Stormwater Detention and Infiltration Design Data Sheet

SDI-Design Data v2.00, Released January 2020

Stormwater Facility Name: **EDB A**

Facility Location & Jurisdiction: **9696 Flagstone Street, El Paso County, CO**

User Input: Watershed Characteristics

Extended Detention Basin (EDB) =	EDB	
Watershed Area =	3.28	acres
Watershed Length =	735	ft
Watershed Length to Centroid =	405	ft
Watershed Slope =	0.021	ft/ft
Watershed Imperviousness =	23.8%	percent
Percentage Hydrologic Soil Group A =	0.0%	percent
Percentage Hydrologic Soil Group B =	100.0%	percent
Percentage Hydrologic Soil Groups C/D =	0.0%	percent
Target WQCV Drain Time =	40.0	hours

Location for 1-hr Rainfall Depths (use dropdown):

Douglas County - Zone 1

User Defined Stage [ft]	User Defined Area [ft^2]	User Defined Stage [ft]	User Defined Discharge [cfs]
0.00	0	0.00	0.00
0.17	416	0.17	0.04
1.17	3,075	1.17	0.08
2.17	4,378	2.17	0.14
3.17	5,338	3.17	0.20
4.17	6,484	4.17	20.00
5.17	6,940	5.17	30.00

After providing required inputs above including 1-hour rainfall depths, click 'Run CUHP' to generate runoff hydrographs using the embedded Colorado Urban Hydrograph Procedure.

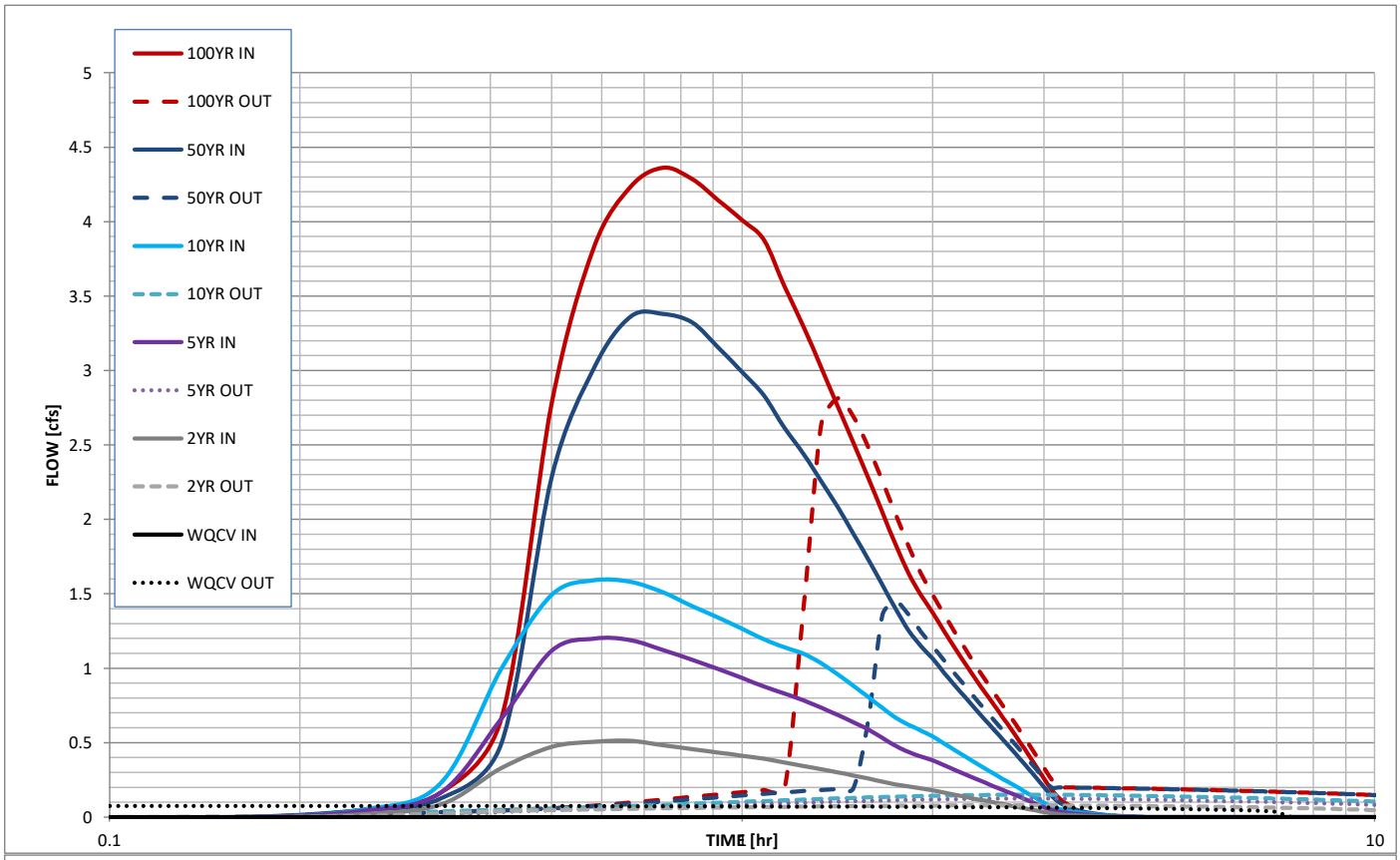
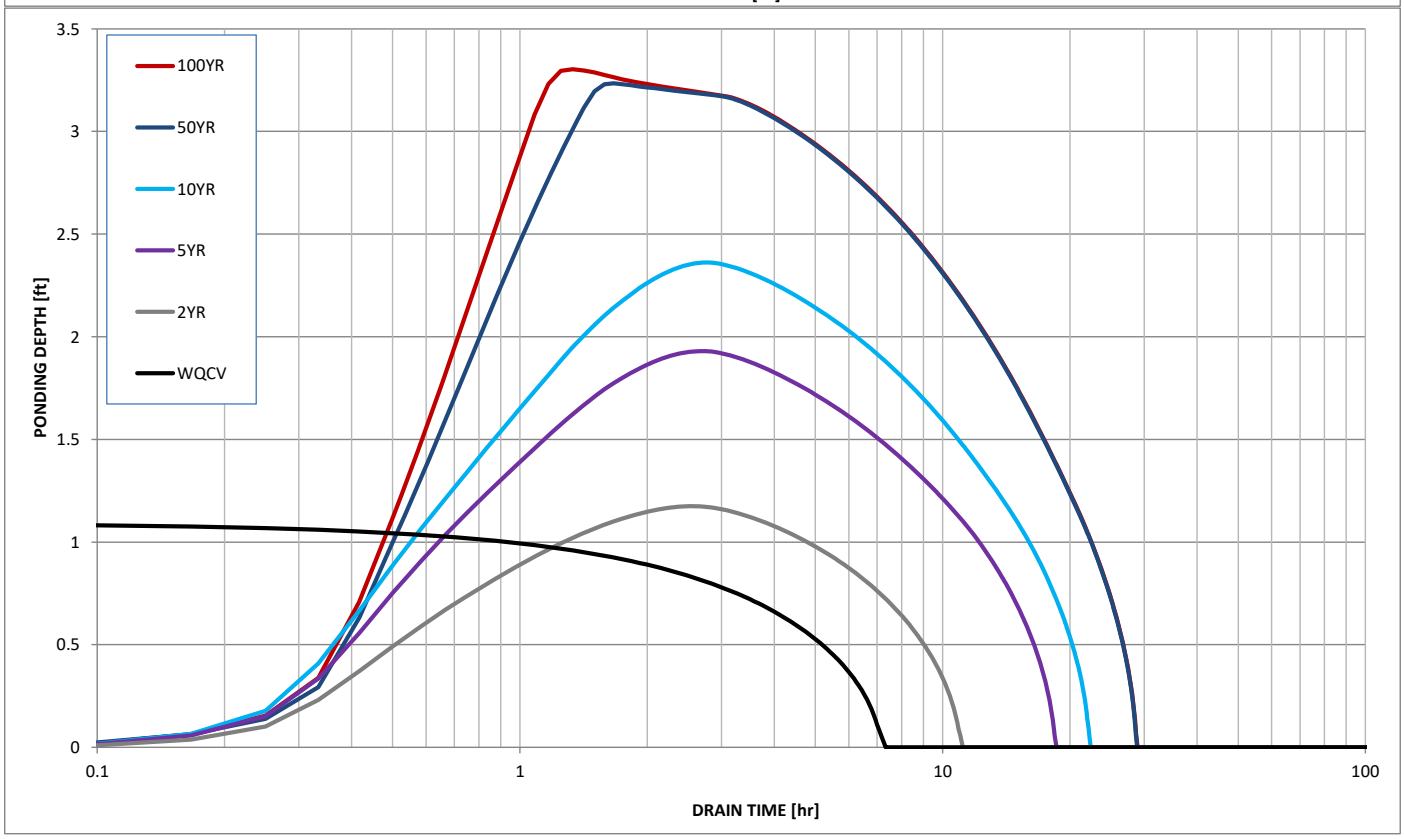
Once CUHP has been run and the Stage-Area-Discharge information has been provided, click 'Process Data' to interpolate the Stage-Area-Volume-Discharge data and generate summary results in the table below. Once this is complete, click 'Print to PDF'.

After completing and printing this worksheet to a pdf, go to:
https://maperture.digitaldataservices.com/gvh/?viewer=cswdif
Create a new stormwater facility, and attach the PDF of this worksheet to that record.

Drain times should be closer to MHFD-Detention Form (40+hrs)

adjust to match MHFD-Detention Form

Routed Hydrograph Results

Design Storm Return Period =	WQCV	2 Year	5 Year	10 Year	50 Year	100 Year	
One-Hour Rainfall Depth =	N/A	1.06	1.43	1.66	2.26	2.60	in
CUHP Runoff Volume =	0.036	0.057	0.127	0.176	0.357	0.466	acre-ft
Inflow Hydrograph Volume =	N/A	0.057	0.127	0.176	0.357	0.466	acre-ft
Time to Drain 97% of Inflow Volume =	6.8	10.4	**17.3**	20.8	26.0	25.3	hours
Time to Drain 99% of Inflow Volume =	7.0	10.8	18.0	21.7	27.6	**27.4**	hours
Maximum Ponding Depth =	1.10	1.17	1.93	2.36	3.23	3.30	ft
Maximum Ponded Area =	0.07	0.07	0.09	0.10	0.12	**0.13**	acres
Maximum Volume Stored =	0.036	0.041	0.103	0.146	0.246	0.254	acre-ft

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