Preliminary Hydromodification Management Study

Ocean Breeze Ranch
Tentative Map Tract No. 5615

County of San Diego, CA
July 31, 2019

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Introduction

This report summarizes the modeling efforts employed to design the hydromodification outlet controls for the proposed stormwater management basins in the Ocean Breeze Ranch development. The existing and post-developed or proposed conditions were modeled in PCSWMM to determine the orifice configurations that would ensure compliance with the hydromodification management requirements for Priority Development Projects according to the County Model BMP Design Manual.

Hydromodification Modeling Overview

The Ocean Breeze Ranch project will consist of multiple single-family housing tracts as well as estate lots spread out over a 1393.6 ac property in Bonsall, CA. Presently the site is utilized as a horse ranch and for agricultural production, and while these uses will be maintained to some degree, significant imperviousness will be added. Nineteen basins have been designed to manage the associated increase in runoff with thirteen of them serving as combined water quality, hydromodification, and peak-flow detention controls, with six discharging to a hydromodification exempt location. An offsite road area improvement area near the Camino del Rey/Lilac Road intersection will include a modular wetland unit for water quality requirements that drains into an underground vault for hydromodification requirements.

Model Description

PCSWMM is a proprietary software which utilizes the EPA's Stormwater Management Model (SWMM) as its computational engine while providing added processing and analytical capabilities to streamline design. PCSWMM is a user-friendly shell for SWMM that allows efficient development of SWMM models.

PCSWMM was used for this study based on the ability to batch create, edit and compare models, perform detention routing with the same software, and moreover, due to the tendency for SWMM to produce results that have been found to more accurately represent San Diego area watersheds than the alternative San Diego Hydrology Model (SDHM).

SWMM is a semi-distributed hydrologic and hydraulic modeling software that simulates the rainfall-runoff response of a watershed based on linear-reservoir overland flow routing. This overland flow routine considers the connectedness of pervious, impervious and Low Impact Development (LID) BMP coverage to the drainage system. The outflow from these watersheds is translated into the hydraulic component of the model that utilizes energy and momentum principles to determine flow through conduits, orifices and other structures. The hydraulics may be computed based on either the kinematic or dynamic-wave equations. In this study the latter was used because there was no need to take downstream hydraulic grade line effects into consideration.

Hydromodification Criteria

The San Diego Regional Water Quality Control Board (SDRWQCB) requires the exceedance duration of post-developed flow rates be maintained to within 10% of the pre-developed flow durations. This must occur for flow frequencies ranging from a fraction of the 2-year flow (Q2) to the 10-year flow (Q10). These flow frequency values may be calculated directly from SWMM statistics or estimated based on accepted USGS regression equations. These equations estimate flows based on a correlation with watershed area and the mean annual rainfall developed for the region.

The fraction of the Q2 that must be controlled is dependent on the relative erodibility of the channel being discharged to, categorized as either High, Medium, or Low susceptibility. By default it is assumed that all channels have a High susceptibility, and that therefore 0.1 of the Q2 must be controlled. A Geomorphic Assessment of Receiving Channels (GARC) may be performed to indicate whether the channel erosion susceptibility can be categorized as Medium or Low, allowing control to 0.3 or 0.5 of the Q2, respectively.

The table below lists all the stormwater basins with the associated point of compliance (POC) and the range of flows to be controlled, depending on if a GARC was performed and whether the USGS equations of SWMM statistics were used to calculate the flow frequencies.

Table 1 – Hydromodification Flows

Chang SCCWRP Analysis	PDC POC ID	Drainage Area (ac)	GARC Results	Q2 Fraction	USGS/ SWMM	Q2 (cfs)	Low Flow Threshold (cfs)	Q10 (cfs)
YES	1A	50.63	LOW	0.5	SWMM	23.4	11.7	38.80
	2A		HYDROMOD EXEMPT - DISCHARGE BELOW 10 YR WSE					
	2B	18.47	-	0.1	SWMM	1.06	0.15	4.01
	2C		HYDROMOD EXEMPT - DISCHARGE BELOW 10 YR WSE					
	2D		HYDROMOD EXEMPT - DISCHARGE BELOW 10 YR WSE					
	2E		HYDROMOD EXEMPT - DISCHARGE BELOW 10 YR WSE					
	2F		HYDROMOD EXEMPT - DISCHARGE BELOW 10 YR WSE					
	2G		HYDROMOD EXEMPT - DISCHARGE BELOW 10 YR WSE					
	2H	2.10	-	0.1	SWMM	4.95	0.50	7.85
	3A	4.11	-	0.1	SWMM	2.06	0.21	3.41
	3B	1.06	-	0.1	SWMM	0.67	0.07	1.04
	3C	8.29	HIGH	0.1	SWMM	4.33	0.43	6.83
	3D	15.00	-	0.1	SWMM	2.38	0.24	5.66
	3E	1.61	-	0.1	SWMM	0.78	0.07	1.28
	3F	1.50	-	0.1	SWMM	0.64	0.06	1.12
	3G	2.02	-	0.1	SWMM	0.91	0.09	1.56
Yes	3H	9.15	-	0.5	SWMM	3.69	1.84	6.56
	3J	4.93		0.1	SWMM	3.13	0.31	4.84
	OFF3	7.51	-	0.1	SWMM	3.39	0.34	5.88

Model Development

The inputs required for a SWMM model include rainfall, evapotranspiration rates, watershed characteristics and BMP configurations. For this study the Fallbrook Gage from the Project Clean Water website and the daily evapotranspiration rates from Table G.1-1 in the BMP Design Manual, based on the project location within Zone 6 of the California Irrigation management Information System "Reference Evapotranspiration Zones," were utilized.

Watershed boundaries were delineated based on post-developed conditions for both existing and proposed models to ensure a 1:1 comparison between pre-project and post-project conditions. In some cases, the pre-developed basins were split to distinguish between pre-developed slope conditions. Watershed characteristics were assigned appropriate parameter values according to the San Diego County BMP Design Manual and the EPA's SWMM User's Manual Version 5.1. The N-pervious parameters varied per DMA and values were taken from Table G.1-4 of the County BMP Design Manual and the Supplemental Handout #2. A portion of the north section of Area 1A does not drain to the POC in the predeveloped conditions, but is being redirected in the proposed condition. This area was not modeled in the predeveloped conditions, but was added in the post condition to show compliance to POC 1A.

As the site includes all four hydrologic soil groups as well as many different land covers, composite values for the Green-Ampt infiltration parameters, depression storage and overland flow roughness coefficient were calculated based on the soil groups. Attachment 2 of this report provides the calculated parameters for each sub-catchment and the model schematic for both pre and proposed conditions.

Stormwater Basin Modeling for Hydromodification Compliance

Ninteen stormwater basins were sited and conservatively sized to manage water quality and peak flow requirements within the Ocean Breeze Ranch project. Thirteen of these discharge to a point of compliance (POC) requiring hydromodification management as well, and these basins were modelled continuously to ensure compliance could be met. The Status Report SWMM output file for the existing condition is provided in Attachment 3 and the proposed condition is provided in Attachment 4. Onsite alternative compliance was included in this project for small areas of proposed AC due to road widening southwest and southeast of the major development area. Basins 2H and 3H accounted for these areas as pervious in the pre project condition and impervious in the post condition directly tieing into the POC and not routed to the basins. See schematic in Attachment 2. The hydromodification vault will take in commingled runon from the north and east from Camino Del Rey and West Lilac Road (See Hydromodification Exhibit 4 of 4)

Flow Frequency Analysis

The range of flows that are managed by each basin are provided in Table 1. This table includes the calculation method used to develop them as well as the erosion susceptibility findings of the Geomorphic Assessment of Receiving Channels, per a separate report from Chang Consultants. These statistics are provided in Attachment 6.

Stormwater Basin Model

The basins were all represented in SWMM using the LID controls and the storage node. This is due to the ability of storage nodes to simulate orifice discharge with stage-storage curves above the ponding depth and the bioretention LID module that represents the outflow and basin geometry and soils. Only the open water storage volumes were accounted for in the stage- storage curves meaning the media storage was neglected and not added in as an equivalent storage depth. The stage-storage curves are input as straight line interpolations between the top and bottom areas as provided in Table 2. Infiltration rates were assigned to the storage nodes based on infiltration testing results provided in the Stormwater Quality Management Plan (SWQMP).

Table 2 - Basin Storage Curves

Basin ID /POC ID	Bottom Area (sf)	Top Area (sf)	Depth (ft)
1A	57,285	79,376	6
2B	19,586	25,934	5
2H	6,782	10,162	3.5
3A	3,570	8,270	6
3B	3,488	7742	5
3C	7,590	13,472	5
3D	19,750	26,398	5
3E	1,870	5,704	5
3F	826	2,869	3.5
3G	1,784	3,963	4
3H	1,864	4,125	2.5
3I	4,990	5,496	2
3J	4,092	6,175	5
Vault	1,300	1,300	5

Orifice Configuration and Sizing

Full infiltration basins were initially assigned a mid, low and/or high flow orifice. Partial retention and no infiltrations basins were assigned these as well as an underdrain orifice. Initial sizes and invert depths were based on an estimate of what would be expected to meet peak flow, hydromodification, and water quality control requirements together. These include maintaining a ponded surface of a minimum of 6 inches for water quality, a total drawdown time of less than 96 hours, and reducing peak flows while ensuring an appropriate free board. Simulation runs were performed and these sizes and depths were adjusted until the flow duration requirements were met for the flow rates corresponding to the required control frequencies (fraction of the 2 year to the 10 year). A number of iterations were performed on the outlet configurations between the peak flow and hydromodification SWMM models until all requirements were satisfied. The orifice sizes and configurations are provided in Attachment 6.

Flow Duration Curves for Hydromodification Compliance

Pre and post developed flow duration exceedance curves were developed for the hourly flow data using an automatic partial duration series calculator in PCSWMM. These curves were graphed over the flow ranges listed in Table 1 and are provided in Attachment 7. Calculations for the flow duration curves have also been provided in Attachment 7. In all cases the duration of post developed flows are brought to within that of the pre developed flows for a fraction of the two year flow to the ten year flow indicating compliance.

Drawdown

To check that that all the basins would drawdown within the required 96 hour period, the storage depths were graphed for one of the largest events during the rainfall record, during which over 4 inches fell in around 6 hours. As the graphs in Attachment 8 show, all basins drawdown to the bottom surface area, or very nearly so, within 48 hours, at which point more rainfall begins to refill them.

Summary

Based on the SWMM model results for this study it is determined that all proposed basins and the proposed underground vault will be able to satisfy the hydromodification criteria. This study is intended to demonstrate that the basins as sized are capable of providing hydromodification compliance and a full outlet design will be performed during final engineering.

Attachments

1 — Hydromodification Management Exhibit

2 — SWMM Model w/ Subcatchment Parameters and Schematics

3 — SWMM Output – Existing Condition

4 — SWMM Output – Proposed Conditions

5 — Flow Frequency Statistical Analysis results

6 — Basin Cross Sections

7 — Orifice Configurations

8 — Flow Duration Curves

9 — Drawdown Graphs

10 – CD with electronic files

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ATTACHMENT 1

Hydromodification Management Exhibit

BMP SUMMARY TABLE

DMA ID	DMA TYPE	DMA SIZE (AC.)	BMP ID	BMP FOOTPRINT (SF)	BMP TYPE	BMP MODEL NO.
1	DRAINS TO BMP	50.63	BASIN 1A	57,285	LINED BIOFILTRATION (BF–2)	N/A
2	DRAINS TO BMP	18.28	BASIN 2A	21,468		
3	DRAINS TO BMP	18.47	BASIN 2B	19,596	BIOFILTRATION PARTIAL (PR–1)	
4A,B	DRAINS TO BMP	5.91	BASIN 2C	5,120	LINED BIOFILTRATION (BF–2)	
5	DRAINS TO BMP	7.35	BASIN 2D	6,851	INFILTRATION (INF–1)	
6	DRAINS TO BMP	2.91	BASIN 2E	2,917		
7	DRAINS TO BMP	3.73	BASIN 2F	3,226		
8	DRAINS TO BMP	3.65	BASIN 2G	3,158		
17	DRAINS TO BMP	9.28	BASIN 2H	6,782	BIOFILTRATION PARTIAL (PR–1)	
9	DRAINS TO BMP	4.11	BASIN 3A	3,570	BIOFILTRATION PARTIAL (PR–1)	
10	DRAINS TO BMP	1.06	BASIN 3B	3,488	BIOFILTRATION PARTIAL (PR–1)	
11	DRAINS TO BMP	8.29	BASIN 3C	7,590	BIOFILTRATION PARTIAL (PR–1)	
12	DRAINS TO BMP	15.00	BASIN 3D	19,750	INFILTRATION (INF–1)	
13	DRAINS TO BMP	1.61	BASIN 3E	1,870	BIOFILTRATION PARTIAL (PR–1)	
14	DRAINS TO BMP	1.50	BASIN 3F	826	INFILTRATION (INF–1)	
15	DRAINS TO BMP	2.02	BASIN 3G	1,784	BIOFILTRATION PARTIAL (PR–1)	
16	DRAINS TO BMP	3.10	BASIN 3H	1,864	BIOFILTRATION PARTIAL (PR–1)	
19	DRAINS TO BMP	6.14	BASIN 3I	4,990	BIOFILTRATION PARTIAL (PR–1)	
20	DRAINS TO BMP	4.93	BASIN 3J	4,092	BIOFILTRATION PARTIAL (PR–1)	
18	DRAINS TO BMP	7.51	HYDROMOD VAULT #1	1,300	HYDROMOD	N/A

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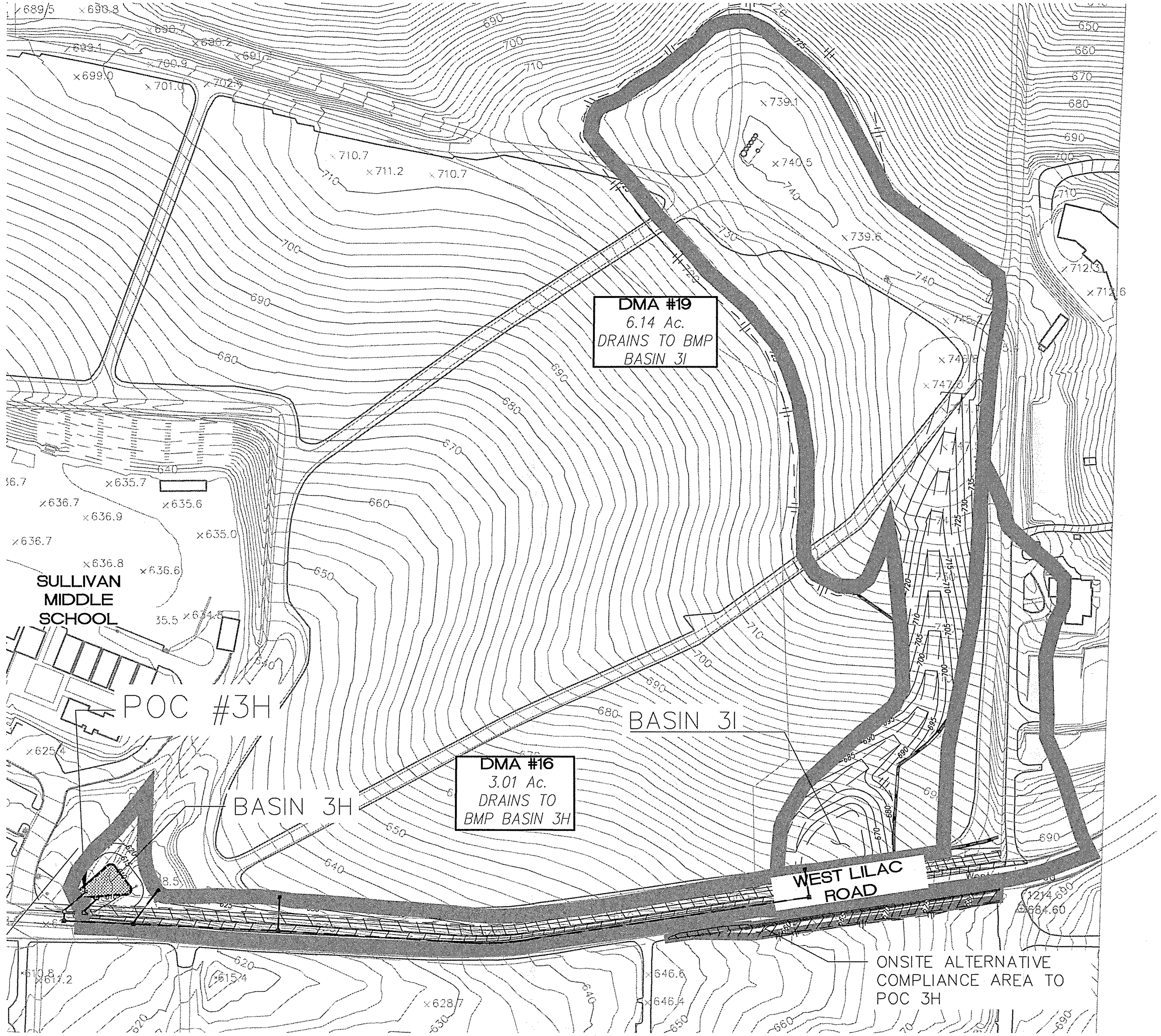
SCALE: 1" = 150'	**COUNTY OF SAN DIEGO**
JOB #: 4192	**OCEAN BREEZE RANCH**
CREATED: 8/29/16	*HYDROMODIFICATION MGMT Exhibit (1 of 4)*

ISTING EQUESTRIAN FACILITY
TO SEPARATE MUP DMA MAP FOR STORM WATER QUALITY
DMA INFORMATION FOR THIS AREA
FOR CONTINUATION SEE EXHIBIT 1 of 4
SAN LUIS
PLANNING AREA 3
PLANNING AREA 1
POC #3A
POC #3B
POC #3C
POC #3D
POC #3E
POC #3F
POC #3G
POC #3H
POC #3J
BASIN 3A
BASIN 3D
BASIN 3E
DMA 1
50.63 AC
DMA 11
8.29 AC
DMA 12
DMA 13
DMA 19
6.14 AC
DMA 20
4.93 AC
AREA NOT INCLUDED IN PRE CONDITION. ADDED IN POST CONDITION DUE TO GRADING
NORMAN L. SULLIVAN MIDDLE SCHOOL
W LILAC RD
Note: Groundwater depth varies from 3 to > 20 feet
LEGEND
DRAINAGE BOUNDARY
SOIL TYPES
PREPARED BY:
PROJECT DESIGN CONSULTANTS
Planning | Landscape Architecture | Engineering | Survey
SCALE: 1" = 200'
JOB #: 4192
CREATED: 8/29/16
COUNTY OF SAN DIEGO
OCEAN BREEZE RANCH
HYDROMODIFICATION MGMT
Exhibit (2 of 4)

LEGEND:

DRAINAGE MANAGEMENT AREA

PROPOSED BMP



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CREATED:	11/20/18

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PROJECT DESIGN CONSULTANTS
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COUNTY OF SAN DIEGO

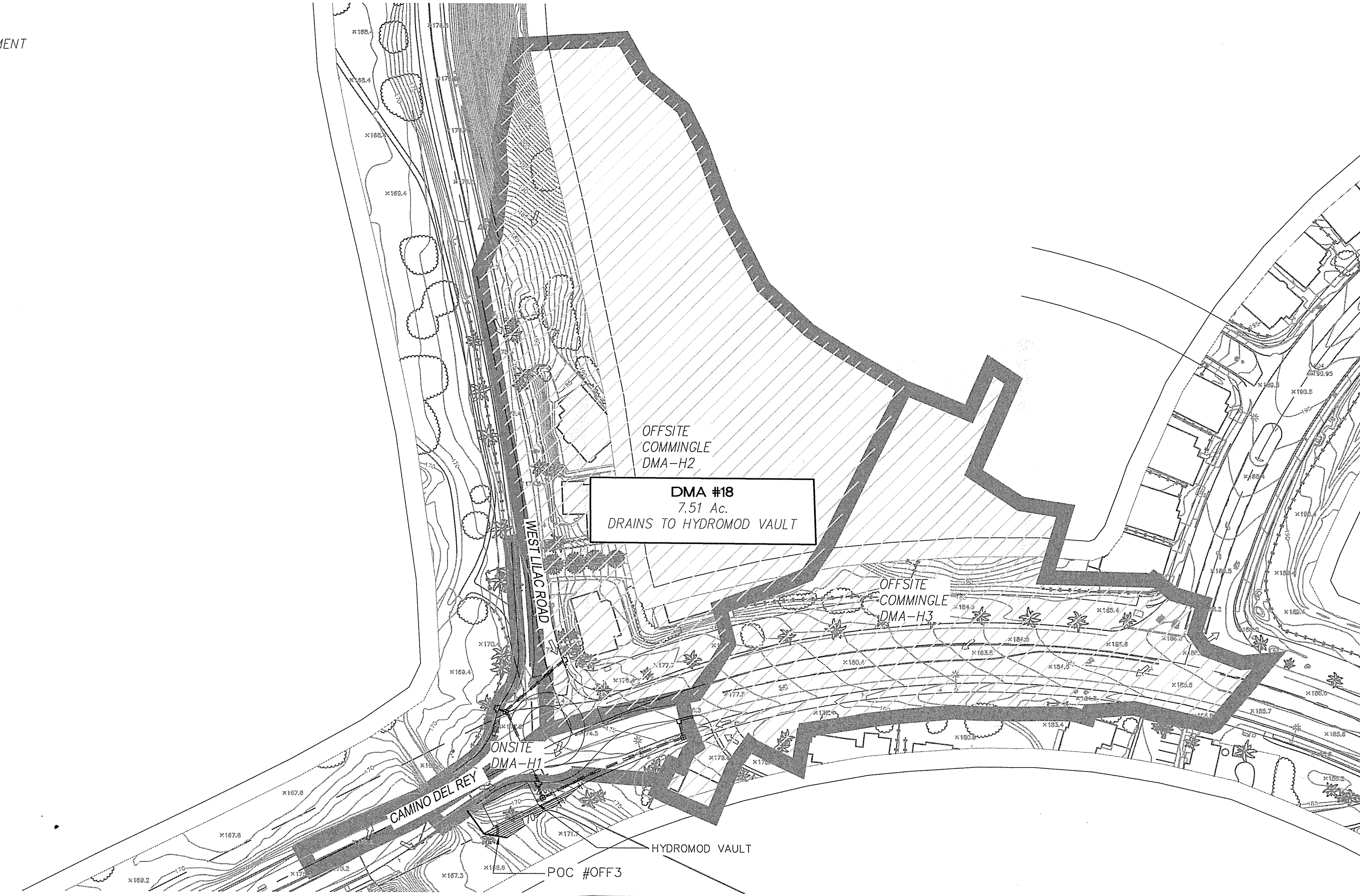
OCEAN BREEZE RANCH

HYDROMODIFICATION MGMT EXHIBIT (3 OF 4)

LEGEND:

DRAINAGE MANAGEMENT AREA

PROPOSED HYDROMOD VAULT



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SCALE:	1"=100'
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COUNTY OF SAN DIEGO

OCEAN BREEZE RANCH

HYDROMODIFICATION MGMT
EXHIBIT (4 OF 4)

P:\4192\Engr\Reports\Hydromod\EXH\4192 Hydromod Exhibit Offsite.dwg 7/30/2019 4:52:10 PM

2

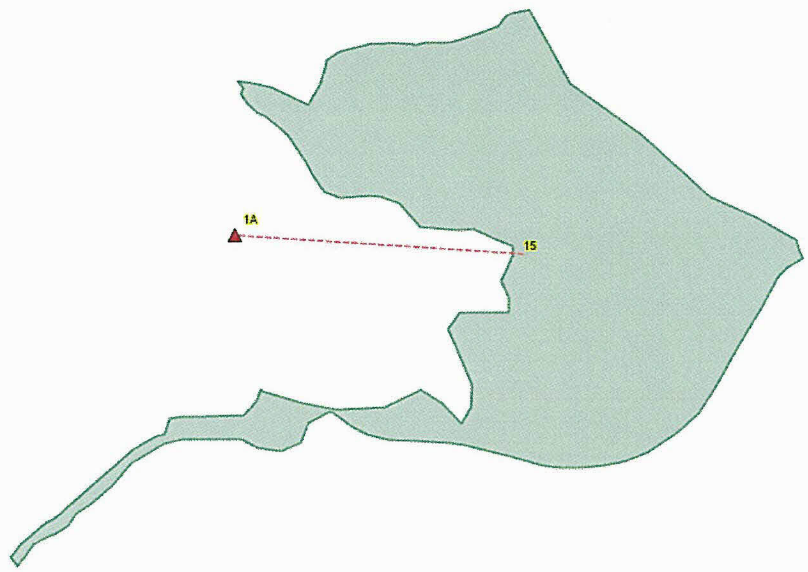
ATTACHMENT 2

SWMM Model with

Sub-catchment Parameters and Schematic

Existing Conditions

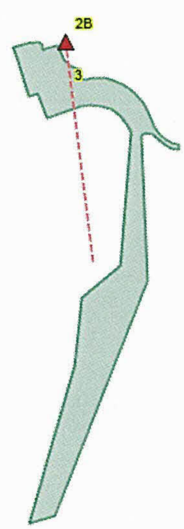
POC 1A



Subcatchments

Name	Rain Gage	Outlet	Area (ac)	Width (ft)	Flow Length (ft)	Slope (%)	Imperv. (%)	N Imperv	N Perv	Dstore Imperv (in)	Dstore Perv (in)	Zero Imperv (%)	Subarea Routing	Percent Routed (%)	Suction Head (in)	Conductivity (in/hr)	Initial Deficit (frac.)
15	Fallbrook	1A	45.48	1319....	1501.927	8.91	0	0.012	0.03	0.05	0.1	0	OUTLET	100	7.8	0.062	0.304

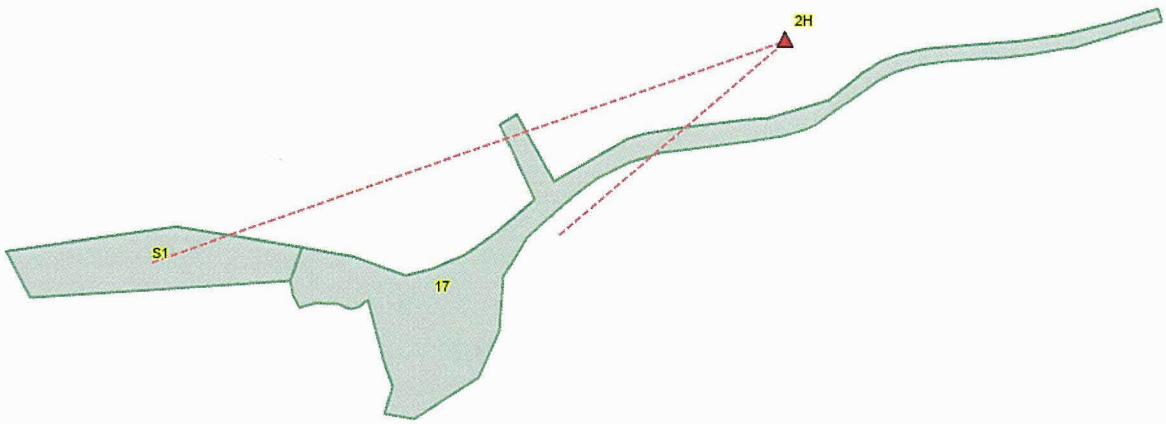
POC 2B



Subcatchments

Name	Rain Gage	Outlet	Area (ac)	Width (ft)	Flow Length (ft)	Slope (%)	Imperv. (%)	N Imperv	N Perv	Dstore Imperv (in)	Dstore Perv (in)	Zero Imperv (%)	Subarea Routing	Percent Routed (%)	Suction Head (in)	Conductivity (in/hr)	Initial Deficit (frac.)
3	Fallbrook	2B	18.47	226.826	3547	2.9	0	0.012	0.15	0.05	0.1	25	OUTLET	100	3.14	0.23	0.322

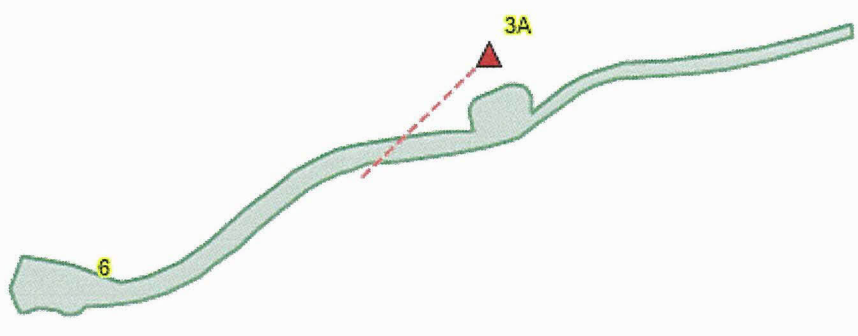
POC 2H



Subcatchments

Name	Rain Gage	Outlet	Area (ac)	Width (ft)	Flow Length (ft)	Slope (%)	Imperv. (%)	N Imperv	N Perv	Dstore Imperv (in)	Dstore Perv (in)	Zero Imperv (%)	Subarea Routing	Percent Routed (%)	Suction Head (in)	Conductivity (in/hr)	Initial Deficit (frac.)
17	Fallbrook	2H	9.28	164.525	2456.993	15.1	0	0.012	0.015	0.05	0.1	25	OUTLET	100	6	0.1	0.31
S1	Fallbrook	2H	0.35	27	564.667	1.92	0	0.01	0.15	0.05	0.1	25	OUTLET	100	6	0.1	0.31

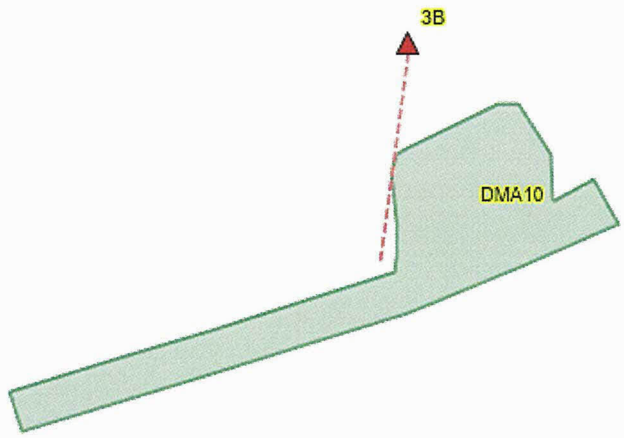
POC 3A



Subcatchments

Name	Rain Gage	Outlet	Area (ac)	Width (ft)	Flow Length (ft)	Slope (%)	Imperv. (%)	N Imperv	N Perv	Dstore Imperv (in)	Dstore Perv (in)	Zero Imperv (%)	Subarea Routing	Percent Routed (%)	Curb Length	Suction Head (in)	Conductivity (in/hr)	Initial Deficit (frac.)
6	Fallbrook	3A	4.11	625.985	286	20.2	0	0.012	0.03	0.05	0.1	25	OUTLET	100	0	6.14	0.096	0.31

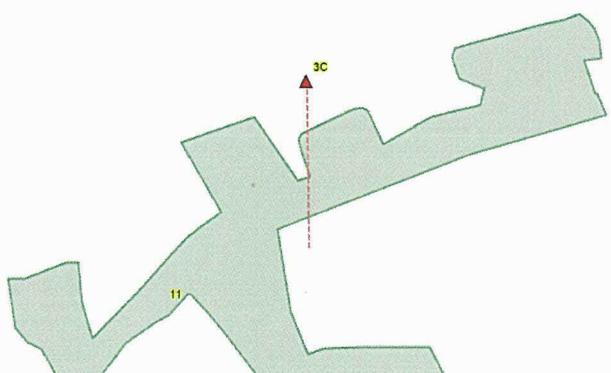
POC 3B



Subcatchments

Name	Rain Gage	Outlet	Area (ac)	Width (ft)	Flow Length (ft)	Slope (%)	Imperv. (%)	N Imperv	N Perv	Dstore Imperv (in)	Dstore Perv (in)	Zero Imperv (%)	Subarea Routing	Percent Routed (%)	Suction Head (in)	Conductivity (in/hr)	Initial Deficit (frac.)
DMA10	Fallbrook	3B	1.06	278.539	165.771	13.3	0	0.012	0.025	0.05	0.1	0	OUTLET	100	6	0.01	0.31

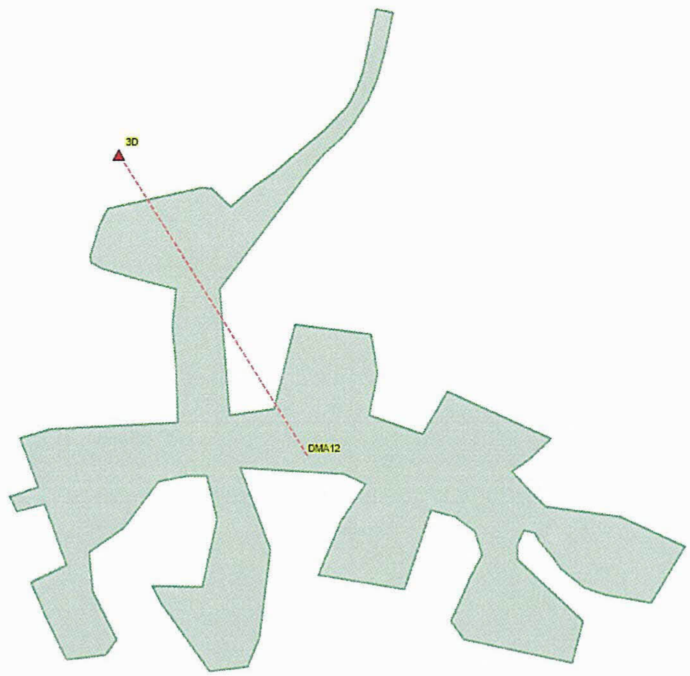
POC 3C



Subcatchments

Name	Rain Gage	Outlet	Area (ac)	Width (ft)	Flow Length (ft)	Slope (%)	Imperv. (%)	N Imperv	N Perv	Dstore Imperv (in)	Dstore Perv (in)	Zero Imperv (%)	Subarea Routing	Percent Routed (%)	Suction Head (in)	Conductivity (in/hr)	Initial Deficit (frac.)
11	Fallbrook	3C	76.2558	464.009	7158.703	4.16	0	0.012	0.025	0.05	0.1	25	OUTLET	100	6	0.1	0.31

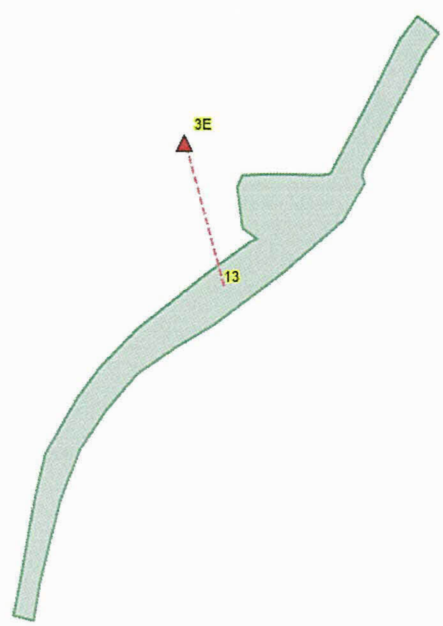
POC 3D



Subcatchments

Name	Rain Gage	Outlet	Area (ac)	Width (ft)	Flow Length (ft)	Slope (%)	Imperv. (%)	N Imperv	N Perv	Dstore Imperv (in)	Dstore Perv (in)	Zero Imperv (%)	Subarea Routing	Percent Routed (%)	Suction Head (in)	Conductivity (in/hr)	Initial Deficit (frac.)
4	Fallbrook	3D	13.17	379.673	1511	5.67	0	0.015	0.32	0.05	0.1	25	OUTLET	100	5.7	0.11	0.31

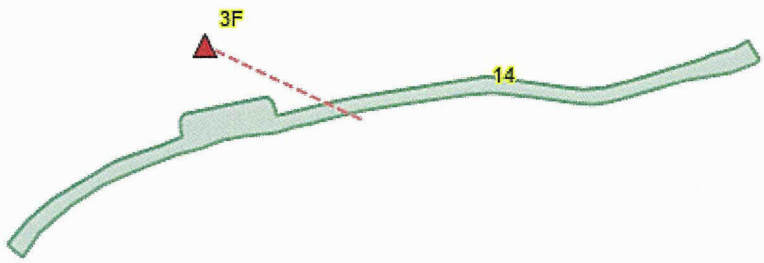
POC 3E



Subcatchments

Name	Rain Gage	Outlet	Area (ac)	Width (ft)	Flow Length (ft)	Slope (%)	Imperv. (%)	N Imperv	N Perv	Dstore Imperv (in)	Dstore Perv (in)	Zero Imperv (%)	Subarea Routing	Percent Routed (%)	Suction Head (in)	Conductivity (in/hr)	Initial Deficit (frac.)
13	Fallbrook	3E	1.61	143.126	490	3.26	0	0.012	0.03	0.05	0.1	0	OUTLET	100	5.47	0.12	0.31

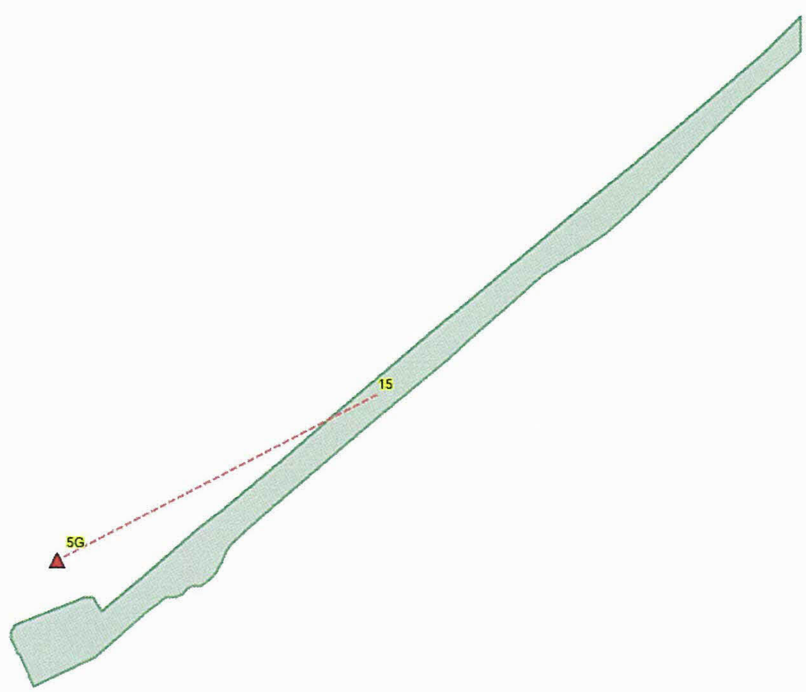
POC 3F



Subcatchments

Name	Rain Gage	Outlet	Area (ac)	Width (ft)	Flow Length (ft)	Slope (%)	Imperv. (%)	N Imperv	N Perv	Dstore Imperv (in)	Dstore Perv (in)	Zero Imperv (%)	Subarea Routing	Percent Routed (%)	Snow Pack	Suction Head (in)	Conductivity (in/hr)	Initial Deficit (frac.)
14	Fallbrook	3F	1.5	830.452	78.68	5.12	0	0.012	0.15	0.05	0.1	25	OUTLET	100		4.48	0.17	0.314

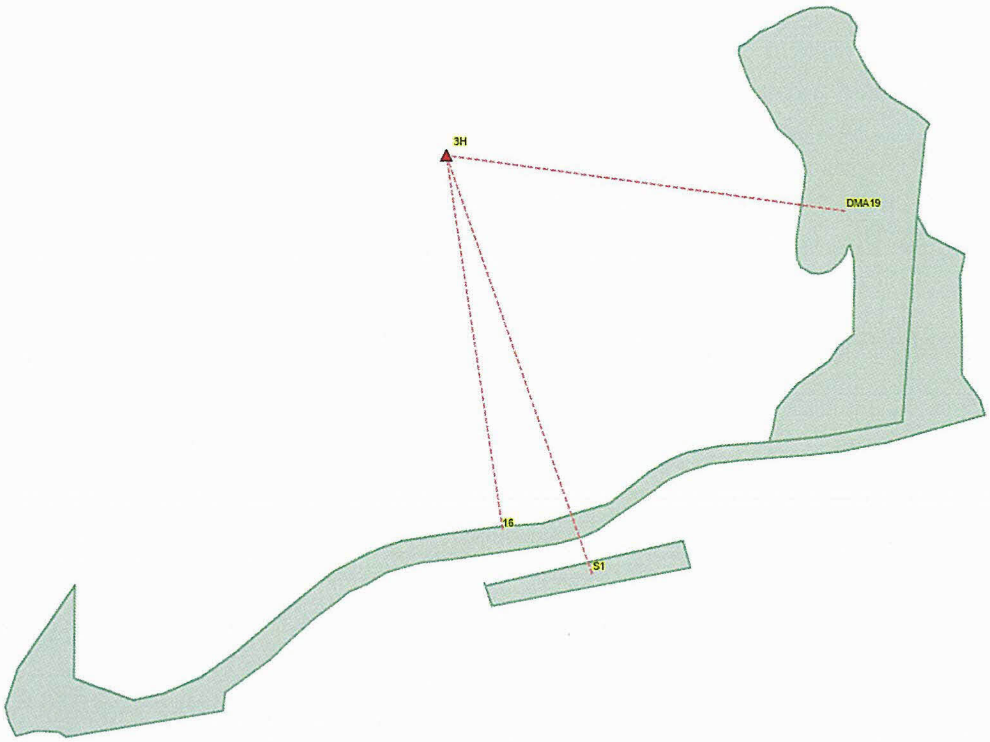
POC 3G



Subcatchments

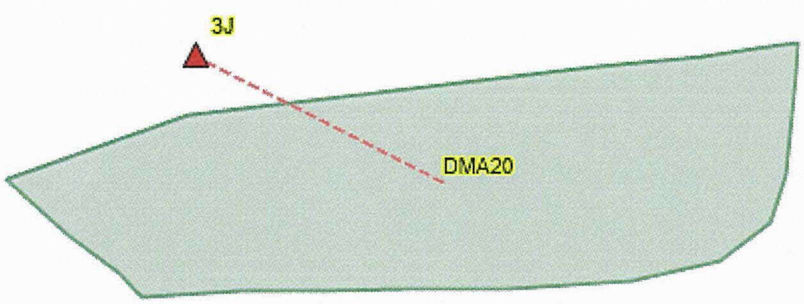
Name	Rain Gage	Outlet	Area (ac)	Width (ft)	Flow Length (ft)	Slope (%)	Imperv. (%)	N Imperv	N Perv	Dstore Imperv (in)	Dstore Perv (in)	Zero Imperv (%)	Subarea Routing	Percent Routed (%)	Suction Head (in)	Conductivity (in/hr)	Initial Deficit (frac.)
15	Fallbrook	5G	2.02	926.223	95	18.9	0	0.012	0.15	0.05	0.1	25	OUTLET	100	4.71	0.15	0.315

POC 3H



Subcatchments																			
Name	Rain Gage	Outlet	Area (ac)	Width (ft)	Flow Length (ft)	Slope (%)	Imperv. (%)	N Imperv	N Perv	Dstore Imperv (in)	Dstore Perv (in)	Zero Imperv (%)	Subarea Routing	Percent Routed (%)	Suction Head (in)	Conductivity (in/hr)	Initial Deficit (frac.)		
16	Fallbrook	3H	2.14	248.251	375.5	12.25	0	0.012	0.15	0.05	0.1	25	OUTLET	0	6	0.1	0.301		

POC 3J



Subcatchments																
Name	Rain Gage	Outlet	Area (ac)	Width (ft)	Flow Length (ft)	Slope (%)	Imperv. (%)	N Imperv	N Perv	Dstore Imperv (in)	Dstore Perv (in)	Zero Imperv (%)	Suction Head (in)	Conductivity (in/hr)	Initial Deficit (frac.)	
DMA20	Fallbrook	3J	4.93	860.2	249.652	7.69	0	0.012	0.03	0.05	0.1	25	6	0.01	0.31	

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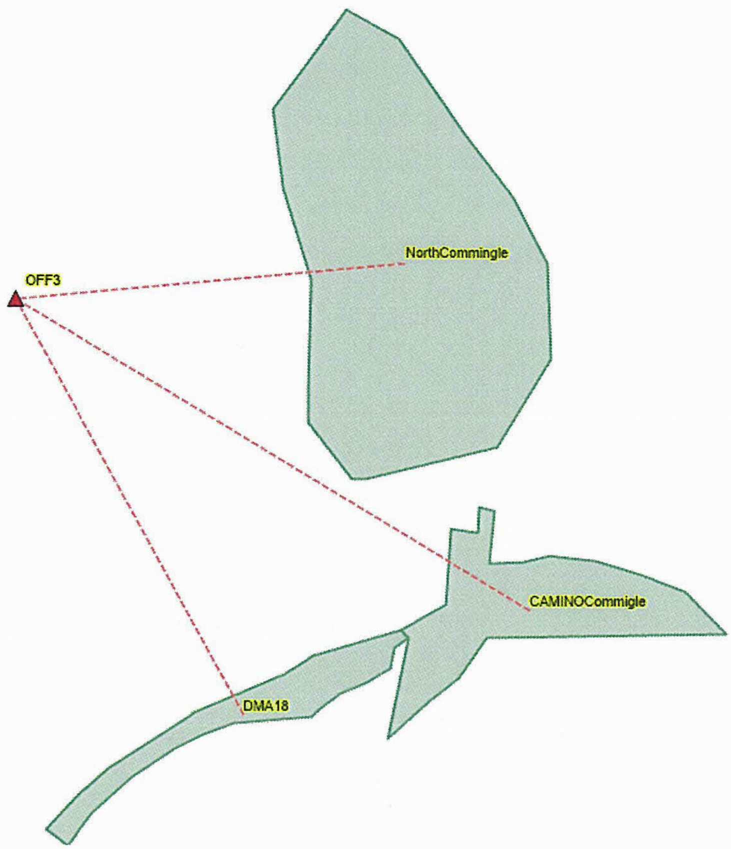
POC OFF3

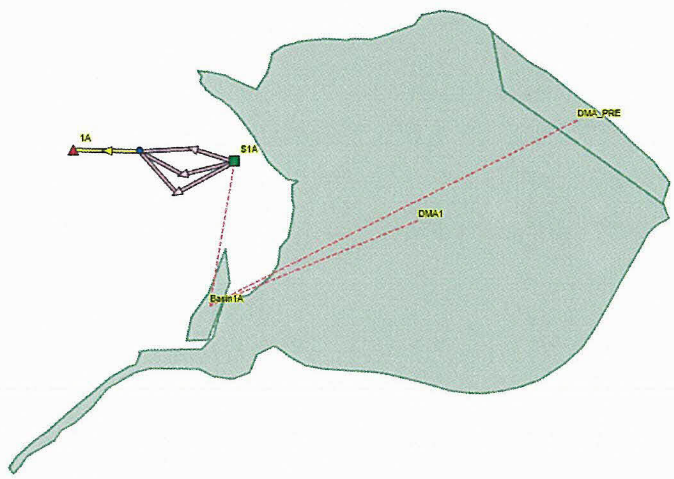


Subcatchments

Name	Rain Gage	Outlet	Area (ac)	Width (ft)	Flow Length (ft)	Slope (%)	Imperv. (%)	N Imperv	N Perv	Dstore Imperv (in)	Dstore Perv (in)	Zero Imperv (%)	Subarea Routing	Percent Routed (%)	Suction Head (in)	Conductivity (in/hr)	Initial Deficit (frac.)
DMA18	Fallbrook	OFF3	0.97	110.525	382.295	4.98	11.3	0.012	0.15	0.05	0.1	25	OUTLET	100	3.12	0.17	0.322
CAMINOCommigle	Fallbrook	OFF3	2.63	217	527.939	2.1	42.2	0.012	0.15	0.05	0.1	25	OUTLET	100	6.12	0.074	0.309
NorthCommingle	Fallbrook	OFF3	4.31	430	436.613	2.1	18.8	0.012	0.15	0.05	0.1	25	OUTLET	100	5.88	0.131	0.312

Proposed Conditions

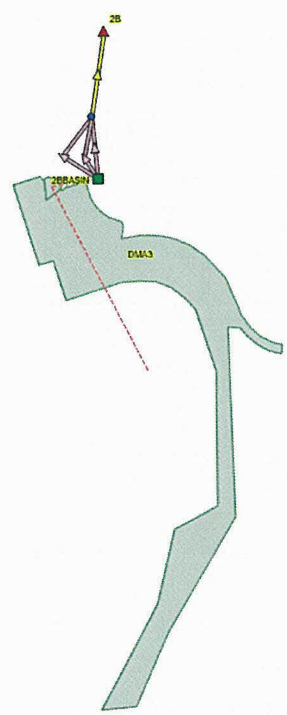
POC 1A



Subcatchments

Name	Rain Gage	Outlet	Area (ac)	Width (ft)	Flow Length (ft)	Slope (%)	Imperv. (%)	N Imperv	N Perv	Dstore Imperv (in)	Dstore Perv (in)	Zero Imperv (%)	Subarea Routing	Percent Routed (%)	LID Controls	LID Names	Suction Head (in)	Conductivity (in/hr)	Initial Deficit (frac.)
Basin1A	Fallbrook	S1A	1.31	131	435.6	0.1	0	0.012	0.15	0.05	0.1	25	OUTLET	100	1	LID1A	3	0.1	0
DMA_PRE	Fallbrook	BASIN1A	5.15	1319.045	170.073	8.37	70	0.012	0.15	0.05	0.1	25	OUTLET	100	0		3	0.046	0.304
DMA1	Fallbrook	BASIN1A	45.48	1319.045	1501.927	8.37	70	0.012	0.15	0.05	0.1	25	OUTLET	100	0		3	0.046	0.304

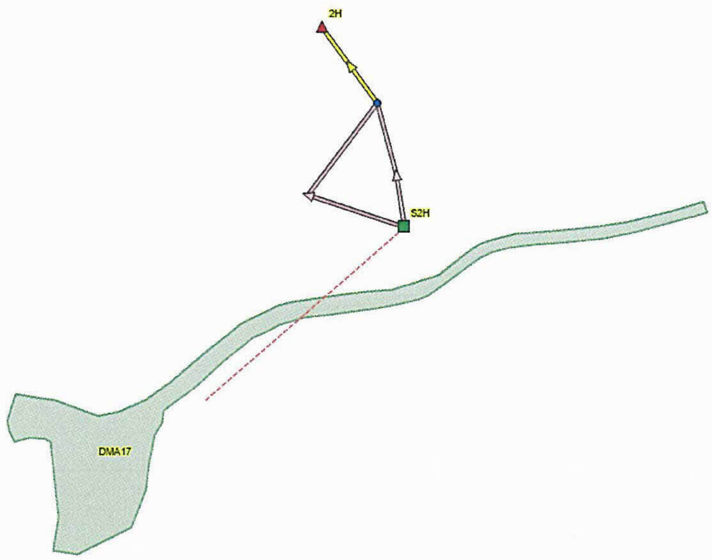
POC 2B



Subcatchments

Name	Rain Gage	Outlet	Area (ac)	Width (ft)	Flow Length (ft)	Slope (%)	Imperv. (%)	N Imperv	N Perv	Dstore Imperv (in)	Dstore Perv (in)	Zero Imperv (%)	Subarea Routing	Percent Routed (%)	LID Controls	LID Names	Suction Head (in)	Conductivity (in/hr)	Initial Deficit (frac.)
DMA3	Fallbrook	2BBASIN	18.021	221.312	3547	2.9	70	0.012	0.15	0.05	0.1	25	OUTLET	100	0	LID2B	3.14	0.17	0.322
2BBASIN	Fallbrook	S2b	0.449	96.347	203	0.1	0	0.012	0.15	0.05	0.1	25	OUTLET	100	1	LID2B	3.14	3.5	0

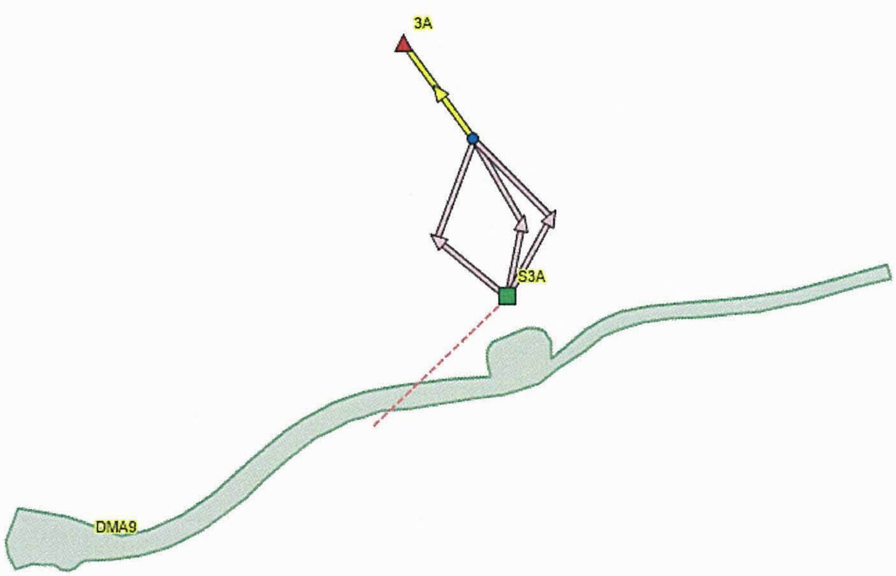
POC 2H



Subcatchments

Name	Rain Gage	Outlet	Area (ac)	Width (ft)	Flow Length (ft)	Slope (%)	Imperv. (%)	N Imperv	N Perv	Dstore Imperv (in)	Dstore Perv (in)	Zero Imperv (%)	Subarea Routing	Percent Routed (%)	LID Controls	LID Names	Suction Head (in)	Conductivity (in/hr)	Initial Deficit (frac.)
DMA17	Fallbrook	S2H	2.1	55.339	1653	6.65	70	0.01	0.15	0.05	0.1	25	OUT...	0	1	2H	8.06	0.036	0.303

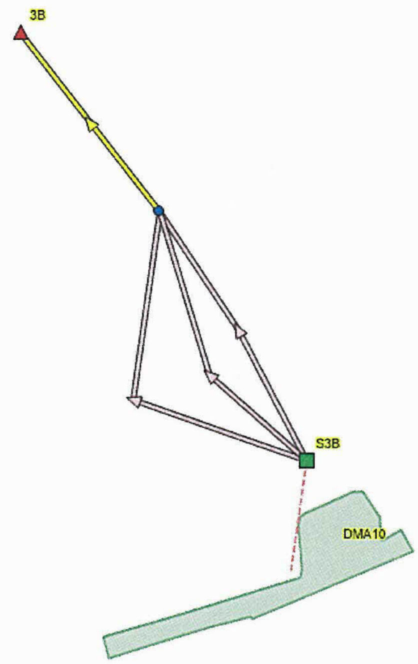
POC 3A



Subcatchments

Name	Rain Gage	Outlet	Area (ac)	Width (ft)	Flow Length (ft)	Slope (%)	Imperv. (%)	N Imperv	N Perv	Dstore Imperv (in)	Dstore Perv (in)	Zero Imperv (%)	Subarea Routing	Percent Routed (%)	LID Controls	LID Names	Suction Head (in)	Conductivity (in/hr)	Initial Deficit (frac.)
DMA9	Fallbrook	S3A	4.11	1005.683	178.02	2	70	0.012	0.15	0.05	0.1	25	OUTLET	0	1	3A	6.28	0.096	0.31

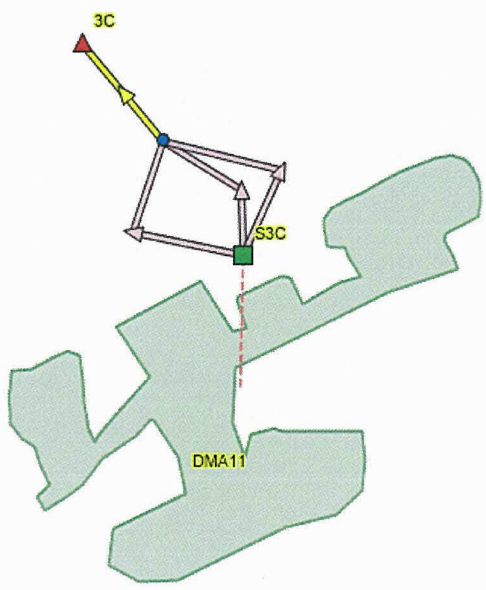
POC 3B



Subcatchments

Name	Rain Gage	Outlet	Area (ac)	Width (ft)	Flow Length (ft)	Slope (%)	Imperv. (%)	N Imperv	N Perv	Dstore Imperv (in)	Dstore Perv (in)	Zero Imperv (%)	Subarea Routing	Percent Routed (%)	LID Controls	LID Names	Suction Head (in)	Conductivity (in/hr)	Initial Deficit (frac.)
BYPASS	Fallbrook	3B	1.2	218.711	239	14.2	0	0.012	0.15	0.05	0.1	25	OUTLET	100	0		6	0.1	0.31
DMA10	Fallbrook	S3B	1.07	50.939	915	1.8	90	0.012	0.15	0.05	0.1	25	OUTLET	100	1	3B	6	0.075	0.31

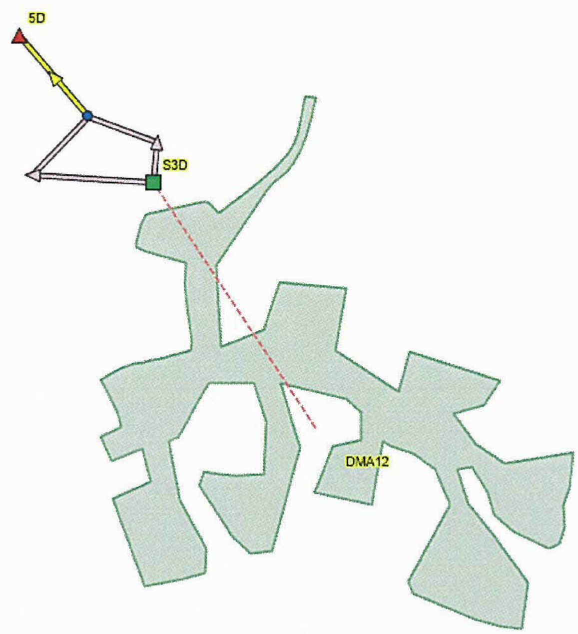
POC 3C



Subcatchments

Name	Rain Gage	Outlet	Area (ac)	Width (ft)	Flow Length (ft)	Slope (%)	Imperv. (%)	N Imperv	N Perv	Dstore Imperv (in)	Dstore Perv (in)	Zero Imperv (%)	Subarea Routing	Percent Routed (%)	N-Perv Pattern	LID Controls	LID Names	Suction Head (in)	Conductivity (in/hr)	Initial Deficit (frac.)
DMA11	Fallbrook	S3C	8.29	818.53	441.172	2.5	39	0.012	0.15	0.05	0.1	25	OUTLET	100		1	3C	6	0.075	0.31

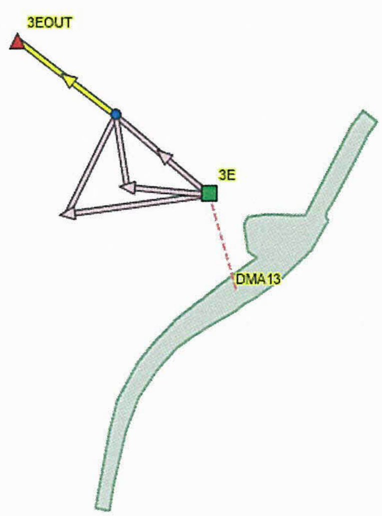
POC 3D



Subcatchments

Name	Rain Gage	Outlet	Area (ac)	Width (ft)	Flow Length (ft)	Slope (%)	Imperv. (%)	N Imperv	N Perv	Dstore Imperv (in)	Dstore Perv (in)	Zero Imperv (%)	Subarea Routing	Percent Routed (%)	LID Controls	LID Names	Suction Head (in)	Conductivity (in/hr)	Initial Deficit (frac.)
DMA12	Fallbrook	S3D	15	352	1856.25	4.7	40	0.012	0.15	0.05	0.1	25	OUTLET	0	0		5.7	0.082	0.31

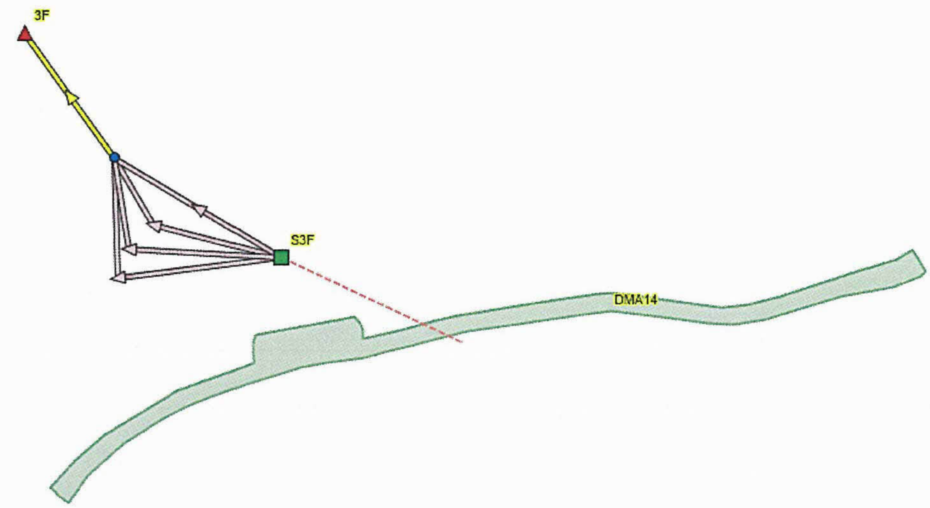
POC 3E



Subcatchments

Name	Rain Gage	Outlet	Area (ac)	Width (ft)	Flow Length (ft)	Slope (%)	Imperv. (%)	N Imperv	N Perv	Dstore Imperv (in)	Dstore Perv (in)	Zero Imperv (%)	Subarea Routing	Percent Routed (%)	LID Controls	LID Names	Suction Head (in)	Conductivity (in/hr)	Initial Deficit (frac.)
DMA13	Fallbrook	3E	1.8897	108.099	761.48	2.55	90	0.01	0.15	0.05	0.1	25	OUTLET	100	1	3E	5.47	0.092	0.312

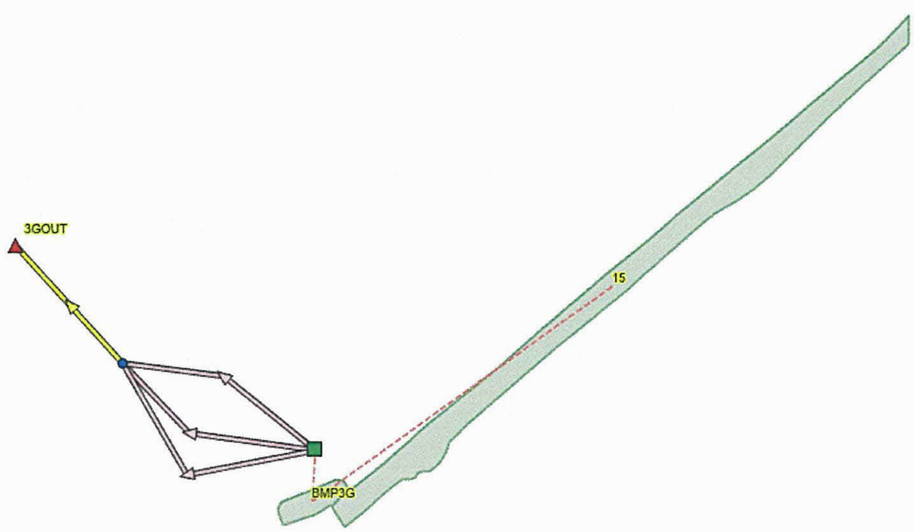
POC 3F



Subcatchments

Name	Rain Gage	Outlet	Area (ac)	Width (ft)	Flow Length (ft)	Slope (%)	Imperv. (%)	N Imperv	N Perv	Dstore Imperv (in)	Dstore Perv (in)	Zero Imperv (%)	Subarea Routing	Percent Routed (%)	LID Controls	LID Names	Suction Head (in)	Conductivity (in/hr)	Initial Deficit (frac.)
DMA14	Fallbrook	S3f	1.5	66.663	980.16	1.5	90	0.012	0.15	0.05	0.1	25	OUTLET	0	0		4.48	0.128	0.314

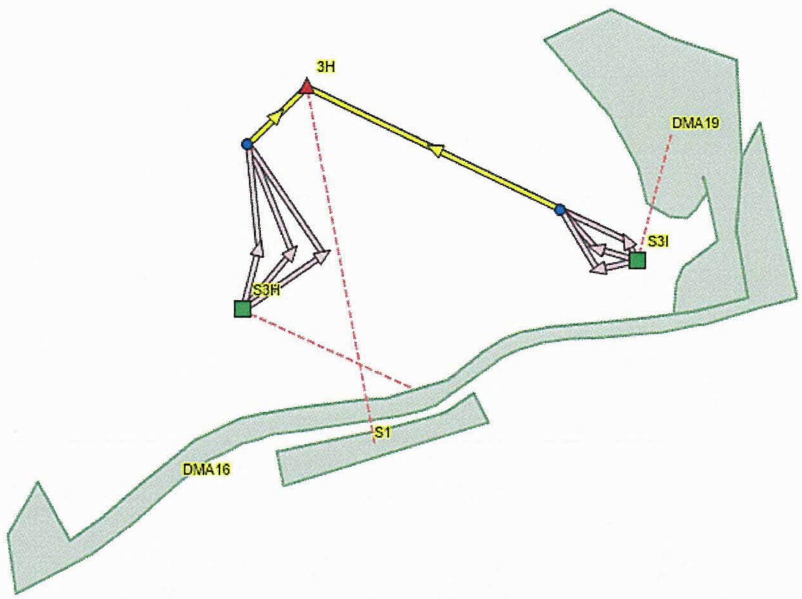
POC 3G



Subcatchments

Name	Rain Gage	Outlet	Area (ac)	Width (ft)	Flow Length (ft)	Slope (%)	Imperv. (%)	N Imperv	N Perv	Dstore Imperv (in)	Dstore Perv (in)	Zero Imperv (%)	Subarea Routing	LID Controls	LID Names	Suction Head (in)	Conductivity (in/hr)	Initial Deficit (frac.)
BMP3G	Fallbrook	3G	0.0409	17.816	100	0.1	0	0.012	0.15	0.05	0.1	25	OUTLET	1	3G	4.71	0.38	0
15	Fallbrook	bmp3G	1.98	60.696	1421	1.76	90	0.012	0.15	0.05	0.1	25	OUTLET	0	3G	4.71	0.112	0.315

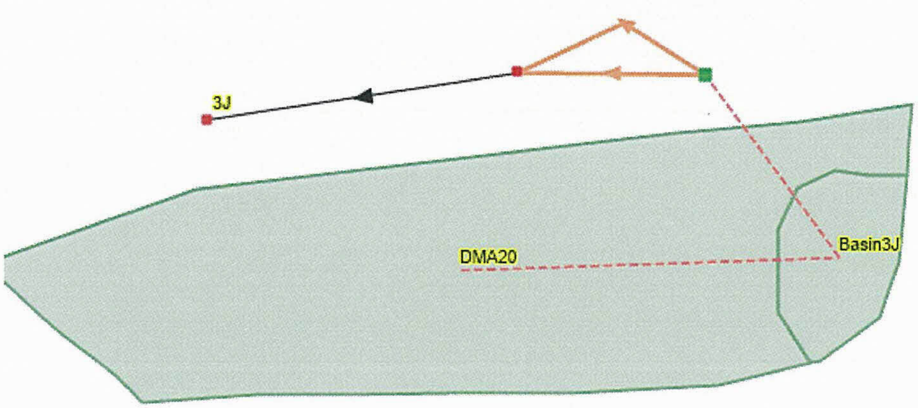
POC 3H



Subcatchments

Name	Rain Gage	Outlet	Area (ac)	Width (ft)	Flow Length (ft)	Slope (%)	Imperv. (%)	N Imperv	N Perv	Dstore Imperv (in)	Dstore Perv (in)	Zero Imperv (%)	Subarea Routing	Percent Routed (%)	LID Controls	LID Names	Suction Head (in)	Conductivity (in/hr)	Initial Deficit (frac.)
DMA16	Fallbrook	S3H	2.1	55.339	1653	6.65	70	0.01	0.15	0.05	0.1	25	OUTLET	0	1	2H	6	0.1	0.31

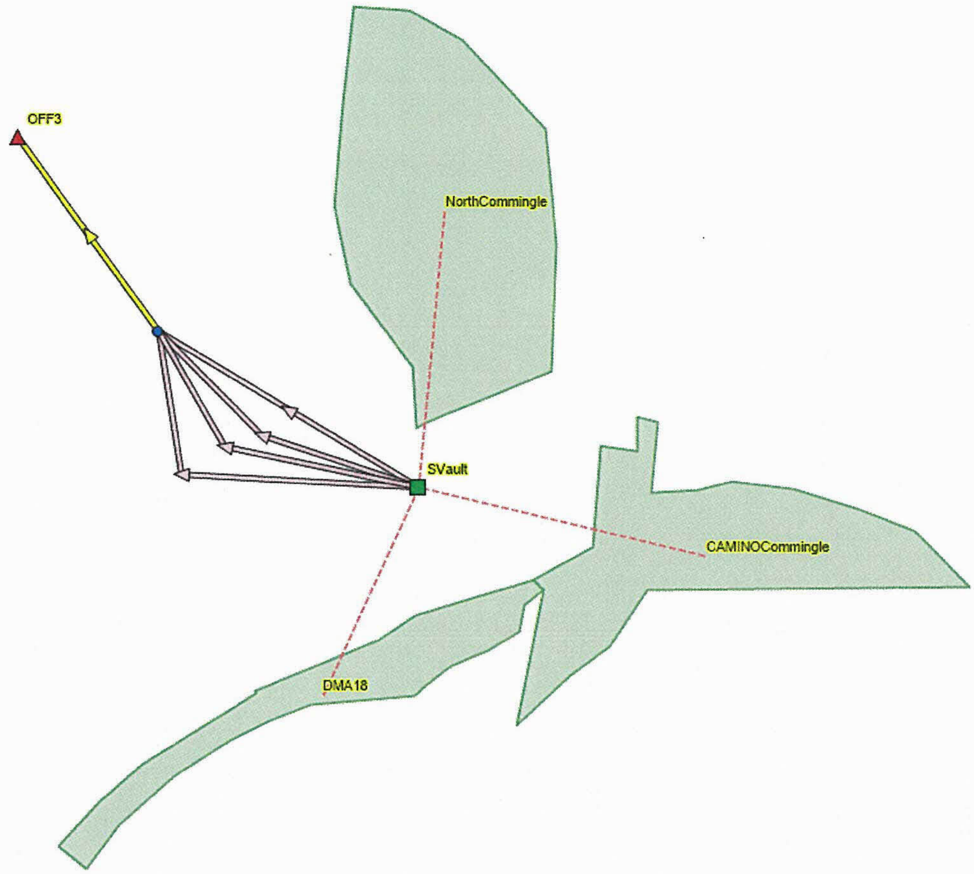
POC 3J



Subcatchments

Name	Rain Gage	Outlet	Area (ac)	Width (ft)	Flow Length (ft)	Slope (%)	Imperv. (%)	N Imperv	N Perv	Dstore Imperv (in)	Dstore Perv (in)	Zero Imperv (%)	Subarea Routing	Percent Routed (%)	LID Controls	LID Names	Suction Head (in)	Conductivity (in/hr)	Initial Deficit (frac.)
DMA20	Fallbrook	Basin3J	4.69	860.2	237.499	1	12	0.012	0.03	0.05	0.1	25	OUTLET	100	0		6	0.008	0.31
Basin3J	Fallbrook	SU1	0.24	118	88.597	1	0	0.012	0.03	0.05	0.1	25	OUTLET	100	1	3J	6	0.008	0.31

POC OFF3



Subcatchments

Name	Rain Gage	Outlet	Area (ac)	Width (ft)	Flow Length (ft)	Slope (%)	Imperv. (%)	N Imperv	N Perv	Dstore Imperv (in)	Dstore Perv (in)	Zero Imperv (%)	Subarea Routing	Percent Routed (%)	Suction Head (in)	Conductivity (in/hr)	Initial Deficit (frac.)
DMA18	Fallbrook	SVault	0.57	110.525	224.648	2.5	73.7	0.012	0.15	0.05	0.1	25	OUTLET	100	3.12	0.17	0.322
CAMINOCommigle	Fallbrook	SVault	2.63	217	527.939	2.1	42.2	0.012	0.15	0.05	0.1	25	OUTLET	100	6.12	0.074	0.309
NorthCommingle	Fallbrook	SVault	4.31	430	436.613	2.2	21.8	0.012	0.15	0.05	0.1	25	OUTLET	100	5.88	0.131	0.312

SWMM Flow Coefficient Calculation

SWMM Model Flow Coefficient Calculation

Basin 1A

PARAMETER	ABBREV.	Bio-Retention Cell LID BMP	
Ponding Depth	PD	6	in
Bioretention Soil Layer	S	18	in
Gravel Layer	G	12	in
TOTAL		3.0	ft
		36	in
Orifice Coefficient	C_g	0.6	--
Low Flow Orifice Diameter	D	3	in
Drain exponent	n	0.5	--
Flow Rate (volumetric)	Q	0.401	cfs
Ponding Depth Surface Area	A_{PD}	60152	ft^2
Bioretention Surface Area	A_S, A_G	57285	ft^2
	A_S, A_G	1.3151	ac
Porosity of Bioretention Soil	n	0.40	-
Flow Rate (per unit area)	q	0.756	in/hr
Effective Ponding Depth	PD_{eff}	6.15	in
Flow Coefficient	C	0.1286	--

SWMM Model Flow Coefficient Calculation

Basin 2B

PARAMETER	ABBREV.	Bio-Retention Cell LID BMP	
Ponding Depth	PD	6	in
Bioretention Soil Layer	S	18	in
Gravel Layer	G	12	in
TOTAL		3.0	ft
		36	in
Orifice Coefficient	C_g	0.6	--
Low Flow Orifice Diameter	D	1	in
Drain exponent	n	0.5	--
Flow Rate (volumetric)	Q	0.045	cfs
Ponding Depth Surface Area	A_{PD}	22451	ft^2
Bioretention Surface Area	A_S, A_G	19956	ft^2
	A_S, A_G	0.4581	ac
Porosity of Bioretention Soil	n	0.40	-
Flow Rate (per unit area)	q	0.244	in/hr
Effective Ponding Depth	PD_{eff}	6.38	in
Flow Coefficient	C	0.0410	--

SWMM Model Flow Coefficient Calculation

Basin 3A

PARAMETER	ABBREV.	Bio-Retention Cell	
Ponding Depth	PD	6	in
Bioretention Soil Layer	S	18	in
Gravel Layer	G	12	in
TOTAL		3.0	ft
		36	in
Orifice Coefficient	C_g	0.6	--
Low Flow Orifice Diameter	D	1	in
Drain exponent	n	0.5	--
Flow Rate (volumetric)	Q	0.045	cfs
Ponding Depth Surface Area	A_{PD}	3785	ft^2
Bioretention Surface Area	A_S, A_G	3534	ft^2
	A_S, A_G	0.0811	ac
Porosity of Bioretention Soil	n	0.40	-
Flow Rate (per unit area)	q	1.380	in/hr
Effective Ponding Depth	PD_{eff}	6.21	in
Flow Coefficient	C	0.2317	--

SWMM Model Flow Coefficient Calculation

Basin 3B

PARAMETER	ABBREV.	Bio-Retention Cell	
Ponding Depth	PD	6	in
Bioretention Soil Layer	S	18	in
Gravel Layer	G	12	in
TOTAL		3.0	ft
		36	in
Orifice Coefficient	C_g	0.6	--
Low Flow Orifice Diameter	D	2	in
Drain exponent	n	0.5	--
Flow Rate (volumetric)	Q	0.179	cfs
Ponding Depth Surface Area	A_{PD}	4215	ft^2
Bioretention Surface Area	A_S, A_G	3996	ft^2
	A_S, A_G	0.0917	ac
Porosity of Bioretention Soil	n	0.40	-
Flow Rate (per unit area)	q	4.849	in/hr
Effective Ponding Depth	PD_{eff}	6.16	in
Flow Coefficient	C	0.8196	--

SWMM Model Flow Coefficient Calculation

Basin 3C

PARAMETER	ABBREV.	Bio-Retention Cell	
Ponding Depth	PD	6	in
Bioretention Soil Layer	S	18	in
Gravel Layer	G	12	in
TOTAL		3.0	ft
		36	in
Orifice Coefficient	C_g	0.6	--
Low Flow Orifice Diameter	D	2	in
Drain exponent	n	0.5	--
Flow Rate (volumetric)	Q	0.179	cfs
Ponding Depth Surface Area	A_{PD}	7415	ft^2
Bioretention Surface Area	A_S, A_G	7196	ft^2
	A_S, A_G	0.1652	ac
Porosity of Bioretention Soil	n	0.40	-
Flow Rate (per unit area)	q	2.693	in/hr
Effective Ponding Depth	PD_{eff}	6.09	in
Flow Coefficient	C	0.4551	--

SWMM Model Flow Coefficient Calculation

Basin 3G

PARAMETER	ABBREV.	Bio-Retention Cell	
Ponding Depth	PD	6	in
Bioretention Soil Layer	S	18	in
Gravel Layer	G	12	in
TOTAL		3.0	ft
		36	in
Orifice Coefficient	C_g	0.6	--
Low Flow Orifice Diameter	D	1	in
Drain exponent	n	0.5	--
Flow Rate (volumetric)	Q	0.045	cfs
Ponding Depth Surface Area	A_{PD}	1974	ft^2
Bioretention Surface Area	A_S, A_G	1872	ft^2
	A_S, A_G	0.0430	ac
Porosity of Bioretention Soil	n	0.40	-
Flow Rate (per unit area)	q	2.606	in/hr
Effective Ponding Depth	PD_{eff}	6.16	in
Flow Coefficient	C	0.4374	--

SWMM Model Flow Coefficient Calculation

Basin 3H

PARAMETER	ABBREV.	Bio-Retention Cell	
Ponding Depth	PD	6	in
Bioretention Soil Layer	S	18	in
Gravel Layer	G	12	in
TOTAL		3.0	ft
		36	in
Orifice Coefficient	C_g	0.6	--
Low Flow Orifice Diameter	D	1	in
Drain exponent	n	0.5	--
Flow Rate (volumetric)	Q	0.045	cfs
Ponding Depth Surface Area	A_{PD}	2144	ft^2
Bioretention Surface Area	A_S, A_G	1865	ft^2
	A_S, A_G	0.0428	ac
Porosity of Bioretention Soil	n	0.40	-
Flow Rate (per unit area)	q	2.616	in/hr
Effective Ponding Depth	PD_{eff}	6.45	in
Flow Coefficient	C	0.4390	--

SWMM Model Flow Coefficient Calculation

Basin 2H

PARAMETER	ABBREV.	Bio-Retention Cell	
Ponding Depth	PD	6	in
Bioretention Soil Layer	S	18	in
Gravel Layer	G	12	in
TOTAL		3.0	ft
		36	in
Orifice Coefficient	C_g	0.6	--
Low Flow Orifice Diameter	D	1	in
Drain exponent	n	0.5	--
Flow Rate (volumetric)	Q	0.045	cfs
Ponding Depth Surface Area	A_{PD}	7182	ft^2
Bioretention Surface Area	A_S, A_G	6782	ft^2
	A_S, A_G	0.1557	ac
Porosity of Bioretention Soil	n	0.40	-
Flow Rate (per unit area)	q	0.719	in/hr
Effective Ponding Depth	PD_{eff}	6.18	in
Flow Coefficient	C	0.1207	--

SWMM Model Flow Coefficient Calculation

Basin 3J

PARAMETER	ABBREV.	Bio-Retention Cell	
Ponding Depth	PD	6	in
Bioretention Soil Layer	S	18	in
Gravel Layer	G	12	in
TOTAL		3.0	ft
		36	in
Orifice Coefficient	C_g	0.6	--
Low Flow Orifice Diameter	D	2	in
Drain exponent	n	0.5	--
Flow Rate (volumetric)	Q	0.179	cfs
Ponding Depth Surface Area	A_{PD}	1974	ft^2
Bioretention Surface Area	A_S, A_G	9796	ft^2
	A_S, A_G	0.2249	ac
Porosity of Bioretention Soil	n	0.40	-
Flow Rate (per unit area)	q	1.978	in/hr
Effective Ponding Depth	PD_{eff}	3.60	in
Flow Coefficient	C	0.3343	--

DMA Soil Types for SWMM Infiltration Parameters

Basin 1A

	SF	%	suction Head	Conductivity	Deficit
Soil A	217737.5	0.10	1.5	0.3	0.33
Soil B		0.00	3	0.2	0.32
Soil C	313036.9	0.14	6	0.1	0.31
Soil D	1674655	0.76	9	0.025	0.3
Total	2205430	100	7.834	0.063	0.304

Basin 2B

	SF	%	Suction Head	Conductivity	Deficit
Soil A	504729.3	0.63	1.5	0.3	0.33
Soil B	104882	0.13	3	0.2	0.32
Soil C	100040	0.12	6	0.1	0.31
Soil D	94826.8	0.12	9	0.025	0.3
Total	804478	100	3.139	0.230	0.323

Basin 2H

	SF	%	Suction Head	Conductivity	Deficit
Soil A		0.00	1.5	0.3	0.33
Soil B		0.00	3	0.2	0.32
Soil C	127893.5	0.31	6	0.1	0.31
Soil D	281081.1	0.69	9	0.025	0.3
Total	408974.6	100	8.062	0.048	0.303

Basin 3A

	SF	%	Suction Head	Conductivity	Deficit
Soil A		0.00	1.5	0.3	0.33
Soil B		0.00	3	0.2	0.32
Soil C	170852.8	0.95	6	0.1	0.31
Soil D	8357	0.05	9	0.025	0.3
Total	179209.8	100	6.140	0.097	0.310

Basin 3B

	SF	%	Suction Head	Conductivity	Deficit
Soil A		0.00	1.5	0.3	0.33
Soil B		0.00	3	0.2	0.32
Soil C	98944.3	1.00	6	0.1	0.31
Soil D		0.00	9	0.025	0.3
Total	98944.3	100	6.00	0.10	0.31

Basin 3C

	SF	%	Suction Head	Conductivity	Deficit
Soil A		0.00	1.5	0.3	0.33
Soil B		0.00	3	0.2	0.32
Soil C	256123.4	1.00	6	0.1	0.31
Soil D		0.00	9	0.025	0.3
Total	256123.4	100	6.00	0.10	0.31

Basin 3D

	SF	%	Suction Head	Conductivity	Deficit
Soil A		0.00	1.5	0.3	0.33
Soil B	57899	0.10	3	0.2	0.32
Soil C	515880	0.90	6	0.1	0.31
Soil D		0.00	9	0.025	0.3
Total	573779	100	5.697	0.110	0.311

Basin 3E

	SF	%	Suction Head	Conductivity	Deficit
Soil A	8147.2	0.12	1.5	0.3	0.33
Soil B		0.00	3	0.2	0.32
Soil C	61839.7	0.88	6	0.1	0.31
Soil D		0.00	9	0.025	0.3
Total	70025.8	100	5.473	0.123	0.312

Basin 3F

	SF	%	suction Head	Cond	Deficit
Soil A	23611	0.362	1.5	0.3	0.33
Soil B	15831.9	0.243	3	0.2	0.32
Soil C	6056.6	0.093	6	0.1	0.31
Soil	19237.6	0.295	9	0.025	0.3
Total	65249.6	100	4.481	0.174	0.314

Basin 3G

	SF	%	Suction Head	Conductivity	Deficit
Soil A		0.000	1.5	0.3	0.33
Soil B	53350.9	0.607	3	0.2	0.32
Soil C	18575	0.211	6	0.1	0.31
Soil	15983	0.182	9	0.025	0.3
Total	87909	100	4.725	0.147	0.314

Basin 3H

	SF	%	Suction Head	Conductivity	Deficit
Soil A		0	1.5	0.3	0.33
Soil B		0	3	0.2	0.32
Soil C	93260	1	6	0.1	0.31
Soil D		0	9	0.025	0.3
Total	93260	100	6	0.1	0.31

Basin 3I

	SF	%	Suction Head	Conductivity	Deficit
Soil A		0	1.5	0.3	0.33
Soil B	35117	0.13	3	0.2	0.32
Soil C	232275	0.87	6	0.1	0.31
Soil D	0	0	9	0.025	0.3
Total	267392	100	5.606	0.113	0.311

Basin 3J

	SF	%	Suction Head	Conductivity	Deficit
Soil A		0	1.5	0.3	0.33
Soil B		0	3	0.2	0.32
Soil C	214964	1	6	0.1	0.31
Soil D		0	9	0.025	0.3
Total	214964	100	6	0.1	0.31

Vault-Onsite

	SF	%	Suction Head	Conductivity	Deficit
Soil A	27032	0.64	1.5	0.3	0.33
Soil B			3	0.2	0.32
Soil C	15274	0.36	6	0.1	0.31
Soil D		0	9	0.025	0.3
Total	42306	100	3.125	0.228	0.323

Vault-North Commingle

	SF	%	Suction Head	Conductivity	Deficit
Soil A	69066	0.33	1.5	0.3	0.33
Soil B			3	0.2	0.32
Soil C	47222	0.22	6	0.1	0.31
Soil D	94888	0.449331	9	0.025	0.3
Total	211176	100	5.876	0.132	0.312

Vault-Camino Commingle

	SF	%	Suction Head	Conductivity	Deficit
Soil A	2202	0.02	1.5	0.3	0.33
Soil B			3	0.2	0.32
Soil C	104162	0.91	6	0.1	0.31
Soil D	8037	0.070253	9	0.025	0.3
Total	114401	100	6.124	0.099	0.310

3

Attachment 3

SWMM Output – Existing Conditions

EPA STORM WATER MANAGEMENT MODEL - VERSION 5.1 (Build 5.1.013)

Pre Condition Basin 1A

```
*************
Element Count
*************
Number of rain gages ...... 1
Number of subcatchments ... 1
Number of nodes ........... 1
Number of links ........... 0
Number of pollutants ...... 0
Number of land uses ....... 0


****************
Raingage Summary
****************
                                                 Data        Recording
Name               Data Source                   Type        Interval
-----------------------------------------------------------------------
Fallbrook          FallbrookHourly               INTENSITY    60 min.


********************
Subcatchment Summary
********************
Name                       Area     Width   %Imperv    %Slope Rain Gage            Outlet
----------------------------------------------------------------------------------------------------------
15                        45.48   1319.05      0.00    8.9100 Fallbrook            1A


************
Node Summary
************
                                       Invert      Max.    Ponded    External
Name               Type                 Elev.     Depth      Area    Inflow
-------------------------------------------------------------------------------
1A                 OUTFALL               0.00      0.00       0.0


*********************************************************
NOTE: The summary statistics displayed in this report are
based on results found at every computational time step,
not just on results from each reporting time step.
*********************************************************

****************
Analysis Options
****************
Flow Units ............... CFS
Process Models:
  Rainfall/Runoff ........ YES
  RDII ................... NO
  Snowmelt ............... NO
  Groundwater ............ NO
  Flow Routing ........... NO
  Water Quality .......... NO
Infiltration Method ...... GREEN_AMPT
Surcharge Method ......... EXTRAN
Starting Date ............ 07/25/1951 04:00:00
Ending Date .............. 05/26/2008 08:00:00
Antecedent Dry Days ...... 0.0
Report Time Step ......... 01:00:00
Wet Time Step ............ 00:30:00
Dry Time Step ............ 00:30:00


**************************        Volume         Depth
Runoff Quantity Continuity     acre-feet        inches
**************************     ---------       -------
Total Precipitation ......      3302.606       871.400
Evaporation Loss .........        39.493        10.420
Infiltration Loss ........      2803.735       739.772
Surface Runoff ...........       491.275       129.624
Final Storage ............         0.000         0.000
Continuity Error (%) .....        -0.966
```

************************** Flow Routing Continuity **************************	Volume acre-feet	Volume 10^6 gal
Dry Weather Inflow	0.000	0.000
Wet Weather Inflow	491.275	160.089
Groundwater Inflow	0.000	0.000
RDII Inflow	0.000	0.000
External Inflow	0.000	0.000
External Outflow	491.275	160.089
Flooding Loss	0.000	0.000
Evaporation Loss	0.000	0.000
Exfiltration Loss	0.000	0.000
Initial Stored Volume	0.000	0.000
Final Stored Volume	0.000	0.000
Continuity Error (%)	0.000	

****
Subcatchment Runoff Summary
****

Subcatchment	Total Precip in	Total Runon in	Total Evap in	Total Infil in	Imperv Runoff in	Perv Runoff in	Total Runoff in	Total Runoff 10^6 gal	Peak Runoff CFS	Runoff Coeff
15	871.40	0.00	10.42	739.77	0.00	129.62	129.62	160.08	59.94	0.149

Analysis begun on: Tue May 21 15:10:50 2019
Analysis ended on: Tue May 21 15:11:08 2019
Total elapsed time: 00:00:18

pre-developed basins were split to distinguish between pre-developed slope conditions. Watershed characteristics were assigned appropriate parameter values according to the San Diego County BMP Design Manual and the EPA's SWMM User's Manual Version 5.1. The N-pervious parameters varied per DMA and values were taken from Table G.1-4 of the County BMP Design Manual and the Supplemental Handout #2. A portion of the north section of Area 1A does not drain to the POC in the predeveloped conditions, but is being redirected in the proposed condition. This area was not modeled in the predeveloped conditions, but was added in the post condition to show compliance to POC 1A.

As the site includes all four hydrologic soil groups as well as many different land covers, composite values for the Green-Ampt infiltration parameters, depression storage and overland flow roughness coefficient were calculated based on the soil groups. Attachment 2 of this report provides the calculated parameters for each sub-catchment and the model schematic for both pre and proposed conditions.

Stormwater Basin Modeling for Hydromodification Compliance

Ninteen stormwater basins were sited and conservatively sized to manage water quality and peak flow requirements within the Ocean Breeze Ranch project. Thirteen of these discharge to a point of compliance (POC) requiring hydromodification management as well, and these basins were modelled continuously to ensure compliance could be met. The Status Report SWMM output file for the existing condition is provided in Attachment 3 and the proposed condition is provided in Attachment 4. Onsite alternative compliance was included in this project for small areas of proposed AC due to road widening southwest and southeast of the major development area. Basins 2H and 3H accounted for these areas as pervious in the pre project condition and impervious in the post condition directly tieing into the POC and not routed to the basins. See schematic in Attachment 2.

Flow Frequency Analysis

The range of flows that are managed by each basin are provided in Table 1. This table includes the calculation method used to develop them as well as the erosion susceptibility findings of the Geomorphic Assessment of Receiving Channels, per a separate report from Chang Consultants. These statistics are provided in Attachment 6.

Stormwater Basin Model

The basins were all represented in SWMM using the LID controls and the storage node. This is due to the ability of storage nodes to simulate orifice discharge with stage-storage curves above the ponding depth and the bioretention LID module that represents the outflow and basin geometry and soils. Only the open water storage volumes were accounted for in the stage- storage curves meaning the media storage was neglected and not added in as an equivalent storage depth. The stage-storage curves are input as straight line interpolations between the top and bottom areas as provided in Table 2. Infiltration rates were assigned to the storage nodes based on infiltration testing results provided in the Stormwater Quality Management Plan (SWQMP).

```
EPA STORM WATER MANAGEMENT MODEL - VERSION 5.1 (Build 5.1.013)
--------------------------------------------------------------
```

Pre Condition Basin 2B

```
*************
Element Count
*************
Number of rain gages ...... 1
Number of subcatchments ... 1
Number of nodes ........... 1
Number of links ........... 0
Number of pollutants ...... 0
Number of land uses ....... 0


****************
Raingage Summary
****************
                                                    Data       Recording
Name                 Data Source                    Type       Interval
------------------------------------------------------------------------
Fallbrook            FallbrookHourly                INTENSITY    60 min.


********************
Subcatchment Summary
********************
Name                       Area     Width   %Imperv    %Slope Rain Gage            Outlet
-------------------------------------------------------------------------------------------------------------
3                         18.47    226.83      0.00    2.9000 Fallbrook            2B


************
Node Summary
************
                                           Invert      Max.    Ponded    External
Name                 Type                   Elev.     Depth      Area    Inflow
-------------------------------------------------------------------------------
2B                   OUTFALL                 0.00      0.00       0.0


*********************************************************
NOTE: The summary statistics displayed in this report are
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not just on results from each reporting time step.
*********************************************************

****************
Analysis Options
****************
Flow Units ............... CFS
Process Models:
  Rainfall/Runoff ........ YES
  RDII ................... NO
  Snowmelt ............... NO
  Groundwater ............ NO
  Flow Routing ........... NO
  Water Quality .......... NO
Infiltration Method ...... GREEN_AMPT
Surcharge Method ......... EXTRAN
Starting Date ............ 07/25/1951 04:00:00
Ending Date .............. 05/26/2008 08:00:00
Antecedent Dry Days ...... 0.0
Report Time Step ......... 01:00:00
Wet Time Step ............ 00:30:00
Dry Time Step ............ 00:30:00


**************************        Volume         Depth
Runoff Quantity Continuity     acre-feet        inches
**************************     ---------       -------
Total Precipitation ......      1341.230       871.400
Evaporation Loss .........         3.385         2.199
Infiltration Loss ........      1318.655       856.733
Surface Runoff ...........        20.417        13.265
Final Storage ............         0.000         0.000
Continuity Error (%) .....        -0.091
```

```
*************************          Volume        Volume
Flow Routing Continuity          acre-feet     10^6 gal
*************************        ---------     ---------
Dry Weather Inflow .......           0.000         0.000
Wet Weather Inflow .......          20.417         6.653
Groundwater Inflow .......           0.000         0.000
RDII Inflow ..............           0.000         0.000
External Inflow ..........           0.000         0.000
External Outflow .........          20.417         6.653
Flooding Loss ............           0.000         0.000
Evaporation Loss .........           0.000         0.000
Exfiltration Loss ........           0.000         0.000
Initial Stored Volume ....           0.000         0.000
Final Stored Volume ......           0.000         0.000
Continuity Error (%) .....           0.000
```

```
***************************
Subcatchment Runoff Summary
***************************
```

Subcatchment	Total Precip in	Total Runon in	Total Evap in	Total Infil in	Imperv Runoff in	Perv Runoff in	Total Runoff in	Total Runoff 10^6 gal	Peak Runoff CFS	Runoff Coeff
3	871.40	0.00	2.20	856.73	0.00	13.26	13.26	6.65	12.49	0.015

```
Analysis begun on:  Mon May 20 19:38:34 2019
Analysis ended on:  Mon May 20 19:38:50 2019
Total elapsed time: 00:00:16
```

```
EPA STORM WATER MANAGEMENT MODEL - VERSION 5.1 (Build 5.1.013)
--------------------------------------------------------------
```

Pre Condition Basin 2H

```
*************
Element Count
*************
Number of rain gages ...... 1
Number of subcatchments ... 2
Number of nodes ........... 1
Number of links ........... 0
Number of pollutants ...... 0
Number of land uses ....... 0


****************
Raingage Summary
****************
                                                     Data       Recording
Name                Data Source                      Type       Interval
------------------------------------------------------------------------
Fallbrook           FallbrookHourly                  INTENSITY    60 min.


********************
Subcatchment Summary
********************
Name                       Area     Width   %Imperv    %Slope Rain Gage            Outlet
-----------------------------------------------------------------------------------------------------------
17                         9.28    164.53      0.00   15.1000 Fallbrook            2H
S1                         0.35     27.00      0.00    1.9200 Fallbrook            2H


************
Node Summary
************
                                           Invert      Max.    Ponded    External
Name                Type                    Elev.     Depth      Area    Inflow
-------------------------------------------------------------------------------
2H                  OUTFALL                  0.00      0.00       0.0


*********************************************************
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not just on results from each reporting time step.
*********************************************************

****************
Analysis Options
****************
Flow Units ............... CFS
Process Models:
  Rainfall/Runoff ........ YES
  RDII ................... NO
  Snowmelt ............... NO
  Groundwater ............ NO
  Flow Routing ........... NO
  Water Quality .......... NO
Infiltration Method ...... GREEN_AMPT
Surcharge Method ......... EXTRAN
Starting Date ............ 07/25/1951 04:00:00
Ending Date .............. 05/26/2008 08:00:00
Antecedent Dry Days ...... 0.0
Report Time Step ......... 01:00:00
Wet Time Step ............ 00:30:00
Dry Time Step ............ 00:30:00


**************************        Volume         Depth
Runoff Quantity Continuity     acre-feet        inches
**************************     ---------       -------
Total Precipitation ......       699.299       871.400
Evaporation Loss .........         5.348         6.664
Infiltration Loss ........       615.048       766.415
Surface Runoff ...........        85.791       106.905
Final Storage ............         0.000         0.000
Continuity Error (%) .....        -0.985
```

****
Flow Routing Continuity
****

	Volume acre-feet	Volume 10^6 gal
Dry Weather Inflow	0.000	0.000
Wet Weather Inflow	85.791	27.956
Groundwater Inflow	0.000	0.000
RDII Inflow	0.000	0.000
External Inflow	0.000	0.000
External Outflow	85.791	27.956
Flooding Loss	0.000	0.000
Evaporation Loss	0.000	0.000
Exfiltration Loss	0.000	0.000
Initial Stored Volume	0.000	0.000
Final Stored Volume	0.000	0.000
Continuity Error (%)	0.000	

****
Subcatchment Runoff Summary
****

Subcatchment	Total Precip in	Total Runon in	Total Evap in	Total Infil in	Imperv Runoff in	Perv Runoff in	Total Runoff in	Total Runoff 10^6 gal	Peak Runoff CFS	Runoff Coeff
17	871.40	0.00	6.64	765.76	0.00	107.79	107.79	27.16	12.13	0.124
S1	871.40	0.00	7.37	783.92	0.00	83.56	83.56	0.79	0.43	0.096

Analysis begun on: Mon May 20 20:16:52 2019
Analysis ended on: Mon May 20 20:17:09 2019
Total elapsed time: 00:00:17

EPA STORM WATER MANAGEMENT MODEL - VERSION 5.1 (Build 5.1.012)

Pre Condition Basin 3A

```
*************
Element Count
*************
Number of rain gages ...... 1
Number of subcatchments ... 1
Number of nodes ........... 1
Number of links ........... 0
Number of pollutants ...... 0
Number of land uses ....... 0


****************
Raingage Summary
****************
                                                         Data       Recording
Name                 Data Source                         Type       Interval
-----------------------------------------------------------------------------
Fallbrook            FallbrookHourly                     INTENSITY    60 min.


********************
Subcatchment Summary
********************
Name                       Area     Width   %Imperv    %Slope Rain Gage            Outlet
-----------------------------------------------------------------------------------------------------------
6                          4.11    625.99      0.00   20.2000 Fallbrook            3A


************
Node Summary
************
                                           Invert      Max.    Ponded    External
Name                 Type                   Elev.     Depth      Area    Inflow
-------------------------------------------------------------------------------
3A                   OUTFALL                 0.00      0.00       0.0


*********************************************************
NOTE: The summary statistics displayed in this report are
based on results found at every computational time step,
not just on results from each reporting time step.
*********************************************************

****************
Analysis Options
****************
Flow Units ............... CFS
Process Models:
  Rainfall/Runoff ........ YES
  RDII ................... NO
  Snowmelt ............... NO
  Groundwater ............ NO
  Flow Routing ........... NO
  Water Quality .......... NO
Infiltration Method ...... GREEN_AMPT
Starting Date ............ 07/25/1951 04:00:00
Ending Date .............. 05/26/2008 08:00:00
Antecedent Dry Days ...... 0.0
Report Time Step ......... 01:00:00
Wet Time Step ............ 00:30:00
Dry Time Step ............ 00:30:00


**************************        Volume         Depth
Runoff Quantity Continuity     acre-feet        inches
**************************     ---------       -------
Total Precipitation ......       298.455       871.400
Evaporation Loss .........         1.933         5.643
Infiltration Loss ........       265.760       775.942
Surface Runoff ...........        35.648       104.083
Final Storage ............         0.000         0.000
Continuity Error (%) .....        -1.637


**************************        Volume        Volume
Flow Routing Continuity        acre-feet      10^6 gal
**************************     ---------     ---------
Dry Weather Inflow .......         0.000         0.000
Wet Weather Inflow .......        35.648        11.617
Groundwater Inflow .......         0.000         0.000
RDII Inflow ..............         0.000         0.000
External Inflow ..........         0.000         0.000
External Outflow .........        35.648        11.617
Flooding Loss ............         0.000         0.000
Evaporation Loss .........         0.000         0.000
Exfiltration Loss ........         0.000         0.000
Initial Stored Volume ....         0.000         0.000
Final Stored Volume ......         0.000         0.000
Continuity Error (%) .....         0.000
```

```
***************************
Subcatchment Runoff Summary
***************************
```

Subcatchment	Total Precip in	Total Runon in	Total Evap in	Total Infil in	Total Runoff in	Total Runoff 10^6 gal	Peak Runoff CFS	Runoff Coeff
6	871.40	0.00	5.64	775.94	104.08	11.62	5.27	0.119

Analysis begun on: Wed Dec 12 08:26:43 2018
Analysis ended on: Wed Dec 12 08:27:04 2018
Total elapsed time: 00:00:21

```
EPA STORM WATER MANAGEMENT MODEL - VERSION 5.1 (Build 5.1.013)
--------------------------------------------------------------
```

Pre Condition Basin 3B

```
*************
Element Count
*************
Number of rain gages ...... 1
Number of subcatchments ... 1
Number of nodes ........... 1
Number of links ........... 0
Number of pollutants ...... 0
Number of land uses ....... 0


****************
Raingage Summary
****************
                                                    Data       Recording
Name                 Data Source                    Type       Interval
------------------------------------------------------------------------
Fallbrook            FallbrookHourly                INTENSITY    60 min.


********************
Subcatchment Summary
********************
Name                         Area     Width   %Imperv    %Slope Rain Gage            Outlet
-------------------------------------------------------------------------------------------------------------
DMA10                        1.06    278.54      0.00   13.3000 Fallbrook            3B


************
Node Summary
************
                                           Invert      Max.    Ponded    External
Name                 Type                   Elev.     Depth      Area    Inflow
-------------------------------------------------------------------------------
3B                   OUTFALL                 0.00      0.00       0.0


*********************************************************
NOTE: The summary statistics displayed in this report are
based on results found at every computational time step,
not just on results from each reporting time step.
*********************************************************

****************
Analysis Options
****************
Flow Units ............... CFS
Process Models:
  Rainfall/Runoff ........ YES
  RDII ................... NO
  Snowmelt ............... NO
  Groundwater ............ NO
  Flow Routing ........... NO
  Water Quality .......... NO
Infiltration Method ...... GREEN_AMPT
Surcharge Method ......... EXTRAN
Starting Date ............ 07/25/1951 04:00:00
Ending Date .............. 05/26/2008 08:00:00
Antecedent Dry Days ...... 0.0
Report Time Step ......... 01:00:00
Wet Time Step ............ 00:30:00
Dry Time Step ............ 00:30:00


**************************        Volume         Depth
Runoff Quantity Continuity     acre-feet        inches
**************************     ---------       -------
Total Precipitation ......        76.974       871.400
Evaporation Loss .........         4.507        51.022
Infiltration Loss ........        35.256       399.120
Surface Runoff ...........        40.311       456.355
Final Storage ............         0.000         0.000
Continuity Error (%) .....        -4.028
```

****
Flow Routing Continuity
****

Flow Routing Continuity	Volume acre-feet	Volume 10^6 gal
Dry Weather Inflow	0.000	0.000
Wet Weather Inflow	40.311	13.136
Groundwater Inflow	0.000	0.000
RDII Inflow	0.000	0.000
External Inflow	0.000	0.000
External Outflow	40.311	13.136
Flooding Loss	0.000	0.000
Evaporation Loss	0.000	0.000
Exfiltration Loss	0.000	0.000
Initial Stored Volume	0.000	0.000
Final Stored Volume	0.000	0.000
Continuity Error (%)	0.000	

****
Subcatchment Runoff Summary
****

Subcatchment	Total Precip in	Total Runon in	Total Evap in	Total Infil in	Imperv Runoff in	Perv Runoff in	Total Runoff in	Total Runoff 10^6 gal	Peak Runoff CFS	Runoff Coeff
DMA10	871.40	0.00	51.02	399.12	0.00	456.36	456.36	13.14	1.48	0.524

Analysis begun on: Mon May 20 17:19:09 2019
Analysis ended on: Mon May 20 17:19:25 2019
Total elapsed time: 00:00:16

```
EPA STORM WATER MANAGEMENT MODEL - VERSION 5.1 (Build 5.1.013)
--------------------------------------------------------------
```

Pre Condition Basin 3C

```
*************
Element Count
*************
Number of rain gages ...... 1
Number of subcatchments ... 1
Number of nodes ........... 1
Number of links ........... 0
Number of pollutants ...... 0
Number of land uses ....... 0


****************
Raingage Summary
****************
                                                          Data       Recording
Name                 Data Source                          Type       Interval
------------------------------------------------------------------------------
Fallbrook            FallbrookHourly                      INTENSITY    60 min.


********************
Subcatchment Summary
********************
Name                       Area     Width   %Imperv    %Slope Rain Gage            Outlet
------------------------------------------------------------------------------------------------------------
11                        76.26    464.01      0.00    4.1600 Fallbrook            3C


************
Node Summary
************
                                           Invert      Max.    Ponded    External
Name                 Type                   Elev.     Depth      Area    Inflow
---------------------------------------------------------------------------------
3C                   OUTFALL                 0.00      0.00       0.0


*********************************************************
NOTE: The summary statistics displayed in this report are
based on results found at every computational time step,
not just on results from each reporting time step.
*********************************************************

****************
Analysis Options
****************
Flow Units ............... CFS
Process Models:
  Rainfall/Runoff ........ YES
  RDII ................... NO
  Snowmelt ............... NO
  Groundwater ............ NO
  Flow Routing ........... NO
  Water Quality .......... NO
Infiltration Method ...... GREEN_AMPT
Surcharge Method ......... EXTRAN
Starting Date ............ 07/25/1951 04:00:00
Ending Date .............. 05/26/2008 08:00:00
Antecedent Dry Days ...... 0.0
Report Time Step ......... 01:00:00
Wet Time Step ............ 00:30:00
Dry Time Step ............ 00:30:00


**************************        Volume         Depth
Runoff Quantity Continuity     acre-feet        inches
**************************     ---------       -------
Total Precipitation ......      5537.442       871.400
Evaporation Loss .........        48.278         7.597
Infiltration Loss ........      5007.510       788.007
Surface Runoff ...........       499.724        78.639
Final Storage ............         0.000         0.000
Continuity Error (%) .....        -0.326
```

************************** Flow Routing Continuity **************************	Volume acre-feet	Volume 10^6 gal
Dry Weather Inflow	0.000	0.000
Wet Weather Inflow	499.724	162.842
Groundwater Inflow	0.000	0.000
RDII Inflow	0.000	0.000
External Inflow	0.000	0.000
External Outflow	499.724	162.842
Flooding Loss	0.000	0.000
Evaporation Loss	0.000	0.000
Exfiltration Loss	0.000	0.000
Initial Stored Volume	0.000	0.000
Final Stored Volume	0.000	0.000
Continuity Error (%)	0.000	

****
Subcatchment Runoff Summary
****

Subcatchment	Total Precip in	Total Runon in	Total Evap in	Total Infil in	Imperv Runoff in	Perv Runoff in	Total Runoff in	Total Runoff 10^6 gal	Peak Runoff CFS	Runoff Coeff
11	871.40	0.00	7.60	788.01	0.00	78.64	78.64	162.83	89.82	0.090

Analysis begun on: Mon May 20 19:28:55 2019
Analysis ended on: Mon May 20 19:29:14 2019
Total elapsed time: 00:00:19

```
EPA STORM WATER MANAGEMENT MODEL - VERSION 5.1 (Build 5.1.013)
--------------------------------------------------------------
```

Pre Condition Basin 3D

```
*************
Element Count
*************
Number of rain gages ...... 1
Number of subcatchments ... 1
Number of nodes ........... 1
Number of links ........... 0
Number of pollutants ...... 0
Number of land uses ....... 0


****************
Raingage Summary
****************
                                                     Data       Recording
Name                 Data Source                     Type       Interval
------------------------------------------------------------------------
Fallbrook            FallbrookHourly                 INTENSITY    60 min.


********************
Subcatchment Summary
********************
Name                     Area     Width   %Imperv    %Slope Rain Gage            Outlet
-----------------------------------------------------------------------------------------------------------------
DMA12                  122.74    379.67      0.00    5.6700 Fallbrook            3D


************
Node Summary
************
                                           Invert      Max.    Ponded    External
Name                 Type                   Elev.     Depth      Area    Inflow
-------------------------------------------------------------------------------
3D                   OUTFALL                 0.00      0.00       0.0


*********************************************************
NOTE: The summary statistics displayed in this report are
based on results found at every computational time step,
not just on results from each reporting time step.
*********************************************************

****************
Analysis Options
****************
Flow Units ............... CFS
Process Models:
  Rainfall/Runoff ........ YES
  RDII ................... NO
  Snowmelt ............... NO
  Groundwater ............ NO
  Flow Routing ........... NO
  Water Quality .......... NO
Infiltration Method ...... GREEN_AMPT
Surcharge Method ......... EXTRAN
Starting Date ............ 07/25/1951 04:00:00
Ending Date .............. 05/26/2008 08:00:00
Antecedent Dry Days ...... 0.0
Report Time Step ......... 01:00:00
Wet Time Step ............ 00:30:00
Dry Time Step ............ 00:30:00


**************************        Volume         Depth
Runoff Quantity Continuity     acre-feet        inches
**************************     ---------       -------
Total Precipitation ......      8912.708       871.400
Evaporation Loss .........        83.047         8.120
Infiltration Loss ........      8608.891       841.696
Surface Runoff ...........       231.589        22.643
Final Storage ............         0.000         0.000
Continuity Error (%) .....        -0.121
```

Flow Routing Continuity	Volume acre-feet	Volume 10^6 gal
Dry Weather Inflow	0.000	0.000
Wet Weather Inflow	231.589	75.467
Groundwater Inflow	0.000	0.000
RDII Inflow	0.000	0.000
External Inflow	0.000	0.000
External Outflow	231.589	75.467
Flooding Loss	0.000	0.000
Evaporation Loss	0.000	0.000
Exfiltration Loss	0.000	0.000
Initial Stored Volume	0.000	0.000
Final Stored Volume	0.000	0.000
Continuity Error (%)	0.000	

****
Subcatchment Runoff Summary
****

Subcatchment	Total Precip in	Total Runon in	Total Evap in	Total Infil in	Imperv Runoff in	Perv Runoff in	Total Runoff in	Total Runoff 10^6 gal	Peak Runoff CFS	Runoff Coeff
DMA12	871.40	0.00	8.12	841.70	0.00	22.64	22.64	75.46	31.42	0.026

Analysis begun on: Mon May 20 19:35:44 2019
Analysis ended on: Mon May 20 19:36:05 2019
Total elapsed time: 00:00:21

EPA STORM WATER MANAGEMENT MODEL - VERSION 5.1 (Build 5.1.012)

Pre Condition Basin 3E

```
*************
Element Count
*************
Number of rain gages ...... 1
Number of subcatchments ... 1
Number of nodes ........... 1
Number of links ........... 0
Number of pollutants ...... 0
Number of land uses ....... 0


****************
Raingage Summary
****************
                                                    Data       Recording
Name                 Data Source                    Type       Interval
------------------------------------------------------------------------
Fallbrook            FallbrookHourly                INTENSITY   60 min.


********************
Subcatchment Summary
********************
Name                       Area     Width   %Imperv    %Slope Rain Gage            Outlet
-----------------------------------------------------------------------------------------------------------
13                         1.61    143.13      0.00    3.2600 Fallbrook            3E


************
Node Summary
************
                                         Invert      Max.    Ponded    External
Name                 Type                 Elev.     Depth      Area    Inflow
-------------------------------------------------------------------------------
3E                   OUTFALL               0.00      0.00       0.0


*********************************************************
NOTE: The summary statistics displayed in this report are
based on results found at every computational time step,
not just on results from each reporting time step.
*********************************************************

****************
Analysis Options
****************
Flow Units ............... CFS
Process Models:
  Rainfall/Runoff ........ YES
  RDII ................... NO
  Snowmelt ............... NO
  Groundwater ............ NO
  Flow Routing ........... NO
  Water Quality .......... NO
Infiltration Method ...... GREEN_AMPT
Starting Date ............ 07/25/1951 04:00:00
Ending Date .............. 05/26/2008 08:00:00
Antecedent Dry Days ...... 0.0
Report Time Step ......... 01:00:00
Wet Time Step ............ 00:30:00
Dry Time Step ............ 00:30:00


**************************        Volume         Depth
Runoff Quantity Continuity     acre-feet        inches
**************************     ---------       -------
Total Precipitation ......       116.913       871.400
Evaporation Loss .........         0.719         5.359
Infiltration Loss ........       105.332       785.083
Surface Runoff ...........        12.027        89.643
Final Storage ............         0.000         0.000
Continuity Error (%) .....        -0.997


**************************        Volume        Volume
Flow Routing Continuity        acre-feet      10^6 gal
**************************     ---------     ---------
Dry Weather Inflow .......         0.000         0.000
Wet Weather Inflow .......        12.027         3.919
Groundwater Inflow .......         0.000         0.000
RDII Inflow ..............         0.000         0.000
External Inflow ..........         0.000         0.000
External Outflow .........        12.027         3.919
Flooding Loss ............         0.000         0.000
Evaporation Loss .........         0.000         0.000
Exfiltration Loss ........         0.000         0.000
Initial Stored Volume ....         0.000         0.000
Final Stored Volume ......         0.000         0.000
Continuity Error (%) .....         0.000
```

****
Subcatchment Runoff Summary
****

Subcatchment	Total Precip in	Total Runon in	Total Evap in	Total Infil in	Total Runoff in	Total Runoff 10^6 gal	Peak Runoff CFS	Runoff Coeff
13	871.40	0.00	5.36	785.08	89.64	3.92	2.07	0.103

Analysis begun on: Wed Dec 12 08:38:11 2018
Analysis ended on: Wed Dec 12 08:38:33 2018
Total elapsed time: 00:00:22

```
EPA STORM WATER MANAGEMENT MODEL - VERSION 5.1 (Build 5.1.012)
--------------------------------------------------------------
```

Pre Condition Basin 3F

```
*************
Element Count
*************
Number of rain gages ...... 1
Number of subcatchments ... 1
Number of nodes ........... 1
Number of links ........... 0
Number of pollutants ...... 0
Number of land uses ....... 0


****************
Raingage Summary
****************
                                                    Data        Recording
Name                  Data Source                   Type        Interval
--------------------------------------------------------------------------
Fallbrook             FallbrookHourly               INTENSITY    60 min.


********************
Subcatchment Summary
********************
Name                       Area      Width    %Imperv    %Slope Rain Gage            Outlet
---------------------------------------------------------------------------------------------------------------
14                         1.50     830.45       0.00    5.1200 Fallbrook            3F


************
Node Summary
************
                                         Invert      Max.    Ponded    External
Name                  Type                 Elev.     Depth      Area    Inflow
-------------------------------------------------------------------------------
3F                    OUTFALL               0.00      0.00       0.0


*********************************************************
NOTE: The summary statistics displayed in this report are
based on results found at every computational time step,
not just on results from each reporting time step.
*********************************************************

****************
Analysis Options
****************
Flow Units ............... CFS
Process Models:
  Rainfall/Runoff ........ YES
  RDII ................... NO
  Snowmelt ............... NO
  Groundwater ............ NO
  Flow Routing ........... NO
  Water Quality .......... NO
Infiltration Method ...... GREEN_AMPT
Starting Date ............ 07/25/1951 04:00:00
Ending Date .............. 05/26/2008 08:00:00
Antecedent Dry Days ...... 0.0
Report Time Step ......... 01:00:00
Wet Time Step ............ 00:30:00
Dry Time Step ............ 00:30:00


**************************        Volume         Depth
Runoff Quantity Continuity     acre-feet        inches
**************************     ---------       -------
Total Precipitation ......       108.925       871.400
Evaporation Loss .........         0.403         3.224
Infiltration Loss ........       102.427       819.420
Surface Runoff ...........         7.182        57.456
Final Storage ............         0.000         0.000
Continuity Error (%) .....        -0.998


**************************        Volume        Volume
```

```
Flow Routing Continuity        acre-feet      10^6 gal
**************************     ---------     ---------
Dry Weather Inflow .......         0.000         0.000
Wet Weather Inflow .......         7.182         2.340
Groundwater Inflow .......         0.000         0.000
RDII Inflow ..............         0.000         0.000
External Inflow ..........         0.000         0.000
External Outflow .........         7.182         2.340
Flooding Loss ............         0.000         0.000
Evaporation Loss .........         0.000         0.000
Exfiltration Loss ........         0.000         0.000
Initial Stored Volume ....         0.000         0.000
Final Stored Volume ......         0.000         0.000
Continuity Error (%) .....         0.000


***************************
Subcatchment Runoff Summary
***************************

------------------------------------------------------------------------------------------------------------
                         Total      Total      Total      Total      Total       Total     Peak  Runoff
                        Precip      Runon       Evap      Infil     Runoff      Runoff   Runoff   Coeff
Subcatchment                in         in         in         in         in    10^6 gal      CFS
------------------------------------------------------------------------------------------------------------
14                      871.40       0.00       3.22     819.42      57.46        2.34     1.86   0.066


Analysis begun on:  Mon May 20 20:18:03 2019
Analysis ended on:  Mon May 20 20:18:24 2019
Total elapsed time: 00:00:21
```

EPA STORM WATER MANAGEMENT MODEL - VERSION 5.1 (Build 5.1.012)

Pre Condition Basin 3G

****
Element Count
****

Number of rain gages 1
Number of subcatchments ... 1
Number of nodes 1
Number of links 0
Number of pollutants 0
Number of land uses 0

****
Raingage Summary
****

Name	Data Source	Data Type	Recording Interval
Fallbrook	FallbrookHourly	INTENSITY	60 min.

****
Subcatchment Summary
****

Name	Area	Width	%Imperv	%Slope	Rain Gage	Outlet
15	2.02	926.22	0.00	18.9000	Fallbrook	5G

****
Node Summary
****

Name	Type	Invert Elev.	Max. Depth	Ponded Area	External Inflow
5G	OUTFALL	0.00	0.00	0.0	

****
NOTE: The summary statistics displayed in this report are
based on results found at every computational time step,
not just on results from each reporting time step.
****

****
Analysis Options
****

Flow Units .... CFS
Process Models:
  Rainfall/Runoff .... YES
  RDII .... NO
  Snowmelt .... NO
  Groundwater .... NO
  Flow Routing .... NO
  Water Quality .... NO
Infiltration Method ...... GREEN_AMPT
Starting Date 07/25/1951 04:00:00
Ending Date 05/26/2008 08:00:00
Antecedent Dry Days 0.0
Report Time Step 01:00:00
Wet Time Step 00:30:00
Dry Time Step 00:30:00

************************** Runoff Quantity Continuity **************************	Volume acre-feet	Depth inches
Total Precipitation	146.686	871.400
Evaporation Loss	0.666	3.957
Infiltration Loss	135.737	806.356
Surface Runoff	12.128	72.045
Final Storage	0.000	0.000
Continuity Error (%)	-1.258	

************************** Flow Routing Continuity **************************	Volume acre-feet	Volume 10^6 gal
Dry Weather Inflow	0.000	0.000
Wet Weather Inflow	12.128	3.952
Groundwater Inflow	0.000	0.000
RDII Inflow	0.000	0.000
External Inflow	0.000	0.000
External Outflow	12.128	3.952
Flooding Loss	0.000	0.000
Evaporation Loss	0.000	0.000
Exfiltration Loss	0.000	0.000
Initial Stored Volume	0.000	0.000
Final Stored Volume	0.000	0.000
Continuity Error (%)	0.000	

****
Subcatchment Runoff Summary
****

Subcatchment	Total Precip in	Total Runon in	Total Evap in	Total Infil in	Total Runoff in	Total Runoff 10^6 gal	Peak Runoff CFS	Runoff Coeff
15	871.40	0.00	3.96	806.36	72.05	3.95	2.54	0.083

Analysis begun on: Wed Dec 12 08:38:02 2018
Analysis ended on: Wed Dec 12 08:38:24 2018
Total elapsed time: 00:00:22

```
EPA STORM WATER MANAGEMENT MODEL - VERSION 5.1 (Build 5.1.013)
--------------------------------------------------------------
```

Pre Condition Basin 3H & 3I

```
*************
Element Count
*************
Number of rain gages ...... 1
Number of subcatchments ... 3
Number of nodes ........... 1
Number of links ........... 0
Number of pollutants ...... 0
Number of land uses ....... 0


****************
Raingage Summary
****************
                                                    Data       Recording
Name                 Data Source                    Type       Interval
------------------------------------------------------------------------
Fallbrook            Fallbrook                      INTENSITY    60 min.


********************
Subcatchment Summary
********************
Name                       Area     Width   %Imperv    %Slope Rain Gage            Outlet
-----------------------------------------------------------------------------------------------------------
16                         3.01    248.25      0.00   12.2500 Fallbrook            3H
DMA19                      6.14    291.00      0.00   11.0000 Fallbrook            3H
S1                         0.16     15.50      0.00    1.3000 Fallbrook            3H


************
Node Summary
************
                                           Invert      Max.    Ponded    External
Name                 Type                   Elev.     Depth      Area    Inflow
-------------------------------------------------------------------------------
3H                   OUTFALL                 0.00      0.00       0.0


*********************************************************
NOTE: The summary statistics displayed in this report are
based on results found at every computational time step,
not just on results from each reporting time step.
*********************************************************

****************
Analysis Options
****************
Flow Units ............... CFS
Process Models:
  Rainfall/Runoff ........ YES
  RDII ................... NO
  Snowmelt ............... NO
  Groundwater ............ NO
  Flow Routing ........... NO
  Water Quality .......... NO
Infiltration Method ...... GREEN_AMPT
Starting Date ............ 07/25/1951 04:00:00
Ending Date .............. 05/26/2008 08:00:00
Antecedent Dry Days ...... 0.0
Report Time Step ......... 01:00:00
Wet Time Step ............ 00:30:00
Dry Time Step ............ 00:30:00


**************************        Volume         Depth
Runoff Quantity Continuity     acre-feet        inches
**************************     ---------       -------
Total Precipitation ......       676.061       871.400
Evaporation Loss .........         5.575         7.186
Infiltration Loss ........       601.833       775.724
Surface Runoff ...........        72.443        93.374
Final Storage ............         0.000         0.000
Continuity Error (%) .....        -0.561
```

```
*************************           Volume         Volume
Flow Routing Continuity           acre-feet       10^6 gal
*************************         ---------      ---------
Dry Weather Inflow .......            0.000          0.000
Wet Weather Inflow .......           72.443         23.607
Groundwater Inflow .......            0.000          0.000
RDII Inflow ..............            0.000          0.000
External Inflow ..........            0.000          0.000
External Outflow .........           72.443         23.607
Flooding Loss ............            0.000          0.000
Evaporation Loss .........            0.000          0.000
Exfiltration Loss ........            0.000          0.000
Initial Stored Volume ....            0.000          0.000
Final Stored Volume ......            0.000          0.000
Continuity Error (%) .....            0.000
```

```
***************************
Subcatchment Runoff Summary
***************************
```

Subcatchment	Total Precip in	Total Runon in	Total Evap in	Total Infil in	Imperv Runoff in	Perv Runoff in	Total Runoff in	Total Runoff 10^6 gal	Peak Runoff CFS	Runoff Coeff
16	871.40	0.00	7.08	771.36	0.00	99.01	99.01	8.09	3.90	0.114
DMA19	871.40	0.00	7.26	778.11	0.00	90.36	90.36	15.06	7.78	0.104
S1	871.40	0.00	6.61	766.41	0.00	103.27	103.27	0.45	0.20	0.119

```
Analysis begun on:  Mon May 20 19:34:58 2019
Analysis ended on:  Mon May 20 19:35:19 2019
Total elapsed time: 00:00:21
```

```
EPA STORM WATER MANAGEMENT MODEL - VERSION 5.1 (Build 5.1.013)
--------------------------------------------------------------
```

Pre Condition Basin 3J

```
*************
Element Count
*************
Number of rain gages ...... 1
Number of subcatchments ... 1
Number of nodes ........... 1
Number of links ........... 0
Number of pollutants ...... 0
Number of land uses ....... 0


****************
Raingage Summary
****************
                                                    Data        Recording
Name                 Data Source                    Type        Interval
------------------------------------------------------------------------
Fallbrook            FallbrookHourly                INTENSITY    60 min.


********************
Subcatchment Summary
********************
Name                      Area     Width   %Imperv    %Slope Rain Gage            Outlet
----------------------------------------------------------------------------------------------------------
DMA20                     4.93    860.20      0.00    7.6900 Fallbrook            3J


************
Node Summary
************
                                           Invert      Max.    Ponded    External
Name                 Type                   Elev.     Depth      Area    Inflow
-------------------------------------------------------------------------------
3J                   OUTFALL                 0.00      0.00       0.0


*********************************************************
NOTE: The summary statistics displayed in this report are
based on results found at every computational time step,
not just on results from each reporting time step.
*********************************************************

****************
Analysis Options
****************
Flow Units ............... CFS
Process Models:
  Rainfall/Runoff ........ YES
  RDII ................... NO
  Snowmelt ............... NO
  Groundwater ............ NO
  Flow Routing ........... NO
  Water Quality .......... NO
Infiltration Method ...... GREEN_AMPT
Surcharge Method ......... EXTRAN
Starting Date ............ 07/25/1951 04:00:00
Ending Date .............. 05/26/2008 08:00:00
Antecedent Dry Days ...... 0.0
Report Time Step ......... 01:00:00
Wet Time Step ............ 00:30:00
Dry Time Step ............ 00:30:00


**************************        Volume         Depth
Runoff Quantity Continuity     acre-feet        inches
**************************     ---------       -------
Total Precipitation ......       358.000       871.400
Evaporation Loss .........        21.655        52.710
Infiltration Loss ........       162.378       395.242
Surface Runoff ...........       185.442       451.380
Final Storage ............         0.000         0.000
Continuity Error (%) .....        -3.205
```

****

Flow Routing Continuity	Volume acre-feet	Volume 10^6 gal
Dry Weather Inflow	0.000	0.000
Wet Weather Inflow	185.442	60.429
Groundwater Inflow	0.000	0.000
RDII Inflow	0.000	0.000
External Inflow	0.000	0.000
External Outflow	185.442	60.429
Flooding Loss	0.000	0.000
Evaporation Loss	0.000	0.000
Exfiltration Loss	0.000	0.000
Initial Stored Volume	0.000	0.000
Final Stored Volume	0.000	0.000
Continuity Error (%)	0.000	

****
Subcatchment Runoff Summary
****

Subcatchment	Total Precip in	Total Runon in	Total Evap in	Total Infil in	Imperv Runoff in	Perv Runoff in	Total Runoff in	Total Runoff 10^6 gal	Peak Runoff CFS	Runoff Coeff
DMA20	871.40	0.00	52.71	395.24	0.00	451.38	451.38	60.42	6.88	0.518

Analysis begun on: Mon May 20 19:34:20 2019
Analysis ended on: Mon May 20 19:34:38 2019
Total elapsed time: 00:00:18

```
EPA STORM WATER MANAGEMENT MODEL - VERSION 5.1 (Build 5.1.013)
--------------------------------------------------------------
```

Pre Condition Vault

```
*************
Element Count
*************
Number of rain gages ...... 1
Number of subcatchments ... 3
Number of nodes ........... 1
Number of links ........... 0
Number of pollutants ...... 0
Number of land uses ....... 0


****************
Raingage Summary
****************
                                                 Data       Recording
Name                 Data Source                 Type       Interval
------------------------------------------------------------------------
Fallbrook            Fallbrook                   INTENSITY    60 min.


********************
Subcatchment Summary
********************
Name                       Area     Width   %Imperv    %Slope Rain Gage            Outlet
-----------------------------------------------------------------------------------------------------------
CAMINOCommigle             2.63    217.00     42.20    2.1000 Fallbrook            OFF3
DMA18                      0.97    110.53     11.30    4.9800 Fallbrook            OFF3
NorthCommingle             4.31    430.00     18.80    2.1000 Fallbrook            OFF3


************
Node Summary
************
                                           Invert      Max.    Ponded    External
Name                 Type                   Elev.     Depth      Area    Inflow
-------------------------------------------------------------------------------
OFF3                 OUTFALL                 0.00      0.00       0.0


*********************************************************
NOTE: The summary statistics displayed in this report are
based on results found at every computational time step,
not just on results from each reporting time step.
*********************************************************

****************
Analysis Options
****************
Flow Units ............... CFS
Process Models:
  Rainfall/Runoff ........ YES
  RDII ................... NO
  Snowmelt ............... NO
  Groundwater ............ NO
  Flow Routing ........... NO
  Water Quality .......... NO
Infiltration Method ...... GREEN_AMPT
Starting Date ............ 07/25/1951 04:00:00
Ending Date .............. 05/26/2008 08:00:00
Antecedent Dry Days ...... 0.0
Report Time Step ......... 01:00:00
Wet Time Step ............ 00:30:00
Dry Time Step ............ 00:30:00


**************************        Volume         Depth
Runoff Quantity Continuity     acre-feet        inches
**************************     ---------       -------
Total Precipitation ......       574.398       871.400
Evaporation Loss .........        20.838        31.613
Infiltration Loss ........       390.937       593.077
Surface Runoff ...........       169.140       256.596
Final Storage ............         0.000         0.000
Continuity Error (%) .....        -1.135


**************************        Volume        Volume
Flow Routing Continuity        acre-feet      10^6 gal
**************************     ---------     ---------
Dry Weather Inflow .......         0.000         0.000
Wet Weather Inflow .......       169.140        55.117
Groundwater Inflow .......         0.000         0.000
RDII Inflow ..............         0.000         0.000
External Inflow ..........         0.000         0.000
External Outflow .........       169.140        55.117
Flooding Loss ............         0.000         0.000
Evaporation Loss .........         0.000         0.000
Exfiltration Loss ........         0.000         0.000
Initial Stored Volume ....         0.000         0.000
```

```
Final Stored Volume ......        0.000         0.000
Continuity Error (%) .....        0.000
```

```
***************************
Subcatchment Runoff Summary
***************************
```

Subcatchment	Total Precip in	Total Runon in	Total Evap in	Total Infil in	Imperv Runoff in	Perv Runoff in	Total Runoff in	Total Runoff 10^6 gal	Peak Runoff CFS	Runoff Coeff
CAMINOCommigle	871.40	0.00	50.93	441.14	333.10	60.45	393.54	28.10	3.52	0.452
DMA18	871.40	0.00	14.72	730.63	89.89	42.93	132.82	3.50	1.21	0.152
NorthCommingle	871.40	0.00	23.63	654.84	149.07	51.82	200.89	23.51	5.49	0.231

```
Analysis begun on:  Wed Jul 31 07:20:27 2019
Analysis ended on:  Wed Jul 31 07:20:43 2019
Total elapsed time: 00:00:16
```

4

Attachment 4

SWMM Output – Proposed Conditions

EPA STORM WATER MANAGEMENT MODEL - VERSION 5.1 (Build 5.1.012)

Post Condition Basin 1A

****
Element Count
****

Number of rain gages 1
Number of subcatchments ... 3
Number of nodes 3
Number of links 4
Number of pollutants 0
Number of land uses 0

****
Raingage Summary
****

Name	Data Source	Data Type	Recording Interval
Fallbrook	Fallbrook	INTENSITY	60 min.

****
Subcatchment Summary
****

Name	Area	Width	%Imperv	%Slope	Rain Gage	Outlet
Basin1A	1.31	131.00	0.00	0.1000	Fallbrook	S1A
DMA_PRE	5.15	1319.05	70.00	8.3700	Fallbrook	Basin1A
DMA1	45.48	1319.05	70.00	8.3700	Fallbrook	Basin1A

****
LID Control Summary
****

Subcatchment	LID Control	No. of Units	Unit Area	Unit Width	% Area Covered	% Imperv Treated
Basin1A	LID1A	1	57063.60	0.00	100.00	100.00

****
Node Summary
****

Name	Type	Invert Elev.	Max. Depth	Ponded Area	External Inflow
R2A	JUNCTION	1.00	10.00	0.0	
1A	OUTFALL	0.00	4.00	0.0	
S1A	STORAGE	2.00	5.50	0.0	

****
Link Summary
****

Name	From Node	To Node	Type	Length	%Slope	Roughness
C5	R2A	1A	CONDUIT	10.0	10.0504	0.1000
OR1	S1A	R2A	ORIFICE			
OR44	S1A	R2A	ORIFICE			
OR8	S1A	R2A	ORIFICE			

****
Cross Section Summary
****

Conduit	Shape	Full Depth	Full Area	Hyd. Rad.	Max. Width	No. of Barrels	Full Flow
C5	CIRCULAR	4.00	12.57	1.00	4.00	1	59.20

****
NOTE: The summary statistics displayed in this report are
based on results found at every computational time step,
not just on results from each reporting time step.
****

```
****************
Analysis Options
****************
Flow Units ............... CFS
Process Models:
  Rainfall/Runoff ........ YES
  RDII ................... NO
  Snowmelt ............... NO
  Groundwater ............ NO
  Flow Routing ........... YES
  Ponding Allowed ........ YES
  Water Quality .......... NO
Infiltration Method ...... GREEN_AMPT
Flow Routing Method ...... KINWAVE
Starting Date ............ 07/25/1951 04:00:00
Ending Date .............. 05/26/2008 08:00:00
Antecedent Dry Days ...... 0.0
Report Time Step ......... 01:00:00
Wet Time Step ............ 00:30:00
Dry Time Step ............ 00:30:00
Routing Time Step ........ 15.00 sec


**************************        Volume         Depth
Runoff Quantity Continuity     acre-feet        inches
**************************     ---------       -------
Initial LID Storage ......         0.196         0.045
Total Precipitation ......      3771.710       871.400
Evaporation Loss .........       485.170       112.092
Infiltration Loss ........       829.279       191.593
Surface Runoff ...........      1029.746       237.908
LID Drainage .............      1508.874       348.604
Final Storage ............         0.481         0.111
Continuity Error (%) .....        -2.165


**************************        Volume        Volume
Flow Routing Continuity        acre-feet      10^6 gal
**************************     ---------     ---------
Dry Weather Inflow .......         0.000         0.000
Wet Weather Inflow .......      2538.621       827.247
Groundwater Inflow .......         0.000         0.000
RDII Inflow ..............         0.000         0.000
External Inflow ..........         0.000         0.000
External Outflow .........      2342.922       763.476
Flooding Loss ............         0.000         0.000
Evaporation Loss .........         0.000         0.000
Exfiltration Loss ........       195.687        63.768
Initial Stored Volume ....         0.000         0.000
Final Stored Volume ......         0.000         0.000
Continuity Error (%) .....         0.000


********************************
Highest Flow Instability Indexes
********************************
All links are stable.


*************************
Routing Time Step Summary
*************************
Minimum Time Step           :     15.00 sec
Average Time Step           :     15.00 sec
Maximum Time Step           :     15.00 sec
Percent in Steady State     :      0.00
Average Iterations per Step :      1.00
Percent Not Converging      :      0.00


***************************
Subcatchment Runoff Summary
***************************
```

Subcatchment	Total Precip in	Total Runon in	Total Evap in	Total Infil in	Total Runoff in	Total Runoff 10^6 gal	Peak Runoff CFS	Runoff Coeff
Basin1A	871.40	23547.49	1162.21	0.00	23254.54	827.19	71.00	0.952

DMA_PRE	871.40	0.00	78.42	191.58	626.04	87.55	7.17	0.718
DMA1	871.40	0.00	85.66	197.11	607.37	750.06	63.18	0.697

****
LID Performance Summary
****

Subcatchment	LID Control	Total Inflow in	Evap Loss in	Infil Loss in	Surface Outflow in	Drain Outflow in	Initial Storage in	Final Storage in	Continuity Error %
Basin1A	LID1A	24418.89	1162.25	0.00	9433.14	13822.25	1.80	4.41	-0.01

****
Node Depth Summary
****

Node	Type	Average Depth Feet	Maximum Depth Feet	Maximum HGL Feet	Time of Max Occurrence days hr:min	Reported Max Depth Feet
R2A	JUNCTION	0.01	2.51	3.51	9672 17:42	2.42
1A	OUTFALL	0.01	2.51	2.51	9672 17:42	2.42
S1A	STORAGE	0.02	5.24	7.24	9672 17:42	5.00

****
Node Inflow Summary
****

Node	Type	Maximum Lateral Inflow CFS	Maximum Total Inflow CFS	Time of Max Occurrence days hr:min	Lateral Inflow Volume 10^6 gal	Total Inflow Volume 10^6 gal	Flow Balance Error Percent
R2A	JUNCTION	0.00	42.56	9672 17:42	0	272	0.000
1A	OUTFALL	0.97	43.53	9672 17:42	492	763	0.000
S1A	STORAGE	70.03	70.03	9672 17:00	336	336	0.000

****
Node Flooding Summary
****

No nodes were flooded.

****
Storage Volume Summary
****

Storage Unit	Average Volume 1000 ft3	Avg Pcnt Full	Evap Pcnt Loss	Exfil Pcnt Loss	Maximum Volume 1000 ft3	Max Pcnt Full	Time of Max Occurrence days hr:min	Maximum Outflow CFS
S1A	1.256	0	0	19	363.466	95	9672 17:42	42.74

****
Outfall Loading Summary
****

Outfall Node	Flow Freq Pcnt	Avg Flow CFS	Max Flow CFS	Total Volume 10^6 gal
1A	7.58	0.75	43.53	763.420
System	7.58	0.75	43.53	763.420

****
Link Flow Summary
****

Link	Type	Maximum |Flow| CFS	Time of Max Occurrence days hr:min	Maximum |Veloc| ft/sec	Max/ Full Flow	Max/ Full Depth
C5	CONDUIT	42.56	9672 17:42	5.12	0.72	0.63
OR1	ORIFICE	38.35	9672 17:42			
OR44	ORIFICE	1.91	9672 17:42			0.00
OR8	ORIFICE	2.29	9672 17:42			0.00

****
Conduit Surcharge Summary
****

No conduits were surcharged.

Analysis begun on: Tue May 21 15:10:50 2019
Analysis ended on: Tue May 21 15:12:17 2019
Total elapsed time: 00:01:27

EPA STORM WATER MANAGEMENT MODEL - VERSION 5.1 (Build 5.1.012)

Post Condition Basin 2B

****
Element Count
****
Number of rain gages 1
Number of subcatchments ... 2
Number of nodes 3
Number of links 4
Number of pollutants 0
Number of land uses 0

****
Raingage Summary
****

Name	Data Source	Data Type	Recording Interval
Fallbrook	Fallbrook	INTENSITY	60 min.

****
Subcatchment Summary
****

Name	Area	Width	%Imperv	%Slope	Rain Gage	Outlet
2BBASIN	0.45	96.35	0.00	0.1000	Fallbrook	S2b
DMA3	18.02	221.31	70.00	2.9000	Fallbrook	2BBASIN

****
LID Control Summary
****

Subcatchment	LID Control	No. of Units	Unit Area	Unit Width	% Area Covered	% Imperv Treated
2BBASIN	LID2B	1	19558.44	0.00	100.00	100.00

****
Node Summary
****

Name	Type	Invert Elev.	Max. Depth	Ponded Area	External Inflow
R3C	JUNCTION	1.00	10.00	0.0	
2B	OUTFALL	0.00	4.00	0.0	
S2b	STORAGE	2.00	4.50	0.0	

****
Link Summary
****

Name	From Node	To Node	Type	Length	%Slope	Roughness
C2	R3C	2B	CONDUIT	10.0	10.0504	0.1000
OR1	S2b	R3C	ORIFICE			
OR12	S2b	R3C	ORIFICE			
OR2	S2b	R3C	ORIFICE			

****
Cross Section Summary
****

Conduit	Shape	Full Depth	Full Area	Hyd. Rad.	Max. Width	No. of Barrels	Full Flow
C2	CIRCULAR	4.00	12.57	1.00	4.00	1	59.20

****
NOTE: The summary statistics displayed in this report are
based on results found at every computational time step,
not just on results from each reporting time step.
****

```
****************
Analysis Options
****************
Flow Units ............... CFS
Process Models:
  Rainfall/Runoff ........ YES
  RDII ................... NO
  Snowmelt ............... NO
  Groundwater ............ NO
  Flow Routing ........... YES
  Ponding Allowed ........ YES
  Water Quality .......... NO
Infiltration Method ...... GREEN_AMPT
Flow Routing Method ...... KINWAVE
Starting Date ............ 07/25/1951 04:00:00
Ending Date .............. 05/26/2008 08:00:00
Antecedent Dry Days ...... 0.0
Report Time Step ......... 01:00:00
Wet Time Step ............ 00:30:00
Dry Time Step ............ 00:30:00
Routing Time Step ........ 15.00 sec


**************************        Volume         Depth
Runoff Quantity Continuity     acre-feet        inches
**************************     ---------       -------
Initial LID Storage ......         0.067         0.044
Total Precipitation ......      1341.230       871.400
Evaporation Loss .........       168.699       109.604
Infiltration Loss ........      1080.740       702.159
Surface Runoff ...........        67.079        43.582
LID Drainage .............        38.299        24.883
Final Storage ............         0.120         0.078
Continuity Error (%) .....        -1.017


**************************        Volume        Volume
Flow Routing Continuity        acre-feet      10^6 gal
**************************     ---------     ---------
Dry Weather Inflow .......         0.000         0.000
Wet Weather Inflow .......       105.378        34.339
Groundwater Inflow .......         0.000         0.000
RDII Inflow ..............         0.000         0.000
External Inflow ..........         0.000         0.000
External Outflow .........        43.290        14.107
Flooding Loss ............         0.000         0.000
Evaporation Loss .........         0.000         0.000
Exfiltration Loss ........        62.113        20.241
Initial Stored Volume ....         0.000         0.000
Final Stored Volume ......         0.000         0.000
Continuity Error (%) .....        -0.023


********************************
Highest Flow Instability Indexes
********************************
All links are stable.


*************************
Routing Time Step Summary
*************************
Minimum Time Step           :     15.00 sec
Average Time Step           :     15.00 sec
Maximum Time Step           :     15.00 sec
Percent in Steady State     :      0.00
Average Iterations per Step :      1.00
Percent Not Converging      :      0.00


***************************
Subcatchment Runoff Summary
***************************
```

Subcatchment	Total Precip in	Total Runon in	Total Evap in	Total Infil in	Total Runoff in	Total Runoff 10^6 gal	Peak Runoff CFS	Runoff Coeff
2BBASIN	871.40	21679.58	893.59	18839.85	2816.35	34.34	22.01	0.125
DMA3	871.40	0.00	90.07	250.25	540.16	264.31	23.59	0.620

****
LID Performance Summary
****

Subcatchment	LID Control	Total Inflow in	Evap Loss in	Infil Loss in	Surface Outflow in	Drain Outflow in	Initial Storage in	Final Storage in	Continuity Error %
2BBASIN	LID2B	22550.98	893.62	18840.54	1792.83	1023.62	1.80	3.21	-0.00

****
Node Depth Summary
****

Node	Type	Average Depth Feet	Maximum Depth Feet	Maximum HGL Feet	Time of Max Occurrence days hr:min	Reported Max Depth Feet
R3C	JUNCTION	0.00	1.38	2.38	9672 17:37	1.04
2B	OUTFALL	0.00	1.38	1.38	9672 17:37	1.05
S2b	STORAGE	0.00	3.63	5.63	9672 17:37	3.38

****
Node Inflow Summary
****

Node	Type	Maximum Lateral Inflow CFS	Maximum Total Inflow CFS	Time of Max Occurrence days hr:min	Lateral Inflow Volume 10^6 gal	Total Inflow Volume 10^6 gal	Flow Balance Error Percent
R3C	JUNCTION	0.00	15.11	9672 17:37	0	1.63	0.000
2B	OUTFALL	0.68	15.79	9672 17:37	12.5	14.1	0.000
S2b	STORAGE	21.33	21.33	9672 17:30	21.9	21.9	-0.037

****
Node Flooding Summary
****

No nodes were flooded.

****
Storage Volume Summary
****

Storage Unit	Average Volume 1000 ft3	Avg Pcnt Full	Evap Pcnt Loss	Exfil Pcnt Loss	Maximum Volume 1000 ft3	Max Pcnt Full	Time of Max Occurrence days hr:min	Maximum Outflow CFS
S2b	0.009	0	0	93	86.687	80	9672 17:37	17.16

****
Outfall Loading Summary
****

Outfall Node	Flow Freq Pcnt	Avg Flow CFS	Max Flow CFS	Total Volume 10^6 gal
2B	0.22	0.48	15.79	14.105
System	0.22	0.48	15.79	14.105

```
*******************
Link Flow Summary
*******************

-----------------------------------------------------------------------------
                             Maximum  Time of Max   Maximum    Max/     Max/
                              |Flow|   Occurrence   |Veloc|    Full     Full
Link                Type        CFS  days hr:min    ft/sec     Flow    Depth
-----------------------------------------------------------------------------
C2                  CONDUIT   15.11  9672  17:37      3.94     0.26     0.34
OR1                 ORIFICE   10.53  9672  17:37
OR12                ORIFICE    4.36  9672  17:37                        0.00
OR2                 ORIFICE    0.22  9672  17:37                        0.00


************************
Conduit Surcharge Summary
************************

No conduits were surcharged.


Analysis begun on:  Tue May 21 13:30:21 2019
Analysis ended on:  Tue May 21 13:31:38 2019
Total elapsed time: 00:01:17
```

EPA STORM WATER MANAGEMENT MODEL - VERSION 5.1 (Build 5.1.013)

Post Condition Basin 2H

****
Element Count
****

Number of rain gages 1
Number of subcatchments ... 2
Number of nodes 3
Number of links 3
Number of pollutants 0
Number of land uses 0

****
Raingage Summary
****

Name	Data Source	Data Type	Recording Interval
Fallbrook	Fallbrook	INTENSITY	60 min.

****
Subcatchment Summary
****

Name	Area	Width	%Imperv	%Slope	Rain Gage	Outlet
Bypass	0.35	27.00	100.00	4.1000	Fallbrook	2H
DMA17	9.28	55.34	45.00	6.6500	Fallbrook	S2H

****
LID Control Summary
****

Subcatchment	LID Control	No. of Units	Unit Area	Unit Width	% Area Covered	% Imperv Treated	% Perv Treated
DMA17	2H	1	6782.00	0.00	1.68	100.00	0.00

****
Node Summary
****

Name	Type	Invert Elev.	Max. Depth	Ponded Area	External Inflow
R5A	JUNCTION	1.00	5.00	0.0	
2H	OUTFALL	0.00	4.00	0.0	
S2H	STORAGE	2.00	4.00	0.0	

****
Link Summary
****

Name	From Node	To Node	Type	Length	%Slope	Roughness
C6	R5A	2H	CONDUIT	10.0	10.0504	0.1000
OR1	S2H	R5A	ORIFICE			
OR2	S2H	R5A	ORIFICE			

****
Cross Section Summary
****

Conduit	Shape	Full Depth	Full Area	Hyd. Rad.	Max. Width	No. of Barrels	Full Flow
C6	CIRCULAR	4.00	12.57	1.00	4.00	1	59.20

****
NOTE: The summary statistics displayed in this report are
based on results found at every computational time step,
not just on results from each reporting time step.
****

****

```
Analysis Options
****************
Flow Units ............... CFS
Process Models:
  Rainfall/Runoff ........ YES
  RDII ................... NO
  Snowmelt ............... NO
  Groundwater ............ NO
  Flow Routing ........... YES
  Ponding Allowed ........ YES
  Water Quality .......... NO
Infiltration Method ...... GREEN_AMPT
Flow Routing Method ...... KINWAVE
Starting Date ............ 07/25/1951 04:00:00
Ending Date .............. 05/26/2008 08:00:00
Antecedent Dry Days ...... 0.0
Report Time Step ......... 01:00:00
Wet Time Step ............ 00:30:00
Dry Time Step ............ 00:30:00
Routing Time Step ........ 15.00 sec


**************************        Volume         Depth
Runoff Quantity Continuity     acre-feet        inches
**************************     ---------       -------
Initial LID Storage ......         0.023         0.029
Total Precipitation ......       699.299       871.400
Evaporation Loss .........        62.408        77.767
Infiltration Loss ........       390.512       486.619
Surface Runoff ...........       132.605       165.240
LID Drainage .............       120.512       150.171
Final Storage ............         0.042         0.052
Continuity Error (%) .....        -0.966


**************************        Volume        Volume
Flow Routing Continuity        acre-feet      10^6 gal
**************************     ---------     ---------
Dry Weather Inflow .......         0.000         0.000
Wet Weather Inflow .......       253.118        82.482
Groundwater Inflow .......         0.000         0.000
RDII Inflow ..............         0.000         0.000
External Inflow ..........         0.000         0.000
External Outflow .........       207.915        67.752
Flooding Loss ............         0.000         0.000
Evaporation Loss .........         0.000         0.000
Exfiltration Loss ........        45.201        14.729
Initial Stored Volume ....         0.000         0.000
Final Stored Volume ......         0.000         0.000
Continuity Error (%) .....         0.000


********************************
Highest Flow Instability Indexes
********************************
All links are stable.


*************************
Routing Time Step Summary
*************************
Minimum Time Step           :    15.00 sec
Average Time Step           :    15.00 sec
Maximum Time Step           :    15.00 sec
Percent in Steady State     :     0.00
Average Iterations per Step :     1.00
Percent Not Converging      :     0.00


***************************
Subcatchment Runoff Summary
***************************

  ------------------------------------------------------------------------------------------------------------
-------------------
                            Total      Total      Total      Total     Imperv       Perv      Total
Total      Peak  Runoff
                           Precip      Runon       Evap      Infil     Runoff     Runoff     Runoff
Runoff   Runoff    Coeff
  Subcatchment                 in         in         in         in         in         in         in    10^6
gal      CFS
```

Bypass	871.40	0.00	110.42	0.00	786.05	0.00	786.05	7.47	0.49	0.902
DMA17	871.40	0.00	76.54	504.97	337.60	45.33	297.66	75.01	10.78	0.342

****
LID Performance Summary
****

Subcatchment	LID Control	Total Inflow in	Evap Loss in	Infil Loss in	Surface Outflow in	Drain Outflow in	Initial Storage in	Final Storage in	Continuity Error %
DMA17	2H	20994.63	923.51	5030.23	5751.87	9288.79	1.80	3.21	-0.01

****
Node Depth Summary
****

Node	Type	Average Depth Feet	Maximum Depth Feet	Maximum HGL Feet	Time of Max Occurrence days hr:min	Reported Max Depth Feet
R5A	JUNCTION	0.00	1.14	2.14	9672 17:01	1.13
2H	OUTFALL	0.00	1.14	1.14	9672 17:01	1.13
S2H	STORAGE	0.03	2.63	4.63	9672 17:01	2.63

****
Node Inflow Summary
****

Node	Type	Maximum Lateral Inflow CFS	Maximum Total Inflow CFS	Time of Max Occurrence days hr:min	Lateral Inflow Volume 10^6 gal	Total Inflow Volume 10^6 gal	Flow Balance Error Percent
R5A	JUNCTION	0.00	10.41	9672 17:01	0	21	-0.000
2H	OUTFALL	0.60	10.99	9672 17:01	46.7	67.7	0.000
S2H	STORAGE	10.67	10.67	9672 17:00	35.7	35.7	0.000

****
Node Flooding Summary
****

No nodes were flooded.

****
Storage Volume Summary
****

Storage Unit	Average Volume 1000 ft3	Avg Pcnt Full	Evap Pcnt Loss	Exfil Pcnt Loss	Maximum Volume 1000 ft3	Max Pcnt Full	Time of Max Occurrence days hr:min	Maximum Outflow CFS
S2H	0.216	1	0	41	20.734	61	9672 17:01	10.44

****
Outfall Loading Summary
****

Outfall Node	Flow Freq Pcnt	Avg Flow CFS	Max Flow CFS	Total Volume 10^6 gal

2H	5.83	0.09	10.99	67.747
System	5.83	0.09	10.99	67.747

****
Link Flow Summary
****

Link	Type	Maximum |Flow| CFS	Time of Max Occurrence days hr:min	Maximum |Veloc| ft/sec	Max/ Full Flow	Max/ Full Depth
C6	CONDUIT	10.41	9672 17:01	3.54	0.18	0.28
OR1	ORIFICE	10.37	9672 17:01			
OR2	ORIFICE	0.04	9672 17:01			0.00

****
Conduit Surcharge Summary
****

No conduits were surcharged.

Analysis begun on: Mon May 20 15:24:23 2019
Analysis ended on: Mon May 20 15:25:25 2019
Total elapsed time: 00:01:02

EPA STORM WATER MANAGEMENT MODEL - VERSION 5.1 (Build 5.1.012)

Post Condition Basin 3A

****
Element Count
****

Number of rain gages 1
Number of subcatchments ... 1
Number of nodes 3
Number of links 4
Number of pollutants 0
Number of land uses 0

****
Raingage Summary
****

Name	Data Source	Data Type	Recording Interval
Fallbrook	Fallbrook	INTENSITY	60 min.

****
Subcatchment Summary
****

Name	Area	Width	%Imperv	%Slope	Rain Gage	Outlet
DMA9	4.11	1005.68	70.00	2.0000	Fallbrook	S3A

****
LID Control Summary
****

Subcatchment	LID Control	No. of Units	Unit Area	Unit Width	% Area Covered	% Imperv Treated
DMA9	3A	1	3534.00	0.00	1.97	100.00

****
Node Summary
****

Name	Type	Invert Elev.	Max. Depth	Ponded Area	External Inflow
R5A	JUNCTION	1.00	10.00	0.0	
3A	OUTFALL	0.00	4.00	0.0	
S3A	STORAGE	2.00	5.50	0.0	

****
Link Summary
****

Name	From Node	To Node	Type	Length	%Slope	Roughness
C6	R5A	3A	CONDUIT	10.0	10.0504	0.1000
OR1	S3A	R5A	ORIFICE			
OR14	S3A	R5A	ORIFICE			
OR45	S3A	R5A	ORIFICE			

****
Cross Section Summary
****

Conduit	Shape	Full Depth	Full Area	Hyd. Rad.	Max. Width	No. of Barrels	Full Flow
C6	CIRCULAR	4.00	12.57	1.00	4.00	1	59.20

****
NOTE: The summary statistics displayed in this report are
based on results found at every computational time step,
not just on results from each reporting time step.
****

****
Analysis Options
****

Flow Units .... CFS
Process Models:
  Rainfall/Runoff .... YES
  RDII .... NO
  Snowmelt .... NO

```
  Groundwater ............ NO
  Flow Routing ........... YES
  Ponding Allowed ........ YES
  Water Quality .......... NO
Infiltration Method ...... GREEN_AMPT
Flow Routing Method ...... KINWAVE
Starting Date ............ 07/25/1951 04:00:00
Ending Date .............. 05/26/2008 08:00:00
Antecedent Dry Days ...... 0.0
Report Time Step ......... 01:00:00
Wet Time Step ............ 00:30:00
Dry Time Step ............ 00:30:00
Routing Time Step ........ 15.00 sec
```

```
**************************        Volume         Depth
Runoff Quantity Continuity     acre-feet        inches
**************************     ---------       -------
Initial LID Storage ......         0.012         0.036
Total Precipitation ......       298.455       871.400
Evaporation Loss .........        32.101        93.725
Infiltration Loss ........       133.084       388.568
Surface Runoff ...........        59.597       174.006
LID Drainage .............        80.899       236.203
Final Storage ............         0.022         0.063
Continuity Error (%) .....        -2.425
```

```
**************************        Volume        Volume
Flow Routing Continuity        acre-feet      10^6 gal
**************************     ---------     ---------
Dry Weather Inflow .......         0.000         0.000
Wet Weather Inflow .......       140.496        45.783
Groundwater Inflow .......         0.000         0.000
RDII Inflow ..............         0.000         0.000
External Inflow ..........         0.000         0.000
External Outflow .........        92.282        30.072
Flooding Loss ............         0.000         0.000
Evaporation Loss .........         0.000         0.000
Exfiltration Loss ........        48.227        15.715
Initial Stored Volume ....         0.000         0.000
Final Stored Volume ......         0.000         0.000
Continuity Error (%) .....        -0.009
```

```
********************************
Highest Flow Instability Indexes
********************************
All links are stable.
```

```
*************************
Routing Time Step Summary
*************************
Minimum Time Step           :    15.00 sec
Average Time Step           :    15.00 sec
Maximum Time Step           :    15.00 sec
Percent in Steady State     :     0.00
Average Iterations per Step :     1.00
Percent Not Converging      :     0.00
```

```
***************************
Subcatchment Runoff Summary
***************************
```

Subcatchment	Total Precip in	Total Runon in	Total Evap in	Total Infil in	Total Runoff in	Total Runoff 10^6 gal	Peak Runoff CFS	Runoff Coeff
DMA9	871.40	0.00	93.72	388.57	410.21	45.78	5.61	0.471

```
**********************
LID Performance Summary
**********************
```

Subcatchment	LID Control	Total Inflow in	Evap Loss in	Infil Loss in	Surface Outflow in	Drain Outflow in	Initial Storage in	Final Storage in	Continuity Error %
DMA9	3A	28401.05	985.72	8068.81	7380.45	11966.41	1.80	3.20	-0.01

```
******************
Node Depth Summary
******************
```

Node	Type	Average Depth Feet	Maximum Depth Feet	Maximum HGL Feet	Time of Max Occurrence days hr:min	Reported Max Depth Feet
R5A	JUNCTION	0.00	0.79	1.79	9672 17:00	0.79
3A	OUTFALL	0.00	0.79	0.79	9672 17:00	0.79
S3A	STORAGE	0.00	3.33	5.33	9672 17:00	3.33

****
Node Inflow Summary
****

Node	Type	Maximum Lateral Inflow CFS	Maximum Total Inflow CFS	Time of Max Occurrence days hr:min	Lateral Inflow Volume 10^6 gal	Total Inflow Volume 10^6 gal	Flow Balance Error Percent
R5A	JUNCTION	0.00	5.01	9672 17:00	0	3.71	0.000
3A	OUTFALL	0.11	5.12	9672 17:00	26.4	30.1	0.000
S3A	STORAGE	5.50	5.50	9672 17:00	19.4	19.4	-0.022

****
Node Flooding Summary
****

No nodes were flooded.

****
Storage Volume Summary
****

Storage Unit	Average Volume 1000 ft3	Avg Pcnt Full	Evap Pcnt Loss	Exfil Pcnt Loss	Maximum Volume 1000 ft3	Max Pcnt Full	Time of Max Occurrence days hr:min	Maximum Outflow CFS
S3A	0.009	0	0	81	17.147	52	9672 17:00	5.49

****
Outfall Loading Summary
****

Outfall Node	Flow Freq Pcnt	Avg Flow CFS	Max Flow CFS	Total Volume 10^6 gal
3A	3.00	0.07	5.12	30.069
System	3.00	0.07	5.12	30.069

****
Link Flow Summary
****

Link	Type	Maximum |Flow| CFS	Time of Max Occurrence days hr:min	Maximum |Veloc| ft/sec	Max/ Full Flow	Max/ Full Depth
C6	CONDUIT	5.01	9672 17:00	2.87	0.08	0.20
OR1	ORIFICE	4.02	9672 17:00			
OR14	ORIFICE	0.21	9672 17:00			0.00
OR45	ORIFICE	0.78	9672 17:00			0.00

****
Conduit Surcharge Summary
****

No conduits were surcharged.

Analysis begun on: Wed Dec 12 07:51:34 2018
Analysis ended on: Wed Dec 12 07:53:24 2018
Total elapsed time: 00:01:50

EPA STORM WATER MANAGEMENT MODEL - VERSION 5.1 (Build 5.1.013)

Post Condition Basin 3B

****
Element Count
****

Number of rain gages 1
Number of subcatchments ... 1
Number of nodes 3
Number of links 4
Number of pollutants 0
Number of land uses 0

****
Raingage Summary
****

Name	Data Source	Data Type	Recording Interval
Fallbrook	Fallbrook	INTENSITY	60 min.

****
Subcatchment Summary
****

Name	Area	Width	%Imperv	%Slope	Rain Gage	Outlet
DMA10	1.06	50.94	90.00	1.8000	Fallbrook	S3B

****
LID Control Summary
****

Subcatchment	LID Control	No. of Units	Unit Area	Unit Width	% Area Covered	% Imperv Treated	% Perv Treated
DMA10	3B	1	3488.00	0.00	7.55	100.00	0.00

****
Node Summary
****

Name	Type	Invert Elev.	Max. Depth	Ponded Area	External Inflow
R5B	JUNCTION	1.00	10.00	0.0	
3B	OUTFALL	0.00	4.00	0.0	
S3B	STORAGE	2.00	4.50	0.0	

****
Link Summary
****

Name	From Node	To Node	Type	Length	%Slope	Roughness
C7	R5B	3B	CONDUIT	10.0	10.0504	0.1000
OR1	S3B	R5B	ORIFICE			
OR16	S3B	R5B	ORIFICE			
OR2	S3B	R5B	ORIFICE			

****
Cross Section Summary
****

Conduit	Shape	Full Depth	Full Area	Hyd. Rad.	Max. Width	No. of Barrels	Full Flow
C7	CIRCULAR	4.00	12.57	1.00	4.00	1	59.20

****
NOTE: The summary statistics displayed in this report are
based on results found at every computational time step,
not just on results from each reporting time step.
****

****

```
Analysis Options
****************
Flow Units ............... CFS
Process Models:
  Rainfall/Runoff ........ YES
  RDII ................... NO
  Snowmelt ............... NO
  Groundwater ............ NO
  Flow Routing ........... YES
  Ponding Allowed ........ YES
  Water Quality .......... NO
Infiltration Method ...... GREEN_AMPT
Flow Routing Method ...... KINWAVE
Starting Date ............ 01/16/1978 00:00:00
Ending Date .............. 01/23/1978 00:00:00
Antecedent Dry Days ...... 0.0
Report Time Step ......... 01:00:00
Wet Time Step ............ 00:30:00
Dry Time Step ............ 00:30:00
Routing Time Step ........ 15.00 sec


**************************        Volume         Depth
Runoff Quantity Continuity     acre-feet        inches
**************************     ---------       -------
Initial LID Storage ......         0.012         0.136
Total Precipitation ......         0.397         4.500
Evaporation Loss .........         0.015         0.173
Infiltration Loss ........         0.081         0.922
Surface Runoff ...........         0.106         1.204
LID Drainage .............         0.189         2.138
Final Storage ............         0.023         0.257
Continuity Error (%) .....        -1.256


**************************        Volume        Volume
Flow Routing Continuity        acre-feet      10^6 gal
**************************     ---------     ---------
Dry Weather Inflow .......         0.000         0.000
Wet Weather Inflow .......         0.295         0.096
Groundwater Inflow .......         0.000         0.000
RDII Inflow ..............         0.000         0.000
External Inflow ..........         0.000         0.000
External Outflow .........         0.247         0.081
Flooding Loss ............         0.000         0.000
Evaporation Loss .........         0.000         0.000
Exfiltration Loss ........         0.048         0.016
Initial Stored Volume ....         0.000         0.000
Final Stored Volume ......         0.000         0.000
Continuity Error (%) .....         0.000


********************************
Highest Flow Instability Indexes
********************************
All links are stable.


*************************
Routing Time Step Summary
*************************
Minimum Time Step           :     15.00 sec
Average Time Step           :     15.00 sec
Maximum Time Step           :     15.00 sec
Percent in Steady State     :      0.00
Average Iterations per Step :      1.00
Percent Not Converging      :      0.00


***************************
Subcatchment Runoff Summary
***************************

  ------------------------------------------------------------------------------------------------------------
-------------------
                                     Total       Total       Total       Total      Imperv        Perv       Total
Total      Peak  Runoff
                                    Precip      Runon        Evap       Infil      Runoff      Runoff      Runoff
Runoff   Runoff    Coeff
  Subcatchment                          in          in          in          in          in          in          in    10^6
gal       CFS
```

DMA10	4.50	0.00	0.17	0.92	3.65	0.19	3.34	0.10	1.44	0.743

****
LID Performance Summary
****

Subcatchment	LID Control	Total Inflow in	Evap Loss in	Infil Loss in	Surface Outflow in	Drain Outflow in	Initial Storage in	Final Storage in	Continuity Error %
DMA10	3B	52.82	0.33	9.22	13.36	28.31	1.80	3.40	-0.00

****
Node Depth Summary
****

Node	Type	Average Depth Feet	Maximum Depth Feet	Maximum HGL Feet	Time of Max Occurrence days hr:min	Reported Max Depth Feet
R5B	JUNCTION	0.01	0.15	1.15	0 21:25	0.13
3B	OUTFALL	0.01	0.15	0.15	0 21:25	0.13
S3B	STORAGE	0.03	0.83	2.83	0 21:25	0.76

****
Node Inflow Summary
****

Node	Type	Maximum Lateral Inflow CFS	Maximum Total Inflow CFS	Time of Max Occurrence days hr:min	Lateral Inflow Volume 10^6 gal	Total Inflow Volume 10^6 gal	Flow Balance Error Percent
R5B	JUNCTION	0.00	0.15	0 21:25	0	0.019	0.000
3B	OUTFALL	0.37	0.52	0 21:25	0.0615	0.0805	0.000
S3B	STORAGE	1.07	1.07	0 21:00	0.0346	0.0346	-0.006

****
Node Flooding Summary
****

No nodes were flooded.

****
Storage Volume Summary
****

Storage Unit	Average Volume 1000 ft3	Avg Pcnt Full	Evap Pcnt Loss	Exfil Pcnt Loss	Maximum Volume 1000 ft3	Max Pcnt Full	Time of Max Occurrence days hr:min	Maximum Outflow CFS
S3B	0.118	0	0	45	3.767	14	0 21:25	0.19

****
Outfall Loading Summary
****

Outfall Node	Flow Freq Pcnt	Avg Flow CFS	Max Flow CFS	Total Volume 10^6 gal
3B	10.99	0.16	0.52	0.080

System	10.99	0.16	0.52	0.080

****
Link Flow Summary
****

Link	Type	Maximum |Flow| CFS	Time of Max Occurrence days hr:min	Maximum |Veloc| ft/sec	Max/ Full Flow	Max/ Full Depth
C7	CONDUIT	0.15	0 21:25	0.99	0.00	0.04
OR1	ORIFICE	0.00	0 00:00			
OR16	ORIFICE	0.04	0 21:25			0.00
OR2	ORIFICE	0.10	0 21:25			0.00

****
Conduit Surcharge Summary
****

No conduits were surcharged.

Analysis begun on: Mon May 20 18:38:57 2019
Analysis ended on: Mon May 20 18:38:57 2019
Total elapsed time: < 1 sec

EPA STORM WATER MANAGEMENT MODEL - VERSION 5.1 (Build 5.1.013)

Post Condition Basin 3C

****
Element Count
****

Number of rain gages 1
Number of subcatchments ... 1
Number of nodes 3
Number of links 4
Number of pollutants 0
Number of land uses 0

****
Raingage Summary
****

Name	Data Source	Data Type	Recording Interval
Fallbrook	Fallbrook	INTENSITY	60 min.

****
Subcatchment Summary
****

Name	Area	Width	%Imperv	%Slope	Rain Gage	Outlet
DMA11	8.29	818.53	39.00	2.5000	Fallbrook	S3C

****
LID Control Summary
****

Subcatchment	LID Control	No. of Units	Unit Area	Unit Width	% Area Covered	% Imperv Treated	% Perv Treated
DMA11	3C	1	7590.00	0.00	2.10	100.00	0.00

****
Node Summary
****

Name	Type	Invert Elev.	Max. Depth	Ponded Area	External Inflow
R5C	JUNCTION	1.00	10.00	0.0	
3C	OUTFALL	0.00	4.00	0.0	
S3C	STORAGE	2.00	4.50	0.0	

****
Link Summary
****

Name	From Node	To Node	Type	Length	%Slope	Roughness
C8	R5C	3C	CONDUIT	10.0	10.0504	0.1000
OR1	S3C	R5C	ORIFICE			
OR18	S3C	R5C	ORIFICE			
OR46	S3C	R5C	ORIFICE			

****
Cross Section Summary
****

Conduit	Shape	Full Depth	Full Area	Hyd. Rad.	Max. Width	No. of Barrels	Full Flow
C8	CIRCULAR	4.00	12.57	1.00	4.00	1	59.20

****
NOTE: The summary statistics displayed in this report are
based on results found at every computational time step,
not just on results from each reporting time step.
****

****

```
  Analysis Options
  ****************
  Flow Units ............... CFS
  Process Models:
    Rainfall/Runoff ........ YES
    RDII ................... NO
    Snowmelt ............... NO
    Groundwater ............ NO
    Flow Routing ........... YES
    Ponding Allowed ........ YES
    Water Quality .......... NO
  Infiltration Method ...... GREEN_AMPT
  Flow Routing Method ...... KINWAVE
  Starting Date ............ 07/25/1951 04:00:00
  Ending Date .............. 05/26/2008 08:00:00
  Antecedent Dry Days ...... 0.0
  Report Time Step ......... 01:00:00
  Wet Time Step ............ 00:30:00
  Dry Time Step ............ 00:30:00
  Routing Time Step ........ 15.00 sec


  **************************        Volume         Depth
  Runoff Quantity Continuity     acre-feet        inches
  **************************     ---------       -------
  Initial LID Storage ......         0.026         0.038
  Total Precipitation ......       601.992       871.400
  Evaporation Loss .........        45.773        66.258
  Infiltration Loss ........       440.876       638.180
  Surface Runoff ...........       118.640       171.735
  LID Drainage .............         6.222         9.007
  Final Storage ............         0.047         0.067
  Continuity Error (%) .....        -1.585


  **************************        Volume        Volume
  Flow Routing Continuity        acre-feet      10^6 gal
  **************************     ---------     ---------
  Dry Weather Inflow .......         0.000         0.000
  Wet Weather Inflow .......       124.863        40.688
  Groundwater Inflow .......         0.000         0.000
  RDII Inflow ..............         0.000         0.000
  External Inflow ..........         0.000         0.000
  External Outflow .........        76.349        24.880
  Flooding Loss ............         0.000         0.000
  Evaporation Loss .........         0.000         0.000
  Exfiltration Loss ........        48.516        15.810
  Initial Stored Volume ....         0.000         0.000
  Final Stored Volume ......         0.000         0.000
  Continuity Error (%) .....        -0.002


  ********************************
  Highest Flow Instability Indexes
  ********************************
  All links are stable.


  *************************
  Routing Time Step Summary
  *************************
  Minimum Time Step           :     15.00 sec
  Average Time Step           :     15.00 sec
  Maximum Time Step           :     15.00 sec
  Percent in Steady State     :      0.00
  Average Iterations per Step :      1.00
  Percent Not Converging      :      0.00


  ***************************
  Subcatchment Runoff Summary
  ***************************

  --------------------------------------------------------------------------------------------------------------
-------------------
                            Total      Total      Total      Total     Imperv       Perv      Total
Total      Peak  Runoff
                           Precip      Runon       Evap      Infil     Runoff     Runoff     Runoff
Runoff   Runoff   Coeff
  Subcatchment                 in         in         in         in         in         in         in    10^6
gal      CFS
```

DMA11	871.40	0.00	66.26	638.18	302.09	63.88	180.74	40.69	11.02	0.207

****
LID Performance Summary
****

Subcatchment	LID Control	Total Inflow in	Evap Loss in	Infil Loss in	Surface Outflow in	Drain Outflow in	Initial Storage in	Final Storage in	Continuity Error %
DMA11	3C	15244.67	962.79	8723.93	5131.57	428.55	1.80	3.21	-0.02

****
Node Depth Summary
****

Node	Type	Average Depth Feet	Maximum Depth Feet	Maximum HGL Feet	Time of Max Occurrence days hr:min	Reported Max Depth Feet
R5C	JUNCTION	0.00	1.15	2.15	9672 17:01	1.15
3C	OUTFALL	0.00	1.15	1.15	9672 17:01	1.15
S3C	STORAGE	0.01	3.59	5.59	9672 17:01	3.58

****
Node Inflow Summary
****

Node	Type	Maximum Lateral Inflow CFS	Maximum Total Inflow CFS	Time of Max Occurrence days hr:min	Lateral Inflow Volume 10^6 gal	Total Inflow Volume 10^6 gal	Flow Balance Error Percent
R5C	JUNCTION	0.00	10.75	9672 17:01	0	22.9	0.000
3C	OUTFALL	0.02	10.75	9672 17:01	2.03	24.9	0.000
S3C	STORAGE	11.02	11.02	9672 17:00	38.7	38.7	-0.003

****
Node Flooding Summary
****

No nodes were flooded.

****
Storage Volume Summary
****

Storage Unit	Average Volume 1000 ft3	Avg Pcnt Full	Evap Pcnt Loss	Exfil Pcnt Loss	Maximum Volume 1000 ft3	Max Pcnt Full	Time of Max Occurrence days hr:min	Maximum Outflow CFS
S3C	0.090	0	0	41	35.236	75	9672 17:00	10.86

****
Outfall Loading Summary
****

Outfall Node	Flow Freq Pcnt	Avg Flow CFS	Max Flow CFS	Total Volume 10^6 gal
3C	1.87	0.10	10.75	24.878

System	1.87	0.10	10.75	24.878

****
Link Flow Summary
****

Link	Type	Maximum |Flow| CFS	Time of Max Occurrence days hr:min	Maximum |Veloc| ft/sec	Max/ Full Flow	Max/ Full Depth
C8	CONDUIT	10.75	9672 17:01	3.58	0.18	0.29
OR1	ORIFICE	9.35	9672 17:01			
OR18	ORIFICE	0.22	9672 17:01			0.00
OR46	ORIFICE	1.18	9672 17:01			0.00

****
Conduit Surcharge Summary
****

No conduits were surcharged.

Analysis begun on: Mon May 20 19:28:55 2019
Analysis ended on: Mon May 20 19:30:09 2019
Total elapsed time: 00:01:14

EPA STORM WATER MANAGEMENT MODEL - VERSION 5.1 (Build 5.1.013)

Post Condition Basin 3D

```
*************
Element Count
*************
Number of rain gages ...... 1
Number of subcatchments ... 1
Number of nodes ........... 3
Number of links ........... 3
Number of pollutants ...... 0
Number of land uses ....... 0


****************
Raingage Summary
****************
                                                   Data       Recording
Name                Data Source                    Type       Interval
-----------------------------------------------------------------------
Fallbrook           Fallbrook                      INTENSITY    60 min.


********************
Subcatchment Summary
********************
Name                       Area     Width   %Imperv    %Slope Rain Gage            Outlet
-------------------------------------------------------------------------------------------------------
DMA12                     15.00    352.00     40.00    4.7000 Fallbrook            S3D


************
Node Summary
************
                                       Invert      Max.    Ponded    External
Name                Type                Elev.     Depth      Area    Inflow
-------------------------------------------------------------------------------
R5D                 JUNCTION             1.00      8.00       0.0
5D                  OUTFALL              0.00      4.00       0.0
S3D                 STORAGE              2.00      4.00       0.0


************
Link Summary
************
Name            From Node        To Node          Type               Length    %Slope Roughness
---------------------------------------------------------------------------------------------
C9              R5D              5D               CONDUIT              10.0   10.0504    0.1000
OR1             S3D              R5D              ORIFICE
OR20            S3D              R5D              ORIFICE


*********************
Cross Section Summary
*********************
                                        Full     Full     Hyd.     Max.   No. of     Full
Conduit         Shape                  Depth     Area     Rad.    Width  Barrels     Flow
---------------------------------------------------------------------------------------
C9              CIRCULAR                4.00    12.57     1.00     4.00        1    59.20


*********************************************************
NOTE: The summary statistics displayed in this report are
based on results found at every computational time step,
not just on results from each reporting time step.
*********************************************************

****************
Analysis Options
****************
Flow Units ............... CFS
Process Models:
  Rainfall/Runoff ........ YES
  RDII ................... NO
  Snowmelt ............... NO
  Groundwater ............ NO
  Flow Routing ........... YES
  Ponding Allowed ........ YES
```

Water Quality .... NO
Infiltration Method ...... GREEN_AMPT
Flow Routing Method ...... KINWAVE
Starting Date 07/25/1951 04:00:00
Ending Date 05/26/2008 08:00:00
Antecedent Dry Days 0.0
Report Time Step 01:00:00
Wet Time Step 00:30:00
Dry Time Step 00:30:00
Routing Time Step .... 15.00 sec

****
Runoff Quantity Continuity
****

Runoff Quantity Continuity	Volume acre-feet	Depth inches
Total Precipitation	1089.250	871.400
Evaporation Loss	63.108	50.486
Infiltration Loss	584.696	467.757
Surface Runoff	455.483	364.386
Final Storage	0.000	0.000
Continuity Error (%)	-1.289	

****
Flow Routing Continuity
****

Flow Routing Continuity	Volume acre-feet	Volume 10^6 gal
Dry Weather Inflow	0.000	0.000
Wet Weather Inflow	455.483	148.426
Groundwater Inflow	0.000	0.000
RDII Inflow	0.000	0.000
External Inflow	0.000	0.000
External Outflow	18.124	5.906
Flooding Loss	0.000	0.000
Evaporation Loss	0.000	0.000
Exfiltration Loss	437.397	142.532
Initial Stored Volume	0.000	0.000
Final Stored Volume	0.000	0.000
Continuity Error (%)	-0.008	

****
Highest Flow Instability Indexes
****

All links are stable.

****
Routing Time Step Summary
****

Minimum Time Step : 15.00 sec
Average Time Step : 15.00 sec
Maximum Time Step : 15.00 sec
Percent in Steady State : 0.00
Average Iterations per Step : 1.00
Percent Not Converging : 0.00

****
Subcatchment Runoff Summary
****

Subcatchment	Total Precip in	Total Runon in	Total Evap in	Total Infil in	Imperv Runoff in	Perv Runoff in	Total Runoff in	Total Runoff 10^6 gal	Peak Runoff CFS	Runoff Coeff
DMA12	871.40	0.00	50.49	467.76	312.60	51.79	364.39	148.41	19.15	0.418

****
Node Depth Summary
****

Average Maximum Maximum Time of Max Reported

Node	Type	Depth Feet	Depth Feet	HGL Feet	Occurrence days hr:min	Max Depth Feet
R5D	JUNCTION	0.00	1.35	2.35	9672 17:06	1.31
5D	OUTFALL	0.00	1.35	1.35	9672 17:06	1.31
S3D	STORAGE	0.00	3.51	5.51	9672 17:06	3.48

****
Node Inflow Summary
****

Node	Type	Maximum Lateral Inflow CFS	Maximum Total Inflow CFS	Time of Max Occurrence days hr:min	Lateral Inflow Volume 10^6 gal	Total Inflow Volume 10^6 gal	Flow Balance Error Percent
R5D	JUNCTION	0.00	14.63	9672 17:06	0	5.91	0.000
5D	OUTFALL	0.00	14.63	9672 17:06	0	5.91	0.000
S3D	STORAGE	19.15	19.15	9672 17:00	148	148	-0.009

****
Node Flooding Summary
****

No nodes were flooded.

****
Storage Volume Summary
****

Storage Unit	Average Volume 1000 ft3	Avg Pcnt Full	Evap Pcnt Loss	Exfil Pcnt Loss	Maximum Volume 1000 ft3	Max Pcnt Full	Time of Max Occurrence days hr:min	Maximum Outflow CFS
S3D	0.031	0	0	96	79.493	86	9672 17:05	16.41

****
Outfall Loading Summary
****

Outfall Node	Flow Freq Pcnt	Avg Flow CFS	Max Flow CFS	Total Volume 10^6 gal
5D	0.05	0.92	14.63	5.906
System	0.05	0.92	14.63	5.906

****
Link Flow Summary
****

Link	Type	Maximum |Flow| CFS	Time of Max Occurrence days hr:min	Maximum |Veloc| ft/sec	Max/ Full Flow	Max/ Full Depth
C9	CONDUIT	14.63	9672 17:06	3.90	0.25	0.34
OR1	ORIFICE	11.27	9672 17:06			
OR20	ORIFICE	3.36	9672 17:06			0.00

****
Conduit Surcharge Summary
****

No conduits were surcharged.

Analysis begun on: Mon May 20 19:35:44 2019
Analysis ended on: Mon May 20 19:36:53 2019
Total elapsed time: 00:01:09

EPA STORM WATER MANAGEMENT MODEL - VERSION 5.1 (Build 5.1.012)

Post Condition Basin 3E

****
Element Count
****

Number of rain gages 1
Number of subcatchments ... 1
Number of nodes 3
Number of links 4
Number of pollutants 0
Number of land uses 0

****
Raingage Summary
****

Name	Data Source	Data Type	Recording Interval
Fallbrook	Fallbrook	INTENSITY	60 min.

****
Subcatchment Summary
****

Name	Area	Width	%Imperv	%Slope	Rain Gage	Outlet
DMA13	1.89	108.10	90.00	2.5500	Fallbrook	3E

****
LID Control Summary
****

Subcatchment	LID Control	No. of Units	Unit Area	Unit Width	% Area Covered	% Imperv Treated
DMA13	3E	1	1870.00	0.00	2.27	100.00

****
Node Summary
****

Name	Type	Invert Elev.	Max. Depth	Ponded Area	External Inflow
R5G	JUNCTION	1.00	10.00	0.0	
3EOUT	OUTFALL	0.00	4.00	0.0	
3E	STORAGE	2.00	4.50	0.0	

****
Link Summary
****

Name	From Node	To Node	Type	Length	%Slope	Roughness
C10	R5G	3EOUT	CONDUIT	10.0	10.0504	0.1000
OR1	3E	R5G	ORIFICE			
OR2	3E	R5G	ORIFICE			
OR24	3E	R5G	ORIFICE			

****
Cross Section Summary
****

Conduit	Shape	Full Depth	Full Area	Hyd. Rad.	Max. Width	No. of Barrels	Full Flow
C10	CIRCULAR	4.00	12.57	1.00	4.00	1	59.20

****
NOTE: The summary statistics displayed in this report are
based on results found at every computational time step,
not just on results from each reporting time step.
****

****
Analysis Options
****

Flow Units .... CFS
Process Models:
  Rainfall/Runoff .... YES
  RDII .... NO
  Snowmelt .... NO

```
  Groundwater ........... NO
  Flow Routing .......... YES
  Ponding Allowed ....... YES
  Water Quality ......... NO
Infiltration Method ...... GREEN_AMPT
Flow Routing Method ...... KINWAVE
Starting Date ............ 07/25/1951 04:00:00
Ending Date .............. 05/26/2008 08:00:00
Antecedent Dry Days ...... 0.0
Report Time Step ......... 01:00:00
Wet Time Step ............ 00:30:00
Dry Time Step ............ 00:30:00
Routing Time Step ........ 15.00 sec


**************************        Volume         Depth
Runoff Quantity Continuity      acre-feet        inches
**************************      ---------       -------
Initial LID Storage ......          0.006         0.041
Total Precipitation ......        137.224       871.400
Evaporation Loss .........         19.229       122.111
Infiltration Loss ........         37.462       237.890
Surface Runoff ...........         25.240       160.281
LID Drainage .............         58.618       372.240
Final Storage ............          0.011         0.073
Continuity Error (%) .....         -2.427


**************************        Volume        Volume
Flow Routing Continuity         acre-feet      10^6 gal
**************************      ---------     ---------
Dry Weather Inflow .......          0.000         0.000
Wet Weather Inflow .......         83.859        27.327
Groundwater Inflow .......          0.000         0.000
RDII Inflow ..............          0.000         0.000
External Inflow ..........          0.000         0.000
External Outflow .........         42.458        13.835
Flooding Loss ............          0.000         0.000
Evaporation Loss .........          0.000         0.000
Exfiltration Loss ........         41.403        13.492
Initial Stored Volume ....          0.000         0.000
Final Stored Volume ......          0.000         0.000
Continuity Error (%) .....         -0.003


********************************
Highest Flow Instability Indexes
********************************
All links are stable.


*************************
Routing Time Step Summary
*************************
Minimum Time Step           :     15.00 sec
Average Time Step           :     15.00 sec
Maximum Time Step           :     15.00 sec
Percent in Steady State     :      0.00
Average Iterations per Step :      1.00
Percent Not Converging      :      0.00


***************************
Subcatchment Runoff Summary
***************************

----------------------------------------------------------------------------------------------------
                            Total      Total      Total      Total      Total       Total     Peak  Runoff
                           Precip      Runon       Evap      Infil     Runoff      Runoff   Runoff   Coeff
Subcatchment                   in         in         in         in         in    10^6 gal      CFS
----------------------------------------------------------------------------------------------------
DMA13                      871.40       0.00     122.11     237.89     532.52       27.32     2.62   0.611


**********************
LID Performance Summary
**********************

------------------------------------------------------------------------------------------------------------------
                                           Total      Evap     Infil   Surface     Drain   Initial     Final  Continuity
                                          Inflow      Loss      Loss   Outflow   Outflow   Storage   Storage       Error
Subcatchment      LID Control                 in        in        in        in        in        in        in           %
------------------------------------------------------------------------------------------------------------------
DMA13             3E                    31118.45    969.11   7151.39   6612.08  16386.19      1.80      3.20       -0.01

******************
Node Depth Summary
******************
```

Node	Type	Average Depth Feet	Maximum Depth Feet	Maximum HGL Feet	Time of Max Occurrence days hr:min	Reported Max Depth Feet
R5G	JUNCTION	0.00	0.57	1.57	9672 17:00	0.57
3EOUT	OUTFALL	0.00	0.57	0.57	9672 17:00	0.57
3E	STORAGE	0.03	3.24	5.24	9672 17:00	3.24

****
Node Inflow Summary
****

Node	Type	Maximum Lateral Inflow CFS	Maximum Total Inflow CFS	Time of Max Occurrence days hr:min	Lateral Inflow Volume 10^6 gal	Total Inflow Volume 10^6 gal	Flow Balance Error Percent
R5G	JUNCTION	0.00	2.58	9672 17:00	0	13.8	0.000
3EOUT	OUTFALL	0.00	2.58	9672 17:00	0	13.8	0.000
3E	STORAGE	2.62	2.62	9672 17:00	27.3	27.3	-0.003

****
Node Flooding Summary
****

No nodes were flooded.

****
Storage Volume Summary
****

Storage Unit	Average Volume 1000 ft3	Avg Pcnt Full	Evap Pcnt Loss	Exfil Pcnt Loss	Maximum Volume 1000 ft3	Max Pcnt Full	Time of Max Occurrence days hr:min	Maximum Outflow CFS
3E	0.084	0	0	49	10.719	62	9672 17:00	2.62

****
Outfall Loading Summary
****

Outfall Node	Flow Freq Pcnt	Avg Flow CFS	Max Flow CFS	Total Volume 10^6 gal
3EOUT	4.08	0.03	2.58	13.834
System	4.08	0.03	2.58	13.834

****
Link Flow Summary
****

Link	Type	Maximum |Flow| CFS	Time of Max Occurrence days hr:min	Maximum |Veloc| ft/sec	Max/ Full Flow	Max/ Full Depth
C10	CONDUIT	2.58	9672 17:00	2.37	0.04	0.14
OR1	ORIFICE	2.50	9672 17:00			
OR2	ORIFICE	0.05	9672 17:00			0.00
OR24	ORIFICE	0.03	9672 17:00			0.00

****
Conduit Surcharge Summary
****

No conduits were surcharged.

Analysis begun on: Tue Dec 11 18:17:03 2018
Analysis ended on: Tue Dec 11 18:18:35 2018
Total elapsed time: 00:01:32

```
EPA STORM WATER MANAGEMENT MODEL - VERSION 5.1 (Build 5.1.013)
--------------------------------------------------------------
```

Post Condition Basin 3F

```
*************
Element Count
*************
Number of rain gages ...... 1
Number of subcatchments ... 1
Number of nodes ........... 3
Number of links ........... 4
Number of pollutants ...... 0
Number of land uses ....... 0


****************
Raingage Summary
****************
                                                     Data      Recording
Name                 Data Source                     Type      Interval
------------------------------------------------------------------------
Fallbrook            Fallbrook                       INTENSITY   60 min.


********************
Subcatchment Summary
********************
Name                       Area     Width   %Imperv    %Slope Rain Gage            Outlet
-----------------------------------------------------------------------------------------------------------
DMA14                      1.50     66.66     90.00    1.5000 Fallbrook            S3F


************
Node Summary
************
                                           Invert      Max.    Ponded    External
Name                 Type                   Elev.     Depth      Area    Inflow
-------------------------------------------------------------------------------
R5H                  JUNCTION                1.00     10.00       0.0
3F                   OUTFALL                 0.00      4.00       0.0
S3F                  STORAGE                 2.00      3.50       0.0


************
Link Summary
************
Name             From Node        To Node          Type               Length    %Slope Roughness
---------------------------------------------------------------------------------------------
C11              R5H              3F               CONDUIT              10.0   10.0504    0.1000
OR1              S3F              R5H              ORIFICE
OR3              S3F              R5H              ORIFICE
OR4              S3F              R5H              ORIFICE


*********************
Cross Section Summary
*********************
                                        Full     Full     Hyd.     Max.   No. of     Full
Conduit          Shape                 Depth     Area     Rad.    Width  Barrels     Flow
---------------------------------------------------------------------------------------
C11              CIRCULAR               4.00    12.57     1.00     4.00        1    59.20


*********************************************************
NOTE: The summary statistics displayed in this report are
based on results found at every computational time step,
not just on results from each reporting time step.
*********************************************************

****************
Analysis Options
****************
Flow Units ............... CFS
Process Models:
  Rainfall/Runoff ........ YES
  RDII ................... NO
  Snowmelt ............... NO
  Groundwater ............ NO
  Flow Routing ........... YES
```

```
  Ponding Allowed ........ YES
  Water Quality .......... NO
Infiltration Method ...... GREEN_AMPT
Flow Routing Method ...... KINWAVE
Starting Date ............ 07/25/1951 04:00:00
Ending Date .............. 05/26/2008 08:00:00
Antecedent Dry Days ...... 0.0
Report Time Step ......... 01:00:00
Wet Time Step ............ 00:30:00
Dry Time Step ............ 00:30:00
Routing Time Step ........ 15.00 sec
```

```
**************************        Volume         Depth
Runoff Quantity Continuity     acre-feet        inches
**************************     ---------       -------
Total Precipitation ......       108.925       871.400
Evaporation Loss .........        13.464       107.715
Infiltration Loss ........         9.920        79.360
Surface Runoff ...........        87.610       700.884
Final Storage ............         0.000         0.000
Continuity Error (%) .....        -1.900
```

```
**************************        Volume        Volume
Flow Routing Continuity        acre-feet      10^6 gal
**************************     ---------     ---------
Dry Weather Inflow .......         0.000         0.000
Wet Weather Inflow .......        87.610        28.549
Groundwater Inflow .......         0.000         0.000
RDII Inflow ..............         0.000         0.000
External Inflow ..........         0.000         0.000
External Outflow .........        16.638         5.422
Flooding Loss ............         0.000         0.000
Evaporation Loss .........         0.000         0.000
Exfiltration Loss ........        70.979        23.129
Initial Stored Volume ....         0.000         0.000
Final Stored Volume ......         0.000         0.000
Continuity Error (%) .....        -0.007
```

```
********************************
Highest Flow Instability Indexes
********************************
All links are stable.
```

```
*************************
Routing Time Step Summary
*************************
Minimum Time Step           :     15.00 sec
Average Time Step           :     15.00 sec
Maximum Time Step           :     15.00 sec
Percent in Steady State     :      0.00
Average Iterations per Step :      1.00
Percent Not Converging      :      0.00
```

```
***************************
Subcatchment Runoff Summary
***************************
```

Subcatchment	Total Precip in	Total Runon in	Total Evap in	Total Infil in	Imperv Runoff in	Perv Runoff in	Total Runoff in	Total Runoff 10^6 gal	Peak Runoff CFS	Runoff Coeff
DMA14	871.40	0.00	107.71	79.36	692.89	7.99	700.88	28.55	2.09	0.804

```
******************
Node Depth Summary
******************

---------------------------------------------------------------------------------
```

Node	Type	Average Depth Feet	Maximum Depth Feet	Maximum HGL Feet	Time of Max Occurrence days hr:min	Reported Max Depth Feet
R5H	JUNCTION	0.00	0.50	1.50	9672 17:00	0.50
3F	OUTFALL	0.00	0.50	0.50	9672 17:00	0.50
S3F	STORAGE	0.02	3.32	5.32	9672 17:00	3.32

****
Node Inflow Summary
****

Node	Type	Maximum Lateral Inflow CFS	Maximum Total Inflow CFS	Time of Max Occurrence days hr:min	Lateral Inflow Volume 10^6 gal	Total Inflow Volume 10^6 gal	Flow Balance Error Percent
R5H	JUNCTION	0.00	1.96	9672 17:00	0	5.42	-0.000
3F	OUTFALL	0.00	1.96	9672 17:00	0	5.42	0.000
S3F	STORAGE	2.09	2.09	9672 17:00	28.5	28.5	-0.007

****
Node Flooding Summary
****

No nodes were flooded.

****
Storage Volume Summary
****

Storage Unit	Average Volume 1000 ft3	Avg Pcnt Full	Evap Pcnt Loss	Exfil Pcnt Loss	Maximum Volume 1000 ft3	Max Pcnt Full	Time of Max Occurrence days hr:min	Maximum Outflow CFS
S3F	0.027	0	0	81	5.959	92	9672 17:00	2.09

****
Outfall Loading Summary
****

Outfall Node	Flow Freq Pcnt	Avg Flow CFS	Max Flow CFS	Total Volume 10^6 gal
3F	1.41	0.03	1.96	5.421
System	1.41	0.03	1.96	5.421

****
Link Flow Summary
****

Link	Type	Maximum |Flow| CFS	Time of Max Occurrence days hr:min	Maximum |Veloc| ft/sec	Max/ Full Flow	Max/ Full Depth
C11	CONDUIT	1.96	9672 17:00	2.18	0.03	0.12
OR1	ORIFICE	0.05	9672 17:00			0.00
OR3	ORIFICE	1.89	9672 17:00			
OR4	ORIFICE	0.02	9672 17:00			0.00

****
Conduit Surcharge Summary
****

No conduits were surcharged.

Analysis begun on: Mon May 20 20:33:33 2019
Analysis ended on: Mon May 20 20:34:35 2019

Total elapsed time: 00:01:02

EPA STORM WATER MANAGEMENT MODEL - VERSION 5.1 (Build 5.1.013)

Post Condition Basin 3G

****
Element Count
****

Number of rain gages 1
Number of subcatchments ... 2
Number of nodes 3
Number of links 4
Number of pollutants 0
Number of land uses 0

****
Raingage Summary
****

Name	Data Source	Data Type	Recording Interval
Fallbrook	Fallbrook	INTENSITY	60 min.

****
Subcatchment Summary
****

Name	Area	Width	%Imperv	%Slope	Rain Gage	Outlet
15	1.98	60.70	90.00	1.7600	Fallbrook	BMP3G
BMP3G	0.04	17.82	0.00	0.1000	Fallbrook	3G

****
LID Control Summary
****

Subcatchment	LID Control	No. of Units	Unit Area	Unit Width	% Area Covered	% Imperv Treated	% Perv Treated
BMP3G	3G	1	1781.60	0.00	100.00	100.00	0.00

****
Node Summary
****

Name	Type	Invert Elev.	Max. Depth	Ponded Area	External Inflow
R5I	JUNCTION	1.00	10.00	0.0	
3GOUT	OUTFALL	0.00	4.00	0.0	
3G	STORAGE	2.00	3.50	0.0	

****
Link Summary
****

Name	From Node	To Node	Type	Length	%Slope	Roughness
C12	R5I	3GOUT	CONDUIT	10.0	10.0504	0.1300
OR1	3G	R5I	ORIFICE			
OR2	3G	R5I	ORIFICE			
OR4	3G	R5I	ORIFICE			

****
Cross Section Summary
****

Conduit	Shape	Full Depth	Full Area	Hyd. Rad.	Max. Width	No. of Barrels	Full Flow
C12	CIRCULAR	4.00	12.57	1.00	4.00	1	45.54

****
NOTE: The summary statistics displayed in this report are
based on results found at every computational time step,
not just on results from each reporting time step.
****

```
****************
Analysis Options
****************
Flow Units ............... CFS
Process Models:
  Rainfall/Runoff ........ YES
  RDII ................... NO
  Snowmelt ............... NO
  Groundwater ............ NO
  Flow Routing ........... YES
  Ponding Allowed ........ YES
  Water Quality .......... NO
Infiltration Method ...... GREEN_AMPT
Flow Routing Method ...... KINWAVE
Starting Date ............ 07/25/1951 04:00:00
Ending Date .............. 05/26/2008 08:00:00
Antecedent Dry Days ...... 0.0
Report Time Step ......... 01:00:00
Wet Time Step ............ 00:30:00
Dry Time Step ............ 00:30:00
Routing Time Step ........ 15.00 sec


**************************        Volume         Depth
Runoff Quantity Continuity     acre-feet        inches
**************************     ---------       -------
Initial LID Storage ......         0.006         0.036
Total Precipitation ......       146.751       871.400
Evaporation Loss .........        21.473       127.506
Infiltration Loss ........        37.947       225.327
Surface Runoff ...........        29.497       175.150
LID Drainage .............        60.207       357.505
Final Storage ............         0.011         0.065
Continuity Error (%) .....        -1.620


**************************        Volume        Volume
Flow Routing Continuity        acre-feet      10^6 gal
**************************     ---------     ---------
Dry Weather Inflow .......         0.000         0.000
Wet Weather Inflow .......        89.703        29.231
Groundwater Inflow .......         0.000         0.000
RDII Inflow ..............         0.000         0.000
External Inflow ..........         0.000         0.000
External Outflow .........        50.260        16.378
Flooding Loss ............         0.000         0.000
Evaporation Loss .........         0.000         0.000
Exfiltration Loss ........        39.445        12.854
Initial Stored Volume ....         0.000         0.000
Final Stored Volume ......         0.000         0.000
Continuity Error (%) .....        -0.002


********************************
Highest Flow Instability Indexes
********************************
All links are stable.


*************************
Routing Time Step Summary
*************************
Minimum Time Step           :     15.00 sec
Average Time Step           :     15.00 sec
Maximum Time Step           :     15.00 sec
Percent in Steady State     :      0.00
Average Iterations per Step :      1.00
Percent Not Converging      :      0.00


***************************
Subcatchment Runoff Summary
***************************

------------------------------------------------------------------------------------------------------------------
-------------------
                              Total      Total      Total      Total     Imperv       Perv      Total
Total      Peak  Runoff
                             Precip      Runon       Evap      Infil     Runoff     Runoff     Runoff
Runoff   Runoff    Coeff
```

```
  Subcatchment                   in          in          in          in          in          in          in    10^6
gal      CFS
  ----------------------------------------------------------------------------------------------------------------
-------------------
  15                          871.40        0.00      110.51       78.20      688.09        9.00      697.09
37.48     2.77   0.800
  BMP3G                       871.40    33746.57      950.34     7347.68        0.00        0.00    26318.87
29.23     2.76   0.760


  **********************
  LID Performance Summary
  **********************

  ----------------------------------------------------------------------------------------------------------------
---------
                                              Total       Evap      Infil    Surface      Drain    Initial      Final
Continuity
                                             Inflow       Loss       Loss    Outflow    Outflow    Storage    Storage
Error
  Subcatchment      LID Control                  in         in         in         in         in         in         in
%
  ----------------------------------------------------------------------------------------------------------------
---------
  BMP3G             3G                     34617.97     950.38    7347.97    8654.63   17665.27       1.80       3.21
-0.00

  *****************
  Node Depth Summary
  *****************

  ---------------------------------------------------------------------------------
                                 Average  Maximum  Maximum  Time of Max    Reported
                                   Depth    Depth      HGL   Occurrence   Max Depth
  Node                 Type         Feet     Feet     Feet  days hr:min        Feet
  ---------------------------------------------------------------------------------
  R5I                  JUNCTION     0.00     0.66     1.66  9672  17:22        0.64
  3GOUT                OUTFALL      0.00     0.66     0.66  9672  17:22        0.64
  3G                   STORAGE      0.03     2.50     4.50  9672  17:22        2.49


  ******************
  Node Inflow Summary
  ******************

  -------------------------------------------------------------------------------------------------
                                  Maximum  Maximum                  Lateral       Total        Flow
                                  Lateral    Total  Time of Max      Inflow      Inflow     Balance
                                   Inflow   Inflow   Occurrence      Volume      Volume       Error
  Node                 Type           CFS      CFS  days hr:min    10^6 gal    10^6 gal     Percent
  -------------------------------------------------------------------------------------------------
  R5I                  JUNCTION      0.00     2.72  9672  17:22           0        16.4       0.000
  3GOUT                OUTFALL       0.00     2.72  9672  17:22           0        16.4       0.000
  3G                   STORAGE       2.76     2.76  11118  05:30       29.2        29.2      -0.003


  ********************
  Node Flooding Summary
  ********************

  No nodes were flooded.


  *********************
  Storage Volume Summary
  *********************

  --------------------------------------------------------------------------------------------------
                         Average     Avg  Evap Exfil       Maximum     Max    Time of Max    Maximum
                          Volume    Pcnt  Pcnt  Pcnt        Volume    Pcnt     Occurrence    Outflow
  Storage Unit          1000 ft3    Full  Loss  Loss      1000 ft3    Full    days hr:min        CFS
  --------------------------------------------------------------------------------------------------
  3G                       0.079       1     0    44         6.721      65    9672  17:22       2.75


  **********************
  Outfall Loading Summary
  **********************

  -----------------------------------------------------------
                         Flow       Avg        Max        Total
```

Outfall Node	Freq Pcnt	Flow CFS	Flow CFS	Volume 10^6 gal
3GOUT	4.20	0.03	2.72	16.377
System	4.20	0.03	2.72	16.377

****
Link Flow Summary
****

Link	Type	Maximum |Flow| CFS	Time of Max Occurrence days hr:min	Maximum |Veloc| ft/sec	Max/ Full Flow	Max/ Full Depth
C12	CONDUIT	2.72	9672 17:22	2.00	0.06	0.17
OR1	ORIFICE	0.04	9672 17:22			0.00
OR2	ORIFICE	0.02	9672 17:22			0.00
OR4	ORIFICE	2.66	9672 17:22			

****
Conduit Surcharge Summary
****

No conduits were surcharged.

Analysis begun on: Mon May 20 19:25:07 2019
Analysis ended on: Mon May 20 19:26:37 2019
Total elapsed time: 00:01:30

EPA STORM WATER MANAGEMENT MODEL - VERSION 5.1 (Build 5.1.013)

Post Condition Basin 3H

****
Element Count
****

Number of rain gages 1
Number of subcatchments ... 3
Number of nodes 5
Number of links 8
Number of pollutants 0
Number of land uses 0

****
Raingage Summary
****

Name	Data Source	Data Type	Recording Interval
Fallbrook	Fallbrook	INTENSITY	60 min.

****
Subcatchment Summary
****

Name	Area	Width	%Imperv	%Slope	Rain Gage	Outlet
DMA16	3.01	55.34	40.90	5.7500	Fallbrook	S3H
DMA19	6.14	421.30	13.00	3.5000	Fallbrook	S3I
S1	0.16	15.50	100.00	1.3300	Fallbrook	3H

****
LID Control Summary
****

Subcatchment	LID Control	No. of Units	Unit Area	Unit Width	% Area Covered	% Imperv Treated	% Perv Treated
DMA16	3H	1	1863.00	0.00	1.42	100.00	0.00
DMA19	3I	1	9281.00	0.00	3.47	0.00	0.00

****
Node Summary
****

Name	Type	Invert Elev.	Max. Depth	Ponded Area	External Inflow
J1	JUNCTION	1.00	5.00	0.0	
R5A	JUNCTION	1.00	5.00	0.0	
3H	OUTFALL	0.00	4.00	0.0	
S3H	STORAGE	2.00	2.50	0.0	
S3I	STORAGE	2.00	2.00	0.0	

****
Link Summary
****

Name	From Node	To Node	Type	Length	%Slope	Roughness
C1	J1	3H	CONDUIT	10.0	10.0504	0.0100
C6	R5A	3H	CONDUIT	10.0	10.0504	0.1000
OR1	S3H	R5A	ORIFICE			
OR14	S3H	R5A	ORIFICE			
OR2	S3H	R5A	ORIFICE			
OR3	S3I	J1	ORIFICE			
OR4	S3I	J1	ORIFICE			
OR5	S3I	J1	ORIFICE			

****
Cross Section Summary
****

Conduit	Shape	Full Depth	Full Area	Hyd. Rad.	Max. Width	No. of Barrels	Full Flow
C1	CIRCULAR	1.00	0.79	0.25	1.00	1	14.68
C6	CIRCULAR	4.00	12.57	1.00	4.00	1	59.20

```
*********************************************************
NOTE: The summary statistics displayed in this report are
based on results found at every computational time step,
not just on results from each reporting time step.
*********************************************************

****************
Analysis Options
****************
Flow Units ............... CFS
Process Models:
  Rainfall/Runoff ........ YES
  RDII ................... NO
  Snowmelt ............... NO
  Groundwater ............ NO
  Flow Routing ........... YES
  Ponding Allowed ........ YES
  Water Quality .......... NO
Infiltration Method ...... GREEN_AMPT
Flow Routing Method ...... KINWAVE
Starting Date ............ 07/25/1951 04:00:00
Ending Date .............. 05/26/2008 08:00:00
Antecedent Dry Days ...... 0.0
Report Time Step ......... 01:00:00
Wet Time Step ............ 00:30:00
Dry Time Step ............ 00:30:00
Routing Time Step ........ 15.00 sec


**************************        Volume         Depth
Runoff Quantity Continuity     acre-feet        inches
**************************     ---------       -------
Initial LID Storage ......         0.038         0.049
Total Precipitation ......       676.061       871.400
Evaporation Loss .........        36.221        46.687
Infiltration Loss ........       462.234       595.790
Surface Runoff ...........       131.165       169.063
LID Drainage .............        53.692        69.206
Final Storage ............         0.044         0.057
Continuity Error (%) .....        -1.073


**************************        Volume        Volume
Flow Routing Continuity        acre-feet      10^6 gal
**************************     ---------     ---------
Dry Weather Inflow .......         0.000         0.000
Wet Weather Inflow .......       184.857        60.239
Groundwater Inflow .......         0.000         0.000
RDII Inflow ..............         0.000         0.000
External Inflow ..........         0.000         0.000
External Outflow .........       130.029        42.372
Flooding Loss ............         0.000         0.000
Evaporation Loss .........         0.000         0.000
Exfiltration Loss ........        54.827        17.866
Initial Stored Volume ....         0.000         0.000
Final Stored Volume ......         0.000         0.000
Continuity Error (%) .....         0.001


********************************
Highest Flow Instability Indexes
********************************
All links are stable.


*************************
Routing Time Step Summary
*************************
Minimum Time Step           :     15.00 sec
Average Time Step           :     15.00 sec
Maximum Time Step           :     15.00 sec
Percent in Steady State     :      0.00
Average Iterations per Step :      1.00
Percent Not Converging      :      0.00


***************************
Subcatchment Runoff Summary
```

****

Subcatchment	Total Precip in	Total Runon in	Total Evap in	Total Infil in	Imperv Runoff in	Perv Runoff in	Total Runoff in	Total Runoff 10^6 gal	Peak Runoff CFS	Runoff Coeff
DMA16	871.40	0.00	63.34	514.73	315.30	45.48	304.41	24.88	3.82	0.349
DMA19	871.40	0.00	36.81	651.05	99.60	91.64	191.67	31.96	7.86	0.220
S1	871.40	0.00	112.57	0.00	782.15	0.00	782.15	3.40	0.23	0.898

****
LID Performance Summary
****

Subcatchment	LID Control	Total Inflow in	Evap Loss in	Infil Loss in	Surface Outflow in	Drain Outflow in	Initial Storage in	Final Storage in	Continuity Error %
DMA16	3H	23062.87	949.36	3890.00	3219.09	15004.42	1.80	3.20	-0.01
DMA19	3I	871.40	530.87	328.22	0.00	12.26	1.80	1.86	-0.00

****
Node Depth Summary
****

Node	Type	Average Depth Feet	Maximum Depth Feet	Maximum HGL Feet	Time of Max Occurrence days hr:min	Reported Max Depth Feet
J1	JUNCTION	0.00	0.51	1.51	9672 17:00	0.51
R5A	JUNCTION	0.00	0.67	1.67	9672 17:00	0.67
3H	OUTFALL	0.00	0.67	0.67	9672 17:01	0.67
S3H	STORAGE	0.01	2.38	4.38	9672 17:00	2.37
S3I	STORAGE	0.02	1.76	3.76	9672 17:00	1.75

****
Node Inflow Summary
****

Node	Type	Maximum Lateral Inflow CFS	Maximum Total Inflow CFS	Time of Max Occurrence days hr:min	Lateral Inflow Volume 10^6 gal	Total Inflow Volume 10^6 gal	Flow Balance Error Percent
J1	JUNCTION	0.00	7.64	9672 17:00	0	16.7	0.000
R5A	JUNCTION	0.00	3.66	9672 17:00	0	4.81	0.000
3H	OUTFALL	0.46	11.75	9672 17:00	20.9	42.4	0.000
S3H	STORAGE	3.71	3.71	9672 17:00	7.46	7.46	0.002
S3I	STORAGE	7.73	7.73	9672 17:00	31.9	31.9	-0.002

****
Node Flooding Summary
****

No nodes were flooded.

****
Storage Volume Summary

****

Storage Unit	Average Volume 1000 ft3	Avg Pcnt Full	Evap Pcnt Loss	Exfil Pcnt Loss	Maximum Volume 1000 ft3	Max Pcnt Full	Time of Max Occurrence days hr:min	Maximum Outflow CFS
S3H	0.028	0	0	35	6.169	94	9672 17:00	3.67
S3I	0.134	1	0	48	10.202	87	9672 17:00	7.65

****
Outfall Loading Summary
****

Outfall Node	Flow Freq Pcnt	Avg Flow CFS	Max Flow CFS	Total Volume 10^6 gal
3H	3.85	0.08	11.75	42.369
System	3.85	0.08	11.75	42.369

****
Link Flow Summary
****

Link	Type	Maximum |Flow| CFS	Time of Max Occurrence days hr:min	Maximum |Veloc| ft/sec	Max/ Full Flow	Max/ Full Depth
C1	CONDUIT	7.64	9672 17:00	18.87	0.52	0.51
C6	CONDUIT	3.66	9672 17:01	2.62	0.06	0.17
OR1	ORIFICE	3.60	9672 17:00			
OR14	ORIFICE	0.03	9672 17:00			0.00
OR2	ORIFICE	0.04	9672 17:00			0.00
OR3	ORIFICE	7.50	9672 17:00			
OR4	ORIFICE	0.11	9672 17:00			0.00
OR5	ORIFICE	0.03	9672 17:00			0.00

****
Conduit Surcharge Summary
****

No conduits were surcharged.

Analysis begun on: Mon May 20 20:45:18 2019
Analysis ended on: Mon May 20 20:46:57 2019
Total elapsed time: 00:01:39

EPA STORM WATER MANAGEMENT MODEL - VERSION 5.1 (Build 5.1.013)

Post Condition Basin 3J

****
Element Count
****

Number of rain gages 1
Number of subcatchments ... 2
Number of nodes 3
Number of links 3
Number of pollutants 0
Number of land uses 0

****
Raingage Summary
****

Name	Data Source	Data Type	Recording Interval
Fallbrook	FallbrookHourly	INTENSITY	60 min.

****
Subcatchment Summary
****

Name	Area	Width	%Imperv	%Slope	Rain Gage	Outlet
Basin3J	0.24	118.00	0.00	1.0000	Fallbrook	SU1
DMA20	4.69	860.20	12.00	1.0000	Fallbrook	Basin3J

****
LID Control Summary
****

Subcatchment	LID Control	No. of Units	Unit Area	Unit Width	% Area Covered	% Imperv Treated	% Perv Treated
Basin3J	3J	1	10450.00	0.00	99.95	0.00	0.00

****
Node Summary
****

Name	Type	Invert Elev.	Max. Depth	Ponded Area	External Inflow
J1	JUNCTION	1.00	10.00	0.0	
3J	OUTFALL	0.00	1.00	0.0	
SU1	STORAGE	2.00	4.50	0.0	

****
Link Summary
****

Name	From Node	To Node	Type	Length	%Slope	Roughness
C1	J1	3J	CONDUIT	10.0	10.0504	0.0100
OR1	SU1	J1	ORIFICE			
OR2	SU1	J1	ORIFICE			

****
Cross Section Summary
****

Conduit	Shape	Full Depth	Full Area	Hyd. Rad.	Max. Width	No. of Barrels	Full Flow
C1	CIRCULAR	1.00	0.79	0.25	1.00	1	14.68

****
NOTE: The summary statistics displayed in this report are
based on results found at every computational time step,
not just on results from each reporting time step.
****

****

```
Analysis Options
****************
Flow Units ............... CFS
Process Models:
  Rainfall/Runoff ........ YES
  RDII ................... NO
  Snowmelt ............... NO
  Groundwater ............ NO
  Flow Routing ........... YES
  Ponding Allowed ........ NO
  Water Quality .......... NO
Infiltration Method ...... GREEN_AMPT
Flow Routing Method ...... DYNWAVE
Surcharge Method ......... EXTRAN
Starting Date ............ 07/25/1951 04:00:00
Ending Date .............. 05/26/2008 08:00:00
Antecedent Dry Days ...... 0.0
Report Time Step ......... 01:00:00
Wet Time Step ............ 00:30:00
Dry Time Step ............ 00:30:00
Routing Time Step ........ 15.00 sec
Variable Time Step ....... YES
Maximum Trials ........... 8
Number of Threads ........ 1
Head Tolerance ........... 0.005000 ft


**************************        Volume         Depth
Runoff Quantity Continuity     acre-feet        inches
**************************     ---------       -------
Initial LID Storage ......         0.036         0.088
Total Precipitation ......       358.000       871.400
Evaporation Loss .........        39.855        97.011
Infiltration Loss ........       173.907       423.303
Surface Runoff ...........        21.363        52.000
LID Drainage .............       131.396       319.829
Final Storage ............         0.064         0.156
Continuity Error (%) .....        -2.388


**************************        Volume        Volume
Flow Routing Continuity        acre-feet      10^6 gal
**************************     ---------     ---------
Dry Weather Inflow .......         0.000         0.000
Wet Weather Inflow .......       152.743        49.774
Groundwater Inflow .......         0.000         0.000
RDII Inflow ..............         0.000         0.000
External Inflow ..........         0.000         0.000
External Outflow .........       152.702        49.760
Flooding Loss ............         0.000         0.000
Evaporation Loss .........         0.000         0.000
Exfiltration Loss ........         0.000         0.000
Initial Stored Volume ....         0.000         0.000
Final Stored Volume ......         0.053         0.017
Continuity Error (%) .....        -0.008


***************************
Time-Step Critical Elements
***************************
Link C1 (5.27%)


********************************
Highest Flow Instability Indexes
********************************
All links are stable.


*************************
Routing Time Step Summary
*************************
Minimum Time Step           :      0.50 sec
Average Time Step           :     14.33 sec
Maximum Time Step           :     15.00 sec
Percent in Steady State     :     -0.00
Average Iterations per Step :      2.00
Percent Not Converging      :      0.00


***************************
```

Subcatchment Runoff Summary
****

Subcatchment	Total Precip in	Total Runon in	Total Evap in	Total Infil in	Imperv Runoff in	Perv Runoff in	Total Runoff in	Total Runoff 10^6 gal	Peak Runoff CFS	Runoff Coeff
Basin3J	871.40	9889.34	739.73	2377.33	0.00	0.00	7637.98	49.78	6.84	0.710
DMA20	871.40	0.00	64.12	323.31	95.31	410.75	506.06	64.45	6.56	0.581

****
LID Performance Summary
****

Subcatchment	LID Control	Total Inflow in	Evap Loss in	Infil Loss in	Surface Outflow in	Drain Outflow in	Initial Storage in	Final Storage in	Continuity Error %
Basin3J	3J	10760.74	740.07	2378.42	1068.66	6572.82	1.80	3.20	-0.01

****
Node Depth Summary
****

Node	Type	Average Depth Feet	Maximum Depth Feet	Maximum HGL Feet	Time of Max Occurrence days hr:min	Reported Max Depth Feet
J1	JUNCTION	0.00	0.46	1.46	9672 17:11	0.44
3J	OUTFALL	0.00	0.46	0.46	9672 17:11	0.44
SU1	STORAGE	0.51	2.38	4.38	9672 17:11	2.36

****
Node Inflow Summary
****

Node	Type	Maximum Lateral Inflow CFS	Maximum Total Inflow CFS	Time of Max Occurrence days hr:min	Lateral Inflow Volume 10^6 gal	Total Inflow Volume 10^6 gal	Flow Balance Error Percent
J1	JUNCTION	0.00	6.26	9672 17:11	0	6.94	-0.056
3J	OUTFALL	0.46	6.71	9672 17:11	42.8	49.8	0.000
SU1	STORAGE	6.38	6.38	9672 17:00	6.96	6.96	-0.000

****
Node Surcharge Summary
****

No nodes were surcharged.

****
Node Flooding Summary
****

No nodes were flooded.

****
Storage Volume Summary

****

Storage Unit	Average Volume 1000 ft3	Avg Pcnt Full	Evap Pcnt Loss	Exfil Pcnt Loss	Maximum Volume 1000 ft3	Max Pcnt Full	Time of Max Occurrence days hr:min	Maximum Outflow CFS
SU1	2.335	9	0	0	11.823	48	9672 17:11	6.26

****
Outfall Loading Summary
****

Outfall Node	Flow Freq Pcnt	Avg Flow CFS	Max Flow CFS	Total Volume 10^6 gal
3J	5.03	0.51	6.71	49.757
System	5.03	0.51	6.71	49.757

****
Link Flow Summary
****

Link	Type	Maximum |Flow| CFS	Time of Max Occurrence days hr:min	Maximum |Veloc| ft/sec	Max/ Full Flow	Max/ Full Depth
C1	CONDUIT	6.26	9672 17:11	17.93	0.43	0.46
OR1	ORIFICE	4.95	9672 17:11			
OR2	ORIFICE	1.31	9672 17:11			1.00

****
Flow Classification Summary
****

Conduit	Adjusted /Actual Length	---------- Fraction of Time in Flow Class ---------- Dry	Up Dry	Down Dry	Sub Crit	Sup Crit	Up Crit	Down Crit	Norm Ltd	Inlet Ctrl
C1	1.00	0.01	0.00	0.00	0.94	0.05	0.00	0.00	0.00	0.00

****
Conduit Surcharge Summary
****

No conduits were surcharged.

Analysis begun on: Mon May 20 19:34:20 2019
Analysis ended on: Mon May 20 19:37:06 2019
Total elapsed time: 00:02:46

EPA STORM WATER MANAGEMENT MODEL - VERSION 5.1 (Build 5.1.013)

Post Condition Vault

****
Element Count
****

Number of rain gages 1
Number of subcatchments ... 3
Number of nodes 3
Number of links 5
Number of pollutants 0
Number of land uses 0

****
Raingage Summary
****

Name	Data Source	Data Type	Recording Interval
Fallbrook	Fallbrook	INTENSITY	60 min.

****
Subcatchment Summary
****

Name	Area	Width	%Imperv	%Slope	Rain Gage	Outlet
CAMINOCommigle	2.63	217.00	42.20	2.1000	Fallbrook	SVault
DMA18	0.57	110.53	73.70	2.5000	Fallbrook	SVault
NorthCommingle	4.31	430.00	21.80	2.2000	Fallbrook	SVault

****
Node Summary
****

Name	Type	Invert Elev.	Max. Depth	Ponded Area	External Inflow
R5H	JUNCTION	1.00	10.00	0.0	
OFF3	OUTFALL	0.00	4.00	0.0	
SVault	STORAGE	2.00	5.00	0.0	

****
Link Summary
****

Name	From Node	To Node	Type	Length	%Slope	Roughness
C11	R5H	OFF3	CONDUIT	10.0	10.0504	0.1000
OR1	SVault	R5H	ORIFICE			
OR2	SVault	R5H	ORIFICE			
OR3	SVault	R5H	ORIFICE			
OR4	SVault	R5H	ORIFICE			

****
Cross Section Summary
****

Conduit	Shape	Full Depth	Full Area	Hyd. Rad.	Max. Width	No. of Barrels	Full Flow
C11	CIRCULAR	4.00	12.57	1.00	4.00	1	59.20

****
NOTE: The summary statistics displayed in this report are
based on results found at every computational time step,
not just on results from each reporting time step.
****

****
Analysis Options
****

Flow Units .... CFS
Process Models:
  Rainfall/Runoff .... YES
  RDII .... NO
  Snowmelt .... NO
  Groundwater .... NO
  Flow Routing .... YES
  Ponding Allowed .... YES
  Water Quality .... NO
Infiltration Method ...... GREEN_AMPT
Flow Routing Method ...... KINWAVE
Starting Date 07/25/1951 04:00:00
Ending Date 05/26/2008 08:00:00
Antecedent Dry Days 0.0
Report Time Step 01:00:00
Wet Time Step 00:30:00
Dry Time Step 00:30:00
Routing Time Step .... 30.00 sec

****
Runoff Quantity Continuity
****

	Volume acre-feet	Depth inches
Total Precipitation	545.351	871.400
Evaporation Loss	24.516	39.173
Infiltration Loss	333.256	532.500
Surface Runoff	194.871	311.379
Final Storage	0.000	0.000
Continuity Error (%)	-1.337	

****
Flow Routing Continuity
****

	Volume acre-feet	Volume 10^6 gal
Dry Weather Inflow	0.000	0.000
Wet Weather Inflow	194.871	63.502
Groundwater Inflow	0.000	0.000
RDII Inflow	0.000	0.000
External Inflow	0.000	0.000
External Outflow	194.749	63.462
Flooding Loss	0.000	0.000
Evaporation Loss	0.000	0.000
Exfiltration Loss	0.000	0.000
Initial Stored Volume	0.000	0.000
Final Stored Volume	0.000	0.000
Continuity Error (%)	0.063	

****
Highest Flow Instability Indexes
****

All links are stable.

****
Routing Time Step Summary
****

Minimum Time Step	:	30.00 sec
Average Time Step	:	30.00 sec
Maximum Time Step	:	30.00 sec
Percent in Steady State	:	0.00
Average Iterations per Step	:	1.00
Percent Not Converging	:	0.00

****
Subcatchment Runoff Summary
****

Subcatchment	Total Precip in	Total Runon in	Total Evap in	Total Infil in	Imperv Runoff in	Perv Runoff in	Total Runoff in	Total Runoff 10^6 gal	Peak Runoff CFS	Runoff Coeff
CAMINOCommigle	871.40	0.00	50.93	441.14	333.10	60.45	393.54	28.10	3.52	0.452
DMA18	871.40	0.00	79.40	214.99	583.17	15.56	598.73	9.27	0.78	0.687
NorthCommingle	871.40	0.00	26.68	630.24	172.80	50.44	223.24	26.13	5.53	0.256

****
Node Depth Summary
****

Node	Type	Average Depth Feet	Maximum Depth Feet	Maximum HGL Feet	Time of Max Occurrence days hr:min	Reported Max Depth Feet
R5H	JUNCTION	0.01	1.10	2.10	9672 17:01	1.10
OFF3	OUTFALL	0.01	1.10	1.10	9672 17:01	1.10
SVault	STORAGE	0.03	4.61	6.61	9672 17:01	4.61

****
Node Inflow Summary
****

Node	Type	Maximum Lateral Inflow CFS	Maximum Total Inflow CFS	Time of Max Occurrence days hr:min	Lateral Inflow Volume 10^6 gal	Total Inflow Volume 10^6 gal	Flow Balance Error Percent
R5H	JUNCTION	0.00	9.77	9672 17:01	0	63.5	-0.000
OFF3	OUTFALL	0.00	9.77	9672 17:01	0	63.5	0.000
SVault	STORAGE	9.82	9.82	9672 17:00	63.5	63.5	0.023

****
Node Flooding Summary
****

No nodes were flooded.

****
Storage Volume Summary
****

Storage Unit	Average Volume 1000 ft3	Avg Pcnt Full	Evap Pcnt Loss	Exfil Pcnt Loss	Maximum Volume 1000 ft3	Max Pcnt Full	Time of Max Occurrence days hr:min	Maximum Outflow CFS
SVault	0.034	1	0	0	5.990	92	9672 17:00	9.77

****
Outfall Loading Summary
****

Outfall Node	Flow Freq Pcnt	Avg Flow CFS	Max Flow CFS	Total Volume 10^6 gal
OFF3	5.92	0.08	9.77	63.457
System	5.92	0.08	9.77	63.457

****
Link Flow Summary
****

Link	Type	Maximum |Flow| CFS	Time of Max Occurrence days hr:min	Maximum |Veloc| ft/sec	Max/ Full Flow	Max/ Full Depth
C11	CONDUIT	9.77	9672 17:01	3.48	0.16	0.27
OR1	ORIFICE	1.88	9672 17:01			0.00
OR2	ORIFICE	0.24	9672 17:01			0.00
OR3	ORIFICE	7.18	9672 17:01			
OR4	ORIFICE	0.46	9672 17:01			0.00

****
Conduit Surcharge Summary
****

No conduits were surcharged.

Analysis begun on: Tue Jul 30 15:30:40 2019
Analysis ended on: Tue Jul 30 15:31:29 2019
Total elapsed time: 00:00:49

5

Attachment 5

Flow Frequency Statistical Analysis

Pre Condition

Statistics - Node 1A Total Inflow

Rank	Start Date	Event Duration (hours)	Event Peak (CFS)	Exceedance Frequency (percent)	Return Period (years)
1	1/16/1978	7	59.92	0.35	58
2	1/1/1982	25	59.288	0.7	29
3	10/1/1983	11	45.683	1.06	19.33
4	1/10/1978	3	41.339	1.41	14.5
5	1/4/1995	9	39.093	1.76	11.6
6	4/5/1967	1	38.733	2.11	9.67
7	1/20/1982	6	37.223	2.46	8.29
8	3/5/1995	24	33.145	2.82	7.25
9	2/9/1963	21	32.651	3.17	6.44
10	3/15/1986	11	31.934	3.52	5.8
11	2/7/1978	72	31.897	3.87	5.27
12	2/22/2004	3	31.106	4.23	4.83
13	2/11/1959	3	28.881	4.58	4.46
14	2/22/1998	45	28.382	4.93	4.14
15	2/17/1980	77	27.774	5.28	3.87
16	1/9/1980	58	27.426	5.63	3.63
17	3/17/1982	16	26.9	5.99	3.41
18	1/28/1980	11	26.375	6.34	3.22
19	1/9/1998	4	26.324	6.69	3.05
20	1/4/1978	10	25.962	7.04	2.9
21	2/15/1992	4	25.943	7.39	2.76
22	2/12/1978	4	25.501	7.75	2.64
23	1/14/1993	3	25.418	8.1	2.52
24	2/16/1980	3	25.302	8.45	2.42
25	2/11/1973	5	24.177	8.8	2.32
26	2/23/1969	46	23.786	9.15	2.23
27	2/12/1992	21	23.636	9.51	2.15
28	11/22/1965	20	23.525	9.86	2.07
29	12/5/1966	45	23.4	10.21	2
30	11/24/1983	1	22.493	10.56	1.93
31	9/10/1976	3	22.204	10.92	1.87
32	2/6/1969	8	21.758	11.27	1.81
33	3/11/1995	6	21.751	11.62	1.76
34	1/18/1955	3	21.73	11.97	1.71
35	3/24/1983	1	21.187	12.32	1.66
36	6/10/1990	1	20.876	12.68	1.61
37	11/30/2007	6	20.617	13.03	1.57
38	1/15/1993	39	20.547	13.38	1.53
39	1/29/1981	3	19.955	13.73	1.49
40	2/14/1980	24	19.938	14.08	1.45
41	2/14/1986	8	19.7	14.44	1.41
42	11/15/1952	19	19.531	14.79	1.38
43	1/24/1969	23	19.366	15.14	1.35
44	12/18/1967	3	19.207	15.49	1.32
45	2/27/1983	14	18.997	15.85	1.29
46	1/11/2005	8	18.767	16.2	1.26
47	2/7/1994	3	18.258	16.55	1.23
48	1/14/1978	7	18.243	16.9	1.21
49	10/19/2004	22	18.108	17.25	1.18
50	2/21/2005	50	17.909	17.61	1.16
51	3/15/1952	11	17.788	17.96	1.14
52	1/9/2005	19	17.735	18.31	1.12
53	1/13/1957	6	17.571	18.66	1.09
54	11/14/1972	2	17.547	19.01	1.07

10-year Q:	38.795	cfs
5-year Q:	31.412	cfs
2-year Q:	23.400	cfs

Lower Flow Threshold: 50%

0.1xQ2 : 11.700 cfs

55	12/6/1997	7	17.425	19.37	1.05
56	4/1/1982	2	17.408	19.72	1.04
57	1/21/1964	22	17.157	20.07	1.02
58	1/29/1983	4	17.018	20.42	1
59	1/15/1979	2	16.942	20.77	0.98
60	1/6/1993	31	16.786	21.13	0.97
61	1/18/1973	4	16.656	21.48	0.95
62	3/8/1968	3	16.392	21.83	0.94
63	1/6/1977	32	16.256	22.18	0.92
64	6/1/1996	1	15.883	22.54	0.91
65	3/26/1991	7	15.88	22.89	0.89
66	11/21/1963	2	15.75	23.24	0.88
67	3/1/1983	46	15.577	23.59	0.87
68	10/18/2004	2	15.453	23.94	0.85
69	1/11/2001	5	15.312	24.3	0.84
70	2/28/1970	36	15.26	24.65	0.83
71	3/15/1958	17	15.155	25	0.82
72	2/19/2005	2	15.084	25.35	0.81
73	1/12/1960	5	14.987	25.7	0.79
74	12/24/1971	31	14.64	26.06	0.78
75	12/29/1965	1	14.491	26.41	0.77
76	2/8/1998	5	14.396	26.76	0.76
77	4/11/1967	3	14.131	27.11	0.75
78	1/16/1973	2	14.068	27.46	0.74
79	3/11/2006	2	14.01	27.82	0.73
80	1/27/2008	32	13.903	28.17	0.73
81	1/20/1962	6	13.855	28.52	0.72
82	2/1/1960	3	13.814	28.87	0.71
83	11/29/1970	5	13.779	29.23	0.7
84	2/3/1998	7	13.521	29.58	0.69
85	11/29/1985	7	13.306	29.93	0.68
86	1/22/1967	8	13.264	30.28	0.67
87	1/5/1979	14	13.256	30.63	0.67
88	12/18/1984	21	13.187	30.99	0.66
89	12/2/1961	2	13.022	31.34	0.65
90	2/13/1954	9	12.954	31.69	0.64
91	3/10/1986	2	12.746	32.04	0.64
92	1/6/1987	2	12.489	32.39	0.63
93	2/26/1983	1	12.348	32.75	0.62
94	3/1/1991	19	12.293	33.1	0.62
95	2/8/1993	10	11.968	33.45	0.61
96	12/27/1984	3	11.873	33.8	0.6
97	1/6/2008	6	11.861	34.15	0.6
98	12/21/1970	6	11.67	34.51	0.59
99	12/28/2004	24	11.592	34.86	0.59
100	4/3/1958	4	11.457	35.21	0.58
101	1/26/1956	10	11.172	35.56	0.57
102	12/24/1988	6	11.113	35.92	0.57
103	2/28/1957	6	11.077	36.27	0.56
104	12/2/1952	3	10.824	36.62	0.56
105	1/21/1969	2	10.726	36.97	0.55
106	11/19/1967	13	10.674	37.32	0.55
107	3/5/2000	2	10.355	37.68	0.54
108	1/16/1952	9	10.341	38.03	0.54
109	3/12/1986	1	10.124	38.38	0.53
110	5/8/1977	2	10.102	38.73	0.53
111	12/29/1991	10	10.08	39.08	0.52
112	1/6/1974	35	10.031	39.44	0.52
113	10/27/2004	6	9.926	39.79	0.51
114	2/4/1958	9	9.895	40.14	0.51
115	1/10/1995	7	9.875	40.49	0.5
116	2/28/1978	21	9.778	40.85	0.5

117	12/24/1959	4	9.554	41.2	0.5
118	1/25/1997	8	9.535	41.55	0.49
119	11/30/1982	8	9.458	41.9	0.49
120	1/7/2005	7	9.006	42.25	0.48
121	1/25/1954	6	8.948	42.61	0.48
122	1/24/1967	7	8.9	42.96	0.48
123	3/8/1974	12	8.776	43.31	0.47
124	1/14/1960	2	8.638	43.66	0.47
125	2/12/1973	3	8.398	44.01	0.46
126	3/23/1992	3	8.395	44.37	0.46
127	12/6/1998	1	8.375	44.72	0.46
128	1/28/1957	30	8.344	45.07	0.45
129	12/20/1952	5	8.342	45.42	0.45
130	12/17/1957	1	8.251	45.77	0.45
131	11/16/1972	20	8.222	46.13	0.44
132	2/8/1976	6	8.199	46.48	0.44
133	1/3/1977	2	8.18	46.83	0.44
134	2/26/2004	7	7.974	47.18	0.43
135	3/13/1967	4	7.953	47.54	0.43
136	2/14/1998	5	7.884	47.89	0.43
137	12/7/1992	1	7.881	48.24	0.42
138	4/10/1952	2	7.842	48.59	0.42
139	1/4/1974	1	7.829	48.94	0.42
140	11/13/1978	1	7.82	49.3	0.41
141	1/28/2005	3	7.614	49.65	0.41
142	1/18/1954	24	7.545	50	0.41
143	1/23/1997	3	7.5	50.35	0.41
144	3/20/1991	3	7.427	50.7	0.4
145	1/5/1992	8	7.419	51.06	0.4
146	3/7/1952	10	7.396	51.41	0.4
147	1/18/1993	11	7.309	51.76	0.39
148	9/17/1963	2	7.258	52.11	0.39
149	2/6/1978	2	7.178	52.46	0.39
150	12/29/1951	14	6.853	52.82	0.39
151	1/7/1995	4	6.852	53.17	0.38
152	3/13/1996	2	6.796	53.52	0.38
153	12/3/1966	4	6.722	53.87	0.38
154	12/25/2003	1	6.692	54.23	0.38
155	1/27/1994	1	6.57	54.58	0.37
156	11/25/2001	2	6.535	54.93	0.37
157	12/4/1972	2	6.511	55.28	0.37
158	12/11/1984	2	6.493	55.63	0.37
159	1/3/2005	3	6.475	55.99	0.36
160	12/4/1974	1	6.47	56.34	0.36
161	4/7/1958	14	6.455	56.69	0.36
162	12/9/1996	1	6.349	57.04	0.36
163	10/25/1951	1	6.346	57.39	0.36
164	1/31/1979	5	6.169	57.75	0.35
165	12/31/2004	2	6.143	58.1	0.35
166	11/21/1996	25	5.931	58.45	0.35
167	4/8/1965	33	5.892	58.8	0.35
168	4/13/1956	7	5.726	59.15	0.35
169	1/18/1952	8	5.65	59.51	0.34
170	1/26/1999	2	5.476	59.86	0.34
171	3/11/1975	1	5.473	60.21	0.34
172	12/19/1970	12	5.46	60.56	0.34
173	2/19/1962	2	5.433	60.92	0.34
174	2/9/1985	5	5.393	61.27	0.33
175	1/15/1997	1	5.38	61.62	0.33
176	4/21/1988	2	5.243	61.97	0.33
177	11/16/1965	2	5.237	62.32	0.33
178	3/21/1983	1	5.101	62.68	0.33

179	4/26/1994	1	5.08	63.03	0.32
180	1/7/1957	5	5.078	63.38	0.32
181	3/18/1973	1	5.044	63.73	0.32
182	2/21/2000	2	5.01	64.08	0.32
183	3/4/1978	21	4.961	64.44	0.32
184	2/13/1989	3	4.943	64.79	0.32
185	4/8/1975	7	4.913	65.14	0.31
186	11/18/1986	4	4.877	65.49	0.31
187	3/3/1992	1	4.783	65.85	0.31
188	1/12/1997	15	4.74	66.2	0.31
189	12/27/1971	3	4.635	66.55	0.31
190	12/18/1977	2	4.608	66.9	0.31
191	1/26/1995	1	4.603	67.25	0.3
192	12/27/1964	1	4.59	67.61	0.3
193	2/19/1993	5	4.55	67.96	0.3
194	1/13/1952	5	4.478	68.31	0.3
195	1/10/1955	2	4.409	68.66	0.3
196	9/18/1963	1	4.409	69.01	0.3
197	2/7/1973	2	4.352	69.37	0.29
198	11/4/1987	13	4.257	69.72	0.29
199	3/20/1992	1	4.111	70.07	0.29
200	12/21/1988	4	4.1	70.42	0.29
201	3/28/1979	1	4.088	70.77	0.29
202	3/6/1980	1	4.019	71.13	0.29
203	12/22/1982	2	3.872	71.48	0.29
204	12/22/1971	1	3.868	71.83	0.28
205	11/21/1967	1	3.856	72.18	0.28
206	2/18/1993	1	3.762	72.54	0.28
207	1/26/1958	1	3.738	72.89	0.28
208	2/17/1990	1	3.572	73.24	0.28
209	4/18/1995	3	3.525	73.59	0.28
210	4/20/1983	2	3.394	73.94	0.28
211	3/17/1963	2	3.377	74.3	0.27
212	1/27/1983	4	3.372	74.65	0.27
213	2/25/1987	2	3.299	75	0.27
214	11/13/1984	1	3.299	75.35	0.27
215	4/4/2006	1	3.29	75.7	0.27
216	3/23/1964	2	3.261	76.06	0.27
217	5/13/1998	2	3.186	76.41	0.27
218	3/1/1953	3	3.152	76.76	0.27
219	1/2/2006	3	3.109	77.11	0.26
220	3/28/2006	11	3.093	77.46	0.26
221	4/1/1958	3	3.077	77.82	0.26
222	11/20/1983	2	3.045	78.17	0.26
223	2/27/1996	1	2.977	78.52	0.26
224	3/28/1993	1	2.882	78.87	0.26
225	10/29/2000	2	2.79	79.23	0.26
226	3/1/1976	1	2.583	79.58	0.26
227	2/27/1991	1	2.557	79.93	0.26
228	2/6/1976	3	2.538	80.28	0.25
229	12/10/1965	1	2.495	80.63	0.25
230	3/29/1998	1	2.316	80.99	0.25
231	11/20/1961	1	2.229	81.34	0.25
232	11/24/1984	5	2.211	81.69	0.25
233	2/22/2008	3	2.166	82.04	0.25
234	2/27/1955	3	2.105	82.39	0.25
235	2/12/2000	2	2.065	82.75	0.25
236	12/11/1996	5	2.019	83.1	0.25
237	2/6/1998	1	1.944	83.45	0.24
238	12/18/1978	1	1.854	83.8	0.24
239	11/23/1973	1	1.848	84.15	0.24
240	10/12/1987	2	1.838	84.51	0.24

241	3/8/1975	5	1.769	84.86	0.24
242	3/2/1976	1	1.705	85.21	0.24
243	2/10/1960	2	1.561	85.56	0.24
244	1/17/1990	2	1.551	85.92	0.24
245	2/19/1958	1	1.387	86.27	0.24
246	3/22/1983	1	1.287	86.62	0.24
247	1/26/1969	3	1.266	86.97	0.23
248	3/21/1958	7	1.257	87.32	0.23
249	3/22/1954	23	1.216	87.68	0.23
250	1/31/1996	5	1.152	88.03	0.23
251	10/14/1957	2	1.056	88.38	0.23
252	11/7/1966	1	1.004	88.73	0.23
253	4/20/1988	2	1.004	89.08	0.23
254	2/10/1982	1	0.977	89.44	0.23
255	12/4/1987	1	0.967	89.79	0.23
256	3/21/2006	1	0.951	90.14	0.23
257	9/25/1986	1	0.875	90.49	0.23
258	3/11/1978	1	0.841	90.85	0.22
259	4/28/2005	1	0.812	91.2	0.22
260	2/28/1973	2	0.774	91.55	0.22
261	3/14/1975	2	0.767	91.9	0.22
262	4/27/1960	3	0.764	92.25	0.22
263	2/28/2006	1	0.665	92.61	0.22
264	4/27/1953	1	0.621	92.96	0.22
265	3/6/1958	1	0.585	93.31	0.22
266	12/13/1995	1	0.583	93.66	0.22
267	2/21/1979	1	0.452	94.01	0.22
268	12/25/1983	1	0.413	94.37	0.22
269	2/25/1958	1	0.402	94.72	0.22
270	3/30/1954	1	0.399	95.07	0.21
271	1/14/1969	1	0.384	95.42	0.21
272	1/12/1995	3	0.359	95.77	0.21
273	11/3/1957	1	0.349	96.13	0.21
274	2/14/1995	1	0.306	96.48	0.21
275	11/25/1985	1	0.293	96.83	0.21
276	11/17/1964	1	0.253	97.18	0.21
277	2/16/1959	1	0.211	97.54	0.21
278	1/19/1978	1	0.191	97.89	0.21
279	2/23/1993	1	0.19	98.24	0.21
280	2/4/1999	1	0.161	98.59	0.21
281	3/27/1958	1	0.147	98.94	0.21
282	3/19/1991	1	0.129	99.3	0.21
283	3/28/1961	1	0.091	99.65	0.2
284	1/7/1992	1	0.022	98.61	0.2
285	2/17/1994	1	0.016	98.96	0.2
286	2/12/2005	1	0.009	99.31	0.2
287	2/18/1969	1	0.003	99.65	0.2

Pre condition Basin 2B

Statistics - Node 2B Total Inflow

Rank		Start Date	Event Duration (hours)	Event Peak (CFS)	Exceedanc Frequency (percent)	Return Period (years)
	1	1/16/1978	8	12.461	0.83	58
	2	1/4/1995	8	8.104	1.67	29
	3	1/1/1982	6	6.853	2.5	19.33
	4	12/5/1966	45	4.688	3.33	14.5
	5	1/10/1978	5	4.538	4.17	11.6
	6	1/4/1978	9	3.904	5	9.67
	7	10/1/1983	3	3.604	5.83	8.29
	8	1/28/1980	12	3.258	6.67	7.25
	9	2/23/1998	8	3.206	7.5	6.44
	10	2/20/1980	5	3.018	8.33	5.8
	11	3/15/1986	11	2.28	9.17	5.27
	12	2/17/1980	36	2.124	10	4.83
	13	1/9/1980	50	2.059	10.83	4.46
	14	1/20/1982	2	1.93	11.67	4.14
	15	4/5/1967	3	1.802	12.5	3.87
	16	2/10/1963	3	1.675	13.33	3.63
	17	2/10/1978	4	1.551	14.17	3.41
	18	3/5/1995	5	1.547	15	3.22
	19	2/25/1969	6	1.511	15.83	3.05
	20	1/18/1955	4	1.482	16.67	2.9
	21	2/11/1959	4	1.396	17.5	2.76
	22	1/9/1998	3	1.368	18.33	2.64
	23	1/25/1969	8	1.355	19.17	2.52
	24	9/10/1976	3	1.196	20	2.42
	25	11/22/1965	7	1.193	20.83	2.32
	26	12/6/1997	7	1.183	21.67	2.23
	27	2/16/1980	4	1.107	22.5	2.15
	29	11/24/1983	2	1.058	24.17	2
	29	2/12/1978	3	1.058	24.17	2
	30	3/17/1982	3	1.055	25	1.93
	31	1/15/1978	7	1.052	25.83	1.87
	32	2/27/1983	3	0.87	26.67	1.81
	33	3/8/1968	4	0.862	27.5	1.76
	34	11/29/1970	5	0.838	28.33	1.71
	35	3/1/1983	4	0.816	29.17	1.66
	36	1/14/1993	2	0.797	30	1.61
	37	2/12/1992	3	0.796	30.83	1.57
	38	1/16/1993	5	0.736	31.67	1.53
	39	11/29/1985	6	0.724	32.5	1.49
	40	1/29/1981	3	0.638	33.33	1.45
	41	2/14/1980	24	0.636	34.17	1.41
	42	1/9/2005	6	0.636	35	1.38
	43	3/24/1983	2	0.634	35.83	1.35
	44	2/8/1998	5	0.633	36.67	1.32
	45	10/20/2004	5	0.575	37.5	1.29
	46	2/1/1960	3	0.566	38.33	1.26
	47	12/24/1971	4	0.554	39.17	1.23
	48	1/22/1964	3	0.513	40	1.21
	49	1/11/2005	5	0.509	40.83	1.18
	50	2/11/1973	2	0.503	41.67	1.16
	51	3/27/1991	4	0.492	42.5	1.14
	52	5/8/1977	3	0.468	43.33	1.12
	53	1/13/1957	4	0.46	44.17	1.09

10-year Q:	4.012	cfs
5-year Q:	2.184	cfs
2-year Q:	1.058	cfs

Lower Flow Threshold: 10%

0.1xQ2 : 0.106 cfs

54	11/21/1963	2	0.437	45	1.07
55	3/1/1978	6	0.419	45.83	1.05
56	2/15/1992	2	0.409	46.67	1.04
57	3/11/1995	2	0.397	47.5	1.02
58	11/14/1972	2	0.397	48.33	1
59	11/30/2007	2	0.396	49.17	0.98
60	1/12/1960	5	0.373	50	0.97
61	4/1/1982	2	0.366	50.83	0.95
62	3/1/1991	5	0.364	51.67	0.94
63	6/10/1990	2	0.304	52.5	0.92
64	1/6/1977	2	0.3	53.33	0.91
65	1/29/1983	3	0.299	54.17	0.89
66	3/1/1970	12	0.297	55	0.88
69	2/7/1994	2	0.243	57.5	0.84
69	2/19/2005	2	0.243	57.5	0.84
69	2/22/2005	2	0.243	57.5	0.84
70	3/15/1952	2	0.215	58.33	0.83
71	1/18/1973	2	0.211	59.17	0.82
72	12/3/1966	4	0.203	60	0.81
73	2/13/1954	3	0.182	60.83	0.79
74	2/15/1986	2	0.178	61.67	0.78
75	1/11/2001	2	0.157	62.5	0.77
76	11/30/1982	3	0.153	63.33	0.76
77	1/27/2008	2	0.146	64.17	0.75
78	2/28/1957	1	0.145	65	0.74
79	3/10/1986	2	0.144	65.83	0.73
80	2/22/2004	2	0.137	66.67	0.73
81	11/19/1967	2	0.137	67.5	0.72
82	3/16/1958	3	0.123	68.33	0.71
83	12/25/2003	1	0.097	69.17	0.7
84	2/8/1993	1	0.084	70	0.69
85	4/3/1958	2	0.07	70.83	0.68
86	1/16/1973	1	0.07	71.67	0.67
91	12/19/1984	2	0.069	75.83	0.64
91	12/22/1982	2	0.069	75.83	0.64
91	1/21/1969	2	0.069	75.83	0.64
91	12/27/1964	1	0.069	75.83	0.64
91	12/21/1970	2	0.069	75.83	0.64
93	11/13/1978	1	0.068	77.5	0.62
93	2/26/1983	1	0.068	77.5	0.62
94	1/7/1987	1	0.053	78.33	0.62
95	1/20/1962	3	0.048	79.17	0.61
96	1/6/1979	1	0.046	80	0.6
97	3/23/1964	2	0.044	80.83	0.6
98	11/15/1952	1	0.044	81.67	0.59
99	6/1/1996	1	0.041	82.5	0.59
100	1/26/1956	1	0.036	83.33	0.58
101	2/4/1958	2	0.034	84.17	0.57
102	10/25/1951	1	0.033	85	0.57
103	3/13/1967	2	0.028	85.83	0.56
104	12/27/1984	1	0.024	86.67	0.56
105	12/24/1988	1	0.024	87.5	0.55
106	2/6/1978	1	0.022	88.33	0.55
107	1/6/1993	1	0.021	89.17	0.54
108	3/1/1976	1	0.02	90	0.54
109	1/15/1979	1	0.019	90.83	0.53
110	1/22/1967	1	0.018	91.67	0.53
111	12/7/1992	1	0.016	92.5	0.52
113	1/26/1958	1	0.008	94.17	0.51
113	1/7/2008	1	0.008	94.17	0.51
114	2/19/1958	1	0.008	95	0.51
115	3/5/2000	1	0.007	95.83	0.5

116	12/17/1957	1	0.002	96.67	0.5
117	1/4/1974	1	0.002	97.5	0.5
118	11/7/1966	1	0.001	98.33	0.49
119	1/15/1993	1	0.001	99.17	0.49
120	1/24/1967	8	9.715	41.81	0.48
121	1/25/1954	7	9.696	42.16	0.48
122	3/8/1974	13	9.519	42.51	0.48
123	1/14/1960	3	9.425	42.86	0.47
124	1/28/1957	32	9.251	43.21	0.47
125	12/20/1952	5	9.122	43.55	0.46
126	2/12/1973	4	9.096	43.9	0.46
127	3/23/1992	4	9.082	44.25	0.46
128	12/6/1998	2	9.033	44.6	0.45
129	2/8/1976	21	8.962	44.95	0.45
130	11/16/1972	20	8.959	45.3	0.45
131	1/3/1977	3	8.93	45.64	0.44
132	2/26/2004	8	8.862	45.99	0.44
133	3/13/1967	5	8.819	46.34	0.44
134	2/14/1998	5	8.758	46.69	0.43
135	12/17/1957	2	8.71	47.04	0.43
136	4/10/1952	2	8.376	47.39	0.43
137	1/18/1954	25	8.361	47.74	0.42
138	12/7/1992	2	8.308	48.08	0.42
139	1/4/1974	2	8.25	48.43	0.42
140	11/13/1978	2	8.232	48.78	0.41
141	3/7/1952	11	8.194	49.13	0.41
142	1/5/1992	9	8.17	49.48	0.41
143	3/20/1991	3	8.082	49.83	0.41
144	1/28/2005	4	8.019	50.17	0.4
145	1/18/1993	11	8.016	50.52	0.4
146	2/6/1978	3	7.832	50.87	0.4
147	12/29/1951	16	7.571	51.22	0.39
148	9/17/1963	2	7.497	51.57	0.39
149	12/3/1966	5	7.46	51.92	0.39
150	1/7/1995	4	7.256	52.26	0.39
151	2/13/1954	4	7.213	52.61	0.38
152	12/25/2003	2	7.183	52.96	0.38
153	3/13/1996	2	7.117	53.31	0.38
154	1/3/2005	4	6.978	53.66	0.38
155	1/27/1994	2	6.941	54.01	0.37
156	12/4/1972	2	6.889	54.36	0.37
157	4/7/1958	14	6.885	54.7	0.37
158	11/25/2001	3	6.871	55.05	0.37
159	12/4/1974	1	6.859	55.4	0.36
160	12/11/1984	3	6.801	55.75	0.36
161	12/31/2004	3	6.789	56.1	0.36
162	12/9/1996	2	6.706	56.45	0.36
163	1/31/1979	6	6.654	56.79	0.36
164	10/25/1951	1	6.627	57.14	0.35
165	11/21/1996	26	6.371	57.49	0.35
166	4/13/1956	8	6.32	57.84	0.35
167	1/18/1952	9	6.186	58.19	0.35
168	4/8/1965	33	6.162	58.54	0.35
169	2/19/1962	3	5.874	58.89	0.34
170	2/9/1985	5	5.838	59.23	0.34
171	1/26/1999	2	5.785	59.58	0.34
172	12/19/1970	12	5.711	59.93	0.34
173	3/11/1975	2	5.707	60.28	0.34
174	1/15/1997	2	5.606	60.63	0.33
175	1/7/1957	6	5.604	60.98	0.33
176	11/16/1965	3	5.536	61.32	0.33
177	4/21/1988	3	5.462	61.67	0.33

178	4/8/1975	7	5.35	62.02	0.33
179	2/13/1989	4	5.333	62.37	0.32
180	4/26/1994	2	5.287	62.72	0.32
181	3/21/1983	1	5.284	63.07	0.32
182	2/21/2000	2	5.216	63.41	0.32
183	3/18/1973	2	5.211	63.76	0.32
184	3/4/1978	21	5.159	64.11	0.32
185	1/12/1997	16	5.055	64.46	0.31
186	11/18/1986	4	5.049	64.81	0.31
187	3/3/1992	2	4.969	65.16	0.31
188	2/19/1993	5	4.856	65.51	0.31
189	12/27/1971	3	4.811	65.85	0.31
190	1/10/1955	3	4.804	66.2	0.31
191	12/18/1977	2	4.781	66.55	0.3
192	12/27/1964	1	4.76	66.9	0.3
193	1/26/1995	2	4.739	67.25	0.3
194	11/4/1987	13	4.705	67.6	0.3
195	1/13/1952	6	4.678	67.94	0.3
196	9/18/1963	2	4.578	68.29	0.3
197	12/21/1988	5	4.522	68.64	0.29
198	2/7/1973	3	4.473	68.99	0.29
199	3/20/1992	1	4.251	69.34	0.29
200	3/28/1979	2	4.231	69.69	0.29
201	3/6/1980	2	4.157	70.03	0.29
202	12/22/1971	2	4.088	70.38	0.29
203	12/22/1982	2	3.997	70.73	0.29
204	11/21/1967	2	3.992	71.08	0.28
205	2/18/1993	1	3.909	71.43	0.28
206	4/18/1995	4	3.876	71.78	0.28
207	1/26/1958	2	3.857	72.13	0.28
208	2/17/1990	2	3.685	72.47	0.28
209	1/27/1983	4	3.675	72.82	0.28
210	4/20/1983	2	3.496	73.17	0.28
211	3/23/1964	2	3.485	73.52	0.27
212	3/17/1963	2	3.447	73.87	0.27
213	3/1/1953	4	3.411	74.22	0.27
214	2/25/1987	2	3.407	74.56	0.27
215	4/4/2006	9	3.402	74.91	0.27
216	11/13/1984	1	3.364	75.26	0.27
217	1/2/2006	3	3.322	75.61	0.27
218	5/13/1998	2	3.279	75.96	0.27
219	4/1/1958	3	3.195	76.31	0.26
220	3/28/2006	12	3.181	76.66	0.26
221	11/20/1983	2	3.133	77	0.26
222	2/27/1996	2	3.104	77.35	0.26
223	3/28/1993	2	3.042	77.7	0.26
224	10/29/2000	2	2.853	78.05	0.26
225	2/6/1976	4	2.796	78.4	0.26
226	3/1/1976	2	2.689	78.75	0.26
227	2/27/1991	1	2.618	79.09	0.26
228	12/10/1965	1	2.554	79.44	0.25
229	3/29/1998	2	2.368	79.79	0.25
230	11/24/1984	6	2.356	80.14	0.25
231	2/22/2008	4	2.332	80.49	0.25
232	2/27/1955	4	2.276	80.84	0.25
233	11/20/1961	1	2.272	81.18	0.25
234	12/11/1996	5	2.182	81.53	0.25
235	2/12/2000	2	2.107	81.88	0.25
236	10/12/1987	3	1.997	82.23	0.25
237	2/6/1998	5	1.979	82.58	0.24
238	11/23/1973	2	1.889	82.93	0.24
239	12/18/1978	2	1.889	83.28	0.24

240	3/8/1975	5	1.825	83.62	0.24
241	3/2/1976	2	1.739	83.97	0.24
242	2/10/1960	3	1.586	84.32	0.24
243	1/17/1990	3	1.573	84.67	0.24
244	2/19/1958	1	1.406	85.02	0.24
245	1/26/1969	3	1.389	85.37	0.24
246	3/22/1983	1	1.322	85.71	0.24
247	3/21/1958	7	1.311	86.06	0.23
248	3/22/1954	24	1.248	86.41	0.23
249	1/31/1996	6	1.181	86.76	0.23
250	10/14/1957	3	1.139	87.11	0.23
251	4/20/1988	2	1.035	87.46	0.23
252	11/7/1966	2	1.014	87.8	0.23
253	2/10/1982	2	0.988	88.15	0.23
254	12/4/1987	1	0.973	88.5	0.23
255	3/21/2006	1	0.961	88.85	0.23
256	9/25/1986	1	0.884	89.2	0.23
257	3/11/1978	1	0.848	89.55	0.23
258	4/28/2005	1	0.818	89.9	0.22
259	4/27/1960	3	0.784	90.24	0.22
260	2/28/2006	1	0.67	90.59	0.22
261	4/27/1953	1	0.625	90.94	0.22
262	12/13/1995	1	0.59	91.29	0.22
263	3/6/1958	1	0.588	91.64	0.22
264	2/21/1979	1	0.454	91.99	0.22
265	12/25/1983	2	0.415	92.33	0.22
266	2/25/1958	1	0.404	92.68	0.22
267	3/30/1954	1	0.401	93.03	0.22
268	1/14/1969	2	0.394	93.38	0.22
269	1/12/1995	3	0.365	93.73	0.22
270	11/3/1957	1	0.35	94.08	0.21
271	11/25/1985	1	0.294	94.43	0.21
272	11/17/1964	1	0.254	94.77	0.21
273	2/16/1959	2	0.211	95.12	0.21
274	1/19/1978	1	0.191	95.47	0.21
275	2/23/1993	1	0.191	95.82	0.21
276	2/4/1999	1	0.162	96.17	0.21
277	3/27/1958	1	0.147	96.52	0.21
278	3/19/1991	1	0.13	96.86	0.21
279	3/28/1961	1	0.091	97.21	0.21
280	2/4/1994	1	0.067	97.56	0.21
281	3/18/1983	2	0.042	97.91	0.21
282	1/26/1957	1	0.022	98.26	0.21
283	1/7/1992	1	0.022	98.61	0.2
284	2/17/1994	1	0.016	98.95	0.2
285	2/12/2005	1	0.009	99.3	0.2
286	2/18/1969	1	0.003	99.65	0.2

Pre Condition POC 2H

Statistics - Node 2H Total Inflow

Rank	Start Date	Event Duration (hours)	Event Peak (CFS)	Exceedanc Frequency (percent)	Return Period (years)
1	1/16/1978	8	12.55	0.4	58
2	1/1/1982	5	12.532	0.79	29
3	10/1/1983	13	10.479	1.19	19.33
4	1/10/1978	4	8.669	1.59	14.5
5	1/4/1995	8	7.921	1.98	11.6
6	1/20/1982	8	7.83	2.38	9.67
7	4/5/1967	3	7.75	2.78	8.29
8	3/5/1995	24	6.667	3.17	7.25
9	2/10/1978	4	6.555	3.57	6.44
10	3/15/1986	12	6.544	3.97	5.8
11	2/10/1963	2	6.36	4.37	5.27
12	2/11/1959	4	6.344	4.76	4.83
13	1/4/1978	11	5.768	5.16	4.46
14	9/10/1976	5	5.699	5.56	4.14
15	2/20/1980	6	5.694	5.95	3.87
16	2/17/1980	37	5.682	6.35	3.63
17	2/22/1998	42	5.669	6.75	3.41
18	11/24/1983	3	5.66	7.14	3.22
19	1/28/1980	12	5.573	7.54	3.05
20	2/16/1980	4	5.555	7.94	2.9
21	3/17/1982	17	5.544	8.33	2.76
22	1/9/1980	51	5.539	8.73	2.64
23	1/18/1955	5	5.228	9.13	2.52
24	2/11/1973	7	5.22	9.52	2.42
25	2/12/1978	4	5.034	9.92	2.32
26	2/22/2004	3	5.016	10.32	2.23
27	1/14/1993	3	5.013	10.71	2.15
28	1/9/1998	4	4.995	11.11	2.07
29	2/12/1992	22	4.948	11.51	2
30	12/5/1966	46	4.828	11.9	1.93
31	11/22/1965	21	4.737	12.3	1.87
32	2/25/1969	7	4.687	12.7	1.81
33	3/24/1983	3	4.669	13.1	1.76
34	1/15/1979	4	4.628	13.49	1.71
35	2/15/1992	5	4.623	13.89	1.66
36	12/29/1965	4	4.547	14.29	1.61
37	6/10/1990	2	4.407	14.68	1.57
38	11/15/1952	19	4.37	15.08	1.53
39	1/11/2001	8	4.316	15.48	1.49
40	2/6/1969	8	4.192	15.87	1.45
41	2/14/1980	25	4.183	16.27	1.41
42	11/14/1972	3	4.167	16.67	1.38
43	2/8/1993	11	4.166	17.06	1.35
44	3/11/1995	4	4.089	17.46	1.32
45	11/30/2007	7	4.038	17.86	1.29
46	1/15/1993	35	3.991	18.25	1.26
47	2/14/1986	9	3.988	18.65	1.23
48	1/22/1964	5	3.874	19.05	1.21
49	1/25/1969	10	3.837	19.44	1.18
50	1/29/1981	3	3.833	19.84	1.16
51	3/8/1968	8	3.813	20.24	1.14
52	2/27/1983	15	3.805	20.63	1.12
53	1/16/1973	4	3.802	21.03	1.09

10-year Q:	7.846	cfs
5-year Q:	6.350	cfs
2-year Q:	4.948	cfs
Lower Flow Threshold:	10%	
0.1xQ2 :	0.495	cfs

55	1/18/1973	5	3.781	21.83	1.05
55	1/29/1983	6	3.781	21.83	1.05
56	1/5/1977	7	3.77	22.22	1.04
57	3/1/1970	22	3.689	22.62	1.02
58	10/19/2004	23	3.688	23.02	1
59	1/14/1978	8	3.673	23.41	0.98
60	12/18/1967	4	3.669	23.81	0.97
61	1/11/2005	8	3.61	24.21	0.95
62	2/21/2005	51	3.506	24.6	0.94
64	11/18/1986	6	3.497	25.4	0.91
64	11/30/1982	9	3.497	25.4	0.91
65	2/7/1994	3	3.475	25.79	0.89
66	1/9/2005	20	3.449	26.19	0.88
67	3/15/1952	10	3.422	26.59	0.87
68	10/18/2004	3	3.269	26.98	0.85
69	3/26/1991	9	3.223	27.38	0.84
70	4/1/1982	3	3.18	27.78	0.83
71	12/6/1997	8	3.168	28.17	0.82
72	2/19/2005	3	3.043	28.57	0.81
73	1/13/1957	5	3.029	28.97	0.79
74	12/2/1961	10	2.991	29.37	0.78
75	1/27/2008	33	2.987	29.76	0.77
76	1/12/1960	6	2.95	30.16	0.76
77	1/6/1993	22	2.897	30.56	0.75
78	3/1/1983	33	2.877	30.95	0.74
79	12/4/1974	6	2.853	31.35	0.73
80	12/24/1971	18	2.851	31.75	0.73
81	2/8/1998	7	2.85	32.14	0.72
82	3/10/1986	3	2.837	32.54	0.71
83	10/25/1951	5	2.832	32.94	0.7
84	11/29/1970	7	2.816	33.33	0.69
85	6/1/1996	1	2.797	33.73	0.68
86	11/21/1963	3	2.763	34.13	0.67
87	3/15/1958	17	2.726	34.52	0.67
88	4/11/1967	3	2.715	34.92	0.66
89	1/6/1987	4	2.689	35.32	0.65
90	11/29/1985	8	2.671	35.71	0.64
91	2/28/1978	40	2.639	36.11	0.64
92	3/11/2006	3	2.638	36.51	0.63
93	1/22/1967	8	2.622	36.9	0.62
94	1/6/1979	7	2.472	37.3	0.62
95	12/18/1984	22	2.437	37.7	0.61
96	12/25/2003	4	2.398	38.1	0.6
97	12/27/1984	4	2.393	38.49	0.6
98	3/1/1991	19	2.392	38.89	0.59
99	3/21/1983	2	2.388	39.29	0.59
100	12/21/1970	6	2.364	39.68	0.58
101	1/20/1962	6	2.362	40.08	0.57
102	1/4/1974	7	2.34	40.48	0.57
103	11/19/1967	13	2.116	40.87	0.56
104	4/3/1958	5	2.047	41.27	0.56
105	1/7/2008	6	2.032	41.67	0.55
106	1/21/1969	3	1.987	42.06	0.55
107	12/24/1988	5	1.975	42.46	0.54
108	2/26/1983	2	1.957	42.86	0.54
109	12/2/1952	4	1.943	43.25	0.53
110	3/23/1964	4	1.912	43.65	0.53
112	1/12/1997	16	1.898	44.44	0.52
112	12/22/1971	9	1.898	44.44	0.52
113	12/27/1964	3	1.88	44.84	0.51
114	2/6/1978	4	1.862	45.24	0.51
115	2/8/1976	7	1.839	45.63	0.5

116	10/12/1987	5	1.825	46.03	0.5
117	12/4/1972	3	1.811	46.43	0.5
118	5/8/1977	4	1.809	46.83	0.49
119	11/16/1972	5	1.804	47.22	0.49
120	3/5/2000	3	1.799	47.62	0.48
121	1/24/1967	8	1.775	48.02	0.48
122	1/31/1979	7	1.77	48.41	0.48
123	1/26/1956	10	1.758	48.81	0.47
124	1/6/1974	36	1.744	49.21	0.47
125	1/27/1983	5	1.744	49.6	0.46
126	11/16/1965	6	1.735	50	0.46
127	12/28/2004	25	1.702	50.4	0.46
128	12/17/1957	2	1.694	50.79	0.45
129	1/16/1952	9	1.691	51.19	0.45
130	12/24/1959	4	1.656	51.59	0.45
131	1/26/1997	5	1.645	51.98	0.44
132	11/20/1983	3	1.629	52.38	0.44
133	12/22/1982	3	1.606	52.78	0.44
134	2/28/1957	2	1.605	53.17	0.43
135	2/10/1982	5	1.593	53.57	0.43
136	1/7/2005	5	1.589	53.97	0.43
137	3/20/1991	4	1.588	54.37	0.42
138	12/7/1992	2	1.56	54.76	0.42
139	3/28/1961	5	1.552	55.16	0.42
140	3/13/1967	5	1.551	55.56	0.41
141	1/10/1995	8	1.535	55.95	0.41
142	2/2/1960	2	1.476	56.35	0.41
143	2/4/1958	4	1.456	56.75	0.41
144	3/12/1986	2	1.453	57.14	0.4
145	12/11/1984	3	1.442	57.54	0.4
146	11/21/1996	25	1.435	57.94	0.4
147	4/7/1958	14	1.423	58.33	0.39
149	9/18/1963	2	1.408	59.13	0.39
149	4/26/1994	2	1.408	59.13	0.39
150	1/28/1957	31	1.401	59.52	0.39
151	2/26/2004	7	1.317	59.92	0.38
152	12/3/1966	5	1.317	60.32	0.38
153	3/23/1992	3	1.293	60.71	0.38
154	1/26/1958	3	1.264	61.11	0.38
155	1/25/1954	7	1.257	61.51	0.37
156	12/6/1998	2	1.247	61.9	0.37
157	2/29/1960	5	1.245	62.3	0.37
158	1/19/1954	4	1.206	62.7	0.37
159	1/18/1993	7	1.19	63.1	0.36
165	1/17/1990	3	1.182	65.48	0.35
165	12/19/1970	13	1.182	65.48	0.35
165	1/14/1969	4	1.182	65.48	0.35
165	12/27/1971	3	1.182	65.48	0.35
165	12/10/1965	8	1.182	65.48	0.35
165	12/30/1981	5	1.182	65.48	0.35
168	2/7/1978	32	1.175	66.67	0.35
168	2/3/1975	2	1.175	66.67	0.35
168	2/6/1998	2	1.175	66.67	0.35
171	3/28/1979	2	1.165	67.86	0.34
171	3/4/1978	3	1.165	67.86	0.34
171	3/2/1976	3	1.165	67.86	0.34
172	4/20/1983	3	1.148	68.25	0.34
173	3/8/1974	9	1.113	68.65	0.34
174	2/14/1998	3	1.104	69.05	0.33
175	10/27/2004	5	1.075	69.44	0.33
176	12/29/1991	10	1.055	69.84	0.33
177	11/13/1978	1	1.043	70.24	0.33

178	1/14/1960	2	1.014	70.63	0.33
179	11/17/1964	3	0.915	71.03	0.32
181	2/23/1969	2	0.91	71.83	0.32
181	2/6/1976	5	0.91	71.83	0.32
182	3/11/1975	2	0.9	72.22	0.32
183	4/8/1965	5	0.882	72.62	0.32
184	2/4/1994	2	0.862	73.02	0.32
185	2/13/1973	2	0.852	73.41	0.31
186	1/3/1977	1	0.847	73.81	0.31
187	11/28/1981	5	0.83	74.21	0.31
188	9/25/1986	1	0.828	74.6	0.31
189	12/30/1951	13	0.817	75	0.31
190	1/8/1982	3	0.77	75.4	0.31
191	2/21/2000	2	0.769	75.79	0.3
192	12/20/1952	5	0.767	76.19	0.3
195	2/6/1966	6	0.76	77.38	0.3
195	2/18/1969	3	0.76	77.38	0.3
195	2/22/1969	2	0.76	77.38	0.3
196	3/8/1975	3	0.745	77.78	0.3
197	12/5/1980	2	0.741	78.17	0.29
198	2/8/1962	10	0.724	78.57	0.29
199	4/8/1975	6	0.721	78.97	0.29
200	2/17/1990	2	0.721	79.37	0.29
201	3/21/2006	2	0.713	79.76	0.29
202	3/3/1992	2	0.675	80.16	0.29
203	4/10/1952	2	0.664	80.56	0.29
204	8/17/1977	2	0.66	80.95	0.28
205	1/5/1992	2	0.644	81.35	0.28
206	4/21/1988	2	0.609	81.75	0.28
207	2/9/1985	4	0.606	82.14	0.28
208	1/7/1995	4	0.597	82.54	0.28
209	12/18/1977	2	0.594	82.94	0.28
210	1/26/1999	2	0.581	83.33	0.28
211	12/31/2004	3	0.576	83.73	0.27
212	12/13/1995	2	0.57	84.13	0.27
213	9/17/1963	1	0.561	84.52	0.27
214	3/30/1954	2	0.561	84.92	0.27
215	5/13/1998	2	0.556	85.32	0.27
216	11/4/1987	4	0.522	85.71	0.27
217	2/13/1954	3	0.513	86.11	0.27
218	1/3/2005	2	0.497	86.51	0.27
219	12/21/1988	5	0.492	86.9	0.26
220	3/7/1952	5	0.478	87.3	0.26
221	3/6/1980	1	0.453	87.7	0.26
222	2/27/1991	1	0.43	88.1	0.26
223	1/10/1955	2	0.418	88.49	0.26
224	11/25/2001	2	0.416	88.89	0.26
225	1/26/1995	1	0.343	89.29	0.26
226	2/19/1962	1	0.306	89.68	0.26
227	2/7/1973	2	0.303	90.08	0.26
228	2/23/1993	2	0.294	90.48	0.25
229	2/13/1989	2	0.263	90.87	0.25
230	1/2/2006	2	0.247	91.27	0.25
231	2/25/1987	1	0.232	91.67	0.25
232	11/7/1966	2	0.21	92.06	0.25
233	2/19/1993	1	0.191	92.46	0.25
234	2/3/1998	1	0.126	92.86	0.25
235	11/23/1973	1	0.124	93.25	0.25
236	2/12/2000	1	0.119	93.65	0.25
237	3/29/2006	1	0.115	94.05	0.24
238	10/18/2005	2	0.11	94.44	0.24
239	3/13/1996	1	0.11	94.84	0.24

240	3/2/1953	1	0.109	95.24	0.24
241	3/29/1998	1	0.108	95.63	0.24
242	1/18/1952	3	0.098	96.03	0.24
243	11/21/1967	1	0.082	96.43	0.24
244	3/28/1993	1	0.067	96.83	0.24
245	4/4/2006	2	0.067	97.22	0.24
246	1/27/1994	1	0.057	97.62	0.24
247	1/13/1952	1	0.052	98.02	0.23
248	11/20/1961	1	0.009	98.41	0.23
249	4/1/1958	3	0.006	98.81	0.23
250	3/11/1978	1	0.002	99.21	0.23
251	1/28/2005	1	0	99.6	0.23
253	2/10/1982	2	0.988	88.15	0.23
254	12/4/1987	1	0.973	88.5	0.23
255	3/21/2006	1	0.961	88.85	0.23
256	9/25/1986	1	0.884	89.2	0.23
257	3/11/1978	1	0.848	89.55	0.23
258	4/28/2005	1	0.818	89.9	0.22
259	4/27/1960	3	0.784	90.24	0.22
260	2/28/2006	1	0.67	90.59	0.22
261	4/27/1953	1	0.625	90.94	0.22
262	12/13/1995	1	0.59	91.29	0.22
263	3/6/1958	1	0.588	91.64	0.22
264	2/21/1979	1	0.454	91.99	0.22
265	12/25/1983	2	0.415	92.33	0.22
266	2/25/1958	1	0.404	92.68	0.22
267	3/30/1954	1	0.401	93.03	0.22
268	1/14/1969	2	0.394	93.38	0.22
269	1/12/1995	3	0.365	93.73	0.22
270	11/3/1957	1	0.35	94.08	0.21
271	11/25/1985	1	0.294	94.43	0.21
272	11/17/1964	1	0.254	94.77	0.21
273	2/16/1959	2	0.211	95.12	0.21
274	1/19/1978	1	0.191	95.47	0.21
275	2/23/1993	1	0.191	95.82	0.21
276	2/4/1999	1	0.162	96.17	0.21
277	3/27/1958	1	0.147	96.52	0.21
278	3/19/1991	1	0.13	96.86	0.21
279	3/28/1961	1	0.091	97.21	0.21
280	2/4/1994	1	0.067	97.56	0.21
281	3/18/1983	2	0.042	97.91	0.21
282	1/26/1957	1	0.022	98.26	0.21
283	1/7/1992	1	0.022	98.61	0.2
284	2/17/1994	1	0.016	98.95	0.2
285	2/12/2005	1	0.009	99.3	0.2
286	2/18/1969	1	0.003	99.65	0.2

Pre Condition POC 3A

Statistics - Node 3A Total Inflow

Rank	Start Date	Event Duration (hours)	Event Peak (CFS)	Exceedance Frequency (percent)	Return Period (years)
1	1/16/1978	4	5.269	0.44	58
2	1/1/1982	3	5.21	0.87	29
3	10/1/1983	9	4.019	1.31	19.33
4	1/10/1978	2	3.559	1.75	14.5
5	4/5/1967	1	3.443	2.18	11.6
6	1/4/1995	7	3.403	2.62	9.67
7	1/20/1982	6	3.231	3.06	8.29
8	3/5/1995	23	2.899	3.49	7.25
9	3/15/1986	10	2.898	3.93	6.44
10	2/10/1978	3	2.853	4.37	5.8
11	2/10/1963	1	2.834	4.8	5.27
12	2/11/1959	3	2.779	5.24	4.83
13	1/9/1980	49	2.469	5.68	4.46
14	2/20/1980	3	2.463	6.11	4.14
15	2/17/1980	36	2.443	6.55	3.87
16	2/22/1998	39	2.429	6.99	3.63
17	3/17/1982	15	2.406	7.42	3.41
18	2/16/1980	3	2.39	7.86	3.22
19	2/22/2004	2	2.344	8.3	3.05
20	1/18/1955	3	2.327	8.73	2.9
21	2/12/1978	1	2.286	9.17	2.76
22	1/14/1993	1	2.244	9.61	2.64
23	2/12/1992	21	2.24	10.04	2.52
24	1/28/1980	9	2.226	10.48	2.42
25	1/9/1998	2	2.214	10.92	2.32
26	1/4/1978	9	2.161	11.35	2.23
27	2/11/1973	1	2.132	11.79	2.15
28	12/5/1966	45	2.067	12.23	2.07
29	2/15/1992	2	2.058	12.66	2
30	2/25/1969	8	2.047	13.1	1.93
31	11/22/1965	19	2.018	13.54	1.87
32	11/15/1952	19	1.992	13.97	1.81
33	11/24/1983	1	1.958	14.41	1.76
34	2/8/1993	10	1.909	14.85	1.71
35	2/6/1969	7	1.891	15.28	1.66
36	11/30/2007	6	1.88	15.72	1.61
37	3/24/1983	1	1.874	16.16	1.57
38	1/11/2001	6	1.871	16.59	1.53
39	3/11/1995	3	1.824	17.03	1.49
40	6/10/1990	1	1.82	17.47	1.45
41	1/29/1981	1	1.813	17.9	1.41
42	6/1/1996	1	1.801	18.34	1.38
43	9/10/1976	1	1.79	18.78	1.35
44	12/18/1967	2	1.756	19.21	1.32
45	2/14/1980	24	1.754	19.65	1.29
46	1/15/1993	34	1.747	20.09	1.26
47	2/14/1986	7	1.743	20.52	1.23
48	10/19/2004	22	1.733	20.96	1.21
49	1/22/1964	3	1.705	21.4	1.18
50	1/15/1979	2	1.634	21.83	1.16
51	1/25/1969	9	1.606	22.27	1.14
52	4/1/1982	2	1.584	22.71	1.12
53	12/6/1997	7	1.583	23.14	1.09
54	1/11/2005	6	1.581	23.58	1.07
55	1/9/2005	18	1.581	24.02	1.05
56	2/21/2005	50	1.578	24.45	1.04
57	11/14/1972	1	1.575	24.89	1.02

10-year Q:	3.410	cfs
5-year Q:	2.800	cfs
2-year Q:	2.058	cfs

Lower Flow Threshold: 10%

0.1xQ2 : 0.206 cfs

58	2/27/1983	14	1.574	25.33	1
59	10/18/2004	1	1.569	25.76	0.98
60	2/7/1994	1	1.567	26.2	0.97
61	3/15/1952	7	1.531	26.64	0.95
62	1/14/1978	7	1.524	27.07	0.94
63	2/19/2005	1	1.499	27.51	0.92
64	12/2/1961	8	1.489	27.95	0.91
65	1/29/1983	3	1.439	28.38	0.89
66	3/1/1983	30	1.438	28.82	0.88
67	1/13/1957	4	1.424	29.26	0.87
68	1/18/1973	2	1.412	29.69	0.85
69	3/26/1991	7	1.407	30.13	0.84
71	3/10/1986	1	1.404	31	0.82
71	3/11/2006	2	1.404	31	0.82
72	1/27/2008	32	1.399	31.44	0.81
73	1/6/1977	4	1.387	31.88	0.79
74	3/15/1958	16	1.362	32.31	0.78
75	3/1/1970	19	1.345	32.75	0.77
76	3/8/1968	2	1.292	33.19	0.76
77	1/12/1960	5	1.291	33.62	0.75
78	1/6/1993	20	1.287	34.06	0.74
79	1/6/1979	6	1.278	34.5	0.73
80	12/29/1965	1	1.254	34.93	0.73
81	11/21/1963	2	1.252	35.37	0.72
82	1/22/1967	7	1.245	35.81	0.71
83	12/18/1984	21	1.234	36.24	0.7
84	3/1/1991	18	1.234	36.68	0.69
85	1/6/1987	2	1.208	37.12	0.68
86	11/29/1985	6	1.206	37.55	0.67
87	12/21/1970	5	1.178	37.99	0.67
88	12/24/1971	3	1.173	38.43	0.66
89	2/8/1998	5	1.139	38.86	0.65
90	4/11/1967	2	1.137	39.3	0.64
91	1/16/1973	1	1.121	39.74	0.64
92	1/21/1969	2	1.104	40.17	0.63
93	11/29/1970	5	1.088	40.61	0.62
94	12/27/1984	3	1.079	41.05	0.62
95	1/20/1962	5	1.078	41.48	0.61
96	12/28/2004	24	1.075	41.92	0.6
97	12/25/2003	2	1.067	42.36	0.6
98	2/26/1983	1	1.06	42.79	0.59
99	11/19/1967	13	1.046	43.23	0.59
100	1/7/2008	5	1.04	43.67	0.58
101	3/5/2000	1	1.024	44.1	0.57
102	10/25/1951	1	1.01	44.54	0.57
103	2/28/1957	1	0.995	44.98	0.56
104	3/23/1964	2	0.99	45.41	0.56
105	12/17/1957	1	0.989	45.85	0.55
106	12/7/1992	1	0.975	46.29	0.55
107	12/24/1988	4	0.918	46.72	0.54
108	12/11/1984	2	0.902	47.16	0.54
109	4/3/1958	3	0.9	47.6	0.53
110	11/21/1996	24	0.898	48.03	0.53
113	4/26/1994	1	0.885	49.34	0.51
113	9/18/1963	1	0.885	49.34	0.51
113	4/7/1958	13	0.885	49.34	0.51
114	12/2/1952	3	0.876	49.78	0.51
115	1/26/1956	8	0.876	50.22	0.5
116	1/26/1958	1	0.875	50.66	0.5
117	3/12/1986	1	0.875	51.09	0.5
118	3/1/1978	12	0.871	51.53	0.49
119	9/17/1963	1	0.831	51.97	0.49
120	2/2/1960	1	0.827	52.4	0.48
121	11/13/1978	1	0.827	52.84	0.48
122	1/25/1954	6	0.812	53.28	0.48

123	1/6/1974	34	0.803	53.71	0.47
124	1/10/1995	7	0.775	54.15	0.47
125	2/8/1976	3	0.768	54.59	0.46
126	11/25/2001	1	0.762	55.02	0.46
127	3/30/1954	1	0.757	55.46	0.46
128	12/24/1959	3	0.752	55.9	0.45
129	1/7/2005	4	0.752	56.33	0.45
130	3/29/1998	2	0.752	56.77	0.45
131	12/6/1998	1	0.75	57.21	0.44
132	1/16/1952	8	0.747	57.64	0.44
133	1/26/1997	4	0.745	58.08	0.44
134	3/8/1974	1	0.738	58.52	0.43
135	5/8/1977	2	0.738	58.95	0.43
136	3/3/1992	1	0.736	59.39	0.43
137	1/24/1967	7	0.736	59.83	0.42
138	3/20/1991	3	0.727	60.26	0.42
139	3/23/1992	2	0.725	60.7	0.42
140	10/27/2004	4	0.723	61.14	0.41
141	1/4/1974	1	0.712	61.57	0.41
142	2/4/1958	3	0.698	62.01	0.41
143	2/6/1978	2	0.698	62.45	0.41
144	2/4/1994	1	0.698	62.88	0.4
145	12/29/1991	9	0.697	63.32	0.4
146	3/11/1975	1	0.678	63.76	0.4
147	4/10/1952	2	0.67	64.19	0.39
148	2/13/1973	1	0.663	64.63	0.39
149	2/21/2000	1	0.661	65.07	0.39
150	2/17/1990	1	0.658	65.5	0.39
151	1/18/1954	19	0.657	65.94	0.38
152	11/30/1982	8	0.654	66.38	0.38
153	11/16/1972	1	0.63	66.81	0.38
154	1/28/1957	30	0.628	67.25	0.38
155	12/20/1952	4	0.621	67.69	0.37
156	1/14/1960	1	0.616	68.12	0.37
157	1/7/1995	3	0.611	68.56	0.37
158	1/3/1977	1	0.61	69	0.37
159	3/4/1978	1	0.604	69.43	0.36
160	4/21/1988	1	0.597	69.87	0.36
161	1/18/1993	3	0.586	70.31	0.36
162	2/26/2004	5	0.583	70.74	0.36
163	1/26/1995	1	0.562	71.18	0.36
164	3/21/2006	1	0.561	71.62	0.35
165	12/27/1971	1	0.559	72.05	0.35
166	12/18/1977	1	0.553	72.49	0.35
167	1/26/1999	1	0.547	72.93	0.35
168	2/23/1993	2	0.542	73.36	0.35
169	2/27/1991	1	0.525	73.8	0.34
170	2/14/1998	2	0.517	74.24	0.34
171	1/5/1992	1	0.516	74.67	0.34
172	2/7/1973	2	0.483	75.11	0.34
173	2/13/1954	2	0.482	75.55	0.34
174	12/4/1974	1	0.472	75.98	0.33
175	12/21/1988	4	0.468	76.42	0.33
176	1/3/2005	2	0.464	76.86	0.33
177	12/27/1964	1	0.459	77.29	0.33
178	12/3/1966	2	0.44	77.73	0.33
179	3/21/1983	1	0.435	78.17	0.32
180	2/3/1998	1	0.434	78.6	0.32
181	2/23/1969	1	0.432	79.04	0.32
182	3/28/1979	1	0.425	79.48	0.32
183	12/29/1951	12	0.423	79.91	0.32
184	3/6/1980	1	0.422	80.35	0.32
185	3/29/2006	1	0.404	80.79	0.31
186	2/9/1985	3	0.396	81.22	0.31
187	3/7/1952	4	0.381	81.66	0.31

188	2/25/1987	1	0.37	82.1	0.31
189	11/18/1986	1	0.364	82.53	0.31
190	3/13/1996	1	0.363	82.97	0.31
191	12/19/1970	1	0.362	83.41	0.3
192	12/13/1995	1	0.362	83.84	0.3
193	12/31/2004	2	0.345	84.28	0.3
194	2/13/1989	1	0.341	84.72	0.3
195	11/28/1981	3	0.341	85.15	0.3
196	2/19/1993	1	0.338	85.59	0.3
197	11/16/1965	1	0.331	86.03	0.29
198	2/19/1962	1	0.328	86.46	0.29
199	3/13/1967	2	0.327	86.9	0.29
200	4/8/1965	3	0.325	87.34	0.29
201	4/8/1975	2	0.32	87.77	0.29
202	1/13/1952	2	0.305	88.21	0.29
203	1/10/1955	1	0.294	88.65	0.29
204	12/22/1982	1	0.292	89.08	0.28
205	4/20/1983	1	0.274	89.52	0.28
206	4/4/2006	1	0.272	89.96	0.28
207	1/18/1952	3	0.256	90.39	0.28
208	2/12/2000	1	0.254	90.83	0.28
209	11/4/1987	4	0.251	91.27	0.28
210	1/2/2006	1	0.246	91.7	0.28
211	11/21/1967	1	0.242	92.14	0.27
212	2/8/1978	2	0.24	92.58	0.27
213	1/27/1994	1	0.239	93.01	0.27
214	4/1/1958	3	0.204	93.45	0.27
215	3/1/1953	3	0.186	93.89	0.27
216	3/28/1993	1	0.174	94.32	0.27
217	5/13/1998	1	0.161	94.76	0.27
218	12/10/1965	1	0.14	95.2	0.27
219	11/20/1961	1	0.116	95.63	0.26
220	1/27/1983	1	0.091	96.07	0.26
221	1/28/2005	1	0.085	96.51	0.26
222	10/18/2005	3	0.079	96.94	0.26
223	12/4/1972	1	0.067	97.38	0.26
224	3/20/1992	1	0.047	97.82	0.26
225	3/28/1961	1	0.034	98.25	0.26
226	10/14/1957	1	0.004	98.69	0.26
227	3/18/1973	1	0.004	99.13	0.26
228	11/20/1983	1	0	99.56	0.25

Pre Condition POC 3B

Statistics - Node 3B Total Inflow

Rank	Start Date	Event Duration (hours)	Event Peak (CFS)	Exceedance Frequency (percent)	Return Period (years)
1	1/16/1978	8	1.479	0.16	58
2	1/1/1982	26	1.46	0.31	29
3	10/1/1983	11	1.239	0.47	19.33
4	1/9/1978	33	1.05	0.62	14.5
5	4/4/1967	25	1.045	0.78	11.6
6	1/20/1982	31	1.04	0.93	9.67
7	1/3/1995	40	0.96	1.09	8.29
8	2/9/1963	38	0.9	1.24	7.25
9	3/15/1986	29	0.836	1.4	6.44
10	2/7/1978	79	0.836	1.55	5.8
11	6/1/1996	1	0.831	1.71	5.27
12	3/5/1995	26	0.825	1.86	4.83
13	6/9/1990	19	0.818	2.02	4.46
14	2/11/1959	26	0.797	2.17	4.14
15	2/22/2004	26	0.788	2.33	3.87
16	2/22/1998	50	0.732	2.48	3.63
17	1/8/1980	110	0.732	2.64	3.41
18	2/13/1980	188	0.732	2.79	3.22
19	2/12/1978	18	0.73	2.95	3.05
20	1/4/1978	51	0.728	3.1	2.9
21	1/28/1980	40	0.726	3.26	2.76
22	1/9/1998	20	0.726	3.41	2.64
23	2/11/1973	45	0.724	3.57	2.52
24	9/10/1976	25	0.72	3.72	2.42
25	11/24/1983	2	0.718	3.88	2.32
26	3/17/1982	24	0.716	4.03	2.23
27	12/6/1997	11	0.701	4.19	2.15
28	1/18/1955	7	0.69	4.34	2.07
29	9/17/1963	43	0.674	4.5	2
30	1/12/1993	36	0.669	4.65	1.93
31	2/15/1992	8	0.668	4.81	1.87
32	2/12/1992	22	0.666	4.96	1.81
33	11/30/2007	18	0.645	5.12	1.76
34	3/24/1983	17	0.624	5.27	1.71
35	2/23/1969	50	0.624	5.43	1.66
36	11/22/1965	24	0.623	5.58	1.61
37	12/18/1967	24	0.622	5.74	1.57
38	12/5/1966	48	0.62	5.89	1.53
39	1/15/1979	9	0.615	6.05	1.49
40	3/11/1995	24	0.614	6.2	1.45
41	12/29/1965	4	0.613	6.36	1.41
42	2/6/1969	11	0.613	6.51	1.38
43	11/14/1972	3	0.611	6.67	1.35
44	1/29/1981	4	0.608	6.82	1.32
45	4/1/1982	5	0.606	6.98	1.29
46	1/22/1967	12	0.571	7.13	1.26
47	2/7/1993	16	0.569	7.29	1.23
48	1/11/2001	33	0.566	7.44	1.21
49	11/14/1952	41	0.565	7.6	1.18
50	12/28/2004	25	0.543	7.75	1.16
51	1/15/1993	78	0.541	7.91	1.14
52	2/14/1986	14	0.536	8.06	1.12
53	12/4/1987	2	0.536	8.22	1.09
54	1/21/1964	27	0.528	8.37	1.07
55	10/19/2004	26	0.525	8.53	1.05
56	1/24/1969	61	0.519	8.68	1.04
57	1/29/1983	5	0.517	8.84	1.02
58	1/5/1977	36	0.517	8.99	1
59	3/18/1973	14	0.516	9.15	0.98
60	1/14/1978	16	0.515	9.3	0.97
61	11/29/1982	28	0.514	9.46	0.95
62	2/26/1983	123	0.513	9.61	0.94
63	1/18/1973	8	0.513	9.77	0.92

10-year Q:	1.041	cfs
5-year Q:	0.827	cfs
2-year Q:	0.674	cfs

Lower Flow Threshold: 10%

0.1xQ2 : 0.067 cfs

64	3/17/1963	3	0.508	9.92	0.91
65	2/28/1970	41	0.506	10.08	0.89
66	1/5/1979	26	0.506	10.23	0.88
67	1/16/1973	5	0.504	10.39	0.87
68	2/3/1998	27	0.501	10.54	0.85
69	11/19/1967	24	0.499	10.7	0.84
70	2/18/2005	34	0.498	10.85	0.83
71	3/7/1968	14	0.498	11.01	0.82
72	1/7/2005	93	0.498	11.16	0.81
73	2/20/2005	70	0.498	11.32	0.79
74	4/11/1967	24	0.497	11.47	0.78
75	2/7/1994	21	0.493	11.63	0.77
76	12/2/1961	29	0.489	11.78	0.76
77	10/25/1951	5	0.487	11.94	0.75
78	3/15/1952	23	0.487	12.09	0.74
79	11/18/1986	6	0.475	12.25	0.73
80	11/20/1963	24	0.474	12.4	0.73
81	1/13/1957	6	0.469	12.56	0.72
82	2/2/2004	3	0.467	12.71	0.71
83	1/28/1981	2	0.466	12.87	0.7
84	11/13/1984	1	0.46	13.02	0.69
85	10/18/2004	2	0.46	13.18	0.68
86	2/28/1957	19	0.456	13.33	0.67
87	1/27/2008	33	0.452	13.49	0.67
88	3/25/1991	53	0.451	13.64	0.66
89	2/1/1960	6	0.45	13.8	0.65
90	3/12/1996	19	0.45	13.95	0.64
91	3/11/2006	6	0.448	14.11	0.64
92	3/10/1986	20	0.448	14.26	0.63
93	1/6/1993	45	0.447	14.42	0.62
94	1/20/1962	10	0.441	14.57	0.62
95	2/27/1991	52	0.44	14.73	0.61
96	3/15/1958	18	0.44	14.88	0.6
97	1/17/1988	12	0.436	15.04	0.6
98	4/28/2005	6	0.435	15.19	0.59
99	1/30/2007	1	0.415	15.35	0.59
100	11/20/1961	2	0.412	15.5	0.58
101	2/7/1998	27	0.411	15.66	0.57
102	1/19/1969	59	0.411	15.81	0.57
103	12/18/1984	40	0.41	15.97	0.56
104	12/21/1970	24	0.41	16.12	0.56
105	1/12/1960	7	0.41	16.28	0.55
106	3/21/1983	7	0.41	16.43	0.55
107	11/28/1970	32	0.409	16.59	0.54
108	12/24/1971	40	0.408	16.74	0.54
109	2/7/1973	2	0.408	16.9	0.53
110	1/4/1974	18	0.405	17.05	0.53
111	2/27/1978	64	0.404	17.21	0.52
112	11/29/1985	17	0.403	17.36	0.52
113	10/27/2004	33	0.403	17.52	0.51
114	1/26/1995	2	0.4	17.67	0.51
115	11/13/1978	2	0.397	17.83	0.5
116	12/29/1991	10	0.396	17.98	0.5
117	3/20/1992	16	0.394	18.14	0.5
118	12/4/1972	6	0.392	18.29	0.49
119	1/6/1987	13	0.392	18.45	0.49
120	12/22/1982	6	0.391	18.6	0.48
121	12/20/1952	11	0.391	18.76	0.48
122	10/29/2000	2	0.388	18.91	0.48
123	5/7/1977	33	0.381	19.07	0.47
124	12/27/1964	25	0.378	19.22	0.47
125	3/25/1977	5	0.375	19.38	0.46
126	12/4/1974	9	0.374	19.53	0.46
127	1/25/1956	41	0.371	19.69	0.46
128	1/10/1995	50	0.369	19.84	0.45
129	4/27/1953	3	0.367	20	0.45
130	11/7/1966	7	0.366	20.16	0.45
131	12/27/1984	18	0.364	20.31	0.44
132	12/7/1992	8	0.364	20.47	0.44
133	4/10/1952	8	0.364	20.62	0.44
134	12/25/2003	10	0.362	20.78	0.43
135	11/21/1996	30	0.359	20.93	0.43

136	3/4/2000	31	0.358	21.09	0.43
137	12/10/2006	1	0.358	21.24	0.42
138	3/2/1992	30	0.357	21.4	0.42
139	7/13/1954	2	0.356	21.55	0.42
140	1/5/2008	52	0.351	21.71	0.41
141	4/15/1978	4	0.347	21.86	0.41
142	2/19/1958	8	0.345	22.02	0.41
143	2/18/1993	7	0.342	22.17	0.41
144	12/17/1957	2	0.341	22.33	0.4
145	12/24/1983	20	0.337	22.48	0.4
146	3/22/1964	29	0.336	22.64	0.4
147	1/25/1958	13	0.336	22.79	0.39
148	3/19/1991	55	0.334	22.95	0.39
149	4/1/2004	2	0.333	23.1	0.39
150	2/13/1954	22	0.332	23.26	0.39
151	3/28/1961	9	0.329	23.41	0.38
152	1/26/2005	11	0.328	23.57	0.38
153	1/28/2005	4	0.328	23.72	0.38
154	4/1/1968	12	0.327	23.88	0.38
155	12/24/1988	7	0.326	24.03	0.37
156	1/7/1995	18	0.323	24.19	0.37
157	2/3/1958	42	0.323	24.34	0.37
158	3/27/1958	5	0.322	24.5	0.37
159	4/6/1958	23	0.322	24.65	0.36
160	3/12/1986	4	0.322	24.81	0.36
161	4/3/1958	34	0.32	24.96	0.36
162	12/11/1984	2	0.32	25.12	0.36
163	4/26/1994	3	0.317	25.27	0.36
164	1/16/1952	10	0.313	25.43	0.35
165	12/9/1996	51	0.313	25.58	0.35
166	2/17/1990	12	0.313	25.74	0.35
167	12/2/1952	3	0.312	25.89	0.35
168	1/31/1993	2	0.305	26.05	0.35
169	1/6/1974	40	0.305	26.2	0.34
170	12/27/1971	26	0.304	26.36	0.34
171	2/6/1998	8	0.303	26.51	0.34
172	1/24/1954	22	0.303	26.67	0.34
173	1/27/1983	10	0.302	26.82	0.34
174	1/31/1979	28	0.301	26.98	0.33
175	3/6/1958	10	0.301	27.13	0.33
176	3/7/1974	19	0.301	27.29	0.33
177	11/16/1972	26	0.301	27.44	0.33
178	3/4/1978	30	0.301	27.6	0.33
179	2/28/2007	2	0.3	27.75	0.32
180	12/19/1970	12	0.3	27.91	0.32
181	4/7/1965	66	0.3	28.06	0.32
182	3/11/1978	17	0.3	28.22	0.32
183	3/5/1980	15	0.3	28.37	0.32
184	3/27/1979	26	0.3	28.53	0.32
185	1/2/1977	7	0.299	28.68	0.31
186	1/17/1990	5	0.299	28.84	0.31
187	2/5/1978	28	0.298	28.99	0.31
188	3/8/1986	6	0.298	29.15	0.31
189	12/9/1965	33	0.298	29.3	0.31
190	2/8/1976	42	0.297	29.46	0.31
191	11/30/1952	6	0.296	29.61	0.3
192	12/16/1978	49	0.296	29.77	0.3
193	3/10/1975	29	0.296	29.92	0.3
194	4/20/1983	23	0.295	30.08	0.3
195	3/29/1998	2	0.295	30.23	0.3
196	11/20/1983	11	0.295	30.39	0.3
197	4/5/1998	1	0.295	30.54	0.29
198	3/13/1967	12	0.295	30.7	0.29
199	11/21/1967	2	0.295	30.85	0.29
200	2/3/1975	51	0.294	31.01	0.29
201	5/4/1998	5	0.294	31.16	0.29
202	2/14/1998	8	0.293	31.32	0.29
203	5/12/1998	24	0.293	31.47	0.29
204	2/10/1982	13	0.293	31.63	0.28
205	2/4/1976	69	0.291	31.78	0.28
206	11/14/1965	51	0.291	31.94	0.28
207	1/24/1967	11	0.29	32.09	0.28

208	1/12/1997	39	0.29	32.25	0.28
209	12/18/1977	6	0.29	32.4	0.28
210	2/21/1979	9	0.29	32.56	0.28
211	12/22/1971	17	0.289	32.71	0.27
212	11/22/1973	3	0.288	32.87	0.27
213	12/30/1952	2	0.287	33.02	0.27
214	3/2/1976	4	0.287	33.18	0.27
215	12/7/1971	1	0.286	33.33	0.27
216	3/19/1979	25	0.286	33.49	0.27
217	10/11/1987	25	0.286	33.64	0.27
218	1/14/1960	4	0.286	33.8	0.27
219	1/14/1969	9	0.286	33.95	0.26
220	1/30/1966	17	0.286	34.11	0.26
221	4/12/1976	9	0.285	34.26	0.26
222	12/3/1966	13	0.284	34.42	0.26
223	3/16/1954	5	0.282	34.57	0.26
224	1/15/1997	2	0.281	34.73	0.26
225	2/27/1996	4	0.28	34.88	0.26
226	1/25/1997	35	0.279	35.04	0.26
227	12/24/1959	5	0.279	35.19	0.26
228	3/11/1965	2	0.279	35.35	0.25
229	3/19/1981	7	0.279	35.5	0.25
230	12/5/1980	6	0.278	35.66	0.25
231	4/20/1988	45	0.278	35.81	0.25
232	9/24/1986	14	0.277	35.97	0.25
233	3/22/1992	18	0.277	36.12	0.25
234	3/30/1954	2	0.277	36.28	0.25
235	3/1/1976	6	0.277	36.43	0.25
236	12/6/1998	2	0.276	36.59	0.25
237	4/11/1998	8	0.276	36.74	0.24
238	1/3/2005	31	0.276	36.9	0.24
239	1/9/2004	1	0.275	37.05	0.24
240	2/20/2000	75	0.274	37.21	0.24
241	2/4/1994	25	0.274	37.36	0.24
242	10/20/1979	2	0.273	37.52	0.24
243	4/4/2006	19	0.271	37.67	0.24
244	3/31/1965	31	0.27	37.83	0.24
245	3/21/1969	10	0.269	37.98	0.24
246	3/2/1974	26	0.268	38.14	0.24
247	2/16/1959	19	0.267	38.29	0.23
248	3/16/1957	2	0.267	38.45	0.23
249	11/25/2001	2	0.266	38.6	0.23
250	11/25/1985	17	0.266	38.76	0.23
251	2/25/1958	4	0.265	38.91	0.23
252	9/5/1978	5	0.265	39.07	0.23
253	5/28/1990	5	0.264	39.22	0.23
254	3/2/1980	17	0.264	39.38	0.23
255	3/19/2005	1	0.263	39.53	0.23
256	11/24/1984	6	0.263	39.69	0.23
257	1/27/1994	1	0.262	39.84	0.23
258	1/18/1954	34	0.261	40	0.22
259	3/14/1982	6	0.261	40.16	0.22
260	1/13/1952	11	0.259	40.31	0.22
261	3/24/1994	4	0.259	40.47	0.22
262	2/17/1994	4	0.258	40.62	0.22
263	12/30/1981	5	0.257	40.78	0.22
264	3/7/1994	6	0.255	40.93	0.22
265	1/21/1996	2	0.254	41.09	0.22
266	1/28/1957	43	0.253	41.24	0.22
267	2/19/1962	46	0.253	41.4	0.22
268	3/25/1998	3	0.253	41.55	0.22
269	11/19/1990	9	0.251	41.71	0.22
270	1/13/1962	1	0.25	41.86	0.21
271	2/11/2005	40	0.241	42.02	0.21
272	4/1/1958	11	0.24	42.17	0.21
273	1/5/1992	18	0.239	42.33	0.21
274	11/12/1960	4	0.237	42.48	0.21
275	1/26/1999	13	0.237	42.64	0.21
276	2/26/2004	10	0.236	42.79	0.21
277	11/11/1954	10	0.235	42.95	0.21
278	12/21/1988	4	0.235	43.1	0.21
279	3/28/2006	12	0.234	43.26	0.21

280	2/19/1993	13	0.234	43.41	0.21
281	11/5/1960	2	0.232	43.57	0.21
282	3/21/2006	3	0.231	43.72	0.21
283	2/27/2006	10	0.23	43.88	0.2
284	11/10/1994	2	0.23	44.03	0.2
285	4/17/1963	6	0.23	44.19	0.2
286	12/31/2004	3	0.228	44.34	0.2
287	2/23/1993	3	0.227	44.5	0.2
288	1/23/1997	4	0.224	44.65	0.2
289	5/22/2008	1	0.224	44.81	0.2
290	10/13/2006	4	0.223	44.96	0.2
291	11/8/1998	20	0.223	45.12	0.2
292	6/5/1993	3	0.223	45.27	0.2
293	2/29/1960	26	0.223	45.43	0.2
294	3/13/1991	2	0.221	45.58	0.2
295	2/11/2000	29	0.221	45.74	0.2
296	2/25/1987	25	0.22	45.89	0.2
297	1/16/1955	8	0.22	46.05	0.2
298	4/20/1957	3	0.219	46.2	0.19
299	3/7/1952	13	0.219	46.36	0.19
300	4/12/1956	23	0.217	46.51	0.19
301	11/14/1988	4	0.214	46.67	0.19
302	12/29/1951	34	0.213	46.82	0.19
303	1/26/1961	6	0.213	46.98	0.19
304	12/8/1984	2	0.213	47.13	0.19
305	4/18/1995	8	0.21	47.29	0.19
306	2/8/1962	19	0.202	47.44	0.19
307	11/20/1951	1	0.2	47.6	0.19
308	12/19/1951	4	0.2	47.75	0.19
309	11/2/1957	15	0.199	47.91	0.19
310	1/16/1970	8	0.199	48.06	0.19
311	2/10/1960	2	0.198	48.22	0.19
312	4/17/2000	17	0.198	48.37	0.19
313	12/28/1977	7	0.198	48.53	0.19
314	1/19/1978	5	0.198	48.68	0.18
315	12/13/1995	3	0.198	48.84	0.18
316	1/17/1952	16	0.197	48.99	0.18
317	4/27/1960	7	0.197	49.15	0.18
318	3/22/1983	4	0.196	49.3	0.18
319	3/19/1973	3	0.196	49.46	0.18
320	2/13/1989	7	0.196	49.61	0.18
321	1/31/1996	23	0.195	49.77	0.18
322	9/24/1958	1	0.195	49.92	0.18
323	1/10/1993	6	0.195	50.08	0.18
324	4/30/1955	17	0.195	50.23	0.18
325	3/10/1980	4	0.195	50.39	0.18
326	2/22/1969	6	0.195	50.54	0.18
327	3/17/1983	37	0.195	50.7	0.18
328	11/12/1976	3	0.194	50.85	0.18
329	3/6/1973	4	0.194	51.01	0.18
330	11/9/1982	22	0.194	51.16	0.18
331	1/24/1983	2	0.193	51.32	0.18
332	3/21/1987	2	0.193	51.47	0.17
333	3/1/1981	29	0.193	51.63	0.17
334	2/23/1979	4	0.193	51.78	0.17
335	4/8/1975	19	0.193	51.94	0.17
336	1/17/1979	25	0.193	52.09	0.17
337	2/17/1998	9	0.192	52.25	0.17
338	3/9/1973	11	0.192	52.4	0.17
339	1/12/1954	3	0.192	52.56	0.17
340	3/14/1983	3	0.192	52.71	0.17
341	4/16/1995	1	0.192	52.87	0.17
342	10/14/1957	4	0.19	53.02	0.17
343	11/30/1967	2	0.19	53.18	0.17
344	3/15/1965	1	0.19	53.33	0.17
345	3/5/1981	12	0.19	53.49	0.17
346	2/9/1985	8	0.189	53.64	0.17
347	5/7/1971	5	0.189	53.8	0.17
348	1/8/1982	7	0.189	53.95	0.17
349	2/7/1966	1	0.189	54.11	0.17
350	1/18/1980	1	0.189	54.26	0.17
351	2/8/1981	16	0.188	54.42	0.17

352	2/18/1969	45	0.188	54.57	0.16
353	3/4/1973	5	0.187	54.73	0.16
354	11/10/1997	3	0.187	54.88	0.16
355	11/17/1964	8	0.187	55.04	0.16
356	4/7/1999	7	0.187	55.19	0.16
357	12/3/1983	4	0.187	55.35	0.16
358	3/31/1998	6	0.186	55.5	0.16
359	11/4/1987	35	0.186	55.66	0.16
360	8/28/1951	3	0.186	55.81	0.16
361	11/19/1982	8	0.186	55.97	0.16
362	11/11/1972	3	0.186	56.12	0.16
363	1/13/1990	13	0.185	56.28	0.16
364	4/7/1978	2	0.185	56.43	0.16
365	1/5/1989	8	0.185	56.59	0.16
366	3/21/1979	4	0.185	56.74	0.16
367	12/18/1988	1	0.184	56.9	0.16
368	3/31/1978	3	0.184	57.05	0.16
369	3/13/1965	5	0.184	57.21	0.16
370	2/22/2008	10	0.184	57.36	0.16
371	3/8/1975	7	0.183	57.52	0.16
372	2/6/1966	7	0.183	57.67	0.16
373	1/30/1986	8	0.182	57.83	0.16
374	3/27/1998	6	0.182	57.98	0.16
375	3/1/1953	3	0.182	58.14	0.15
376	3/22/2005	4	0.181	58.29	0.15
377	12/7/1997	1	0.181	58.45	0.15
378	12/25/1968	12	0.181	58.6	0.15
379	3/7/1992	1	0.18	58.76	0.15
380	12/1/1973	2	0.179	58.91	0.15
381	3/1/1979	5	0.179	59.07	0.15
382	11/11/1983	27	0.179	59.22	0.15
383	12/16/1984	2	0.178	59.38	0.15
384	11/26/1981	49	0.177	59.53	0.15
385	4/29/1983	5	0.177	59.69	0.15
386	4/1/1992	2	0.177	59.84	0.15
387	11/14/1955	2	0.176	60	0.15
388	1/24/1965	1	0.176	60.16	0.15
389	4/5/1969	2	0.175	60.31	0.15
390	1/30/1955	4	0.174	60.47	0.15
391	12/28/1974	11	0.174	60.62	0.15
392	10/9/1986	8	0.174	60.78	0.15
393	3/5/1975	10	0.174	60.93	0.15
394	3/17/1979	4	0.173	61.09	0.15
395	2/10/1992	2	0.172	61.24	0.15
396	8/17/1977	20	0.17	61.4	0.15
397	2/23/1953	1	0.17	61.55	0.15
398	12/12/1951	9	0.168	61.71	0.15
399	1/4/1987	13	0.168	61.86	0.15
400	10/18/2005	3	0.168	62.02	0.14
401	11/8/1979	1	0.167	62.17	0.14
402	10/22/1987	6	0.166	62.33	0.14
403	1/10/1955	4	0.165	62.48	0.14
404	2/10/1970	7	0.165	62.64	0.14
405	5/21/1957	1	0.165	62.79	0.14
406	12/30/1976	23	0.165	62.95	0.14
407	12/11/1993	1	0.164	63.1	0.14
408	11/11/1985	25	0.163	63.26	0.14
409	3/25/1980	4	0.163	63.41	0.14
410	4/1/1967	4	0.162	63.57	0.14
411	12/17/1952	4	0.16	63.72	0.14
412	2/15/1962	17	0.16	63.88	0.14
413	9/25/1997	5	0.16	64.03	0.14
414	4/26/1963	1	0.157	64.19	0.14
415	7/25/1951	1	0.157	64.34	0.14
416	11/21/1978	4	0.155	64.5	0.14
417	1/7/1957	7	0.154	64.65	0.14
418	2/10/1989	1	0.153	64.81	0.14
419	10/28/1974	26	0.152	64.96	0.14
420	4/2/1981	1	0.152	65.12	0.14
421	2/3/1973	2	0.151	65.27	0.14
422	2/6/1992	19	0.15	65.43	0.14
423	2/13/1995	24	0.149	65.58	0.14

424	2/25/1996	21	0.147	65.74	0.14
425	12/10/2001	3	0.147	65.89	0.14
426	3/14/1975	2	0.146	66.05	0.14
427	2/7/1986	13	0.146	66.2	0.14
428	3/4/1996	7	0.146	66.36	0.14
429	2/15/1969	3	0.146	66.51	0.14
430	2/27/1955	4	0.146	66.67	0.13
431	2/17/2000	3	0.146	66.82	0.13
432	4/14/1988	3	0.145	66.98	0.13
433	2/21/1996	22	0.145	67.13	0.13
434	2/2/1985	2	0.144	67.29	0.13
435	3/8/2000	2	0.144	67.44	0.13
436	3/10/1952	14	0.144	67.6	0.13
437	3/27/1985	23	0.144	67.75	0.13
438	4/1/1999	1	0.143	67.91	0.13
439	4/20/2007	1	0.143	68.06	0.13
440	3/13/1971	2	0.143	68.22	0.13
441	12/3/1992	1	0.143	68.37	0.13
442	3/23/1995	4	0.142	68.53	0.13
443	12/16/1987	20	0.141	68.68	0.13
444	4/19/1981	1	0.14	68.84	0.13
445	11/11/1978	23	0.14	68.99	0.13
446	11/21/1955	4	0.14	69.15	0.13
447	11/26/1960	9	0.138	69.3	0.13
448	2/3/2008	14	0.138	69.46	0.13
449	2/28/1969	1	0.136	69.61	0.13
450	1/9/1991	2	0.136	69.77	0.13
451	1/2/2006	4	0.136	69.92	0.13
452	3/28/1993	11	0.135	70.08	0.13
453	12/27/1983	1	0.134	70.23	0.13
454	12/15/1957	5	0.134	70.39	0.13
455	10/25/1958	1	0.134	70.54	0.13
456	11/25/1988	6	0.133	70.7	0.13
457	3/20/1958	31	0.133	70.85	0.13
458	11/9/1964	2	0.132	71.01	0.13
459	3/22/1954	76	0.132	71.16	0.13
460	1/12/1971	1	0.131	71.32	0.13
461	2/29/1952	17	0.13	71.47	0.13
462	12/9/1954	2	0.129	71.63	0.13
463	12/1/1955	3	0.128	71.78	0.13
464	4/19/1984	2	0.128	71.94	0.13
465	3/6/1962	1	0.127	72.09	0.12
466	2/21/1959	9	0.126	72.25	0.12
467	1/6/1953	34	0.125	72.4	0.12
468	3/19/1962	6	0.125	72.56	0.12
469	2/14/1963	3	0.123	72.71	0.12
470	11/30/1993	1	0.122	72.87	0.12
471	4/16/1990	3	0.122	73.02	0.12
472	7/29/1965	1	0.122	73.18	0.12
473	3/24/1987	2	0.121	73.33	0.12
474	3/26/1992	2	0.12	73.49	0.12
475	1/22/1962	17	0.119	73.64	0.12
476	3/19/1994	7	0.118	73.8	0.12
477	12/15/1988	24	0.117	73.95	0.12
478	4/14/1971	3	0.117	74.11	0.12
479	4/25/1952	1	0.117	74.26	0.12
480	2/17/1971	1	0.116	74.42	0.12
481	11/27/1975	26	0.115	74.57	0.12
482	1/7/1992	6	0.113	74.73	0.12
483	1/26/1957	5	0.112	74.88	0.12
484	1/23/1995	44	0.112	75.04	0.12
485	11/15/1963	4	0.111	75.19	0.12
486	2/17/1955	4	0.111	75.35	0.12
487	2/23/1957	7	0.109	75.5	0.12
488	3/13/1986	9	0.109	75.66	0.12
489	10/31/1957	1	0.109	75.81	0.12
490	11/25/1961	3	0.108	75.97	0.12
491	12/5/1957	18	0.107	76.12	0.12
492	12/28/1952	1	0.107	76.28	0.12
493	10/31/1987	12	0.105	76.43	0.12
494	3/15/1991	1	0.105	76.59	0.12
495	1/10/1960	5	0.105	76.74	0.12

496	2/20/1994	2	0.105	76.9	0.12
497	2/25/2005	3	0.104	77.05	0.12
498	12/5/1951	7	0.103	77.21	0.12
499	2/4/1999	4	0.103	77.36	0.12
500	2/29/1988	27	0.103	77.52	0.12
501	10/30/1996	3	0.102	77.67	0.12
502	3/22/1962	1	0.101	77.83	0.12
503	3/2/2004	3	0.099	77.98	0.12
504	4/25/1994	2	0.099	78.14	0.12
505	2/26/1993	1	0.099	78.29	0.11
506	12/25/1994	3	0.098	78.45	0.11
507	12/7/2007	4	0.098	78.6	0.11
508	4/17/2004	3	0.098	78.76	0.11
509	2/28/1973	7	0.097	78.91	0.11
510	4/12/1999	5	0.096	79.07	0.11
511	3/28/1963	3	0.096	79.22	0.11
512	11/14/1953	2	0.094	79.38	0.11
513	10/10/1966	2	0.092	79.53	0.11
514	1/13/1980	1	0.092	79.69	0.11
515	3/25/1989	11	0.091	79.84	0.11
516	1/11/1970	8	0.091	80	0.11
517	1/25/1952	5	0.09	80.16	0.11
518	10/30/1992	1	0.09	80.31	0.11
519	1/28/1969	1	0.09	80.47	0.11
520	11/25/1965	2	0.09	80.62	0.11
521	1/10/1970	5	0.09	80.78	0.11
522	12/26/1977	19	0.09	80.93	0.11
523	12/7/1982	5	0.089	81.09	0.11
524	2/7/1983	29	0.089	81.24	0.11
525	1/8/1985	2	0.089	81.4	0.11
526	1/5/1997	7	0.089	81.55	0.11
527	12/7/1972	28	0.089	81.71	0.11
528	3/13/1969	1	0.089	81.86	0.11
529	12/16/1965	6	0.088	82.02	0.11
530	1/11/1982	6	0.087	82.17	0.11
531	12/14/1965	5	0.087	82.33	0.11
532	4/11/1965	42	0.087	82.48	0.11
533	3/10/1969	3	0.087	82.64	0.11
534	3/28/1960	2	0.086	82.79	0.11
535	2/19/1998	4	0.085	82.95	0.11
536	11/24/1978	3	0.085	83.1	0.11
537	1/2/1990	7	0.085	83.26	0.11
538	4/4/1965	7	0.085	83.41	0.11
539	2/9/1975	7	0.085	83.57	0.11
540	11/13/1997	6	0.085	83.72	0.11
541	1/5/1982	3	0.085	83.88	0.11
542	2/12/1968	1	0.084	84.03	0.11
543	4/3/1965	4	0.084	84.19	0.11
544	5/28/1971	3	0.084	84.34	0.11
545	3/29/1982	5	0.084	84.5	0.11
546	4/22/1967	1	0.083	84.65	0.11
547	1/19/1983	1	0.083	84.81	0.11
548	12/30/1977	1	0.083	84.96	0.11
549	4/2/1978	2	0.081	85.12	0.11
550	1/3/1997	1	0.081	85.27	0.11
551	2/2/1988	12	0.081	85.43	0.11
552	3/17/2002	3	0.081	85.58	0.11
553	4/19/1967	1	0.081	85.74	0.1
554	1/10/1957	4	0.081	85.89	0.1
556	1/31/2000	3	0.081	86.2	0.1
556	12/14/2001	3	0.081	86.2	0.1
557	4/15/1976	1	0.079	86.36	0.1
558	3/20/1954	2	0.079	86.51	0.1
559	2/2/1979	16	0.079	86.67	0.1
560	1/23/2008	2	0.078	86.82	0.1
561	3/9/1978	2	0.078	86.98	0.1
562	11/10/1964	2	0.077	87.13	0.1
563	3/11/1958	7	0.077	87.29	0.1
564	2/25/1981	5	0.077	87.44	0.1
565	3/15/1987	2	0.076	87.6	0.1
566	4/2/1974	4	0.076	87.75	0.1
567	12/27/2006	1	0.076	87.91	0.1

568	1/16/1996	2	0.075	88.06	0.1
569	3/26/1982	5	0.075	88.22	0.1
570	9/26/1982	9	0.075	88.37	0.1
571	3/3/1995	2	0.075	88.53	0.1
572	11/23/1952	2	0.074	88.68	0.1
573	12/17/1967	1	0.074	88.84	0.1
574	11/2/1974	1	0.073	88.99	0.1
575	4/21/1963	4	0.073	89.15	0.1
576	4/18/1983	9	0.072	89.3	0.1
577	4/18/1996	2	0.071	89.46	0.1
578	3/22/1975	4	0.071	89.61	0.1
579	12/17/1970	1	0.071	89.77	0.1
580	11/18/1973	12	0.071	89.92	0.1
581	1/25/1994	2	0.07	90.08	0.1
582	1/9/1973	1	0.069	90.23	0.1
583	5/6/1971	1	0.069	90.39	0.1
584	4/5/1975	1	0.068	90.54	0.1
585	12/22/1965	1	0.068	90.7	0.1
586	1/30/1978	5	0.068	90.85	0.1
587	2/24/1977	5	0.067	91.01	0.1
588	12/5/2004	7	0.067	91.16	0.1
589	11/10/1969	4	0.067	91.32	0.1
590	12/21/1959	3	0.066	91.47	0.1
591	2/19/1986	1	0.066	91.63	0.1
592	10/7/1983	1	0.065	91.78	0.1
593	1/26/2001	6	0.065	91.94	0.1
594	12/27/1996	14	0.064	92.09	0.1
595	3/16/1977	5	0.064	92.25	0.1
596	2/13/1987	3	0.063	92.4	0.1
597	10/11/1957	1	0.062	92.56	0.1
598	12/21/1979	1	0.059	92.71	0.1
599	3/31/1967	1	0.058	92.87	0.1
600	10/17/1971	1	0.058	93.02	0.1
601	1/31/1990	2	0.055	93.18	0.1
602	11/6/1969	2	0.055	93.33	0.1
603	12/28/1992	3	0.054	93.49	0.1
604	1/21/1995	2	0.054	93.64	0.1
605	1/4/1998	1	0.054	93.8	0.1
606	12/31/2005	1	0.053	93.95	0.1
607	6/10/1957	1	0.051	94.11	0.1
608	4/27/1994	3	0.05	94.26	0.1
609	4/6/1986	2	0.049	94.42	0.1
610	12/31/2001	3	0.049	94.57	0.1
611	1/31/1956	2	0.045	94.73	0.09
612	2/14/1979	1	0.045	94.88	0.09
613	3/6/1983	1	0.045	95.04	0.09
614	4/26/1959	2	0.044	95.19	0.09
615	5/10/1980	1	0.043	95.35	0.09
616	4/1/1964	2	0.042	95.5	0.09
617	3/21/1995	3	0.041	95.66	0.09
618	2/6/1973	1	0.039	95.81	0.09
619	2/19/1971	1	0.038	95.97	0.09
620	1/4/1989	1	0.037	96.12	0.09
621	2/22/2007	11	0.036	96.28	0.09
622	4/14/2006	2	0.035	96.43	0.09
623	3/26/1993	1	0.034	96.59	0.09
624	3/14/1984	1	0.033	96.74	0.09
625	2/6/1965	1	0.032	96.9	0.09
626	2/2/1983	1	0.03	97.05	0.09
627	6/15/1995	1	0.028	97.21	0.09
628	10/16/2005	1	0.025	97.36	0.09
629	2/8/1959	13	0.025	97.52	0.09
630	2/10/1997	2	0.025	97.67	0.09
631	7/23/1977	1	0.022	97.83	0.09
632	1/6/1955	2	0.022	97.98	0.09
633	2/24/2008	4	0.021	98.14	0.09
634	12/3/1985	1	0.015	98.29	0.09
635	12/4/1975	1	0.01	98.45	0.09
636	2/18/1994	1	0.009	98.6	0.09
637	12/19/1987	1	0.007	98.76	0.09
638	10/8/1961	1	0.007	98.91	0.09
639	2/8/1960	1	0.007	99.07	0.09

640	5/19/1957	1	0.004	99.22	0.09
641	10/1/1959	1	0.002	99.38	0.09
642	11/21/2004	1	0.002	99.53	0.09
643	1/1/1955	1	0	99.69	0.09
644	1/19/1998	1	0	99.84	0.09

Pre Condition POC 3C

Statistics - Node 3C Total Inflow

Rank	Start Date	Event Duration (hours)	Event Peak (CFS)	Exceedance Frequency (percent)	Return Period (years)
1	1/1/1982	4	10.838	0.4	58
2	1/16/1978	5	10.827	0.79	29
3	10/1/1983	11	9.11	1.19	19.33
4	1/10/1978	3	7.495	1.59	14.5
5	1/4/1995	7	6.829	1.98	11.6
6	1/20/1982	7	6.824	2.38	9.67
7	4/5/1967	2	6.765	2.78	8.29
8	3/5/1995	23	5.787	3.17	7.25
9	2/10/1978	3	5.724	3.57	6.44
10	3/15/1986	11	5.714	3.97	5.8
11	2/10/1963	2	5.555	4.37	5.27
12	2/11/1959	3	5.526	4.76	4.83
13	1/4/1978	10	4.982	5.16	4.46
14	2/20/1980	4	4.951	5.56	4.14
15	9/10/1976	4	4.944	5.95	3.87
16	2/17/1980	36	4.939	6.35	3.63
17	11/24/1983	2	4.934	6.75	3.41
18	2/22/1998	41	4.912	7.14	3.22
19	2/16/1980	3	4.858	7.54	3.05
20	3/17/1982	16	4.848	7.94	2.9
21	1/9/1980	49	4.844	8.33	2.76
22	1/28/1980	11	4.824	8.73	2.64
23	1/18/1955	4	4.567	9.13	2.52
24	2/11/1973	6	4.567	9.52	2.42
25	2/12/1978	2	4.406	9.92	2.32
26	2/22/2004	2	4.393	10.32	2.23
27	1/14/1993	2	4.383	10.71	2.15
28	1/9/1998	3	4.356	11.11	2.07
29	2/12/1992	21	4.332	11.51	2
30	12/5/1966	45	4.159	11.9	1.93
31	11/22/1965	20	4.113	12.3	1.87
32	3/24/1983	2	4.076	12.7	1.81
33	2/25/1969	6	4.071	13.1	1.76
34	1/15/1979	2	4.043	13.49	1.71
35	2/15/1992	3	4.033	13.89	1.66
36	12/29/1965	3	3.984	14.29	1.61
37	6/10/1990	1	3.866	14.68	1.57
38	11/15/1952	19	3.828	15.08	1.53
39	1/11/2001	6	3.736	15.48	1.49
40	2/6/1969	8	3.667	15.87	1.45
41	2/14/1980	24	3.661	16.27	1.41
42	11/14/1972	2	3.652	16.67	1.38
43	2/8/1993	11	3.651	17.06	1.35
44	3/11/1995	3	3.569	17.46	1.32
45	11/30/2007	7	3.541	17.86	1.29
46	1/15/1993	34	3.466	18.25	1.26
47	2/14/1986	8	3.455	18.65	1.23
48	1/22/1964	4	3.374	19.05	1.21
49	1/29/1981	2	3.364	19.44	1.18
50	1/25/1969	9	3.314	19.84	1.16
51	2/27/1983	14	3.303	20.24	1.14
52	1/16/1973	3	3.302	20.63	1.12
53	3/8/1968	6	3.296	21.03	1.09
55	1/18/1973	4	3.293	21.83	1.05
55	1/29/1983	5	3.293	21.83	1.05
56	1/5/1977	6	3.284	22.22	1.04
57	10/19/2004	22	3.236	22.62	1.02
58	3/1/1970	19	3.225	23.02	1
59	12/18/1967	3	3.222	23.41	0.98
60	1/14/1978	7	3.184	23.81	0.97
61	1/11/2005	7	3.136	24.21	0.95
63	11/18/1986	4	3.071	25	0.92
63	11/30/1982	9	3.071	25	0.92

10-year Q:	6.825	cfs
5-year Q:	5.537	cfs
2-year Q:	4.332	cfs

Lower Flow Threshold:	10%	
0.1xQ2 :	0.433	cfs

64	2/21/2005	50	3.066	25.4	0.91
65	2/7/1994	2	3.04	25.79	0.89
66	1/9/2005	19	3.022	26.19	0.88
67	3/15/1952	7	2.99	26.59	0.87
68	10/18/2004	2	2.871	26.98	0.85
69	4/1/1982	2	2.796	27.38	0.84
70	3/26/1991	8	2.792	27.78	0.83
71	12/6/1997	7	2.786	28.17	0.82
72	2/19/2005	2	2.675	28.57	0.81
73	1/13/1957	4	2.656	28.97	0.79
74	12/2/1961	9	2.629	29.37	0.78
75	1/27/2008	32	2.62	29.76	0.77
76	1/12/1960	5	2.56	30.16	0.76
77	3/1/1983	30	2.53	30.56	0.75
78	1/6/1993	21	2.522	30.95	0.74
79	3/10/1986	2	2.495	31.35	0.73
80	10/25/1951	5	2.491	31.75	0.73
81	12/24/1971	17	2.481	32.14	0.72
82	2/8/1998	5	2.474	32.54	0.71
83	12/4/1974	4	2.472	32.94	0.7
84	6/1/1996	1	2.467	33.33	0.69
85	11/29/1970	6	2.433	33.73	0.68
86	11/21/1963	2	2.415	34.13	0.67
87	3/15/1958	16	2.398	34.52	0.67
88	4/11/1967	2	2.382	34.92	0.66
89	1/6/1987	3	2.35	35.32	0.65
90	3/11/2006	2	2.321	35.71	0.64
91	11/29/1985	7	2.319	36.11	0.64
92	2/28/1978	39	2.313	36.51	0.63
93	1/22/1967	7	2.308	36.9	0.62
94	1/6/1979	6	2.175	37.3	0.62
95	12/18/1984	21	2.144	37.7	0.61
96	3/21/1983	2	2.102	38.1	0.6
97	12/27/1984	3	2.093	38.49	0.6
98	12/25/2003	3	2.091	38.89	0.59
99	3/1/1991	19	2.083	39.29	0.59
100	12/21/1970	5	2.081	39.68	0.58
101	1/20/1962	5	2.062	40.08	0.57
102	1/4/1974	6	2.053	40.48	0.57
103	11/19/1967	13	1.864	40.87	0.56
104	1/7/2008	6	1.788	41.27	0.56
105	4/3/1958	4	1.778	41.67	0.55
106	1/21/1969	2	1.751	42.06	0.55
107	12/24/1988	4	1.731	42.46	0.54
108	2/26/1983	1	1.723	42.86	0.54
109	12/2/1952	3	1.697	43.25	0.53
110	3/23/1964	3	1.682	43.65	0.53
111	12/27/1964	1	1.656	44.05	0.52
113	12/22/1971	8	1.648	44.84	0.51
113	1/12/1997	16	1.648	44.84	0.51
114	2/6/1978	3	1.624	45.24	0.51
115	2/8/1976	6	1.606	45.63	0.5
116	12/4/1972	2	1.593	46.03	0.5
117	10/12/1987	4	1.592	46.43	0.5
118	3/5/2000	2	1.586	46.83	0.49
119	5/8/1977	3	1.581	47.22	0.49
120	11/16/1972	3	1.576	47.62	0.48
121	1/24/1967	7	1.55	48.02	0.48
122	1/31/1979	6	1.548	48.41	0.48
123	1/26/1956	9	1.545	48.81	0.47
125	1/6/1974	35	1.531	49.6	0.46
125	1/27/1983	4	1.531	49.6	0.46
126	11/16/1965	5	1.523	50	0.46
127	12/28/2004	24	1.499	50.4	0.46
128	12/17/1957	2	1.493	50.79	0.45
129	1/16/1952	8	1.462	51.19	0.45
130	12/24/1959	3	1.446	51.59	0.45
131	1/26/1997	3	1.435	51.98	0.44
132	11/20/1983	2	1.432	52.38	0.44
133	12/22/1982	2	1.416	52.78	0.44
134	2/28/1957	1	1.415	53.17	0.43
135	2/10/1982	4	1.402	53.57	0.43

136	1/7/2005	4	1.394	53.97	0.43
137	3/20/1991	3	1.389	54.37	0.42
138	12/7/1992	1	1.375	54.76	0.42
139	3/28/1961	4	1.368	55.16	0.42
140	1/10/1995	7	1.35	55.56	0.41
141	3/13/1967	4	1.346	55.95	0.41
142	2/2/1960	1	1.301	56.35	0.41
143	3/12/1986	1	1.28	56.75	0.41
144	2/4/1958	3	1.277	57.14	0.4
145	12/11/1984	2	1.272	57.54	0.4
146	11/21/1996	25	1.266	57.94	0.4
149	9/18/1963	2	1.242	59.13	0.39
149	4/26/1994	2	1.242	59.13	0.39
149	4/7/1958	14	1.242	59.13	0.39
150	1/28/1957	30	1.215	59.52	0.39
151	12/3/1966	4	1.14	59.92	0.38
152	2/26/2004	6	1.139	60.32	0.38
153	3/23/1992	2	1.139	60.71	0.38
154	1/26/1958	2	1.115	61.11	0.38
155	1/25/1954	6	1.105	61.51	0.37
156	12/6/1998	1	1.1	61.9	0.37
157	2/29/1960	4	1.091	62.3	0.37
158	1/19/1954	3	1.053	62.7	0.37
164	12/19/1970	12	1.043	65.08	0.35
164	12/10/1965	7	1.043	65.08	0.35
164	12/27/1971	3	1.043	65.08	0.35
164	1/17/1990	3	1.043	65.08	0.35
164	12/30/1981	5	1.043	65.08	0.35
164	1/14/1969	3	1.043	65.08	0.35
165	1/18/1993	4	1.04	65.48	0.35
168	2/6/1998	1	1.037	66.67	0.35
168	2/7/1978	28	1.037	66.67	0.35
168	2/3/1975	1	1.037	66.67	0.35
171	3/28/1979	1	1.028	67.86	0.34
171	3/2/1976	2	1.028	67.86	0.34
171	3/4/1978	3	1.028	67.86	0.34
172	4/20/1983	2	1.013	68.25	0.34
173	3/8/1974	8	0.982	68.65	0.34
174	2/14/1998	3	0.964	69.05	0.33
175	10/27/2004	5	0.948	69.44	0.33
176	12/29/1991	9	0.931	69.84	0.33
177	11/13/1978	1	0.921	70.24	0.33
178	1/14/1960	1	0.894	70.63	0.33
180	2/23/1969	1	0.803	71.43	0.32
180	2/6/1976	4	0.803	71.43	0.32
181	11/17/1964	2	0.798	71.83	0.32
182	3/11/1975	1	0.795	72.22	0.32
183	4/8/1965	4	0.769	72.62	0.32
184	2/4/1994	2	0.761	73.02	0.32
185	2/13/1973	1	0.752	73.41	0.31
186	1/3/1977	1	0.747	73.81	0.31
187	9/25/1986	1	0.731	74.21	0.31
188	11/28/1981	3	0.725	74.6	0.31
189	12/30/1951	12	0.71	75	0.31
190	2/21/2000	2	0.679	75.4	0.31
191	1/8/1982	2	0.678	75.79	0.3
192	12/20/1952	5	0.677	76.19	0.3
195	2/6/1966	5	0.669	77.38	0.3
195	2/18/1969	3	0.669	77.38	0.3
195	2/22/1969	1	0.669	77.38	0.3
196	3/8/1975	2	0.656	77.78	0.3
197	12/5/1980	1	0.654	78.17	0.29
198	2/8/1962	9	0.638	78.57	0.29
199	2/17/1990	1	0.636	78.97	0.29
200	4/8/1975	4	0.635	79.37	0.29
201	3/21/2006	1	0.629	79.76	0.29
202	3/3/1992	2	0.596	80.16	0.29
203	4/10/1952	2	0.586	80.56	0.29
204	8/17/1977	1	0.582	80.95	0.28
205	1/5/1992	1	0.569	81.35	0.28
206	4/21/1988	2	0.538	81.75	0.28
207	2/9/1985	3	0.535	82.14	0.28

208	1/7/1995	3	0.527	82.54	0.28
209	12/18/1977	2	0.525	82.94	0.28
210	1/26/1999	2	0.513	83.33	0.28
211	12/31/2004	2	0.508	83.73	0.27
212	12/13/1995	1	0.502	84.13	0.27
213	9/17/1963	1	0.495	84.52	0.27
214	3/30/1954	1	0.495	84.92	0.27
215	5/13/1998	2	0.491	85.32	0.27
216	11/4/1987	3	0.457	85.71	0.27
217	2/13/1954	3	0.453	86.11	0.27
218	1/3/2005	2	0.439	86.51	0.27
219	12/21/1988	4	0.43	86.9	0.26
220	3/7/1952	4	0.422	87.3	0.26
221	3/6/1980	1	0.4	87.7	0.26
222	2/27/1991	1	0.38	88.1	0.26
223	1/10/1955	1	0.368	88.49	0.26
224	11/25/2001	1	0.367	88.89	0.26
225	1/26/1995	1	0.303	89.29	0.26
226	2/19/1962	1	0.27	89.68	0.26
227	2/7/1973	2	0.267	90.08	0.26
228	2/23/1993	2	0.26	90.48	0.25
229	2/13/1989	2	0.232	90.87	0.25
230	1/2/2006	1	0.218	91.27	0.25
231	2/25/1987	1	0.205	91.67	0.25
232	11/7/1966	2	0.185	92.06	0.25
233	2/19/1993	1	0.168	92.46	0.25
234	2/3/1998	1	0.111	92.86	0.25
235	11/23/1973	1	0.109	93.25	0.25
236	2/12/2000	1	0.106	93.65	0.25
237	3/29/2006	1	0.102	94.05	0.24
238	10/18/2005	2	0.097	94.44	0.24
239	3/13/1996	1	0.097	94.84	0.24
240	3/2/1953	1	0.096	95.24	0.24
241	3/29/1998	1	0.096	95.63	0.24
242	1/18/1952	3	0.086	96.03	0.24
243	11/21/1967	1	0.073	96.43	0.24
244	3/28/1993	1	0.06	96.83	0.24
245	4/4/2006	1	0.057	97.22	0.24
246	1/27/1994	1	0.05	97.62	0.24
247	1/13/1952	1	0.046	98.02	0.23
248	11/20/1961	1	0.008	98.41	0.23
249	4/1/1958	3	0.005	98.81	0.23
250	3/11/1978	1	0.002	99.21	0.23
251	1/28/2005	1	0	99.6	0.23

Pre Condition POC 3D

Statistics - Node 3D Total Inflow

Rank	Start Date	Event Duration (hours)	Event Peak (CFS)	Exceedance Frequency (percent)	Return Period (years)
1	1/16/1978	10	13.936	0.43	58
2	1/4/1995	11	9.714	0.87	29
3	1/1/1982	7	9.351	1.3	19.33
4	1/10/1978	7	6.587	1.73	14.5
5	12/5/1966	48	6.19	2.16	11.6
6	1/4/1978	12	5.546	2.6	9.67
7	10/1/1983	15	5.17	3.03	8.29
8	1/28/1980	14	4.801	3.46	7.25
9	2/20/1980	8	4.782	3.9	6.44
10	2/22/1998	48	4.743	4.33	5.8
11	2/16/1980	67	4.082	4.76	5.27
12	11/22/1965	22	3.794	5.19	4.83
13	1/25/1969	14	3.726	5.63	4.46
14	3/5/1995	26	3.72	6.06	4.14
15	3/15/1986	14	3.67	6.49	3.87
16	1/9/1980	53	3.591	6.93	3.63
17	2/14/1986	12	3.407	7.36	3.41
18	9/10/1976	8	3.241	7.79	3.22
19	2/25/1969	9	3.192	8.23	3.05
20	1/20/1982	9	3.139	8.66	2.9
21	1/14/1978	10	3.029	9.09	2.76
22	3/8/1968	10	2.949	9.52	2.64
23	1/11/2001	10	2.846	9.96	2.52
24	4/5/1967	4	2.795	10.39	2.42
25	1/18/1955	7	2.678	10.82	2.32
26	2/11/1959	6	2.649	11.26	2.23
27	11/29/1970	8	2.603	11.69	2.15
28	1/9/2005	54	2.393	12.12	2.07
29	1/15/1993	38	2.38	12.55	2
30	2/10/1978	7	2.346	12.99	1.93
31	11/29/1985	10	2.308	13.42	1.87
32	11/24/1983	4	2.217	13.85	1.81
33	2/10/1963	3	2.194	14.29	1.76
34	2/28/1978	40	2.095	14.72	1.71
35	2/8/1993	11	2.069	15.15	1.66
36	2/27/1983	15	2.034	15.58	1.61
37	3/26/1991	10	2.02	16.02	1.57
38	2/8/1998	8	1.959	16.45	1.53
39	11/30/1982	10	1.906	16.88	1.49
40	1/9/1998	5	1.832	17.32	1.45
41	3/17/1982	17	1.753	17.75	1.41
42	12/24/1971	6	1.712	18.18	1.38
43	10/19/2004	24	1.659	18.61	1.35
44	3/24/1983	5	1.636	19.05	1.32
45	2/15/1992	5	1.613	19.48	1.29
46	1/29/1983	7	1.607	19.91	1.26
47	2/12/1992	22	1.599	20.35	1.23
48	1/22/1964	6	1.597	20.78	1.21
49	1/18/1973	6	1.59	21.21	1.18
50	1/12/1960	7	1.574	21.65	1.16
51	1/5/1977	8	1.529	22.08	1.14
52	1/15/1979	6	1.526	22.51	1.12
53	2/11/1973	8	1.511	22.94	1.09
54	1/14/1993	4	1.508	23.38	1.07
55	1/13/1957	6	1.475	23.81	1.05
56	2/12/1978	5	1.438	24.24	1.04
57	3/1/1983	33	1.41	24.68	1.02
58	12/4/1974	8	1.38	25.11	1
59	3/11/1995	4	1.329	25.54	0.98
60	11/21/1963	4	1.266	25.97	0.97
61	1/16/1973	5	1.248	26.41	0.95
62	12/29/1965	5	1.229	26.84	0.94
63	2/22/2004	3	1.198	27.27	0.92

10-year Q:	5.656	cfs
5-year Q:	3.905	cfs
2-year Q:	2.380	cfs

Lower Flow Threshold: 10%

0.1xQ2 : 0.238 cfs

64	3/1/1970	22	1.182	27.71	0.91
65	2/14/1980	25	1.173	28.14	0.89
66	3/1/1991	19	1.161	28.57	0.88
67	11/15/1952	19	1.16	29	0.87
68	1/6/1993	22	1.142	29.44	0.85
69	11/18/1986	7	1.116	29.87	0.84
70	3/15/1952	11	1.053	30.3	0.83
71	2/21/2005	52	1.041	30.74	0.82
72	1/16/1952	10	1.017	31.17	0.81
73	2/7/1994	4	1.011	31.6	0.79
74	3/16/1958	7	0.985	32.03	0.78
75	6/10/1990	2	0.98	32.47	0.77
76	12/2/1961	4	0.976	32.9	0.76
77	11/30/2007	8	0.975	33.33	0.75
78	12/24/1988	5	0.969	33.77	0.74
80	1/12/1997	16	0.962	34.63	0.73
80	12/22/1971	9	0.962	34.63	0.73
81	2/6/1969	8	0.947	35.06	0.72
82	11/14/1972	3	0.945	35.5	0.71
83	12/29/1951	15	0.911	35.93	0.7
84	12/25/2003	4	0.883	36.36	0.69
85	4/3/1958	5	0.879	36.8	0.68
86	2/26/2004	7	0.879	37.23	0.67
87	1/29/1981	4	0.85	37.66	0.67
88	1/20/1962	5	0.815	38.1	0.66
89	12/6/1997	8	0.812	38.53	0.65
90	1/6/1987	4	0.801	38.96	0.64
91	10/12/1987	6	0.774	39.39	0.64
92	1/28/1957	32	0.757	39.83	0.63
93	3/23/1964	4	0.745	40.26	0.62
94	1/24/1967	9	0.689	40.69	0.62
95	12/27/1984	5	0.688	41.13	0.61
96	2/19/2005	4	0.683	41.56	0.6
97	10/18/2004	3	0.68	41.99	0.6
98	12/3/1966	5	0.66	42.42	0.59
99	2/6/1978	5	0.658	42.86	0.59
100	1/27/2008	33	0.632	43.29	0.58
101	12/2/1952	4	0.599	43.72	0.57
102	3/13/1967	5	0.598	44.16	0.57
103	4/1/1982	3	0.558	44.59	0.56
104	12/19/1970	13	0.536	45.02	0.56
105	2/28/1957	6	0.528	45.45	0.55
106	5/8/1977	4	0.526	45.89	0.55
107	3/10/1986	3	0.526	46.32	0.54
108	2/8/1976	7	0.524	46.75	0.54
109	11/16/1972	5	0.518	47.19	0.53
110	4/7/1958	14	0.493	47.62	0.53
111	4/11/1967	3	0.487	48.05	0.52
112	12/24/1959	5	0.481	48.48	0.52
113	12/18/1967	3	0.477	48.92	0.51
114	1/6/1974	37	0.46	49.35	0.51
115	2/6/1976	5	0.45	49.78	0.5
116	1/26/1997	5	0.44	50.22	0.5
117	3/20/1991	4	0.427	50.65	0.5
118	10/25/1951	5	0.423	51.08	0.49
119	1/22/1967	8	0.396	51.52	0.49
120	1/6/1979	7	0.393	51.95	0.48
121	1/7/2005	5	0.387	52.38	0.48
122	3/21/1983	2	0.386	52.81	0.48
123	12/21/1970	6	0.378	53.25	0.47
124	1/19/1954	5	0.369	53.68	0.47
125	12/18/1984	22	0.366	54.11	0.46
126	1/27/1983	5	0.345	54.55	0.46
127	11/16/1965	6	0.337	54.98	0.46
128	1/14/1969	4	0.317	55.41	0.45
129	2/7/1978	29	0.314	55.84	0.45
130	1/18/1993	7	0.302	56.28	0.45
131	6/1/1996	1	0.292	56.71	0.44
132	1/4/1974	2	0.287	57.14	0.44
133	1/10/1995	3	0.287	57.58	0.44
134	11/19/1967	13	0.282	58.01	0.43
135	1/26/1956	10	0.279	58.44	0.43

136	1/7/2008	6	0.279	58.87	0.43
137	11/17/1964	3	0.277	59.31	0.42
138	2/4/1958	4	0.274	59.74	0.42
139	1/21/1969	3	0.265	60.17	0.42
140	2/29/1960	5	0.262	60.61	0.41
141	2/10/1982	5	0.261	61.04	0.41
142	2/14/1998	3	0.261	61.47	0.41
143	4/8/1965	5	0.255	61.9	0.41
144	3/11/2006	2	0.25	62.34	0.4
145	3/5/2000	3	0.234	62.77	0.4
146	11/28/1981	5	0.231	63.2	0.4
147	12/4/1972	3	0.21	63.64	0.39
148	12/17/1957	2	0.21	64.07	0.39
149	12/27/1964	2	0.197	64.5	0.39
150	12/28/2004	25	0.196	64.94	0.39
151	2/26/1983	2	0.188	65.37	0.38
152	12/22/1982	3	0.188	65.8	0.38
153	3/28/1961	5	0.181	66.23	0.38
154	12/11/1984	3	0.159	66.67	0.38
155	11/21/1996	25	0.158	67.1	0.37
157	9/18/1963	2	0.154	67.97	0.37
157	4/26/1994	2	0.154	67.97	0.37
158	2/2/1960	2	0.151	68.4	0.37
159	3/23/1992	2	0.147	68.83	0.36
160	12/7/1992	2	0.139	69.26	0.36
161	1/25/1954	7	0.13	69.7	0.36
162	3/12/1986	2	0.119	70.13	0.36
165	1/17/1990	3	0.114	71.43	0.35
165	12/27/1971	3	0.114	71.43	0.35
165	12/10/1965	8	0.114	71.43	0.35
166	1/31/1979	2	0.114	71.86	0.35
167	2/6/1998	2	0.113	72.29	0.35
170	3/4/1978	3	0.112	73.59	0.34
170	3/28/1979	2	0.112	73.59	0.34
170	3/2/1976	3	0.112	73.59	0.34
171	4/20/1983	3	0.11	74.03	0.34
172	12/21/1988	5	0.106	74.46	0.34
173	3/8/1974	2	0.103	74.89	0.34
174	11/4/1987	4	0.095	75.32	0.33
175	1/26/1958	2	0.093	75.76	0.33
176	2/8/1962	9	0.092	76.19	0.33
177	11/20/1983	2	0.091	76.62	0.33
178	1/8/1982	3	0.087	77.06	0.33
180	2/22/1969	2	0.085	77.92	0.32
180	2/6/1966	6	0.085	77.92	0.32
181	3/8/1975	2	0.082	78.35	0.32
182	2/18/1969	3	0.079	78.79	0.32
183	1/7/1995	4	0.076	79.22	0.32
184	4/8/1975	5	0.076	79.65	0.32
185	11/13/1978	1	0.074	80.09	0.31
186	1/14/1960	1	0.071	80.52	0.31
187	2/23/1969	2	0.071	80.95	0.31
188	3/11/1975	2	0.07	81.39	0.31
189	2/4/1994	2	0.068	81.82	0.31
190	10/27/2004	5	0.066	82.25	0.31
191	2/13/1973	1	0.064	82.68	0.3
192	2/13/1954	3	0.057	83.12	0.3
193	2/21/2000	2	0.057	83.55	0.3
194	12/30/1991	1	0.055	83.98	0.3
195	2/9/1985	4	0.052	84.42	0.3
196	12/5/1980	1	0.05	84.85	0.3
197	8/17/1977	1	0.043	85.28	0.29
198	2/17/1990	1	0.042	85.71	0.29
199	12/13/1995	2	0.041	86.15	0.29
200	3/3/1992	2	0.038	86.58	0.29
201	1/3/1977	1	0.038	87.01	0.29
202	4/21/1988	2	0.037	87.45	0.29
203	12/18/1977	2	0.035	87.88	0.29
204	5/13/1998	2	0.032	88.31	0.28
205	12/31/2004	1	0.029	88.74	0.28
206	1/26/1999	1	0.026	89.18	0.28
207	3/7/1952	4	0.026	89.61	0.28

208	4/10/1952	2	0.023	90.04	0.28
209	9/17/1963	1	0.022	90.48	0.28
210	3/6/1980	1	0.022	90.91	0.28
211	9/25/1986	1	0.021	91.34	0.27
212	2/7/1973	2	0.021	91.77	0.27
213	12/20/1952	1	0.021	92.21	0.27
214	2/27/1991	1	0.017	92.64	0.27
215	12/6/1998	1	0.016	93.07	0.27
216	1/5/1992	1	0.015	93.51	0.27
217	1/10/1955	1	0.013	93.94	0.27
218	1/26/1995	1	0.011	94.37	0.27
219	1/3/2005	2	0.01	94.81	0.26
220	2/25/1987	1	0.008	95.24	0.26
221	12/30/1981	1	0.008	95.67	0.26
222	2/19/1993	1	0.005	96.1	0.26
223	2/13/1989	1	0.004	96.54	0.26
224	2/3/1975	1	0.004	96.97	0.26
225	2/12/2000	1	0.002	97.4	0.26
226	3/29/1998	1	0.001	97.84	0.26
227	2/19/1962	1	0.001	98.27	0.26
228	1/2/2006	1	0.001	98.7	0.25
229	11/7/1966	1	0.001	99.13	0.25
230	3/21/2006	1	0	99.57	0.25
231	3/21/2006	1	0	99.57	0.25

Pre Condition POC 3E

Statistics - Node 3E Total Inflow

Rank	Start Date	Event Duration (hours)	Event Peak (CFS)	Exceedance Frequency (percent)	Return Period (years)
1	1/1/1982	3	2.073	0.44	58
2	1/16/1978	5	2.071	0.88	29
3	10/1/1983	11	1.74	1.33	19.33
4	1/10/1978	3	1.424	1.77	14.5
5	1/4/1995	6	1.294	2.21	11.6
6	4/5/1967	2	1.281	2.65	9.67
7	1/20/1982	6	1.265	3.1	8.29
8	3/5/1995	23	1.093	3.54	7.25
9	2/10/1978	3	1.086	3.98	6.44
10	3/15/1986	11	1.084	4.42	5.8
11	2/11/1959	3	1.043	4.87	5.27
12	2/10/1963	1	1.039	5.31	4.83
13	1/4/1978	10	0.936	5.75	4.46
14	2/20/1980	4	0.93	6.19	4.14
15	9/10/1976	3	0.929	6.64	3.87
16	2/17/1980	36	0.928	7.08	3.63
17	11/24/1983	2	0.928	7.52	3.41
18	2/22/1998	41	0.922	7.96	3.22
19	2/16/1980	3	0.919	8.41	3.05
20	3/17/1982	15	0.917	8.85	2.9
21	1/9/1980	49	0.915	9.29	2.76
22	1/28/1980	11	0.882	9.73	2.64
23	2/11/1973	1	0.829	10.18	2.52
24	1/18/1955	3	0.821	10.62	2.42
25	1/14/1993	2	0.819	11.06	2.32
26	2/12/1978	2	0.818	11.5	2.23
27	2/12/1992	21	0.817	11.95	2.15
28	1/9/1998	2	0.797	12.39	2.07
29	12/5/1966	45	0.775	12.83	2
30	11/22/1965	19	0.768	13.27	1.93
31	3/24/1983	2	0.761	13.72	1.87
32	2/25/1969	6	0.758	14.16	1.81
33	1/15/1979	2	0.755	14.6	1.76
34	12/29/1965	3	0.75	15.04	1.71
35	2/22/2004	2	0.733	15.49	1.66
36	2/15/1992	2	0.732	15.93	1.61
37	11/15/1952	17	0.715	16.37	1.57
38	6/10/1990	1	0.687	16.81	1.53
39	2/8/1993	10	0.68	17.26	1.49
40	2/14/1980	24	0.669	17.7	1.45
41	1/11/2001	5	0.668	18.14	1.41
42	11/30/2007	6	0.652	18.58	1.38
43	3/11/1995	2	0.645	19.03	1.35
44	1/15/1993	32	0.641	19.47	1.32
45	2/14/1986	8	0.64	19.91	1.29
46	11/14/1972	2	0.63	20.35	1.26
47	1/22/1964	3	0.625	20.8	1.23
48	1/29/1981	2	0.616	21.24	1.21
49	1/25/1969	9	0.612	21.68	1.18
50	2/27/1983	14	0.61	22.12	1.16
52	1/18/1973	4	0.609	23.01	1.12
52	1/29/1983	4	0.609	23.01	1.12
53	3/8/1968	6	0.608	23.45	1.09
54	1/5/1977	6	0.607	23.89	1.07
55	10/19/2004	21	0.606	24.34	1.05
56	3/1/1970	19	0.596	24.78	1.04

10-year Q:	1.283	cfs
5-year Q:	1.041	cfs
2-year Q:	0.775	cfs

Lower Flow Threshold: 10%

0.1xQ2 : 0.078 cfs

57	1/14/1978	7	0.578	25.22	1.02
58	1/11/2005	7	0.578	25.66	1
60	11/18/1986	4	0.574	26.55	0.97
60	11/30/1982	8	0.574	26.55	0.97
61	2/6/1969	7	0.57	26.99	0.95
63	2/21/2005	49	0.565	27.88	0.92
63	2/7/1994	2	0.565	27.88	0.92
64	1/9/2005	19	0.556	28.32	0.91
65	3/15/1952	6	0.547	28.76	0.89
66	11/21/1963	3	0.543	29.2	0.88
67	2/19/2005	2	0.538	29.65	0.87
68	10/18/2004	2	0.536	30.09	0.85
69	1/6/1993	24	0.514	30.53	0.84
70	3/26/1991	7	0.51	30.97	0.83
71	4/1/1982	2	0.492	31.42	0.82
72	12/6/1997	7	0.492	31.86	0.81
73	1/16/1973	2	0.49	32.3	0.79
74	1/12/1960	5	0.465	32.74	0.78
75	2/28/1957	2	0.464	33.19	0.77
76	3/10/1986	2	0.462	33.63	0.76
77	3/1/1983	30	0.456	34.07	0.75
78	1/27/2008	32	0.453	34.51	0.74
79	2/8/1998	5	0.448	34.96	0.73
80	3/16/1958	4	0.444	35.4	0.73
81	11/29/1985	7	0.442	35.84	0.72
82	11/29/1970	5	0.441	36.28	0.71
83	1/13/1957	4	0.435	36.73	0.7
84	3/11/2006	2	0.434	37.17	0.69
85	12/2/1961	2	0.429	37.61	0.68
86	1/6/1987	3	0.423	38.05	0.67
87	6/1/1996	1	0.417	38.5	0.67
88	2/28/1978	39	0.415	38.94	0.66
89	12/24/1971	3	0.413	39.38	0.65
90	3/1/1991	19	0.409	39.82	0.64
91	12/4/1974	2	0.4	40.27	0.64
92	5/8/1977	3	0.399	40.71	0.63
93	1/26/1956	10	0.395	41.15	0.62
94	12/18/1967	2	0.394	41.59	0.62
95	1/22/1967	7	0.392	42.04	0.61
96	12/18/1984	21	0.389	42.48	0.6
97	3/21/1983	1	0.386	42.92	0.6
98	1/6/1979	6	0.384	43.36	0.59
99	12/21/1970	5	0.381	43.81	0.59
100	10/25/1951	1	0.379	44.25	0.58
101	12/27/1984	3	0.375	44.69	0.57
102	4/11/1967	2	0.375	45.13	0.57
103	12/25/2003	2	0.374	45.58	0.56
104	1/20/1962	3	0.343	46.02	0.56
105	11/19/1967	1	0.31	46.46	0.55
106	4/3/1958	3	0.308	46.9	0.55
107	12/7/1992	1	0.307	47.35	0.54
108	1/21/1969	2	0.305	47.79	0.54
109	12/2/1952	3	0.298	48.23	0.53
110	12/24/1988	3	0.295	48.67	0.53
111	1/4/1974	1	0.289	49.12	0.52
112	1/7/2008	5	0.286	49.56	0.52
113	2/6/1978	2	0.284	50	0.51
114	3/5/2000	2	0.283	50.44	0.51
115	10/12/1987	4	0.277	50.88	0.5
116	11/16/1972	2	0.273	51.33	0.5
117	2/8/1976	3	0.272	51.77	0.5
118	1/7/1995	4	0.268	52.21	0.49
119	12/17/1957	1	0.264	52.65	0.49
120	1/14/1960	2	0.262	53.1	0.48
121	1/24/1967	7	0.262	53.54	0.48

122	1/6/1974	34	0.262	53.98	0.48
123	3/23/1964	3	0.261	54.42	0.47
124	11/16/1965	2	0.26	54.87	0.47
125	1/3/2005	3	0.25	55.31	0.46
126	12/24/1959	3	0.247	55.75	0.46
127	12/22/1971	3	0.245	56.19	0.46
128	1/16/1952	7	0.244	56.64	0.45
129	1/26/1997	3	0.243	57.08	0.45
130	3/20/1991	3	0.237	57.52	0.45
131	1/12/1997	14	0.236	57.96	0.44
132	1/7/2005	3	0.227	58.41	0.44
133	12/27/1964	1	0.227	58.85	0.44
135	12/28/2004	24	0.219	59.73	0.43
135	12/11/1984	2	0.219	59.73	0.43
136	11/22/1996	1	0.218	60.18	0.43
139	4/26/1994	2	0.213	61.5	0.42
139	9/18/1963	2	0.213	61.5	0.42
139	4/7/1958	14	0.213	61.5	0.42
140	2/26/1983	1	0.209	61.95	0.41
141	1/29/1957	7	0.204	62.39	0.41
142	12/22/1982	2	0.194	62.83	0.41
143	12/4/1972	2	0.193	63.27	0.41
144	2/26/2004	5	0.189	63.72	0.4
145	3/13/1967	3	0.187	64.16	0.4
146	2/4/1958	2	0.186	64.6	0.4
147	3/23/1992	2	0.184	65.04	0.39
148	1/10/1995	2	0.181	65.49	0.39
149	12/3/1966	3	0.179	65.93	0.39
150	2/29/1960	3	0.172	66.37	0.39
156	1/17/1990	2	0.171	69.03	0.37
156	12/10/1965	7	0.171	69.03	0.37
156	1/14/1969	3	0.171	69.03	0.37
156	12/19/1970	12	0.171	69.03	0.37
156	12/27/1971	2	0.171	69.03	0.37
156	1/25/1954	5	0.171	69.03	0.37
158	2/8/1978	2	0.17	69.91	0.37
158	2/6/1998	1	0.17	69.91	0.37
160	3/28/1979	1	0.168	70.8	0.36
160	3/2/1976	2	0.168	70.8	0.36
161	4/20/1983	2	0.165	71.24	0.36
162	1/18/1993	3	0.164	71.68	0.36
163	1/19/1954	3	0.163	72.12	0.36
164	2/2/1960	1	0.163	72.57	0.35
165	3/4/1978	2	0.161	73.01	0.35
166	2/19/1962	6	0.157	73.45	0.35
167	3/8/1974	1	0.157	73.89	0.35
168	2/17/1990	1	0.153	74.34	0.35
169	12/29/1951	13	0.15	74.78	0.34
170	3/12/1986	1	0.149	75.22	0.34
171	2/14/1998	2	0.131	75.66	0.34
172	1/27/1994	1	0.122	76.11	0.34
173	11/17/1964	2	0.121	76.55	0.34
174	2/6/1976	4	0.12	76.99	0.33
175	2/23/1969	1	0.118	77.43	0.33
176	1/27/1983	3	0.117	77.88	0.33
177	3/11/1975	1	0.116	78.32	0.33
178	4/8/1965	3	0.116	78.76	0.33
179	12/31/2004	2	0.115	79.2	0.32
180	2/4/1994	1	0.111	79.65	0.32
181	1/26/1958	1	0.109	80.09	0.32
182	1/5/1992	1	0.104	80.53	0.32
183	11/28/1981	3	0.104	80.97	0.32
184	11/13/1978	1	0.103	81.42	0.32
185	2/10/1982	4	0.103	81.86	0.31
186	2/11/2005	12	0.102	82.3	0.31

187	2/13/1973	1	0.1	82.74	0.31
188	2/21/2000	1	0.095	83.19	0.31
189	2/27/1991	1	0.089	83.63	0.31
190	1/8/1982	2	0.086	84.07	0.31
192	2/22/1969	1	0.084	84.96	0.3
192	2/7/1978	2	0.084	84.96	0.3
193	12/5/1980	1	0.084	85.4	0.3
194	3/8/1975	2	0.081	85.84	0.3
195	4/8/1975	2	0.076	86.28	0.3
196	4/21/1988	1	0.061	86.73	0.3
197	3/3/1992	1	0.06	87.17	0.29
198	2/8/1962	2	0.057	87.61	0.29
199	12/18/1977	2	0.056	88.05	0.29
200	11/4/1987	3	0.051	88.5	0.29
201	10/27/2004	1	0.05	88.94	0.29
202	5/13/1998	2	0.05	89.38	0.29
203	12/21/1988	4	0.045	89.82	0.29
204	2/9/1985	3	0.043	90.27	0.28
205	12/30/1991	1	0.041	90.71	0.28
206	3/6/1980	1	0.032	91.15	0.28
207	1/3/1977	1	0.025	91.59	0.28
208	1/26/1999	1	0.025	92.04	0.28
209	12/13/1995	1	0.024	92.48	0.28
210	8/17/1977	1	0.024	92.92	0.28
211	2/23/1993	1	0.024	93.36	0.27
212	9/17/1963	1	0.023	93.81	0.27
214	3/29/2006	1	0.022	94.69	0.27
214	3/21/2006	1	0.022	94.69	0.27
215	2/13/1954	1	0.02	95.13	0.27
216	12/20/1952	1	0.018	95.58	0.27
217	2/6/1992	2	0.015	96.02	0.27
218	11/25/1985	1	0.008	96.46	0.27
219	1/26/1995	1	0.007	96.9	0.26
220	4/10/1952	1	0.005	97.35	0.26
221	11/20/1983	1	0.005	97.79	0.26
222	9/25/1986	1	0.004	98.23	0.26
223	2/7/1973	2	0.004	98.67	0.26
224	11/20/1961	1	0.003	99.12	0.26
225	2/19/1993	1	0.001	99.56	0.26

Pre Condition POC 3F

10-year Q:	1.119	cfs
5-year Q:	0.835	cfs
2-year Q:	0.644	cfs
Lower Flow Threshold:	10%	
0.1xQ2 :	0.064	cfs

Statistics - Statistics - Node 3F Total Inflow

Rank	Rank	Start Date	Event Duration (hours)	Event Peak (CFS)	Exceedance Frequency (percent)	Return Period (years)
1	1/1/1900	1/1/1982	3	1.856	0.62	58
2	1/2/1900	1/16/1978	4	1.854	1.23	29
3	1/3/1900	10/1/1983	11	1.534	1.85	19.33
4	1/4/1900	1/10/1978	2	1.251	2.47	14.5
5	1/5/1900	1/4/1995	6	1.131	3.09	11.6
6	1/6/1900	4/5/1967	1	1.116	3.7	9.67
7	1/7/1900	1/20/1982	1	1.069	4.32	8.29
8	1/8/1900	3/5/1995	20	0.945	4.94	7.25
9	1/9/1900	2/10/1978	3	0.944	5.56	6.44
10	1/10/1900	3/15/1986	10	0.943	6.17	5.8
11	1/11/1900	2/10/1963	1	0.875	6.79	5.27
12	1/12/1900	2/11/1959	2	0.809	7.41	4.83
13	1/13/1900	1/4/1978	9	0.797	8.02	4.46
14	1/14/1900	2/20/1980	3	0.793	8.64	4.14
15	1/15/1900	1/9/1980	47	0.793	9.26	3.87
16	1/17/1900	2/17/1980	35	0.791	10.49	3.41
	1/17/1900	2/16/1980	2	0.791	10.49	3.41
	1/18/1900	9/10/1976	3	0.791	11.11	3.22
	1/19/1900	3/17/1982	6	0.789	11.73	3.05
	1/20/1900	1/28/1980	11	0.787	12.35	2.9
	1/21/1900	2/22/1998	39	0.784	12.96	2.76
	1/22/1900	1/18/1955	3	0.731	13.58	2.64
	1/23/1900	1/14/1993	1	0.7	14.2	2.52
	1/24/1900	2/12/1992	2	0.699	14.81	2.42
	1/25/1900	3/24/1983	1	0.678	15.43	2.32
	1/26/1900	2/12/1978	1	0.674	16.05	2.23
	1/27/1900	11/24/1983	1	0.655	16.67	2.15
	1/28/1900	12/5/1966	45	0.646	17.28	2.07
	1/29/1900	2/25/1969	5	0.644	17.9	2
	1/30/1900	11/22/1965	19	0.642	18.52	1.93
	1/31/1900	2/11/1973	1	0.639	19.14	1.87
	2/1/1900	11/15/1952	2	0.605	19.75	1.81
	2/2/1900	1/9/1998	1	0.582	20.37	1.76
	2/3/1900	2/15/1992	1	0.574	20.99	1.71
	2/4/1900	2/14/1980	24	0.533	21.6	1.66
	2/5/1900	11/30/2007	1	0.525	22.22	1.61
	2/6/1900	1/15/1993	30	0.524	22.84	1.57
	2/7/1900	6/10/1990	1	0.51	23.46	1.53
	2/8/1900	1/22/1964	3	0.509	24.07	1.49
	2/9/1900	10/19/2004	20	0.505	24.69	1.45
	2/10/1900	1/25/1969	8	0.495	25.31	1.41
	2/12/1900	1/29/1983	4	0.494	26.54	1.35
	2/12/1900	1/18/1973	3	0.494	26.54	1.35
	2/13/1900	2/27/1983	14	0.494	27.16	1.32
	2/14/1900	3/8/1968	3	0.492	27.78	1.29
	2/15/1900	3/11/1995	2	0.49	28.4	1.26
	2/16/1900	1/6/1977	4	0.489	29.01	1.23
	2/17/1900	1/29/1981	1	0.489	29.63	1.21
	2/18/1900	3/1/1970	19	0.482	30.25	1.18
	2/19/1900	11/30/1982	8	0.477	30.86	1.16
	2/20/1900	10/25/1951	1	0.474	31.48	1.14
	2/21/1900	2/15/1986	3	0.47	32.1	1.12
	2/22/1900	1/11/2005	6	0.464	32.72	1.09
	2/23/1900	2/22/2004	1	0.457	33.33	1.07
	2/24/1900	2/7/1994	1	0.452	33.95	1.05
	2/25/1900	1/15/1978	5	0.448	34.57	1.04
	2/26/1900	1/9/2005	18	0.445	35.19	1.02
	2/27/1900	2/19/2005	1	0.444	35.8	1
	2/28/1900	11/21/1963	2	0.433	36.42	0.98
	2/29/1900	11/14/1972	1	0.431	37.04	0.97
	3/1/1900	1/15/1979	2	0.43	37.65	0.95
	3/2/1900	1/11/2001	2	0.424	38.27	0.94
	3/3/1900	2/21/2005	44	0.423	38.89	0.92
	3/4/1900	3/26/1991	5	0.401	39.51	0.91

3/5/1900	3/15/1952	2	0.388	40.12	0.89
3/6/1900	1/27/2008	1	0.377	40.74	0.88
3/9/1900	3/1/1991	18	0.375	42.59	0.84
3/9/1900	2/28/1957	1	0.375	42.59	0.84
3/9/1900	11/20/1961	1	0.375	42.59	0.84
3/10/1900	3/10/1986	1	0.374	43.21	0.83
3/11/1900	10/18/2004	1	0.363	43.83	0.82
3/12/1900	1/12/1960	4	0.358	44.44	0.81
3/13/1900	1/6/1993	2	0.357	45.06	0.79
3/14/1900	3/16/1958	4	0.356	45.68	0.78
3/15/1900	12/6/1997	7	0.352	46.3	0.77
3/16/1900	2/8/1998	3	0.343	46.91	0.76
3/17/1900	4/1/1982	1	0.341	47.53	0.75
3/18/1900	3/1/1983	3	0.34	48.15	0.74
3/19/1900	11/29/1985	6	0.339	48.77	0.73
3/20/1900	11/29/1970	4	0.336	49.38	0.73
3/21/1900	12/29/1965	1	0.323	50	0.72
3/22/1900	1/7/1987	1	0.317	50.62	0.71
3/23/1900	2/2/1960	1	0.308	51.23	0.7
3/24/1900	12/19/1984	2	0.303	51.85	0.69
3/25/1900	2/8/1993	10	0.3	52.47	0.68
3/26/1900	12/24/1971	3	0.299	53.09	0.67
3/27/1900	3/1/1978	12	0.299	53.7	0.67
3/28/1900	12/21/1970	4	0.295	54.32	0.66
3/29/1900	1/26/1956	8	0.288	54.94	0.65
3/30/1900	11/18/1986	4	0.275	55.56	0.64
3/31/1900	12/25/2003	2	0.274	56.17	0.64
4/1/1900	12/27/1984	1	0.272	56.79	0.63
4/2/1900	1/6/1979	1	0.268	57.41	0.62
4/3/1900	1/13/1957	3	0.264	58.02	0.62
4/4/1900	6/1/1996	1	0.252	58.64	0.61
4/5/1900	5/8/1977	2	0.242	59.26	0.6
4/6/1900	1/22/1967	1	0.233	59.88	0.6
4/7/1900	2/6/1969	7	0.227	60.49	0.59
4/9/1900	1/10/1995	7	0.221	61.73	0.58
4/9/1900	12/7/1992	1	0.221	61.73	0.58
4/10/1900	2/4/1958	3	0.218	62.35	0.57
4/11/1900	4/3/1958	3	0.215	62.96	0.57
4/12/1900	12/2/1952	1	0.201	63.58	0.56
4/13/1900	12/2/1961	2	0.199	64.2	0.56
4/14/1900	1/7/2008	5	0.198	64.81	0.55
4/15/1900	1/16/1973	1	0.196	65.43	0.55
4/16/1900	3/5/2000	1	0.195	66.05	0.54
4/17/1900	2/6/1978	2	0.189	66.67	0.54
4/18/1900	1/21/1969	1	0.187	67.28	0.53
4/19/1900	12/17/1957	1	0.173	67.9	0.53
4/20/1900	3/23/1964	2	0.17	68.52	0.52
4/21/1900	1/14/1960	1	0.163	69.14	0.52
4/22/1900	12/24/1988	3	0.162	69.75	0.51
4/23/1900	10/12/1987	2	0.156	70.37	0.51
4/24/1900	11/19/1967	1	0.155	70.99	0.5
4/25/1900	12/4/1974	1	0.154	71.6	0.5
4/26/1900	4/11/1967	1	0.144	72.22	0.5
4/27/1900	3/20/1991	1	0.139	72.84	0.49
4/28/1900	1/16/1952	2	0.13	73.46	0.49
4/29/1900	1/7/1974	1	0.128	74.07	0.48
4/30/1900	11/16/1972	1	0.127	74.69	0.48
5/2/1900	11/16/1965	1	0.125	75.93	0.47
5/2/1900	2/8/1976	1	0.125	75.93	0.47
5/4/1900	12/28/2004	23	0.12	77.16	0.46
5/4/1900	1/7/1995	3	0.12	77.16	0.46
5/6/1900	11/22/1996	1	0.119	78.4	0.46
5/6/1900	2/17/1990	1	0.119	78.4	0.46
5/7/1900	3/12/1986	1	0.117	79.01	0.45
5/10/1900	4/26/1994	1	0.114	80.86	0.44
5/10/1900	9/18/1963	1	0.114	80.86	0.44
5/10/1900	4/7/1958	11	0.114	80.86	0.44
5/11/1900	1/20/1962	2	0.103	81.48	0.44
5/12/1900	12/24/1959	1	0.1	82.1	0.44
5/13/1900	2/26/2004	1	0.079	82.72	0.43
5/15/1900	1/26/1997	1	0.078	83.95	0.43
5/15/1900	1/7/2005	2	0.078	83.95	0.43

5/16/1900	1/19/1954	1	0.07	84.57	0.42
5/21/1900	1/24/1967	6	0.062	87.65	0.41
5/21/1900	12/27/1971	1	0.062	87.65	0.41
5/21/1900	1/17/1990	1	0.062	87.65	0.41
5/21/1900	1/25/1954	1	0.062	87.65	0.41
5/21/1900	12/10/1965	1	0.062	87.65	0.41
5/23/1900	2/8/1978	2	0.061	88.89	0.4
144	2/6/1998	1	0.061	88.89	0.4
145	1/29/1957	1	0.06	89.51	0.4
148	3/28/1979	1	0.059	91.36	0.39
148	3/4/1978	1	0.059	91.36	0.39
148	3/2/1976	1	0.059	91.36	0.39
149	4/20/1983	1	0.056	91.98	0.39
150	3/8/1974	1	0.041	92.59	0.39
151	1/4/1974	1	0.038	93.21	0.38
152	2/6/1976	3	0.035	93.83	0.38
153	3/7/1952	2	0.023	94.44	0.38
154	1/14/1969	2	0.022	95.06	0.38
155	1/27/1994	1	0.01	95.68	0.37
156	12/27/1964	1	0.01	96.3	0.37
157	12/19/1970	1	0.009	96.91	0.37
158	3/23/1992	1	0.009	97.53	0.37
159	4/4/2006	1	0.007	98.15	0.36
160	2/23/1969	1	0.004	98.77	0.36
161	3/11/1975	1	0.004	99.38	0.36
162	4/8/1975	11	0.049	52.43	0.36
163	3/18/1973	6	0.049	52.75	0.36
164	1/27/1983	10	0.048	53.07	0.35
165	1/31/1979	9	0.048	53.4	0.35
166	1/28/1981	5	0.048	53.72	0.35
167	4/4/2006	13	0.048	54.05	0.35
168	1/18/1952	8	0.048	54.37	0.35
169	11/12/1983	8	0.047	54.69	0.34
170	2/6/1976	6	0.047	55.02	0.34
171	1/27/2008	33	0.047	55.34	0.34
172	4/28/2005	7	0.046	55.66	0.34
173	11/16/1972	7	0.046	55.99	0.34
174	2/11/2005	25	0.045	56.31	0.33
175	10/25/1951	7	0.045	56.63	0.33
176	5/12/1998	7	0.045	56.96	0.33
177	12/25/2003	4	0.045	57.28	0.33
178	11/17/1964	6	0.045	57.61	0.33
179	12/16/1987	16	0.045	57.93	0.32
180	4/8/1965	33	0.045	58.25	0.32
181	2/25/1958	5	0.044	58.58	0.32
182	2/17/1994	4	0.044	58.9	0.32
183	3/6/1958	8	0.044	59.22	0.32
184	2/9/1981	7	0.044	59.55	0.32
185	10/20/1979	6	0.043	59.87	0.31
186	11/16/1965	10	0.043	60.19	0.31
187	2/29/1960	6	0.043	60.52	0.31
188	12/24/1959	5	0.043	60.84	0.31
189	11/23/1973	5	0.043	61.17	0.31
190	11/30/1952	6	0.043	61.49	0.31
191	12/24/1983	21	0.042	61.81	0.3
192	2/19/1962	4	0.042	62.14	0.3
193	3/2/1992	6	0.042	62.46	0.3
194	5/4/1998	6	0.042	62.78	0.3
195	12/9/1965	32	0.042	63.11	0.3
196	5/28/1990	6	0.042	63.43	0.3
197	3/8/1986	4	0.042	63.75	0.29
198	8/28/1951	6	0.041	64.08	0.29
199	1/26/1961	7	0.041	64.4	0.29
200	1/13/1952	8	0.041	64.72	0.29
201	1/7/2008	8	0.04	65.05	0.29
202	11/11/1954	10	0.039	65.37	0.29
203	12/2/1952	4	0.039	65.7	0.29
204	2/21/1979	5	0.039	66.02	0.28
205	2/6/1966	7	0.039	66.34	0.28
206	2/3/2004	4	0.039	66.67	0.28
207	12/30/1981	8	0.039	66.99	0.28
208	3/4/1978	9	0.038	67.31	0.28

209	3/10/1986	7	0.038	67.64	0.28
210	2/6/1978	5	0.038	67.96	0.28
211	1/21/1969	3	0.038	68.28	0.27
212	2/19/2005	3	0.037	68.61	0.27
213	1/31/1996	7	0.037	68.93	0.27
214	11/28/1981	6	0.036	69.26	0.27
215	2/9/1985	5	0.036	69.58	0.27
216	4/1/1968	11	0.035	69.9	0.27
217	3/13/1996	4	0.035	70.23	0.27
218	8/17/1977	17	0.035	70.55	0.27
219	10/14/2006	5	0.035	70.87	0.26
220	3/25/1977	5	0.035	71.2	0.26
221	1/7/1957	5	0.035	71.52	0.26
222	2/22/2008	8	0.035	71.84	0.26
223	1/14/1960	3	0.034	72.17	0.26
224	3/31/1965	7	0.034	72.49	0.26
225	3/28/1961	9	0.034	72.82	0.26
226	10/29/2000	3	0.034	73.14	0.26
227	3/20/1991	4	0.034	73.46	0.26
228	11/20/1990	4	0.033	73.79	0.25
229	10/18/2004	3	0.032	74.11	0.25
230	12/19/1984	22	0.032	74.43	0.25
231	12/27/1971	4	0.032	74.76	0.25
232	3/11/2006	3	0.031	75.08	0.25
233	12/21/1988	4	0.031	75.4	0.25
234	2/17/1998	5	0.031	75.73	0.25
235	1/23/1997	4	0.031	76.05	0.25
236	11/15/1965	5	0.031	76.38	0.25
237	11/11/1985	11	0.03	76.7	0.24
238	9/5/1978	6	0.03	77.02	0.24
239	1/26/1958	4	0.03	77.35	0.24
240	1/4/1987	12	0.029	77.67	0.24
241	11/24/1984	4	0.029	77.99	0.24
242	12/9/1996	4	0.028	78.32	0.24
243	3/19/1991	6	0.028	78.64	0.24
244	2/19/1993	3	0.028	78.96	0.24
245	2/13/1989	4	0.028	79.29	0.24
246	3/23/1992	4	0.028	79.61	0.24
247	1/16/1955	3	0.026	79.94	0.23
248	1/30/1966	6	0.026	80.26	0.23
249	12/26/1977	3	0.026	80.58	0.23
250	1/30/2007	3	0.026	80.91	0.23
251	11/4/1987	3	0.025	81.23	0.23
252	11/20/1983	2	0.025	81.55	0.23
253	11/13/1978	2	0.025	81.88	0.23
254	10/30/1996	3	0.025	82.2	0.23
255	3/19/1981	8	0.024	82.52	0.23
256	3/5/2000	3	0.024	82.85	0.23
257	2/7/1973	3	0.024	83.17	0.23
258	12/11/1996	5	0.024	83.5	0.22
259	11/8/1998	4	0.023	83.82	0.22
260	3/6/1975	2	0.023	84.14	0.22
261	4/20/1983	2	0.021	84.47	0.22
262	3/24/1994	4	0.021	84.79	0.22
263	4/15/1988	3	0.021	85.11	0.22
264	1/31/1993	3	0.021	85.44	0.22
265	3/8/1975	6	0.021	85.76	0.22
266	12/30/1976	3	0.02	86.08	0.22
267	3/25/1998	3	0.02	86.41	0.22
268	2/6/1998	4	0.02	86.73	0.22
269	7/13/1954	2	0.019	87.06	0.22
270	2/18/1969	7	0.019	87.38	0.21
271	11/14/1955	3	0.019	87.7	0.21
272	2/6/1992	5	0.019	88.03	0.21
273	2/13/1973	2	0.019	88.35	0.21
274	9/26/1982	5	0.019	88.67	0.21
275	3/25/1991	3	0.017	89	0.21
276	4/12/1976	1	0.017	89.32	0.21
277	4/20/1988	5	0.017	89.64	0.21
278	1/8/1982	6	0.016	89.97	0.21
279	11/25/1988	3	0.015	90.29	0.21
280	4/1/2004	2	0.015	90.61	0.21

281	3/7/1994	5	0.015	90.94	0.21
282	3/1/1981	2	0.014	91.26	0.21
283	4/18/1995	5	0.013	91.59	0.2
284	1/14/1990	4	0.013	91.91	0.2
285	3/17/1954	2	0.012	92.23	0.2
286	11/13/1984	1	0.012	92.56	0.2
287	3/1/1979	2	0.012	92.88	0.2
288	3/27/1979	20	0.011	93.2	0.2
289	4/14/1971	2	0.011	93.53	0.2
290	2/3/1975	5	0.011	93.85	0.2
291	12/31/2004	1	0.009	94.17	0.2
292	11/27/1981	2	0.008	94.5	0.2
293	3/27/1958	2	0.007	94.82	0.2
294	2/27/1996	2	0.007	95.15	0.2
295	3/31/1978	1	0.005	95.47	0.2
296	10/28/1974	2	0.005	95.79	0.2
297	1/7/1953	4	0.005	96.12	0.2
298	2/8/1986	1	0.004	96.44	0.19
299	1/25/1994	1	0.004	96.76	0.19
300	1/12/1995	1	0.004	97.09	0.19
301	4/17/2000	1	0.003	97.41	0.19
302	1/17/1990	4	0.003	97.73	0.19
303	12/25/1968	1	0.002	98.06	0.19
304	12/5/1980	2	0.001	98.38	0.19
305	2/28/2007	1	0.001	98.71	0.19
306	2/3/2008	1	0.001	99.03	0.19
307	1/10/1960	2	0.001	99.35	0.19
308	12/11/1984	1	0.001	99.68	0.19

Pre Condition POC 3G

Statistics - Node 5G Total Inflow

Rank	Start Date	Event Duration (hours)	Event Peak (CFS)	Exceedance Frequency (percent)	Return Period (years)
1	1/1/1982	3	2.541	0.53	58
2	1/16/1978	4	2.538	1.06	29
3	10/1/1983	11	2.128	1.59	19.33
4	1/10/1978	2	1.726	2.12	14.5
5	1/4/1995	6	1.563	2.65	11.6
6	4/5/1967	1	1.559	3.17	9.67
7	1/20/1982	5	1.506	3.7	8.29
8	2/10/1978	3	1.316	4.23	7.25
9	3/5/1995	22	1.315	4.76	6.44
10	3/15/1986	10	1.314	5.29	5.8
11	2/10/1963	1	1.241	5.82	5.27
12	2/11/1959	2	1.181	6.35	4.83
13	1/4/1978	9	1.115	6.88	4.46
14	1/9/1980	49	1.114	7.41	4.14
15	2/17/1980	35	1.112	7.94	3.87
16	2/16/1980	2	1.112	8.47	3.63
17	2/20/1980	3	1.11	8.99	3.41
18	3/17/1982	6	1.11	9.52	3.22
19	9/10/1976	3	1.107	10.05	3.05
20	2/22/1998	39	1.098	10.58	2.9
21	1/18/1955	3	1.032	11.11	2.76
22	1/28/1980	9	1.032	11.64	2.64
23	11/24/1983	1	0.999	12.17	2.52
24	1/14/1993	1	0.991	12.7	2.42
25	2/12/1992	21	0.989	13.23	2.32
26	2/12/1978	1	0.973	13.76	2.23
27	2/11/1973	1	0.949	14.29	2.15
28	12/5/1966	45	0.911	14.81	2.07
29	2/25/1969	5	0.91	15.34	2
30	11/22/1965	18	0.908	15.87	1.93
31	3/24/1983	1	0.906	16.4	1.87
32	1/9/1998	1	0.884	16.93	1.81
33	11/15/1952	17	0.866	17.46	1.76
34	2/15/1992	1	0.846	17.99	1.71
35	6/10/1990	1	0.799	18.52	1.66
36	2/14/1980	24	0.785	19.05	1.61
37	2/22/2004	1	0.782	19.58	1.57
38	11/30/2007	1	0.776	20.11	1.53
39	12/29/1965	1	0.76	20.63	1.49
40	1/15/1979	2	0.758	21.16	1.45
41	1/15/1993	31	0.748	21.69	1.41
42	3/11/1995	2	0.738	22.22	1.38
43	10/19/2004	20	0.737	22.75	1.35
44	1/29/1981	1	0.736	23.28	1.32
45	1/22/1964	3	0.728	23.81	1.29
46	1/25/1969	8	0.708	24.34	1.26
48	1/29/1983	4	0.708	25.4	1.21
48	1/18/1973	3	0.708	25.4	1.21
49	1/6/1977	4	0.707	25.93	1.18
50	2/27/1983	14	0.706	26.46	1.16
51	2/15/1986	6	0.704	26.98	1.14
52	3/8/1968	3	0.703	27.51	1.12
53	3/1/1970	19	0.702	28.04	1.09
54	11/30/1982	8	0.7	28.57	1.07
55	10/25/1951	1	0.697	29.1	1.05
56	11/14/1972	1	0.697	29.63	1.04
57	2/8/1993	10	0.688	30.16	1.02
58	1/11/2005	6	0.667	30.69	1

10-year Q:	1.560	cfs
5-year Q:	1.204	cfs
2-year Q:	0.910	cfs

Lower Flow Threshold: 10%

0.1xQ2 : 0.091 cfs

59	2/7/1994	1	0.663	31.22	0.98
60	1/9/2005	18	0.661	31.75	0.97
61	2/19/2005	1	0.658	32.28	0.95
62	11/18/1986	4	0.657	32.8	0.94
63	1/14/1978	6	0.656	33.33	0.92
64	10/18/2004	1	0.655	33.86	0.91
65	1/11/2001	3	0.65	34.39	0.89
66	2/21/2005	49	0.635	34.92	0.88
67	11/21/1963	2	0.624	35.45	0.87
68	3/15/1952	2	0.616	35.98	0.85
69	12/6/1997	7	0.593	36.51	0.84
70	4/1/1982	1	0.586	37.04	0.83
71	3/26/1991	7	0.581	37.57	0.82
72	6/1/1996	1	0.575	38.1	0.81
74	3/1/1991	18	0.573	39.15	0.78
74	2/28/1957	1	0.573	39.15	0.78
75	3/10/1986	1	0.571	39.68	0.77
76	1/6/1993	20	0.569	40.21	0.76
77	3/1/1983	3	0.552	40.74	0.75
78	3/16/1958	4	0.549	41.27	0.74
79	2/6/1969	7	0.546	41.8	0.73
80	1/12/1960	4	0.524	42.33	0.73
81	1/27/2008	17	0.517	42.86	0.72
82	2/8/1998	5	0.502	43.39	0.71
83	11/29/1985	6	0.502	43.92	0.7
84	2/1/1960	2	0.499	44.44	0.69
85	11/29/1970	5	0.494	44.97	0.68
86	12/19/1984	2	0.487	45.5	0.67
87	1/13/1957	3	0.483	46.03	0.67
88	1/7/1987	1	0.482	46.56	0.66
89	3/1/1978	12	0.479	47.09	0.65
90	12/21/1970	4	0.477	47.62	0.64
91	1/6/1979	1	0.464	48.15	0.64
92	1/22/1967	1	0.462	48.68	0.63
93	12/24/1971	3	0.45	49.21	0.62
94	12/2/1961	2	0.442	49.74	0.62
95	1/26/1956	8	0.441	50.26	0.61
96	1/16/1973	1	0.424	50.79	0.6
97	12/27/1984	1	0.421	51.32	0.6
98	12/25/2003	2	0.414	51.85	0.59
99	5/8/1977	2	0.394	52.38	0.59
100	4/11/1967	1	0.385	52.91	0.58
101	12/4/1974	1	0.376	53.44	0.57
102	1/21/1969	1	0.373	53.97	0.57
103	1/7/2008	5	0.366	54.5	0.56
104	3/5/2000	1	0.362	55.03	0.56
105	11/19/1967	1	0.36	55.56	0.55
106	3/11/2006	1	0.356	56.08	0.55
107	12/7/1992	1	0.345	56.61	0.54
108	12/17/1957	1	0.339	57.14	0.54
109	2/4/1958	3	0.339	57.67	0.53
110	3/23/1964	2	0.335	58.2	0.53
111	4/3/1958	3	0.327	58.73	0.52
112	12/2/1952	2	0.32	59.26	0.52
113	1/20/1962	2	0.311	59.79	0.51
114	12/24/1988	3	0.304	60.32	0.51
115	2/6/1978	2	0.298	60.85	0.5
116	1/7/1995	3	0.293	61.38	0.5
117	10/12/1987	2	0.293	61.9	0.5
118	11/16/1972	1	0.286	62.43	0.49
119	1/7/1974	9	0.284	62.96	0.49
121	11/16/1965	1	0.282	64.02	0.48
121	2/8/1976	1	0.282	64.02	0.48
122	12/11/1984	2	0.279	64.55	0.48
123	1/14/1960	1	0.278	65.08	0.47

124	11/22/1996	1	0.278	65.61	0.47
127	9/18/1963	1	0.27	67.2	0.46
127	4/7/1958	12	0.27	67.2	0.46
127	4/26/1994	1	0.27	67.2	0.46
128	12/28/2004	24	0.26	67.72	0.45
129	12/24/1959	1	0.253	68.25	0.45
130	3/20/1991	2	0.245	68.78	0.45
131	1/26/1997	1	0.243	69.31	0.44
132	1/7/2005	2	0.237	69.84	0.44
133	1/4/1974	1	0.234	70.37	0.44
134	1/16/1952	2	0.231	70.9	0.43
135	1/24/1967	6	0.227	71.43	0.43
136	12/18/1967	1	0.208	71.96	0.43
141	12/10/1965	1	0.207	74.6	0.41
141	1/25/1954	1	0.207	74.6	0.41
141	12/27/1971	1	0.207	74.6	0.41
141	1/14/1969	2	0.207	74.6	0.41
141	1/17/1990	1	0.207	74.6	0.41
143	2/8/1978	2	0.205	75.66	0.41
143	2/6/1998	1	0.205	75.66	0.41
146	3/4/1978	1	0.202	77.25	0.4
146	3/28/1979	1	0.202	77.25	0.4
146	3/2/1976	1	0.202	77.25	0.4
147	12/19/1970	11	0.2	77.78	0.39
148	1/29/1957	3	0.198	78.31	0.39
149	4/20/1983	1	0.197	78.84	0.39
150	3/21/1983	1	0.195	79.37	0.39
151	12/27/1964	1	0.192	79.89	0.38
152	3/8/1974	1	0.179	80.42	0.38
153	2/26/2004	4	0.176	80.95	0.38
154	1/3/2005	2	0.172	81.48	0.38
155	1/19/1954	2	0.156	82.01	0.37
156	12/3/1966	2	0.148	82.54	0.37
157	4/13/1956	4	0.147	83.07	0.37
158	3/7/1952	3	0.138	83.6	0.37
159	3/23/1992	1	0.136	84.13	0.36
160	2/29/1960	1	0.121	84.66	0.36
161	1/27/1994	1	0.118	85.19	0.36
162	3/2/1983	2	0.116	85.71	0.36
163	12/30/1951	7	0.114	86.24	0.36
164	12/22/1982	1	0.107	86.77	0.35
166	2/23/1969	1	0.105	87.83	0.35
166	2/6/1976	3	0.105	87.83	0.35
167	3/11/1975	1	0.102	88.36	0.35
168	2/4/1994	1	0.094	88.89	0.35
169	2/19/1962	1	0.093	89.42	0.34
170	11/17/1964	1	0.087	89.95	0.34
171	1/10/1995	2	0.085	90.48	0.34
172	12/31/2004	1	0.084	91.01	0.34
173	2/17/1990	1	0.082	91.53	0.34
174	4/8/1965	1	0.076	92.06	0.33
175	2/21/2000	1	0.066	92.59	0.33
176	2/26/1983	1	0.065	93.12	0.33
177	3/12/1986	1	0.057	93.65	0.33
178	2/13/1973	1	0.052	94.18	0.33
179	12/4/1972	1	0.043	94.71	0.32
180	12/5/1980	1	0.037	95.24	0.32
181	1/18/1993	1	0.032	95.77	0.32
182	4/1/1958	1	0.027	96.3	0.32
183	12/22/1971	1	0.013	96.83	0.32
184	3/13/1967	1	0.008	97.35	0.32
185	4/21/1988	1	0.007	97.88	0.31
186	2/13/1954	1	0.004	98.41	0.31
187	11/13/1978	1	0.001	98.94	0.31
188	12/18/1977	1	0.001	99.47	0.31

Pre Condition POC 3H

Statistics - Node 3H Total Inflow

Rank	Start Date	Event Duration (hours)	Event Peak (CFS)	Exceedanc Frequency (percent)	Return Period (years)
1	1/16/1978	8	11.878	0.34	58
2	1/1/1982	26	11.6	0.68	29
3	10/1/1983	12	8.941	1.02	19.33
4	1/9/1978	16	8.038	1.37	14.5
5	1/4/1995	10	7.528	1.71	11.6
6	1/20/1982	17	6.359	2.05	9.67
7	4/5/1967	3	6.009	2.39	8.29
8	3/5/1995	24	5.81	2.73	7.25
9	1/4/1978	21	5.35	3.07	6.44
10	2/11/1959	5	5.195	3.41	5.8
11	2/22/1998	49	5.109	3.75	5.27
12	2/7/1978	73	5.054	4.1	4.83
13	3/15/1986	24	5.046	4.44	4.46
14	9/10/1976	13	5.037	4.78	4.14
15	1/28/1980	12	5.03	5.12	3.87
16	2/10/1963	18	4.886	5.46	3.63
17	2/16/1980	105	4.847	5.8	3.41
18	12/5/1966	48	4.648	6.14	3.22
19	11/24/1983	4	4.547	6.48	3.05
20	3/17/1982	16	4.081	6.83	2.9
21	1/9/1980	57	4.074	7.17	2.76
22	11/22/1965	22	4.051	7.51	2.64
23	2/25/1969	16	4.049	7.85	2.52
24	1/9/1998	4	4.001	8.19	2.42
25	1/18/1955	5	3.964	8.53	2.32
26	1/11/2001	8	3.946	8.87	2.23
27	2/11/1973	7	3.801	9.22	2.15
28	1/14/1993	3	3.714	9.56	2.07
29	2/15/1992	4	3.681	9.9	2
30	2/22/2004	3	3.668	10.24	1.93
31	3/24/1983	4	3.62	10.58	1.87
32	2/12/1978	4	3.594	10.92	1.81
33	1/24/1969	28	3.567	11.26	1.76
34	2/14/1986	9	3.517	11.6	1.71
35	2/12/1992	22	3.516	11.95	1.66
36	3/8/1968	8	3.516	12.29	1.61
37	1/15/1979	4	3.514	12.63	1.57
38	1/15/1993	39	3.442	12.97	1.53
39	2/27/1983	15	3.331	13.31	1.49
40	1/16/1973	5	3.293	13.65	1.45
41	3/11/1995	4	3.202	13.99	1.41
42	1/14/1978	14	3.195	14.33	1.38
43	1/22/1964	4	3.168	14.68	1.35
44	12/29/1965	4	3.141	15.02	1.32
46	1/29/1983	5	3.11	15.7	1.26
46	1/18/1973	5	3.11	15.7	1.26
47	1/11/2005	9	3.105	16.04	1.23
48	2/8/1993	11	3.104	16.38	1.21
49	2/6/1969	9	3.083	16.72	1.18
50	1/5/1977	34	3.075	17.06	1.16
51	2/14/1980	25	3.051	17.41	1.14
52	11/15/1952	19	3.048	17.75	1.12
53	6/10/1990	2	2.97	18.09	1.09
54	11/14/1972	3	2.898	18.43	1.07
55	3/26/1991	8	2.884	18.77	1.05
56	2/28/1970	37	2.731	19.11	1.04
57	11/30/2007	7	2.7	19.45	1.02
58	11/30/1982	9	2.678	19.8	1
59	11/29/1970	6	2.598	20.14	0.98

10-year Q:	6.559	cfs
5-year Q:	5.075	cfs
2-year Q:	3.681	cfs

Lower Flow Threshold: 50%

0.1xQ2 : 1.841 cfs

60	1/12/1960	7	2.598	20.48	0.97
61	1/9/2005	20	2.595	20.82	0.95
62	3/15/1952	9	2.579	21.16	0.94
63	2/21/2005	52	2.57	21.5	0.92
64	12/4/1974	5	2.557	21.84	0.91
65	2/7/1994	3	2.53	22.18	0.89
66	2/8/1998	6	2.502	22.53	0.88
67	1/29/1981	3	2.471	22.87	0.87
68	1/6/1993	21	2.451	23.21	0.85
69	10/19/2004	23	2.372	23.55	0.84
70	12/18/1967	3	2.321	23.89	0.83
71	12/24/1971	31	2.314	24.23	0.82
72	11/29/1985	8	2.268	24.57	0.81
73	3/1/1983	46	2.264	24.91	0.79
74	11/18/1986	6	2.174	25.26	0.78
75	11/21/1963	3	2.099	25.6	0.77
76	1/13/1957	6	2.086	25.94	0.76
77	1/6/1987	3	2.018	26.28	0.75
78	10/18/2004	3	2.011	26.62	0.74
79	1/27/2008	33	1.972	26.96	0.73
80	3/1/1991	20	1.96	27.3	0.73
81	12/25/2003	3	1.912	27.65	0.72
82	12/6/1997	8	1.892	27.99	0.71
83	4/1/1982	3	1.883	28.33	0.7
84	2/19/2005	3	1.841	28.67	0.69
85	1/20/1962	6	1.833	29.01	0.68
86	12/2/1961	10	1.814	29.35	0.67
87	4/11/1967	4	1.801	29.69	0.67
88	2/27/1978	63	1.8	30.03	0.66
89	4/3/1958	5	1.78	30.38	0.65
90	10/25/1951	6	1.764	30.72	0.64
91	12/27/1984	18	1.747	31.06	0.64
93	12/22/1971	9	1.675	31.74	0.62
93	1/12/1997	17	1.675	31.74	0.62
94	1/4/1974	7	1.665	32.08	0.62
95	3/10/1986	14	1.653	32.42	0.61
96	3/11/2006	3	1.65	32.76	0.6
97	12/24/1988	6	1.583	33.11	0.6
98	1/16/1952	9	1.569	33.45	0.59
99	3/15/1958	17	1.564	33.79	0.59
100	3/13/1967	5	1.51	34.13	0.58
101	3/22/1964	25	1.493	34.47	0.57
102	1/22/1967	8	1.487	34.81	0.57
103	2/6/1978	4	1.474	35.15	0.56
104	12/2/1952	4	1.464	35.49	0.56
105	2/8/1976	24	1.418	35.84	0.55
106	10/12/1987	6	1.415	36.18	0.55
107	5/8/1977	3	1.408	36.52	0.54
108	12/18/1984	29	1.386	36.86	0.54
109	1/6/1979	7	1.382	37.2	0.53
110	11/16/1972	21	1.349	37.54	0.53
111	12/21/1970	7	1.335	37.88	0.52
112	1/31/1979	6	1.315	38.23	0.52
113	3/21/1983	2	1.302	38.57	0.51
114	6/1/1996	1	1.301	38.91	0.51
115	1/24/1967	8	1.281	39.25	0.5
116	1/25/1997	8	1.279	39.59	0.5
117	12/24/1959	5	1.249	39.93	0.5
118	12/3/1966	7	1.227	40.27	0.49
119	1/28/1957	31	1.223	40.61	0.49
120	2/26/2004	8	1.203	40.96	0.48
121	2/26/1983	2	1.163	41.3	0.48
122	12/4/1972	4	1.153	41.64	0.48
123	3/20/1991	4	1.149	41.98	0.47
124	1/6/2008	26	1.13	42.32	0.47
125	11/19/1967	14	1.125	42.66	0.46
126	4/7/1958	15	1.114	43	0.46
128	1/6/1974	36	1.099	43.69	0.45

128	1/27/1983	5	1.099	43.69	0.45
129	11/16/1965	7	1.091	44.03	0.45
130	12/27/1964	19	1.088	44.37	0.45
131	1/26/1956	10	1.059	44.71	0.44
132	1/7/2005	5	1.033	45.05	0.44
133	1/21/1969	3	1.009	45.39	0.44
134	2/4/1958	7	0.988	45.73	0.43
135	11/20/1983	4	0.951	46.08	0.43
136	1/18/1954	22	0.949	46.42	0.43
137	1/10/1995	8	0.933	46.76	0.42
138	12/28/2004	25	0.891	47.1	0.42
139	2/10/1982	8	0.886	47.44	0.42
140	3/5/2000	3	0.882	47.78	0.41
141	2/14/1998	4	0.87	48.12	0.41
142	12/19/1970	13	0.867	48.46	0.41
143	2/29/1960	4	0.856	48.81	0.41
144	1/18/1993	11	0.829	49.15	0.4
145	2/2/1960	2	0.814	49.49	0.4
146	2/6/1976	5	0.81	49.83	0.4
147	12/17/1957	2	0.81	50.17	0.39
148	12/22/1982	3	0.809	50.51	0.39
149	12/7/1992	2	0.789	50.85	0.39
150	2/28/1957	2	0.772	51.19	0.39
151	1/14/1969	9	0.769	51.54	0.38
152	3/12/1986	2	0.752	51.88	0.38
153	11/17/1964	4	0.723	52.22	0.38
154	3/28/1961	5	0.722	52.56	0.38
155	12/6/1998	2	0.705	52.9	0.37
156	12/29/1951	13	0.698	53.24	0.37
157	4/8/1965	32	0.689	53.58	0.37
158	1/25/1954	7	0.666	53.92	0.37
159	12/11/1984	3	0.653	54.27	0.36
160	3/23/1992	5	0.652	54.61	0.36
161	11/21/1996	25	0.65	54.95	0.36
163	9/18/1963	2	0.636	55.63	0.36
163	4/26/1994	2	0.636	55.63	0.36
164	1/26/1958	3	0.617	55.97	0.35
165	11/28/1981	5	0.604	56.31	0.35
166	12/29/1991	10	0.544	56.66	0.35
167	4/1/1968	6	0.531	57	0.35
168	10/27/2004	5	0.529	57.34	0.35
169	1/14/1960	3	0.516	57.68	0.34
173	12/10/1965	10	0.503	59.04	0.34
173	12/27/1971	5	0.503	59.04	0.34
173	1/17/1990	3	0.503	59.04	0.34
173	12/30/1981	5	0.503	59.04	0.34
175	2/6/1998	5	0.5	59.73	0.33
175	2/3/1975	2	0.5	59.73	0.33
178	3/4/1978	25	0.495	60.75	0.33
178	3/2/1976	3	0.495	60.75	0.33
178	3/27/1979	21	0.495	60.75	0.33
179	4/20/1983	3	0.487	61.09	0.32
180	3/8/1974	9	0.468	61.43	0.32
181	9/25/1986	3	0.464	61.77	0.32
182	11/13/1978	2	0.434	62.12	0.32
183	11/25/2001	2	0.424	62.46	0.32
184	3/30/1954	2	0.42	62.8	0.32
185	1/8/1982	4	0.407	63.14	0.31
188	2/22/1969	3	0.4	64.16	0.31
188	2/6/1966	7	0.4	64.16	0.31
188	2/18/1969	8	0.4	64.16	0.31
189	3/8/1975	6	0.39	64.51	0.31
190	1/3/1977	2	0.385	64.85	0.31
191	2/13/1954	3	0.383	65.19	0.3
192	3/7/1952	6	0.381	65.53	0.3
193	4/8/1975	7	0.372	65.87	0.3
194	11/4/1987	13	0.369	66.21	0.3
195	12/20/1952	5	0.368	66.55	0.3

196	2/23/1969	2	0.357	66.89	0.3
197	12/21/1988	5	0.357	67.24	0.29
198	3/11/1975	2	0.352	67.58	0.29
199	1/7/1995	4	0.341	67.92	0.29
200	2/4/1994	6	0.339	68.26	0.29
201	2/13/1973	2	0.337	68.6	0.29
202	2/8/1962	11	0.326	68.94	0.29
203	8/17/1977	4	0.318	69.28	0.29
204	12/31/2004	3	0.317	69.62	0.28
205	4/10/1952	2	0.309	69.97	0.28
206	2/17/1990	2	0.296	70.31	0.28
207	2/21/2000	2	0.295	70.65	0.28
208	3/21/2006	2	0.287	70.99	0.28
209	12/5/1980	2	0.277	71.33	0.28
210	2/9/1985	5	0.276	71.67	0.28
211	1/5/1992	8	0.271	72.01	0.27
212	12/13/1995	3	0.27	72.35	0.27
213	3/2/1992	22	0.248	72.7	0.27
214	9/17/1963	2	0.228	73.04	0.27
215	4/21/1988	2	0.227	73.38	0.27
216	1/26/1999	2	0.217	73.72	0.27
217	12/18/1977	2	0.215	74.06	0.27
218	1/3/2005	2	0.211	74.4	0.27
219	2/23/1993	2	0.208	74.74	0.26
220	5/13/1998	2	0.2	75.09	0.26
221	2/7/1973	2	0.186	75.43	0.26
222	1/10/1955	3	0.182	75.77	0.26
223	2/27/1991	1	0.169	76.11	0.26
224	3/6/1980	2	0.16	76.45	0.26
225	1/13/1952	3	0.144	76.79	0.26
226	2/19/1962	2	0.132	77.13	0.26
227	1/26/1995	1	0.124	77.47	0.26
228	11/7/1966	2	0.107	77.82	0.25
229	2/13/1989	2	0.096	78.16	0.25
230	1/2/2006	3	0.094	78.5	0.25
231	2/3/1998	2	0.088	78.84	0.25
232	2/25/1987	2	0.077	79.18	0.25
233	3/29/2006	1	0.077	79.52	0.25
234	11/23/1973	2	0.073	79.86	0.25
235	2/19/1993	5	0.065	80.2	0.25
236	3/13/1996	1	0.058	80.55	0.25
237	10/18/2005	3	0.055	80.89	0.24
238	3/29/1998	2	0.04	81.23	0.24
239	2/12/2000	2	0.04	81.57	0.24
240	4/4/2006	9	0.038	81.91	0.24
241	3/1/1953	3	0.038	82.25	0.24
242	11/21/1967	1	0.034	82.59	0.24
243	1/18/1952	3	0.033	82.94	0.24
244	1/27/1994	1	0.031	83.28	0.24
245	3/31/1978	1	0.029	83.62	0.24
246	3/28/1993	2	0.024	83.96	0.24
247	4/1/1958	3	0.022	84.3	0.23
248	11/20/1961	1	0.019	84.64	0.23
249	1/28/2005	1	0.007	84.98	0.23
250	3/20/1992	1	0.007	85.32	0.23
251	3/11/1978	4	0.005	85.67	0.23
252	1/24/1983	1	0.002	86.01	0.23
256	2/17/1998	4	0.002	87.37	0.23
256	2/9/1981	2	0.002	87.37	0.23
256	2/23/1979	1	0.002	87.37	0.23
256	11/14/1965	5	0.002	87.37	0.23
263	3/1/1981	6	0.002	89.76	0.22
263	3/19/1973	2	0.002	89.76	0.22
263	3/22/1983	1	0.002	89.76	0.22
263	3/4/1973	1	0.002	89.76	0.22
263	3/27/1998	3	0.002	89.76	0.22
263	3/6/1973	2	0.002	89.76	0.22
263	3/10/1975	2	0.002	89.76	0.22

264	10/14/1957	2	0.002	90.1	0.22
266	4/7/1978	2	0.002	90.78	0.22
266	4/29/1983	2	0.002	90.78	0.22
267	1/19/1978	4	0.002	91.13	0.22
268	5/7/1971	2	0.002	91.47	0.22
269	3/18/1983	10	0.002	91.81	0.22
270	3/9/1973	8	0.002	92.15	0.21
271	3/18/1973	1	0.002	92.49	0.21
272	12/18/1978	2	0.002	92.83	0.21
273	1/31/1996	6	0.002	93.17	0.21
274	4/13/1956	1	0.001	93.52	0.21
275	1/15/1997	1	0.001	93.86	0.21
276	2/27/1996	1	0.001	94.2	0.21
277	2/19/1958	1	0.001	94.54	0.21
278	12/17/1952	2	0.001	94.88	0.21
279	12/28/1977	1	0.001	95.22	0.21
280	2/10/1970	3	0.001	95.56	0.21
281	3/17/1963	1	0.001	95.9	0.21
282	2/16/1962	1	0.001	96.25	0.21
283	1/16/1970	2	0	96.59	0.2
284	11/10/1982	1	0	96.93	0.2
285	12/4/1987	1	0	97.27	0.2
286	3/20/1958	1	0	97.61	0.2
287	3/14/1982	1	0	97.95	0.2
288	2/27/1955	2	0	98.29	0.2
289	12/5/1957	2	0	98.63	0.2
290	2/14/1995	1	0	98.98	0.2
291	10/10/1986	1	0	99.32	0.2
292	3/1/1976	1	0	99.66	0.2

Pre Condition POC 3I

Statistics - Node 3J Total Inflow

Rank	Start Date	Event Duration (hours)	Event Peak (CFS)	Exceedance Frequency (percent)	Return Period (years)
1	1/16/1978	9	6.88	0.16	58
2	1/1/1982	27	6.791	0.31	29
3	10/1/1983	11	5.764	0.47	19.33
4	1/9/1978	34	4.888	0.62	14.5
5	4/4/1967	25	4.86	0.78	11.6
6	1/20/1982	32	4.835	0.93	9.67
7	1/3/1995	40	4.467	1.09	8.29
8	2/9/1963	38	4.189	1.24	7.25
9	2/7/1978	80	3.896	1.4	6.44
10	3/15/1986	29	3.89	1.55	5.8
11	6/1/1996	1	3.858	1.71	5.27
12	3/5/1995	26	3.839	1.86	4.83
13	6/9/1990	19	3.742	2.02	4.46
14	2/11/1959	26	3.709	2.17	4.14
15	2/22/2004	26	3.666	2.33	3.87
16	1/8/1980	111	3.405	2.48	3.63
17	2/22/1998	50	3.405	2.64	3.41
18	2/13/1980	189	3.405	2.8	3.22
19	2/12/1978	19	3.403	2.95	3.05
20	12/6/1997	40	3.399	3.11	2.9
21	11/24/1983	4	3.398	3.26	2.76
22	1/4/1978	52	3.385	3.42	2.64
23	1/28/1980	41	3.377	3.57	2.52
24	1/9/1998	21	3.376	3.73	2.42
25	2/11/1973	45	3.365	3.88	2.32
26	9/10/1976	26	3.347	4.04	2.23
27	3/17/1982	25	3.33	4.19	2.15
28	1/18/1955	7	3.178	4.35	2.07
29	9/17/1963	43	3.131	4.5	2
30	1/12/1993	37	3.113	4.66	1.93
31	2/15/1992	9	3.107	4.81	1.87
32	2/12/1992	22	3.099	4.97	1.81
33	11/30/2007	18	3.001	5.12	1.76
34	3/24/1983	18	2.903	5.28	1.71
35	2/23/1969	51	2.901	5.43	1.66
36	11/22/1965	25	2.895	5.59	1.61
37	12/18/1967	25	2.894	5.75	1.57
38	12/5/1966	49	2.882	5.9	1.53
39	4/1/1982	10	2.882	6.06	1.49
40	1/15/1979	10	2.86	6.21	1.45
41	3/11/1995	24	2.855	6.37	1.41
42	12/29/1965	5	2.852	6.52	1.38
43	2/6/1969	12	2.85	6.68	1.35
44	11/14/1972	4	2.84	6.83	1.32
45	1/29/1981	4	2.827	6.99	1.29
46	1/22/1967	12	2.654	7.14	1.26
47	2/8/1993	15	2.636	7.3	1.23
48	3/16/1963	5	2.635	7.45	1.21
49	1/11/2001	33	2.63	7.61	1.18
50	11/14/1952	42	2.625	7.76	1.16
51	12/28/2004	25	2.524	7.92	1.14
52	1/15/1993	79	2.518	8.07	1.12
53	12/4/1987	2	2.492	8.23	1.09
54	2/14/1986	14	2.48	8.39	1.07
55	1/21/1964	27	2.457	8.54	1.05
56	10/19/2004	26	2.441	8.7	1.04
57	1/24/1969	62	2.416	8.85	1.02
58	1/29/1983	5	2.405	9.01	1
59	3/18/1973	15	2.4	9.16	0.98
60	1/14/1978	17	2.396	9.32	0.97
61	2/26/1983	124	2.387	9.47	0.95
62	1/18/1973	9	2.384	9.63	0.94
63	1/5/1977	35	2.381	9.78	0.92
64	3/7/1968	17	2.356	9.94	0.91
65	11/29/1982	27	2.354	10.09	0.89
66	2/28/1970	42	2.353	10.25	0.88
67	1/5/1979	27	2.352	10.4	0.87

10-year Q:	4.839	cfs
5-year Q:	3.846	cfs
2-year Q:	3.131	cfs

Lower Flow Threshold: 10%

0.1xQ2 : 0.313 cfs

68	1/16/1973	6	2.343	10.56	0.85
69	2/3/1998	28	2.329	10.71	0.84
70	11/19/1967	25	2.321	10.87	0.83
71	1/7/2005	94	2.318	11.02	0.82
72	2/20/2005	70	2.318	11.18	0.81
73	2/18/2005	34	2.317	11.34	0.79
74	4/11/1967	25	2.31	11.49	0.78
75	2/7/1994	22	2.295	11.65	0.77
76	12/2/1961	30	2.272	11.8	0.76
77	3/15/1952	24	2.264	11.96	0.75
78	10/25/1951	5	2.262	12.11	0.74
79	11/18/1986	6	2.209	12.27	0.73
80	11/20/1963	24	2.206	12.42	0.73
81	1/13/1957	7	2.18	12.58	0.72
82	2/2/2004	3	2.168	12.73	0.71
83	1/28/1981	2	2.166	12.89	0.7
84	10/18/2004	2	2.136	13.04	0.69
85	11/13/1984	2	2.136	13.2	0.68
86	2/28/1957	20	2.121	13.35	0.67
87	1/27/2008	33	2.104	13.51	0.67
88	3/25/1991	53	2.101	13.66	0.66
89	2/1/1960	7	2.095	13.82	0.65
90	3/11/2006	7	2.085	13.98	0.64
91	3/10/1986	20	2.081	14.13	0.64
92	1/6/1993	46	2.077	14.29	0.63
93	3/15/1958	20	2.052	14.44	0.62
94	1/20/1962	10	2.051	14.6	0.62
95	3/12/1996	18	2.051	14.75	0.61
96	2/27/1991	52	2.048	14.91	0.6
97	4/28/2005	6	2.024	15.06	0.6
98	1/30/2007	2	1.924	15.22	0.59
99	12/24/1971	41	1.917	15.37	0.59
100	2/7/1998	28	1.913	15.53	0.58
101	11/20/1961	2	1.913	15.68	0.57
102	1/19/1969	60	1.912	15.84	0.57
103	12/18/1984	41	1.906	15.99	0.56
104	1/12/1960	7	1.906	16.15	0.56
105	12/21/1970	25	1.906	16.3	0.55
106	11/28/1970	33	1.904	16.46	0.55
107	3/21/1983	8	1.904	16.61	0.54
108	2/7/1973	3	1.893	16.77	0.54
109	1/4/1974	18	1.885	16.93	0.53
110	2/27/1978	65	1.879	17.08	0.53
111	11/29/1985	18	1.875	17.24	0.52
112	4/15/1978	5	1.875	17.39	0.52
113	10/27/2004	34	1.864	17.55	0.51
114	1/23/1995	70	1.857	17.7	0.51
115	11/13/1978	3	1.846	17.86	0.5
116	12/29/1991	11	1.837	18.01	0.5
117	3/20/1992	16	1.833	18.17	0.5
118	12/4/1972	6	1.824	18.32	0.49
119	1/6/1987	13	1.824	18.48	0.49
120	12/22/1982	7	1.819	18.63	0.48
121	12/20/1952	11	1.81	18.79	0.48
122	10/29/2000	3	1.803	18.94	0.48
123	5/7/1977	36	1.774	19.1	0.47
124	12/27/1964	25	1.755	19.25	0.47
125	3/25/1977	5	1.742	19.41	0.46
126	12/4/1974	9	1.738	19.57	0.46
127	1/25/1956	42	1.727	19.72	0.46
128	12/27/1984	20	1.717	19.88	0.45
129	1/10/1995	51	1.716	20.03	0.45
130	4/27/1953	4	1.706	20.19	0.45
131	11/7/1966	7	1.703	20.34	0.44
132	12/7/1992	9	1.69	20.5	0.44
133	3/19/1991	56	1.689	20.65	0.44
134	4/10/1952	8	1.684	20.81	0.43
135	12/25/2003	11	1.684	20.96	0.43
136	3/4/2000	32	1.667	21.12	0.43
137	11/21/1996	31	1.658	21.27	0.42
138	12/10/2006	1	1.653	21.43	0.42
139	3/2/1992	30	1.652	21.58	0.42
140	1/5/2008	52	1.633	21.74	0.41
141	7/13/1954	2	1.623	21.89	0.41

142	2/19/1958	8	1.603	22.05	0.41
143	2/18/1993	7	1.591	22.2	0.41
144	12/17/1957	2	1.585	22.36	0.4
145	1/17/1988	12	1.563	22.52	0.4
146	3/22/1964	29	1.56	22.67	0.4
147	1/25/1958	14	1.554	22.83	0.39
148	12/24/1983	20	1.549	22.98	0.39
149	4/1/2004	2	1.548	23.14	0.39
150	2/13/1954	22	1.543	23.29	0.39
151	3/28/1961	9	1.528	23.45	0.38
152	1/26/2005	11	1.523	23.6	0.38
153	1/28/2005	4	1.518	23.76	0.38
154	12/24/1988	8	1.516	23.91	0.38
155	1/7/1995	19	1.503	24.07	0.37
156	2/3/1958	42	1.501	24.22	0.37
157	3/27/1958	5	1.496	24.38	0.37
158	3/12/1986	4	1.496	24.53	0.37
159	4/6/1958	21	1.493	24.69	0.36
160	4/3/1958	34	1.491	24.84	0.36
161	4/1/1968	12	1.489	25	0.36
162	12/11/1984	3	1.484	25.16	0.36
163	4/25/1994	29	1.474	25.31	0.36
164	1/16/1952	11	1.455	25.47	0.35
165	12/2/1952	4	1.453	25.62	0.35
166	2/17/1990	12	1.453	25.78	0.35
167	12/9/1996	51	1.451	25.93	0.35
168	6/5/1993	4	1.427	26.09	0.35
169	12/27/1971	27	1.423	26.24	0.34
170	1/24/1954	26	1.421	26.4	0.34
171	1/6/1974	41	1.419	26.55	0.34
172	1/12/1997	41	1.417	26.71	0.34
173	12/22/1971	19	1.412	26.86	0.34
174	2/6/1998	9	1.411	27.02	0.33
175	4/20/1983	24	1.404	27.17	0.33
176	1/31/1979	69	1.401	27.33	0.33
177	3/7/1974	20	1.4	27.48	0.33
178	12/4/1980	21	1.399	27.64	0.33
179	11/16/1972	27	1.398	27.8	0.32
180	1/31/1993	2	1.398	27.95	0.32
181	3/6/1958	10	1.396	28.11	0.32
182	3/4/1978	31	1.395	28.26	0.32
183	12/19/1970	13	1.395	28.42	0.32
184	2/28/2007	2	1.394	28.57	0.32
185	3/27/1979	27	1.392	28.73	0.31
186	1/2/1977	8	1.391	28.88	0.31
187	2/5/1978	28	1.389	29.04	0.31
188	3/5/1980	16	1.387	29.19	0.31
189	1/17/1990	6	1.387	29.35	0.31
190	12/9/1965	34	1.383	29.5	0.31
191	4/7/1965	67	1.382	29.66	0.3
192	3/11/1978	18	1.381	29.81	0.3
193	2/8/1976	43	1.381	29.97	0.3
194	3/19/1979	54	1.377	30.12	0.3
195	11/30/1952	6	1.376	30.28	0.3
196	3/10/1975	30	1.375	30.43	0.3
197	11/20/1983	12	1.373	30.59	0.29
198	3/13/1967	13	1.372	30.75	0.29
199	11/21/1967	3	1.37	30.9	0.29
200	2/3/1975	51	1.369	31.06	0.29
201	3/8/1986	6	1.367	31.21	0.29
202	5/4/1998	6	1.366	31.37	0.29
203	1/27/1983	11	1.363	31.52	0.29
204	2/14/1998	9	1.363	31.68	0.28
205	3/30/1954	2	1.362	31.83	0.28
206	12/16/1978	50	1.362	31.99	0.28
207	2/10/1982	13	1.361	32.14	0.28
208	3/29/1998	3	1.359	32.3	0.28
209	4/5/1998	2	1.359	32.45	0.28
210	5/12/1998	25	1.357	32.61	0.28
211	2/16/1959	19	1.356	32.76	0.27
212	11/14/1965	52	1.354	32.92	0.27
213	2/4/1976	70	1.35	33.07	0.27
214	1/24/1967	11	1.349	33.23	0.27
215	2/21/1979	9	1.346	33.39	0.27

216	12/18/1977	6	1.34	33.54	0.27
217	3/2/1976	4	1.334	33.7	0.27
218	10/11/1987	25	1.33	33.85	0.27
219	1/14/1960	4	1.33	34.01	0.26
220	11/22/1973	3	1.328	34.16	0.26
221	1/14/1969	9	1.328	34.32	0.26
222	1/30/1966	18	1.328	34.47	0.26
223	12/7/1971	2	1.325	34.63	0.26
224	4/12/1976	9	1.32	34.78	0.26
225	12/3/1966	13	1.319	34.94	0.26
226	1/15/1997	2	1.314	35.09	0.26
227	12/30/1952	2	1.31	35.25	0.26
228	1/25/1997	35	1.3	35.4	0.25
229	12/24/1959	5	1.299	35.56	0.25
230	11/5/1960	17	1.293	35.71	0.25
231	3/11/1965	2	1.288	35.87	0.25
232	9/24/1986	14	1.287	36.02	0.25
233	2/27/1996	5	1.287	36.18	0.25
234	3/22/1992	19	1.287	36.34	0.25
235	2/25/1958	5	1.286	36.49	0.25
236	3/1/1976	6	1.286	36.65	0.25
237	3/16/1954	5	1.285	36.8	0.24
238	12/6/1998	3	1.283	36.96	0.24
239	1/3/2005	32	1.282	37.11	0.24
240	3/19/1981	8	1.28	37.27	0.24
241	2/20/2000	75	1.275	37.42	0.24
242	4/11/1998	8	1.271	37.58	0.24
243	2/4/1994	25	1.269	37.73	0.24
244	10/20/1979	2	1.265	37.89	0.24
245	4/4/2006	19	1.258	38.04	0.24
246	3/31/1965	36	1.254	38.2	0.24
247	3/2/1974	26	1.246	38.35	0.23
248	11/25/1985	17	1.235	38.51	0.23
249	3/21/1969	11	1.234	38.66	0.23
250	11/25/2001	3	1.232	38.82	0.23
251	1/9/2004	1	1.232	38.98	0.23
252	9/5/1978	5	1.23	39.13	0.23
253	4/20/1988	45	1.227	39.29	0.23
254	3/2/1980	18	1.223	39.44	0.23
255	5/28/1990	6	1.221	39.6	0.23
256	3/16/1957	2	1.22	39.75	0.23
257	1/27/1994	2	1.216	39.91	0.23
258	1/18/1954	34	1.214	40.06	0.22
259	3/14/1982	6	1.212	40.22	0.22
260	3/19/2005	2	1.206	40.37	0.22
261	1/13/1952	11	1.205	40.53	0.22
262	11/24/1984	6	1.204	40.68	0.22
263	3/24/1994	4	1.199	40.84	0.22
264	2/17/1994	4	1.199	40.99	0.22
265	3/7/1994	6	1.187	41.15	0.22
266	12/30/1981	5	1.185	41.3	0.22
267	1/28/1957	43	1.177	41.46	0.22
268	2/19/1962	47	1.176	41.61	0.22
269	11/19/1990	9	1.161	41.77	0.22
270	3/25/1998	3	1.155	41.93	0.21
271	1/21/1996	2	1.135	42.08	0.21
272	1/13/1962	2	1.132	42.24	0.21
273	4/1/1958	12	1.131	42.39	0.21
274	2/11/2005	41	1.123	42.55	0.21
275	2/26/2004	12	1.115	42.7	0.21
276	1/5/1992	19	1.109	42.86	0.21
277	1/26/1999	14	1.102	43.01	0.21
278	2/23/1993	4	1.102	43.17	0.21
279	2/25/1987	26	1.099	43.32	0.21
280	4/16/1995	7	1.095	43.48	0.21
281	12/21/1988	5	1.09	43.63	0.21
282	2/19/1993	13	1.087	43.79	0.21
283	4/18/1995	8	1.078	43.94	0.2
284	11/12/1960	5	1.076	44.1	0.2
285	3/21/2006	4	1.072	44.25	0.2
286	2/27/2006	12	1.068	44.41	0.2
287	4/17/1963	6	1.068	44.57	0.2
288	3/7/1952	13	1.063	44.72	0.2
289	11/11/1954	10	1.062	44.88	0.2

290	3/28/2006	13	1.059	45.03	0.2
291	12/31/2004	4	1.059	45.19	0.2
292	4/12/1956	24	1.052	45.34	0.2
293	7/23/2005	2	1.048	45.5	0.2
294	1/23/1997	4	1.042	45.65	0.2
295	10/13/2006	5	1.037	45.81	0.2
296	2/29/1960	26	1.036	45.96	0.2
297	11/8/1998	20	1.033	46.12	0.2
298	3/13/1991	2	1.027	46.27	0.19
299	2/11/2000	29	1.027	46.43	0.19
300	4/20/1957	4	1.009	46.58	0.19
301	11/10/1994	2	1.001	46.74	0.19
302	12/29/1951	34	0.992	46.89	0.19
303	5/22/2008	1	0.984	47.05	0.19
304	1/26/1961	6	0.971	47.2	0.19
305	12/8/1984	2	0.954	47.36	0.19
306	1/16/1955	4	0.949	47.52	0.19
307	11/14/1988	4	0.946	47.67	0.19
308	2/8/1962	19	0.937	47.83	0.19
309	1/19/1978	5	0.919	47.98	0.19
310	12/28/1977	8	0.919	48.14	0.19
311	11/2/1957	16	0.918	48.29	0.19
312	1/17/1952	17	0.917	48.45	0.19
313	4/27/1960	8	0.917	48.6	0.19
314	11/20/1951	2	0.914	48.76	0.18
315	3/22/1983	5	0.913	48.91	0.18
316	3/19/1973	4	0.913	49.07	0.18
317	2/13/1989	8	0.911	49.22	0.18
318	1/8/1982	9	0.91	49.38	0.18
319	1/31/1996	24	0.908	49.53	0.18
320	4/29/1983	7	0.907	49.69	0.18
321	2/22/1969	7	0.905	49.84	0.18
322	3/17/1983	38	0.9	50	0.18
323	1/24/1983	3	0.898	50.16	0.18
324	3/1/1981	30	0.897	50.31	0.18
325	2/23/1979	5	0.897	50.47	0.18
326	4/8/1975	20	0.897	50.62	0.18
327	11/9/1982	23	0.896	50.78	0.18
328	2/17/1998	10	0.896	50.93	0.18
329	1/27/1968	16	0.895	51.09	0.18
330	3/9/1973	12	0.892	51.24	0.18
331	3/17/1979	5	0.89	51.4	0.18
332	2/8/1981	18	0.884	51.55	0.17
333	11/30/1967	3	0.883	51.71	0.17
334	2/9/1985	8	0.881	51.86	0.17
335	5/7/1971	6	0.879	52.02	0.17
336	3/6/1973	5	0.879	52.17	0.17
337	11/26/1960	10	0.877	52.33	0.17
338	11/17/1964	9	0.869	52.48	0.17
339	12/3/1983	4	0.868	52.64	0.17
340	11/10/1997	4	0.866	52.8	0.17
341	4/17/2000	17	0.866	52.95	0.17
342	2/10/1960	3	0.865	53.11	0.17
343	10/14/1957	4	0.865	53.26	0.17
344	2/10/1970	23	0.863	53.42	0.17
345	11/11/1972	4	0.863	53.57	0.17
346	1/13/1990	14	0.861	53.73	0.17
347	11/19/1982	9	0.86	53.88	0.17
348	2/18/1969	46	0.859	54.04	0.17
349	12/13/1995	3	0.858	54.19	0.17
350	4/7/1978	3	0.858	54.35	0.17
351	3/31/1978	4	0.857	54.5	0.17
352	3/4/1973	7	0.855	54.66	0.16
353	2/22/2008	11	0.854	54.81	0.16
354	2/6/1966	8	0.849	54.97	0.16
355	3/8/1975	8	0.847	55.12	0.16
356	1/10/1993	6	0.846	55.28	0.16
357	12/25/1968	13	0.843	55.43	0.16
358	4/30/1955	18	0.842	55.59	0.16
359	3/27/1998	6	0.841	55.75	0.16
360	3/22/2005	4	0.841	55.9	0.16
361	1/17/1979	26	0.84	56.06	0.16
362	2/28/1969	2	0.836	56.21	0.16
363	3/21/1987	2	0.834	56.37	0.16

364	3/5/1981	13	0.833	56.52	0.16
365	12/19/1951	3	0.832	56.68	0.16
366	3/1/1979	6	0.832	56.83	0.16
367	11/4/1987	35	0.827	56.99	0.16
368	11/26/1981	53	0.825	57.14	0.16
369	11/11/1983	27	0.824	57.3	0.16
370	1/12/1954	5	0.823	57.45	0.16
371	11/14/1955	2	0.817	57.61	0.16
372	1/30/1986	8	0.817	57.76	0.16
373	3/15/1965	2	0.816	57.92	0.16
374	3/7/1992	2	0.813	58.07	0.16
375	12/16/1984	2	0.81	58.23	0.15
376	2/7/1966	2	0.81	58.39	0.15
377	1/18/1980	2	0.808	58.54	0.15
378	1/24/1965	2	0.806	58.7	0.15
379	12/28/1974	11	0.806	58.85	0.15
380	3/5/1975	10	0.802	59.01	0.15
381	4/7/1999	8	0.8	59.16	0.15
382	1/16/1970	3	0.797	59.32	0.15
383	3/31/1998	7	0.797	59.47	0.15
384	9/24/1958	1	0.795	59.63	0.15
385	8/28/1951	4	0.791	59.78	0.15
386	8/17/1977	20	0.79	59.94	0.15
387	1/5/1989	8	0.785	60.09	0.15
388	4/5/1969	2	0.785	60.25	0.15
389	12/12/1951	10	0.782	60.4	0.15
390	12/18/1988	2	0.782	60.56	0.15
391	3/13/1965	6	0.781	60.71	0.15
392	1/4/1987	13	0.775	60.87	0.15
393	3/1/1953	4	0.767	61.02	0.15
394	12/1/1955	8	0.767	61.18	0.15
395	12/30/1976	24	0.763	61.34	0.15
396	11/11/1985	26	0.758	61.49	0.15
397	3/10/1980	5	0.757	61.65	0.15
398	10/18/2005	3	0.757	61.8	0.15
399	3/25/1980	4	0.753	61.96	0.15
400	12/1/1973	3	0.75	62.11	0.14
401	12/17/1952	4	0.745	62.27	0.14
402	9/25/1997	8	0.743	62.42	0.14
403	1/10/1955	4	0.741	62.58	0.14
404	2/15/1962	18	0.727	62.73	0.14
405	2/23/1953	1	0.722	62.89	0.14
406	10/9/1986	9	0.72	63.04	0.14
407	2/17/1955	6	0.719	63.2	0.14
408	4/26/1963	1	0.719	63.35	0.14
409	1/7/1957	7	0.715	63.51	0.14
410	3/23/1995	5	0.704	63.66	0.14
411	11/8/1979	1	0.698	63.82	0.14
412	2/10/1992	2	0.696	63.98	0.14
413	1/30/1955	4	0.696	64.13	0.14
414	10/28/1974	26	0.693	64.29	0.14
415	2/13/1995	24	0.681	64.44	0.14
416	2/27/1955	5	0.678	64.6	0.14
417	2/7/1986	13	0.676	64.75	0.14
418	2/21/1996	22	0.674	64.91	0.14
419	12/10/2001	3	0.666	65.06	0.14
420	5/21/1957	2	0.666	65.22	0.14
421	10/22/1987	6	0.665	65.37	0.14
422	3/4/1996	8	0.665	65.53	0.14
423	2/25/1996	22	0.665	65.68	0.14
424	4/20/2007	1	0.661	65.84	0.14
425	3/13/1971	2	0.661	65.99	0.14
426	2/17/2000	3	0.659	66.15	0.14
427	12/16/1987	20	0.656	66.3	0.14
428	2/2/1985	2	0.656	66.46	0.14
429	3/10/1952	14	0.652	66.61	0.14
430	4/1/1967	4	0.651	66.77	0.13
431	3/27/1985	24	0.649	66.93	0.13
432	3/8/2000	3	0.648	67.08	0.13
433	4/1/1956	4	0.647	67.24	0.13
434	4/1/1999	2	0.647	67.39	0.13
435	4/1/1992	2	0.645	67.55	0.13
436	2/3/2008	14	0.641	67.7	0.13
437	1/2/2006	4	0.631	67.86	0.13

438	1/9/1991	3	0.629	68.01	0.13
439	3/28/1993	11	0.628	68.17	0.13
440	11/21/1978	4	0.619	68.32	0.13
441	11/25/1988	6	0.619	68.48	0.13
442	11/21/1955	5	0.619	68.63	0.13
443	12/15/1957	6	0.617	68.79	0.13
444	3/20/1958	31	0.614	68.94	0.13
445	3/21/1995	5	0.613	69.1	0.13
446	3/22/1954	76	0.61	69.25	0.13
447	2/29/1952	17	0.596	69.41	0.13
448	12/11/1993	2	0.591	69.57	0.13
449	12/9/1954	3	0.59	69.72	0.13
450	2/21/1959	9	0.586	69.88	0.13
451	1/6/1953	36	0.582	70.03	0.13
452	3/19/1962	6	0.581	70.19	0.13
453	4/2/1981	1	0.577	70.34	0.13
454	2/6/1992	19	0.567	70.5	0.13
455	2/3/1973	2	0.561	70.65	0.13
456	4/16/1990	3	0.56	70.81	0.13
457	6/10/1957	5	0.557	70.96	0.13
458	1/22/1962	17	0.549	71.12	0.13
459	4/14/1971	3	0.539	71.27	0.13
460	4/14/1988	3	0.539	71.43	0.13
461	2/14/1963	3	0.537	71.58	0.13
462	2/10/1989	1	0.53	71.74	0.13
463	2/15/1969	3	0.529	71.89	0.13
464	11/12/1976	1	0.528	72.05	0.13
465	1/7/1992	7	0.525	72.2	0.12
466	1/26/1957	6	0.52	72.36	0.12
467	3/19/1994	7	0.512	72.52	0.12
468	11/15/1963	4	0.51	72.67	0.12
469	4/19/1981	1	0.506	72.83	0.12
470	3/13/1986	9	0.503	72.98	0.12
471	11/11/1978	23	0.502	73.14	0.12
472	11/25/1961	4	0.501	73.29	0.12
473	3/6/1962	2	0.5	73.45	0.12
474	3/14/1975	2	0.492	73.6	0.12
475	2/20/1994	3	0.482	73.76	0.12
476	12/5/1951	7	0.48	73.91	0.12
477	2/4/1999	4	0.478	74.07	0.12
478	10/31/1987	12	0.477	74.22	0.12
479	10/30/1996	3	0.471	74.38	0.12
480	6/21/1999	2	0.471	74.53	0.12
481	12/27/1983	2	0.471	74.69	0.12
482	12/28/1952	2	0.47	74.84	0.12
483	7/25/1951	1	0.466	75	0.12
484	1/10/1960	5	0.465	75.16	0.12
485	1/12/1971	1	0.458	75.31	0.12
486	3/15/1991	2	0.457	75.47	0.12
487	12/7/2007	4	0.455	75.62	0.12
488	12/25/1994	4	0.455	75.78	0.12
489	7/29/1965	1	0.45	75.93	0.12
490	4/17/2004	3	0.449	76.09	0.12
491	11/9/1964	2	0.447	76.24	0.12
492	3/26/1992	3	0.444	76.4	0.12
493	3/2/2004	5	0.442	76.55	0.12
494	4/12/1999	5	0.442	76.71	0.12
495	10/31/1957	1	0.428	76.86	0.12
496	4/19/1984	2	0.425	77.02	0.12
497	1/25/1952	5	0.419	77.17	0.12
498	11/30/1993	1	0.419	77.33	0.12
499	2/9/1975	15	0.419	77.48	0.12
500	11/25/1965	3	0.419	77.64	0.12
501	12/26/1977	20	0.416	77.8	0.12
502	1/13/1980	2	0.415	77.95	0.12
503	2/7/1983	30	0.414	78.11	0.12
504	2/2/1983	4	0.412	78.26	0.12
505	12/16/1965	7	0.41	78.42	0.11
506	3/22/1962	2	0.41	78.57	0.11
507	11/3/1960	2	0.41	78.73	0.11
508	4/18/1983	11	0.409	78.88	0.11
509	12/14/1965	6	0.406	79.04	0.11
510	3/10/1969	4	0.406	79.19	0.11
511	4/25/1952	1	0.403	79.35	0.11

512	3/13/1969	2	0.401	79.5	0.11
513	1/5/1997	8	0.4	79.66	0.11
514	3/24/1987	2	0.394	79.81	0.11
515	4/11/1965	43	0.394	79.97	0.11
516	4/3/1965	5	0.393	80.12	0.11
517	12/7/1972	29	0.391	80.28	0.11
518	2/19/1998	5	0.391	80.43	0.11
519	3/28/1960	2	0.389	80.59	0.11
520	4/4/1965	8	0.389	80.75	0.11
521	11/13/1997	7	0.387	80.9	0.11
522	11/24/1978	4	0.386	81.06	0.11
523	1/5/1982	4	0.384	81.21	0.11
524	12/15/1988	24	0.38	81.37	0.11
525	12/13/1971	6	0.38	81.52	0.11
526	4/2/1978	3	0.379	81.68	0.11
527	2/25/2005	3	0.374	81.83	0.11
528	1/28/1969	2	0.374	81.99	0.11
529	3/29/1982	6	0.372	82.14	0.11
530	3/27/1974	2	0.371	82.3	0.11
531	2/17/1971	1	0.365	82.45	0.11
532	1/10/1957	5	0.364	82.61	0.11
533	3/9/1978	3	0.361	82.76	0.11
534	1/3/1997	2	0.361	82.92	0.11
535	11/27/1975	26	0.359	83.07	0.11
536	11/10/1964	3	0.359	83.23	0.11
537	4/2/1974	4	0.35	83.39	0.11
538	1/16/1996	2	0.349	83.54	0.11
539	4/22/1967	2	0.345	83.7	0.11
540	4/15/1976	2	0.345	83.85	0.11
541	10/30/1992	1	0.342	84.01	0.11
542	9/26/1982	9	0.341	84.16	0.11
543	12/5/1957	18	0.339	84.32	0.11
544	3/20/1954	3	0.338	84.47	0.11
545	11/2/1974	2	0.337	84.63	0.11
546	1/23/2008	2	0.336	84.78	0.11
547	3/15/1987	2	0.335	84.94	0.11
548	1/8/1985	2	0.334	85.09	0.11
549	11/14/1953	2	0.331	85.25	0.11
550	3/26/1982	5	0.331	85.4	0.11
551	11/18/1973	12	0.329	85.56	0.11
552	4/21/1963	4	0.326	85.71	0.11
553	2/2/1988	12	0.326	85.87	0.1
554	1/25/1994	3	0.325	86.02	0.1
555	4/19/1967	2	0.321	86.18	0.1
556	4/17/1975	6	0.319	86.34	0.1
557	1/30/1978	5	0.315	86.49	0.1
558	2/24/1977	5	0.313	86.65	0.1
559	12/5/2004	8	0.31	86.8	0.1
560	3/22/1975	4	0.305	86.96	0.1
561	1/2/1990	7	0.301	87.11	0.1
562	1/26/2001	7	0.298	87.27	0.1
563	12/8/1982	1	0.298	87.42	0.1
564	12/27/1996	14	0.296	87.58	0.1
565	12/30/1977	2	0.289	87.73	0.1
566	2/26/1993	1	0.288	87.89	0.1
567	12/22/1965	1	0.285	88.04	0.1
568	12/17/1970	1	0.284	88.2	0.1
569	10/10/1966	2	0.283	88.35	0.1
570	12/21/1959	3	0.283	88.51	0.1
571	4/18/1996	2	0.277	88.66	0.1
572	2/28/1973	7	0.274	88.82	0.1
573	3/28/1963	3	0.269	88.98	0.1
574	9/20/2005	4	0.264	89.13	0.1
575	3/11/1958	7	0.263	89.29	0.1
576	3/16/1977	5	0.262	89.44	0.1
577	1/9/1973	1	0.262	89.6	0.1
578	12/21/1979	1	0.259	89.75	0.1
579	3/25/1989	11	0.258	89.91	0.1
580	12/17/1967	2	0.254	90.06	0.1
581	11/6/1969	2	0.252	90.22	0.1
582	10/5/1994	3	0.251	90.37	0.1
583	1/31/1990	2	0.25	90.53	0.1
584	2/25/1981	5	0.25	90.68	0.1
585	1/21/1995	2	0.248	90.84	0.1

586	12/28/1992	3	0.245	90.99	0.1
588	12/14/2001	3	0.242	91.3	0.1
588	1/31/2000	3	0.242	91.3	0.1
589	11/23/1952	2	0.239	91.46	0.1
590	2/12/1968	1	0.235	91.61	0.1
591	2/20/1985	2	0.234	91.77	0.1
592	5/6/1971	1	0.229	91.93	0.1
593	4/6/1986	2	0.229	92.08	0.1
594	4/5/1975	1	0.225	92.24	0.1
595	1/19/1983	1	0.223	92.39	0.1
596	3/17/2002	3	0.216	92.55	0.1
597	11/10/1969	4	0.211	92.7	0.1
598	10/11/1957	1	0.209	92.86	0.1
599	3/3/1995	2	0.197	93.01	0.1
600	4/26/1959	2	0.196	93.17	0.1
601	12/27/2006	1	0.186	93.32	0.1
602	1/11/1970	1	0.174	93.48	0.1
603	1/4/1998	1	0.169	93.63	0.1
604	2/14/1979	1	0.166	93.79	0.1
605	12/31/2005	1	0.162	93.94	0.1
606	5/10/1980	1	0.162	94.1	0.1
607	4/27/1994	3	0.158	94.25	0.1
608	2/23/1957	1	0.152	94.41	0.1
609	3/31/1967	1	0.139	94.57	0.1
610	10/17/1971	1	0.137	94.72	0.1
611	4/1/1964	2	0.132	94.88	0.09
612	3/26/1993	1	0.128	95.03	0.09
613	6/2/1999	3	0.126	95.19	0.09
614	12/31/2001	3	0.121	95.34	0.09
615	2/23/1956	19	0.118	95.5	0.09
616	3/6/1983	1	0.11	95.65	0.09
617	2/8/1959	13	0.109	95.81	0.09
618	2/19/1971	1	0.106	95.96	0.09
619	1/31/1956	2	0.104	96.12	0.09
620	1/4/1989	1	0.104	96.27	0.09
621	2/6/1973	1	0.097	96.43	0.09
622	1/6/1955	2	0.096	96.58	0.09
623	3/20/1953	2	0.095	96.74	0.09
624	3/24/2002	1	0.092	96.89	0.09
625	2/6/1965	1	0.092	97.05	0.09
626	2/24/2008	4	0.091	97.2	0.09
627	2/22/2007	11	0.084	97.36	0.09
628	4/14/2006	2	0.077	97.52	0.09
629	3/14/1984	1	0.07	97.67	0.09
630	6/15/1995	1	0.066	97.83	0.09
631	10/16/2005	1	0.061	97.98	0.09
632	7/23/1977	1	0.046	98.14	0.09
633	12/3/1985	1	0.04	98.29	0.09
634	2/18/1994	1	0.029	98.45	0.09
635	3/14/1983	1	0.028	98.6	0.09
636	12/4/1975	1	0.021	98.76	0.09
637	2/8/1960	1	0.017	98.91	0.09
638	10/8/1961	1	0.015	99.07	0.09
639	12/19/1987	1	0.015	99.22	0.09
640	5/19/1957	1	0.009	99.38	0.09
641	11/21/2004	1	0.002	99.53	0.09
642	1/1/1955	1	0.001	99.69	0.09
643	1/19/1998	1	0	99.84	0.09

Pre Condition POC Vault

Statistics - Node OFF3 Total Inflow

Rank	Start Date	Event Duration (hours)	Event Peak (CFS)	Exceedanc Frequency (percent)	Return Period (years)
1	1/16/1978	10	10.213	0.08	58
2	1/1/1982	29	10.022	0.17	29
3	9/29/1983	51	7.853	0.25	19.33
4	1/9/1978	36	6.964	0.34	14.5
5	1/3/1995	47	6.507	0.42	11.6
6	1/20/1982	34	5.747	0.5	9.67
7	4/4/1967	25	5.731	0.59	8.29
8	3/3/1995	72	5.153	0.67	7.25
9	2/9/1963	39	4.781	0.76	6.44
10	2/7/1978	89	4.74	0.84	5.8
11	3/15/1986	31	4.723	0.92	5.27
12	1/3/1978	71	4.577	1.01	4.83
13	2/22/1998	50	4.533	1.09	4.46
14	2/11/1959	28	4.526	1.18	4.14
15	2/13/1980	206	4.383	1.26	3.87
16	1/27/1980	74	4.316	1.34	3.63
17	9/9/1976	30	4.218	1.43	3.41
18	12/3/1966	91	3.963	1.51	3.22
19	1/7/1980	195	3.926	1.6	3.05
20	3/14/1982	113	3.901	1.68	2.9
21	11/24/1983	5	3.649	1.76	2.76
22	11/22/1965	25	3.609	1.85	2.64
23	2/23/1969	51	3.586	1.93	2.52
24	1/9/1998	20	3.58	2.02	2.42
25	2/12/1978	41	3.54	2.1	2.32
26	1/12/1993	146	3.505	2.18	2.23
27	2/11/1973	48	3.478	2.27	2.15
28	2/11/1992	50	3.41	2.35	2.07
29	2/21/2004	44	3.388	2.43	2
30	1/18/1955	18	3.334	2.52	1.93
31	2/15/1992	28	3.325	2.6	1.87
32	3/24/1983	18	3.237	2.69	1.81
33	1/23/1969	71	3.126	2.77	1.76
34	2/13/1986	74	3.075	2.85	1.71
35	6/9/1990	29	3.037	2.94	1.66
36	11/14/1952	44	2.978	3.02	1.61
37	2/26/1983	145	2.976	3.11	1.57
38	3/7/1968	18	2.957	3.19	1.53
39	3/11/1995	24	2.948	3.27	1.49
40	11/30/2007	36	2.849	3.36	1.45
41	1/10/2001	41	2.824	3.44	1.41
42	1/14/1978	17	2.804	3.53	1.38
43	1/21/1964	31	2.788	3.61	1.35
44	1/14/1979	30	2.787	3.69	1.32
45	1/7/2005	115	2.786	3.78	1.29
46	1/28/1983	5	2.742	3.86	1.26
47	1/18/1973	9	2.718	3.95	1.23
48	12/29/1965	17	2.667	4.03	1.21
49	1/29/1981	18	2.619	4.11	1.18
50	1/5/1977	37	2.609	4.2	1.16
51	1/6/1993	72	2.565	4.28	1.14
52	3/25/1991	54	2.513	4.37	1.12
53	11/20/1963	26	2.505	4.45	1.09
54	6/1/1996	1	2.493	4.53	1.07
55	11/14/1972	4	2.492	4.62	1.05
56	2/7/1993	56	2.453	4.7	1.04
57	10/17/2004	99	2.446	4.79	1.02
58	2/28/1970	43	2.433	4.87	1
59	2/7/1994	29	2.43	4.95	0.98
60	2/5/1969	35	2.414	5.04	0.97

10-year Q:	5.877	cfs
5-year Q:	4.633	cfs
2-year Q:	3.388	cfs

Lower Flow Threshold: 10%

0.1xQ2 : 0.339 cfs

61	12/6/1997	49	2.404	5.12	0.95
62	3/15/1952	24	2.317	5.21	0.94
63	1/12/1960	8	2.287	5.29	0.92
64	11/28/1970	33	2.276	5.37	0.91
65	2/17/2005	150	2.25	5.46	0.89
66	2/6/1998	62	2.239	5.54	0.88
67	4/1/1982	10	2.178	5.63	0.87
68	11/29/1982	34	2.163	5.71	0.85
69	11/29/1985	19	2.121	5.79	0.84
70	12/24/1971	54	2.12	5.88	0.83
71	10/25/1951	21	2.059	5.96	0.82
72	2/27/1991	55	1.942	6.05	0.81
73	1/13/1957	6	1.908	6.13	0.79
74	1/22/1967	13	1.89	6.21	0.78
75	11/17/1986	18	1.862	6.3	0.77
76	12/18/1967	37	1.858	6.38	0.76
77	5/7/1977	42	1.847	6.47	0.75
78	1/6/1987	15	1.79	6.55	0.74
79	3/10/1986	27	1.788	6.63	0.73
80	1/16/1973	16	1.78	6.72	0.73
81	1/26/2008	36	1.78	6.8	0.72
82	3/15/1958	47	1.775	6.88	0.71
83	2/28/1957	19	1.734	6.97	0.7
84	1/5/1979	26	1.73	7.05	0.69
85	1/25/1956	43	1.698	7.14	0.68
86	12/1/1961	35	1.676	7.22	0.67
87	4/11/1967	25	1.671	7.3	0.67
88	3/10/2006	69	1.627	7.39	0.66
89	12/26/1984	31	1.611	7.47	0.65
90	2/27/1978	84	1.602	7.56	0.64
91	12/18/1984	46	1.575	7.64	0.64
92	4/1/1958	75	1.573	7.72	0.63
93	12/24/2003	22	1.561	7.81	0.62
94	1/20/1962	59	1.559	7.89	0.62
95	9/17/1963	53	1.551	7.98	0.61
96	11/19/1967	25	1.498	8.06	0.6
97	12/4/1974	13	1.483	8.14	0.6
98	12/16/1970	138	1.48	8.23	0.59
99	12/28/2004	46	1.477	8.31	0.59
100	2/3/1958	43	1.457	8.4	0.58
101	2/1/1960	8	1.408	8.48	0.57
102	12/1/1952	6	1.407	8.56	0.57
103	12/24/1988	38	1.398	8.65	0.56
104	1/16/1952	11	1.377	8.73	0.56
105	3/22/1964	61	1.358	8.82	0.55
106	1/18/1969	71	1.309	8.9	0.55
107	2/5/1978	29	1.277	8.98	0.54
108	1/5/2008	55	1.259	9.07	0.54
109	2/3/1998	27	1.212	9.15	0.53
110	12/7/1992	26	1.187	9.24	0.53
111	3/4/2000	35	1.183	9.32	0.52
112	3/16/1963	6	1.161	9.4	0.52
113	12/4/1987	8	1.156	9.49	0.51
114	1/14/1960	23	1.152	9.57	0.51
115	1/6/1974	43	1.147	9.66	0.5
116	2/3/1976	177	1.144	9.74	0.5
117	11/16/1972	34	1.142	9.82	0.5
118	12/24/1959	36	1.14	9.91	0.49
119	1/4/1974	20	1.129	9.99	0.49
120	1/24/1967	13	1.128	10.08	0.48
121	1/25/1997	39	1.109	10.16	0.48
122	3/18/1973	14	1.089	10.24	0.48
123	12/15/1957	50	1.086	10.33	0.47
124	1/26/1957	90	1.082	10.41	0.47
125	3/21/1983	45	1.077	10.5	0.46
126	3/19/1991	55	1.068	10.58	0.46
127	2/25/2004	13	1.064	10.66	0.46
128	10/27/2004	33	1.059	10.75	0.45

129	11/20/1961	6	1.056	10.83	0.45
130	1/10/1995	70	1.054	10.92	0.45
131	4/6/1958	25	1.047	11	0.44
132	10/11/1987	50	1.024	11.08	0.44
133	1/28/1981	8	1.018	11.17	0.44
134	12/27/1964	28	1.01	11.25	0.43
135	11/13/1984	3	1.01	11.34	0.43
136	3/12/1996	32	1	11.42	0.43
137	1/7/1995	25	1	11.5	0.42
138	1/30/2007	16	0.977	11.59	0.42
139	2/2/2004	11	0.975	11.67	0.42
140	11/14/1965	88	0.972	11.75	0.41
141	11/13/1978	2	0.968	11.84	0.41
142	12/4/1972	9	0.963	11.92	0.41
143	3/12/1986	5	0.95	12.01	0.41
144	12/22/1982	12	0.95	12.09	0.4
145	4/10/1952	10	0.947	12.17	0.4
146	1/25/1958	46	0.947	12.26	0.4
147	7/13/1954	3	0.944	12.34	0.39
148	1/3/2005	32	0.923	12.43	0.39
149	1/24/1954	28	0.922	12.51	0.39
150	12/10/1984	13	0.912	12.59	0.39
151	3/13/1967	15	0.91	12.68	0.38
152	11/21/1996	40	0.896	12.76	0.38
153	4/28/2005	7	0.888	12.85	0.38
154	3/6/1974	51	0.882	12.93	0.38
155	12/20/1952	12	0.88	13.01	0.37
156	2/7/1973	2	0.878	13.1	0.37
157	1/18/1954	46	0.866	13.18	0.37
158	1/26/1995	1	0.864	13.27	0.37
159	4/25/1994	30	0.864	13.35	0.36
160	3/20/1992	71	0.864	13.43	0.36
161	2/13/1954	25	0.861	13.52	0.36
162	12/29/1991	11	0.858	13.6	0.36
163	2/14/1998	8	0.849	13.69	0.36
164	11/7/1966	23	0.827	13.77	0.35
165	12/28/1951	53	0.818	13.85	0.35
166	3/2/1992	39	0.817	13.94	0.35
167	12/9/2006	4	0.814	14.02	0.35
168	12/24/1983	67	0.813	14.11	0.35
169	3/25/1977	6	0.809	14.19	0.34
171	4/15/1978	14	0.805	14.36	0.34
171	4/1/1968	42	0.805	14.36	0.34
172	1/2/1977	7	0.802	14.44	0.34
173	12/22/1971	19	0.798	14.53	0.34
174	10/29/2000	5	0.797	14.61	0.33
175	1/12/1997	41	0.797	14.69	0.33
176	3/4/1978	31	0.792	14.78	0.33
177	12/27/1971	27	0.792	14.86	0.33
178	2/17/1990	42	0.782	14.95	0.33
179	3/27/1979	50	0.772	15.03	0.32
180	2/18/1993	52	0.771	15.11	0.32
181	3/7/1952	29	0.769	15.2	0.32
182	12/9/1965	41	0.753	15.28	0.32
183	4/20/1983	24	0.751	15.37	0.32
184	12/6/1998	3	0.75	15.45	0.32
185	3/10/1975	30	0.747	15.53	0.31
186	3/1/1976	51	0.733	15.62	0.31
187	1/17/1990	12	0.733	15.7	0.31
188	1/17/1988	18	0.732	15.79	0.31
189	1/30/1993	3	0.732	15.87	0.31
190	1/12/1952	23	0.726	15.95	0.31
191	4/1/2004	3	0.723	16.04	0.3
192	4/27/1953	5	0.723	16.12	0.3
193	2/19/1958	9	0.72	16.2	0.3
194	1/28/2005	4	0.717	16.29	0.3
195	3/24/1998	103	0.711	16.37	0.3
196	1/5/1992	63	0.71	16.46	0.3

197	1/13/1969	30	0.709	16.54	0.29
198	2/19/1962	50	0.707	16.62	0.29
199	4/7/1965	67	0.705	16.71	0.29
200	12/16/1977	51	0.693	16.79	0.29
201	1/27/1994	4	0.688	16.88	0.29
202	3/30/1954	4	0.688	16.96	0.29
203	3/27/1958	7	0.686	17.04	0.29
204	1/30/1979	76	0.676	17.13	0.28
205	12/9/1996	66	0.672	17.21	0.28
206	3/5/1980	16	0.667	17.3	0.28
207	3/28/1961	19	0.666	17.38	0.28
208	2/20/2000	78	0.664	17.46	0.28
209	11/21/1967	2	0.661	17.55	0.28
210	4/19/1988	48	0.658	17.63	0.28
211	7/25/1951	1	0.658	17.72	0.27
212	12/31/2004	4	0.657	17.8	0.27
213	5/12/1998	25	0.651	17.88	0.27
215	1/26/2005	10	0.65	18.05	0.27
215	1/12/1962	12	0.65	18.05	0.27
216	1/9/2004	1	0.65	18.14	0.27
217	11/10/1994	5	0.648	18.22	0.27
218	2/28/2007	3	0.648	18.3	0.27
219	3/8/1986	11	0.646	18.39	0.26
220	11/20/1983	13	0.644	18.47	0.26
221	1/27/1983	11	0.643	18.56	0.26
222	5/22/2008	36	0.64	18.64	0.26
223	6/5/1993	16	0.637	18.72	0.26
224	12/16/1978	56	0.634	18.81	0.26
225	12/4/1980	23	0.634	18.89	0.26
226	12/30/1952	15	0.629	18.98	0.26
227	3/6/1958	17	0.625	19.06	0.26
228	11/22/1973	4	0.623	19.14	0.25
229	2/28/1960	46	0.616	19.23	0.25
230	1/15/1997	2	0.615	19.31	0.25
231	2/3/1994	36	0.614	19.4	0.25
232	2/9/1982	34	0.61	19.48	0.25
233	3/11/1978	29	0.61	19.56	0.25
234	11/25/2001	15	0.609	19.65	0.25
235	12/30/1981	9	0.609	19.73	0.25
236	12/7/1971	2	0.609	19.82	0.25
237	1/30/1966	17	0.609	19.9	0.24
238	9/23/1986	33	0.608	19.98	0.24
240	2/3/1975	53	0.607	20.15	0.24
240	2/20/1979	57	0.607	20.15	0.24
241	11/30/1952	11	0.607	20.24	0.24
242	3/19/1981	19	0.605	20.32	0.24
244	3/21/1969	11	0.605	20.49	0.24
244	3/11/1965	3	0.605	20.49	0.24
245	3/2/1974	32	0.605	20.57	0.24
247	3/2/1980	18	0.605	20.74	0.23
247	3/31/1965	107	0.605	20.74	0.23
249	3/14/1984	1	0.605	20.91	0.23
249	3/19/1979	25	0.605	20.91	0.23
250	3/16/1957	3	0.605	20.99	0.23
251	3/16/1954	13	0.604	21.07	0.23
252	10/20/1979	15	0.604	21.16	0.23
254	4/14/1971	7	0.6	21.33	0.23
254	4/5/1998	27	0.6	21.33	0.23
255	4/12/1976	10	0.6	21.41	0.23
256	4/11/1998	9	0.6	21.49	0.23
257	9/5/1978	13	0.6	21.58	0.23
258	9/24/1958	1	0.6	21.66	0.22
259	5/4/1998	13	0.599	21.75	0.22
260	4/12/1956	24	0.596	21.83	0.22
261	7/23/1977	1	0.596	21.91	0.22
262	11/26/1981	57	0.595	22	0.22
263	4/4/2006	20	0.588	22.08	0.22
264	2/16/1959	20	0.587	22.17	0.22

265	1/25/1999	47	0.581	22.25	0.22
266	1/21/1996	16	0.568	22.33	0.22
267	2/17/1994	6	0.566	22.42	0.22
268	2/25/1958	6	0.566	22.5	0.22
269	11/10/1954	19	0.566	22.59	0.22
270	11/24/1984	8	0.566	22.67	0.21
271	11/19/1990	10	0.566	22.75	0.21
272	11/24/1985	27	0.566	22.84	0.21
273	11/8/1998	23	0.566	22.92	0.21
275	11/5/1960	16	0.566	23.09	0.21
275	2/27/1996	4	0.566	23.09	0.21
276	3/6/1994	27	0.564	23.17	0.21
277	3/24/1994	9	0.564	23.26	0.21
278	3/18/2005	20	0.564	23.34	0.21
279	10/13/2006	15	0.563	23.43	0.21
280	4/17/2000	18	0.559	23.51	0.21
281	5/28/1990	8	0.558	23.59	0.21
282	1/26/1961	22	0.547	23.68	0.21
283	11/12/1960	7	0.546	23.76	0.2
284	1/17/1952	18	0.539	23.85	0.2
285	12/20/1988	9	0.534	23.93	0.2
286	11/17/1964	13	0.531	24.01	0.2
287	2/9/1985	13	0.52	24.1	0.2
288	2/10/2005	45	0.516	24.18	0.2
289	8/28/1951	25	0.515	24.27	0.2
290	3/28/2006	28	0.512	24.35	0.2
291	4/8/1975	27	0.508	24.43	0.2
292	2/24/1987	48	0.501	24.52	0.2
293	4/17/1963	6	0.498	24.6	0.2
294	2/12/1989	31	0.495	24.69	0.2
295	1/7/1957	22	0.494	24.77	0.2
296	3/20/2006	4	0.491	24.85	0.2
297	2/23/1993	18	0.487	24.94	0.2
298	12/13/1995	28	0.486	25.02	0.19
299	1/11/1954	21	0.486	25.1	0.19
300	1/30/1986	52	0.486	25.19	0.19
301	12/7/1984	3	0.486	25.27	0.19
302	12/11/1993	4	0.486	25.36	0.19
303	1/22/1997	22	0.486	25.44	0.19
304	2/27/2006	17	0.485	25.52	0.19
305	11/14/1988	6	0.484	25.61	0.19
306	3/13/1991	11	0.482	25.69	0.19
307	3/19/1994	28	0.482	25.78	0.19
308	4/20/1957	46	0.478	25.86	0.19
309	4/16/1995	6	0.478	25.94	0.19
310	4/18/1995	9	0.477	26.03	0.19
311	4/1/1992	2	0.477	26.11	0.19
312	7/23/2005	2	0.473	26.2	0.19
313	2/11/2000	52	0.469	26.28	0.19
314	11/20/1951	4	0.464	26.36	0.18
315	11/14/1955	6	0.464	26.45	0.18
316	3/21/1987	6	0.461	26.53	0.18
317	4/30/1955	18	0.457	26.62	0.18
318	2/7/1962	39	0.45	26.7	0.18
319	1/16/1955	10	0.445	26.78	0.18
320	11/2/1957	15	0.443	26.87	0.18
321	3/8/1975	20	0.441	26.95	0.18
322	11/4/1987	38	0.441	27.04	0.18
323	1/8/1982	10	0.436	27.12	0.18
324	1/9/1955	13	0.435	27.2	0.18
325	2/22/1969	7	0.433	27.29	0.18
326	2/23/1953	9	0.423	27.37	0.18
327	2/10/1960	2	0.423	27.46	0.18
328	4/27/1960	9	0.416	27.54	0.18
329	12/16/1984	4	0.411	27.62	0.18
330	3/1/1953	24	0.409	27.71	0.18
331	10/13/1957	12	0.408	27.79	0.18
333	12/25/1968	20	0.404	27.96	0.17

333	12/30/1976	24	0.404	27.96	0.17
334	1/31/1996	47	0.404	28.04	0.17
335	1/16/1970	19	0.404	28.13	0.17
336	1/13/1990	27	0.404	28.21	0.17
337	12/28/1974	27	0.404	28.3	0.17
338	1/19/1983	3	0.404	28.38	0.17
339	1/18/1978	29	0.404	28.46	0.17
340	12/28/1977	23	0.404	28.55	0.17
341	1/26/1968	28	0.404	28.63	0.17
342	1/17/1979	36	0.404	28.72	0.17
343	12/18/1988	17	0.404	28.8	0.17
344	12/3/1983	4	0.404	28.88	0.17
345	12/19/1951	5	0.404	28.97	0.17
346	12/15/1988	30	0.404	29.05	0.17
347	1/12/1971	8	0.404	29.14	0.17
348	1/24/1983	3	0.404	29.22	0.17
349	1/24/1965	2	0.404	29.3	0.17
350	1/10/1993	15	0.404	29.39	0.17
351	1/18/1980	22	0.404	29.47	0.17
356	12/27/2006	1	0.404	29.89	0.16
356	1/2/1990	7	0.404	29.89	0.16
356	1/31/1990	3	0.404	29.89	0.16
356	1/5/1989	15	0.404	29.89	0.16
356	12/1/1973	2	0.404	29.89	0.16
357	11/11/1983	32	0.402	29.97	0.16
358	2/18/1969	46	0.402	30.06	0.16
359	2/6/1966	9	0.402	30.14	0.16
360	2/22/2008	10	0.402	30.23	0.16
363	11/9/1982	35	0.402	30.48	0.16
363	11/27/1975	34	0.402	30.48	0.16
363	11/10/1978	40	0.402	30.48	0.16
365	11/11/1972	6	0.402	30.65	0.16
365	2/15/1969	6	0.402	30.65	0.16
366	2/6/1992	33	0.402	30.73	0.16
369	2/10/1970	33	0.402	30.98	0.16
369	11/7/1979	11	0.402	30.98	0.16
369	11/18/1982	10	0.402	30.98	0.16
370	2/12/1968	10	0.402	31.07	0.16
371	11/10/1997	3	0.402	31.15	0.16
372	2/16/1971	14	0.402	31.23	0.16
373	11/30/1967	2	0.402	31.32	0.16
374	11/11/1985	32	0.402	31.4	0.16
375	2/9/1992	11	0.402	31.49	0.15
376	11/26/1960	10	0.402	31.57	0.15
377	11/12/1976	15	0.402	31.65	0.15
379	2/8/1981	19	0.402	31.82	0.15
379	2/16/1998	10	0.402	31.82	0.15
383	2/25/1981	6	0.402	32.16	0.15
383	11/21/1978	5	0.402	32.16	0.15
383	2/28/1973	8	0.402	32.16	0.15
383	11/9/1964	31	0.402	32.16	0.15
384	2/3/1973	21	0.402	32.24	0.15
390	11/8/1972	1	0.402	32.75	0.15
390	2/7/1966	1	0.402	32.75	0.15
390	2/6/1965	14	0.402	32.75	0.15
390	2/28/1969	13	0.402	32.75	0.15
390	2/10/1989	1	0.402	32.75	0.15
390	2/14/1979	2	0.402	32.75	0.15
393	3/17/1979	4	0.4	33	0.15
393	3/25/1980	4	0.4	33	0.15
393	3/12/1971	21	0.4	33	0.15
394	3/1/1979	8	0.4	33.08	0.15
395	3/17/1983	48	0.4	33.17	0.15
396	3/9/1973	24	0.4	33.25	0.15
397	3/5/1975	28	0.4	33.33	0.15
398	3/6/1992	38	0.4	33.42	0.15
399	3/22/2005	15	0.4	33.5	0.15
400	3/5/1981	13	0.4	33.59	0.14

403	3/30/1978	28	0.4	33.84	0.14
403	2/28/1981	49	0.4	33.84	0.14
403	3/6/1973	7	0.4	33.84	0.14
404	3/4/1973	18	0.4	33.92	0.14
405	3/19/1973	4	0.4	34.01	0.14
407	3/10/1980	5	0.4	34.17	0.14
407	3/31/1967	6	0.4	34.17	0.14
413	3/31/1998	19	0.399	34.68	0.14
413	3/14/1983	3	0.399	34.68	0.14
413	3/15/1965	14	0.399	34.68	0.14
413	3/21/1979	4	0.399	34.68	0.14
413	3/13/1965	15	0.399	34.68	0.14
413	3/14/1975	2	0.399	34.68	0.14
414	10/10/1966	3	0.399	34.76	0.14
415	10/28/1974	28	0.399	34.84	0.14
416	10/17/1984	4	0.399	34.93	0.14
417	10/9/1986	11	0.399	35.01	0.14
418	10/22/1987	11	0.399	35.1	0.14
419	10/16/2005	46	0.399	35.18	0.14
420	10/30/1996	11	0.399	35.26	0.14
421	10/25/1958	1	0.399	35.35	0.14
423	10/16/1971	20	0.399	35.52	0.14
423	10/15/1964	1	0.399	35.52	0.14
424	9/25/1997	26	0.396	35.6	0.14
425	4/14/1988	9	0.396	35.68	0.14
426	4/20/2007	8	0.396	35.77	0.14
427	4/19/1984	4	0.396	35.85	0.14
428	4/29/1983	25	0.396	35.94	0.14
429	4/6/1978	6	0.396	36.02	0.14
431	4/5/1969	3	0.396	36.19	0.13
431	4/18/1957	2	0.396	36.19	0.13
432	4/18/1981	18	0.395	36.27	0.13
440	4/1/1967	4	0.395	36.94	0.13
440	4/2/1981	14	0.395	36.94	0.13
440	4/25/1990	1	0.395	36.94	0.13
440	9/24/1964	1	0.395	36.94	0.13
440	4/6/1999	15	0.395	36.94	0.13
440	9/3/1976	1	0.395	36.94	0.13
440	4/13/1972	1	0.395	36.94	0.13
440	4/2/1977	1	0.395	36.94	0.13
441	5/7/1971	7	0.394	37.03	0.13
443	5/22/2006	4	0.394	37.2	0.13
443	5/10/1980	2	0.394	37.2	0.13
444	8/16/1977	34	0.392	37.28	0.13
445	7/29/1965	3	0.391	37.36	0.13
446	1/4/1987	21	0.384	37.45	0.13
447	3/28/1963	4	0.379	37.53	0.13
448	3/28/1960	4	0.379	37.62	0.13
449	4/26/1963	12	0.375	37.7	0.13
450	5/21/1957	1	0.373	37.78	0.13
451	12/31/2005	61	0.367	37.87	0.13
452	1/6/1959	4	0.363	37.95	0.13
453	12/17/1952	11	0.363	38.04	0.13
454	1/30/1955	4	0.363	38.12	0.13
455	2/16/1955	22	0.362	38.2	0.13
456	3/28/1993	12	0.359	38.29	0.13
457	12/11/1951	11	0.343	38.37	0.13
458	12/1/1955	9	0.343	38.46	0.13
459	2/15/1962	18	0.341	38.54	0.13
460	2/7/1959	22	0.341	38.62	0.13
461	10/8/1961	13	0.338	38.71	0.13
462	4/26/1959	5	0.334	38.79	0.13
463	5/14/1962	12	0.332	38.87	0.13
464	1/9/1991	4	0.322	38.96	0.13
465	12/16/1987	27	0.322	39.04	0.12
466	1/24/1994	19	0.322	39.13	0.12
467	12/5/1957	21	0.322	39.21	0.12
468	12/3/1992	28	0.322	39.29	0.12

469	12/4/1953	2	0.322	39.38	0.12
470	12/19/1987	1	0.321	39.46	0.12
471	2/3/2008	33	0.321	39.55	0.12
472	2/19/1996	50	0.321	39.63	0.12
473	2/26/1955	37	0.321	39.71	0.12
474	2/2/1985	64	0.321	39.8	0.12
475	11/15/1963	7	0.321	39.88	0.12
476	11/25/1988	9	0.321	39.97	0.12
477	2/13/1995	50	0.321	40.05	0.12
478	2/7/1986	16	0.321	40.13	0.12
479	2/25/1996	26	0.321	40.22	0.12
480	11/30/1993	2	0.32	40.3	0.12
481	2/26/1993	15	0.32	40.39	0.12
482	2/27/1997	15	0.32	40.47	0.12
486	2/9/1999	2	0.319	40.81	0.12
486	11/11/1958	1	0.319	40.81	0.12
486	11/29/1991	1	0.319	40.81	0.12
486	2/21/1959	17	0.319	40.81	0.12
487	3/27/1985	30	0.318	40.89	0.12
488	3/21/1995	9	0.318	40.97	0.12
489	3/23/1995	28	0.318	41.06	0.12
490	3/25/1989	24	0.318	41.14	0.12
491	3/4/1996	16	0.318	41.23	0.12
492	3/26/1992	13	0.318	41.31	0.12
493	3/17/2002	6	0.318	41.39	0.12
494	3/14/1987	21	0.318	41.48	0.12
495	10/11/1957	5	0.317	41.56	0.12
498	3/23/1987	22	0.317	41.81	0.12
498	3/25/1993	26	0.317	41.81	0.12
498	3/5/1990	1	0.317	41.81	0.12
499	4/16/1990	15	0.314	41.9	0.12
500	4/25/1952	10	0.314	41.98	0.12
501	4/21/2001	7	0.314	42.07	0.12
502	4/1/1999	11	0.314	42.15	0.12
503	4/14/2006	15	0.314	42.23	0.12
504	4/3/1997	6	0.313	42.32	0.12
506	5/28/1987	1	0.311	42.49	0.11
506	5/22/1992	3	0.311	42.49	0.11
508	6/21/1999	1	0.308	42.65	0.11
508	7/27/2006	1	0.308	42.65	0.11
509	3/20/1958	38	0.302	42.74	0.11
510	12/10/2001	17	0.302	42.82	0.11
511	12/9/1954	10	0.302	42.91	0.11
512	1/31/1956	2	0.302	42.99	0.11
513	2/14/1963	4	0.3	43.07	0.11
514	11/21/1955	10	0.3	43.16	0.11
515	2/17/2000	6	0.3	43.24	0.11
516	3/18/1962	25	0.298	43.32	0.11
517	3/6/1962	13	0.298	43.41	0.11
518	3/8/2000	17	0.298	43.49	0.11
519	3/10/1952	20	0.298	43.58	0.11
520	10/30/1957	11	0.297	43.66	0.11
521	4/1/1956	13	0.293	43.74	0.11
522	12/27/1952	24	0.281	43.83	0.11
523	1/10/1960	10	0.281	43.91	0.11
524	1/6/1953	48	0.281	44	0.11
525	1/1/1955	12	0.281	44.08	0.11
526	1/5/1957	4	0.281	44.16	0.11
527	12/4/1951	8	0.281	44.25	0.11
528	11/14/1953	9	0.28	44.33	0.11
529	3/20/1954	115	0.278	44.42	0.11
530	2/29/1952	21	0.277	44.5	0.11
531	4/22/1955	10	0.273	44.58	0.11
532	9/4/1963	8	0.273	44.67	0.11
533	4/7/1952	1	0.272	44.75	0.11
534	6/10/1957	11	0.269	44.84	0.11
535	12/5/1956	13	0.261	44.92	0.11
536	2/23/1957	7	0.259	45	0.11

537	3/22/1962	2	0.257	45.09	0.11
538	2/16/1964	1	0.257	45.17	0.11
539	10/22/1953	5	0.254	45.26	0.11
540	4/20/1953	3	0.252	45.34	0.11
541	1/16/1996	6	0.24	45.42	0.11
542	1/23/2008	28	0.24	45.51	0.11
543	12/24/1994	22	0.24	45.59	0.11
545	1/7/1985	19	0.24	45.76	0.11
545	1/23/1995	65	0.24	45.76	0.11
546	1/21/1995	4	0.24	45.84	0.11
547	12/22/1996	3	0.24	45.93	0.11
548	12/7/2007	46	0.24	46.01	0.11
549	12/5/2004	16	0.24	46.1	0.11
550	1/26/2001	15	0.24	46.18	0.11
551	1/2/2004	19	0.24	46.26	0.11
552	12/4/1998	6	0.24	46.35	0.11
553	2/4/1999	44	0.239	46.43	0.1
554	11/7/1984	23	0.239	46.52	0.1
555	11/21/2004	6	0.239	46.6	0.1
556	2/11/2007	3	0.239	46.68	0.1
557	2/22/2007	12	0.239	46.77	0.1
558	11/22/1952	16	0.239	46.85	0.1
559	11/25/1961	19	0.239	46.94	0.1
560	2/2/1988	17	0.239	47.02	0.1
561	11/28/1998	21	0.239	47.1	0.1
562	2/20/1994	5	0.239	47.19	0.1
563	2/3/1989	23	0.239	47.27	0.1
564	2/25/2005	5	0.239	47.36	0.1
565	2/14/2008	7	0.239	47.44	0.1
566	2/29/1988	28	0.238	47.52	0.1
567	11/11/1988	9	0.238	47.61	0.1
568	11/22/1993	7	0.238	47.69	0.1
570	12/16/2006	19	0.237	47.86	0.1
570	1/13/1984	1	0.237	47.86	0.1
571	3/13/1986	11	0.236	47.94	0.1
573	3/15/1991	6	0.236	48.11	0.1
573	3/15/1999	2	0.236	48.11	0.1
574	3/1/2004	20	0.236	48.19	0.1
575	3/23/2002	21	0.236	48.28	0.1
576	10/30/1992	2	0.235	48.36	0.1
577	10/26/1991	5	0.235	48.45	0.1
578	10/23/1992	20	0.235	48.53	0.1
579	10/31/1987	59	0.235	48.61	0.1
580	10/4/1994	25	0.235	48.7	0.1
583	2/18/2004	3	0.235	48.95	0.1
583	2/18/1994	7	0.235	48.95	0.1
583	2/19/2002	1	0.235	48.95	0.1
584	10/26/2000	21	0.235	49.03	0.1
585	3/25/1999	8	0.233	49.12	0.1
586	4/17/1996	26	0.232	49.2	0.1
587	4/11/1999	11	0.232	49.29	0.1
588	4/6/1986	14	0.232	49.37	0.1
589	4/17/2004	8	0.232	49.45	0.1
590	4/24/1994	10	0.232	49.54	0.1
591	10/28/1992	13	0.232	49.62	0.1
593	4/6/1984	10	0.228	49.79	0.1
593	9/20/2005	4	0.228	49.79	0.1
594	6/15/1995	31	0.228	49.87	0.1
595	7/16/1995	2	0.227	49.96	0.1
596	8/26/2007	3	0.225	50.04	0.1
597	1/25/1952	11	0.22	50.13	0.1
598	12/20/1959	10	0.22	50.21	0.1
599	1/7/1952	6	0.22	50.29	0.1
601	12/14/2001	12	0.22	50.46	0.1
601	1/31/2000	10	0.22	50.46	0.1
602	12/2/1951	4	0.22	50.55	0.1
603	11/16/1957	3	0.218	50.63	0.1
604	11/28/2004	4	0.218	50.71	0.1

605	3/11/1958	47	0.216	50.8	0.1
609	1/3/1998	3	0.2	51.13	0.1
609	12/14/1965	6	0.2	51.13	0.1
609	12/22/1965	12	0.2	51.13	0.1
609	12/18/1997	3	0.2	51.13	0.1
610	12/25/1977	31	0.2	51.22	0.1
611	1/30/1978	14	0.2	51.3	0.09
612	12/16/1965	8	0.2	51.39	0.09
613	12/21/1979	9	0.2	51.47	0.09
615	1/9/1973	16	0.2	51.64	0.09
615	1/3/1997	10	0.2	51.64	0.09
618	12/7/1972	56	0.2	51.89	0.09
618	1/9/1970	8	0.2	51.89	0.09
618	12/7/1982	8	0.2	51.89	0.09
619	12/3/1954	14	0.2	51.97	0.09
629	1/11/1970	9	0.199	52.81	0.09
629	1/4/1998	2	0.199	52.81	0.09
629	12/12/1975	2	0.199	52.81	0.09
629	1/7/1965	2	0.199	52.81	0.09
629	1/19/1998	2	0.199	52.81	0.09
629	12/13/1971	6	0.199	52.81	0.09
629	12/20/1968	2	0.199	52.81	0.09
629	1/5/1997	8	0.199	52.81	0.09
629	12/4/1975	4	0.199	52.81	0.09
629	1/29/1998	2	0.199	52.81	0.09
630	12/31/2001	9	0.199	52.9	0.09
631	1/9/1957	15	0.199	52.98	0.09
632	1/5/1982	7	0.199	53.06	0.09
633	1/28/1982	10	0.199	53.15	0.09
634	12/16/1967	23	0.199	53.23	0.09
639	1/4/1973	3	0.199	53.65	0.09
639	1/1/1974	3	0.199	53.65	0.09
639	1/22/1983	6	0.199	53.65	0.09
639	1/10/1982	8	0.199	53.65	0.09
639	1/25/1973	3	0.199	53.65	0.09
640	1/28/1969	14	0.199	53.74	0.09
641	12/11/1977	94	0.199	53.82	0.09
644	1/9/1979	4	0.199	54.07	0.09
644	12/3/1971	27	0.199	54.07	0.09
644	12/13/1967	4	0.199	54.07	0.09
645	12/30/1977	5	0.199	54.16	0.09
646	1/20/1974	11	0.199	54.24	0.09
647	12/12/1965	30	0.198	54.32	0.09
648	11/6/1969	12	0.198	54.41	0.09
649	2/23/1977	27	0.198	54.49	0.09
650	2/19/1998	13	0.198	54.58	0.09
651	11/13/1997	9	0.198	54.66	0.09
655	2/7/1983	30	0.198	55	0.09
655	11/17/1973	34	0.198	55	0.09
655	11/15/1968	16	0.198	55	0.09
655	2/9/1975	18	0.198	55	0.09
656	11/24/1965	18	0.198	55.08	0.09
657	11/3/1960	10	0.198	55.16	0.09
662	11/25/1970	12	0.198	55.58	0.09
662	11/10/1969	5	0.198	55.58	0.09
662	2/19/1971	2	0.198	55.58	0.09
662	11/1/1974	19	0.198	55.58	0.09
662	2/6/1973	7	0.198	55.58	0.09
663	11/24/1978	10	0.198	55.67	0.09
664	2/2/1983	7	0.198	55.75	0.09
665	2/24/1983	14	0.198	55.84	0.09
667	11/12/1971	6	0.198	56	0.09
667	11/17/1983	3	0.198	56	0.09
668	12/31/1965	16	0.198	56.09	0.09
669	1/20/1957	3	0.198	56.17	0.09
670	2/5/1972	5	0.198	56.26	0.09
671	2/23/1956	31	0.197	56.34	0.09
672	12/9/1959	5	0.195	56.42	0.09

673	3/16/1977	13	0.195	56.51	0.09
674	3/25/1982	16	0.195	56.59	0.09
675	3/22/1975	6	0.195	56.68	0.09
678	3/9/1978	3	0.195	56.93	0.09
678	3/24/1966	23	0.195	56.93	0.09
678	3/6/1998	7	0.195	56.93	0.09
679	3/12/1969	40	0.195	57.01	0.09
680	3/28/1982	29	0.195	57.09	0.09
682	3/2/1966	2	0.195	57.26	0.09
682	3/6/1965	8	0.195	57.26	0.09
683	3/10/1969	5	0.195	57.35	0.08
684	3/27/1974	3	0.195	57.43	0.08
685	3/4/1967	15	0.195	57.51	0.08
686	3/24/1961	6	0.195	57.6	0.08
687	3/6/1983	5	0.195	57.68	0.08
688	3/13/1952	19	0.194	57.77	0.08
689	9/30/1959	27	0.194	57.85	0.08
690	10/7/1983	2	0.194	57.93	0.08
691	10/15/1980	9	0.194	58.02	0.08
692	10/26/1980	5	0.194	58.1	0.08
693	10/7/1975	6	0.194	58.19	0.08
694	12/8/1977	47	0.193	58.27	0.08
731	1/7/1975	1	0.193	61.38	0.08
731	1/11/1981	1	0.193	61.38	0.08
731	12/10/1969	1	0.193	61.38	0.08
731	12/9/1970	1	0.193	61.38	0.08
731	12/7/1980	1	0.193	61.38	0.08
731	1/14/1970	1	0.193	61.38	0.08
731	12/16/1975	1	0.193	61.38	0.08
731	12/7/1975	1	0.193	61.38	0.08
731	1/8/1975	1	0.193	61.38	0.08
731	1/15/1990	1	0.193	61.38	0.08
731	1/28/1979	1	0.193	61.38	0.08
731	12/30/1979	1	0.193	61.38	0.08
731	12/16/1968	1	0.193	61.38	0.08
731	12/3/1979	1	0.193	61.38	0.08
731	12/25/1979	1	0.193	61.38	0.08
731	12/11/1968	1	0.193	61.38	0.08
731	12/9/1978	1	0.193	61.38	0.08
731	1/30/1975	1	0.193	61.38	0.08
731	12/8/1969	1	0.193	61.38	0.08
731	12/1/1968	1	0.193	61.38	0.08
731	1/23/1979	1	0.193	61.38	0.08
731	12/2/1970	1	0.193	61.38	0.08
731	1/12/1981	1	0.193	61.38	0.08
731	12/28/1973	1	0.193	61.38	0.08
731	12/1/1983	1	0.193	61.38	0.08
731	1/9/1974	1	0.193	61.38	0.08
731	1/31/1998	1	0.193	61.38	0.08
731	12/23/1977	1	0.193	61.38	0.08
731	12/22/1973	1	0.193	61.38	0.08
731	1/31/1967	1	0.193	61.38	0.08
731	1/26/1977	1	0.193	61.38	0.08
731	1/27/1966	1	0.193	61.38	0.08
731	1/29/1977	1	0.193	61.38	0.08
731	1/16/1998	1	0.193	61.38	0.08
731	12/7/1967	1	0.193	61.38	0.08
731	12/1/1967	1	0.193	61.38	0.08
731	1/19/1966	1	0.193	61.38	0.08
732	3/31/1975	20	0.191	61.46	0.08
733	4/1/1974	9	0.191	61.54	0.08
734	9/26/1982	16	0.191	61.63	0.08
758	11/5/1975	1	0.191	63.64	0.08
758	2/5/1983	1	0.191	63.64	0.08
758	11/23/1967	1	0.191	63.64	0.08
758	11/24/1972	1	0.191	63.64	0.08
758	11/21/1972	1	0.191	63.64	0.08
758	2/13/1983	1	0.191	63.64	0.08

758	2/25/1966	1	0.191	63.64	0.08
758	11/20/1965	1	0.191	63.64	0.08
758	10/31/1975	69	0.191	63.64	0.08
758	11/26/1973	1	0.191	63.64	0.08
758	2/2/1966	1	0.191	63.64	0.08
758	2/18/1971	1	0.191	63.64	0.08
758	11/29/1971	1	0.191	63.64	0.08
758	2/19/1974	1	0.191	63.64	0.08
758	2/10/1975	1	0.191	63.64	0.08
758	11/27/1976	1	0.191	63.64	0.08
758	2/28/1972	1	0.191	63.64	0.08
758	11/12/1964	1	0.191	63.64	0.08
758	11/26/1964	1	0.191	63.64	0.08
758	11/3/1970	1	0.191	63.64	0.08
758	2/22/1977	1	0.191	63.64	0.08
758	2/8/1982	1	0.191	63.64	0.08
758	11/6/1967	1	0.191	63.64	0.08
758	11/13/1968	1	0.191	63.64	0.08
760	4/2/1978	4	0.191	63.81	0.08
760	4/17/1983	12	0.191	63.81	0.08
766	9/29/1971	2	0.191	64.32	0.08
766	4/18/1967	27	0.191	64.32	0.08
766	4/19/1972	5	0.191	64.32	0.08
766	4/11/1965	46	0.191	64.32	0.08
766	9/2/1967	2	0.191	64.32	0.08
766	4/14/1976	22	0.191	64.32	0.08
769	4/4/1975	56	0.191	64.57	0.08
769	4/3/1969	3	0.191	64.57	0.08
769	4/21/1967	15	0.191	64.57	0.08
772	4/16/1975	23	0.191	64.82	0.08
772	4/17/1971	4	0.191	64.82	0.08
772	9/16/1982	26	0.191	64.82	0.08
774	4/25/1975	5	0.19	64.99	0.07
774	9/16/1965	13	0.19	64.99	0.07
775	5/19/1957	7	0.189	65.07	0.07
776	5/11/1958	3	0.189	65.16	0.07
777	5/12/1977	2	0.189	65.24	0.07
778	5/28/1971	5	0.189	65.32	0.07
779	5/6/1971	7	0.189	65.41	0.07
780	5/19/1975	20	0.189	65.49	0.07
803	3/9/1962	1	0.188	67.42	0.07
803	3/10/1970	1	0.188	67.42	0.07
803	3/24/1978	1	0.188	67.42	0.07
803	3/7/1978	1	0.188	67.42	0.07
803	3/17/1978	1	0.188	67.42	0.07
803	3/21/1978	22	0.188	67.42	0.07
803	3/2/1964	1	0.188	67.42	0.07
803	3/18/1968	15	0.188	67.42	0.07
803	3/18/1980	1	0.188	67.42	0.07
803	3/25/1975	1	0.188	67.42	0.07
803	3/11/1967	1	0.188	67.42	0.07
803	3/24/1965	1	0.188	67.42	0.07
803	3/6/1968	1	0.188	67.42	0.07
803	3/17/1968	1	0.188	67.42	0.07
803	3/31/1979	91	0.188	67.42	0.07
803	3/9/1976	1	0.188	67.42	0.07
803	3/14/1979	1	0.188	67.42	0.07
803	3/11/1969	1	0.188	67.42	0.07
803	3/11/1973	1	0.188	67.42	0.07
803	3/12/1976	1	0.188	67.42	0.07
803	3/15/1979	1	0.188	67.42	0.07
803	3/9/1969	1	0.188	67.42	0.07
803	3/25/1973	1	0.188	67.42	0.07
804	4/11/1983	30	0.188	67.51	0.07
817	10/3/1977	1	0.188	68.6	0.07
817	10/11/1981	1	0.188	68.6	0.07
817	10/21/1972	1	0.188	68.6	0.07
817	10/28/1981	1	0.188	68.6	0.07

817	10/28/1971	1	0.188	68.6	0.07
817	10/14/1977	1	0.188	68.6	0.07
817	10/19/1972	19	0.188	68.6	0.07
817	10/26/1974	1	0.188	68.6	0.07
817	10/3/1980	1	0.188	68.6	0.07
817	10/17/1972	1	0.188	68.6	0.07
817	10/29/1964	1	0.188	68.6	0.07
817	10/1/1981	1	0.188	68.6	0.07
817	10/20/1983	1	0.188	68.6	0.07
818	8/16/1965	13	0.187	68.68	0.07
819	6/13/1967	5	0.187	68.77	0.07
820	6/20/1972	5	0.186	68.85	0.07
821	7/7/1968	6	0.185	68.93	0.07
850	4/30/1973	1	0.184	71.37	0.07
850	4/1/1973	1	0.184	71.37	0.07
850	9/15/1997	1	0.184	71.37	0.07
850	4/4/1976	1	0.184	71.37	0.07
850	9/8/1972	1	0.184	71.37	0.07
850	9/17/1974	1	0.184	71.37	0.07
850	9/25/1973	1	0.184	71.37	0.07
850	4/28/1967	1	0.184	71.37	0.07
850	9/8/1978	1	0.184	71.37	0.07
850	4/25/1981	1	0.184	71.37	0.07
850	9/16/1978	1	0.184	71.37	0.07
850	9/3/1978	1	0.184	71.37	0.07
850	4/15/1967	1	0.184	71.37	0.07
850	4/24/1967	1	0.184	71.37	0.07
850	4/4/1978	1	0.184	71.37	0.07
850	4/19/1978	1	0.184	71.37	0.07
850	4/2/1980	1	0.184	71.37	0.07
850	4/1/1980	1	0.184	71.37	0.07
850	4/3/1987	18	0.184	71.37	0.07
850	4/5/1987	1	0.184	71.37	0.07
850	4/10/1979	1	0.184	71.37	0.07
850	4/28/1980	46	0.184	71.37	0.07
850	4/24/1980	1	0.184	71.37	0.07
850	4/22/1980	1	0.184	71.37	0.07
850	4/21/1980	1	0.184	71.37	0.07
850	4/27/1970	1	0.184	71.37	0.07
850	9/11/1971	1	0.184	71.37	0.07
850	4/21/1971	1	0.184	71.37	0.07
850	4/25/1971	24	0.184	71.37	0.07
868	5/6/1998	1	0.182	72.88	0.07
868	5/6/1969	1	0.182	72.88	0.07
868	5/1/1983	1	0.182	72.88	0.07
868	5/2/1998	1	0.182	72.88	0.07
868	5/19/1972	1	0.182	72.88	0.07
868	5/20/1972	1	0.182	72.88	0.07
868	5/21/1968	1	0.182	72.88	0.07
868	5/5/1969	1	0.182	72.88	0.07
868	5/24/1977	1	0.182	72.88	0.07
868	5/28/1973	1	0.182	72.88	0.07
868	5/10/1967	1	0.182	72.88	0.07
868	5/31/1973	1	0.182	72.88	0.07
868	5/10/1966	1	0.182	72.88	0.07
868	5/28/1976	1	0.182	72.88	0.07
868	5/11/1982	1	0.182	72.88	0.07
868	5/7/1976	1	0.182	72.88	0.07
868	5/20/1974	1	0.182	72.88	0.07
868	5/20/1981	1	0.182	72.88	0.07
875	8/9/1983	1	0.181	73.47	0.07
875	8/20/1979	1	0.181	73.47	0.07
875	8/21/1976	1	0.181	73.47	0.07
875	8/18/1986	1	0.181	73.47	0.07
875	8/9/1978	1	0.181	73.47	0.07
875	8/18/1983	1	0.181	73.47	0.07
875	8/16/1983	1	0.181	73.47	0.07
885	7/23/1986	1	0.18	74.31	0.07

885	6/7/1972	1	0.18	74.31	0.07
885	7/9/1983	1	0.18	74.31	0.07
885	7/18/1979	1	0.18	74.31	0.07
885	6/4/1979	1	0.18	74.31	0.07
885	6/7/1975	1	0.18	74.31	0.07
885	6/17/1975	1	0.18	74.31	0.07
885	6/19/1975	1	0.18	74.31	0.07
885	7/20/1979	1	0.18	74.31	0.07
885	6/11/1970	1	0.18	74.31	0.07
886	11/6/1963	3	0.174	74.39	0.07
887	1/25/1960	7	0.173	74.48	0.07
888	4/20/1963	6	0.17	74.56	0.07
889	4/26/1955	2	0.169	74.64	0.07
890	11/20/1953	1	0.167	74.73	0.07
891	1/28/1985	4	0.159	74.81	0.07
892	12/27/1992	58	0.159	74.9	0.07
893	12/27/1996	23	0.159	74.98	0.06
896	12/9/1983	3	0.159	75.23	0.06
896	1/5/1988	6	0.159	75.23	0.06
896	12/28/1991	4	0.159	75.23	0.06
897	1/4/1989	10	0.159	75.31	0.06
898	12/2/1985	17	0.159	75.4	0.06
899	12/19/1998	7	0.159	75.48	0.06
900	1/25/2000	6	0.158	75.57	0.06
901	1/6/1955	4	0.158	75.65	0.06
902	12/18/2007	14	0.158	75.73	0.06
903	12/28/1989	5	0.158	75.82	0.06
904	1/3/1991	25	0.158	75.9	0.06
908	1/16/1984	3	0.158	76.24	0.06
908	12/22/1988	4	0.158	76.24	0.06
908	1/21/1991	2	0.158	76.24	0.06
908	12/17/1992	4	0.158	76.24	0.06
909	12/9/1985	37	0.158	76.32	0.06
912	12/11/1992	3	0.158	76.57	0.06
912	12/5/1996	11	0.158	76.57	0.06
912	12/8/2004	7	0.158	76.57	0.06
913	12/17/1991	42	0.157	76.66	0.06
914	2/13/1987	6	0.157	76.74	0.06
915	2/8/1960	5	0.157	76.83	0.06
916	11/17/1955	13	0.157	76.91	0.06
917	2/4/1990	6	0.157	76.99	0.06
918	2/19/1986	14	0.157	77.08	0.06
919	11/12/2003	26	0.157	77.16	0.06
920	11/10/2000	27	0.157	77.25	0.06
921	2/2/1989	4	0.157	77.33	0.06
922	11/15/1958	2	0.157	77.41	0.06
923	2/20/1985	6	0.157	77.5	0.06
924	2/17/2006	33	0.157	77.58	0.06
925	2/24/1962	40	0.156	77.67	0.06
926	2/12/2007	5	0.156	77.75	0.06
931	2/10/1997	9	0.156	78.17	0.06
931	11/26/1990	2	0.156	78.17	0.06
931	11/27/2006	20	0.156	78.17	0.06
931	11/15/2003	13	0.156	78.17	0.06
931	2/24/2008	9	0.156	78.17	0.06
932	11/14/1987	5	0.155	78.25	0.06
933	3/11/1990	4	0.154	78.34	0.06
934	3/11/1999	5	0.154	78.42	0.06
935	3/10/1955	5	0.154	78.51	0.06
936	3/20/2007	13	0.154	78.59	0.06
937	3/17/2006	45	0.154	78.67	0.06
938	10/13/2007	5	0.153	78.76	0.06
939	3/4/2005	11	0.153	78.84	0.06
940	3/7/2006	24	0.153	78.93	0.06
941	3/7/2002	19	0.152	79.01	0.06
942	4/4/1990	6	0.15	79.09	0.06
943	4/1/1964	7	0.15	79.18	0.06
945	4/27/1994	4	0.15	79.35	0.06

945	4/24/2002	2	0.15	79.35	0.06
946	4/9/1994	3	0.15	79.43	0.06
947	4/24/2005	21	0.15	79.51	0.06
948	9/22/2000	24	0.149	79.6	0.06
949	9/17/1989	3	0.148	79.68	0.06
950	5/13/1995	3	0.148	79.76	0.06
951	5/6/1995	9	0.148	79.85	0.06
952	6/2/1999	7	0.146	79.93	0.06
953	5/11/1957	10	0.145	80.02	0.06
959	1/8/2001	9	0.143	80.52	0.06
959	1/28/2002	29	0.143	80.52	0.06
959	12/29/1987	13	0.143	80.52	0.06
959	12/13/1994	1	0.143	80.52	0.06
959	12/20/1986	5	0.143	80.52	0.06
959	12/22/2006	4	0.143	80.52	0.06
966	2/17/1952	2	0.141	81.11	0.06
966	2/10/1984	1	0.141	81.11	0.06
966	2/29/1964	4	0.141	81.11	0.06
966	11/26/1994	2	0.141	81.11	0.06
966	11/17/1987	1	0.141	81.11	0.06
966	2/12/1996	4	0.141	81.11	0.06
966	2/20/2008	4	0.141	81.11	0.06
968	3/26/2006	1	0.139	81.28	0.06
968	3/3/2006	1	0.139	81.28	0.06
969	12/21/2001	4	0.138	81.36	0.06
971	10/18/1963	1	0.138	81.53	0.06
971	10/21/1985	2	0.138	81.53	0.06
972	11/2/1959	2	0.135	81.61	0.06
979	4/23/1988	1	0.134	82.2	0.06
979	4/23/1960	22	0.134	82.2	0.06
979	9/24/1999	1	0.134	82.2	0.06
979	9/22/1999	1	0.134	82.2	0.06
979	9/13/1987	2	0.134	82.2	0.06
979	4/1/1991	1	0.134	82.2	0.06
979	4/8/2005	1	0.134	82.2	0.06
980	3/9/1957	5	0.134	82.28	0.06
982	5/5/1988	1	0.132	82.45	0.06
982	5/10/1989	9	0.132	82.45	0.06
984	8/23/1999	1	0.13	82.62	0.06
984	8/13/1992	3	0.13	82.62	0.06
987	6/11/1963	1	0.129	82.87	0.06
987	7/15/1984	1	0.129	82.87	0.06
987	7/16/1999	1	0.129	82.87	0.06
988	2/11/1962	31	0.124	82.96	0.06
989	12/6/1952	2	0.117	83.04	0.06
990	1/18/1964	4	0.117	83.12	0.06
991	12/8/1959	2	0.117	83.21	0.06
992	3/4/1961	1	0.117	83.29	0.06
993	2/18/1954	2	0.115	83.38	0.06
994	3/20/1953	5	0.113	83.46	0.06
995	10/21/1957	5	0.112	83.54	0.06
996	9/19/1952	4	0.109	83.63	0.06
997	10/29/1951	1	0.108	83.71	0.06
998	11/22/1951	18	0.106	83.8	0.06
1000	3/15/1963	1	0.102	83.96	0.06
1000	3/13/1960	1	0.102	83.96	0.06
1001	1/24/1957	5	0.097	84.05	0.06
1002	11/13/2001	2	0.089	84.13	0.06
1003	5/6/1964	20	0.084	84.21	0.06
1004	4/28/1964	4	0.08	84.3	0.06
1005	11/21/1951	1	0.077	84.38	0.06
1006	1/2/1993	6	0.077	84.47	0.06
1007	1/25/1996	12	0.077	84.55	0.06
1008	12/3/1984	6	0.077	84.63	0.06
1009	12/14/1993	3	0.077	84.72	0.06
1010	1/15/1995	44	0.077	84.8	0.06
1011	1/13/1953	6	0.077	84.89	0.06
1012	1/15/2001	13	0.076	84.97	0.06

1014	12/23/1995	7	0.076	85.14	0.06
1014	12/22/1994	4	0.076	85.14	0.06
1015	1/20/1999	28	0.076	85.22	0.06
1016	1/2/1992	8	0.076	85.31	0.06
1018	1/4/2007	5	0.076	85.47	0.06
1018	1/28/1996	5	0.076	85.47	0.06
1019	12/4/1955	5	0.076	85.56	0.06
1020	2/19/2007	9	0.075	85.64	0.06
1021	2/18/1987	10	0.074	85.73	0.06
1022	11/17/1994	16	0.074	85.81	0.06
1027	12/27/1988	2	0.074	86.23	0.06
1027	1/31/1999	2	0.074	86.23	0.06
1027	12/14/2003	2	0.074	86.23	0.06
1027	12/1/1998	2	0.074	86.23	0.06
1027	1/22/2008	2	0.074	86.23	0.06
1028	1/31/1963	1	0.073	86.31	0.06
1029	3/5/1987	21	0.072	86.4	0.06
1030	3/2/1985	12	0.072	86.48	0.06
1032	11/16/1984	13	0.072	86.65	0.06
1032	11/16/1994	2	0.072	86.65	0.06
1033	3/15/1961	4	0.072	86.73	0.06
1034	10/22/1989	7	0.072	86.82	0.06
1035	3/10/1954	1	0.071	86.9	0.06
1036	3/2/1989	16	0.071	86.99	0.06
1039	2/3/1996	3	0.07	87.24	0.06
1039	11/7/2004	10	0.07	87.24	0.06
1039	11/23/1988	3	0.07	87.24	0.06
1040	4/15/2002	3	0.068	87.32	0.06
1041	1/5/1955	1	0.068	87.41	0.06
1042	11/11/1993	25	0.068	87.49	0.06
1043	4/25/1989	5	0.066	87.57	0.06
1044	3/28/1996	3	0.066	87.66	0.06
1045	7/31/1991	28	0.064	87.74	0.06
1046	4/14/1963	19	0.064	87.83	0.06
1047	5/9/1956	4	0.063	87.91	0.06
1048	3/2/1958	1	0.062	87.99	0.06
1049	4/28/1954	1	0.061	88.08	0.06
1050	3/5/1997	4	0.061	88.16	0.06
1051	4/11/1956	2	0.06	88.25	0.06
1052	5/4/1960	8	0.06	88.33	0.06
1053	10/16/1963	6	0.06	88.41	0.06
1054	6/9/1964	4	0.06	88.5	0.06
1055	7/8/1999	2	0.058	88.58	0.05
1057	10/28/1987	4	0.058	88.75	0.05
1057	10/26/1998	4	0.058	88.75	0.05
1059	9/19/1989	3	0.057	88.92	0.05
1059	4/23/2007	3	0.057	88.92	0.05
1060	11/5/1953	3	0.054	89	0.05
1061	5/26/1962	1	0.053	89.08	0.05
1062	3/12/1964	3	0.052	89.17	0.05
1063	12/2/1960	2	0.052	89.25	0.05
1064	12/19/1990	9	0.051	89.34	0.05
1065	2/9/1952	1	0.043	89.42	0.05
1066	4/21/1985	12	0.041	89.5	0.05
1067	2/6/2005	8	0.036	89.59	0.05
1068	12/14/1961	5	0.036	89.67	0.05
1069	1/23/1956	1	0.032	89.76	0.05
1070	4/28/1952	4	0.027	89.84	0.05
1071	10/23/1956	1	0.023	89.92	0.05
1072	4/30/1953	1	0.022	90.01	0.05
1073	12/17/1962	1	0.019	90.09	0.05
1094	12/11/1991	1	0.019	91.86	0.05
1094	1/21/2004	1	0.019	91.86	0.05
1094	1/28/2004	1	0.019	91.86	0.05
1094	1/24/2001	1	0.019	91.86	0.05
1094	12/23/2003	1	0.019	91.86	0.05
1094	12/31/1991	1	0.019	91.86	0.05
1094	12/11/2006	1	0.019	91.86	0.05

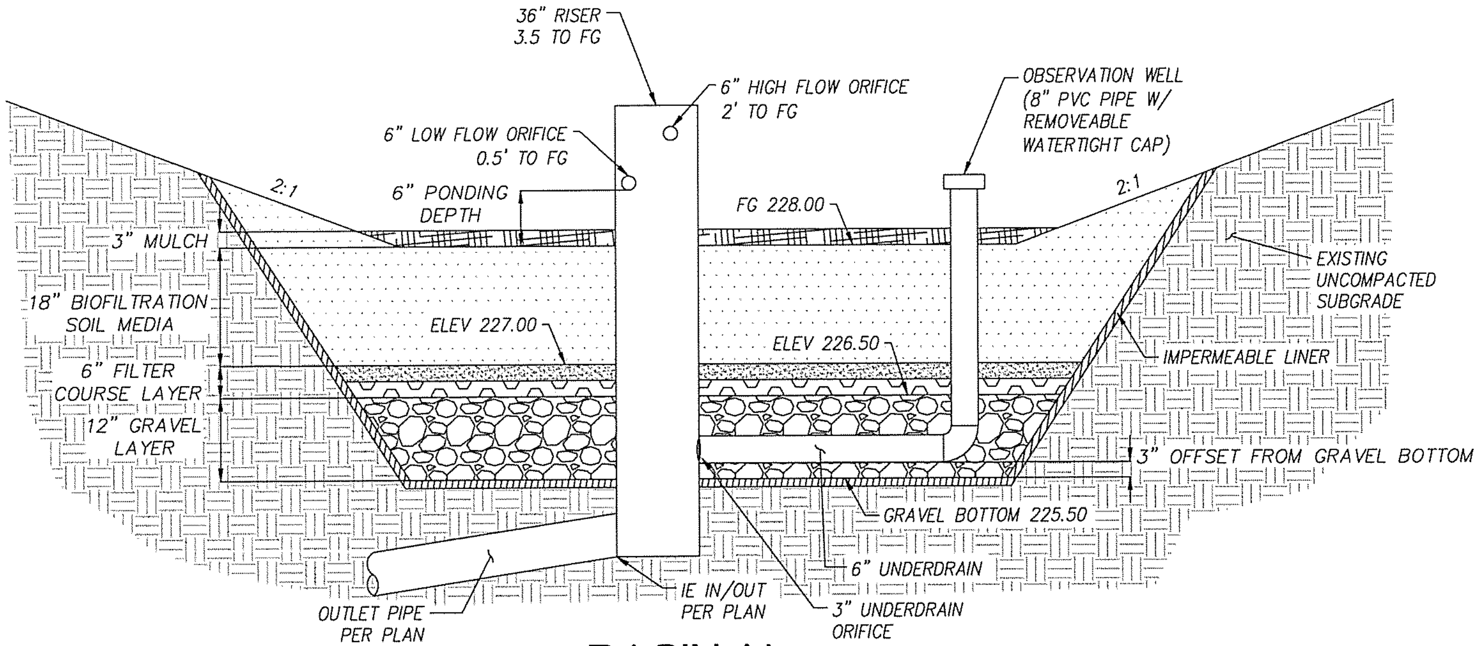
1094	12/31/1996	1	0.019	91.86	0.05
1094	12/19/1993	1	0.019	91.86	0.05
1094	12/7/1987	1	0.019	91.86	0.05
1094	1/18/1996	1	0.019	91.86	0.05
1094	12/20/2007	1	0.019	91.86	0.05
1094	1/8/1984	1	0.019	91.86	0.05
1094	1/30/1985	1	0.019	91.86	0.05
1094	12/3/2005	1	0.019	91.86	0.05
1094	1/4/1955	1	0.019	91.86	0.05
1094	1/15/2006	1	0.019	91.86	0.05
1094	1/19/1993	1	0.019	91.86	0.05
1094	12/7/2003	1	0.019	91.86	0.05
1094	1/28/2001	1	0.019	91.86	0.05
1094	1/19/1996	1	0.019	91.86	0.05
1115	11/19/1996	1	0.019	93.62	0.05
1115	3/1/2005	1	0.019	93.62	0.05
1115	11/26/1989	1	0.019	93.62	0.05
1115	11/3/1996	1	0.019	93.62	0.05
1115	2/28/1985	1	0.019	93.62	0.05
1115	2/15/1987	1	0.019	93.62	0.05
1115	2/14/2005	1	0.019	93.62	0.05
1115	2/20/2007	1	0.019	93.62	0.05
1115	11/22/1984	13	0.019	93.62	0.05
1115	11/1/2003	1	0.019	93.62	0.05
1115	11/21/1987	1	0.019	93.62	0.05
1115	2/28/1993	1	0.019	93.62	0.05
1115	11/28/1984	1	0.019	93.62	0.05
1115	2/9/1995	1	0.019	93.62	0.05
1115	11/11/1998	1	0.019	93.62	0.05
1115	11/10/2005	1	0.019	93.62	0.05
1115	11/18/1991	1	0.019	93.62	0.05
1115	11/11/1999	1	0.019	93.62	0.05
1115	2/8/1989	1	0.019	93.62	0.05
1115	11/18/1995	1	0.019	93.62	0.05
1115	11/14/1993	1	0.019	93.62	0.05
1116	3/7/1999	7	0.018	93.7	0.05
1134	3/20/1999	1	0.018	95.21	0.05
1134	3/24/2005	1	0.018	95.21	0.05
1134	3/11/2005	1	0.018	95.21	0.05
1134	3/16/2008	1	0.018	95.21	0.05
1134	3/6/1986	1	0.018	95.21	0.05
1134	3/12/1990	1	0.018	95.21	0.05
1134	3/21/1985	1	0.018	95.21	0.05
1134	3/26/2004	1	0.018	95.21	0.05
1134	3/9/1992	1	0.018	95.21	0.05
1134	3/1/2002	1	0.018	95.21	0.05
1134	3/15/2002	9	0.018	95.21	0.05
1134	3/31/2006	25	0.018	95.21	0.05
1134	3/31/1984	1	0.018	95.21	0.05
1134	3/20/1996	1	0.018	95.21	0.05
1134	3/5/1991	1	0.018	95.21	0.05
1134	3/27/2007	1	0.018	95.21	0.05
1134	3/11/1991	1	0.018	95.21	0.05
1134	3/4/1999	1	0.018	95.21	0.05
1146	10/3/1951	1	0.018	96.22	0.05
1146	10/19/1984	1	0.018	96.22	0.05
1146	10/12/1984	1	0.018	96.22	0.05
1146	10/4/2000	1	0.018	96.22	0.05
1146	10/17/1993	1	0.018	96.22	0.05
1146	10/16/1993	1	0.018	96.22	0.05
1146	10/13/1992	1	0.018	96.22	0.05
1146	10/31/2000	1	0.018	96.22	0.05
1146	10/1/1995	1	0.018	96.22	0.05
1146	10/16/1994	1	0.018	96.22	0.05
1146	10/5/1996	1	0.018	96.22	0.05
1146	10/4/1999	1	0.018	96.22	0.05
1164	4/3/1999	6	0.017	97.73	0.05
1164	4/28/1999	1	0.017	97.73	0.05

1164	4/22/2000	1	0.017	97.73	0.05
1164	9/26/1998	1	0.017	97.73	0.05
1164	4/1/1994	1	0.017	97.73	0.05
1164	4/1/1996	1	0.017	97.73	0.05
1164	4/21/1995	1	0.017	97.73	0.05
1164	9/3/1998	10	0.017	97.73	0.05
1164	9/20/2007	1	0.017	97.73	0.05
1164	9/28/2007	1	0.017	97.73	0.05
1164	4/10/1985	1	0.017	97.73	0.05
1164	4/3/2004	1	0.017	97.73	0.05
1164	9/23/1987	1	0.017	97.73	0.05
1164	9/18/1985	1	0.017	97.73	0.05
1164	4/21/1953	1	0.017	97.73	0.05
1164	4/1/1986	1	0.017	97.73	0.05
1164	4/18/1988	1	0.017	97.73	0.05
1164	4/23/2006	1	0.017	97.73	0.05
1178	5/29/1988	1	0.017	98.91	0.05
1178	5/14/1995	1	0.017	98.91	0.05
1178	5/23/1995	1	0.017	98.91	0.05
1178	5/5/2005	1	0.017	98.91	0.05
1178	5/29/1994	1	0.017	98.91	0.05
1178	5/7/1994	1	0.017	98.91	0.05
1178	5/15/1989	1	0.017	98.91	0.05
1178	5/3/1999	1	0.017	98.91	0.05
1178	5/31/2001	1	0.017	98.91	0.05
1178	5/16/2000	1	0.017	98.91	0.05
1178	5/8/2000	22	0.017	98.91	0.05
1178	5/25/2000	1	0.017	98.91	0.05
1178	5/27/2006	1	0.017	98.91	0.05
1178	5/9/1992	1	0.017	98.91	0.05
1181	8/15/1990	1	0.016	99.16	0.05
1181	8/10/2000	1	0.016	99.16	0.05
1181	8/14/1987	1	0.016	99.16	0.05
1189	7/10/1992	23	0.016	99.83	0.05
1189	7/12/1992	1	0.016	99.83	0.05
1189	6/1/1995	1	0.016	99.83	0.05
1189	6/13/1997	1	0.016	99.83	0.05
1189	7/23/2004	1	0.016	99.83	0.05
1189	6/5/1984	24	0.016	99.83	0.05
1189	7/17/1987	1	0.016	99.83	0.05
1189	6/3/1999	1	0.016	99.83	0.05
1190	6/11/1998	1	0.016	99.92	0.05
1192	12/9/1963	1	0.008	99.75	0.05
1192	12/10/1961	1	0.008	99.75	0.05
1193	11/30/2001	1	0.007	99.83	0.05
1194	2/25/1956	1	0.007	99.92	0.05
1195	5/28/1953	1	0.003	99.01	0.05
1196	5/25/1955	1	0.003	99.09	0.05
1198	6/9/1954	1	0.003	99.25	0.05
1198	7/20/1960	1	0.003	99.25	0.05
1200	12/8/1952	2	0.002	99.42	0.05
1200	1/21/1952	2	0.002	99.42	0.05
1201	12/7/1955	3	0.002	99.5	0.05
1202	12/10/1999	1	0.002	99.59	0.05
1203	1/16/2000	1	0.002	99.67	0.05
1206	11/12/1951	1	0.002	99.92	0.05
1206	11/5/1957	1	0.002	99.92	0.05
1206	2/13/1958	1	0.002	99.92	0.05

6

Attachment 6

Basin Cross Sections



BASIN 1A BIOFILTRATION

NTS

SCALE:	1"=60'
JOB #:	4192.00
CREATED:	12/12/18

PREPARED BY:

PROJECT DESIGN CONSULTANTS
Planning | Landscape Architecture | Engineering | Survey

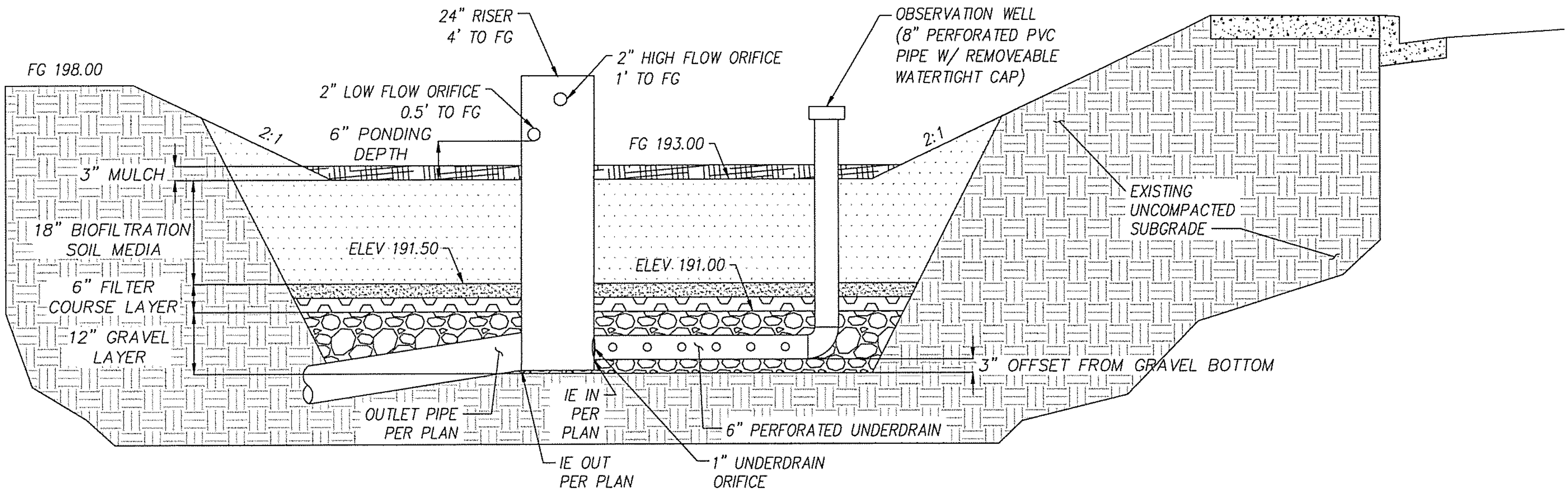
701 B Street, Suite 800
San Diego, CA 92101
619.235.6471 Tel
619.234.0349 Fax

COUNTY OF SAN DIEGO

OCEAN BREEZE RANCH

BASIN CROSS SECTIONS
EXHIBIT (1 OF 13)

N



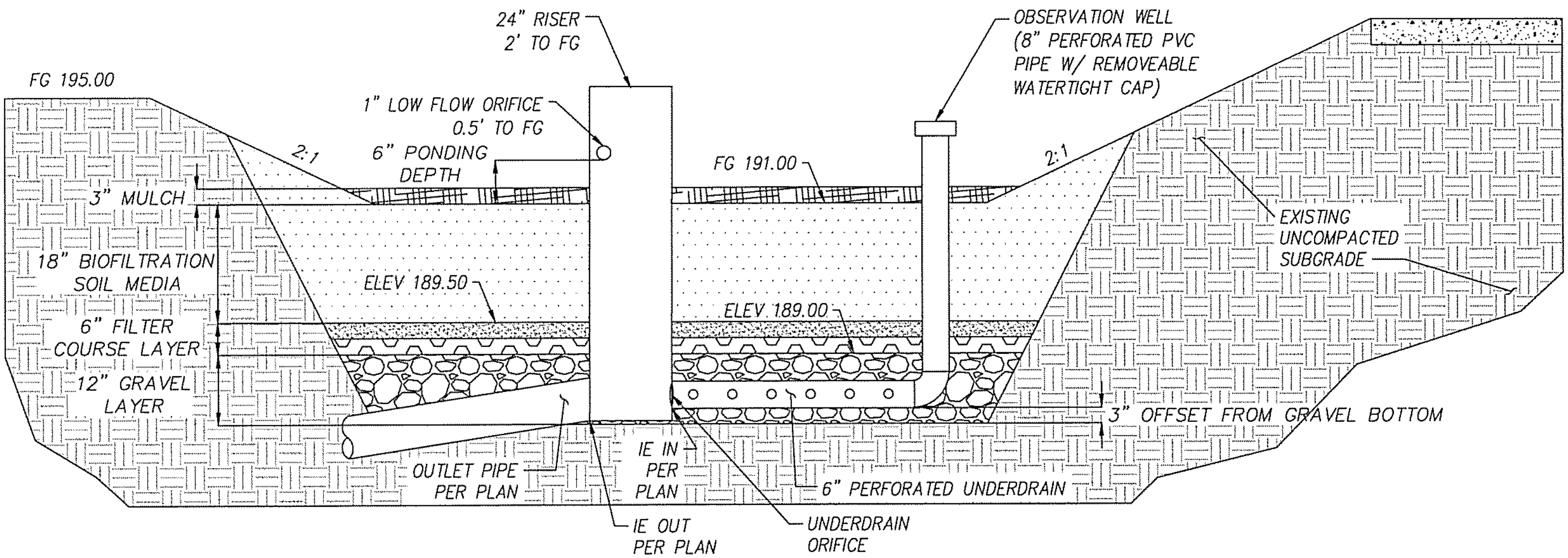
BASIN 2B

BIOFILTRATION WITH PARTIAL INFILTRATION

NTS

SCALE: 1"=60'	PREPARED BY:		COUNTY OF SAN DIEGO
JOB #: 4192.00	PROJECT DESIGN CONSULTANTS Planning | Landscape Architecture | Engineering | Survey	701 B Street, Suite 800 San Diego, CA 92101 619.235.6471 Tel 619.234.0349 Fax	OCEAN BREEZE RANCH
CREATED: 12/12/18			BASIN CROSS SECTIONS EXHIBIT (2 OF 13)

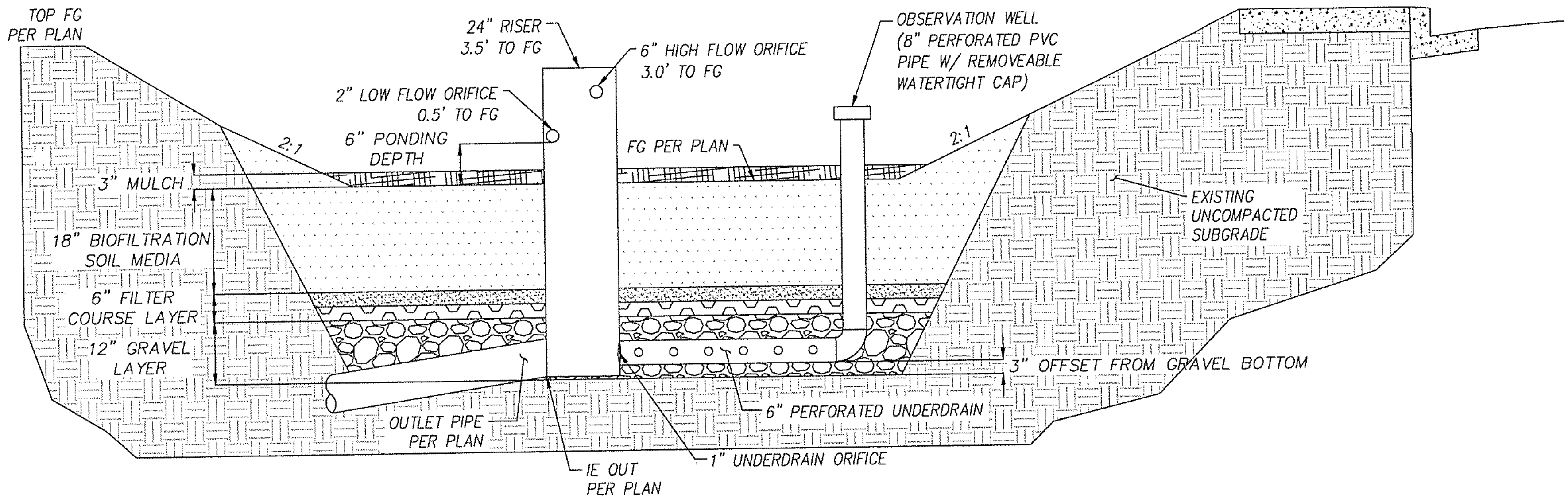
N



BASIN 2H

BIOFILTRATION WITH PARTIAL INFILTRATION

SCALE:	1"=60'	PREPARED BY:	COUNTY OF SAN DIEGO
JOB #:	4192.00	PROJECT DESIGN CONSULTANTS Planning | Landscape Architecture | Engineering | Survey 701 B Street, Suite 800 San Diego, CA 92101 619.235.6471 Tel 619.234.0349 Fax	OCEAN BREEZE RANCH
CREATED:	12/12/18		BASIN CROSS SECTIONS EXHIBIT (3 OF 13)



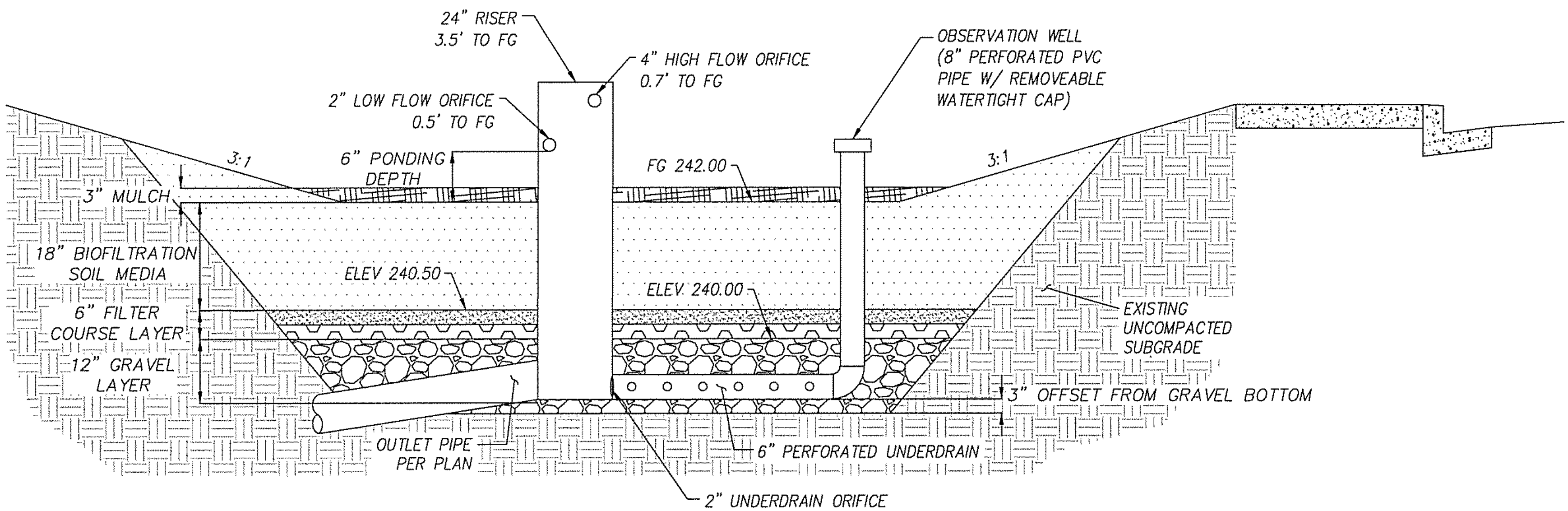
BASIN 3A

BIOFILTRATION WITH PARTIAL INFILTRATION

NTS

SCALE: 1"=60'	PREPARED BY:		COUNTY OF SAN DIEGO
JOB #: 4192.00	PROJECT DESIGN CONSULTANTS Planning | Landscape Architecture | Engineering | Survey	701 B Street, Suite 800 San Diego, CA 92101 619.235.6471 Tel 619.234.0349 Fax	OCEAN BREEZE RANCH
CREATED: 12/12/18			BASIN CROSS SECTIONS EXHIBIT (4 OF 13)

N



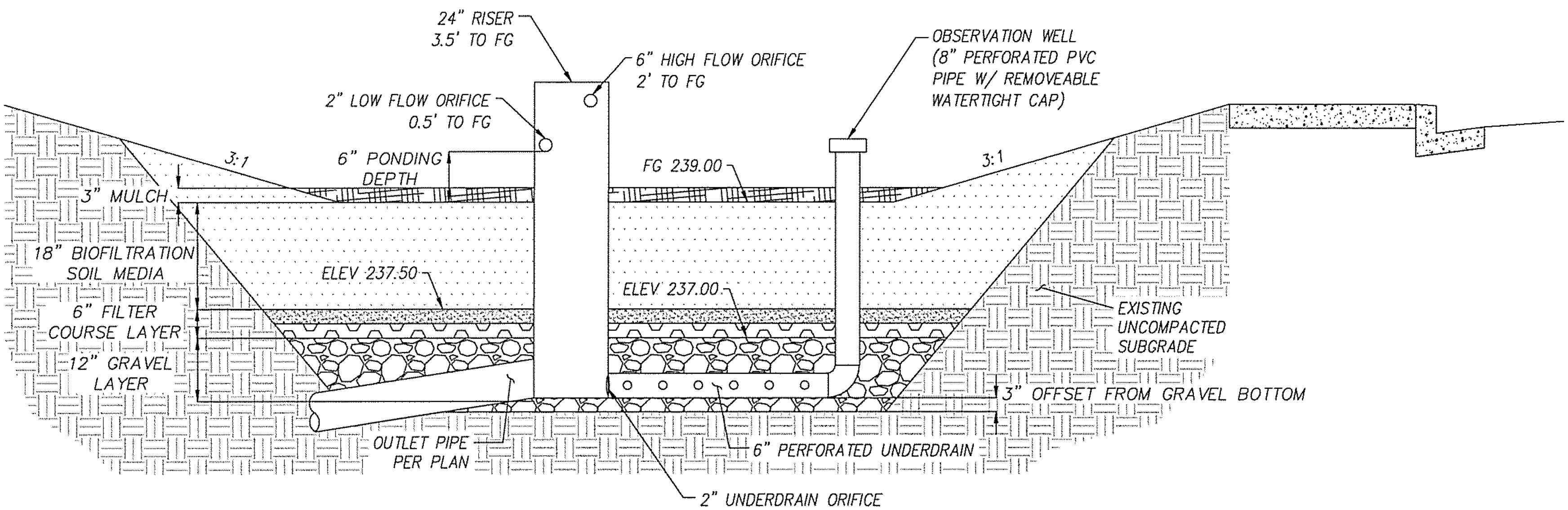
BASIN 3B

BIOFILTRATION WITH PARTIAL INFILTRATION

NTS

SCALE:	1"=60'	PREPARED BY:	COUNTY OF SAN DIEGO
JOB #:	4192.00	PROJECT DESIGN CONSULTANTS Planning | Landscape Architecture | Engineering | Survey 701 B Street, Suite 800 San Diego, CA 92101 619.235.6471 Tel 619.234.0349 Fax	OCEAN BREEZE RANCH
CREATED:	12/12/18		BASIN CROSS SECTIONS EXHIBIT (5 OF 13)

N



BASIN 3C
BIOFILTRATION WITH PARTIAL INFILTRATION

NTS

SCALE:	1"=60'
JOB #:	4192.00
CREATED:	12/12/18

PREPARED BY:

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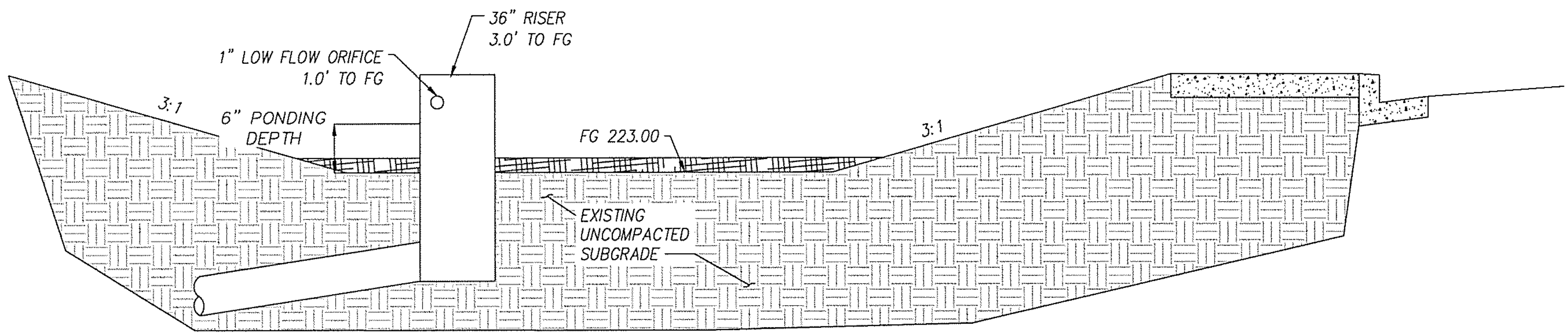
701 B Street, Suite 800
San Diego, CA 92101
619.235.6471 Tel
619.234.0349 Fax

COUNTY OF SAN DIEGO

OCEAN BREEZE RANCH

BASIN CROSS SECTIONS
EXHIBIT (6 OF 13)



BASIN 3D INFILTRATION

NTS

SCALE:	1"=60'
JOB #:	4192.00
CREATED:	12/12/18

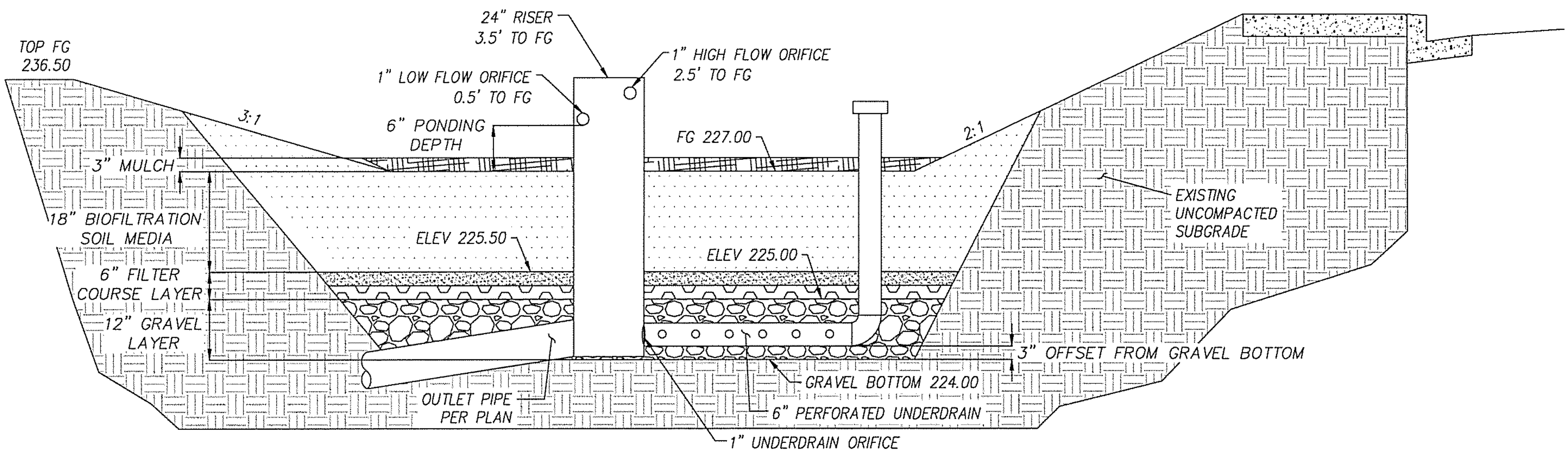
PREPARED BY:

PROJECT DESIGN CONSULTANTS
Planning | Landscape Architecture | Engineering | Survey
701 B Street, Suite 800
San Diego, CA 92101
619.235.6471 Tel
619.234.0349 Fax

COUNTY OF SAN DIEGO

OCEAN BREEZE RANCH

BASIN CROSS SECTIONS
EXHIBIT (7 OF 13)

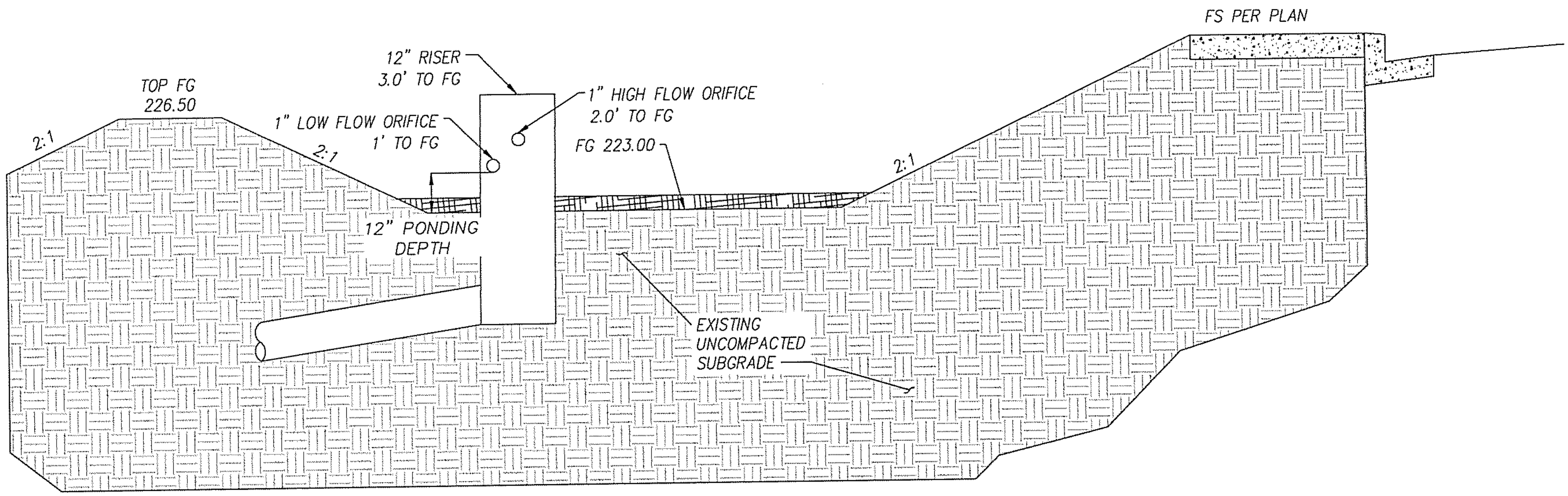


BASIN 3E
BIOFILTRATION WITH PARTIAL INFILTRATION

NTS

SCALE:	1"=60'	PREPARED BY:	COUNTY OF SAN DIEGO
JOB #:	4192.00	PROJECT DESIGN CONSULTANTS Planning I Landscape Architecture I Engineering I Survey 701 B Street, Suite 800 San Diego, CA 92101 619.235.6471 Tel 619.234.0349 Fax	OCEAN BREEZE RANCH
CREATED:	12/12/18		BASIN CROSS SECTIONS EXHIBIT (8 OF 13)

N



BASIN 3F
INFILTRATION WITH PRETREATMENT

NTS

SCALE:	1"=60'
JOB #:	4192.00
CREATED:	12/12/18

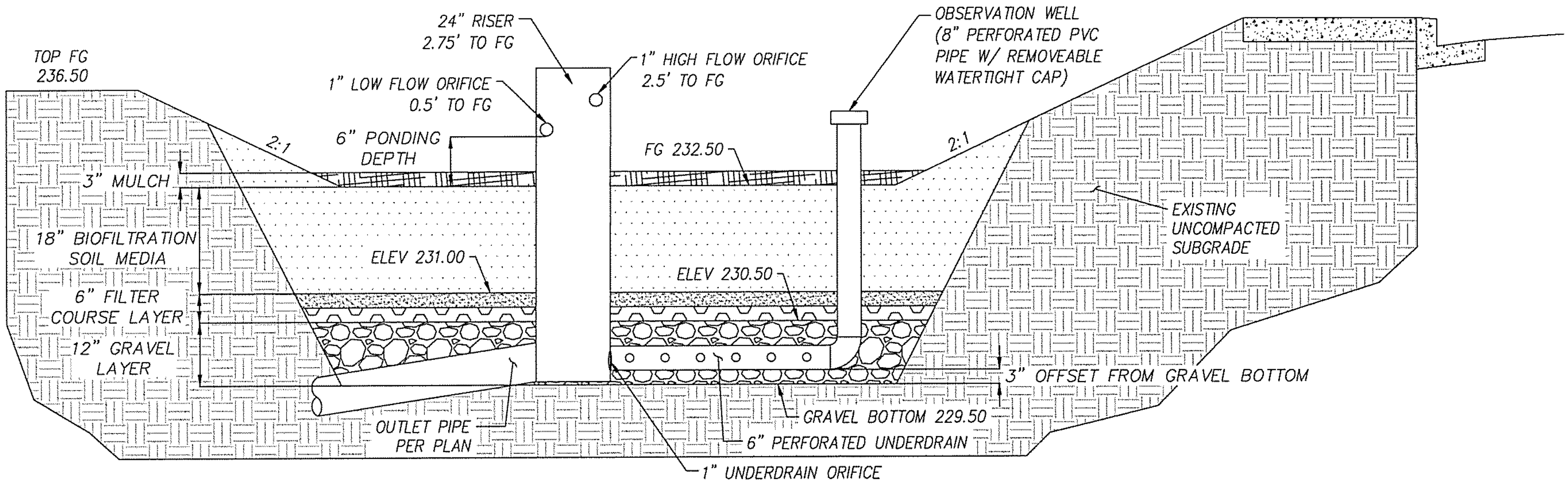
PREPARED BY:

PROJECT DESIGN CONSULTANTS
Planning | Landscape Architecture | Engineering | Survey

701 B Street, Suite 800
San Diego, CA 92101
619.235.6471 Tel
619.234.0349 Fax

COUNTY OF SAN DIEGO
OCEAN BREEZE RANCH

BASIN CROSS SECTIONS
EXHIBIT (9 OF 13)



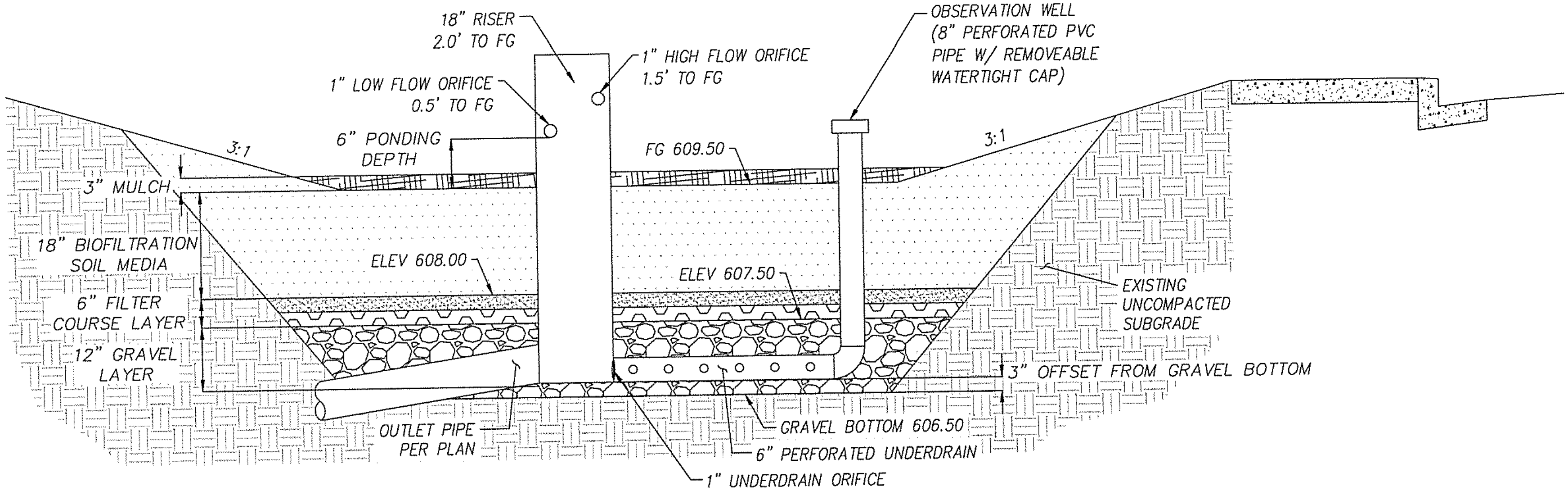
BASIN 3G

BIOFILTRATION WITH PARTIAL INFILTRATION AND PRETREATMENT

NTS

SCALE: 1"=60'	PREPARED BY:		COUNTY OF SAN DIEGO
JOB #: 4192.00	PROJECT DESIGN CONSULTANTS Planning | Landscape Architecture | Engineering | Survey	701 B Street, Suite 800 San Diego, CA 92101 619.235.6471 Tel 619.234.0349 Fax	OCEAN BREEZE RANCH
CREATED: 12/12/18			BASIN CROSS SECTIONS EXHIBIT (10 OF 13)

N



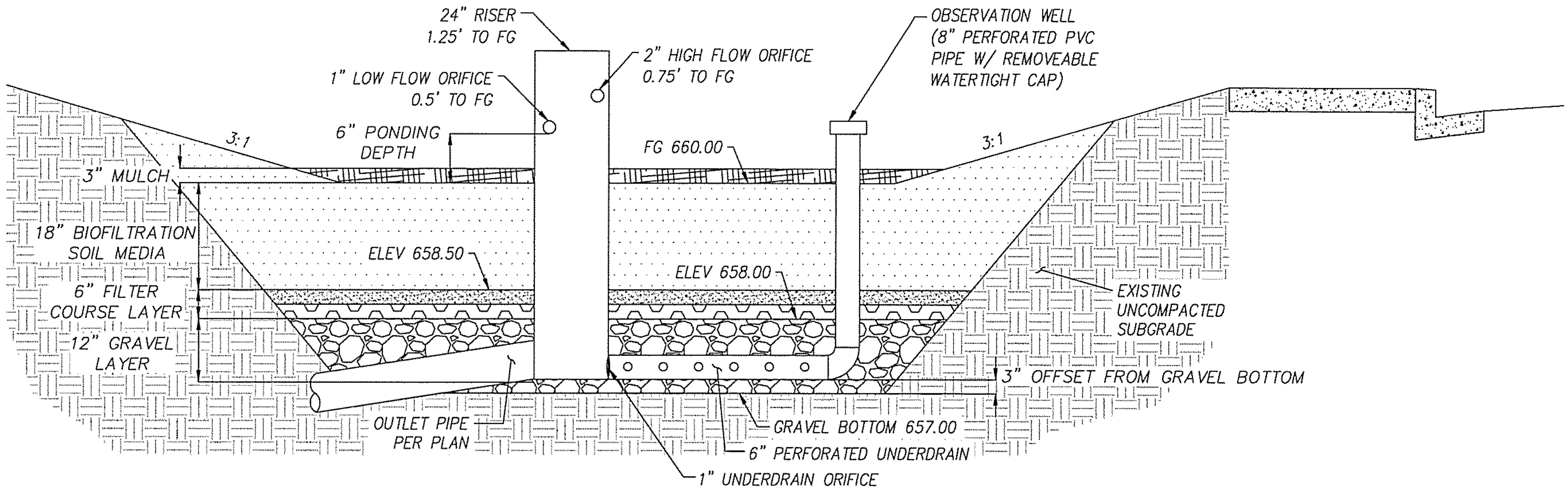
BASIN 3H

BIOFILTRATION WITH PARTIAL INFILTRATION AND PRETREATMENT

NTS

SCALE: 1"=60'	PREPARED BY:		COUNTY OF SAN DIEGO
JOB #: 4192.00	PROJECT DESIGN CONSULTANTS Planning I Landscape Architecture I Engineering I Survey	701 B Street, Suite 800 San Diego, CA 92101 619.235.6471 Tel 619.234.0349 Fax	OCEAN BREEZE RANCH
CREATED: 12/12/18			BASIN CROSS SECTIONS EXHIBIT (11 OF 13)

N

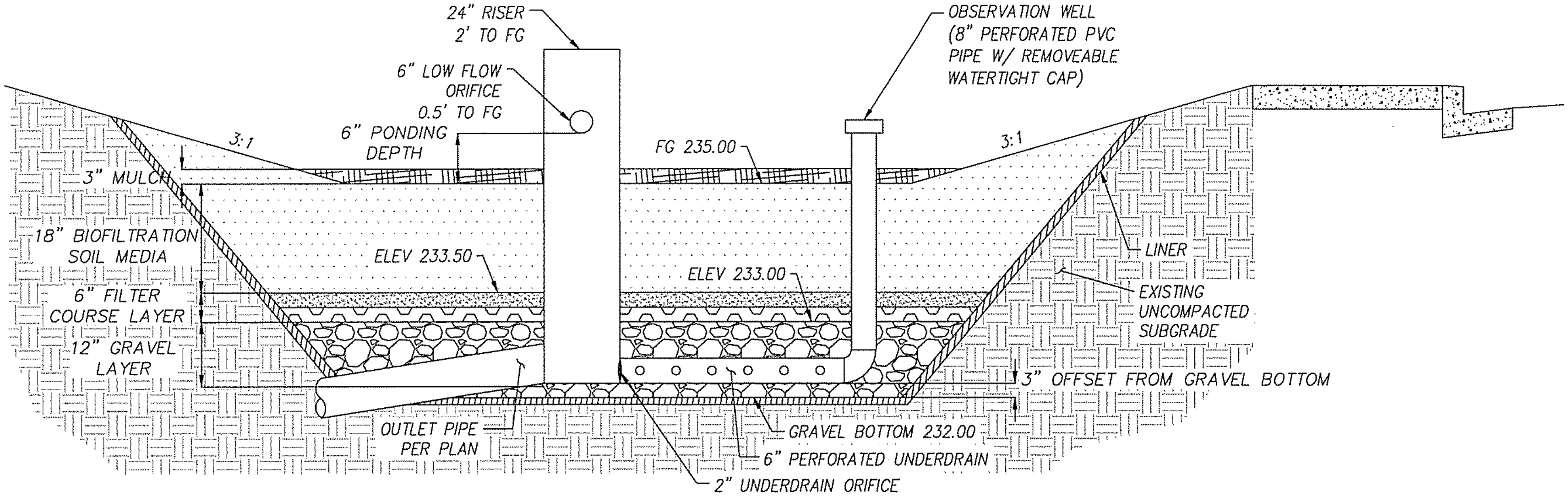


BASIN 3I
BIOFILTRATION WITH PARTIAL INFILTRATION

NTS

SCALE:	1"=60'	PREPARED BY:	COUNTY OF SAN DIEGO
JOB #:	4192.00	PROJECT DESIGN CONSULTANTS Planning | Landscape Architecture | Engineering | Survey 701 B Street, Suite 800 San Diego, CA 92101 619.235.6471 Tel 619.234.0349 Fax	OCEAN BREEZE RANCH
CREATED:	12/12/18		BASIN CROSS SECTIONS EXHIBIT (12 OF 13)

N

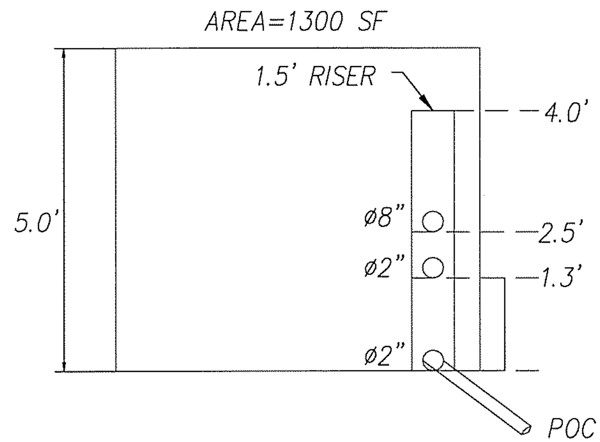


BASIN 3J BIOFILTRATION

NTS

SCALE: 1"=60'	PREPARED BY: PROJECT DESIGN CONSULTANTS Planning | Landscape Architecture | Engineering | Survey	701 B Street, Suite 800 San Diego, CA 92101 619.235.6471 Tel 619.234.0349 Fax	COUNTY OF SAN DIEGO
JOB #: 4192.00			OCEAN BREEZE RANCH
CREATED: 12/12/18			BASIN CROSS SECTIONS EXHIBIT (13 OF 13)

N



HYDROMOD VAULT DETAIL

SCALE: NTS

SCALE:	1"=60'
JOB #:	4192.00
CREATED:	12/12/18

PREPARED BY:

PROJECT DESIGN CONSULTANTS
Planning | Landscape Architecture | Engineering | Survey
701 B Street, Suite 800
San Diego, CA 92101
619.235.6471 Tel
619.234.0349 Fax

COUNTY OF SAN DIEGO

OCEAN BREEZE RANCH

HYDROMOD VAULT DETAIL

N

P:\4192\Engr\Reports\Hydromod\EXH\4192 Hydromod Basin XS.dwg 7/30/2019 4:59:50 PM

7

Attachment 7

Orifice Configurations

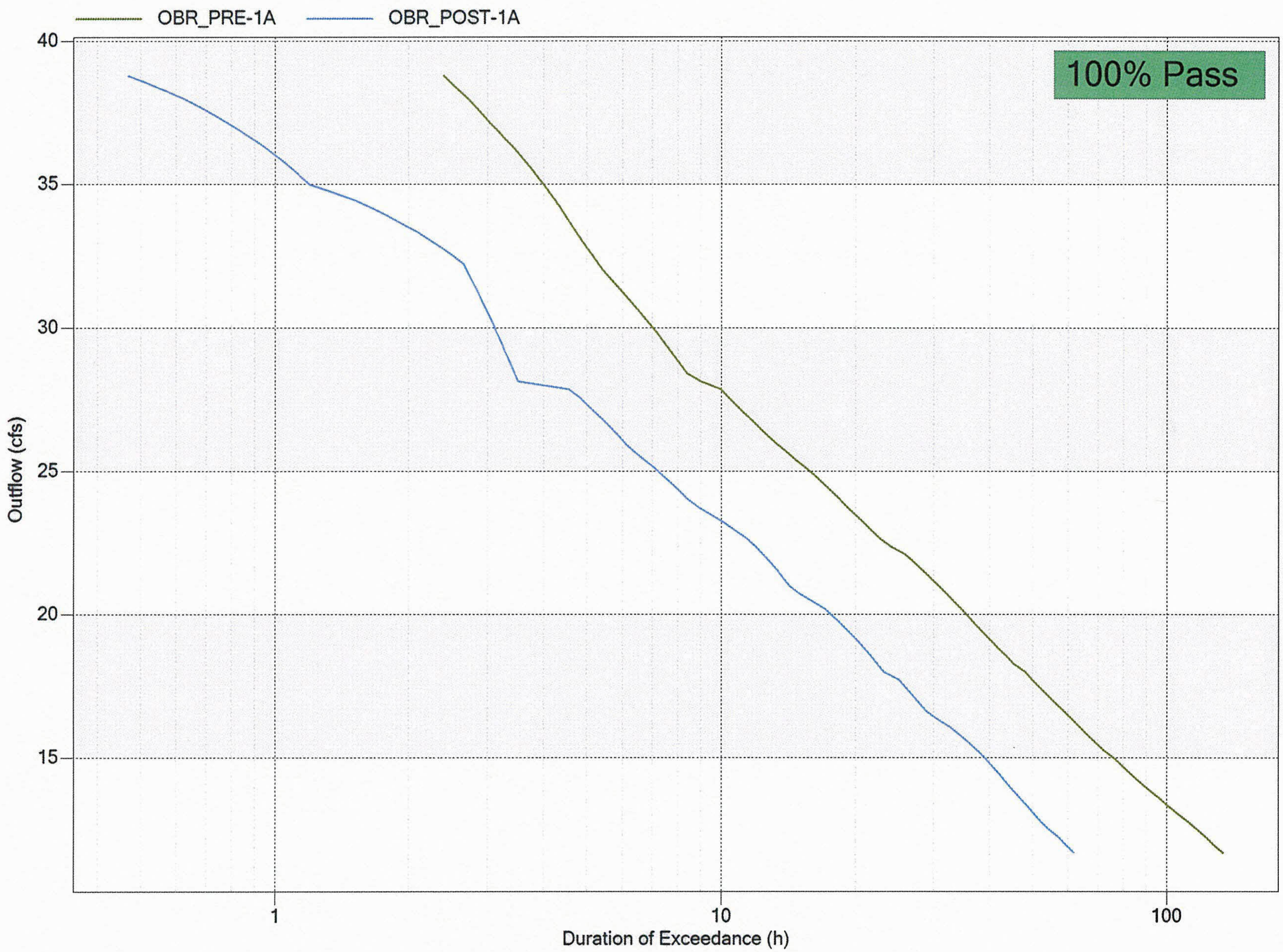
Inlet	Orifice	Type	Diameter (ft)	Inlet Offset (ft)
S1A	OR1	BOTTOM	3	3
S1A	OR8	SIDE	0.5	0
S1A	OR44	SIDE	0.5	1.5
S2B	OR1	BOTTOM	2	3.5
S2B	OR2	SIDE	0.17	0
S2B	OR12	SIDE	0.17	1.5
S2H	OR1	BOTTOM	2	2
S2H	OR2	SIDE	0.083	0
S3A	OR1	BOTTOM	2	3.0
S3A	OR14	SIDE	0.33	0
S3A	OR45	SIDE	0.5	2.5
S3B	OR1	BOTTOM	2	3.5
S3B	OR2	SIDE	0.17	0
S3B	OR16	SIDE	0.33	0.7
S3C	OR1	BOTTOM	2	3
S3C	OR18	SIDE	0.17	0
S3C	OR46	SIDE	1	2
S3D	OR1	BOTTOM	3	3.0
S3D	OR20	SIDE	0.75	1
S3E	OR1	BOTTOM	2	3
S3E	OR2	SIDE	0.083	0
S3E	OR24	SIDE	0.083	2
S3F	OR3	BOTTOM	2	3.8
S3F	OR2	SIDE	0.083	3.1
S3F	OR4	SIDE	0.083	3.1
S3F	OR5	SIDE	0.083	0.5

Inlet	Orifice	Type	Diameter (ft)	Inlet Offset (ft)
S3G	OR4	BOTTOM	2	2.25
S3G	OR1	SIDE	0.083	0
S3G	OR2	SIDE	0.083	2
S3H	OR1	BOTTOM	1	2
S3H	OR2	SIDE	0.083	0
S3H	OR14	SIDE	0.083	1
S3I	OR1	BOTTOM	2	1.25
S3I	OR2	SIDE	0.083	0.5
S3I	OR3	SIDE	0.167	0.75
S3J	OR1	BOTTOM	2	2
S3J	OR2	SIDE	0.5	0.5
SVAULT	OR3	BOTTOM	1.5	4.0
SVAULT	OR1	SIDE	0.583	2.5
SVAULT	OR2	SIDE	0.167	0
SVAULT	OR4	SIDE	0.25	1.2

8

Attachment 8

Flow Duration Curves


OBR_PRE-1A
OBR_POST-1A
100% Pass
Outflow (cfs)
40
35
30
25
20
15
1
10
100
Duration of Exceedance (h)

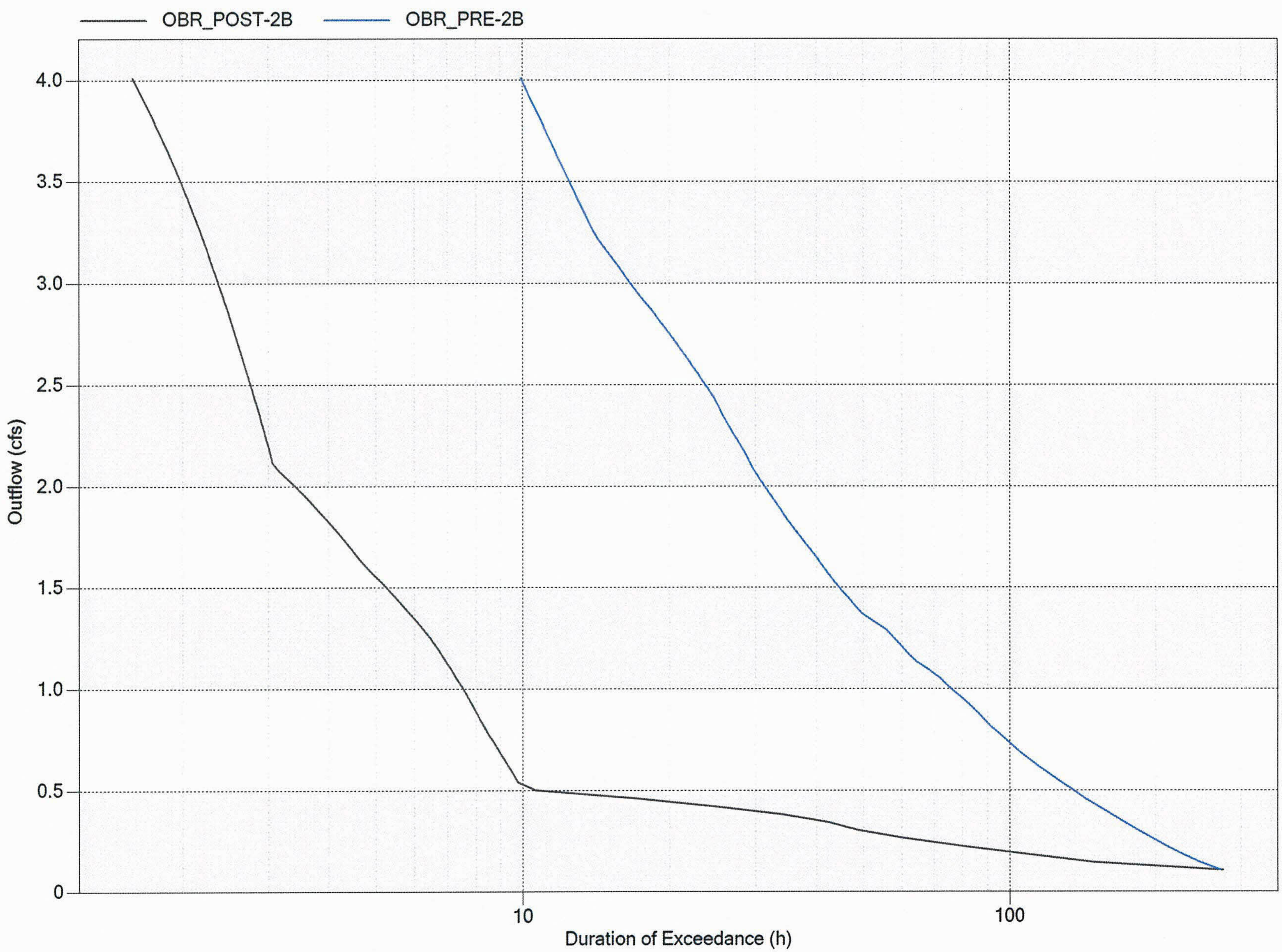
BASIN 1A

Lower Flow Threshold:	10%	
0.1xQ2 (Pre):	11.700	cfs
Q10 (Pre):	38.795	cfs
# of Ordinates:	100	
Incremental Q (Pre):	0.27095	cfs
Total Hourly Data:	498244	hours

The proposed BMP: PASSED

Interval	Pre-project Flow (cfs)	Pre-project Hours	Pre-project % Time Exceeding	Post-project Hours	Post-project % Time Exceeding	Percentage	Pass/Fail
0	11.700	147	2.95E-04	63	1.26E-04	43%	Pass
1	11.971	140	2.81E-04	62	1.24E-04	44%	Pass
2	12.242	139	2.79E-04	61	1.22E-04	44%	Pass
3	12.513	134	2.69E-04	57	1.14E-04	43%	Pass
4	12.784	132	2.65E-04	52	1.04E-04	39%	Pass
5	13.055	129	2.59E-04	51	1.02E-04	40%	Pass
6	13.326	122	2.45E-04	47	9.43E-05	39%	Pass
7	13.597	121	2.43E-04	46	9.23E-05	38%	Pass
8	13.868	116	2.33E-04	46	9.23E-05	40%	Pass
9	14.139	109	2.19E-04	44	8.83E-05	40%	Pass
10	14.409	107	2.15E-04	44	8.83E-05	41%	Pass
11	14.680	102	2.05E-04	44	8.83E-05	43%	Pass
12	14.951	101	2.03E-04	41	8.23E-05	41%	Pass
13	15.222	94	1.89E-04	40	8.03E-05	43%	Pass
14	15.493	91	1.83E-04	39	7.83E-05	43%	Pass
15	15.764	89	1.79E-04	39	7.83E-05	44%	Pass
16	16.035	87	1.75E-04	39	7.83E-05	45%	Pass
17	16.306	86	1.73E-04	36	7.23E-05	42%	Pass
18	16.577	83	1.67E-04	33	6.62E-05	40%	Pass
19	16.848	80	1.61E-04	32	6.42E-05	40%	Pass
20	17.119	77	1.55E-04	31	6.22E-05	40%	Pass
21	17.390	76	1.53E-04	31	6.22E-05	41%	Pass
22	17.661	71	1.43E-04	30	6.02E-05	42%	Pass
23	17.932	68	1.36E-04	26	5.22E-05	38%	Pass
24	18.203	65	1.30E-04	22	4.42E-05	34%	Pass
25	18.474	62	1.24E-04	22	4.42E-05	35%	Pass
26	18.745	61	1.22E-04	21	4.21E-05	34%	Pass
27	19.016	58	1.16E-04	19	3.81E-05	33%	Pass
28	19.286	56	1.12E-04	19	3.81E-05	34%	Pass
29	19.557	53	1.06E-04	19	3.81E-05	36%	Pass
30	19.828	52	1.04E-04	19	3.81E-05	37%	Pass
31	20.099	50	1.00E-04	16	3.21E-05	32%	Pass
32	20.370	50	1.00E-04	16	3.21E-05	32%	Pass
33	20.641	47	9.43E-05	16	3.21E-05	34%	Pass
34	20.912	45	9.03E-05	15	3.01E-05	33%	Pass
35	21.183	45	9.03E-05	14	2.81E-05	31%	Pass
36	21.454	44	8.83E-05	14	2.81E-05	32%	Pass
37	21.725	44	8.83E-05	14	2.81E-05	32%	Pass
38	21.996	41	8.23E-05	13	2.61E-05	32%	Pass
39	22.267	39	7.83E-05	13	2.61E-05	33%	Pass
40	22.538	37	7.43E-05	13	2.61E-05	35%	Pass
41	22.809	36	7.23E-05	12	2.41E-05	33%	Pass
42	23.080	35	7.02E-05	12	2.41E-05	34%	Pass
43	23.351	35	7.02E-05	12	2.41E-05	34%	Pass
44	23.622	33	6.62E-05	11	2.21E-05	33%	Pass
45	23.893	30	6.02E-05	10	2.01E-05	33%	Pass
46	24.163	30	6.02E-05	10	2.01E-05	33%	Pass
47	24.434	29	5.82E-05	10	2.01E-05	34%	Pass
48	24.705	29	5.82E-05	10	2.01E-05	34%	Pass
49	24.976	29	5.82E-05	10	2.01E-05	34%	Pass
50	25.247	29	5.82E-05	10	2.01E-05	34%	Pass
51	25.518	26	5.22E-05	8	1.61E-05	31%	Pass
52	25.789	26	5.22E-05	8	1.61E-05	31%	Pass
53	26.060	24	4.82E-05	7	1.40E-05	29%	Pass

54	26.331	22	4.42E-05	7	1.40E-05	32%	Pass
55	26.602	21	4.21E-05	7	1.40E-05	33%	Pass
56	26.873	21	4.21E-05	7	1.40E-05	33%	Pass
57	27.144	19	3.81E-05	6	1.20E-05	32%	Pass
58	27.415	19	3.81E-05	6	1.20E-05	32%	Pass
59	27.686	18	3.61E-05	6	1.20E-05	33%	Pass
60	27.957	16	3.21E-05	5	1.00E-05	31%	Pass
61	28.228	14	2.81E-05	4	8.03E-06	29%	Pass
62	28.499	13	2.61E-05	4	8.03E-06	31%	Pass
63	28.770	13	2.61E-05	4	8.03E-06	31%	Pass
64	29.041	12	2.41E-05	4	8.03E-06	33%	Pass
65	29.311	12	2.41E-05	4	8.03E-06	33%	Pass
66	29.582	12	2.41E-05	4	8.03E-06	33%	Pass
67	29.853	12	2.41E-05	4	8.03E-06	33%	Pass
68	30.124	12	2.41E-05	4	8.03E-06	33%	Pass
69	30.395	12	2.41E-05	4	8.03E-06	33%	Pass
70	30.666	12	2.41E-05	4	8.03E-06	33%	Pass
71	30.937	12	2.41E-05	4	8.03E-06	33%	Pass
72	31.208	11	2.21E-05	4	8.03E-06	36%	Pass
73	31.479	11	2.21E-05	4	8.03E-06	36%	Pass
74	31.750	11	2.21E-05	4	8.03E-06	36%	Pass
75	32.021	9	1.81E-05	4	8.03E-06	44%	Pass
76	32.292	9	1.81E-05	3	6.02E-06	33%	Pass
77	32.563	9	1.81E-05	3	6.02E-06	33%	Pass
78	32.834	8	1.61E-05	3	6.02E-06	38%	Pass
79	33.105	8	1.61E-05	3	6.02E-06	38%	Pass
80	33.376	7	1.40E-05	3	6.02E-06	43%	Pass
81	33.647	7	1.40E-05	3	6.02E-06	43%	Pass
82	33.918	7	1.40E-05	3	6.02E-06	43%	Pass
83	34.188	7	1.40E-05	3	6.02E-06	43%	Pass
84	34.459	7	1.40E-05	2	4.01E-06	29%	Pass
85	34.730	7	1.40E-05	2	4.01E-06	29%	Pass
86	35.001	7	1.40E-05	1	2.01E-06	14%	Pass
87	35.272	7	1.40E-05	1	2.01E-06	14%	Pass
88	35.543	7	1.40E-05	1	2.01E-06	14%	Pass
89	35.814	7	1.40E-05	1	2.01E-06	14%	Pass
90	36.085	7	1.40E-05	1	2.01E-06	14%	Pass
91	36.356	7	1.40E-05	1	2.01E-06	14%	Pass
92	36.627	7	1.40E-05	1	2.01E-06	14%	Pass
93	36.898	7	1.40E-05	1	2.01E-06	14%	Pass
94	37.169	7	1.40E-05	1	2.01E-06	14%	Pass
95	37.440	6	1.20E-05	1	2.01E-06	17%	Pass
96	37.711	6	1.20E-05	1	2.01E-06	17%	Pass
97	37.982	6	1.20E-05	1	2.01E-06	17%	Pass
98	38.253	6	1.20E-05	1	2.01E-06	17%	Pass
99	38.524	6	1.20E-05	1	2.01E-06	17%	Pass
100	38.795	5	1.00E-05	1	2.01E-06	20%	Pass



OBR_POST-2B
OBR_PRE-2B
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0
Outflow (cfs)
10
100
Duration of Exceedance (h)

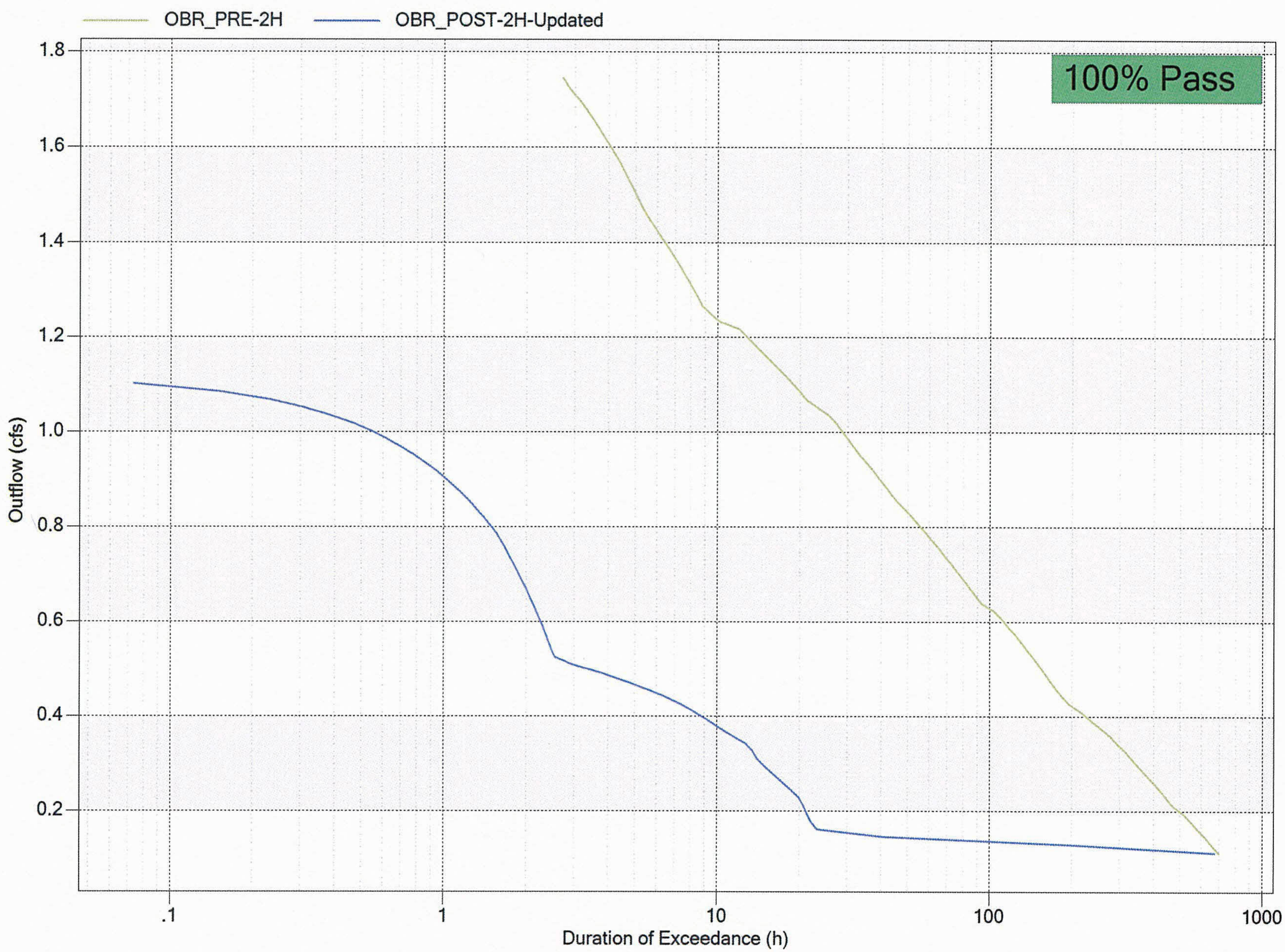
BASIN 2B

Lower Flow Threshold:	10%	
0.1xQ2 (Pre):	0.106	cfs
Q10 (Pre):	4.012	cfs
# of Ordinates:	100	
Incremental Q (Pre):	0.03907	cfs
Total Hourly Data:	498244	hours

The proposed BMP: PASSED

Interval	Pre-project Flow (cfs)	Pre-project Hours	Pre-project % Time Exceeding	Post-project Hours	Post-project % Time Exceeding	Percentage	Pass/Fail
0	0.106	248	4.98E-04	242	4.86E-04	98%	Pass
1	0.145	228	4.58E-04	226	4.54E-04	99%	Pass
2	0.184	209	4.19E-04	211	4.23E-04	101%	Pass
3	0.223	201	4.03E-04	193	3.87E-04	96%	Pass
4	0.262	188	3.77E-04	185	3.71E-04	98%	Pass
5	0.301	174	3.49E-04	168	3.37E-04	97%	Pass
6	0.340	171	3.43E-04	152	3.05E-04	89%	Pass
7	0.379	161	3.23E-04	148	2.97E-04	92%	Pass
8	0.418	152	3.05E-04	136	2.73E-04	89%	Pass
9	0.457	144	2.89E-04	124	2.49E-04	86%	Pass
10	0.496	135	2.71E-04	120	2.41E-04	89%	Pass
11	0.536	125	2.51E-04	117	2.35E-04	94%	Pass
12	0.575	121	2.43E-04	7	1.40E-05	6%	Pass
13	0.614	119	2.39E-04	7	1.40E-05	6%	Pass
14	0.653	109	2.19E-04	7	1.40E-05	6%	Pass
15	0.692	107	2.15E-04	7	1.40E-05	7%	Pass
16	0.731	102	2.05E-04	7	1.40E-05	7%	Pass
17	0.770	98	1.97E-04	7	1.40E-05	7%	Pass
18	0.809	95	1.91E-04	6	1.20E-05	6%	Pass
19	0.848	92	1.85E-04	6	1.20E-05	7%	Pass
20	0.887	89	1.79E-04	6	1.20E-05	7%	Pass
21	0.926	86	1.73E-04	6	1.20E-05	7%	Pass
22	0.965	85	1.71E-04	6	1.20E-05	7%	Pass
23	1.004	82	1.65E-04	6	1.20E-05	7%	Pass
24	1.043	80	1.61E-04	6	1.20E-05	8%	Pass
25	1.082	71	1.43E-04	6	1.20E-05	8%	Pass
26	1.122	68	1.36E-04	6	1.20E-05	9%	Pass
27	1.161	65	1.30E-04	6	1.20E-05	9%	Pass
28	1.200	60	1.20E-04	6	1.20E-05	10%	Pass
29	1.239	60	1.20E-04	6	1.20E-05	10%	Pass
30	1.278	60	1.20E-04	5	1.00E-05	8%	Pass
31	1.317	59	1.18E-04	5	1.00E-05	8%	Pass
32	1.356	56	1.12E-04	5	1.00E-05	9%	Pass
33	1.395	54	1.08E-04	5	1.00E-05	9%	Pass
34	1.434	51	1.02E-04	5	1.00E-05	10%	Pass
35	1.473	50	1.00E-04	5	1.00E-05	10%	Pass
36	1.512	47	9.43E-05	5	1.00E-05	11%	Pass
37	1.551	45	9.03E-05	5	1.00E-05	11%	Pass
38	1.590	44	8.83E-05	4	8.03E-06	9%	Pass
39	1.629	42	8.43E-05	4	8.03E-06	10%	Pass
40	1.668	39	7.83E-05	3	6.02E-06	8%	Pass
41	1.708	37	7.43E-05	3	6.02E-06	8%	Pass
42	1.747	37	7.43E-05	3	6.02E-06	8%	Pass
43	1.786	36	7.23E-05	3	6.02E-06	8%	Pass
44	1.825	35	7.02E-05	3	6.02E-06	9%	Pass
45	1.864	34	6.82E-05	3	6.02E-06	9%	Pass
46	1.903	34	6.82E-05	3	6.02E-06	9%	Pass
47	1.942	33	6.62E-05	3	6.02E-06	9%	Pass
48	1.981	33	6.62E-05	3	6.02E-06	9%	Pass
49	2.020	33	6.62E-05	3	6.02E-06	9%	Pass
50	2.059	33	6.62E-05	3	6.02E-06	9%	Pass
51	2.098	32	6.42E-05	3	6.02E-06	9%	Pass
52	2.137	29	5.82E-05	2	4.01E-06	7%	Pass
53	2.176	29	5.82E-05	2	4.01E-06	7%	Pass

54	2.215	29	5.82E-05	2	4.01E-06	7%	Pass
55	2.254	27	5.42E-05	2	4.01E-06	7%	Pass
56	2.293	26	5.22E-05	2	4.01E-06	8%	Pass
57	2.333	25	5.02E-05	2	4.01E-06	8%	Pass
58	2.372	25	5.02E-05	2	4.01E-06	8%	Pass
59	2.411	23	4.62E-05	2	4.01E-06	9%	Pass
60	2.450	23	4.62E-05	2	4.01E-06	9%	Pass
61	2.489	23	4.62E-05	2	4.01E-06	9%	Pass
62	2.528	23	4.62E-05	2	4.01E-06	9%	Pass
63	2.567	21	4.21E-05	2	4.01E-06	10%	Pass
64	2.606	21	4.21E-05	2	4.01E-06	10%	Pass
65	2.645	21	4.21E-05	2	4.01E-06	10%	Pass
66	2.684	21	4.21E-05	2	4.01E-06	10%	Pass
67	2.723	20	4.01E-05	2	4.01E-06	10%	Pass
68	2.762	20	4.01E-05	2	4.01E-06	10%	Pass
69	2.801	20	4.01E-05	2	4.01E-06	10%	Pass
70	2.840	19	3.81E-05	2	4.01E-06	11%	Pass
71	2.879	19	3.81E-05	2	4.01E-06	11%	Pass
72	2.919	19	3.81E-05	2	4.01E-06	11%	Pass
73	2.958	18	3.61E-05	2	4.01E-06	11%	Pass
74	2.997	18	3.61E-05	2	4.01E-06	11%	Pass
75	3.036	17	3.41E-05	2	4.01E-06	12%	Pass
76	3.075	17	3.41E-05	2	4.01E-06	12%	Pass
77	3.114	17	3.41E-05	2	4.01E-06	12%	Pass
78	3.153	17	3.41E-05	2	4.01E-06	12%	Pass
79	3.192	17	3.41E-05	2	4.01E-06	12%	Pass
80	3.231	16	3.21E-05	2	4.01E-06	13%	Pass
81	3.270	15	3.01E-05	2	4.01E-06	13%	Pass
82	3.309	15	3.01E-05	2	4.01E-06	13%	Pass
83	3.348	15	3.01E-05	2	4.01E-06	13%	Pass
84	3.387	15	3.01E-05	2	4.01E-06	13%	Pass
85	3.426	14	2.81E-05	2	4.01E-06	14%	Pass
86	3.465	14	2.81E-05	2	4.01E-06	14%	Pass
87	3.505	14	2.81E-05	2	4.01E-06	14%	Pass
88	3.544	14	2.81E-05	2	4.01E-06	14%	Pass
89	3.583	14	2.81E-05	2	4.01E-06	14%	Pass
90	3.622	13	2.61E-05	2	4.01E-06	15%	Pass
91	3.661	13	2.61E-05	2	4.01E-06	15%	Pass
92	3.700	13	2.61E-05	2	4.01E-06	15%	Pass
93	3.739	13	2.61E-05	2	4.01E-06	15%	Pass
94	3.778	13	2.61E-05	2	4.01E-06	15%	Pass
95	3.817	13	2.61E-05	2	4.01E-06	15%	Pass
96	3.856	13	2.61E-05	2	4.01E-06	15%	Pass
97	3.895	13	2.61E-05	2	4.01E-06	15%	Pass
98	3.934	12	2.41E-05	2	4.01E-06	17%	Pass
99	3.973	12	2.41E-05	2	4.01E-06	17%	Pass
100	4.012	12	2.41E-05	2	4.01E-06	17%	Pass


OBR_PRE-2H
OBR_POST-2H-Updated
100% Pass
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
Outflow (cfs)
.1
1
10
100
1000
Duration of Exceedance (h)

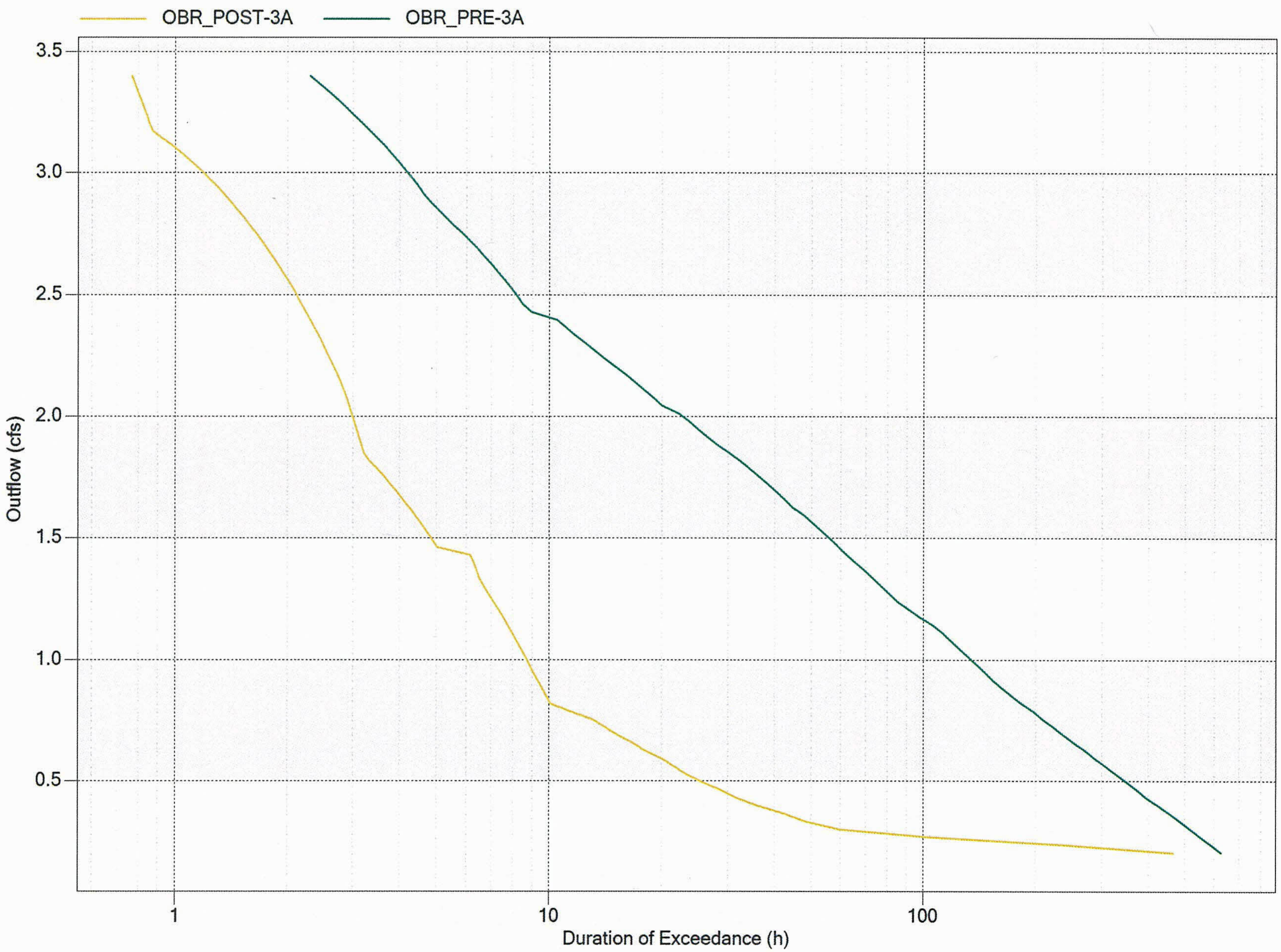
BASIN 2H

Lower Flow Threshold:	10%	
0.1xQ2 (Pre):	0.495	cfs
Q10 (Pre):	7.846	cfs
# of Ordinates:	100	
Incremental Q (Pre):	0.07351	cfs
Total Hourly Data:	498244	hours

The proposed BMP: PASSED

Interval	Pre-project Flow (cfs)	Pre-project Hours	Pre-project % Time Exceeding	Post-project Hours	Post-project % Time Exceeding	Percentage	Pass/Fail
0	0.495	560	1.12E-03	402	8.07E-04	72%	Pass
1	0.568	541	1.09E-03	365	7.33E-04	67%	Pass
2	0.642	519	1.04E-03	338	6.78E-04	65%	Pass
3	0.715	499	1.00E-03	313	6.28E-04	63%	Pass
4	0.789	462	9.27E-04	290	5.82E-04	63%	Pass
5	0.862	435	8.73E-04	266	5.34E-04	61%	Pass
6	0.936	414	8.31E-04	248	4.98E-04	60%	Pass
7	1.009	387	7.77E-04	237	4.76E-04	61%	Pass
8	1.083	369	7.41E-04	215	4.32E-04	58%	Pass
9	1.156	358	7.19E-04	202	4.05E-04	56%	Pass
10	1.230	323	6.48E-04	191	3.83E-04	59%	Pass
11	1.303	315	6.32E-04	176	3.53E-04	56%	Pass
12	1.377	306	6.14E-04	158	3.17E-04	52%	Pass
13	1.450	289	5.80E-04	143	2.87E-04	49%	Pass
14	1.524	284	5.70E-04	134	2.69E-04	47%	Pass
15	1.597	272	5.46E-04	125	2.51E-04	46%	Pass
16	1.671	260	5.22E-04	117	2.35E-04	45%	Pass
17	1.744	241	4.84E-04	113	2.27E-04	47%	Pass
18	1.818	223	4.48E-04	107	2.15E-04	48%	Pass
19	1.891	203	4.07E-04	102	2.05E-04	50%	Pass
20	1.965	183	3.67E-04	99	1.99E-04	54%	Pass
21	2.038	170	3.41E-04	92	1.85E-04	54%	Pass
22	2.112	165	3.31E-04	82	1.65E-04	50%	Pass
23	2.185	161	3.23E-04	76	1.53E-04	47%	Pass
24	2.259	159	3.19E-04	74	1.49E-04	47%	Pass
25	2.332	159	3.19E-04	71	1.43E-04	45%	Pass
26	2.406	144	2.89E-04	66	1.32E-04	46%	Pass
27	2.480	141	2.83E-04	64	1.28E-04	45%	Pass
28	2.553	140	2.81E-04	61	1.22E-04	44%	Pass
29	2.627	138	2.77E-04	56	1.12E-04	41%	Pass
30	2.700	134	2.69E-04	52	1.04E-04	39%	Pass
31	2.774	128	2.57E-04	49	9.83E-05	38%	Pass
32	2.847	117	2.35E-04	48	9.63E-05	41%	Pass
33	2.921	104	2.09E-04	44	8.83E-05	42%	Pass
34	2.994	99	1.99E-04	42	8.43E-05	42%	Pass
35	3.068	96	1.93E-04	41	8.23E-05	43%	Pass
36	3.141	96	1.93E-04	40	8.03E-05	42%	Pass
37	3.215	92	1.85E-04	39	7.83E-05	42%	Pass
38	3.288	88	1.77E-04	37	7.43E-05	42%	Pass
39	3.362	88	1.77E-04	33	6.62E-05	38%	Pass
40	3.435	87	1.75E-04	33	6.62E-05	38%	Pass
41	3.509	81	1.63E-04	31	6.22E-05	38%	Pass
42	3.582	81	1.63E-04	31	6.22E-05	38%	Pass
43	3.656	77	1.55E-04	29	5.82E-05	38%	Pass
44	3.729	71	1.43E-04	28	5.62E-05	39%	Pass
45	3.803	65	1.30E-04	27	5.42E-05	42%	Pass
46	3.876	58	1.16E-04	24	4.82E-05	41%	Pass
47	3.950	58	1.16E-04	23	4.62E-05	40%	Pass
48	4.023	56	1.12E-04	22	4.42E-05	39%	Pass
49	4.097	54	1.08E-04	22	4.42E-05	41%	Pass
50	4.170	52	1.04E-04	20	4.01E-05	38%	Pass
51	4.244	50	1.00E-04	19	3.81E-05	38%	Pass
52	4.317	49	9.83E-05	16	3.21E-05	33%	Pass
53	4.391	48	9.63E-05	13	2.61E-05	27%	Pass

54	4.464	47	9.43E-05	13	2.61E-05	28%	Pass
55	4.538	47	9.43E-05	12	2.41E-05	26%	Pass
56	4.611	45	9.03E-05	12	2.41E-05	27%	Pass
57	4.685	41	8.23E-05	11	2.21E-05	27%	Pass
58	4.758	39	7.83E-05	9	1.81E-05	23%	Pass
59	4.832	34	6.82E-05	7	1.40E-05	21%	Pass
60	4.905	34	6.82E-05	6	1.20E-05	18%	Pass
61	4.979	33	6.62E-05	6	1.20E-05	18%	Pass
62	5.052	29	5.82E-05	6	1.20E-05	21%	Pass
63	5.126	29	5.82E-05	6	1.20E-05	21%	Pass
64	5.199	29	5.82E-05	6	1.20E-05	21%	Pass
65	5.273	26	5.22E-05	5	1.00E-05	19%	Pass
66	5.346	26	5.22E-05	5	1.00E-05	19%	Pass
67	5.420	26	5.22E-05	5	1.00E-05	19%	Pass
68	5.493	26	5.22E-05	5	1.00E-05	19%	Pass
69	5.567	22	4.42E-05	5	1.00E-05	23%	Pass
70	5.640	19	3.81E-05	4	8.03E-06	21%	Pass
71	5.714	14	2.81E-05	4	8.03E-06	29%	Pass
72	5.787	12	2.41E-05	4	8.03E-06	33%	Pass
73	5.861	12	2.41E-05	4	8.03E-06	33%	Pass
74	5.934	12	2.41E-05	4	8.03E-06	33%	Pass
75	6.008	12	2.41E-05	4	8.03E-06	33%	Pass
76	6.081	12	2.41E-05	4	8.03E-06	33%	Pass
77	6.155	12	2.41E-05	4	8.03E-06	33%	Pass
78	6.228	12	2.41E-05	3	6.02E-06	25%	Pass
79	6.302	12	2.41E-05	3	6.02E-06	25%	Pass
80	6.375	10	2.01E-05	3	6.02E-06	30%	Pass
81	6.449	10	2.01E-05	3	6.02E-06	30%	Pass
82	6.522	10	2.01E-05	3	6.02E-06	30%	Pass
83	6.596	8	1.61E-05	3	6.02E-06	38%	Pass
84	6.669	7	1.40E-05	3	6.02E-06	43%	Pass
85	6.743	7	1.40E-05	3	6.02E-06	43%	Pass
86	6.816	7	1.40E-05	3	6.02E-06	43%	Pass
87	6.890	7	1.40E-05	3	6.02E-06	43%	Pass
88	6.963	7	1.40E-05	3	6.02E-06	43%	Pass
89	7.037	7	1.40E-05	3	6.02E-06	43%	Pass
90	7.110	7	1.40E-05	3	6.02E-06	43%	Pass
91	7.184	7	1.40E-05	3	6.02E-06	43%	Pass
92	7.257	7	1.40E-05	3	6.02E-06	43%	Pass
93	7.331	7	1.40E-05	3	6.02E-06	43%	Pass
94	7.405	7	1.40E-05	3	6.02E-06	43%	Pass
95	7.478	7	1.40E-05	3	6.02E-06	43%	Pass
96	7.552	7	1.40E-05	3	6.02E-06	43%	Pass
97	7.625	7	1.40E-05	3	6.02E-06	43%	Pass
98	7.699	7	1.40E-05	1	2.01E-06	14%	Pass
99	7.772	6	1.20E-05	1	2.01E-06	17%	Pass
100	7.846	5	1.00E-05	1	2.01E-06	20%	Pass


OBR_POST-3A
OBR_PRE-3A
3.5
3.0
2.5
2.0
1.5
1.0
0.5
Outflow (cfs)
1
10
100
Duration of Exceedance (h)

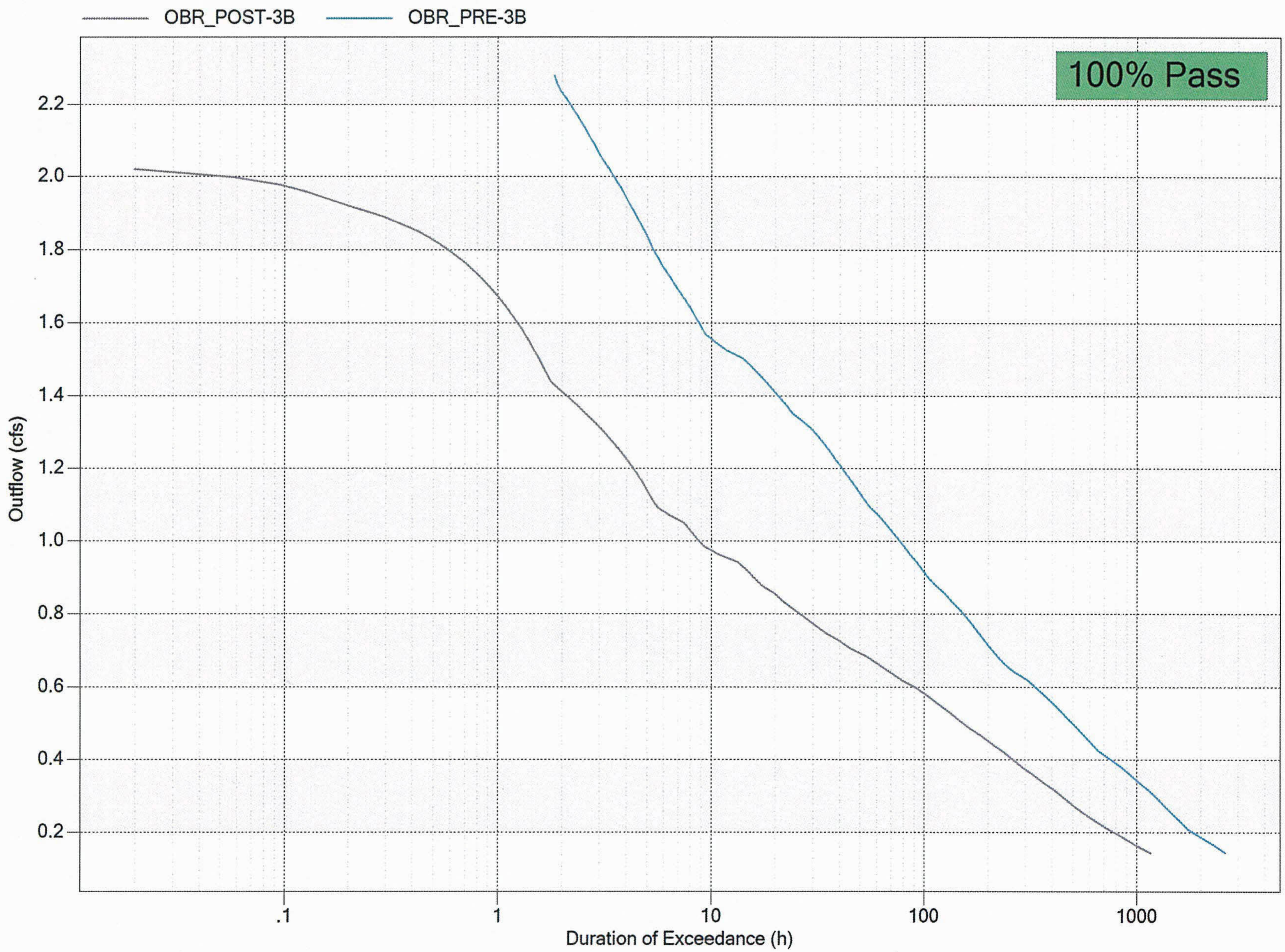
BASIN 3A

Lower Flow Threshold:	10%	
0.1xQ2 (Pre):	0.206	cfs
Q10 (Pre):	3.410	cfs
# of Ordinates:	100	
Incremental Q (Pre):	0.03204	cfs
Total Hourly Data:	498244	hours

The proposed BMP: PASSED

Interval	Pre-project Flow (cfs)	Pre-project Hours	Pre-project % Time Exceeding	Post-project Hours	Post-project % Time Exceeding	Percentage	Pass/Fail
0	0.206	530	1.06E-03	488	9.79E-04	92%	Pass
1	0.238	522	1.05E-03	244	4.90E-04	47%	Pass
2	0.270	487	9.77E-04	105	2.11E-04	22%	Pass
3	0.302	472	9.47E-04	51	1.02E-04	11%	Pass
4	0.334	461	9.25E-04	44	8.83E-05	10%	Pass
5	0.366	442	8.87E-04	39	7.83E-05	9%	Pass
6	0.398	416	8.35E-04	35	7.02E-05	8%	Pass
7	0.430	383	7.69E-04	33	6.62E-05	9%	Pass
8	0.462	370	7.43E-04	30	6.02E-05	8%	Pass
9	0.494	360	7.23E-04	25	5.02E-05	7%	Pass
10	0.526	351	7.04E-04	22	4.42E-05	6%	Pass
11	0.558	337	6.76E-04	22	4.42E-05	7%	Pass
12	0.590	310	6.22E-04	21	4.21E-05	7%	Pass
13	0.622	300	6.02E-04	18	3.61E-05	6%	Pass
14	0.654	291	5.84E-04	16	3.21E-05	5%	Pass
15	0.686	279	5.60E-04	15	3.01E-05	5%	Pass
16	0.718	266	5.34E-04	15	3.01E-05	6%	Pass
17	0.750	243	4.88E-04	14	2.81E-05	6%	Pass
18	0.783	220	4.42E-04	11	2.21E-05	5%	Pass
19	0.815	207	4.15E-04	8	1.61E-05	4%	Pass
20	0.847	200	4.01E-04	8	1.61E-05	4%	Pass
21	0.879	188	3.77E-04	8	1.61E-05	4%	Pass
22	0.911	173	3.47E-04	8	1.61E-05	5%	Pass
23	0.943	162	3.25E-04	8	1.61E-05	5%	Pass
24	0.975	161	3.23E-04	7	1.40E-05	4%	Pass
25	1.007	156	3.13E-04	7	1.40E-05	4%	Pass
26	1.039	153	3.07E-04	7	1.40E-05	5%	Pass
27	1.071	148	2.97E-04	7	1.40E-05	5%	Pass
28	1.103	138	2.77E-04	7	1.40E-05	5%	Pass
29	1.135	135	2.71E-04	7	1.40E-05	5%	Pass
30	1.167	128	2.57E-04	7	1.40E-05	5%	Pass
31	1.199	118	2.37E-04	7	1.40E-05	6%	Pass
32	1.231	111	2.23E-04	7	1.40E-05	6%	Pass
33	1.263	105	2.11E-04	7	1.40E-05	7%	Pass
34	1.295	100	2.01E-04	7	1.40E-05	7%	Pass
35	1.327	100	2.01E-04	6	1.20E-05	6%	Pass
36	1.359	99	1.99E-04	6	1.20E-05	6%	Pass
37	1.391	97	1.95E-04	6	1.20E-05	6%	Pass
38	1.423	90	1.81E-04	6	1.20E-05	7%	Pass
39	1.455	86	1.73E-04	4	8.03E-06	5%	Pass
40	1.487	86	1.73E-04	4	8.03E-06	5%	Pass
41	1.519	84	1.69E-04	4	8.03E-06	5%	Pass
42	1.551	82	1.65E-04	4	8.03E-06	5%	Pass
43	1.584	71	1.43E-04	4	8.03E-06	6%	Pass
44	1.616	66	1.32E-04	4	8.03E-06	6%	Pass
45	1.648	62	1.24E-04	4	8.03E-06	6%	Pass
46	1.680	61	1.22E-04	4	8.03E-06	7%	Pass
47	1.712	59	1.18E-04	4	8.03E-06	7%	Pass
48	1.744	57	1.14E-04	4	8.03E-06	7%	Pass
49	1.776	54	1.08E-04	4	8.03E-06	7%	Pass
50	1.808	52	1.04E-04	4	8.03E-06	8%	Pass
51	1.840	48	9.63E-05	3	6.02E-06	6%	Pass
52	1.872	47	9.43E-05	3	6.02E-06	6%	Pass
53	1.904	42	8.43E-05	3	6.02E-06	7%	Pass

54	1.936	41	8.23E-05	3	6.02E-06	7%	Pass
55	1.968	39	7.83E-05	3	6.02E-06	8%	Pass
56	2.000	38	7.63E-05	3	6.02E-06	8%	Pass
57	2.032	35	7.02E-05	3	6.02E-06	9%	Pass
58	2.064	32	6.42E-05	3	6.02E-06	9%	Pass
59	2.096	31	6.22E-05	3	6.02E-06	10%	Pass
60	2.128	31	6.22E-05	2	4.01E-06	6%	Pass
61	2.160	30	6.02E-05	2	4.01E-06	7%	Pass
62	2.192	29	5.82E-05	2	4.01E-06	7%	Pass
63	2.224	28	5.62E-05	2	4.01E-06	7%	Pass
64	2.256	25	5.02E-05	2	4.01E-06	8%	Pass
65	2.288	24	4.82E-05	2	4.01E-06	8%	Pass
66	2.320	24	4.82E-05	2	4.01E-06	8%	Pass
67	2.353	20	4.01E-05	2	4.01E-06	10%	Pass
68	2.385	20	4.01E-05	2	4.01E-06	10%	Pass
69	2.417	16	3.21E-05	2	4.01E-06	13%	Pass
70	2.449	14	2.81E-05	2	4.01E-06	14%	Pass
71	2.481	12	2.41E-05	2	4.01E-06	17%	Pass
72	2.513	12	2.41E-05	2	4.01E-06	17%	Pass
73	2.545	12	2.41E-05	2	4.01E-06	17%	Pass
74	2.577	12	2.41E-05	2	4.01E-06	17%	Pass
75	2.609	12	2.41E-05	2	4.01E-06	17%	Pass
76	2.641	12	2.41E-05	2	4.01E-06	17%	Pass
77	2.673	12	2.41E-05	2	4.01E-06	17%	Pass
78	2.705	12	2.41E-05	2	4.01E-06	17%	Pass
79	2.737	12	2.41E-05	2	4.01E-06	17%	Pass
80	2.769	12	2.41E-05	2	4.01E-06	17%	Pass
81	2.801	11	2.21E-05	2	4.01E-06	18%	Pass
82	2.833	11	2.21E-05	2	4.01E-06	18%	Pass
83	2.865	9	1.81E-05	2	4.01E-06	22%	Pass
84	2.897	9	1.81E-05	2	4.01E-06	22%	Pass
85	2.929	7	1.40E-05	2	4.01E-06	29%	Pass
86	2.961	7	1.40E-05	2	4.01E-06	29%	Pass
87	2.993	7	1.40E-05	2	4.01E-06	29%	Pass
88	3.025	7	1.40E-05	2	4.01E-06	29%	Pass
89	3.057	7	1.40E-05	2	4.01E-06	29%	Pass
90	3.089	7	1.40E-05	2	4.01E-06	29%	Pass
91	3.121	7	1.40E-05	2	4.01E-06	29%	Pass
92	3.154	7	1.40E-05	2	4.01E-06	29%	Pass
93	3.186	7	1.40E-05	1	2.01E-06	14%	Pass
94	3.218	7	1.40E-05	1	2.01E-06	14%	Pass
95	3.250	6	1.20E-05	1	2.01E-06	17%	Pass
96	3.282	6	1.20E-05	1	2.01E-06	17%	Pass
97	3.314	6	1.20E-05	1	2.01E-06	17%	Pass
98	3.346	6	1.20E-05	1	2.01E-06	17%	Pass
99	3.378	6	1.20E-05	1	2.01E-06	17%	Pass
100	3.410	5	1.00E-05	1	2.01E-06	20%	Pass



OBR_POST-3B
OBR_PRE-3B
100% Pass
2.2
2.0
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
Outflow (cfs)
.1
1
10
100
1000
Duration of Exceedance (h)

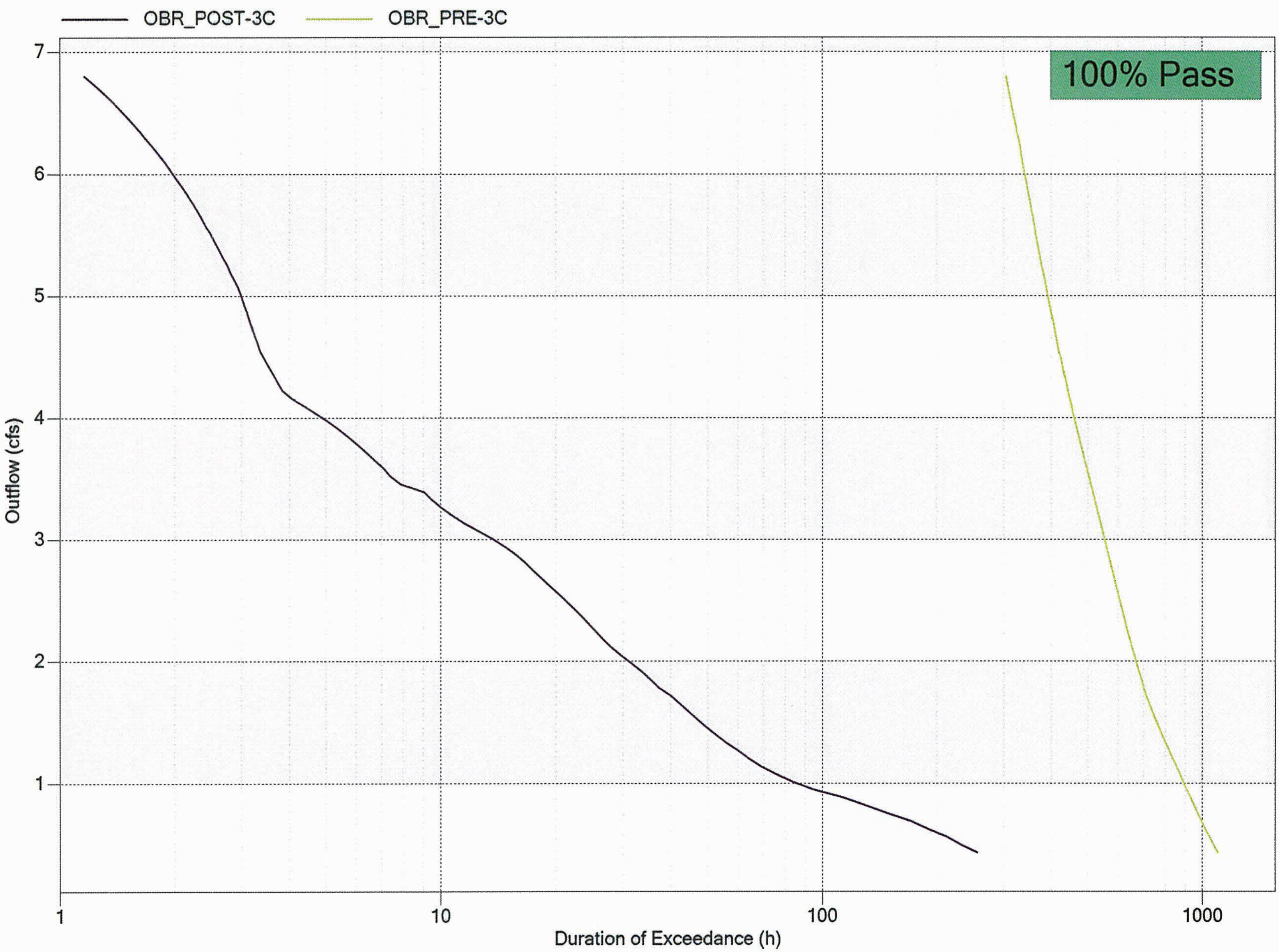
BASIN 3B

Lower Flow Threshold:	10%	
0.1xQ2 (Pre):	0.067	cfs
Q10 (Pre):	1.041	cfs
# of Ordinates:	100	
Incremental Q (Pre):	0.00973	cfs
Total Hourly Data:	498244	hours

The proposed BMP: PASSED

Interval	Pre-project Flow (cfs)	Pre-project Hours	Pre-project % Time Exceeding	Post-project Hours	Post-project % Time Exceeding	Percentage	Pass/Fail
0	0.067	2784	5.59E-03	3045	6.11E-03	109%	Pass
1	0.077	2466	4.95E-03	2687	5.39E-03	109%	Pass
2	0.087	2011	4.04E-03	2204	4.42E-03	110%	Pass
3	0.097	1670	3.35E-03	1795	3.60E-03	107%	Pass
4	0.106	1571	3.15E-03	1698	3.41E-03	108%	Pass
5	0.116	1449	2.91E-03	1305	2.62E-03	90%	Pass
6	0.126	1397	2.80E-03	1176	2.36E-03	84%	Pass
7	0.136	1358	2.73E-03	1114	2.24E-03	82%	Pass
8	0.145	1279	2.57E-03	1045	2.10E-03	82%	Pass
9	0.155	1193	2.39E-03	961	1.93E-03	81%	Pass
10	0.165	1125	2.26E-03	866	1.74E-03	77%	Pass
11	0.174	1063	2.13E-03	777	1.56E-03	73%	Pass
12	0.184	953	1.91E-03	676	1.36E-03	71%	Pass
13	0.194	763	1.53E-03	595	1.19E-03	78%	Pass
14	0.204	644	1.29E-03	510	1.02E-03	79%	Pass
15	0.213	631	1.27E-03	426	8.55E-04	68%	Pass
16	0.223	603	1.21E-03	354	7.10E-04	59%	Pass
17	0.233	576	1.16E-03	280	5.62E-04	49%	Pass
18	0.243	543	1.09E-03	230	4.62E-04	42%	Pass
19	0.252	534	1.07E-03	172	3.45E-04	32%	Pass
20	0.262	514	1.03E-03	135	2.71E-04	26%	Pass
21	0.272	486	9.75E-04	105	2.11E-04	22%	Pass
22	0.282	450	9.03E-04	80	1.61E-04	18%	Pass
23	0.291	408	8.19E-04	61	1.22E-04	15%	Pass
24	0.301	328	6.58E-04	55	1.10E-04	17%	Pass
25	0.311	279	5.60E-04	55	1.10E-04	20%	Pass
26	0.320	256	5.14E-04	50	1.00E-04	20%	Pass
27	0.330	234	4.70E-04	50	1.00E-04	21%	Pass
28	0.340	227	4.56E-04	47	9.43E-05	21%	Pass
29	0.350	221	4.44E-04	47	9.43E-05	21%	Pass
30	0.359	214	4.30E-04	46	9.23E-05	21%	Pass
31	0.369	200	4.01E-04	43	8.63E-05	22%	Pass
32	0.379	194	3.89E-04	41	8.23E-05	21%	Pass
33	0.389	188	3.77E-04	38	7.63E-05	20%	Pass
34	0.398	174	3.49E-04	38	7.63E-05	22%	Pass
35	0.408	155	3.11E-04	37	7.43E-05	24%	Pass
36	0.418	130	2.61E-04	36	7.23E-05	28%	Pass
37	0.428	129	2.59E-04	35	7.02E-05	27%	Pass
38	0.437	127	2.55E-04	35	7.02E-05	28%	Pass
39	0.447	122	2.45E-04	33	6.62E-05	27%	Pass
40	0.457	114	2.29E-04	32	6.42E-05	28%	Pass
41	0.467	111	2.23E-04	31	6.22E-05	28%	Pass
42	0.476	107	2.15E-04	29	5.82E-05	27%	Pass
43	0.486	107	2.15E-04	26	5.22E-05	24%	Pass
44	0.496	101	2.03E-04	25	5.02E-05	25%	Pass
45	0.505	92	1.85E-04	24	4.82E-05	26%	Pass
46	0.515	81	1.63E-04	23	4.62E-05	28%	Pass
47	0.525	69	1.38E-04	22	4.42E-05	32%	Pass
48	0.535	68	1.36E-04	22	4.42E-05	32%	Pass
49	0.544	64	1.28E-04	22	4.42E-05	34%	Pass
50	0.554	64	1.28E-04	22	4.42E-05	34%	Pass
51	0.564	64	1.28E-04	22	4.42E-05	34%	Pass
52	0.574	60	1.20E-04	22	4.42E-05	37%	Pass
53	0.583	60	1.20E-04	22	4.42E-05	37%	Pass

54	0.593	60	1.20E-04	21	4.21E-05	35%	Pass
55	0.603	59	1.18E-04	19	3.81E-05	32%	Pass
56	0.613	56	1.12E-04	19	3.81E-05	34%	Pass
57	0.622	49	9.83E-05	18	3.61E-05	37%	Pass
58	0.632	40	8.03E-05	18	3.61E-05	45%	Pass
59	0.642	40	8.03E-05	18	3.61E-05	45%	Pass
60	0.651	39	7.83E-05	16	3.21E-05	41%	Pass
61	0.661	39	7.83E-05	16	3.21E-05	41%	Pass
62	0.671	36	7.23E-05	16	3.21E-05	44%	Pass
63	0.681	35	7.02E-05	16	3.21E-05	46%	Pass
64	0.690	35	7.02E-05	15	3.01E-05	43%	Pass
65	0.700	34	6.82E-05	15	3.01E-05	44%	Pass
66	0.710	31	6.22E-05	15	3.01E-05	48%	Pass
67	0.720	28	5.62E-05	15	3.01E-05	54%	Pass
68	0.729	23	4.62E-05	15	3.01E-05	65%	Pass
69	0.739	15	3.01E-05	15	3.01E-05	100%	Pass
70	0.749	15	3.01E-05	14	2.81E-05	93%	Pass
71	0.759	15	3.01E-05	13	2.61E-05	87%	Pass
72	0.768	15	3.01E-05	12	2.41E-05	80%	Pass
73	0.778	15	3.01E-05	11	2.21E-05	73%	Pass
74	0.788	15	3.01E-05	11	2.21E-05	73%	Pass
75	0.797	14	2.81E-05	11	2.21E-05	79%	Pass
76	0.807	13	2.61E-05	9	1.81E-05	69%	Pass
77	0.817	13	2.61E-05	8	1.61E-05	62%	Pass
78	0.827	11	2.21E-05	8	1.61E-05	73%	Pass
79	0.836	8	1.61E-05	8	1.61E-05	100%	Pass
80	0.846	8	1.61E-05	8	1.61E-05	100%	Pass
81	0.856	8	1.61E-05	8	1.61E-05	100%	Pass
82	0.866	8	1.61E-05	8	1.61E-05	100%	Pass
83	0.875	8	1.61E-05	8	1.61E-05	100%	Pass
84	0.885	8	1.61E-05	8	1.61E-05	100%	Pass
85	0.895	8	1.61E-05	8	1.61E-05	100%	Pass
86	0.905	7	1.40E-05	7	1.40E-05	100%	Pass
87	0.914	7	1.40E-05	7	1.40E-05	100%	Pass
88	0.924	7	1.40E-05	7	1.40E-05	100%	Pass
89	0.934	7	1.40E-05	7	1.40E-05	100%	Pass
90	0.944	7	1.40E-05	7	1.40E-05	100%	Pass
91	0.953	7	1.40E-05	7	1.40E-05	100%	Pass
92	0.963	6	1.20E-05	6	1.20E-05	100%	Pass
93	0.973	6	1.20E-05	6	1.20E-05	100%	Pass
94	0.982	6	1.20E-05	6	1.20E-05	100%	Pass
95	0.992	6	1.20E-05	6	1.20E-05	100%	Pass
96	1.002	6	1.20E-05	6	1.20E-05	100%	Pass
97	1.012	6	1.20E-05	6	1.20E-05	100%	Pass
98	1.021	6	1.20E-05	6	1.20E-05	100%	Pass
99	1.031	6	1.20E-05	6	1.20E-05	100%	Pass
100	1.041	5	1.00E-05	5	1.00E-05	100%	Pass



OBR_POST-3C
OBR_PRE-3C
100% Pass
Outflow (cfs)
7
6
5
4
3
2
1
1
10
100
1000
Duration of Exceedance (h)

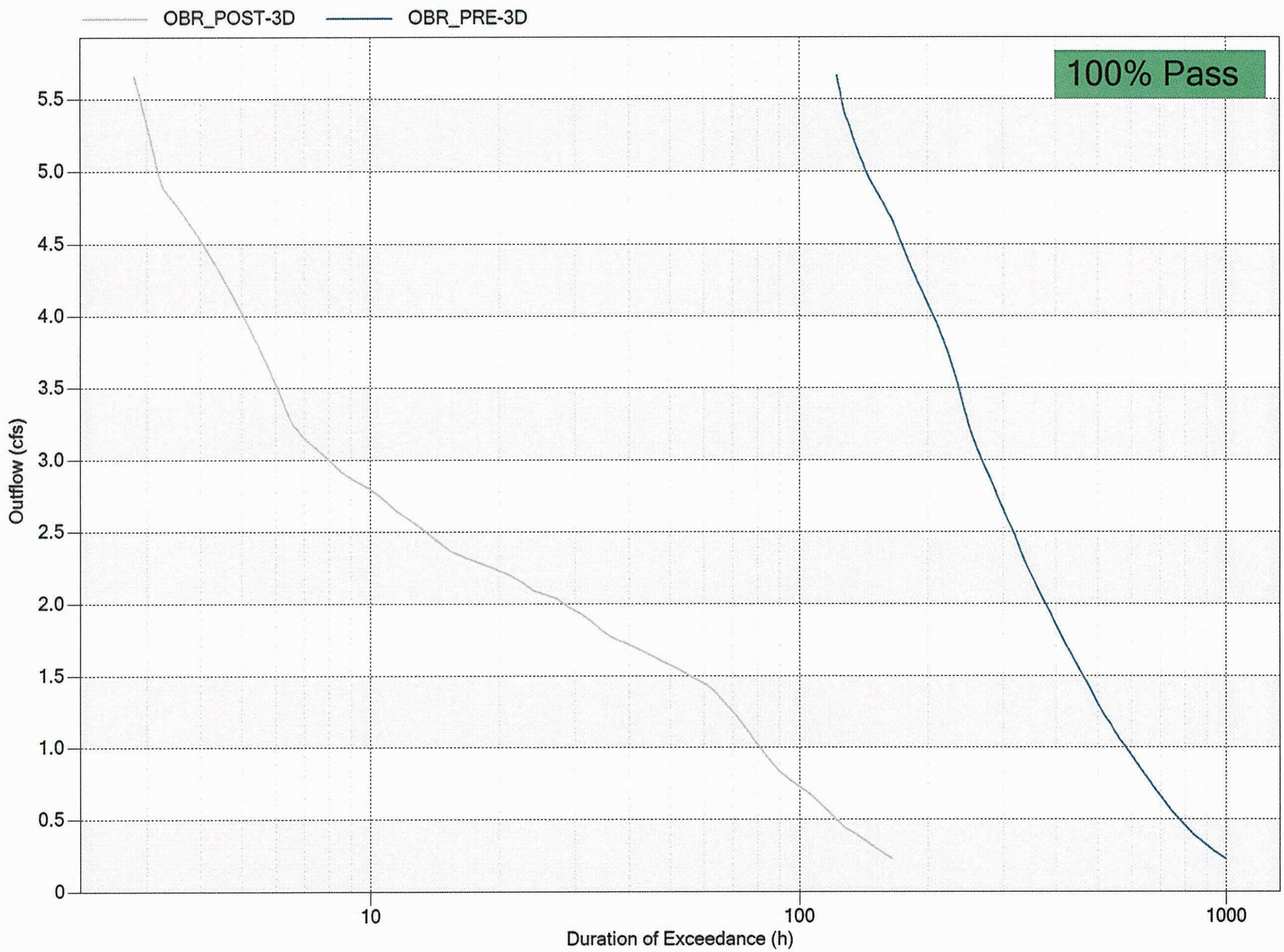
BASIN 3C

Lower Flow Threshold:	10%	
0.1xQ2 (Pre):	0.433	cfs
Q10 (Pre):	6.825	cfs
# of Ordinates:	100	
Incremental Q (Pre):	0.06392	cfs
Total Hourly Data:	498244	hours

The proposed BMP: PASSED

Interval	Pre-project Flow (cfs)	Pre-project Hours	Pre-project % Time Exceeding	Post-project Hours	Post-project % Time Exceeding	Percentage	Pass/Fail
0	0.433	977	1.96E-03	253	5.08E-04	26%	Pass
1	0.497	955	1.92E-03	225	4.52E-04	24%	Pass
2	0.561	940	1.89E-03	213	4.28E-04	23%	Pass
3	0.625	923	1.85E-03	195	3.91E-04	21%	Pass
4	0.689	906	1.82E-03	180	3.61E-04	20%	Pass
5	0.753	892	1.79E-03	155	3.11E-04	17%	Pass
6	0.817	876	1.76E-03	132	2.65E-04	15%	Pass
7	0.881	864	1.73E-03	112	2.25E-04	13%	Pass
8	0.945	854	1.71E-03	96	1.93E-04	11%	Pass
9	1.008	836	1.68E-03	83	1.67E-04	10%	Pass
10	1.072	818	1.64E-03	72	1.45E-04	9%	Pass
11	1.136	802	1.61E-03	60	1.20E-04	7%	Pass
12	1.200	783	1.57E-03	55	1.10E-04	7%	Pass
13	1.264	768	1.54E-03	52	1.04E-04	7%	Pass
14	1.328	763	1.53E-03	50	1.00E-04	7%	Pass
15	1.392	751	1.51E-03	49	9.83E-05	7%	Pass
16	1.456	743	1.49E-03	45	9.03E-05	6%	Pass
17	1.520	730	1.47E-03	43	8.63E-05	6%	Pass
18	1.584	710	1.43E-03	43	8.63E-05	6%	Pass
19	1.648	701	1.41E-03	41	8.23E-05	6%	Pass
20	1.712	684	1.37E-03	39	7.83E-05	6%	Pass
21	1.775	659	1.32E-03	37	7.43E-05	6%	Pass
22	1.839	656	1.32E-03	36	7.23E-05	5%	Pass
23	1.903	646	1.30E-03	35	7.02E-05	5%	Pass
24	1.967	637	1.28E-03	32	6.42E-05	5%	Pass
25	2.031	631	1.27E-03	30	6.02E-05	5%	Pass
26	2.095	626	1.26E-03	29	5.82E-05	5%	Pass
27	2.159	620	1.24E-03	26	5.22E-05	4%	Pass
28	2.223	611	1.23E-03	25	5.02E-05	4%	Pass
29	2.287	604	1.21E-03	25	5.02E-05	4%	Pass
30	2.351	591	1.19E-03	25	5.02E-05	4%	Pass
31	2.415	585	1.17E-03	23	4.62E-05	4%	Pass
32	2.479	579	1.16E-03	23	4.62E-05	4%	Pass
33	2.542	574	1.15E-03	23	4.62E-05	4%	Pass
34	2.606	566	1.14E-03	22	4.42E-05	4%	Pass
35	2.670	559	1.12E-03	21	4.21E-05	4%	Pass
36	2.734	553	1.11E-03	20	4.01E-05	4%	Pass
37	2.798	548	1.10E-03	20	4.01E-05	4%	Pass
38	2.862	543	1.09E-03	20	4.01E-05	4%	Pass
39	2.926	540	1.08E-03	18	3.61E-05	3%	Pass
40	2.990	536	1.08E-03	17	3.41E-05	3%	Pass
41	3.054	535	1.07E-03	17	3.41E-05	3%	Pass
42	3.118	530	1.06E-03	16	3.21E-05	3%	Pass
43	3.182	525	1.05E-03	14	2.81E-05	3%	Pass
44	3.246	522	1.05E-03	13	2.61E-05	2%	Pass
45	3.309	513	1.03E-03	12	2.41E-05	2%	Pass
46	3.373	511	1.03E-03	12	2.41E-05	2%	Pass
47	3.437	503	1.01E-03	11	2.21E-05	2%	Pass
48	3.501	499	1.00E-03	9	1.81E-05	2%	Pass
49	3.565	489	9.81E-04	7	1.40E-05	1%	Pass
50	3.629	485	9.73E-04	7	1.40E-05	1%	Pass
51	3.693	481	9.65E-04	7	1.40E-05	1%	Pass
52	3.757	478	9.59E-04	7	1.40E-05	1%	Pass
53	3.821	472	9.47E-04	7	1.40E-05	1%	Pass

54	3.885	464	9.31E-04	7	1.40E-05	2%	Pass
55	3.949	459	9.21E-04	7	1.40E-05	2%	Pass
56	4.013	455	9.13E-04	7	1.40E-05	2%	Pass
57	4.076	449	9.01E-04	7	1.40E-05	2%	Pass
58	4.140	447	8.97E-04	7	1.40E-05	2%	Pass
59	4.204	440	8.83E-04	6	1.20E-05	1%	Pass
60	4.268	432	8.67E-04	5	1.00E-05	1%	Pass
61	4.332	430	8.63E-04	5	1.00E-05	1%	Pass
62	4.396	423	8.49E-04	4	8.03E-06	1%	Pass
63	4.460	416	8.35E-04	4	8.03E-06	1%	Pass
64	4.524	413	8.29E-04	4	8.03E-06	1%	Pass
65	4.588	408	8.19E-04	3	6.02E-06	1%	Pass
66	4.652	408	8.19E-04	3	6.02E-06	1%	Pass
67	4.716	399	8.01E-04	3	6.02E-06	1%	Pass
68	4.780	393	7.89E-04	3	6.02E-06	1%	Pass
69	4.843	393	7.89E-04	3	6.02E-06	1%	Pass
70	4.907	386	7.75E-04	3	6.02E-06	1%	Pass
71	4.971	382	7.67E-04	3	6.02E-06	1%	Pass
72	5.035	379	7.61E-04	3	6.02E-06	1%	Pass
73	5.099	376	7.55E-04	2	4.01E-06	1%	Pass
74	5.163	370	7.43E-04	2	4.01E-06	1%	Pass
75	5.227	367	7.37E-04	2	4.01E-06	1%	Pass
76	5.291	365	7.33E-04	2	4.01E-06	1%	Pass
77	5.355	361	7.25E-04	2	4.01E-06	1%	Pass
78	5.419	358	7.19E-04	2	4.01E-06	1%	Pass
79	5.483	353	7.08E-04	2	4.01E-06	1%	Pass
80	5.547	350	7.02E-04	2	4.01E-06	1%	Pass
81	5.610	345	6.92E-04	2	4.01E-06	1%	Pass
82	5.674	341	6.84E-04	2	4.01E-06	1%	Pass
83	5.738	338	6.78E-04	2	4.01E-06	1%	Pass
84	5.802	334	6.70E-04	2	4.01E-06	1%	Pass
85	5.866	334	6.70E-04	2	4.01E-06	1%	Pass
86	5.930	333	6.68E-04	2	4.01E-06	1%	Pass
87	5.994	330	6.62E-04	2	4.01E-06	1%	Pass
88	6.058	326	6.54E-04	2	4.01E-06	1%	Pass
89	6.122	323	6.48E-04	2	4.01E-06	1%	Pass
90	6.186	323	6.48E-04	2	4.01E-06	1%	Pass
91	6.250	320	6.42E-04	2	4.01E-06	1%	Pass
92	6.314	318	6.38E-04	2	4.01E-06	1%	Pass
93	6.377	317	6.36E-04	2	4.01E-06	1%	Pass
94	6.441	316	6.34E-04	2	4.01E-06	1%	Pass
95	6.505	314	6.30E-04	2	4.01E-06	1%	Pass
96	6.569	313	6.28E-04	2	4.01E-06	1%	Pass
97	6.633	308	6.18E-04	2	4.01E-06	1%	Pass
98	6.697	307	6.16E-04	2	4.01E-06	1%	Pass
99	6.761	304	6.10E-04	2	4.01E-06	1%	Pass
100	6.825	300	6.02E-04	2	4.01E-06	1%	Pass


OBR_POST-3D
OBR_PRE-3D
100% Pass
Outflow (cfs)
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0
10
100
1000
Duration of Exceedance (h)

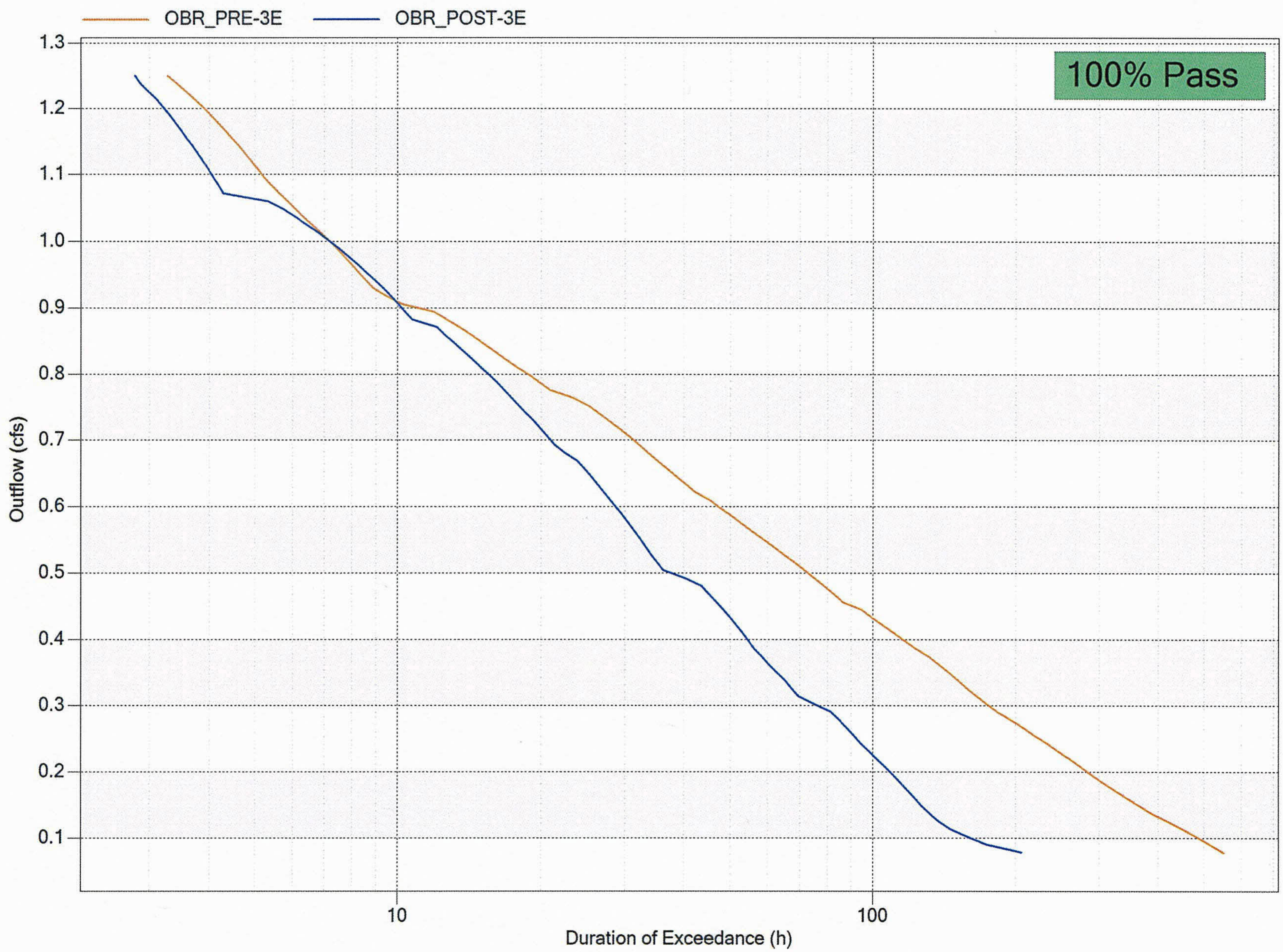
BASIN 3D

Lower Flow Threshold:	10%	
0.1xQ2 (Pre):	0.238	cfs
Q10 (Pre):	5.656	cfs
# of Ordinates:	100	
Incremental Q (Pre):	0.05418	cfs
Total Hourly Data:	498244	hours

The proposed BMP: **PASSED**

Interval	Pre-project Flow (cfs)	Pre-project Hours	Pre-project % Time Exceeding	Post-project Hours	Post-project % Time Exceeding	Percentage	Pass/Fail
0	0.238	964	1.93E-03	159	3.19E-04	16%	Pass
1	0.292	911	1.83E-03	150	3.01E-04	16%	Pass
2	0.346	868	1.74E-03	142	2.85E-04	16%	Pass
3	0.401	827	1.66E-03	136	2.73E-04	16%	Pass
4	0.455	786	1.58E-03	124	2.49E-04	16%	Pass
5	0.509	760	1.53E-03	119	2.39E-04	16%	Pass
6	0.563	731	1.47E-03	117	2.35E-04	16%	Pass
7	0.617	704	1.41E-03	112	2.25E-04	16%	Pass
8	0.671	690	1.38E-03	104	2.09E-04	15%	Pass
9	0.726	673	1.35E-03	98	1.97E-04	15%	Pass
10	0.780	654	1.31E-03	94	1.89E-04	14%	Pass
11	0.834	634	1.27E-03	90	1.81E-04	14%	Pass
12	0.888	621	1.25E-03	87	1.75E-04	14%	Pass
13	0.942	603	1.21E-03	85	1.71E-04	14%	Pass
14	0.997	580	1.16E-03	81	1.63E-04	14%	Pass
15	1.051	567	1.14E-03	80	1.61E-04	14%	Pass
16	1.105	551	1.11E-03	79	1.59E-04	14%	Pass
17	1.159	541	1.09E-03	77	1.55E-04	14%	Pass
18	1.213	523	1.05E-03	76	1.53E-04	15%	Pass
19	1.267	509	1.02E-03	75	1.51E-04	15%	Pass
20	1.322	500	1.00E-03	71	1.43E-04	14%	Pass
21	1.376	489	9.81E-04	70	1.40E-04	14%	Pass
22	1.430	481	9.65E-04	64	1.28E-04	13%	Pass
23	1.484	472	9.47E-04	62	1.24E-04	13%	Pass
24	1.538	466	9.35E-04	59	1.18E-04	13%	Pass
25	1.593	458	9.19E-04	49	9.83E-05	11%	Pass
26	1.647	442	8.87E-04	46	9.23E-05	10%	Pass
27	1.701	429	8.61E-04	44	8.83E-05	10%	Pass
28	1.755	418	8.39E-04	38	7.63E-05	9%	Pass
29	1.809	408	8.19E-04	35	7.02E-05	9%	Pass
30	1.863	400	8.03E-04	34	6.82E-05	9%	Pass
31	1.918	391	7.85E-04	33	6.62E-05	8%	Pass
32	1.972	386	7.75E-04	31	6.22E-05	8%	Pass
33	2.026	374	7.51E-04	29	5.82E-05	8%	Pass
34	2.080	366	7.35E-04	26	5.22E-05	7%	Pass
35	2.134	361	7.25E-04	23	4.62E-05	6%	Pass
36	2.189	352	7.06E-04	21	4.21E-05	6%	Pass
37	2.243	345	6.92E-04	19	3.81E-05	6%	Pass
38	2.297	340	6.82E-04	19	3.81E-05	6%	Pass
39	2.351	334	6.70E-04	16	3.21E-05	5%	Pass
40	2.405	328	6.58E-04	15	3.01E-05	5%	Pass
41	2.459	322	6.46E-04	15	3.01E-05	5%	Pass
42	2.514	317	6.36E-04	14	2.81E-05	4%	Pass
43	2.568	309	6.20E-04	13	2.61E-05	4%	Pass
44	2.622	304	6.10E-04	11	2.21E-05	4%	Pass
45	2.676	299	6.00E-04	10	2.01E-05	3%	Pass
46	2.730	296	5.94E-04	10	2.01E-05	3%	Pass
47	2.785	290	5.82E-04	8	1.61E-05	3%	Pass
48	2.839	284	5.70E-04	8	1.61E-05	3%	Pass
49	2.893	280	5.62E-04	7	1.40E-05	3%	Pass
50	2.947	277	5.56E-04	7	1.40E-05	3%	Pass
51	3.001	273	5.48E-04	7	1.40E-05	3%	Pass
52	3.055	269	5.40E-04	7	1.40E-05	3%	Pass
53	3.110	267	5.36E-04	7	1.40E-05	3%	Pass

54	3.164	260	5.22E-04	6	1.20E-05	2%	Pass
55	3.218	256	5.14E-04	6	1.20E-05	2%	Pass
56	3.272	249	5.00E-04	5	1.00E-05	2%	Pass
57	3.326	244	4.90E-04	4	8.03E-06	2%	Pass
58	3.381	242	4.86E-04	4	8.03E-06	2%	Pass
59	3.435	239	4.80E-04	4	8.03E-06	2%	Pass
60	3.489	235	4.72E-04	4	8.03E-06	2%	Pass
61	3.543	234	4.70E-04	4	8.03E-06	2%	Pass
62	3.597	233	4.68E-04	4	8.03E-06	2%	Pass
63	3.651	231	4.64E-04	4	8.03E-06	2%	Pass
64	3.706	226	4.54E-04	4	8.03E-06	2%	Pass
65	3.760	222	4.46E-04	4	8.03E-06	2%	Pass
66	3.814	219	4.40E-04	4	8.03E-06	2%	Pass
67	3.868	215	4.32E-04	4	8.03E-06	2%	Pass
68	3.922	214	4.30E-04	4	8.03E-06	2%	Pass
69	3.976	208	4.17E-04	4	8.03E-06	2%	Pass
70	4.031	204	4.09E-04	4	8.03E-06	2%	Pass
71	4.085	200	4.01E-04	4	8.03E-06	2%	Pass
72	4.139	198	3.97E-04	4	8.03E-06	2%	Pass
73	4.193	191	3.83E-04	4	8.03E-06	2%	Pass
74	4.247	187	3.75E-04	4	8.03E-06	2%	Pass
75	4.302	184	3.69E-04	4	8.03E-06	2%	Pass
76	4.356	183	3.67E-04	4	8.03E-06	2%	Pass
77	4.410	180	3.61E-04	4	8.03E-06	2%	Pass
78	4.464	176	3.53E-04	4	8.03E-06	2%	Pass
79	4.518	174	3.49E-04	4	8.03E-06	2%	Pass
80	4.572	170	3.41E-04	4	8.03E-06	2%	Pass
81	4.627	165	3.31E-04	4	8.03E-06	2%	Pass
82	4.681	161	3.23E-04	4	8.03E-06	2%	Pass
83	4.735	159	3.19E-04	4	8.03E-06	3%	Pass
84	4.789	155	3.11E-04	4	8.03E-06	3%	Pass
85	4.843	153	3.07E-04	4	8.03E-06	3%	Pass
86	4.898	149	2.99E-04	3	6.02E-06	2%	Pass
87	4.952	146	2.93E-04	3	6.02E-06	2%	Pass
88	5.006	143	2.87E-04	3	6.02E-06	2%	Pass
89	5.060	141	2.83E-04	2	4.01E-06	1%	Pass
90	5.114	140	2.81E-04	2	4.01E-06	1%	Pass
91	5.168	139	2.79E-04	2	4.01E-06	1%	Pass
92	5.223	137	2.75E-04	2	4.01E-06	1%	Pass
93	5.277	135	2.71E-04	2	4.01E-06	1%	Pass
94	5.331	135	2.71E-04	2	4.01E-06	1%	Pass
95	5.385	132	2.65E-04	2	4.01E-06	2%	Pass
96	5.439	130	2.61E-04	2	4.01E-06	2%	Pass
97	5.494	129	2.59E-04	2	4.01E-06	2%	Pass
98	5.548	125	2.51E-04	2	4.01E-06	2%	Pass
99	5.602	123	2.47E-04	2	4.01E-06	2%	Pass
100	5.656	121	2.43E-04	2	4.01E-06	2%	Pass


OBR_PRE-3E
OBR_POST-3E
100% Pass
1.3
1.2
1.1
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
Outflow (cfs)
10
100
Duration of Exceedance (h)

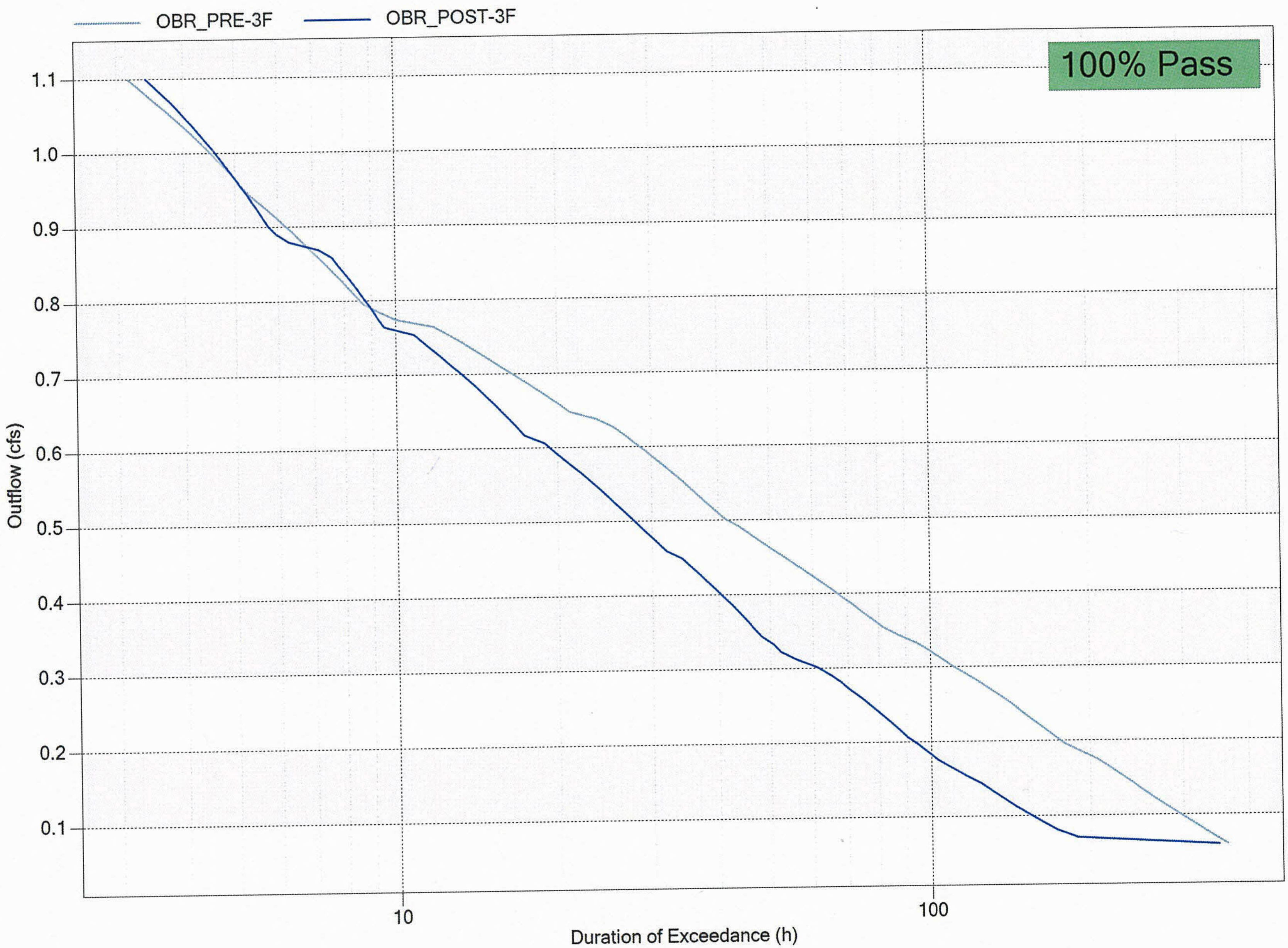
BASIN 3E

Lower Flow Threshold:	10%	
0.1xQ2 (Pre):	0.078	cfs
Q10 (Pre):	1.283	cfs
# of Ordinates:	100	
Incremental Q (Pre):	0.01206	cfs
Total Hourly Data:	498244	hours

The proposed BMP: **PASSED**

Interval	Pre-project Flow (cfs)	Pre-project Hours	Pre-project % Time Exceeding	Post-project Hours	Post-project % Time Exceeding	Percentage	Pass/Fail
0	0.078	485	9.73E-04	181	3.63E-04	37%	Pass
1	0.090	461	9.25E-04	154	3.09E-04	33%	Pass
2	0.102	452	9.07E-04	143	2.87E-04	32%	Pass
3	0.114	424	8.51E-04	128	2.57E-04	30%	Pass
4	0.126	395	7.93E-04	125	2.51E-04	32%	Pass
5	0.138	370	7.43E-04	113	2.27E-04	31%	Pass
6	0.150	359	7.21E-04	106	2.13E-04	30%	Pass
7	0.162	345	6.92E-04	99	1.99E-04	29%	Pass
8	0.174	310	6.22E-04	98	1.97E-04	32%	Pass
9	0.186	299	6.00E-04	97	1.95E-04	32%	Pass
10	0.198	287	5.76E-04	97	1.95E-04	34%	Pass
11	0.210	277	5.56E-04	97	1.95E-04	35%	Pass
12	0.222	261	5.24E-04	96	1.93E-04	37%	Pass
13	0.234	255	5.12E-04	95	1.91E-04	37%	Pass
14	0.246	247	4.96E-04	91	1.83E-04	37%	Pass
15	0.258	238	4.78E-04	91	1.83E-04	38%	Pass
16	0.270	221	4.44E-04	91	1.83E-04	41%	Pass
17	0.282	206	4.13E-04	89	1.79E-04	43%	Pass
18	0.295	187	3.75E-04	79	1.59E-04	42%	Pass
19	0.307	179	3.59E-04	68	1.36E-04	38%	Pass
20	0.319	170	3.41E-04	60	1.20E-04	35%	Pass
21	0.331	164	3.29E-04	59	1.18E-04	36%	Pass
22	0.343	161	3.23E-04	58	1.16E-04	36%	Pass
23	0.355	160	3.21E-04	57	1.14E-04	36%	Pass
24	0.367	160	3.21E-04	56	1.12E-04	35%	Pass
25	0.379	156	3.13E-04	56	1.12E-04	36%	Pass
26	0.391	143	2.87E-04	55	1.10E-04	38%	Pass
27	0.403	136	2.73E-04	55	1.10E-04	40%	Pass
28	0.415	134	2.69E-04	55	1.10E-04	41%	Pass
29	0.427	131	2.63E-04	55	1.10E-04	42%	Pass
30	0.439	124	2.49E-04	55	1.10E-04	44%	Pass
31	0.451	105	2.11E-04	55	1.10E-04	52%	Pass
32	0.463	100	2.01E-04	54	1.08E-04	54%	Pass
33	0.475	98	1.97E-04	53	1.06E-04	54%	Pass
34	0.487	98	1.97E-04	49	9.83E-05	50%	Pass
35	0.500	95	1.91E-04	36	7.23E-05	38%	Pass
36	0.512	93	1.87E-04	35	7.02E-05	38%	Pass
37	0.524	89	1.79E-04	32	6.42E-05	36%	Pass
38	0.536	87	1.75E-04	32	6.42E-05	37%	Pass
39	0.548	84	1.69E-04	31	6.22E-05	37%	Pass
40	0.560	83	1.67E-04	31	6.22E-05	37%	Pass
41	0.572	78	1.57E-04	31	6.22E-05	40%	Pass
42	0.584	71	1.43E-04	31	6.22E-05	44%	Pass
43	0.596	70	1.40E-04	30	6.02E-05	43%	Pass
44	0.608	66	1.32E-04	30	6.02E-05	45%	Pass
45	0.620	58	1.16E-04	29	5.82E-05	50%	Pass
46	0.632	56	1.12E-04	29	5.82E-05	52%	Pass
47	0.644	54	1.08E-04	29	5.82E-05	54%	Pass
48	0.656	52	1.04E-04	29	5.82E-05	56%	Pass
49	0.668	51	1.02E-04	29	5.82E-05	57%	Pass
50	0.680	49	9.83E-05	25	5.02E-05	51%	Pass
51	0.692	48	9.63E-05	21	4.21E-05	44%	Pass
52	0.704	48	9.63E-05	21	4.21E-05	44%	Pass
53	0.717	47	9.43E-05	21	4.21E-05	45%	Pass

54	0.729	47	9.43E-05	21	4.21E-05	45%	Pass
55	0.741	45	9.03E-05	21	4.21E-05	47%	Pass
56	0.753	43	8.63E-05	20	4.01E-05	47%	Pass
57	0.765	39	7.83E-05	20	4.01E-05	51%	Pass
58	0.777	33	6.62E-05	20	4.01E-05	61%	Pass
59	0.789	33	6.62E-05	20	4.01E-05	61%	Pass
60	0.801	32	6.42E-05	20	4.01E-05	63%	Pass
61	0.813	32	6.42E-05	20	4.01E-05	63%	Pass
62	0.825	28	5.62E-05	20	4.01E-05	71%	Pass
63	0.837	27	5.42E-05	19	3.81E-05	70%	Pass
64	0.849	26	5.22E-05	19	3.81E-05	73%	Pass
65	0.861	26	5.22E-05	18	3.61E-05	69%	Pass
66	0.873	26	5.22E-05	13	2.61E-05	50%	Pass
67	0.885	25	5.02E-05	12	2.41E-05	48%	Pass
68	0.897	25	5.02E-05	12	2.41E-05	48%	Pass
69	0.909	23	4.62E-05	12	2.41E-05	52%	Pass
70	0.922	19	3.81E-05	12	2.41E-05	63%	Pass
71	0.934	13	2.61E-05	12	2.41E-05	92%	Pass
72	0.946	12	2.41E-05	12	2.41E-05	100%	Pass
73	0.958	12	2.41E-05	12	2.41E-05	100%	Pass
74	0.970	12	2.41E-05	12	2.41E-05	100%	Pass
75	0.982	12	2.41E-05	12	2.41E-05	100%	Pass
76	0.994	12	2.41E-05	12	2.41E-05	100%	Pass
77	1.006	12	2.41E-05	12	2.41E-05	100%	Pass
78	1.018	12	2.41E-05	12	2.41E-05	100%	Pass
79	1.030	12	2.41E-05	12	2.41E-05	100%	Pass
80	1.042	11	2.21E-05	12	2.41E-05	109%	Pass
81	1.054	10	2.01E-05	11	2.21E-05	110%	Pass
82	1.066	10	2.01E-05	6	1.20E-05	60%	Pass
83	1.078	10	2.01E-05	6	1.20E-05	60%	Pass
84	1.090	8	1.61E-05	6	1.20E-05	75%	Pass
85	1.102	7	1.40E-05	6	1.20E-05	86%	Pass
86	1.114	7	1.40E-05	6	1.20E-05	86%	Pass
87	1.126	7	1.40E-05	6	1.20E-05	86%	Pass
88	1.139	7	1.40E-05	6	1.20E-05	86%	Pass
89	1.151	7	1.40E-05	6	1.20E-05	86%	Pass
90	1.163	7	1.40E-05	5	1.00E-05	71%	Pass
91	1.175	7	1.40E-05	5	1.00E-05	71%	Pass
92	1.187	7	1.40E-05	5	1.00E-05	71%	Pass
93	1.199	7	1.40E-05	5	1.00E-05	71%	Pass
94	1.211	7	1.40E-05	5	1.00E-05	71%	Pass
95	1.223	7	1.40E-05	4	8.03E-06	57%	Pass
96	1.235	7	1.40E-05	4	8.03E-06	57%	Pass
97	1.247	7	1.40E-05	2	4.01E-06	29%	Pass
98	1.259	7	1.40E-05	2	4.01E-06	29%	Pass
99	1.271	6	1.20E-05	2	4.01E-06	33%	Pass
100	1.283	5	1.00E-05	2	4.01E-06	40%	Pass


OBR_PRE-3F
OBR_POST-3F
100% Pass
1.1
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
Outflow (cfs)
10
100
Duration of Exceedance (h)

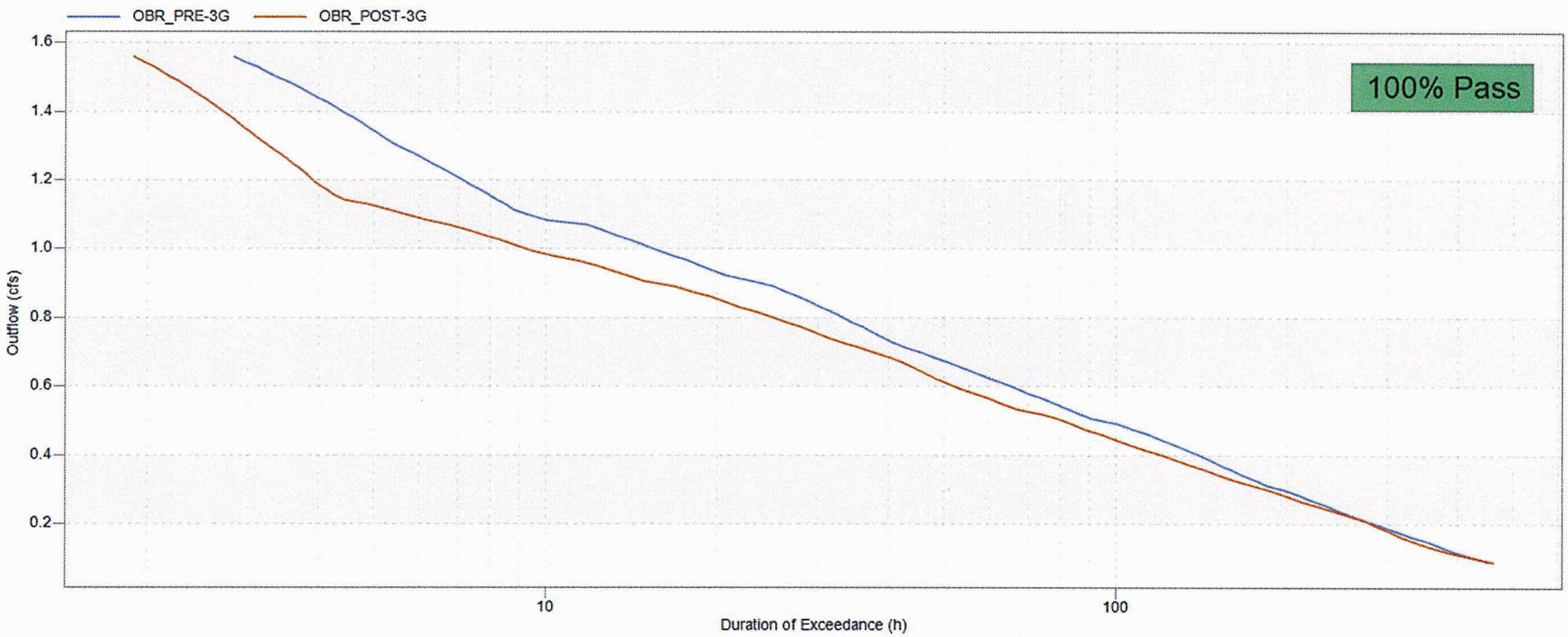
BASIN 3F

Lower Flow Threshold:	10%	
0.1xQ2 (Pre):	0.064	cfs
Q10 (Pre):	1.119	cfs
# of Ordinates:	100	
Incremental Q (Pre):	0.01054	cfs
Total Hourly Data:	498244	hours

The proposed BMP: **PASSED**

Interval	Pre-project Flow (cfs)	Pre-project Hours	Pre-project % Time Exceeding	Post-project Hours	Post-project % Time Exceeding	Percentage	Pass/Fail
0	0.064	282	5.66E-04	147	2.95E-04	52%	Pass
1	0.075	273	5.48E-04	137	2.75E-04	50%	Pass
2	0.085	269	5.40E-04	129	2.59E-04	48%	Pass
3	0.096	267	5.36E-04	128	2.57E-04	48%	Pass
4	0.107	260	5.22E-04	123	2.47E-04	47%	Pass
5	0.117	252	5.06E-04	121	2.43E-04	48%	Pass
6	0.128	231	4.64E-04	115	2.31E-04	50%	Pass
7	0.138	228	4.58E-04	112	2.25E-04	49%	Pass
8	0.149	223	4.48E-04	109	2.19E-04	49%	Pass
9	0.159	217	4.36E-04	100	2.01E-04	46%	Pass
10	0.170	210	4.21E-04	96	1.93E-04	46%	Pass
11	0.180	203	4.07E-04	87	1.75E-04	43%	Pass
12	0.191	187	3.75E-04	82	1.65E-04	44%	Pass
13	0.201	167	3.35E-04	79	1.59E-04	47%	Pass
14	0.212	164	3.29E-04	79	1.59E-04	48%	Pass
15	0.223	156	3.13E-04	79	1.59E-04	51%	Pass
16	0.233	151	3.03E-04	78	1.57E-04	52%	Pass
17	0.244	149	2.99E-04	77	1.55E-04	52%	Pass
18	0.254	148	2.97E-04	77	1.55E-04	52%	Pass
19	0.265	146	2.93E-04	76	1.53E-04	52%	Pass
20	0.275	142	2.85E-04	75	1.51E-04	53%	Pass
21	0.286	140	2.81E-04	71	1.43E-04	51%	Pass
22	0.296	137	2.75E-04	67	1.34E-04	49%	Pass
23	0.307	128	2.57E-04	62	1.24E-04	48%	Pass
24	0.317	125	2.51E-04	53	1.06E-04	42%	Pass
25	0.328	121	2.43E-04	47	9.43E-05	39%	Pass
26	0.338	117	2.35E-04	46	9.23E-05	39%	Pass
27	0.349	99	1.99E-04	44	8.83E-05	44%	Pass
28	0.360	95	1.91E-04	42	8.43E-05	44%	Pass
29	0.370	93	1.87E-04	42	8.43E-05	45%	Pass
30	0.381	88	1.77E-04	42	8.43E-05	48%	Pass
31	0.391	87	1.75E-04	42	8.43E-05	48%	Pass
32	0.402	85	1.71E-04	42	8.43E-05	49%	Pass
33	0.412	85	1.71E-04	41	8.23E-05	48%	Pass
34	0.423	84	1.69E-04	40	8.03E-05	48%	Pass
35	0.433	79	1.59E-04	38	7.63E-05	48%	Pass
36	0.444	77	1.55E-04	37	7.43E-05	48%	Pass
37	0.454	73	1.47E-04	34	6.82E-05	47%	Pass
38	0.465	69	1.38E-04	33	6.62E-05	48%	Pass
39	0.476	67	1.34E-04	30	6.02E-05	45%	Pass
40	0.486	64	1.28E-04	29	5.82E-05	45%	Pass
41	0.497	51	1.02E-04	28	5.62E-05	55%	Pass
42	0.507	50	1.00E-04	28	5.62E-05	56%	Pass
43	0.518	48	9.63E-05	28	5.62E-05	58%	Pass
44	0.528	46	9.23E-05	28	5.62E-05	61%	Pass
45	0.539	45	9.03E-05	28	5.62E-05	62%	Pass
46	0.549	45	9.03E-05	28	5.62E-05	62%	Pass
47	0.560	45	9.03E-05	28	5.62E-05	62%	Pass
48	0.570	45	9.03E-05	28	5.62E-05	62%	Pass
49	0.581	44	8.83E-05	26	5.22E-05	59%	Pass
50	0.591	43	8.63E-05	25	5.02E-05	58%	Pass
51	0.602	43	8.63E-05	23	4.62E-05	53%	Pass
52	0.613	42	8.43E-05	20	4.01E-05	48%	Pass
53	0.623	42	8.43E-05	18	3.61E-05	43%	Pass

54	0.634	41	8.23E-05	18	3.61E-05	44%	Pass
55	0.644	36	7.23E-05	18	3.61E-05	50%	Pass
56	0.655	31	6.22E-05	18	3.61E-05	58%	Pass
57	0.665	31	6.22E-05	18	3.61E-05	58%	Pass
58	0.676	30	6.02E-05	18	3.61E-05	60%	Pass
59	0.686	29	5.82E-05	18	3.61E-05	62%	Pass
60	0.697	29	5.82E-05	18	3.61E-05	62%	Pass
61	0.707	27	5.42E-05	17	3.41E-05	63%	Pass
62	0.718	26	5.22E-05	17	3.41E-05	65%	Pass
63	0.729	26	5.22E-05	17	3.41E-05	65%	Pass
64	0.739	25	5.02E-05	17	3.41E-05	68%	Pass
65	0.750	25	5.02E-05	16	3.21E-05	64%	Pass
66	0.760	25	5.02E-05	14	2.81E-05	56%	Pass
67	0.771	23	4.62E-05	12	2.41E-05	52%	Pass
68	0.781	23	4.62E-05	12	2.41E-05	52%	Pass
69	0.792	17	3.41E-05	12	2.41E-05	71%	Pass
70	0.802	12	2.41E-05	12	2.41E-05	100%	Pass
71	0.813	11	2.21E-05	12	2.41E-05	109%	Pass
72	0.823	11	2.21E-05	12	2.41E-05	109%	Pass
73	0.834	11	2.21E-05	12	2.41E-05	109%	Pass
74	0.844	11	2.21E-05	12	2.41E-05	109%	Pass
75	0.855	11	2.21E-05	12	2.41E-05	109%	Pass
76	0.866	11	2.21E-05	11	2.21E-05	100%	Pass
77	0.876	10	2.01E-05	11	2.21E-05	110%	Pass
78	0.887	10	2.01E-05	10	2.01E-05	100%	Pass
79	0.897	10	2.01E-05	8	1.61E-05	80%	Pass
80	0.908	10	2.01E-05	7	1.40E-05	70%	Pass
81	0.918	10	2.01E-05	6	1.20E-05	60%	Pass
82	0.929	10	2.01E-05	6	1.20E-05	60%	Pass
83	0.939	10	2.01E-05	6	1.20E-05	60%	Pass
84	0.950	7	1.40E-05	6	1.20E-05	86%	Pass
85	0.960	7	1.40E-05	6	1.20E-05	86%	Pass
86	0.971	7	1.40E-05	6	1.20E-05	86%	Pass
87	0.982	7	1.40E-05	6	1.20E-05	86%	Pass
88	0.992	7	1.40E-05	6	1.20E-05	86%	Pass
89	1.003	7	1.40E-05	6	1.20E-05	86%	Pass
90	1.013	7	1.40E-05	6	1.20E-05	86%	Pass
91	1.024	7	1.40E-05	6	1.20E-05	86%	Pass
92	1.034	7	1.40E-05	6	1.20E-05	86%	Pass
93	1.045	7	1.40E-05	6	1.20E-05	86%	Pass
94	1.055	7	1.40E-05	6	1.20E-05	86%	Pass
95	1.066	7	1.40E-05	6	1.20E-05	86%	Pass
96	1.076	6	1.20E-05	6	1.20E-05	100%	Pass
97	1.087	6	1.20E-05	6	1.20E-05	100%	Pass
98	1.097	6	1.20E-05	6	1.20E-05	100%	Pass
99	1.108	6	1.20E-05	6	1.20E-05	100%	Pass
100	1.119	5	1.00E-05	5	1.00E-05	100%	Pass


OBR_PRE-3G
OBR_POST-3G
100% Pass
Outflow (cfs)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
10
100
Duration of Exceedance (h)

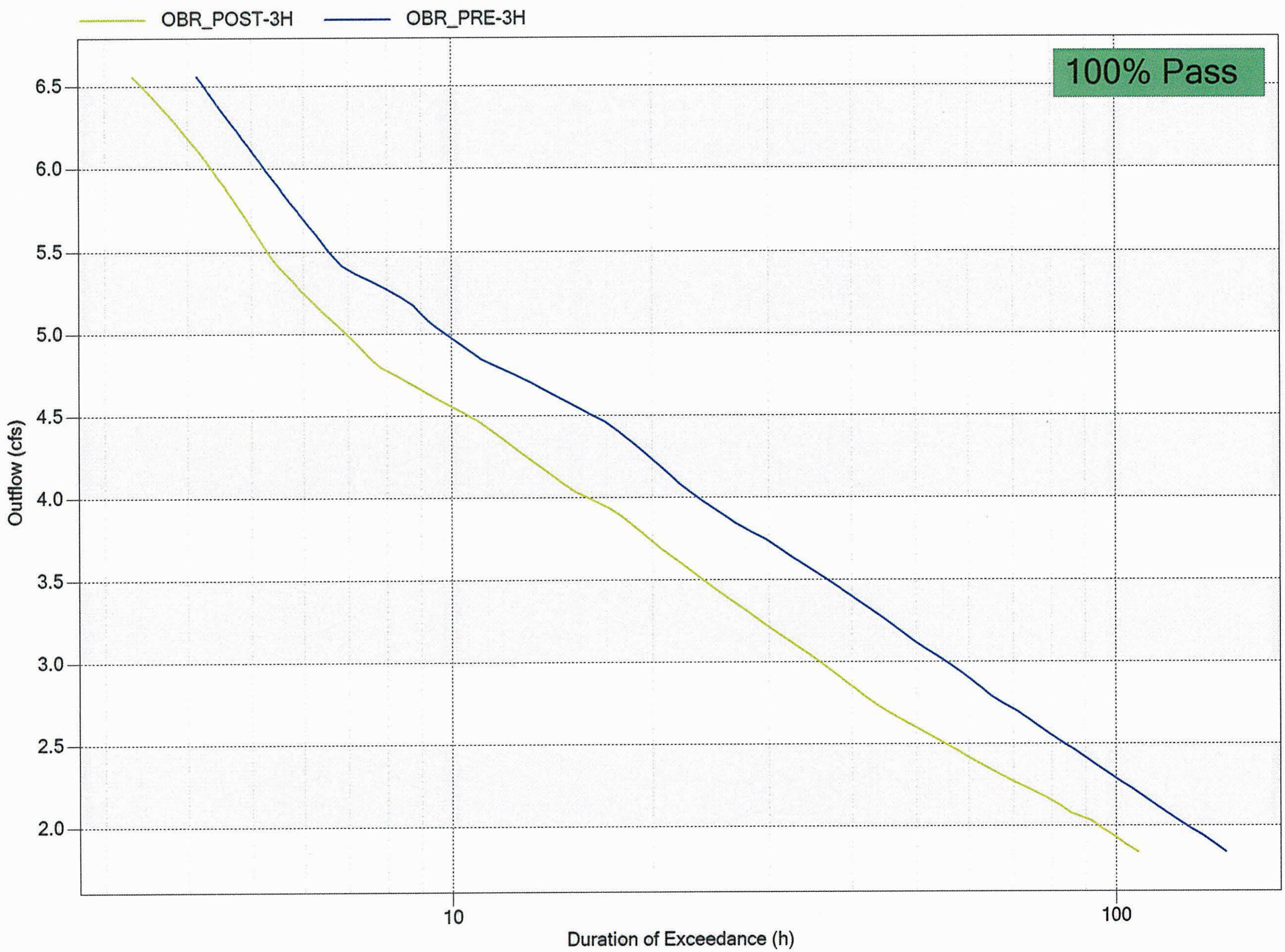
BASIN 3G

Lower Flow Threshold:	10%	
0.1xQ2 (Pre):	0.091	cfs
Q10 (Pre):	1.560	cfs
# of Ordinates:	100	
Incremental Q (Pre):	0.01469	cfs
Total Hourly Data:	498244	hours

The proposed BMP: **PASSED**

Interval	Pre-project Flow (cfs)	Pre-project Hours	Pre-project % Time Exceeding	Post-project Hours	Post-project % Time Exceeding	Percentage	Pass/Fail
0	0.091	379	7.61E-04	414	8.31E-04	109%	Pass
1	0.106	346	6.94E-04	380	7.63E-04	110%	Pass
2	0.120	337	6.76E-04	355	7.13E-04	105%	Pass
3	0.135	332	6.66E-04	334	6.70E-04	101%	Pass
4	0.150	324	6.50E-04	312	6.26E-04	96%	Pass
5	0.164	316	6.34E-04	296	5.94E-04	94%	Pass
6	0.179	307	6.16E-04	286	5.74E-04	93%	Pass
7	0.194	300	6.02E-04	284	5.70E-04	95%	Pass
8	0.208	266	5.34E-04	272	5.46E-04	102%	Pass
9	0.223	261	5.24E-04	257	5.16E-04	98%	Pass
10	0.238	253	5.08E-04	235	4.72E-04	93%	Pass
11	0.253	247	4.96E-04	218	4.38E-04	88%	Pass
12	0.267	238	4.78E-04	209	4.19E-04	88%	Pass
13	0.282	225	4.52E-04	203	4.07E-04	90%	Pass
14	0.297	203	4.07E-04	186	3.73E-04	92%	Pass
15	0.311	184	3.69E-04	180	3.61E-04	98%	Pass
16	0.326	183	3.67E-04	166	3.33E-04	91%	Pass
17	0.341	169	3.39E-04	151	3.03E-04	89%	Pass
18	0.355	166	3.33E-04	143	2.87E-04	86%	Pass
19	0.370	161	3.23E-04	137	2.75E-04	85%	Pass
20	0.385	157	3.15E-04	134	2.69E-04	85%	Pass
21	0.399	154	3.09E-04	130	2.61E-04	84%	Pass
22	0.414	152	3.05E-04	116	2.33E-04	76%	Pass
23	0.429	147	2.95E-04	114	2.29E-04	78%	Pass
24	0.443	145	2.91E-04	108	2.17E-04	74%	Pass
25	0.458	144	2.89E-04	105	2.11E-04	73%	Pass
26	0.473	142	2.85E-04	97	1.95E-04	68%	Pass
27	0.488	130	2.61E-04	93	1.87E-04	72%	Pass
28	0.502	116	2.33E-04	90	1.81E-04	78%	Pass
29	0.517	105	2.11E-04	87	1.75E-04	83%	Pass
30	0.532	102	2.05E-04	82	1.65E-04	80%	Pass
31	0.546	101	2.03E-04	69	1.38E-04	68%	Pass
32	0.561	99	1.99E-04	69	1.38E-04	70%	Pass
33	0.576	94	1.89E-04	63	1.26E-04	67%	Pass
34	0.590	91	1.83E-04	60	1.20E-04	66%	Pass
35	0.605	90	1.81E-04	55	1.10E-04	61%	Pass
36	0.620	89	1.79E-04	52	1.04E-04	58%	Pass
37	0.634	88	1.77E-04	52	1.04E-04	59%	Pass
38	0.649	84	1.69E-04	51	1.02E-04	61%	Pass
39	0.664	75	1.51E-04	48	9.63E-05	64%	Pass
40	0.678	73	1.47E-04	47	9.43E-05	64%	Pass
41	0.693	72	1.45E-04	42	8.43E-05	58%	Pass
42	0.708	58	1.16E-04	40	8.03E-05	69%	Pass
43	0.723	56	1.12E-04	39	7.83E-05	70%	Pass
44	0.737	53	1.06E-04	39	7.83E-05	74%	Pass
45	0.752	51	1.02E-04	36	7.23E-05	71%	Pass
46	0.767	49	9.83E-05	32	6.42E-05	65%	Pass
47	0.781	48	9.63E-05	32	6.42E-05	67%	Pass
48	0.796	46	9.23E-05	32	6.42E-05	70%	Pass
49	0.811	45	9.03E-05	32	6.42E-05	71%	Pass
50	0.825	45	9.03E-05	31	6.22E-05	69%	Pass
51	0.840	45	9.03E-05	30	6.02E-05	67%	Pass
52	0.855	44	8.83E-05	27	5.42E-05	61%	Pass
53	0.869	43	8.63E-05	27	5.42E-05	63%	Pass

54	0.884	43	8.63E-05	27	5.42E-05	63%	Pass
55	0.899	42	8.43E-05	22	4.42E-05	52%	Pass
56	0.913	32	6.42E-05	20	4.01E-05	63%	Pass
57	0.928	32	6.42E-05	20	4.01E-05	63%	Pass
58	0.943	32	6.42E-05	18	3.61E-05	56%	Pass
59	0.958	31	6.22E-05	17	3.41E-05	55%	Pass
60	0.972	31	6.22E-05	17	3.41E-05	55%	Pass
61	0.987	30	6.02E-05	16	3.21E-05	53%	Pass
62	1.002	27	5.42E-05	14	2.81E-05	52%	Pass
63	1.016	26	5.22E-05	13	2.61E-05	50%	Pass
64	1.031	26	5.22E-05	13	2.61E-05	50%	Pass
65	1.046	24	4.82E-05	11	2.21E-05	46%	Pass
66	1.060	24	4.82E-05	10	2.01E-05	42%	Pass
67	1.075	22	4.42E-05	10	2.01E-05	45%	Pass
68	1.090	22	4.42E-05	9	1.81E-05	41%	Pass
69	1.104	21	4.21E-05	8	1.61E-05	38%	Pass
70	1.119	12	2.41E-05	8	1.61E-05	67%	Pass
71	1.134	12	2.41E-05	8	1.61E-05	67%	Pass
72	1.148	12	2.41E-05	7	1.40E-05	58%	Pass
73	1.163	12	2.41E-05	6	1.20E-05	50%	Pass
74	1.178	12	2.41E-05	6	1.20E-05	50%	Pass
75	1.193	11	2.21E-05	5	1.00E-05	45%	Pass
76	1.207	11	2.21E-05	5	1.00E-05	45%	Pass
77	1.222	11	2.21E-05	5	1.00E-05	45%	Pass
78	1.237	11	2.21E-05	5	1.00E-05	45%	Pass
79	1.251	10	2.01E-05	5	1.00E-05	50%	Pass
80	1.266	10	2.01E-05	5	1.00E-05	50%	Pass
81	1.281	10	2.01E-05	5	1.00E-05	50%	Pass
82	1.295	10	2.01E-05	5	1.00E-05	50%	Pass
83	1.310	10	2.01E-05	4	8.03E-06	40%	Pass
84	1.325	7	1.40E-05	2	4.01E-06	29%	Pass
85	1.339	7	1.40E-05	2	4.01E-06	29%	Pass
86	1.354	7	1.40E-05	2	4.01E-06	29%	Pass
87	1.369	7	1.40E-05	2	4.01E-06	29%	Pass
88	1.383	7	1.40E-05	2	4.01E-06	29%	Pass
89	1.398	7	1.40E-05	2	4.01E-06	29%	Pass
90	1.413	7	1.40E-05	2	4.01E-06	29%	Pass
91	1.428	7	1.40E-05	2	4.01E-06	29%	Pass
92	1.442	7	1.40E-05	2	4.01E-06	29%	Pass
93	1.457	7	1.40E-05	2	4.01E-06	29%	Pass
94	1.472	7	1.40E-05	2	4.01E-06	29%	Pass
95	1.486	7	1.40E-05	2	4.01E-06	29%	Pass
96	1.501	7	1.40E-05	2	4.01E-06	29%	Pass
97	1.516	6	1.20E-05	2	4.01E-06	33%	Pass
98	1.530	6	1.20E-05	2	4.01E-06	33%	Pass
99	1.545	6	1.20E-05	2	4.01E-06	33%	Pass
100	1.560	5	1.00E-05	2	4.01E-06	40%	Pass


OBR_POST-3H
OBR_PRE-3H
100% Pass
6.5
6.0
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
Outflow (cfs)
10
100
Duration of Exceedance (h)

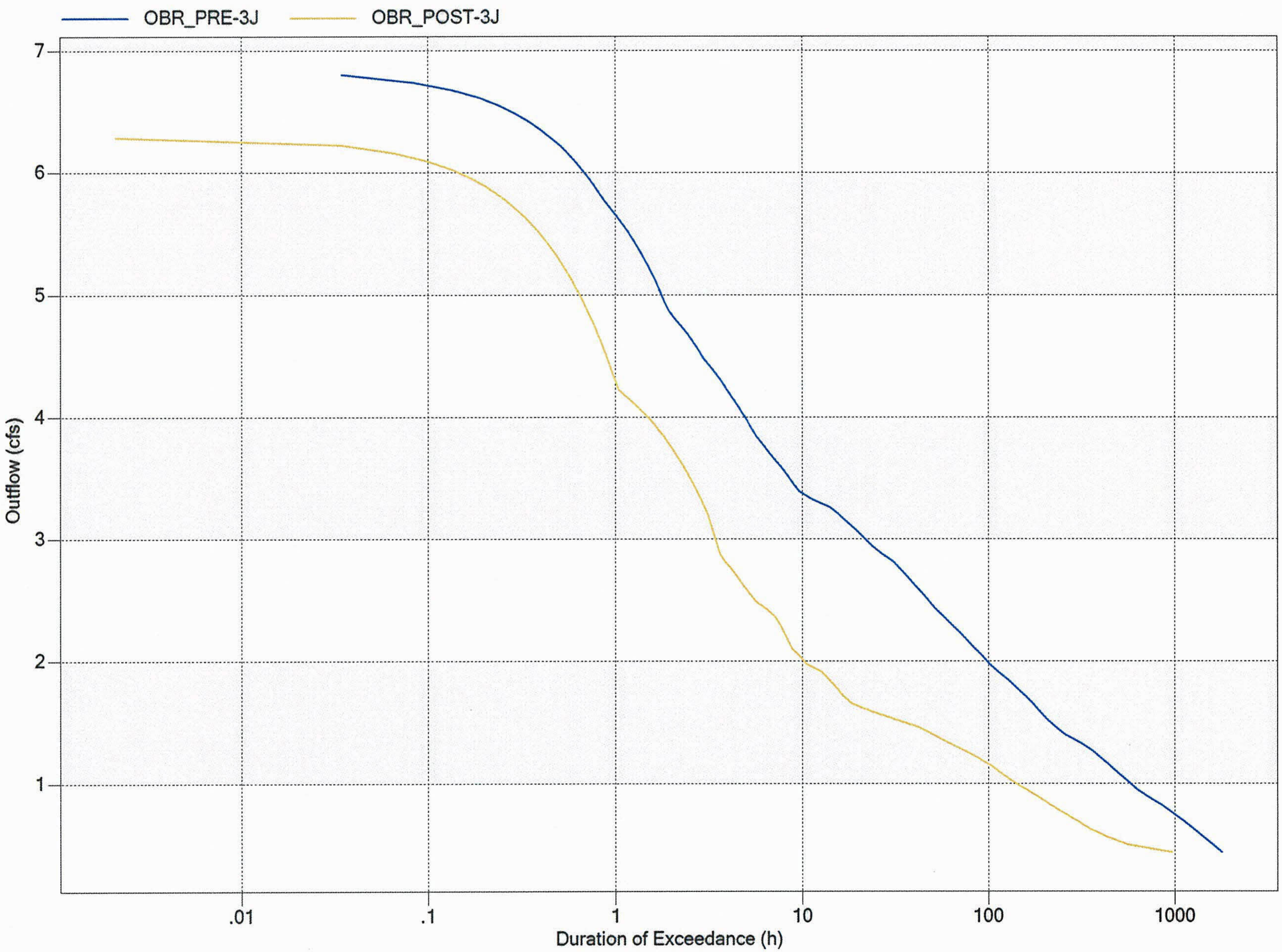
BASIN 3H

Lower Flow Threshold:	10%	
0.1xQ2 (Pre):	1.841	cfs
Q10 (Pre):	6.559	cfs
# of Ordinates:	100	
Incremental Q (Pre):	0.04718	cfs
Total Hourly Data:	498244	hours

The proposed BMP: **PASSED**

Interval	Pre-project Flow (cfs)	Pre-project Hours	Pre-project % Time Exceeding	Post-project Hours	Post-project % Time Exceeding	Percentage	Pass/Fail
0	1.841	158	3.17E-04	114	2.29E-04	72%	Pass
1	1.888	152	3.05E-04	110	2.21E-04	72%	Pass
2	1.935	144	2.89E-04	108	2.17E-04	75%	Pass
3	1.982	138	2.77E-04	105	2.11E-04	76%	Pass
4	2.029	134	2.69E-04	103	2.07E-04	77%	Pass
5	2.076	133	2.67E-04	94	1.89E-04	71%	Pass
6	2.124	126	2.53E-04	92	1.85E-04	73%	Pass
7	2.171	120	2.41E-04	87	1.75E-04	73%	Pass
8	2.218	117	2.35E-04	83	1.67E-04	71%	Pass
9	2.265	115	2.31E-04	79	1.59E-04	69%	Pass
10	2.312	111	2.23E-04	74	1.49E-04	67%	Pass
11	2.360	109	2.19E-04	72	1.45E-04	66%	Pass
12	2.407	107	2.15E-04	68	1.36E-04	64%	Pass
13	2.454	104	2.09E-04	65	1.30E-04	63%	Pass
14	2.501	101	2.03E-04	63	1.26E-04	62%	Pass
15	2.548	99	1.99E-04	60	1.20E-04	61%	Pass
16	2.595	96	1.93E-04	58	1.16E-04	60%	Pass
17	2.643	92	1.85E-04	55	1.10E-04	60%	Pass
18	2.690	90	1.81E-04	52	1.04E-04	58%	Pass
19	2.737	85	1.71E-04	49	9.83E-05	58%	Pass
20	2.784	83	1.67E-04	46	9.23E-05	55%	Pass
21	2.831	83	1.67E-04	46	9.23E-05	55%	Pass
22	2.879	82	1.65E-04	45	9.03E-05	55%	Pass
23	2.926	80	1.61E-04	44	8.83E-05	55%	Pass
24	2.973	76	1.53E-04	42	8.43E-05	55%	Pass
25	3.020	73	1.47E-04	41	8.23E-05	56%	Pass
26	3.067	71	1.43E-04	40	8.03E-05	56%	Pass
27	3.114	65	1.30E-04	40	8.03E-05	62%	Pass
28	3.162	62	1.24E-04	37	7.43E-05	60%	Pass
29	3.209	59	1.18E-04	35	7.02E-05	59%	Pass
30	3.256	58	1.16E-04	34	6.82E-05	59%	Pass
31	3.303	57	1.14E-04	33	6.62E-05	58%	Pass
32	3.350	56	1.12E-04	31	6.22E-05	55%	Pass
33	3.398	56	1.12E-04	30	6.02E-05	54%	Pass
34	3.445	54	1.08E-04	29	5.82E-05	54%	Pass
35	3.492	54	1.08E-04	28	5.62E-05	52%	Pass
36	3.539	48	9.63E-05	27	5.42E-05	56%	Pass
37	3.586	47	9.43E-05	27	5.42E-05	57%	Pass
38	3.633	44	8.83E-05	27	5.42E-05	61%	Pass
39	3.681	41	8.23E-05	26	5.22E-05	63%	Pass
40	3.728	40	8.03E-05	25	5.02E-05	63%	Pass
41	3.775	38	7.63E-05	25	5.02E-05	66%	Pass
42	3.822	37	7.43E-05	25	5.02E-05	68%	Pass
43	3.869	36	7.23E-05	24	4.82E-05	67%	Pass
44	3.917	36	7.23E-05	23	4.62E-05	64%	Pass
45	3.964	35	7.02E-05	20	4.01E-05	57%	Pass
46	4.011	33	6.62E-05	20	4.01E-05	61%	Pass
47	4.058	31	6.22E-05	18	3.61E-05	58%	Pass
48	4.105	27	5.42E-05	18	3.61E-05	67%	Pass
49	4.153	27	5.42E-05	17	3.41E-05	63%	Pass
50	4.200	27	5.42E-05	17	3.41E-05	63%	Pass
51	4.247	27	5.42E-05	16	3.21E-05	59%	Pass
52	4.294	27	5.42E-05	16	3.21E-05	59%	Pass
53	4.341	27	5.42E-05	16	3.21E-05	59%	Pass

54	4.388	27	5.42E-05	16	3.21E-05	59%	Pass
55	4.436	27	5.42E-05	15	3.01E-05	56%	Pass
56	4.483	26	5.22E-05	14	2.81E-05	54%	Pass
57	4.530	24	4.82E-05	14	2.81E-05	58%	Pass
58	4.577	23	4.62E-05	12	2.41E-05	52%	Pass
59	4.624	23	4.62E-05	11	2.21E-05	48%	Pass
60	4.672	21	4.21E-05	11	2.21E-05	52%	Pass
61	4.719	21	4.21E-05	10	2.01E-05	48%	Pass
62	4.766	20	4.01E-05	10	2.01E-05	50%	Pass
63	4.813	20	4.01E-05	9	1.81E-05	45%	Pass
64	4.860	19	3.81E-05	9	1.81E-05	47%	Pass
65	4.907	18	3.61E-05	9	1.81E-05	50%	Pass
66	4.955	18	3.61E-05	9	1.81E-05	50%	Pass
67	5.002	18	3.61E-05	9	1.81E-05	50%	Pass
68	5.049	15	3.01E-05	9	1.81E-05	60%	Pass
69	5.096	14	2.81E-05	9	1.81E-05	64%	Pass
70	5.143	13	2.61E-05	8	1.61E-05	62%	Pass
71	5.191	13	2.61E-05	8	1.61E-05	62%	Pass
72	5.238	11	2.21E-05	8	1.61E-05	73%	Pass
73	5.285	11	2.21E-05	7	1.40E-05	64%	Pass
74	5.332	11	2.21E-05	7	1.40E-05	64%	Pass
75	5.379	10	2.01E-05	7	1.40E-05	70%	Pass
76	5.426	9	1.81E-05	7	1.40E-05	78%	Pass
77	5.474	9	1.81E-05	6	1.20E-05	67%	Pass
78	5.521	8	1.61E-05	5	1.00E-05	63%	Pass
79	5.568	8	1.61E-05	5	1.00E-05	63%	Pass
80	5.615	8	1.61E-05	5	1.00E-05	63%	Pass
81	5.662	8	1.61E-05	5	1.00E-05	63%	Pass
82	5.710	8	1.61E-05	5	1.00E-05	63%	Pass
83	5.757	8	1.61E-05	5	1.00E-05	63%	Pass
84	5.804	8	1.61E-05	5	1.00E-05	63%	Pass
85	5.851	7	1.40E-05	5	1.00E-05	71%	Pass
86	5.898	7	1.40E-05	5	1.00E-05	71%	Pass
87	5.945	7	1.40E-05	5	1.00E-05	71%	Pass
88	5.993	7	1.40E-05	5	1.00E-05	71%	Pass
89	6.040	6	1.20E-05	5	1.00E-05	83%	Pass
90	6.087	6	1.20E-05	5	1.00E-05	83%	Pass
91	6.134	6	1.20E-05	5	1.00E-05	83%	Pass
92	6.181	6	1.20E-05	5	1.00E-05	83%	Pass
93	6.229	6	1.20E-05	5	1.00E-05	83%	Pass
94	6.276	6	1.20E-05	5	1.00E-05	83%	Pass
95	6.323	6	1.20E-05	5	1.00E-05	83%	Pass
96	6.370	5	1.00E-05	5	1.00E-05	100%	Pass
97	6.417	5	1.00E-05	5	1.00E-05	100%	Pass
98	6.465	5	1.00E-05	5	1.00E-05	100%	Pass
99	6.512	5	1.00E-05	5	1.00E-05	100%	Pass
100	6.559	5	1.00E-05	5	1.00E-05	100%	Pass



OBR_PRE-3J
OBR_POST-3J
7
6
5
4
3
2
1
Outflow (cfs)
.01
.1
1
10
100
1000
Duration of Exceedance (h)

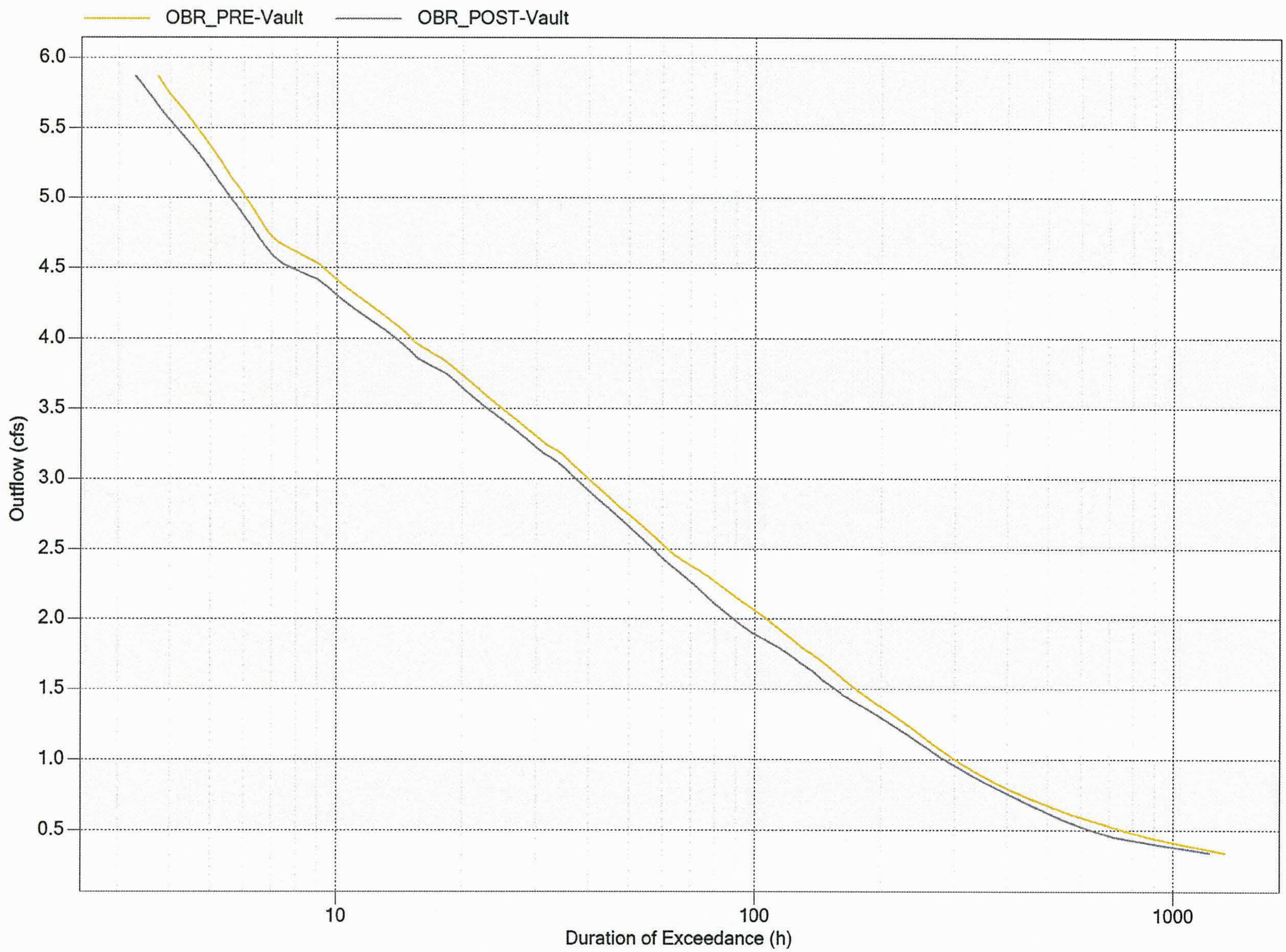
BASIN 3J

Lower Flow Threshold:	10%	
0.1xQ2 (Pre):	0.313	cfs
Q10 (Pre):	4.839	cfs
# of Ordinates:	100	
Incremental Q (Pre):	0.04526	cfs
Total Hourly Data:	498244	hours

The proposed BMP: PASSED

Interval	Pre-project Flow (cfs)	Pre-project Hours	Pre-project % Time Exceeding	Post-project Hours	Post-project % Time Exceeding	Percentage	Pass/Fail
0	0.313	2703	5.43E-03	2073	4.16E-03	77%	Pass
1	0.358	2399	4.81E-03	1776	3.56E-03	74%	Pass
2	0.404	1980	3.97E-03	1455	2.92E-03	73%	Pass
3	0.449	1629	3.27E-03	789	1.58E-03	48%	Pass
4	0.494	1541	3.09E-03	554	1.11E-03	36%	Pass
5	0.539	1417	2.84E-03	455	9.13E-04	32%	Pass
6	0.585	1371	2.75E-03	386	7.75E-04	28%	Pass
7	0.630	1330	2.67E-03	346	6.94E-04	26%	Pass
8	0.675	1257	2.52E-03	309	6.20E-04	25%	Pass
9	0.720	1177	2.36E-03	275	5.52E-04	23%	Pass
10	0.766	1106	2.22E-03	250	5.02E-04	23%	Pass
11	0.811	1031	2.07E-03	225	4.52E-04	22%	Pass
12	0.856	918	1.84E-03	209	4.19E-04	23%	Pass
13	0.902	755	1.52E-03	185	3.71E-04	25%	Pass
14	0.947	644	1.29E-03	174	3.49E-04	27%	Pass
15	0.992	629	1.26E-03	154	3.09E-04	24%	Pass
16	1.037	608	1.22E-03	139	2.79E-04	23%	Pass
17	1.083	579	1.16E-03	122	2.45E-04	21%	Pass
18	1.128	544	1.09E-03	116	2.33E-04	21%	Pass
19	1.173	533	1.07E-03	102	2.05E-04	19%	Pass
20	1.218	514	1.03E-03	93	1.87E-04	18%	Pass
21	1.264	486	9.75E-04	79	1.59E-04	16%	Pass
22	1.309	452	9.07E-04	68	1.36E-04	15%	Pass
23	1.354	416	8.35E-04	60	1.20E-04	14%	Pass
24	1.399	332	6.66E-04	54	1.08E-04	16%	Pass
25	1.445	279	5.60E-04	47	9.43E-05	17%	Pass
26	1.490	257	5.16E-04	42	8.43E-05	16%	Pass
27	1.535	234	4.70E-04	33	6.62E-05	14%	Pass
28	1.580	227	4.56E-04	24	4.82E-05	11%	Pass
29	1.626	221	4.44E-04	21	4.21E-05	10%	Pass
30	1.671	215	4.32E-04	17	3.41E-05	8%	Pass
31	1.716	201	4.03E-04	16	3.21E-05	8%	Pass
32	1.761	194	3.89E-04	14	2.81E-05	7%	Pass
33	1.807	189	3.79E-04	14	2.81E-05	7%	Pass
34	1.852	177	3.55E-04	14	2.81E-05	8%	Pass
35	1.897	158	3.17E-04	14	2.81E-05	9%	Pass
36	1.943	128	2.57E-04	13	2.61E-05	10%	Pass
37	1.988	128	2.57E-04	11	2.21E-05	9%	Pass
38	2.033	127	2.55E-04	11	2.21E-05	9%	Pass
39	2.078	121	2.43E-04	11	2.21E-05	9%	Pass
40	2.124	114	2.29E-04	9	1.81E-05	8%	Pass
41	2.169	110	2.21E-04	9	1.81E-05	8%	Pass
42	2.214	107	2.15E-04	9	1.81E-05	8%	Pass
43	2.259	107	2.15E-04	9	1.81E-05	8%	Pass
44	2.305	101	2.03E-04	9	1.81E-05	9%	Pass
45	2.350	93	1.87E-04	9	1.81E-05	10%	Pass
46	2.395	81	1.63E-04	7	1.40E-05	9%	Pass
47	2.440	71	1.43E-04	7	1.40E-05	10%	Pass
48	2.486	68	1.36E-04	7	1.40E-05	10%	Pass
49	2.531	65	1.30E-04	6	1.20E-05	9%	Pass
50	2.576	65	1.30E-04	6	1.20E-05	9%	Pass
51	2.621	65	1.30E-04	4	8.03E-06	6%	Pass
52	2.667	60	1.20E-04	4	8.03E-06	7%	Pass
53	2.712	60	1.20E-04	4	8.03E-06	7%	Pass

54	2.757	60	1.20E-04	4	8.03E-06	7%	Pass
55	2.802	59	1.18E-04	4	8.03E-06	7%	Pass
56	2.848	57	1.14E-04	4	8.03E-06	7%	Pass
57	2.893	49	9.83E-05	3	6.02E-06	6%	Pass
58	2.938	40	8.03E-05	3	6.02E-06	8%	Pass
59	2.984	40	8.03E-05	3	6.02E-06	8%	Pass
60	3.029	39	7.83E-05	3	6.02E-06	8%	Pass
61	3.074	39	7.83E-05	3	6.02E-06	8%	Pass
62	3.119	36	7.23E-05	3	6.02E-06	8%	Pass
63	3.165	35	7.02E-05	3	6.02E-06	9%	Pass
64	3.210	34	6.82E-05	3	6.02E-06	9%	Pass
65	3.255	34	6.82E-05	2	4.01E-06	6%	Pass
66	3.300	32	6.42E-05	2	4.01E-06	6%	Pass
67	3.346	31	6.22E-05	2	4.01E-06	6%	Pass
68	3.391	25	5.02E-05	2	4.01E-06	8%	Pass
69	3.436	15	3.01E-05	2	4.01E-06	13%	Pass
70	3.481	15	3.01E-05	2	4.01E-06	13%	Pass
71	3.527	15	3.01E-05	2	4.01E-06	13%	Pass
72	3.572	15	3.01E-05	2	4.01E-06	13%	Pass
73	3.617	15	3.01E-05	2	4.01E-06	13%	Pass
74	3.662	15	3.01E-05	2	4.01E-06	13%	Pass
75	3.708	14	2.81E-05	2	4.01E-06	14%	Pass
76	3.753	12	2.41E-05	2	4.01E-06	17%	Pass
77	3.798	12	2.41E-05	2	4.01E-06	17%	Pass
78	3.844	11	2.21E-05	2	4.01E-06	18%	Pass
79	3.889	10	2.01E-05	2	4.01E-06	20%	Pass
80	3.934	8	1.61E-05	2	4.01E-06	25%	Pass
81	3.979	8	1.61E-05	2	4.01E-06	25%	Pass
82	4.025	8	1.61E-05	2	4.01E-06	25%	Pass
83	4.070	8	1.61E-05	2	4.01E-06	25%	Pass
84	4.115	8	1.61E-05	2	4.01E-06	25%	Pass
85	4.160	8	1.61E-05	2	4.01E-06	25%	Pass
86	4.206	7	1.40E-05	2	4.01E-06	29%	Pass
87	4.251	7	1.40E-05	1	2.01E-06	14%	Pass
88	4.296	7	1.40E-05	1	2.01E-06	14%	Pass
89	4.341	7	1.40E-05	1	2.01E-06	14%	Pass
90	4.387	7	1.40E-05	1	2.01E-06	14%	Pass
91	4.432	7	1.40E-05	1	2.01E-06	14%	Pass
92	4.477	6	1.20E-05	1	2.01E-06	17%	Pass
93	4.522	6	1.20E-05	1	2.01E-06	17%	Pass
94	4.568	6	1.20E-05	1	2.01E-06	17%	Pass
95	4.613	6	1.20E-05	1	2.01E-06	17%	Pass
96	4.658	6	1.20E-05	1	2.01E-06	17%	Pass
97	4.703	6	1.20E-05	1	2.01E-06	17%	Pass
98	4.749	6	1.20E-05	1	2.01E-06	17%	Pass
99	4.794	6	1.20E-05	1	2.01E-06	17%	Pass
100	4.839	5	1.00E-05	1	2.01E-06	20%	Pass



OBR_PRE-Vault
OBR_POST-Vault
Outflow (cfs)
6.0
5.5
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
10
100
1000
Duration of Exceedance (h)

MWU

Lower Flow Threshold:	10%	
0.1xQ2 (Pre):	0.339	cfs
Q10 (Pre):	5.877	cfs
# of Ordinates:	100	
Incremental Q (Pre):	0.05538	cfs
Total Hourly Data:	498244	hours

The proposed BMP: PASSED

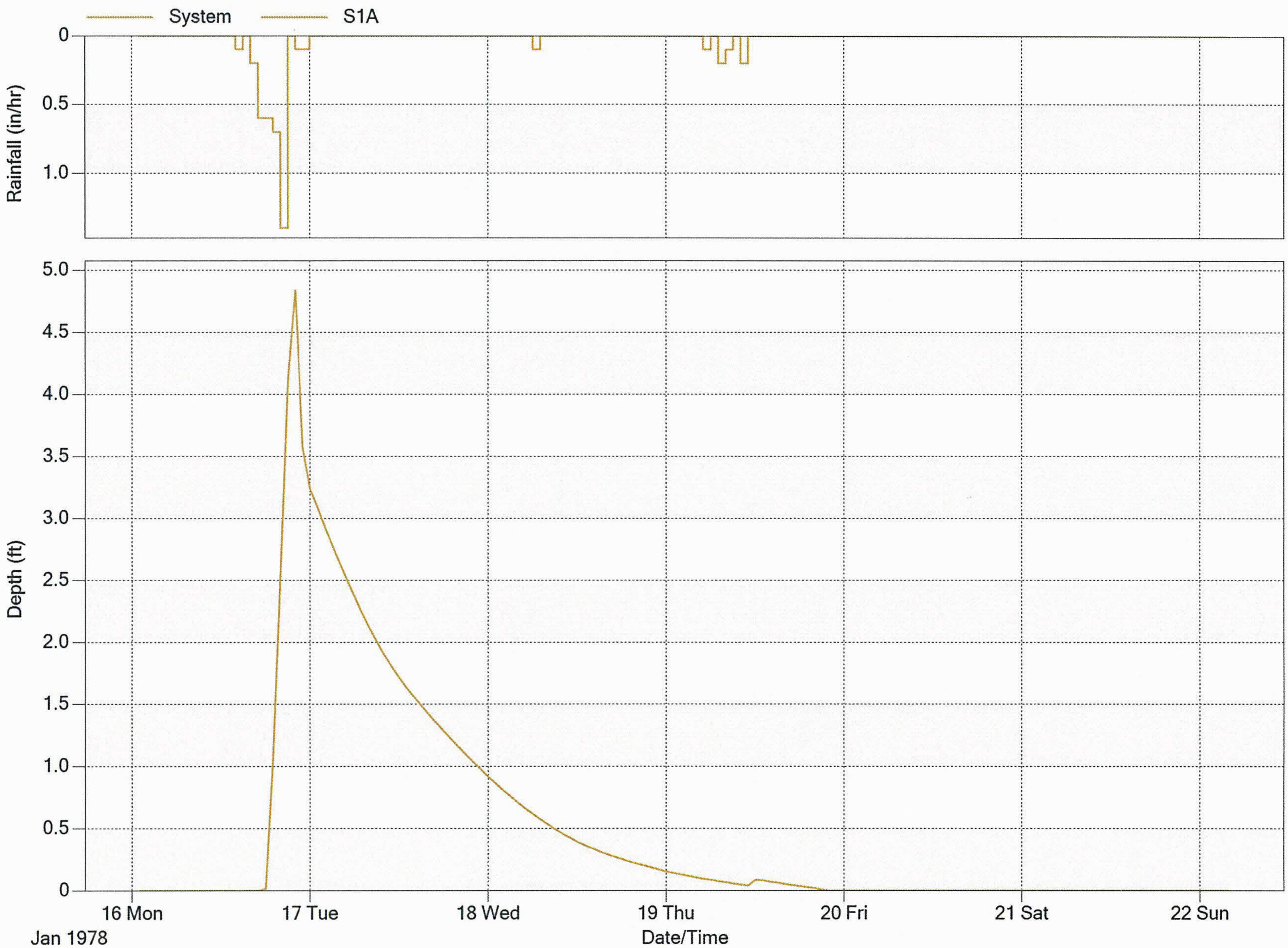
Interval	Pre-project Flow (cfs)	Pre-project Hours	Pre-project % Time Exceeding	Post-project Hours	Post-project % Time Exceeding	Percentage	Pass/Fail
0	0.339	1420	2.85E-03	1249	2.51E-03	88%	Pass
1	0.394	1228	2.46E-03	901	1.81E-03	73%	Pass
2	0.450	850	1.71E-03	627	1.26E-03	74%	Pass
3	0.505	740	1.49E-03	533	1.07E-03	72%	Pass
4	0.560	698	1.40E-03	491	9.85E-04	70%	Pass
5	0.616	580	1.16E-03	451	9.05E-04	78%	Pass
6	0.671	526	1.06E-03	424	8.51E-04	81%	Pass
7	0.726	467	9.37E-04	393	7.89E-04	84%	Pass
8	0.782	419	8.41E-04	365	7.33E-04	87%	Pass
9	0.837	378	7.59E-04	338	6.78E-04	89%	Pass
10	0.893	352	7.06E-04	313	6.28E-04	89%	Pass
11	0.948	320	6.42E-04	294	5.90E-04	92%	Pass
12	1.003	299	6.00E-04	275	5.52E-04	92%	Pass
13	1.059	282	5.66E-04	261	5.24E-04	93%	Pass
14	1.114	264	5.30E-04	245	4.92E-04	93%	Pass
15	1.170	248	4.98E-04	234	4.70E-04	94%	Pass
16	1.225	237	4.76E-04	222	4.46E-04	94%	Pass
17	1.280	227	4.56E-04	212	4.25E-04	93%	Pass
18	1.336	221	4.44E-04	204	4.09E-04	92%	Pass
19	1.391	210	4.21E-04	193	3.87E-04	92%	Pass
20	1.446	201	4.03E-04	183	3.67E-04	91%	Pass
21	1.502	188	3.77E-04	176	3.53E-04	94%	Pass
22	1.557	179	3.59E-04	164	3.29E-04	92%	Pass
23	1.613	166	3.33E-04	159	3.19E-04	96%	Pass
24	1.668	159	3.19E-04	150	3.01E-04	94%	Pass
25	1.723	153	3.07E-04	140	2.81E-04	92%	Pass
26	1.779	146	2.93E-04	136	2.73E-04	93%	Pass
27	1.834	135	2.71E-04	127	2.55E-04	94%	Pass
28	1.889	129	2.59E-04	118	2.37E-04	91%	Pass
29	1.945	122	2.45E-04	118	2.37E-04	97%	Pass
30	2.000	121	2.43E-04	112	2.25E-04	93%	Pass
31	2.056	118	2.37E-04	107	2.15E-04	91%	Pass
32	2.111	114	2.29E-04	97	1.95E-04	85%	Pass
33	2.166	109	2.19E-04	89	1.79E-04	82%	Pass
34	2.222	106	2.13E-04	88	1.77E-04	83%	Pass
35	2.277	102	2.05E-04	82	1.65E-04	80%	Pass
36	2.333	97	1.95E-04	76	1.53E-04	78%	Pass
37	2.388	92	1.85E-04	72	1.45E-04	78%	Pass
38	2.443	84	1.69E-04	68	1.36E-04	81%	Pass
39	2.499	79	1.59E-04	61	1.22E-04	77%	Pass
40	2.554	76	1.53E-04	58	1.16E-04	76%	Pass
41	2.609	72	1.45E-04	53	1.06E-04	74%	Pass
42	2.665	71	1.43E-04	50	1.00E-04	70%	Pass
43	2.720	69	1.38E-04	48	9.63E-05	70%	Pass
44	2.776	68	1.36E-04	47	9.43E-05	69%	Pass
45	2.831	61	1.22E-04	47	9.43E-05	77%	Pass
46	2.886	59	1.18E-04	46	9.23E-05	78%	Pass
47	2.942	58	1.16E-04	45	9.03E-05	78%	Pass
48	2.997	54	1.08E-04	43	8.63E-05	80%	Pass
49	3.052	52	1.04E-04	43	8.63E-05	83%	Pass
50	3.108	49	9.83E-05	39	7.83E-05	80%	Pass
51	3.163	45	9.03E-05	37	7.43E-05	82%	Pass
52	3.219	44	8.83E-05	35	7.02E-05	80%	Pass
53	3.274	42	8.43E-05	34	6.82E-05	81%	Pass

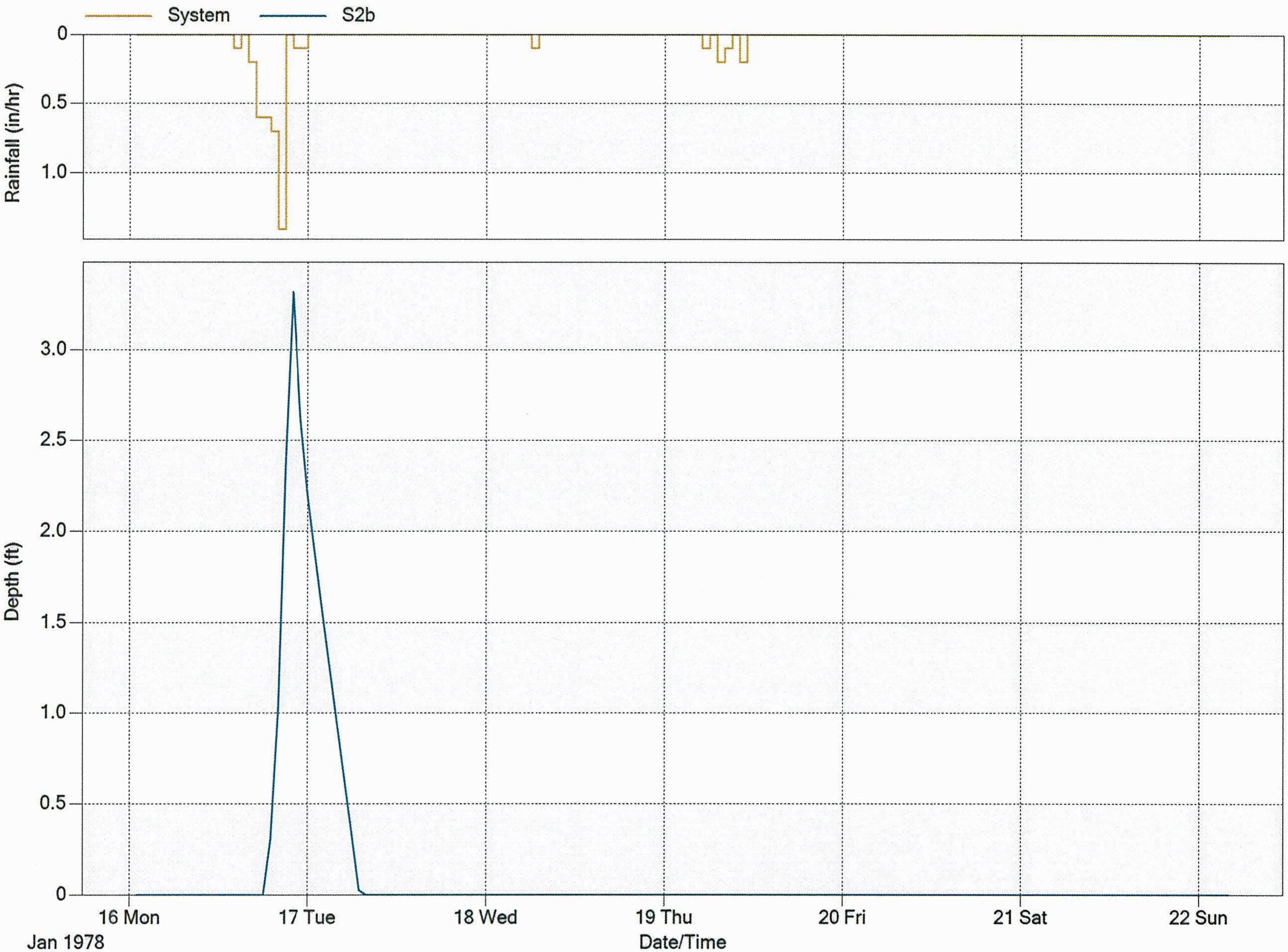
54	3.329	41	8.23E-05	34	6.82E-05	83%	Pass
55	3.385	40	8.03E-05	33	6.62E-05	83%	Pass
56	3.440	38	7.63E-05	33	6.62E-05	87%	Pass
57	3.496	37	7.43E-05	32	6.42E-05	86%	Pass
58	3.551	35	7.02E-05	30	6.02E-05	86%	Pass
59	3.606	33	6.62E-05	29	5.82E-05	88%	Pass
60	3.662	31	6.22E-05	29	5.82E-05	94%	Pass
61	3.717	30	6.02E-05	29	5.82E-05	97%	Pass
62	3.772	29	5.82E-05	25	5.02E-05	86%	Pass
63	3.828	29	5.82E-05	23	4.62E-05	79%	Pass
64	3.883	28	5.62E-05	22	4.42E-05	79%	Pass
65	3.939	23	4.62E-05	22	4.42E-05	96%	Pass
66	3.994	22	4.42E-05	21	4.21E-05	95%	Pass
67	4.049	21	4.21E-05	21	4.21E-05	100%	Pass
68	4.105	21	4.21E-05	20	4.01E-05	95%	Pass
69	4.160	21	4.21E-05	19	3.81E-05	90%	Pass
70	4.216	21	4.21E-05	18	3.61E-05	86%	Pass
71	4.271	19	3.81E-05	18	3.61E-05	95%	Pass
72	4.326	18	3.61E-05	17	3.41E-05	94%	Pass
73	4.382	18	3.61E-05	17	3.41E-05	94%	Pass
74	4.437	17	3.41E-05	15	3.01E-05	88%	Pass
75	4.492	17	3.41E-05	13	2.61E-05	76%	Pass
76	4.548	14	2.81E-05	12	2.41E-05	86%	Pass
77	4.603	13	2.61E-05	10	2.01E-05	77%	Pass
78	4.659	13	2.61E-05	9	1.81E-05	69%	Pass
79	4.714	12	2.41E-05	8	1.61E-05	67%	Pass
80	4.769	9	1.81E-05	8	1.61E-05	89%	Pass
81	4.825	8	1.61E-05	8	1.61E-05	100%	Pass
82	4.880	8	1.61E-05	8	1.61E-05	100%	Pass
83	4.935	8	1.61E-05	8	1.61E-05	100%	Pass
84	4.991	8	1.61E-05	8	1.61E-05	100%	Pass
85	5.046	8	1.61E-05	7	1.40E-05	88%	Pass
86	5.102	8	1.61E-05	7	1.40E-05	88%	Pass
87	5.157	7	1.40E-05	7	1.40E-05	100%	Pass
88	5.212	7	1.40E-05	7	1.40E-05	100%	Pass
89	5.268	7	1.40E-05	7	1.40E-05	100%	Pass
90	5.323	7	1.40E-05	7	1.40E-05	100%	Pass
91	5.379	7	1.40E-05	7	1.40E-05	100%	Pass
92	5.434	7	1.40E-05	7	1.40E-05	100%	Pass
93	5.489	7	1.40E-05	7	1.40E-05	100%	Pass
94	5.545	7	1.40E-05	7	1.40E-05	100%	Pass
95	5.600	7	1.40E-05	6	1.20E-05	86%	Pass
96	5.655	7	1.40E-05	5	1.00E-05	71%	Pass
97	5.711	7	1.40E-05	5	1.00E-05	71%	Pass
98	5.766	5	1.00E-05	5	1.00E-05	100%	Pass
99	5.822	5	1.00E-05	5	1.00E-05	100%	Pass
100	5.877	5	1.00E-05	5	1.00E-05	100%	Pass

9

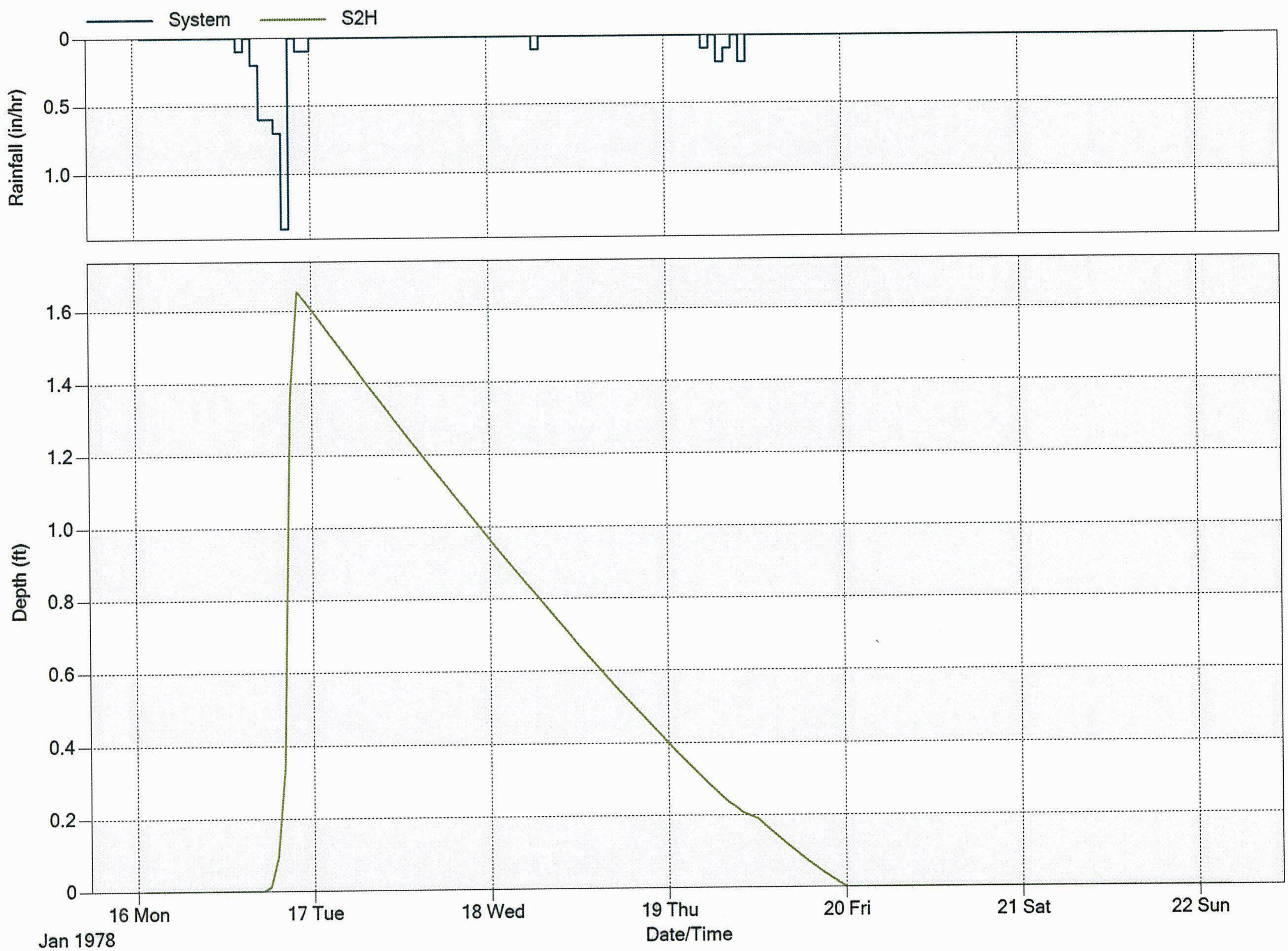
Attachment 9

Drawdown Graphs

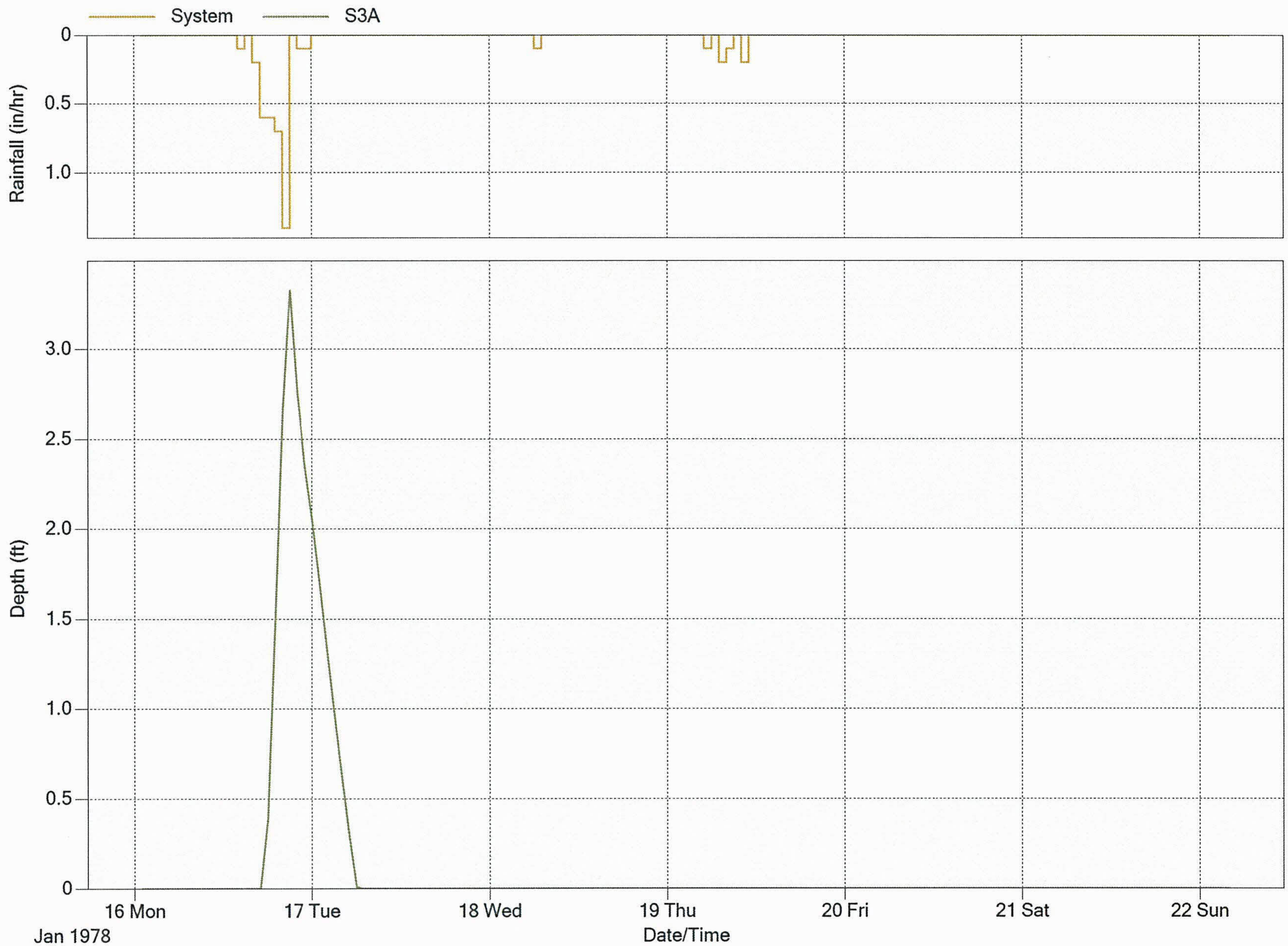

System
S1A
Rainfall (in/hr)
0
0.5
1.0
Depth (ft)
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0
16 Mon
17 Tue
18 Wed
19 Thu
20 Fri
21 Sat
22 Sun
Jan 1978
Date/Time

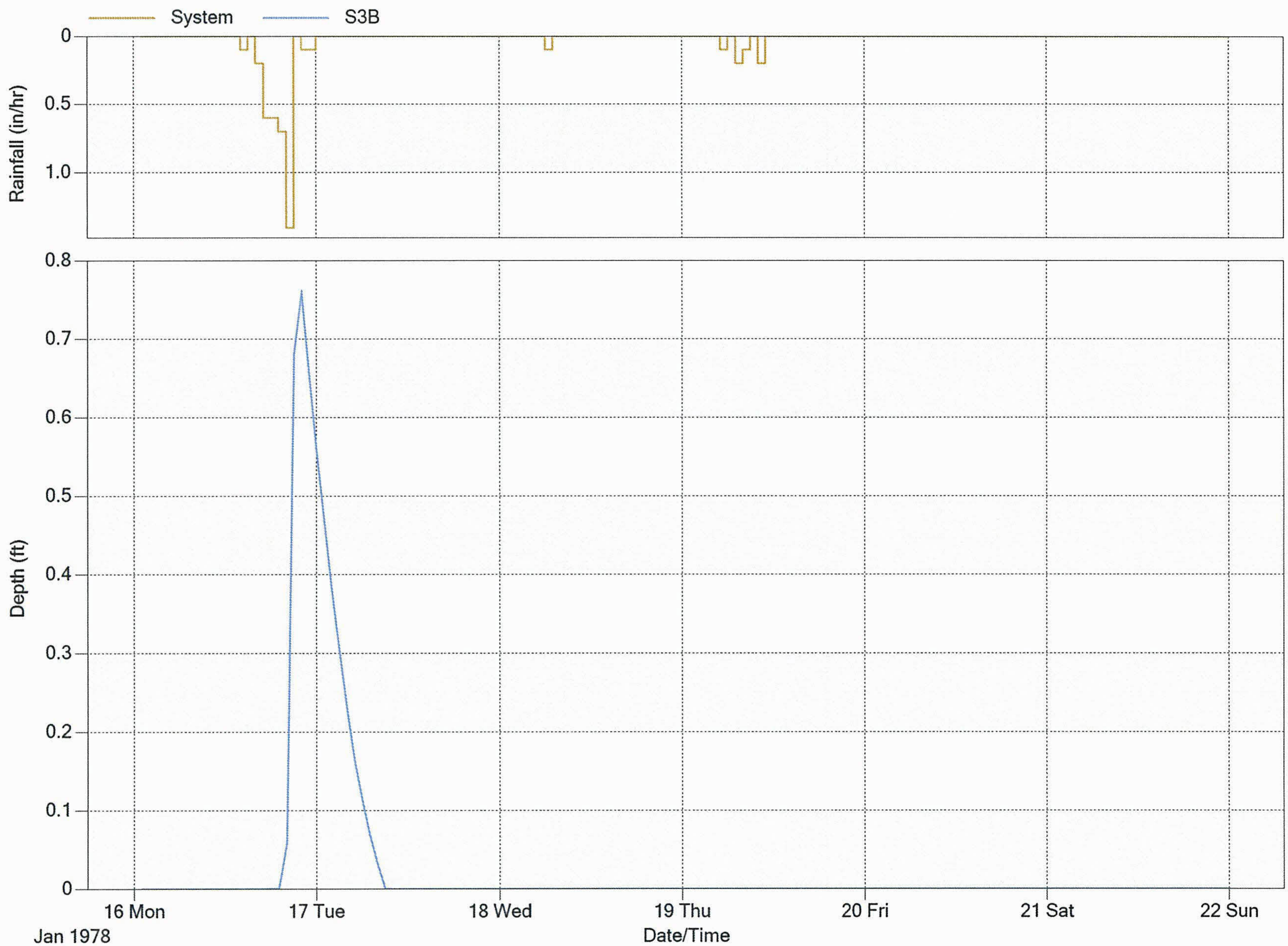


System
S2b
Rainfall (in/hr)
0
0.5
1.0
Depth (ft)
3.0
2.5
2.0
1.5
1.0
0.5
0
16 Mon
Jan 1978
17 Tue
18 Wed
19 Thu
20 Fri
21 Sat
22 Sun
Date/Time

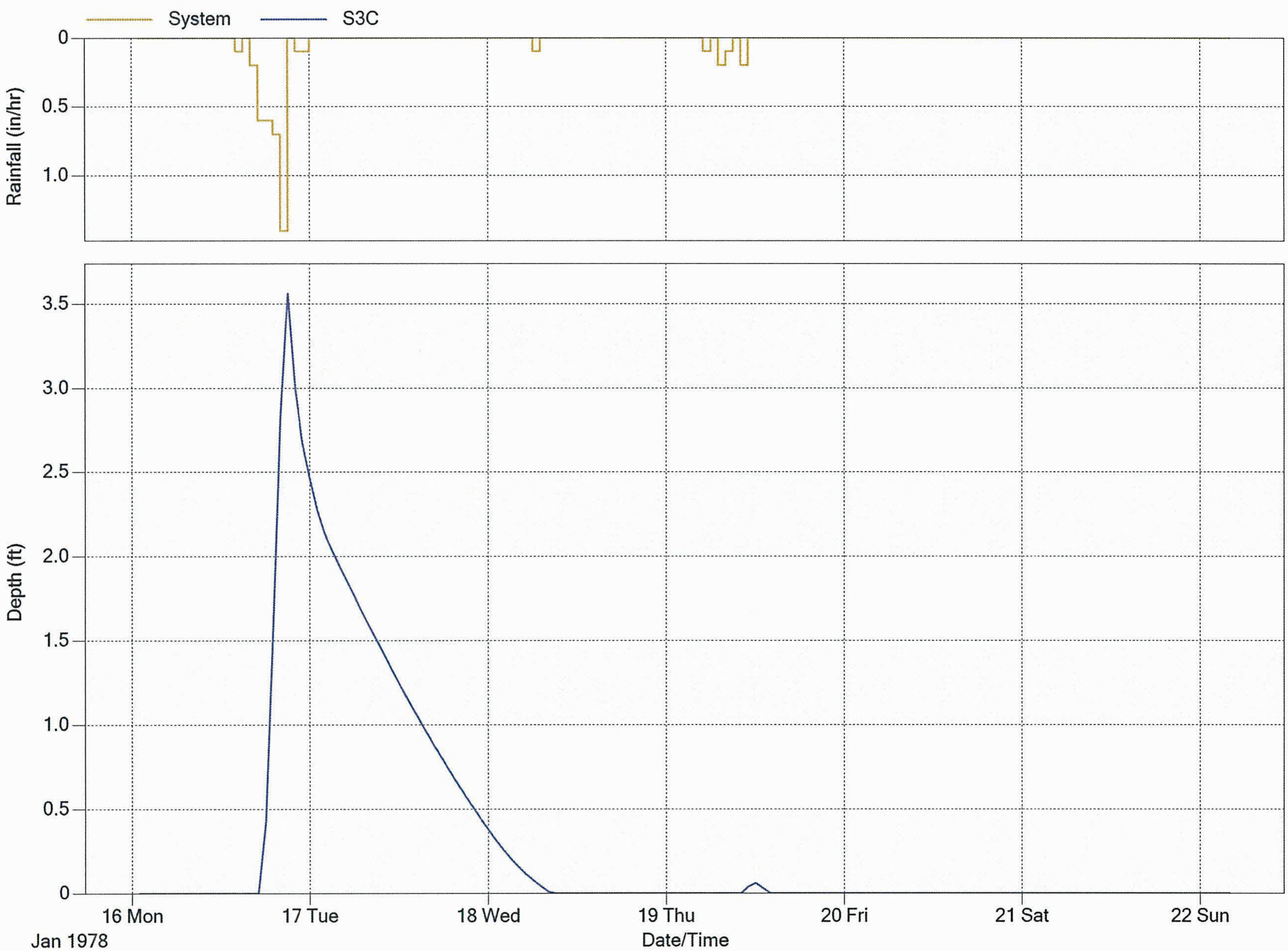


System
S2H
Rainfall (in/hr)
0
0.5
1.0
Depth (ft)
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0
16 Mon
17 Tue
18 Wed
19 Thu
20 Fri
21 Sat
22 Sun
Jan 1978
Date/Time

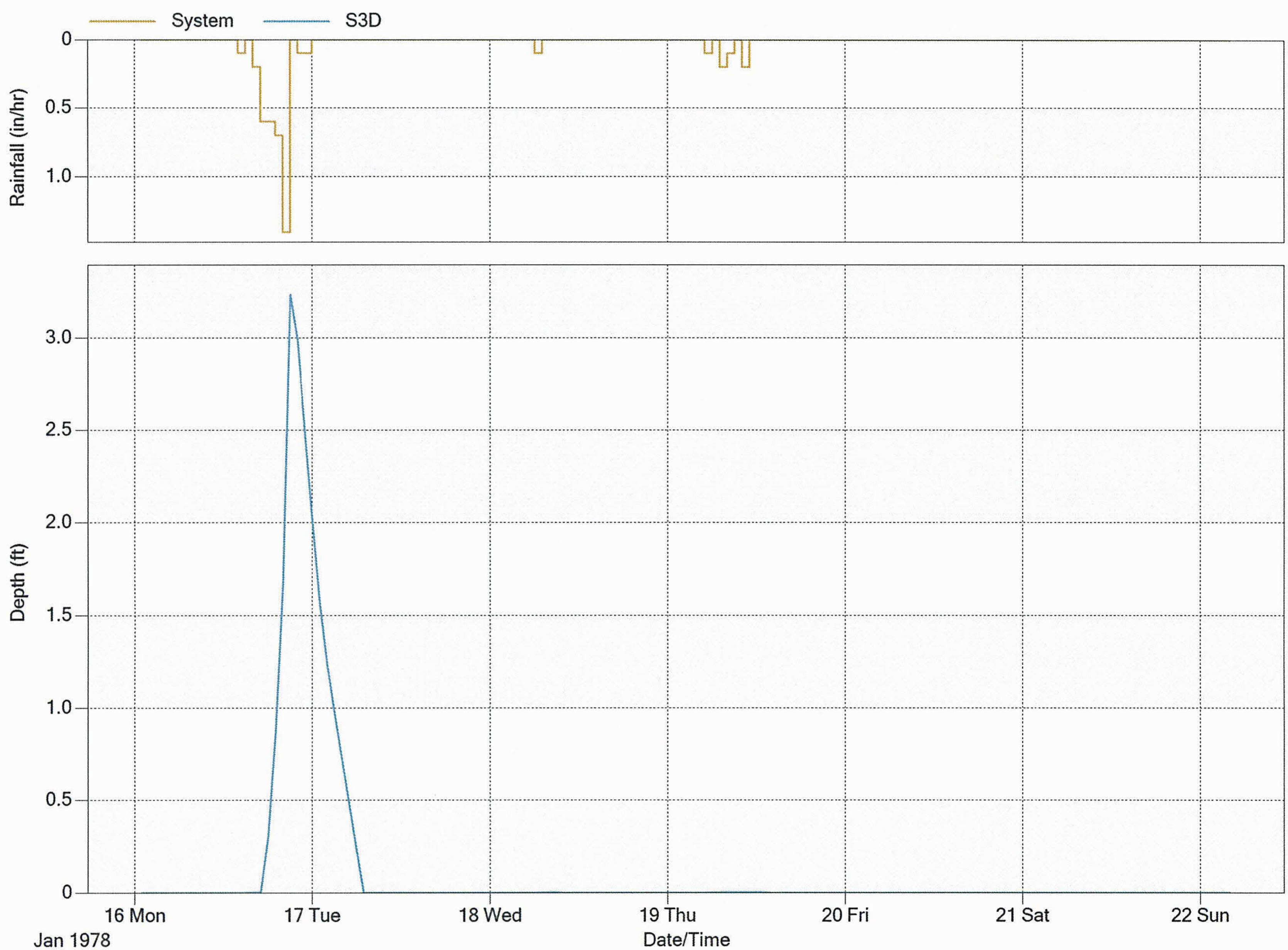

System
S3A
Rainfall (in/hr)
0
0.5
1.0
Depth (ft)
3.0
2.5
2.0
1.5
1.0
0.5
0
16 Mon
Jan 1978
17 Tue
18 Wed
19 Thu
20 Fri
21 Sat
22 Sun
Date/Time



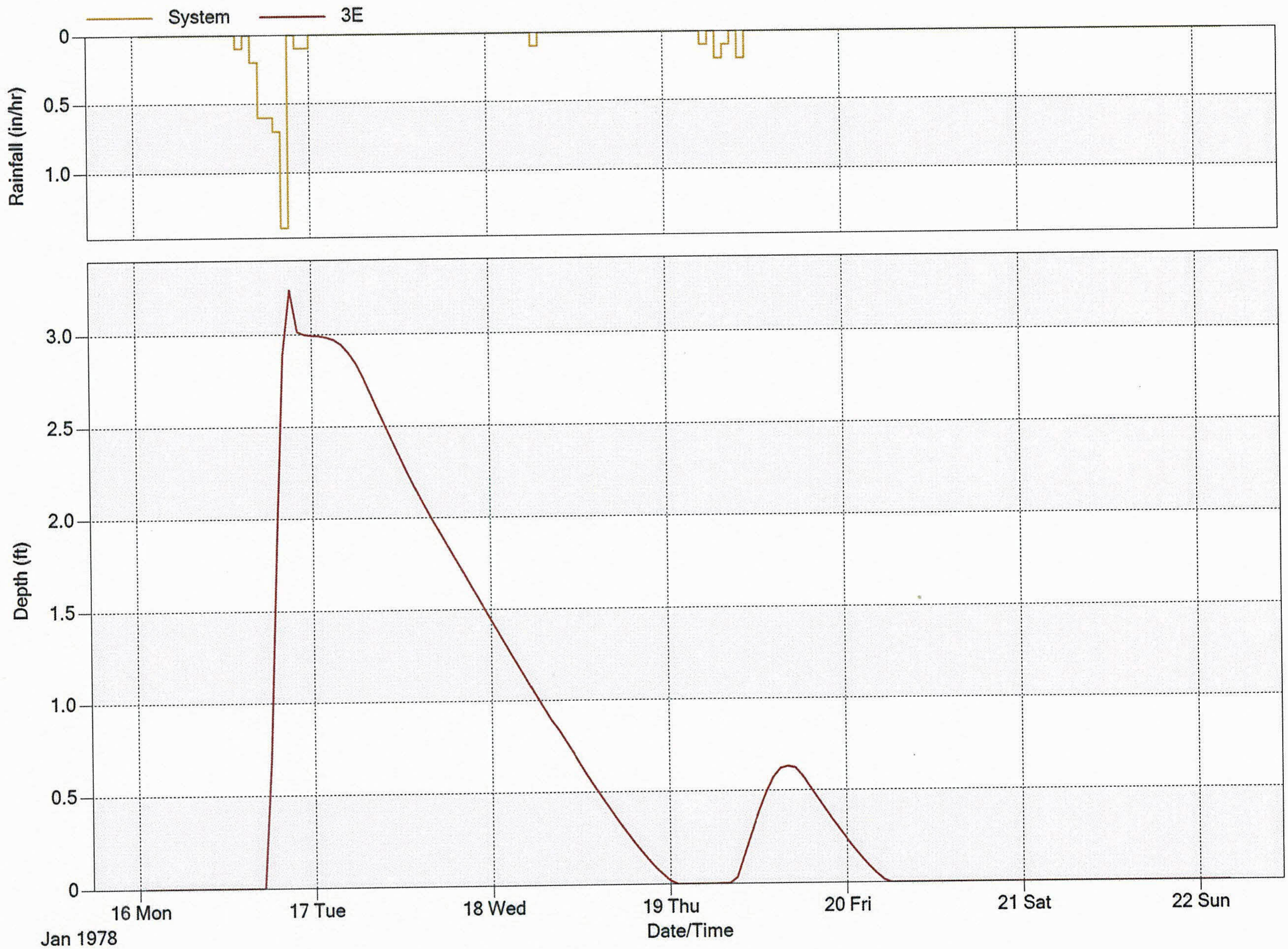
System
S3B
Rainfall (in/hr)
0
0.5
1.0
Depth (ft)
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
16 Mon
17 Tue
18 Wed
19 Thu
20 Fri
21 Sat
22 Sun
Jan 1978
Date/Time

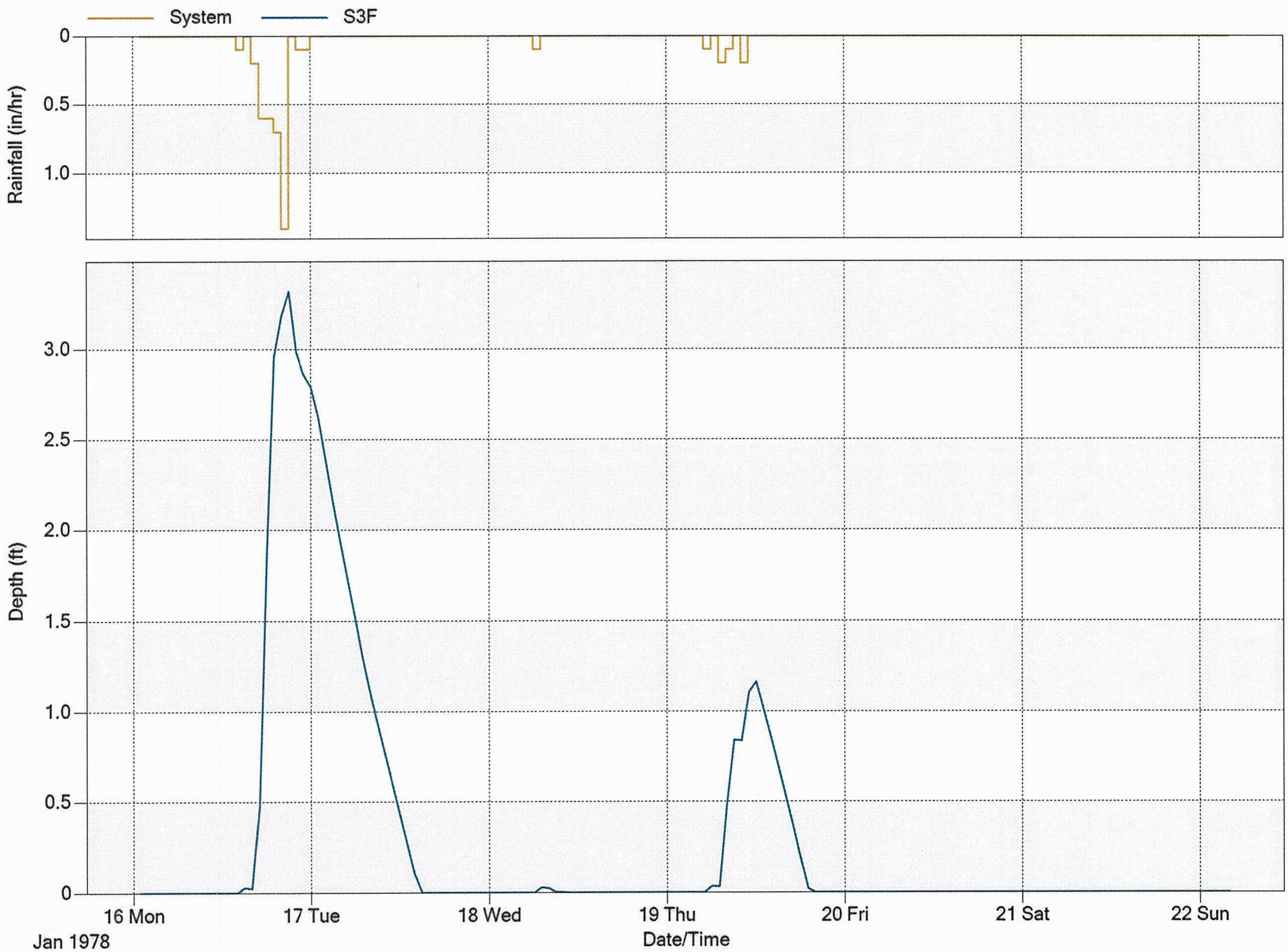


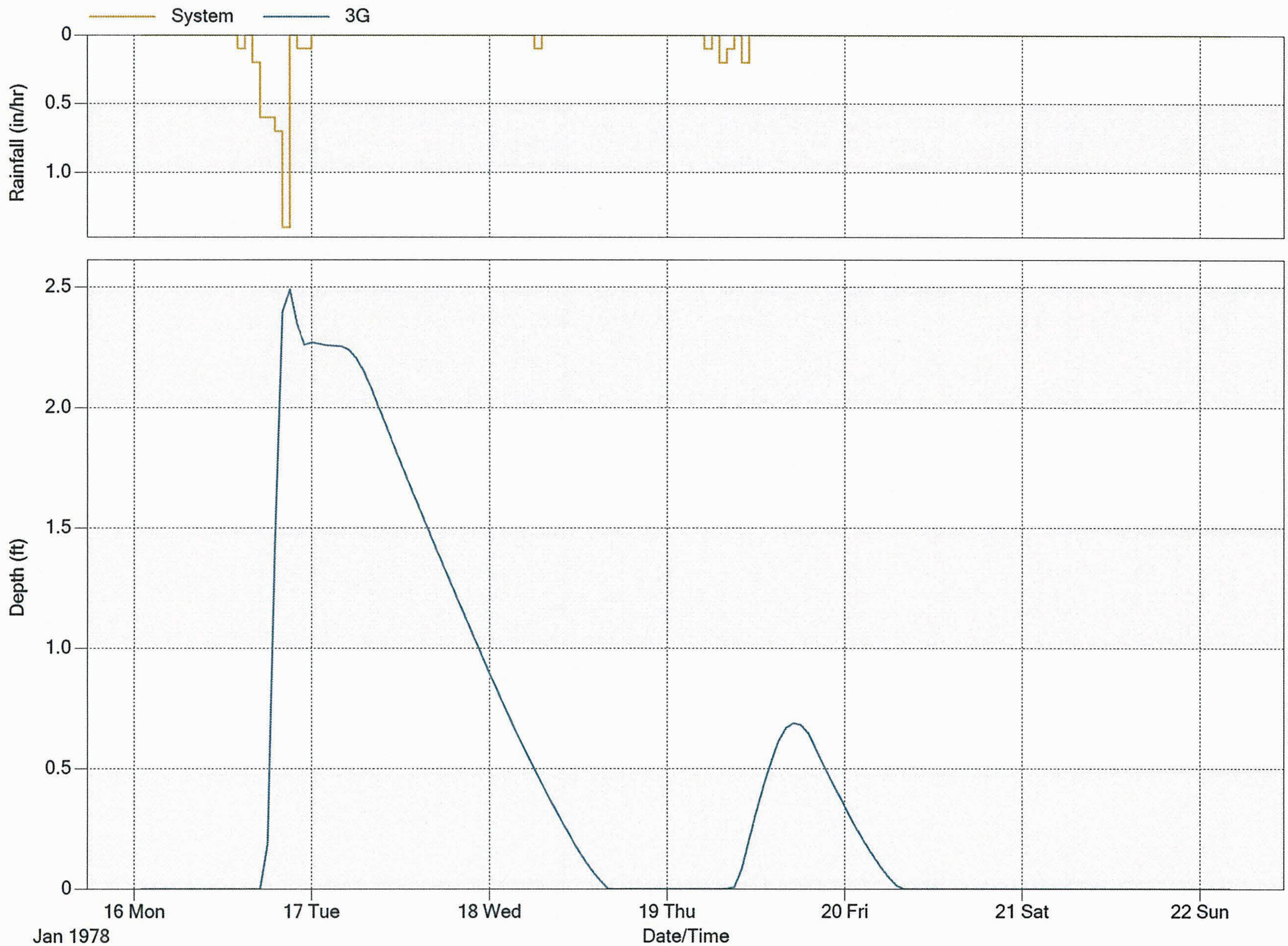
System
S3C
Rainfall (in/hr)
0
0.5
1.0
Depth (ft)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0
16 Mon
17 Tue
18 Wed
19 Thu
20 Fri
21 Sat
22 Sun
Jan 1978
Date/Time



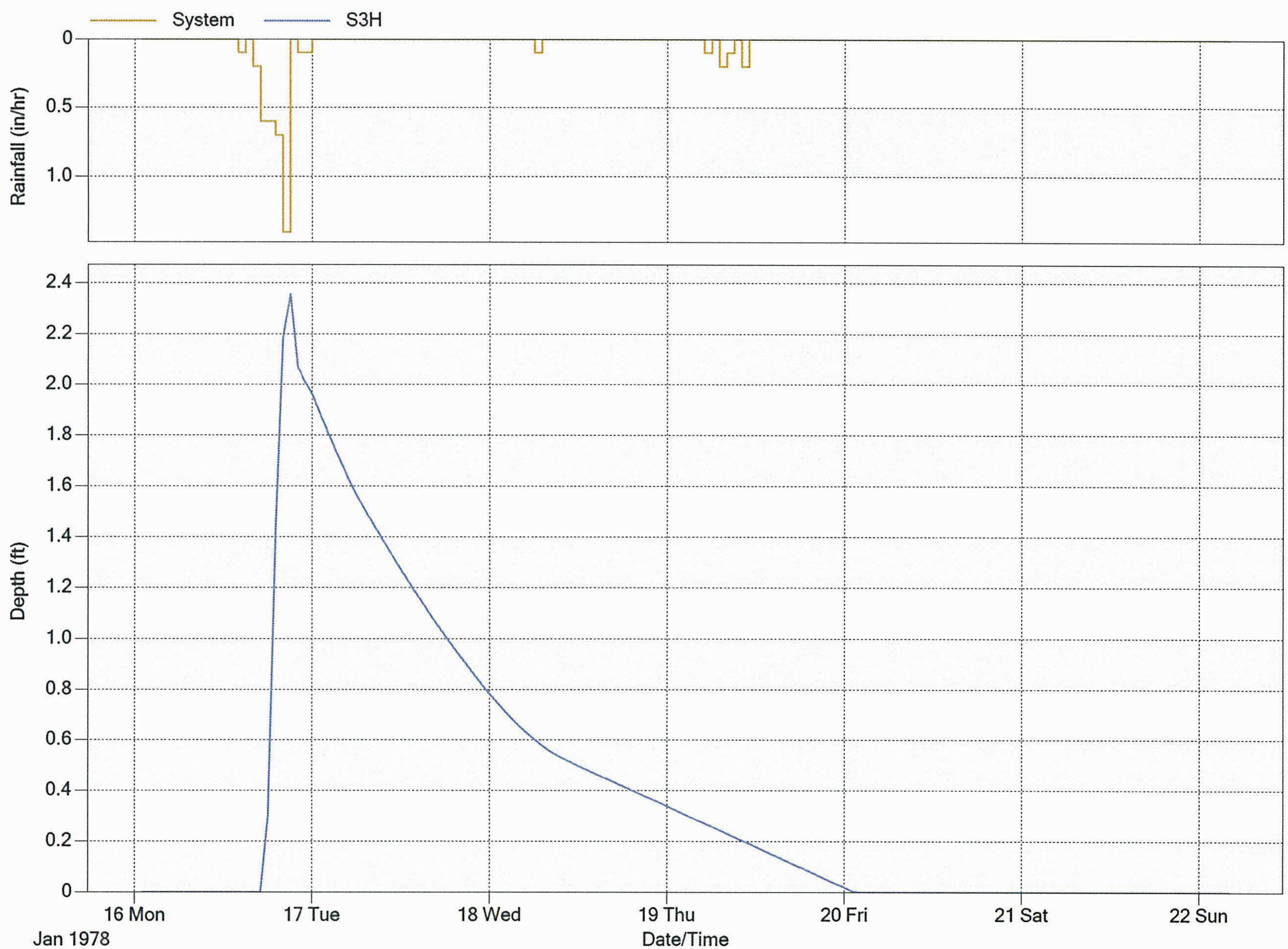
System
S3D
Rainfall (in/hr)
0
0.5
1.0
Depth (ft)
3.0
2.5
2.0
1.5
1.0
0.5
0
16 Mon
17 Tue
18 Wed
19 Thu
20 Fri
21 Sat
22 Sun
Jan 1978
Date/Time


System
3E
Rainfall (in/hr)
0
0.5
1.0
Depth (ft)
3.0
2.5
2.0
1.5
1.0
0.5
0
16 Mon
Jan 1978
17 Tue
18 Wed
19 Thu
20 Fri
21 Sat
22 Sun
Date/Time

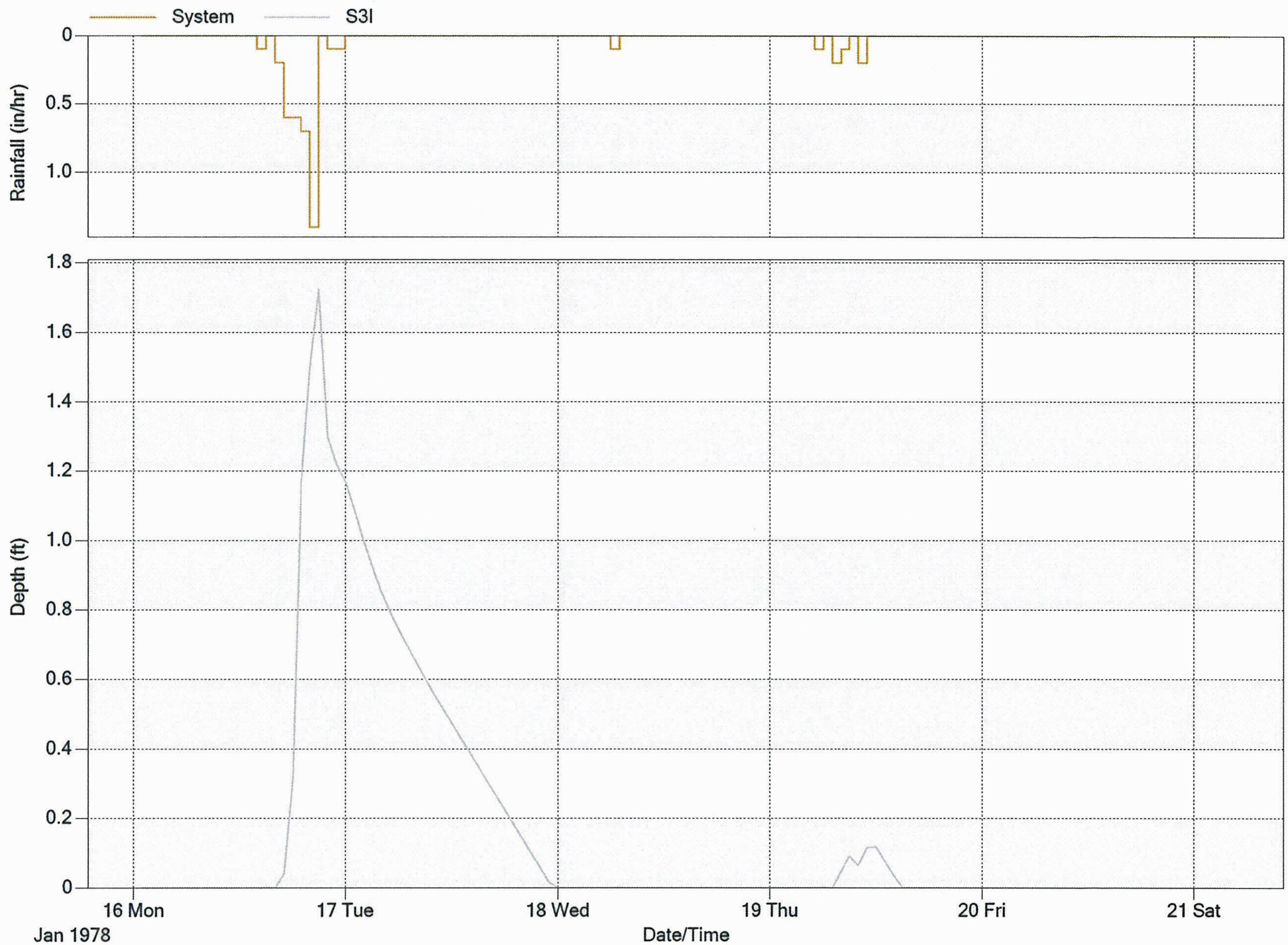

System
S3F
Rainfall (in/hr)
0
0.5
1.0
Depth (ft)
3.0
2.5
2.0
1.5
1.0
0.5
0
16 Mon
Jan 1978
17 Tue
18 Wed
19 Thu
20 Fri
21 Sat
22 Sun
Date/Time



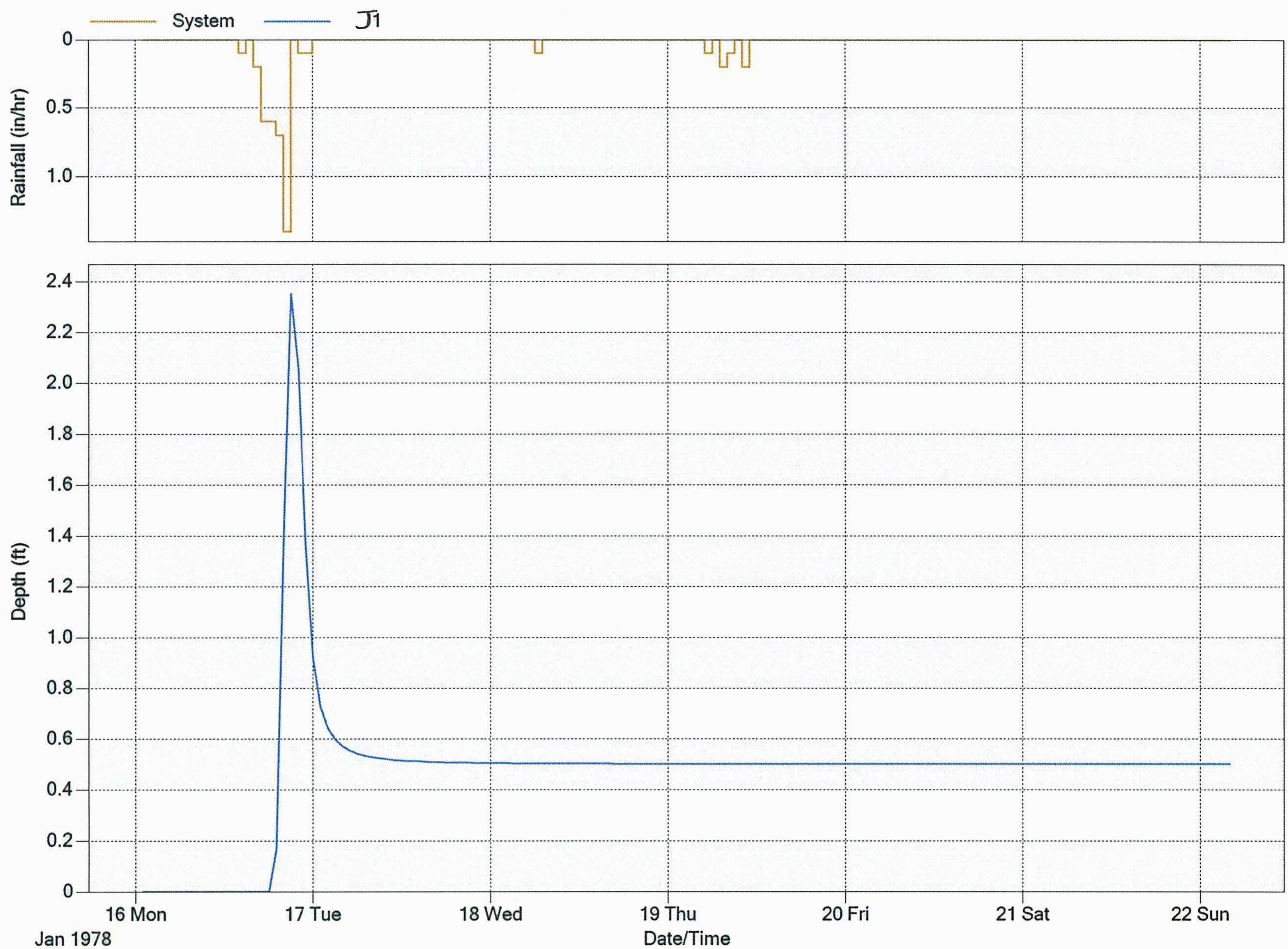
System
3G
Rainfall (in/hr)
0
0.5
1.0
Depth (ft)
2.5
2.0
1.5
1.0
0.5
0
16 Mon
Jan 1978
17 Tue
18 Wed
19 Thu
20 Fri
21 Sat
22 Sun
Date/Time

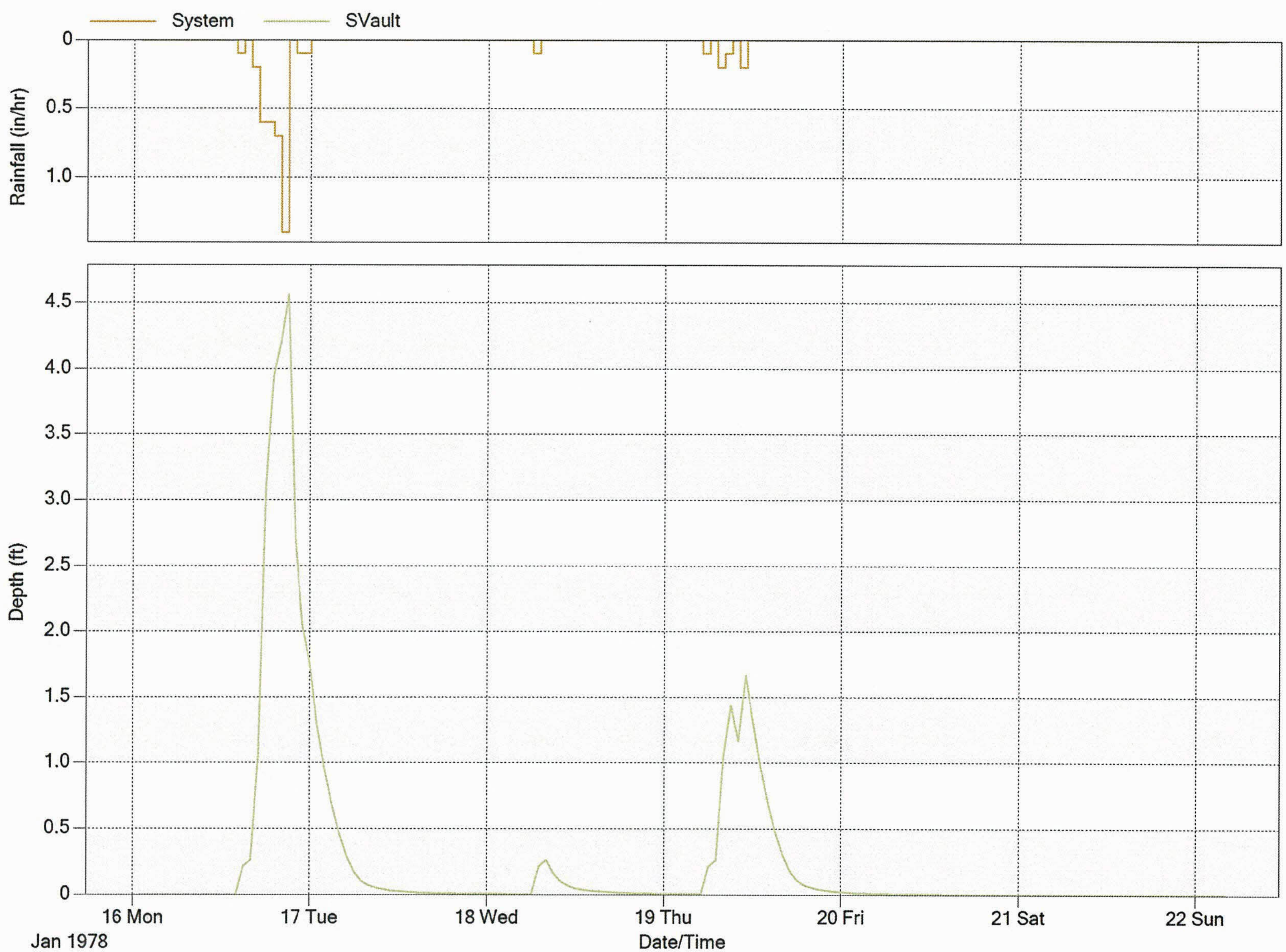


System
S3H
Rainfall (in/hr)
0
0.5
1.0
Depth (ft)
2.4
2.2
2.0
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0
16 Mon
Jan 1978
17 Tue
18 Wed
19 Thu
20 Fri
21 Sat
22 Sun
Date/Time



System
S3I
Rainfall (in/hr)
0
0.5
1.0
Depth (ft)
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0
16 Mon
Jan 1978
17 Tue
18 Wed
19 Thu
20 Fri
21 Sat
Date/Time


System
J1
Rainfall (in/hr)
0
0.5
1.0
Depth (ft)
2.4
2.2
2.0
1.8
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0
16 Mon
17 Tue
18 Wed
19 Thu
20 Fri
21 Sat
22 Sun
Jan 1978
Date/Time


System
SVault
Rainfall (in/hr)
0
0.5
1.0
Depth (ft)
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0
16 Mon
Jan 1978
17 Tue
18 Wed
19 Thu
20 Fri
21 Sat
22 Sun
Date/Time

10

Attachment 10

CD with Electronic Files


Verbatim
CD-R
COMPACT disc Recordable
700 MB Mo
52x speed vitesse
80 min
4192
Ocean Breeze Ranch
SWMM Files