Stormwater Detention and Infiltration Design Data Sheet

Workbook Protected Worksheet Protected

Stormwater Facility Name: **South Pond - Falcon Meadows at Bent Grass Filing No. 1**

Facility Location & Jurisdiction: **Approx 850' west of Bent Grass Meadows Drive, adjacent to Falcon Basin West Trib - El Paso County**

User Input: Watershed Characteristics

Watershed Slope =	0.030	ft/ft
Watershed Length =	3600	ft
Watershed Area =	68.50	acres
Watershed Imperviousness =	31.7%	percent
Percentage Hydrologic Soil Group A =	100.0%	percent
Percentage Hydrologic Soil Group B =	0.0%	percent
Percentage Hydrologic Soil Groups C/D =	0.0%	percent

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

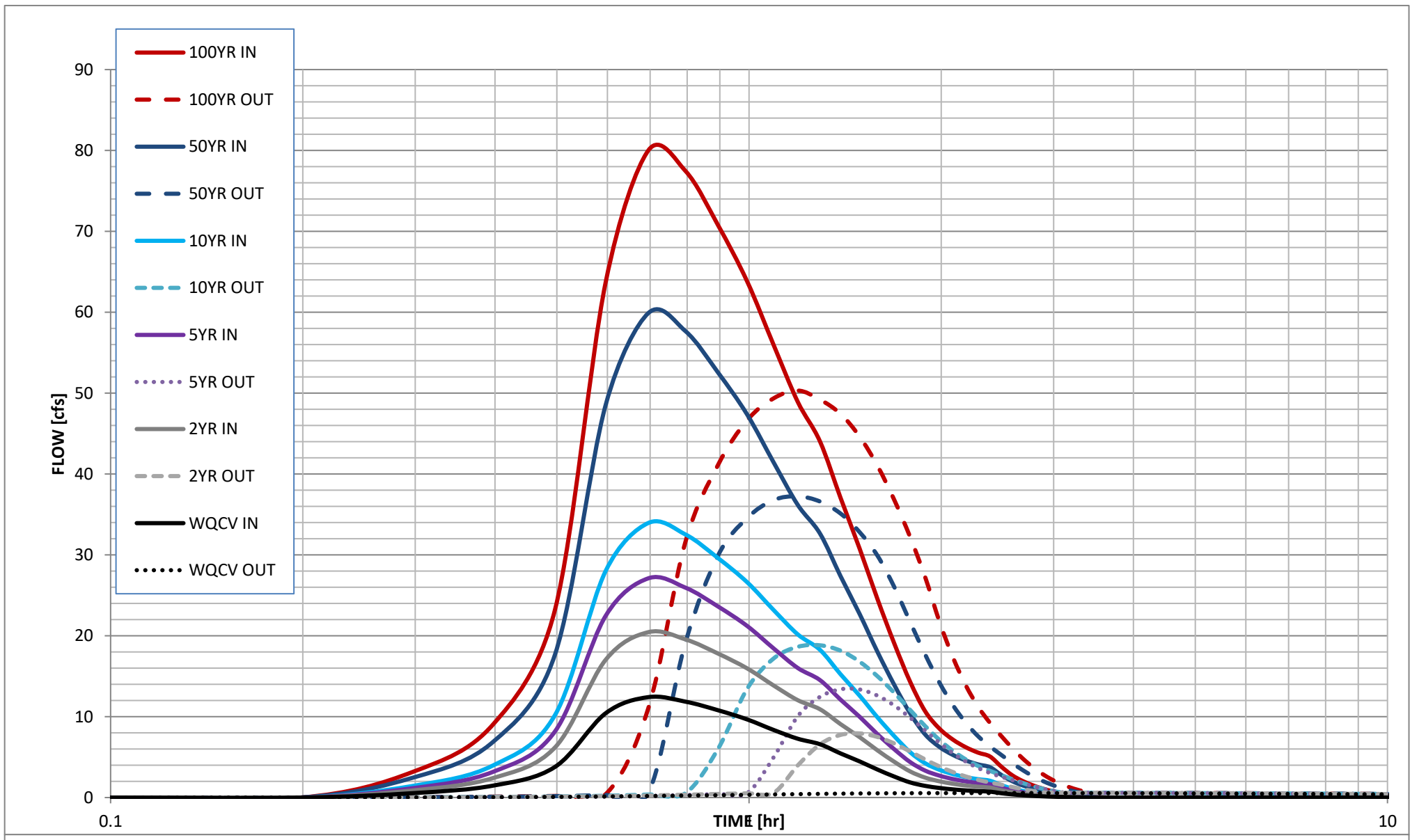
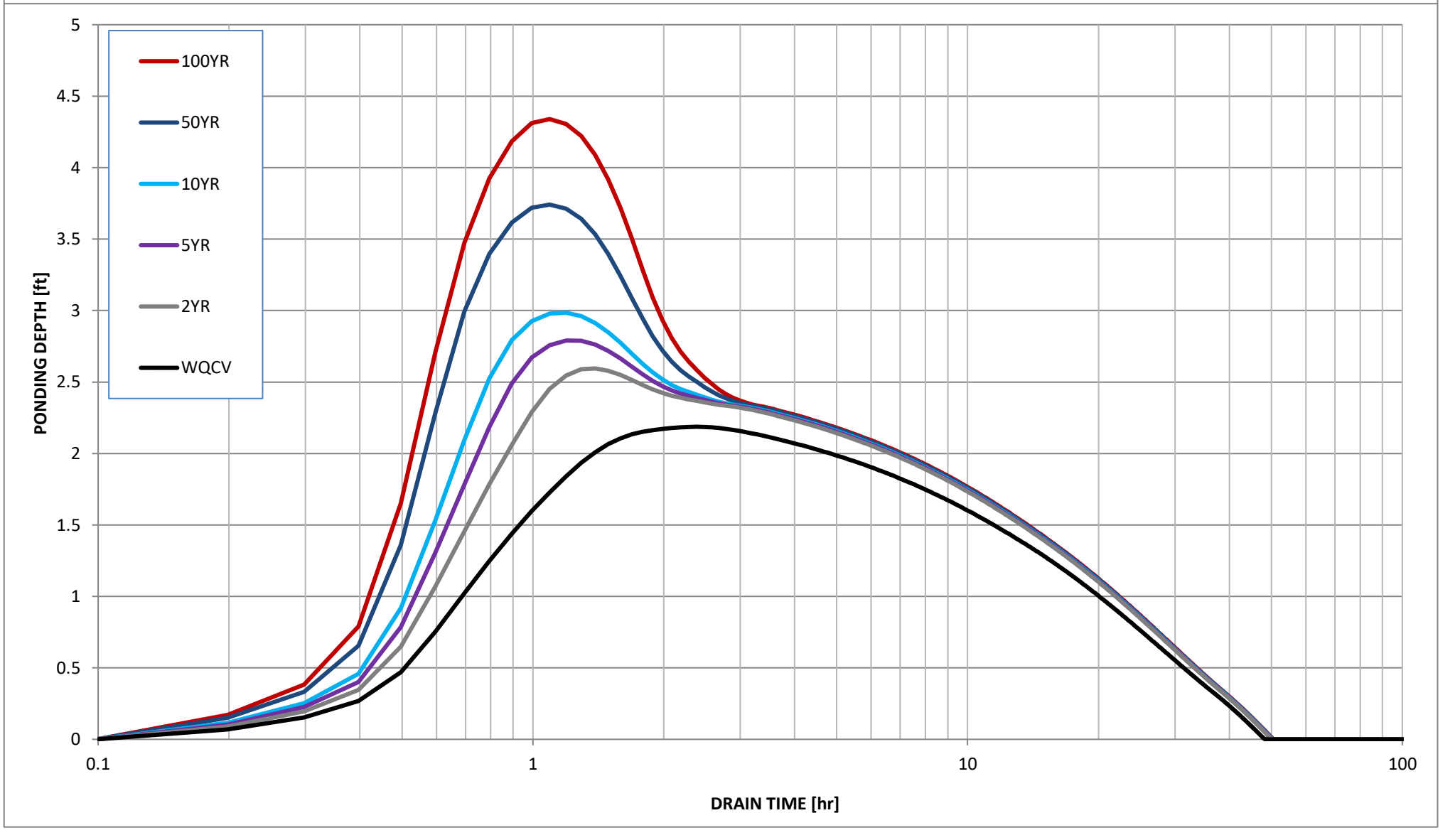
User Input

WQCV Treatment Method = Extended Detention

User Defined Stage [ft]	User Defined Area [ft^2]	User Defined Stage [ft]	User Defined Discharge [cfs]
0.00	56	0.00	0.00
0.33	12,476	0.33	0.10
1.33	18,677	1.33	0.31
2.33	23,065	2.33	0.60
3.33	27,922	3.33	28.56
4.33	33,784	4.33	49.82
5.33	40,499	5.33	135.90

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 =	0.894	1.482	1.972	2.478	4.412	5.940	acre-ft
OPTIONAL Override Runoff Volume =							acre-ft
Inflow Hydrograph Volume =	0.894	1.482	1.972	2.477	4.411	5.932	acre-ft
Time to Drain 97% of Inflow Volume =	39.5	38.8	**37.3**	35.7	30.8	27.6	hours
Time to Drain 99% of Inflow Volume =	43.2	43.6	42.7	41.9	39.2	**37.5**	hours
Maximum Ponding Depth =	2.19	2.60	2.79	2.99	3.74	4.34	ft
Maximum Ponded Area =	0.51	0.56	0.58	0.60	0.70	**0.78**	acres
Maximum Volume Stored =	0.807	1.026	1.137	1.253	1.741	2.183	acre-ft

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