 | 1.307 | 0.011 |
| 0.8000 | 0.056 | 0.022 | 1.489 | 0.011 |
| 0.8167 | 0.056 | 0.023 | 1.679 | 0.011 |
| 0.8333 | 0.056 | 0.024 | 1.876 | 0.011 |
| 0.8500 | 0.056 | 0.025 | 2.081 | 0.011 |
| 0.8667 | 0.056 | 0.026 | 2.292 | 0.011 |
| 0.8833 | 0.056 | 0.027 | 2.511 | 0.011 |
| 0.9000 | 0.056 | 0.028 | 2.735 | 0.011 |
| 0.9167 | 0.056 | 0.029 | 2.967 | 0.011 |
| 0.9333 | 0.056 | 0.030 | 3.204 | 0.011 |
| 0.9500 | 0.056 | 0.031 | 3.447 | 0.011 |
| 0.9667 | 0.056 | 0.032 | 3.696 | 0.011 |
| 0.9833 | 0.056 | 0.032 | 3.951 | 0.011 |
| 1.0000 | 0.056 | 0.033 | 4.212 | 0.011 |
| 1.0167 | 0.056 | 0.034 | 4.478 | 0.011 |
| 1.0333 | 0.056 | 0.035 | 4.749 | 0.011 |
| 1.0500 | 0.056 | 0.036 | 5.026 | 0.011 |
| 1.0667 | 0.056 | 0.037 | 5.307 | 0.011 |
| 1.0833 | 0.056 | 0.038 | 5.594 | 0.011 |
| 1.1000 | 0.056 | 0.039 | 5.886 | 0.011 |
| 1.1167 | 0.056 | 0.040 | 6.183 | 0.011 |
| 1.1333 | 0.056 | 0.041 | 6.485 | 0.011 |
| 1.1500 | 0.056 | 0.042 | 6.791 | 0.011 |
| 1.1667 | 0.056 | 0.043 | 7.102 | 0.011 |
| 1.1833 | 0.056 | 0.044 | 7.418 | 0.011 |
| 1.2000 | 0.056 | 0.045 | 7.738 | 0.011 |
| 1.2167 | 0.056 | 0.046 | 8.062 | 0.011 |
| 1.2333 | 0.056 | 0.047 | 8.391 | 0.011 |
| 1.2500 | 0.056 | 0.048 | 8.725 | 0.011 |
| 1.2667 | 0.056 | 0.049 | 9.063 | 0.011 |
| 1.2833 | 0.056 | 0.049 | 9.405 | 0.011 |
| 1.3000 | 0.056 | 0.050 | 9.751 | 0.011 |
| 1.3167 | 0.056 | 0.051 | 10.10 | 0.011 |
| 1.3333 | 0.056 | 0.052 | 10.45 | 0.011 |
| 1.3500 | 0.056 | 0.053 | 10.81 | 0.011 |
| 1.3667 | 0.056 | 0.054 | 11.17 | 0.011 |
| 1.3833 | 0.056 | 0.055 | 11.54 | 0.011 |
| 1.4000 | 0.056 | 0.056 | 11.91 | 0.011 |
| 1.4167 | 0.056 | 0.057 | 12.28 | 0.011 |
| 1.4333 | 0.056 | 0.058 | 12.66 | 0.011 |

| | | | | |
|--------|-------|-------|-------|-------|
| 1.4500 | 0.056 | 0.059 | 13.04 | 0.011 |
| 1.4667 | 0.056 | 0.060 | 13.43 | 0.011 |
| 1.4833 | 0.056 | 0.061 | 13.82 | 0.011 |
| 1.5000 | 0.056 | 0.062 | 14.21 | 0.011 |

Analysis Results

POC 1



+ Predeveloped x Mitigated

Predeveloped Landuse Totals for POC #1

Total Pervious Area: 0.072
Total Impervious Area: 0

Mitigated Landuse Totals for POC #1

Total Pervious Area: 0.016
Total Impervious Area: 0.056244

Flow Frequency Method: Log Pearson Type III 17B

Flow Frequency Return Periods for Predeveloped. POC #1

| Return Period | Flow(cfs) |
|---------------|-----------|
| 2 year | 0.001517 |
| 5 year | 0.00236 |
| 10 year | 0.002819 |
| 25 year | 0.003285 |
| 50 year | 0.003562 |
| 100 year | 0.00379 |

Flow Frequency Return Periods for Mitigated. POC #1

| Return Period | Flow(cfs) |
|---------------|-----------|
| 2 year | 0 |
| 5 year | 0 |
| 10 year | 0 |
| 25 year | 0 |
| 50 year | 0 |
| 100 year | 0 |

Annual Peaks

Annual Peaks for Predeveloped and Mitigated. POC #1

| Year | Predeveloped | Mitigated |
|------|--------------|-----------|
| 1902 | 0.001 | 0.000 |
| 1903 | 0.001 | 0.000 |
| 1904 | 0.002 | 0.000 |
| 1905 | 0.001 | 0.000 |
| 1906 | 0.000 | 0.000 |
| 1907 | 0.002 | 0.000 |
| 1908 | 0.002 | 0.000 |
| 1909 | 0.002 | 0.000 |
| 1910 | 0.002 | 0.000 |
| 1911 | 0.002 | 0.000 |

| | | |
|------|-------|-------|
| 1912 | 0.005 | 0.000 |
| 1913 | 0.002 | 0.000 |
| 1914 | 0.001 | 0.000 |
| 1915 | 0.001 | 0.000 |
| 1916 | 0.002 | 0.000 |
| 1917 | 0.001 | 0.000 |
| 1918 | 0.002 | 0.000 |
| 1919 | 0.001 | 0.000 |
| 1920 | 0.002 | 0.000 |
| 1921 | 0.002 | 0.000 |
| 1922 | 0.002 | 0.000 |
| 1923 | 0.001 | 0.000 |
| 1924 | 0.001 | 0.000 |
| 1925 | 0.001 | 0.000 |
| 1926 | 0.001 | 0.000 |
| 1927 | 0.001 | 0.000 |
| 1928 | 0.001 | 0.000 |
| 1929 | 0.002 | 0.000 |
| 1930 | 0.002 | 0.000 |
| 1931 | 0.001 | 0.000 |
| 1932 | 0.001 | 0.000 |
| 1933 | 0.001 | 0.000 |
| 1934 | 0.003 | 0.000 |
| 1935 | 0.001 | 0.000 |
| 1936 | 0.001 | 0.000 |
| 1937 | 0.002 | 0.000 |
| 1938 | 0.001 | 0.000 |
| 1939 | 0.000 | 0.000 |
| 1940 | 0.001 | 0.000 |
| 1941 | 0.001 | 0.000 |
| 1942 | 0.002 | 0.000 |
| 1943 | 0.001 | 0.000 |
| 1944 | 0.002 | 0.000 |
| 1945 | 0.002 | 0.000 |
| 1946 | 0.001 | 0.000 |
| 1947 | 0.001 | 0.000 |
| 1948 | 0.003 | 0.000 |
| 1949 | 0.003 | 0.000 |
| 1950 | 0.001 | 0.000 |
| 1951 | 0.001 | 0.000 |
| 1952 | 0.004 | 0.000 |
| 1953 | 0.004 | 0.000 |
| 1954 | 0.001 | 0.000 |
| 1955 | 0.001 | 0.000 |
| 1956 | 0.001 | 0.000 |
| 1957 | 0.002 | 0.000 |
| 1958 | 0.004 | 0.000 |
| 1959 | 0.003 | 0.000 |
| 1960 | 0.001 | 0.000 |
| 1961 | 0.003 | 0.000 |
| 1962 | 0.001 | 0.000 |
| 1963 | 0.001 | 0.000 |
| 1964 | 0.001 | 0.000 |
| 1965 | 0.003 | 0.000 |
| 1966 | 0.001 | 0.000 |
| 1967 | 0.001 | 0.000 |
| 1968 | 0.001 | 0.000 |
| 1969 | 0.001 | 0.000 |

| | | |
|------|-------|-------|
| 1970 | 0.002 | 0.000 |
| 1971 | 0.003 | 0.000 |
| 1972 | 0.002 | 0.000 |
| 1973 | 0.003 | 0.000 |
| 1974 | 0.001 | 0.000 |
| 1975 | 0.003 | 0.000 |
| 1976 | 0.002 | 0.000 |
| 1977 | 0.001 | 0.000 |
| 1978 | 0.003 | 0.000 |
| 1979 | 0.001 | 0.000 |
| 1980 | 0.002 | 0.000 |
| 1981 | 0.002 | 0.000 |
| 1982 | 0.001 | 0.000 |
| 1983 | 0.003 | 0.000 |
| 1984 | 0.001 | 0.000 |
| 1985 | 0.002 | 0.000 |
| 1986 | 0.002 | 0.000 |
| 1987 | 0.003 | 0.000 |
| 1988 | 0.002 | 0.000 |
| 1989 | 0.002 | 0.000 |
| 1990 | 0.002 | 0.000 |
| 1991 | 0.001 | 0.000 |
| 1992 | 0.002 | 0.000 |
| 1993 | 0.002 | 0.000 |
| 1994 | 0.003 | 0.000 |
| 1995 | 0.001 | 0.000 |
| 1996 | 0.003 | 0.000 |
| 1997 | 0.001 | 0.000 |
| 1998 | 0.002 | 0.000 |
| 1999 | 0.000 | 0.000 |
| 2000 | 0.001 | 0.000 |
| 2001 | 0.001 | 0.000 |
| 2002 | 0.002 | 0.000 |
| 2003 | 0.002 | 0.000 |
| 2004 | 0.002 | 0.000 |
| 2005 | 0.003 | 0.000 |
| 2006 | 0.001 | 0.000 |
| 2007 | 0.001 | 0.000 |
| 2008 | 0.002 | 0.000 |
| 2009 | 0.001 | 0.000 |
| 2010 | 0.001 | 0.000 |
| 2011 | 0.001 | 0.000 |
| 2012 | 0.001 | 0.000 |
| 2013 | 0.001 | 0.000 |
| 2014 | 0.001 | 0.000 |
| 2015 | 0.001 | 0.000 |
| 2016 | 0.000 | 0.000 |
| 2017 | 0.002 | 0.000 |
| 2018 | 0.004 | 0.000 |
| 2019 | 0.004 | 0.000 |
| 2020 | 0.001 | 0.000 |
| 2021 | 0.002 | 0.000 |
| 2022 | 0.001 | 0.000 |
| 2023 | 0.002 | 0.000 |
| 2024 | 0.003 | 0.000 |
| 2025 | 0.002 | 0.000 |
| 2026 | 0.003 | 0.000 |
| 2027 | 0.001 | 0.000 |

| | | |
|------|-------|-------|
| 2028 | 0.001 | 0.000 |
| 2029 | 0.002 | 0.000 |
| 2030 | 0.003 | 0.000 |
| 2031 | 0.001 | 0.000 |
| 2032 | 0.001 | 0.000 |
| 2033 | 0.001 | 0.000 |
| 2034 | 0.001 | 0.000 |
| 2035 | 0.004 | 0.000 |
| 2036 | 0.002 | 0.000 |
| 2037 | 0.000 | 0.000 |
| 2038 | 0.001 | 0.000 |
| 2039 | 0.000 | 0.000 |
| 2040 | 0.001 | 0.000 |
| 2041 | 0.001 | 0.000 |
| 2042 | 0.004 | 0.000 |
| 2043 | 0.002 | 0.000 |
| 2044 | 0.002 | 0.000 |
| 2045 | 0.002 | 0.000 |
| 2046 | 0.002 | 0.000 |
| 2047 | 0.001 | 0.000 |
| 2048 | 0.002 | 0.000 |
| 2049 | 0.002 | 0.000 |
| 2050 | 0.001 | 0.000 |
| 2051 | 0.002 | 0.000 |
| 2052 | 0.001 | 0.000 |
| 2053 | 0.002 | 0.000 |
| 2054 | 0.002 | 0.000 |
| 2055 | 0.001 | 0.000 |
| 2056 | 0.001 | 0.000 |
| 2057 | 0.001 | 0.000 |
| 2058 | 0.001 | 0.000 |
| 2059 | 0.003 | 0.000 |

Ranked Annual Peaks

Ranked Annual Peaks for Predeveloped and Mitigated. POC #1

| Rank | Predeveloped | Mitigated |
|------|--------------|-----------|
| 1 | 0.0051 | 0.0000 |
| 2 | 0.0043 | 0.0000 |
| 3 | 0.0043 | 0.0000 |
| 4 | 0.0041 | 0.0000 |
| 5 | 0.0040 | 0.0000 |
| 6 | 0.0038 | 0.0000 |
| 7 | 0.0036 | 0.0000 |
| 8 | 0.0035 | 0.0000 |
| 9 | 0.0033 | 0.0000 |
| 10 | 0.0033 | 0.0000 |
| 11 | 0.0033 | 0.0000 |
| 12 | 0.0032 | 0.0000 |
| 13 | 0.0032 | 0.0000 |
| 14 | 0.0032 | 0.0000 |
| 15 | 0.0031 | 0.0000 |
| 16 | 0.0031 | 0.0000 |
| 17 | 0.0030 | 0.0000 |
| 18 | 0.0029 | 0.0000 |
| 19 | 0.0029 | 0.0000 |
| 20 | 0.0029 | 0.0000 |
| 21 | 0.0028 | 0.0000 |
| 22 | 0.0026 | 0.0000 |

| | | |
|----|--------|--------|
| 23 | 0.0026 | 0.0000 |
| 24 | 0.0026 | 0.0000 |
| 25 | 0.0026 | 0.0000 |
| 26 | 0.0025 | 0.0000 |
| 27 | 0.0025 | 0.0000 |
| 28 | 0.0024 | 0.0000 |
| 29 | 0.0024 | 0.0000 |
| 30 | 0.0024 | 0.0000 |
| 31 | 0.0023 | 0.0000 |
| 32 | 0.0023 | 0.0000 |
| 33 | 0.0023 | 0.0000 |
| 34 | 0.0021 | 0.0000 |
| 35 | 0.0021 | 0.0000 |
| 36 | 0.0021 | 0.0000 |
| 37 | 0.0021 | 0.0000 |
| 38 | 0.0021 | 0.0000 |
| 39 | 0.0020 | 0.0000 |
| 40 | 0.0020 | 0.0000 |
| 41 | 0.0020 | 0.0000 |
| 42 | 0.0020 | 0.0000 |
| 43 | 0.0020 | 0.0000 |
| 44 | 0.0020 | 0.0000 |
| 45 | 0.0019 | 0.0000 |
| 46 | 0.0019 | 0.0000 |
| 47 | 0.0018 | 0.0000 |
| 48 | 0.0018 | 0.0000 |
| 49 | 0.0018 | 0.0000 |
| 50 | 0.0018 | 0.0000 |
| 51 | 0.0017 | 0.0000 |
| 52 | 0.0017 | 0.0000 |
| 53 | 0.0017 | 0.0000 |
| 54 | 0.0017 | 0.0000 |
| 55 | 0.0017 | 0.0000 |
| 56 | 0.0017 | 0.0000 |
| 57 | 0.0017 | 0.0000 |
| 58 | 0.0017 | 0.0000 |
| 59 | 0.0017 | 0.0000 |
| 60 | 0.0017 | 0.0000 |
| 61 | 0.0017 | 0.0000 |
| 62 | 0.0017 | 0.0000 |
| 63 | 0.0017 | 0.0000 |
| 64 | 0.0016 | 0.0000 |
| 65 | 0.0016 | 0.0000 |
| 66 | 0.0016 | 0.0000 |
| 67 | 0.0016 | 0.0000 |
| 68 | 0.0016 | 0.0000 |
| 69 | 0.0016 | 0.0000 |
| 70 | 0.0016 | 0.0000 |
| 71 | 0.0016 | 0.0000 |
| 72 | 0.0015 | 0.0000 |
| 73 | 0.0015 | 0.0000 |
| 74 | 0.0015 | 0.0000 |
| 75 | 0.0015 | 0.0000 |
| 76 | 0.0015 | 0.0000 |
| 77 | 0.0015 | 0.0000 |
| 78 | 0.0015 | 0.0000 |
| 79 | 0.0015 | 0.0000 |
| 80 | 0.0015 | 0.0000 |

| | | |
|-----|--------|--------|
| 81 | 0.0015 | 0.0000 |
| 82 | 0.0015 | 0.0000 |
| 83 | 0.0015 | 0.0000 |
| 84 | 0.0014 | 0.0000 |
| 85 | 0.0014 | 0.0000 |
| 86 | 0.0014 | 0.0000 |
| 87 | 0.0014 | 0.0000 |
| 88 | 0.0014 | 0.0000 |
| 89 | 0.0014 | 0.0000 |
| 90 | 0.0013 | 0.0000 |
| 91 | 0.0013 | 0.0000 |
| 92 | 0.0013 | 0.0000 |
| 93 | 0.0013 | 0.0000 |
| 94 | 0.0013 | 0.0000 |
| 95 | 0.0012 | 0.0000 |
| 96 | 0.0012 | 0.0000 |
| 97 | 0.0012 | 0.0000 |
| 98 | 0.0012 | 0.0000 |
| 99 | 0.0012 | 0.0000 |
| 100 | 0.0012 | 0.0000 |
| 101 | 0.0012 | 0.0000 |
| 102 | 0.0011 | 0.0000 |
| 103 | 0.0011 | 0.0000 |
| 104 | 0.0011 | 0.0000 |
| 105 | 0.0011 | 0.0000 |
| 106 | 0.0011 | 0.0000 |
| 107 | 0.0011 | 0.0000 |
| 108 | 0.0011 | 0.0000 |
| 109 | 0.0011 | 0.0000 |
| 110 | 0.0011 | 0.0000 |
| 111 | 0.0011 | 0.0000 |
| 112 | 0.0011 | 0.0000 |
| 113 | 0.0010 | 0.0000 |
| 114 | 0.0010 | 0.0000 |
| 115 | 0.0010 | 0.0000 |
| 116 | 0.0010 | 0.0000 |
| 117 | 0.0009 | 0.0000 |
| 118 | 0.0009 | 0.0000 |
| 119 | 0.0009 | 0.0000 |
| 120 | 0.0009 | 0.0000 |
| 121 | 0.0009 | 0.0000 |
| 122 | 0.0009 | 0.0000 |
| 123 | 0.0009 | 0.0000 |
| 124 | 0.0009 | 0.0000 |
| 125 | 0.0009 | 0.0000 |
| 126 | 0.0009 | 0.0000 |
| 127 | 0.0009 | 0.0000 |
| 128 | 0.0008 | 0.0000 |
| 129 | 0.0008 | 0.0000 |
| 130 | 0.0008 | 0.0000 |
| 131 | 0.0008 | 0.0000 |
| 132 | 0.0008 | 0.0000 |
| 133 | 0.0008 | 0.0000 |
| 134 | 0.0008 | 0.0000 |
| 135 | 0.0007 | 0.0000 |
| 136 | 0.0007 | 0.0000 |
| 137 | 0.0007 | 0.0000 |
| 138 | 0.0007 | 0.0000 |

| | | |
|-----|--------|--------|
| 139 | 0.0007 | 0.0000 |
| 140 | 0.0007 | 0.0000 |
| 141 | 0.0007 | 0.0000 |
| 142 | 0.0006 | 0.0000 |
| 143 | 0.0006 | 0.0000 |
| 144 | 0.0006 | 0.0000 |
| 145 | 0.0006 | 0.0000 |
| 146 | 0.0006 | 0.0000 |
| 147 | 0.0006 | 0.0000 |
| 148 | 0.0006 | 0.0000 |
| 149 | 0.0006 | 0.0000 |
| 150 | 0.0006 | 0.0000 |
| 151 | 0.0006 | 0.0000 |
| 152 | 0.0005 | 0.0000 |
| 153 | 0.0005 | 0.0000 |
| 154 | 0.0004 | 0.0000 |
| 155 | 0.0003 | 0.0000 |
| 156 | 0.0002 | 0.0000 |
| 157 | 0.0001 | 0.0000 |
| 158 | 0.0001 | 0.0000 |

Duration Flows

The Facility PASSED

| Flow(cfs) | Predev | Mit | Percentage | Pass/Fail |
|-----------|--------|-----|------------|-----------|
| 0.0008 | 54381 | 0 | 0 | Pass |
| 0.0008 | 50298 | 0 | 0 | Pass |
| 0.0008 | 46597 | 0 | 0 | Pass |
| 0.0008 | 43379 | 0 | 0 | Pass |
| 0.0009 | 40337 | 0 | 0 | Pass |
| 0.0009 | 37462 | 0 | 0 | Pass |
| 0.0009 | 34952 | 0 | 0 | Pass |
| 0.0010 | 32625 | 0 | 0 | Pass |
| 0.0010 | 30326 | 0 | 0 | Pass |
| 0.0010 | 28299 | 0 | 0 | Pass |
| 0.0010 | 26465 | 0 | 0 | Pass |
| 0.0011 | 24786 | 0 | 0 | Pass |
| 0.0011 | 23307 | 0 | 0 | Pass |
| 0.0011 | 21955 | 0 | 0 | Pass |
| 0.0012 | 20676 | 0 | 0 | Pass |
| 0.0012 | 19435 | 0 | 0 | Pass |
| 0.0012 | 18304 | 0 | 0 | Pass |
| 0.0012 | 17252 | 0 | 0 | Pass |
| 0.0013 | 16160 | 0 | 0 | Pass |
| 0.0013 | 15158 | 0 | 0 | Pass |
| 0.0013 | 14293 | 0 | 0 | Pass |
| 0.0014 | 13451 | 0 | 0 | Pass |
| 0.0014 | 12676 | 0 | 0 | Pass |
| 0.0014 | 11955 | 0 | 0 | Pass |
| 0.0014 | 11246 | 0 | 0 | Pass |
| 0.0015 | 10576 | 0 | 0 | Pass |
| 0.0015 | 9989 | 0 | 0 | Pass |
| 0.0015 | 9374 | 0 | 0 | Pass |
| 0.0016 | 8853 | 0 | 0 | Pass |
| 0.0016 | 8338 | 0 | 0 | Pass |
| 0.0016 | 7856 | 0 | 0 | Pass |
| 0.0016 | 7462 | 0 | 0 | Pass |
| 0.0017 | 7041 | 0 | 0 | Pass |
| 0.0017 | 6609 | 0 | 0 | Pass |
| 0.0017 | 6277 | 0 | 0 | Pass |
| 0.0017 | 5983 | 0 | 0 | Pass |
| 0.0018 | 5712 | 0 | 0 | Pass |
| 0.0018 | 5439 | 0 | 0 | Pass |
| 0.0018 | 5199 | 0 | 0 | Pass |
| 0.0019 | 4950 | 0 | 0 | Pass |
| 0.0019 | 4704 | 0 | 0 | Pass |
| 0.0019 | 4515 | 0 | 0 | Pass |
| 0.0019 | 4341 | 0 | 0 | Pass |
| 0.0020 | 4158 | 0 | 0 | Pass |
| 0.0020 | 3958 | 0 | 0 | Pass |
| 0.0020 | 3770 | 0 | 0 | Pass |
| 0.0021 | 3577 | 0 | 0 | Pass |
| 0.0021 | 3416 | 0 | 0 | Pass |
| 0.0021 | 3267 | 0 | 0 | Pass |
| 0.0021 | 3134 | 0 | 0 | Pass |
| 0.0022 | 3027 | 0 | 0 | Pass |
| 0.0022 | 2931 | 0 | 0 | Pass |
| 0.0022 | 2813 | 0 | 0 | Pass |

| | | | | |
|--------|------|---|---|------|
| 0.0023 | 2682 | 0 | 0 | Pass |
| 0.0023 | 2556 | 0 | 0 | Pass |
| 0.0023 | 2451 | 0 | 0 | Pass |
| 0.0023 | 2359 | 0 | 0 | Pass |
| 0.0024 | 2256 | 0 | 0 | Pass |
| 0.0024 | 2143 | 0 | 0 | Pass |
| 0.0024 | 2038 | 0 | 0 | Pass |
| 0.0025 | 1952 | 0 | 0 | Pass |
| 0.0025 | 1862 | 0 | 0 | Pass |
| 0.0025 | 1778 | 0 | 0 | Pass |
| 0.0025 | 1691 | 0 | 0 | Pass |
| 0.0026 | 1619 | 0 | 0 | Pass |
| 0.0026 | 1561 | 0 | 0 | Pass |
| 0.0026 | 1483 | 0 | 0 | Pass |
| 0.0027 | 1408 | 0 | 0 | Pass |
| 0.0027 | 1338 | 0 | 0 | Pass |
| 0.0027 | 1270 | 0 | 0 | Pass |
| 0.0027 | 1218 | 0 | 0 | Pass |
| 0.0028 | 1163 | 0 | 0 | Pass |
| 0.0028 | 1103 | 0 | 0 | Pass |
| 0.0028 | 1056 | 0 | 0 | Pass |
| 0.0029 | 1005 | 0 | 0 | Pass |
| 0.0029 | 964 | 0 | 0 | Pass |
| 0.0029 | 920 | 0 | 0 | Pass |
| 0.0029 | 872 | 0 | 0 | Pass |
| 0.0030 | 815 | 0 | 0 | Pass |
| 0.0030 | 774 | 0 | 0 | Pass |
| 0.0030 | 738 | 0 | 0 | Pass |
| 0.0031 | 694 | 0 | 0 | Pass |
| 0.0031 | 637 | 0 | 0 | Pass |
| 0.0031 | 601 | 0 | 0 | Pass |
| 0.0031 | 553 | 0 | 0 | Pass |
| 0.0032 | 517 | 0 | 0 | Pass |
| 0.0032 | 478 | 0 | 0 | Pass |
| 0.0032 | 433 | 0 | 0 | Pass |
| 0.0033 | 394 | 0 | 0 | Pass |
| 0.0033 | 363 | 0 | 0 | Pass |
| 0.0033 | 339 | 0 | 0 | Pass |
| 0.0033 | 310 | 0 | 0 | Pass |
| 0.0034 | 297 | 0 | 0 | Pass |
| 0.0034 | 273 | 0 | 0 | Pass |
| 0.0034 | 252 | 0 | 0 | Pass |
| 0.0034 | 237 | 0 | 0 | Pass |
| 0.0035 | 223 | 0 | 0 | Pass |
| 0.0035 | 206 | 0 | 0 | Pass |
| 0.0035 | 195 | 0 | 0 | Pass |
| 0.0036 | 179 | 0 | 0 | Pass |

Water Quality

Water Quality BMP Flow and Volume for POC #1

On-line facility volume: 0 acre-feet

On-line facility target flow: 0 cfs.

Adjusted for 15 min: 0 cfs.

Off-line facility target flow: 0 cfs.

Adjusted for 15 min: 0 cfs.

LID Report

| LID Technique | Used for Treatment ? | Total Volume Needs Treatment (ac-ft) | Volume Through Facility (ac-ft) | Infiltration Volume (ac-ft) | Cumulative Volume Infiltration Credit | Percent Volume Infiltrated | Water Quality | Percent Water Quality Treated | Comment |
|---|--------------------------|--------------------------------------|---------------------------------|-----------------------------|---------------------------------------|----------------------------|---------------|-------------------------------|-----------------------------------|
| Permeable Pavement 1 POC | <input type="checkbox"/> | 21.03 | | | <input type="checkbox"/> | 100.00 | | | |
| Total Volume Infiltrated | | 21.03 | 0.00 | 0.00 | | 100.00 | 0.00 | 0% | No Treat. Credit |
| Compliance with LID Standard 8% of 2-yr to 50% of 2-yr | | | | | | | | | Duration Analysis Result = Passed |
| | | | | | | | | | |

Model Default Modifications

Total of 0 changes have been made.

PERLND Changes

No PERLND changes have been made.

IMPLND Changes

No IMPLND changes have been made.

Appendix

Predeveloped Schematic



Basin 1
10.07ac

Mitigated Schematic



Lateral
Basin 1
0.02ac

SI



Permeable
Pavement
1

Predeveloped UCI File

RUN

GLOBAL

```
WWMH4 model simulation
START      1901 10 01      END      2059 09 30
RUN INTERP OUTPUT LEVEL    3      0
RESUME     0 RUN          1          UNIT SYSTEM      1
END GLOBAL
```

FILES

```
<File>  <Un#>  <-----File Name----->***
<-ID->                                     ***
WDM       26    7'CombinedPermeablePavementSidewalk.wdm
MESSU     25    Pre7'CombinedPermeablePavementSidewalk.MES
          27    Pre7'CombinedPermeablePavementSidewalk.L61
          28    Pre7'CombinedPermeablePavementSidewalk.L62
          30    POC7'CombinedPermeablePavementSidewalk1.dat
```

END FILES

OPN SEQUENCE

INGRP INDELT 00:15

```
PERLND    10
COPY       501
DISPLY     1
```

END INGRP

END OPN SEQUENCE

DISPLY

DISPLY-INFO1

```
# - #<-----Title----->***TRAN PIVL DIG1 FIL1  PYR DIG2 FIL2 YRND
1      Basin 1          MAX          1      2      30      9
```

END DISPLY-INFO1

END DISPLY

COPY

TIMESERIES

```
# - #  NPT  NMN  ***
1      1      1
501     1      1
```

END TIMESERIES

END COPY

GENER

OPCODE

```
#      # OPCD ***
```

END OPCODE

PARM

```
#      #          K ***
```

END PARM

END GENER

PERLND

GEN-INFO

```
<PLS ><-----Name----->NBLKS    Unit-systems    Printer ***
# - #          User    t-series  Engl Metr ***
                      in  out          ***
```

```
10      C, Forest, Flat          1      1      1      1      27      0
```

END GEN-INFO

*** Section PWATER***

ACTIVITY

```
<PLS > ***** Active Sections *****
# - # ATMP SNOW PWAT  SED  PST  PWG  PQAL MSTL  PEST  NITR  PHOS  TRAC ***
10      0      0      1      0      0      0      0      0      0      0      0
```

END ACTIVITY

PRINT-INFO

```
<PLS > ***** Print-flags ***** PIVL  PYR
# - # ATMP SNOW PWAT  SED  PST  PWG  PQAL MSTL  PEST  NITR  PHOS  TRAC  *****
10      0      0      4      0      0      0      0      0      0      0      0      1      9
```

END PRINT-INFO

```

PWAT-PARM1
<PLS > PWATER variable monthly parameter value flags ***
# - # CSNO RTOP UZFG VCS VUZ VNN VIFW VIRC VLE INFC HWT ***
10      0      0      0      0      0      0      0      0      0      0      0
END PWAT-PARM1

PWAT-PARM2
<PLS > PWATER input info: Part 2 ***
# - # ***FOREST LZSN INFILT LSUR SLSUR KVARV AGWRC
10      0      4.5      0.08      400      0.05      0.5      0.996
END PWAT-PARM2

PWAT-PARM3
<PLS > PWATER input info: Part 3 ***
# - # ***PETMAX PETMIN INFEXP INFILD DEEPFR BASETP AGWETP
10      0      0      2      2      0      0      0
END PWAT-PARM3

PWAT-PARM4
<PLS > PWATER input info: Part 4 ***
# - # CEPSC UZSN NSUR INTFW IRC LZETP ***
10      0.2      0.5      0.35      6      0.5      0.7
END PWAT-PARM4

PWAT-STATE1
<PLS > *** Initial conditions at start of simulation
ran from 1990 to end of 1992 (pat 1-11-95) RUN 21 ***
# - # *** CEPS SURS UZS IFWS LZS AGWS GWVS
10      0      0      0      0      2.5      1      0
END PWAT-STATE1

END PERLND

IMPLND
GEN-INFO
<PLS ><-----Name-----> Unit-systems Printer ***
# - # User t-series Engl Metr ***
in out ***
END GEN-INFO
*** Section IWATER***

ACTIVITY
<PLS > ***** Active Sections *****
# - # ATMP SNOW IWAT SLD IWG IQAL ***
END ACTIVITY

PRINT-INFO
<ILS > ***** Print-flags ***** PIVL PYR
# - # ATMP SNOW IWAT SLD IWG IQAL *****
END PRINT-INFO

IWAT-PARM1
<PLS > IWATER variable monthly parameter value flags ***
# - # CSNO RTOP VRS VNN RTLI ***
END IWAT-PARM1

IWAT-PARM2
<PLS > IWATER input info: Part 2 ***
# - # *** LSUR SLSUR NSUR RETSC
END IWAT-PARM2

IWAT-PARM3
<PLS > IWATER input info: Part 3 ***
# - # ***PETMAX PETMIN
END IWAT-PARM3

IWAT-STATE1
<PLS > *** Initial conditions at start of simulation
# - # *** RETS SURS
END IWAT-STATE1

```


END IMPLND

SCHEMATIC

| <-Source-> | | <--Area--> | | <-Target-> | MBLK | *** |
|------------|------|------------|--|------------|------|------|
| <Name> | # | <-factor-> | | <Name> | # | Tbl# |
| Basin | 1*** | | | | | |
| PERLND | 10 | 0.072 | | COPY | 501 | 12 |
| PERLND | 10 | 0.072 | | COPY | 501 | 13 |

*****Routing*****

END SCHEMATIC

NETWORK

| <-Volume-> | <-Grp> | <-Member-> | <--Mult--> | Tran | <-Target vols> | <-Grp> | <-Member-> | *** |
|------------|--------|------------|------------|-----------------|----------------|--------|------------|----------|
| <Name> | # | <Name> | # | #<-factor->strg | <Name> | # | # | <Name> |
| COPY | 501 | OUTPUT | MEAN | 1 1 | 48.4 | DISPLY | 1 | INPUT |
| | | | | | | | | TIMSER 1 |

| <-Volume-> | <-Grp> | <-Member-> | <--Mult--> | Tran | <-Target vols> | <-Grp> | <-Member-> | *** |
|------------|--------|------------|------------|-----------------|----------------|--------|------------|--------|
| <Name> | # | <Name> | # | #<-factor->strg | <Name> | # | # | <Name> |
| | | | | | | | | |

END NETWORK

RCHRES

GEN-INFO

| RCHRES | Name | Nexits | Unit Systems | Printer | *** |
|--------|---------|--------|---------------|----------------|-----|
| # - # | <-----> | <----> | User T-series | Engl Metr LKFG | *** |
| | | | in out | | *** |

END GEN-INFO

*** Section RCHRES***

ACTIVITY

<PLS > ***** Active Sections *****

| # | - | # | HYFG | ADFG | CNFG | HTFG | SDFG | GQFG | OXFG | NUFG | PKFG | PHFG | *** |
|---|---|---|------|------|------|------|------|------|------|------|------|------|-----|
|---|---|---|------|------|------|------|------|------|------|------|------|------|-----|

END ACTIVITY

PRINT-INFO

<PLS > ***** Print-flags ***** PIVL PYR

| # | - | # | HYDR | ADCA | CONS | HEAT | SED | GQL | OXRX | NUTR | PLNK | PHCB | PIVL | PYR | ***** |
|---|---|---|------|------|------|------|-----|-----|------|------|------|------|------|-----|-------|
|---|---|---|------|------|------|------|-----|-----|------|------|------|------|------|-----|-------|

END PRINT-INFO

HYDR-PARM1

| RCHRES | Flags for each HYDR Section | *** | ODGTFG for each | FUNCT for each | *** |
|--------|-----------------------------|-----------------|-----------------|-----------------|----------------|
| # - # | VC A1 A2 A3 | ODFVFG for each | *** | ODGTFG for each | FUNCT for each |
| | FG FG FG FG | possible exit | *** | possible exit | possible exit |
| | * * * * | * * * * | | * * * * | *** |

END HYDR-PARM1

HYDR-PARM2

| # | - | # | FTABNO | LEN | DELTH | STCOR | KS | DB50 | *** |
|---------|---------|---------|---------|---------|---------|---------|---------|---------|-----|
| <-----> | <-----> | <-----> | <-----> | <-----> | <-----> | <-----> | <-----> | <-----> | *** |

END HYDR-PARM2

HYDR-INIT

| RCHRES | Initial conditions for each HYDR section | *** |
|---------|---|---|
| # - # | *** VOL Initial value of COLIND Initial value of OUTDGT | |
| | *** ac-ft for each possible exit for each possible exit | |
| <-----> | <-----> | <---><---><---><---><---> *** <---><---><---><---><---> |

END HYDR-INIT

END RCHRES

SPEC-ACTIONS

END SPEC-ACTIONS

FTABLES

END FTABLES

EXT SOURCES

| <-Volume-> | <Member> | SsysSgap | <--Mult--> | Tran | <-Target vols> | <-Grp> | <-Member-> | *** |
|------------|----------|----------|------------|----------|----------------|--------|------------|--------|
| <Name> | # | <Name> | # | tem strg | <-factor->strg | <Name> | # | <Name> |
| WDM | 2 | PREC | ENGL | 1 | | PERLND | 1 | 999 |
| | | | | | | EXTNL | PREC | |
| WDM | 2 | PREC | ENGL | 1 | | IMPLND | 1 | 999 |
| | | | | | | EXTNL | PREC | |

```

WDM      1 EVAP      ENGL      1          PERLND    1 999 EXTNL  PETINP
WDM      1 EVAP      ENGL      1          IMPLND    1 999 EXTNL  PETINP

END EXT SOURCES

EXT TARGETS
<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Volume-> <Member> Tsys Tgap Amd ***
<Name>      #      <Name> # #<-factor->strg <Name>      # <Name>      tem strg strg***
COPY    501 OUTPUT MEAN    1 1      48.4      WDM      501 FLOW      ENGL      REPL
END EXT TARGETS

MASS-LINK
<Volume>    <-Grp> <-Member-><--Mult-->    <Target>          <-Grp> <-Member->***
<Name>      <Name> # #<-factor->    <Name>          <Name> # #***
  MASS-LINK      12
PERLND    PWATER SURO      0.083333    COPY          INPUT  MEAN
  END MASS-LINK    12

  MASS-LINK      13
PERLND    PWATER IFWO      0.083333    COPY          INPUT  MEAN
  END MASS-LINK    13

END MASS-LINK

END RUN

```

Mitigated UCI File

RUN

GLOBAL

```
WWMH4 model simulation
START      1901 10 01      END      2059 09 30
RUN INTERP OUTPUT LEVEL    3      0
RESUME     0 RUN          1          UNIT SYSTEM      1
END GLOBAL
```

FILES

```
<File>  <Un#>  <-----File Name----->***
<-ID->                                     ***
WDM      26      7'CombinedPermeablePavementSidewalk.wdm
MESSU    25      Mit7'CombinedPermeablePavementSidewalk.MES
          27      Mit7'CombinedPermeablePavementSidewalk.L61
          28      Mit7'CombinedPermeablePavementSidewalk.L62
          30      POC7'CombinedPermeablePavementSidewalk1.dat
END FILES
```

OPN SEQUENCE

INGRP INDELT 00:15

```
PERLND    38
IMPLND    19
RCHRES     1
COPY       1
COPY      501
DISPLY     1
```

END INGRP

END OPN SEQUENCE

DISPLY

DISPLY-INFO1

```
# - #<-----Title----->***TRAN PIVL DIG1 FIL1  PYR DIG2 FIL2 YRND
1      Permeable Pavement  1      MAX      1      2      30      9
```

END DISPLY-INFO1

END DISPLY

COPY

TIMESERIES

```
# - # NPT NMN ***
1      1      1
501     1      1
```

END TIMESERIES

END COPY

GENER

OPCODE

```
#      # OPCD ***
```

END OPCODE

PARM

```
#      #      K ***
```

END PARM

END GENER

PERLND

GEN-INFO

```
<PLS ><-----Name----->NBLKS  Unit-systems  Printer ***
# - #      User  t-series  Engl Metr ***
                        in  out      ***
```

```
38      C, Lawn, Mod      1      1      1      1      27      0
```

END GEN-INFO

*** Section PWATER***

ACTIVITY

```
<PLS > ***** Active Sections *****
# - # ATMP SNOW PWAT  SED  PST  PWG PQAL MSTL PEST NITR PHOS TRAC ***
38      0      0      1      0      0      0      0      0      0      0      0
```

END ACTIVITY

PRINT-INFO

```
<PLS > ***** Print-flags ***** PIVL  PYR
# - # ATMP SNOW PWAT  SED  PST  PWG PQAL MSTL PEST NITR PHOS TRAC *****
```

```

38      0      0      4      0      0      0      0      0      0      0      0      0      1      9
END PRINT-INFO

PWAT-PARM1
<PLS >  PWATER variable monthly parameter value flags ***
# - # CSNO RTOP UZFG VCS VUZ VNN VIFW VIRC VLE INFC HWT ***
38      0      0      0      0      0      0      0      0      0      0      0
END PWAT-PARM1

PWAT-PARM2
<PLS >  PWATER input info: Part 2 ***
# - # ***FOREST LZSN INFILT LSUR SLSUR KVARV AGWRC
38      0      4.5      0.03      400      0.1      0.5      0.996
END PWAT-PARM2

PWAT-PARM3
<PLS >  PWATER input info: Part 3 ***
# - # ***PETMAX PETMIN INFEXP INFILD DEEPFR BASETP AGWETP
38      0      0      2      2      0      0      0
END PWAT-PARM3
PWAT-PARM4
<PLS >  PWATER input info: Part 4 ***
# - # CEPSC UZSN NSUR INTFW IRC LZETP ***
38      0.1      0.25      0.25      6      0.5      0.25
END PWAT-PARM4

PWAT-STATE1
<PLS > *** Initial conditions at start of simulation
ran from 1990 to end of 1992 (pat 1-11-95) RUN 21 ***
# - # *** CEPS SURS UZS IFWS LZS AGWS GWVS
38      0      0      0      0      2.5      1      0
END PWAT-STATE1

END PERLND

IMPLND
GEN-INFO
<PLS ><-----Name-----> Unit-systems Printer ***
# - # User t-series Engr Metr ***
in out ***
19 Porous Pavement 1 1 1 27 0
END GEN-INFO
*** Section IWATER***

ACTIVITY
<PLS > ***** Active Sections *****
# - # ATMP SNOW IWAT SLD IWG IQAL ***
19      0      0      1      0      0      0
END ACTIVITY

PRINT-INFO
<ILS > ***** Print-flags ***** PIVL PYR
# - # ATMP SNOW IWAT SLD IWG IQAL *****
19      0      0      4      0      0      0      1      9
END PRINT-INFO

IWAT-PARM1
<PLS >  IWATER variable monthly parameter value flags ***
# - # CSNO RTOP VRS VNN RTLI ***
19      0      0      0      0      0
END IWAT-PARM1

IWAT-PARM2
<PLS >  IWATER input info: Part 2 ***
# - # *** LSUR SLSUR NSUR RETSC
19      400      0.01      0.1      0.1
END IWAT-PARM2

IWAT-PARM3
<PLS >  IWATER input info: Part 3 ***

```

```

# - # ***PETMAX      PETMIN
19      0      0
END IWAT-PARM3

IWAT-STATE1
<PLS > *** Initial conditions at start of simulation
# - # *** RETS      SURS
19      0      0
END IWAT-STATE1

END IMPLND

SCHEMATIC
<-Source->          <--Area-->      <-Target->      MBLK      ***
<Name> #          <-factor->      <Name> #      Tbl#      ***
IMPLND 19          0.0562      RCHRES 1      5
Lateral Basin 1***
PERLND 38          0.2845      IMPLND 19      54
PERLND 38          0.2845      IMPLND 19      55

*****Routing*****
PERLND 38          0.016      COPY 1      12
PERLND 38          0.016      COPY 1      13
RCHRES 1          1      COPY 501      17
END SCHEMATIC

NETWORK
<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Target vols> <-Grp> <-Member-> ***
<Name> #      <Name> # #<-factor->strg <Name> # #      <Name> # #      ***
COPY 501 OUTPUT MEAN 1 1 48.4      DISPLY 1      INPUT TIMSER 1

<-Volume-> <-Grp> <-Member-><--Mult-->Tran <-Target vols> <-Grp> <-Member-> ***
<Name> #      <Name> # #<-factor->strg <Name> # #      <Name> # #      ***
END NETWORK

RCHRES
GEN-INFO
RCHRES      Name      Nexits      Unit Systems      Printer      ***
# - #<-----><----> User T-series      Engl Metr LKFG      ***
in out
1      Permeable Paveme-009      2      1      1      1      28      0      1      ***
END GEN-INFO
*** Section RCHRES***

ACTIVITY
<PLS > ***** Active Sections *****
# - # HYFG ADFG CNFG HTFG SDFG GQFG OXFG NUFG PKFG PHFG ***
1      1      0      0      0      0      0      0      0      0      0
END ACTIVITY

PRINT-INFO
<PLS > ***** Print-flags ***** PIVL      PYR
# - # HYDR ADCA CONS HEAT SED GQL OXRX NUTR PLNK PHCB PIVL      PYR *****
1      4      0      0      0      0      0      0      0      0      1      9
END PRINT-INFO

HYDR-PARM1
RCHRES      Flags for each HYDR Section      ***
# - # VC A1 A2 A3 ODFVFG for each *** ODGTFG for each      FUNCT for each
FG FG FG FG possible exit *** possible exit      possible exit
* * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
1      0      1      0      0      4      5      0      0      0      0      0      0      0      0      0      2      2      2      2      2
END HYDR-PARM1

HYDR-PARM2
# - # FTABNO      LEN      DELTH      STCOR      KS      DB50      ***
<-----><-----><-----><-----><-----><-----><----->
1      1      0.01      0.0      0.0      0.5      0.0      ***

```

```

END HYDR-PARM2
HYDR-INIT
  RCHRES Initial conditions for each HYDR section ***
  # - # *** VOL Initial value of COLIND Initial value of OUTDGT
        *** ac-ft for each possible exit for each possible exit
<-----><-----> <---><---><---><---><---> *** <---><---><---><---><--->
1 0 4.0 5.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0
END HYDR-INIT
END RCHRES

```

```

SPEC-ACTIONS
END SPEC-ACTIONS
FTABLES

```

| FTABLE 1 | | | | | | | |
|----------|----------|-----------|----------|----------|----------|----------------|--|
| 91 | 5 | | | | | | |
| Depth | Area | Volume | Outflow1 | Outflow2 | Velocity | Travel Time*** | |
| (ft) | (acres) | (acre-ft) | (cfs) | (cfs) | (ft/sec) | (Minutes)*** | |
| 0.000000 | 0.056244 | 0.000000 | 0.000000 | 0.000000 | | | |
| 0.016667 | 0.056244 | 0.000187 | 0.000000 | 0.011343 | | | |
| 0.033333 | 0.056244 | 0.000375 | 0.000000 | 0.011343 | | | |
| 0.050000 | 0.056244 | 0.000562 | 0.000000 | 0.011343 | | | |
| 0.066667 | 0.056244 | 0.000750 | 0.000000 | 0.011343 | | | |
| 0.083333 | 0.056244 | 0.000937 | 0.000000 | 0.011343 | | | |
| 0.100000 | 0.056244 | 0.001125 | 0.000000 | 0.011343 | | | |
| 0.116667 | 0.056244 | 0.001312 | 0.000000 | 0.011343 | | | |
| 0.133333 | 0.056244 | 0.001500 | 0.000000 | 0.011343 | | | |
| 0.150000 | 0.056244 | 0.001687 | 0.000000 | 0.011343 | | | |
| 0.166667 | 0.056244 | 0.001875 | 0.000000 | 0.011343 | | | |
| 0.183333 | 0.056244 | 0.002062 | 0.000000 | 0.011343 | | | |
| 0.200000 | 0.056244 | 0.002250 | 0.000000 | 0.011343 | | | |
| 0.216667 | 0.056244 | 0.002437 | 0.000000 | 0.011343 | | | |
| 0.233333 | 0.056244 | 0.002625 | 0.000000 | 0.011343 | | | |
| 0.250000 | 0.056244 | 0.002812 | 0.000000 | 0.011343 | | | |
| 0.266667 | 0.056244 | 0.003000 | 0.000000 | 0.011343 | | | |
| 0.283333 | 0.056244 | 0.003187 | 0.000000 | 0.011343 | | | |
| 0.300000 | 0.056244 | 0.003375 | 0.000000 | 0.011343 | | | |
| 0.316667 | 0.056244 | 0.003562 | 0.000000 | 0.011343 | | | |
| 0.333333 | 0.056244 | 0.003750 | 0.000000 | 0.011343 | | | |
| 0.350000 | 0.056244 | 0.003937 | 0.000000 | 0.011343 | | | |
| 0.366667 | 0.056244 | 0.004125 | 0.000000 | 0.011343 | | | |
| 0.383333 | 0.056244 | 0.004312 | 0.000000 | 0.011343 | | | |
| 0.400000 | 0.056244 | 0.004500 | 0.000000 | 0.011343 | | | |
| 0.416667 | 0.056244 | 0.004687 | 0.000000 | 0.011343 | | | |
| 0.433333 | 0.056244 | 0.004875 | 0.000000 | 0.011343 | | | |
| 0.450000 | 0.056244 | 0.005062 | 0.000000 | 0.011343 | | | |
| 0.466667 | 0.056244 | 0.005249 | 0.000000 | 0.011343 | | | |
| 0.483333 | 0.056244 | 0.005437 | 0.000000 | 0.011343 | | | |
| 0.500000 | 0.056244 | 0.005624 | 0.000000 | 0.011343 | | | |
| 0.516667 | 0.056244 | 0.006562 | 0.000000 | 0.011343 | | | |
| 0.533333 | 0.056244 | 0.007499 | 0.000000 | 0.011343 | | | |
| 0.550000 | 0.056244 | 0.008437 | 0.000000 | 0.011343 | | | |
| 0.566667 | 0.056244 | 0.009374 | 0.000000 | 0.011343 | | | |
| 0.583333 | 0.056244 | 0.010311 | 0.000000 | 0.011343 | | | |
| 0.600000 | 0.056244 | 0.011249 | 0.000000 | 0.011343 | | | |
| 0.616667 | 0.056244 | 0.012186 | 0.035825 | 0.011343 | | | |
| 0.633333 | 0.056244 | 0.013124 | 0.101329 | 0.011343 | | | |
| 0.650000 | 0.056244 | 0.014061 | 0.186153 | 0.011343 | | | |
| 0.666667 | 0.056244 | 0.014998 | 0.286601 | 0.011343 | | | |
| 0.683333 | 0.056244 | 0.015936 | 0.400537 | 0.011343 | | | |
| 0.700000 | 0.056244 | 0.016873 | 0.526519 | 0.011343 | | | |
| 0.716667 | 0.056244 | 0.017811 | 0.663490 | 0.011343 | | | |
| 0.733333 | 0.056244 | 0.018748 | 0.810629 | 0.011343 | | | |
| 0.750000 | 0.056244 | 0.019685 | 0.967278 | 0.011343 | | | |
| 0.766667 | 0.056244 | 0.020623 | 1.132889 | 0.011343 | | | |
| 0.783333 | 0.056244 | 0.021560 | 1.307002 | 0.011343 | | | |
| 0.800000 | 0.056244 | 0.022498 | 1.489221 | 0.011343 | | | |
| 0.816667 | 0.056244 | 0.023435 | 1.679200 | 0.011343 | | | |
| 0.833333 | 0.056244 | 0.024373 | 1.876633 | 0.011343 | | | |
| 0.850000 | 0.056244 | 0.025310 | 2.081250 | 0.011343 | | | |
| 0.866667 | 0.056244 | 0.026247 | 2.292806 | 0.011343 | | | |

| | | | | |
|----------|----------|----------|----------|----------|
| 0.883333 | 0.056244 | 0.027185 | 2.511081 | 0.011343 |
| 0.900000 | 0.056244 | 0.028122 | 2.735874 | 0.011343 |
| 0.916667 | 0.056244 | 0.029060 | 2.967001 | 0.011343 |
| 0.933333 | 0.056244 | 0.029997 | 3.204294 | 0.011343 |
| 0.950000 | 0.056244 | 0.030934 | 3.447595 | 0.011343 |
| 0.966667 | 0.056244 | 0.031872 | 3.696761 | 0.011343 |
| 0.983333 | 0.056244 | 0.032809 | 3.951656 | 0.011343 |
| 1.000000 | 0.056244 | 0.033747 | 4.212154 | 0.011343 |
| 1.016667 | 0.056244 | 0.034684 | 4.478137 | 0.011343 |
| 1.033333 | 0.056244 | 0.035621 | 4.749494 | 0.011343 |
| 1.050000 | 0.056244 | 0.036559 | 5.026122 | 0.011343 |
| 1.066667 | 0.056244 | 0.037496 | 5.307920 | 0.011343 |
| 1.083333 | 0.056244 | 0.038434 | 5.594797 | 0.011343 |
| 1.100000 | 0.056244 | 0.039371 | 5.886664 | 0.011343 |
| 1.116667 | 0.056244 | 0.040308 | 6.183436 | 0.011343 |
| 1.133333 | 0.056244 | 0.041246 | 6.485035 | 0.011343 |
| 1.150000 | 0.056244 | 0.042183 | 6.791384 | 0.011343 |
| 1.166667 | 0.056244 | 0.043121 | 7.102410 | 0.011343 |
| 1.183333 | 0.056244 | 0.044058 | 7.418044 | 0.011343 |
| 1.200000 | 0.056244 | 0.044995 | 7.738221 | 0.011343 |
| 1.216667 | 0.056244 | 0.045933 | 8.062875 | 0.011343 |
| 1.233333 | 0.056244 | 0.046870 | 8.391947 | 0.011343 |
| 1.250000 | 0.056244 | 0.047808 | 8.725378 | 0.011343 |
| 1.266667 | 0.056244 | 0.048745 | 9.063112 | 0.011343 |
| 1.283333 | 0.056244 | 0.049682 | 9.405094 | 0.011343 |
| 1.300000 | 0.056244 | 0.050620 | 9.751273 | 0.011343 |
| 1.316667 | 0.056244 | 0.051557 | 10.10160 | 0.011343 |
| 1.333333 | 0.056244 | 0.052495 | 10.45602 | 0.011343 |
| 1.350000 | 0.056244 | 0.053432 | 10.81449 | 0.011343 |
| 1.366667 | 0.056244 | 0.054369 | 11.17697 | 0.011343 |
| 1.383333 | 0.056244 | 0.055307 | 11.54341 | 0.011343 |
| 1.400000 | 0.056244 | 0.056244 | 11.91377 | 0.011343 |
| 1.416667 | 0.056244 | 0.057182 | 12.28801 | 0.011343 |
| 1.433333 | 0.056244 | 0.058119 | 12.66608 | 0.011343 |
| 1.450000 | 0.056244 | 0.059056 | 13.04796 | 0.011343 |
| 1.466667 | 0.056244 | 0.059994 | 13.43360 | 0.011343 |
| 1.483333 | 0.056244 | 0.060931 | 13.82296 | 0.011343 |
| 1.500000 | 0.056244 | 0.061869 | 14.21602 | 0.011343 |

END FTABLE 1
END FTABLES

EXT SOURCES

| <-Volume-> | <Member> | SsysSgap<--Mult--> | Tran | <-Target | vols> | <-Grp> | <-Member-> | *** |
|------------|----------|--------------------|------|--------------------|--------|--------|------------|-------|
| <Name> | # | <Name> | # | tem strg<-factor-> | strg | <Name> | # | # |
| WDM | 2 | PREC | ENGL | 1 | PERLND | 1 | 999 | EXTNL |
| WDM | 2 | PREC | ENGL | 1 | IMPLND | 1 | 999 | EXTNL |
| WDM | 1 | EVAP | ENGL | 1 | PERLND | 1 | 999 | EXTNL |
| WDM | 1 | EVAP | ENGL | 1 | IMPLND | 1 | 999 | EXTNL |
| WDM | 1 | EVAP | ENGL | 1 | RCHRES | 1 | | EXTNL |

END EXT SOURCES

EXT TARGETS

| <-Volume-> | <-Grp> | <-Member-> | <--Mult--> | Tran | <-Volume-> | <Member> | Tsys | Tgap | Amd | *** |
|------------|--------|------------|------------|-------------|------------|----------|------|--------|------|------|
| <Name> | # | <Name> | # | #<-factor-> | strg | <Name> | # | <Name> | tem | strg |
| COPY | 1 | OUTPUT | MEAN | 1 | 1 | 48.4 | WDM | 701 | FLOW | ENGL |
| COPY | 501 | OUTPUT | MEAN | 1 | 1 | 48.4 | WDM | 801 | FLOW | ENGL |

END EXT TARGETS

MASS-LINK

| <Volume> | <-Grp> | <-Member-> | <--Mult--> | <Target> | <-Grp> | <-Member-> | *** |
|---------------|--------|------------|------------|-------------|--------|------------|-----|
| <Name> | # | <Name> | # | #<-factor-> | <Name> | # | # |
| MASS-LINK | 5 | | | | | | |
| IMPLND | IWATER | SURO | 0.083333 | RCHRES | INFLOW | IVOL | |
| END MASS-LINK | 5 | | | | | | |
| MASS-LINK | 12 | | | | | | |
| PERLND | PWATER | SURO | 0.083333 | COPY | INPUT | MEAN | |
| END MASS-LINK | 12 | | | | | | |

| | | | | | | |
|---------------|--------|------|----------|--------|-------|-------|
| MASS-LINK | 13 | | | | | |
| PERLND | PWATER | IFWO | 0.083333 | COPY | INPUT | MEAN |
| END MASS-LINK | 13 | | | | | |
| | | | | | | |
| MASS-LINK | 17 | | | | | |
| RCHRES | OFLOW | OVOL | 1 | COPY | INPUT | MEAN |
| END MASS-LINK | 17 | | | | | |
| | | | | | | |
| MASS-LINK | 54 | | | | | |
| PERLND | PWATER | SURO | | IMPLND | EXTNL | SURLI |
| END MASS-LINK | 54 | | | | | |
| | | | | | | |
| MASS-LINK | 55 | | | | | |
| PERLND | PWATER | IFWO | | IMPLND | EXTNL | SURLI |
| END MASS-LINK | 55 | | | | | |
| | | | | | | |
| END MASS-LINK | | | | | | |
| END RUN | | | | | | |

Predeveloped HSPF Message File

Mitigated HSPF Message File

Disclaimer

Legal Notice

This program and accompanying documentation are provided 'as-is' without warranty of any kind. The entire risk regarding the performance and results of this program is assumed by End User. Clear Creek Solutions Inc. and the governmental licensee or sublicensees disclaim all warranties, either expressed or implied, including but not limited to implied warranties of program and accompanying documentation. In no event shall Clear Creek Solutions Inc. be liable for any damages whatsoever (including without limitation to damages for loss of business profits, loss of business information, business interruption, and the like) arising out of the use of, or inability to use this program even if Clear Creek Solutions Inc. or their authorized representatives have been advised of the possibility of such damages. Software Copyright © by : Clear Creek Solutions, Inc. 2005-2018; All Rights Reserved.

Clear Creek Solutions, Inc.
6200 Capitol Blvd. Ste F
Olympia, WA. 98501
Toll Free 1(866)943-0304
Local (360)943-0304

www.clearcreeksolutions.com