

DETENTION BASIN

Cumulative Volume For Detention Pond
Sandhill Crane Cluster Subdivision

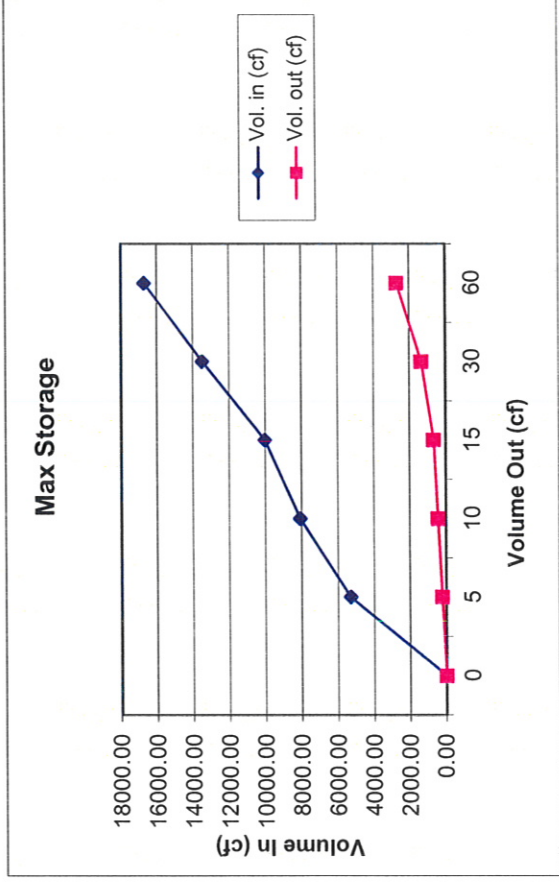
C = 0.27

A = 8.54

Q(out) = 0.75

time (min)	time (sec)	i (in./hr.)	Q (cfs)	Vol. in (cf)	Vol. out (cf)	Difference (cf)
0	0	0.00	0.00	0.00	0.00	0.00
5	300	7.57	17.75	5325.45	225.60	5099.85
10	600	5.76	13.51	8104.26	451.20	7653.06
15	900	4.76	11.16	10045.90	676.80	9369.10
30	1800	3.20	7.50	13507.09	1353.60	12153.49
60	3600	1.98	4.64	16715.03	2707.20	14007.83
120	7200	1.16	2.72	19585.28	5414.40	14170.88
180	10800	0.80	1.88	20311.29	8121.60	12189.69
1440	86400	0.29	0.68	58553.24	64972.80	-6419.56
0	0	0.1	0.23	0.00	0.00	0.00

Eden, UT Area
NOAA Atlas 14



Outfall Pipe Analysis Calculation Summary Sandhill Crane Cluster Subdivision 3/22/2016 6460-01

Water Shed Calculations									
Tc=60 Minutes									
Subbasin 0	Q=CIA	0.27	1.98	Area (AC)	0.94	Q (cfs)	0.50	1.26	0.24
Subbasin 1		0.27	1.98		2.36				
Subbasin 2		0.27	1.98		0.46				2.55
Subbasin 3		0.27	1.98		4.78				
Detainable (Subbasin 0 - 2)			1.98		3.76		2.01		
Total Area					8.54				
Pipe Calculations									
Label	Pipe Size (Inches)	Section Shape	Min. Percent Slope	Total System Flow (100YR)	Pipe Capacity Flow (100YR)	Pipe Size Adequate (100YR)?			
Pipe 1	15	Circular	0.25	2.01	3.24	YES			
								Manning's Roughness Coefficient	
								n	
								0.013	
								RCP	