Stormwater Detention and Infiltration Design Data Sheet

Workbook Protected Worksheet Protected

Stormwater Facility Name: **Araco Concrete - Detention Basin A1**

Facility Location & Jurisdiction: **7470 Southmoor Drive, Fountain, CO (El Paso County)**

User Input: Watershed Characteristics

Watershed Slope =	0.013	ft/ft
Watershed Length =	300	ft
Watershed Area =	1.23	acres
Watershed Imperviousness =	68.9%	percent
Percentage Hydrologic Soil Group A =	100.0%	percent
Percentage Hydrologic Soil Group B =		percent
Percentage Hydrologic Soil Groups C/D =		percent

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

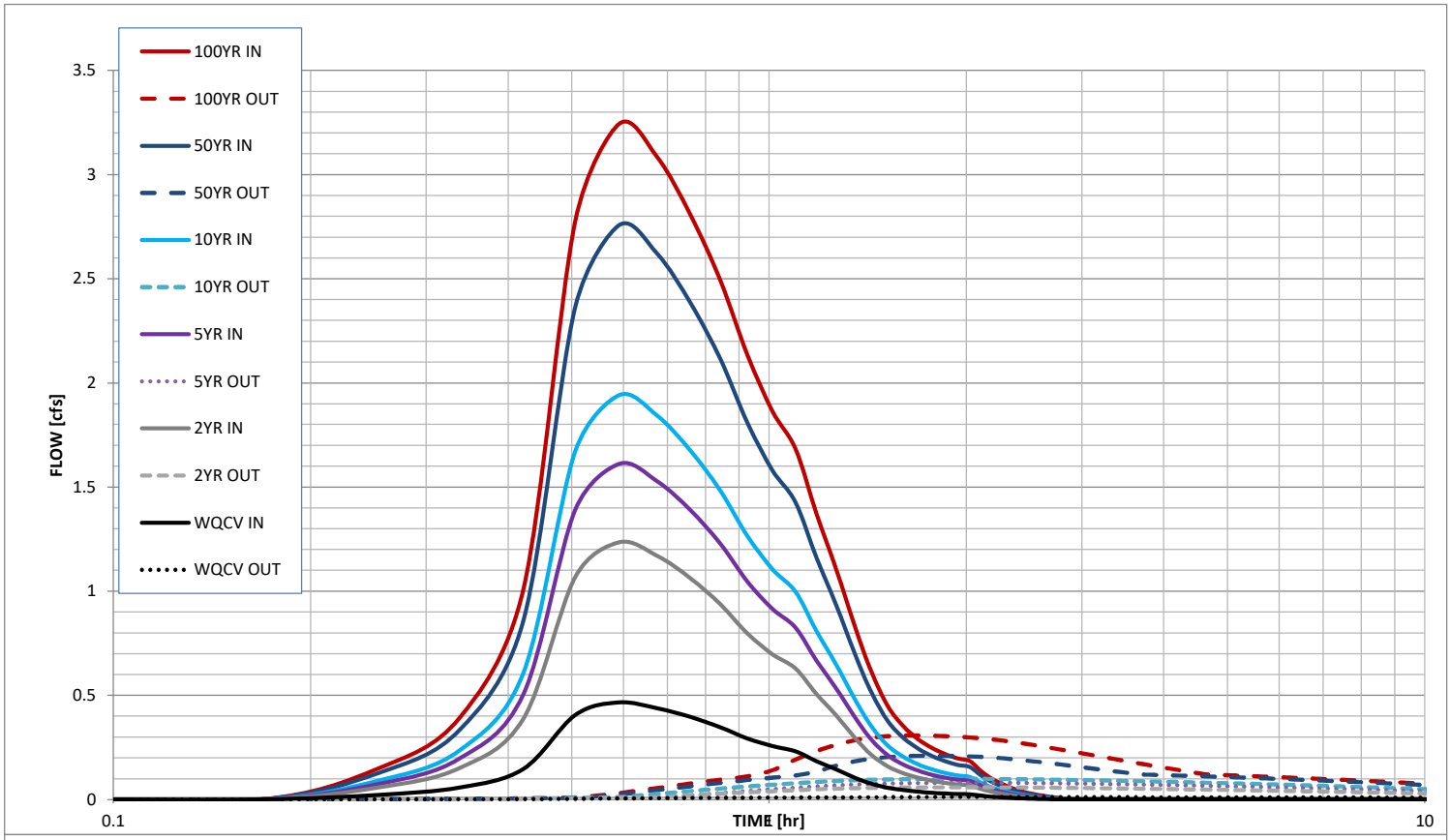
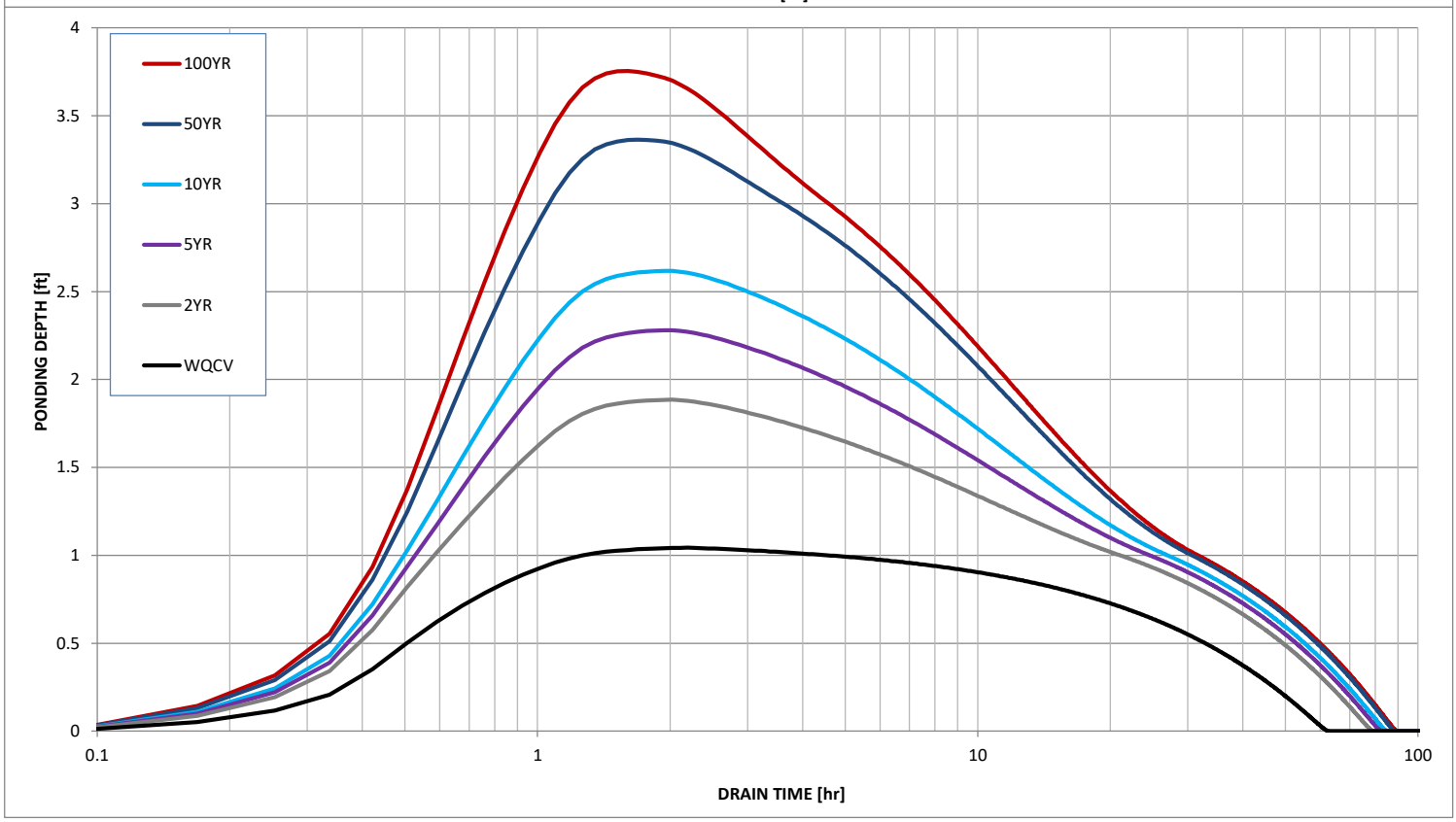
User Input

WQCV Treatment Method = Extended Detention

User Defined Stage [ft]	User Defined Area [ft^2]	User Defined Stage [ft]	User Defined Discharge [cfs]
0.00	10	0.00	0.00
1.00	2,033	1.00	0.01
3.00	2,378	3.00	0.12
5.00	2,726	5.00	0.62
7.00	3,400	7.00	17.68

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 =	0.60	1.19	1.50	1.75	2.25	2.52	in
Calculated Runoff Volume =	0.028	0.074	0.096	0.117	0.166	0.195	acre-ft
OPTIONAL Override Runoff Volume =							acre-ft
Inflow Hydrograph Volume =	0.027	0.073	0.096	0.116	0.165	0.195	acre-ft
Time to Drain 97% of Inflow Volume =	51.0	60.6	**61.6**	62.0	61.4	60.1	hours
Time to Drain 99% of Inflow Volume =	55.6	68.1	70.1	71.4	72.6	**72.2**	hours
Maximum Ponding Depth =	1.04	1.88	2.28	2.62	3.36	3.75	ft
Maximum Ponded Area =	0.05	0.05	0.05	0.05	0.06	**0.06**	acres
Maximum Volume Stored =	0.025	0.066	0.086	0.104	0.145	0.167	acre-ft

Stormwater Detention and Infiltration Design Data Sheet