SDI-Design Data v2.00, Released January 2020

Stormwater Facility Name: Sterling Ranch Recycling Facility-Pond A Interim

Facility Location & Jurisdiction: El Paso County, Colorado

User Input: Watershed Characteristics



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'.

User Defined	User Defined	User Defined	User Defined
Stage [ft]	Area [ft^2]	Stage [ft]	Discharge [cfs]
0.00	10	0.00	0.00
1.00	1,237	1.00	0.03
2.00	9,028	2.00	0.08
3.00	19,414	3.00	0.27
4.00	31,638	4.00	4.11
5.00	39,589	5.00	9.85
6.00	45,537	6.00	13.01
7.00	51,596	7.00	15.54
8.00	57,766	8.00	31.64
9.00	64,047	9.00	49.02
10.00	70,449	10.00	420.90
10.50	73,681	10.50	740.22

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

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Design Storm Return Period =	WQCV	2 Year	5 Year	10 Year	50 Year	100 Year	
One-Hour Rainfall Depth =	N/A	1.19	1.50	1.75	2.25	2.52	in
CUHP Runoff Volume =	0.256	0.181	0.298	0.397	1.558	2.370	acre-ft
Inflow Hydrograph Volume =	N/A	0.181	0.298	0.397	1.558	2.370	acre-ft
Time to Drain 97% of Inflow Volume =	39.9	36.2	43.3	47.3	46.0	41.8	hours
Time to Drain 99% of Inflow Volume =	43.6	39.2	47.2	51.8	54.7	52.8	hours
Maximum Ponding Depth =	2.48	2.13	2.51	2.76	4.00	4.57	ft
Maximum Ponded Area =	0.32	0.24	0.33	0.39	0.72	0.83	acres
Maximum Volume Stored =	0.258	0.160	0.264	0.353	1.039	1.477	acre-ft



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Stormwater Facility Name: Sterling Ranch Recycling Facility-Pond A Ultimate

Facility Location & Jurisdiction: El Paso County, Colorado

User Input: Watershed Characteristics



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'.

User Defined	User Defined	User Defined	User Defined
Stage [ft]	Area [ft^2]	Stage [ft]	Discharge [cfs]
0.00	10	0.00	0.00
1.00	1,237	1.00	0.10
2.00	9,028	2.00	0.22
3.00	19,414	3.00	0.36
4.00	31,638	4.00	0.48
5.00	39,589	5.00	0.98
6.00	45,537	6.00	1.27
7.00	51,596	7.00	1.49
8.00	57,766	8.00	15.61
9.00	64,047	9.00	22.40
10.00	70,449	10.00	392.99
10.50	73,681	10.50	711.69

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Routed Hydrograph Results

Design Storm Return Period =	WQCV	2 Year	5 Year	10 Year	50 Year	100 Year	
One-Hour Rainfall Depth =	N/A	1.19	1.50	1.75	2.25	2.52	in
CUHP Runoff Volume =	1.064	3.020	3.935	4.670	6.455	7.502	acre-ft
Inflow Hydrograph Volume =	N/A	3.020	3.935	4.670	6.455	7.502	acre-ft
Time to Drain 97% of Inflow Volume =	37.5	59.7	65.9	67.8	66.0	64.9	hours
Time to Drain 99% of Inflow Volume =	39.7	64.1	71.2	73.8	73.3	72.9	hours
Maximum Ponding Depth =	4.03	5.99	6.79	7.27	7.95	8.50	ft
Maximum Ponded Area =	0.73	1.04	1.15	1.22	1.32	1.40	acres
Maximum Volume Stored =	1.065	2.819	3.705	4.269	5.133	5.875	acre-ft

