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Stormwater Manager
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El Paso County Department of Public Works

Stormwater Detention and Infiltration Design Data Sheet

Workbook Protected Worksheet Protected

Stormwater Facility Name: **RETREAT AT TIMBERRIDGE FILING NO. 4 - POND 4**

Facility Location & Jurisdiction: **Approx. 1400' east of int. of Vollmer Road and Arroya Lane, El Paso County**

User Input: Watershed Characteristics

Watershed Slope =	0.050	ft/ft
Watershed Length =	2200	ft
Watershed Area =	48.50	acres
Watershed Imperviousness =	7.1%	percent
Percentage Hydrologic Soil Group A =		percent
Percentage Hydrologic Soil Group B =	100.0%	percent
Percentage Hydrologic Soil Groups C/D =		percent

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

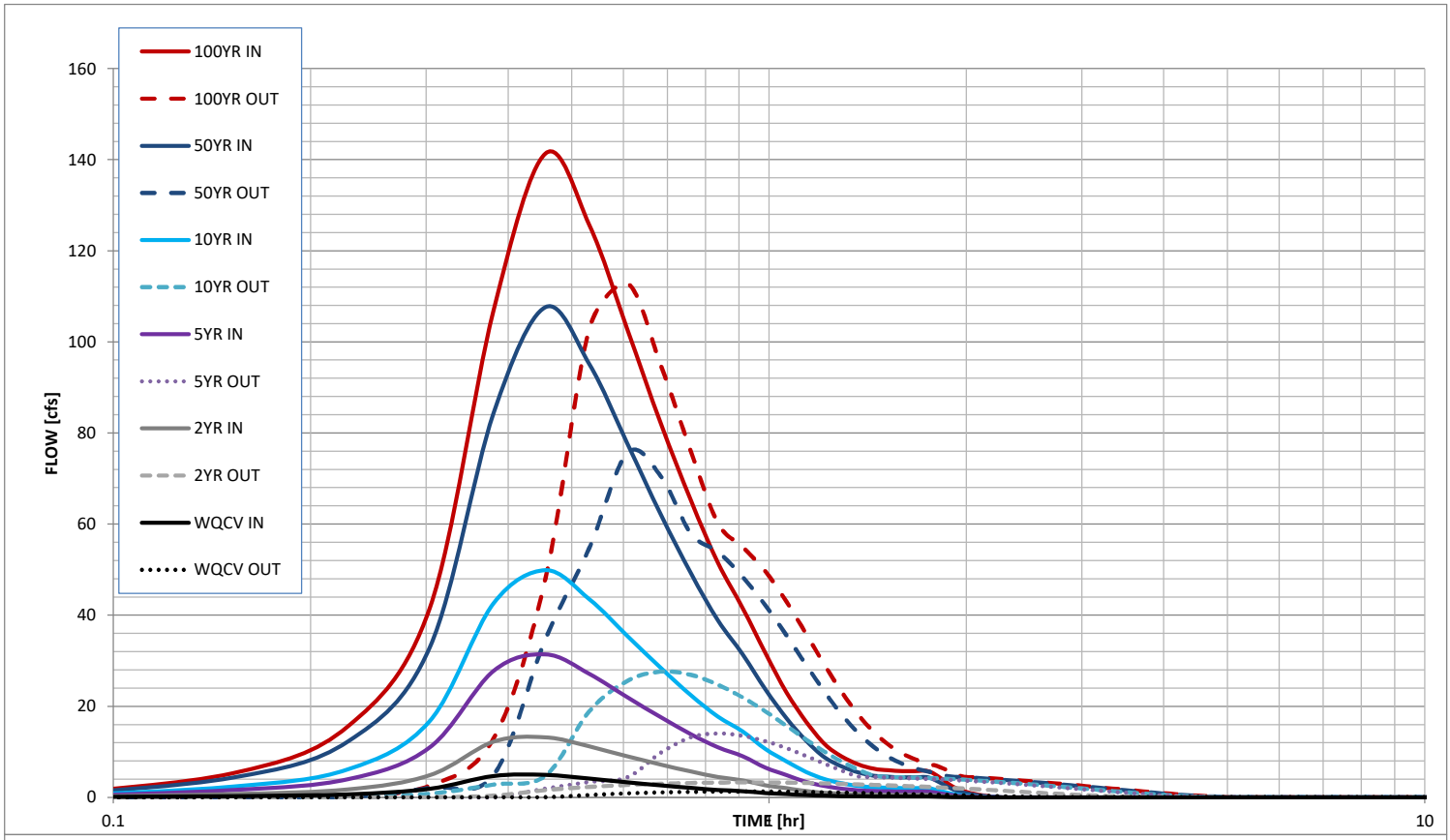
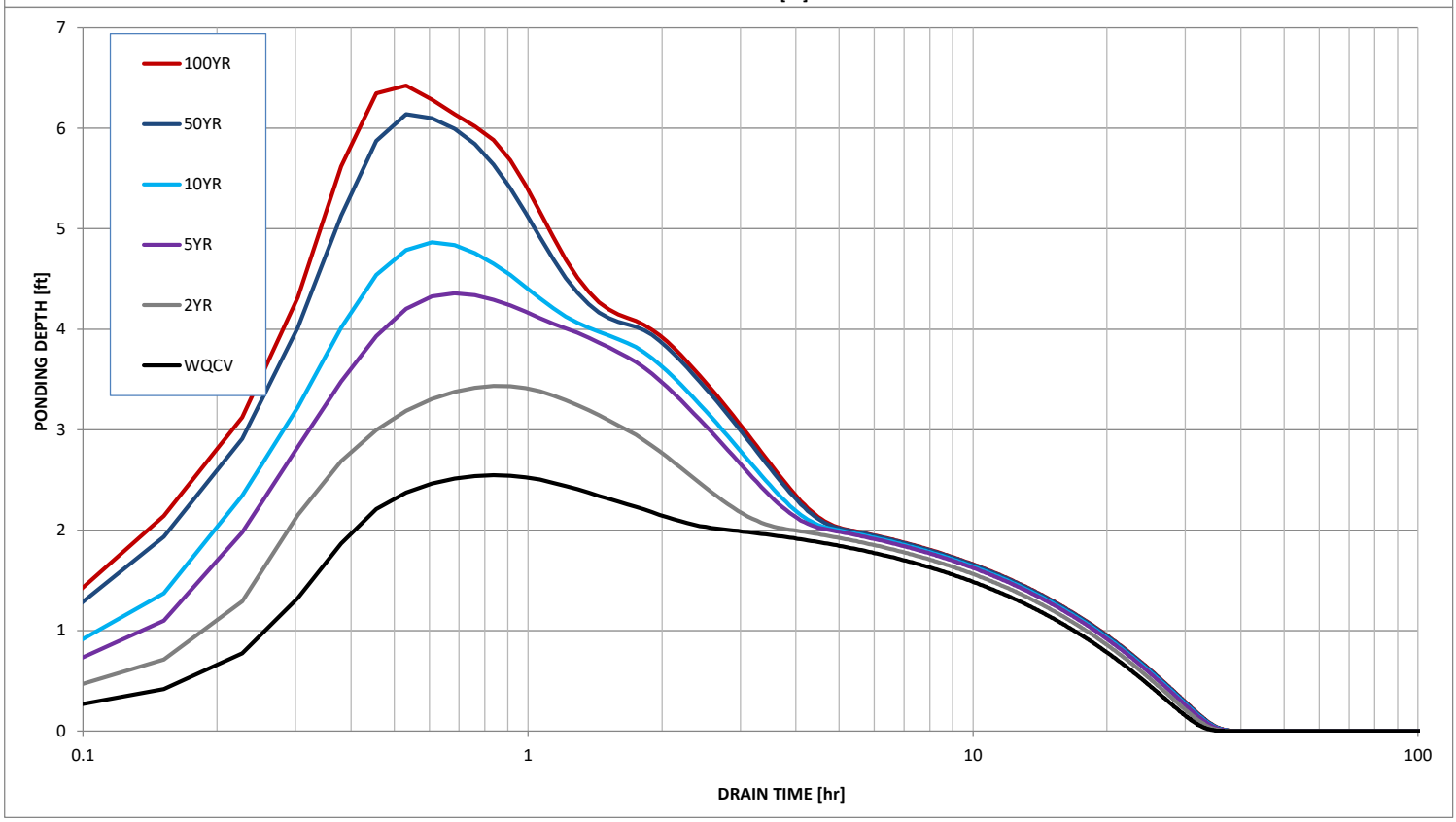
User Input

WQCV Treatment Method = Extended Detention

User Defined Stage [ft]	User Defined Area [ft^2]	User Defined Stage [ft]	User Defined Discharge [cfs]
0.00	106	0.00	0.00
2.00	2,988	2.00	0.06
4.00	17,546	4.00	4.58
6.00	21,886	6.00	58.31
8.00	26,651	8.00	318.05

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.

Routed Hydrograph Results

Design Storm Return Period =	WQCV	2 Year	5 Year	10 Year	50 Year	100 Year	
One-Hour Rainfall Depth =	0.53	1.19	1.50	1.75	2.25	2.52	in
Calculated Runoff Volume =	0.201	0.218	0.907	1.774	4.526	5.873	acre-ft
OPTIONAL Override Runoff Volume =	0.20	0.54	1.29	2.05	4.40	5.77	acre-ft
Inflow Hydrograph Volume =	0.201	0.540	1.291	2.054	4.396	5.764	acre-ft
Time to Drain 97% of Inflow Volume =	23.7	19.1	**12.3**	6.9	3.6	3.4	hours
Time to Drain 99% of Inflow Volume =	27.7	25.3	21.5	18.4	11.4	**8.1**	hours
Maximum Ponding Depth =	2.55	3.43	4.36	4.86	6.14	6.42	ft
Maximum Ponded Area =	0.16	0.31	0.42	0.45	0.51	**0.53**	acres
Maximum Volume Stored =	0.133	0.339	0.686	0.904	1.514	1.662	acre-ft

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