

STORM WATER CALCULATIONS

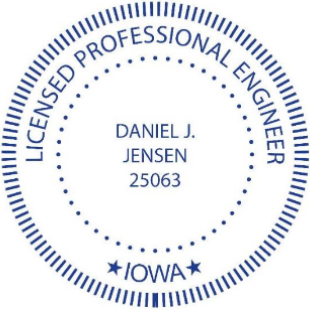
For:

Calhoun County Pumped Wetlands CAL883229B (North and South)

Iowa Department of Agriculture and Land Stewardship
Rockwell City, Iowa

S-H PROJECT # 2142206150

January 10, 2025

	<p>I hereby certify that the portion of this engineering document was prepared by me or under my direct personal supervision. I am a duly licensed Professional Engineer under the laws of the State of Iowa.</p> <p>Signature: <u><i>Dan Jensen</i></u></p> <p>Name: <u>Dan Jensen, P.E.</u></p> <p>Date: <u>01/10/2025</u></p> <p>My license renewal date is December 31, 2026.</p> <p>Pages, sheets, or divisions covered by this certification: <u>Stormwater Report and Attachments</u></p> <p>_____</p> <p>_____</p>
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PROJECT SUMMARY

GENERAL

The proposed work includes construction of two pumped wetlands to the north of Rockwell City, IA. The location can be more specifically described as the NW ¼ of Section 29 and SW ¼ of Section 20, Township 88 North, Range 32 West of the Fifth Principal meridian, Calhoun County, Iowa. A pump system will be constructed to feed water for the wetland which is sited within an existing floodplain depression that will be excavated to provide a larger pool area. A water control structure will allow for pool elevation control and drawdown capabilities for maintenance.

DESIGN STANDARDS, ANALYSIS, AND ASSUMPTIONS

The design procedures and guidelines were obtained from the following resources:

1. "National Engineering Handbook 4 – Hydrology"
2. "NRCS Practice Standard 378 and 656" (as applicable)

DESIGN CRITERIA AND GUIDELINES

NORTH WETLAND SUMMARY

The north site consists of a 7.35-acre pool with a normal water level of 1186.0, the pool is situated in a natural floodplain depression that will be enlarged through excavation. Two pumps located on the north side of the pool will supply water to the pool from the drainage ditch and will be powered by a solar array and battery. The maximum capacity of each pump is estimated to be 1.6 CFS (3.2 CFS total) and is designed to run approximately 8 hours per day during daylight hours. Additionally, an overland flow drainage area of approximately 32.6 acres contributes runoff to the wetland pool. There is no proposed embankment for the north pool. The natural floodplain overflow is on the south side of the site at an elevation of approximately 1186.90. The pool storage at normal water level is 6.17 acre-feet.

NORTH WETLAND PRINCIPAL SPILLWAY

The principal spillway consists of a 24" CMP Riser and 18" CMP that is connected to a 48" circular CMP water control structure equipped with stop logs for water elevation control. The 48-inch-wide stop logs will be maintained approximately 1 inch below the normal water level of 1186.00 (1185.92). An 18" CMP discharge pipe will run east and daylight into Lake Creek.

NRCS 378 & NRCS 656 standards were used to design the principal spillway. A summary of the design criteria is listed below.

NRCS 378, Table 2:

- Principal Spillway Capacity - 5-year, 24-hour storm
 - For embankments between 0 and 20 feet height, drainage areas between 20 and 80 acres, and less than 50 acre-feet of storage.

NRCS 656:

- Principal Spillway Capacity - 25-year, 24-hour storm without overtopping embankment, refers to NRCS 378 for all other spillway requirements.

Based on NRCS 378, the spillway design storm shall be the 5-year, 24-hour storm. This equates to a storm producing a rainfall depth of 3.70" and shall be passed by the principal spillway without use of the auxiliary spillway. In this design the auxiliary spillway is a natural floodplain overflow with an elevation of 1186.90. The 5-year, 24-hour storm will produce a peak water surface elevation of 1186.81'.

NORTH WETLAND FREEBOARD DESIGN

The auxiliary spillway consists of an existing overflow into the drainage ditch on the south side of the wetland. The overflow is approximately 270 feet wide. Based on NRCS 378, the auxiliary spillway should pass the 25-year, 24 hours storm with 1 foot of freeboard from the top of dam. This equates to a storm producing a rainfall depth of 5.60”.

Since this site does not have a typical dam, existing topography was reviewed. The natural ground varies around the perimeter of the pool but is generally higher than 1187.0. The high-water elevation produced by the 25-year storm is 1186.97 and will be contained within the single overflow location on the south side of the pool. Furthermore, the 100-year storm produced a high-water elevation of 1187.09. This storm may overflow in other locations at the natural floodplain drain locations.

The freeboard criteria is not practical for this application as a dam within the floodway would require a no-rise condition that may not be permissible with the Iowa DNR. A variance request for NRCS should be prepared to waive the freeboard requirement for this site.

SOUTH WETLAND

The south site consists of a 4.65-acre pool with a normal water level of 1186.0, the pool is situated in a natural floodplain depression. One pump located on the northwest side of the pool will supply water to the pool from the drainage ditch and will be powered by a solar array and battery. The maximum capacity of each pump is estimated to be 1.7 CFS. Additionally, an overland flow drainage area of approximately 9.8 acres contributes runoff to the wetland pool. A berm approximately 2 feet in height is proposed on the south end of the site to maintain the pool on the property and maintain the drainage capacity of the adjacent swale draining to the ditch. The berm elevation is proposed to be 1187.0 to match the adjacent topography. The natural floodplain overflow is on the south east corner of the site at an elevation of 1186.49. The pool storage at normal water level is 2.71 acre-feet.

SOUTH WETLAND PRINCIPAL SPILLWAY

The principal spillway consists of a 24” CMP Riser and 18” CMP that is connected to a 48” circular CMP water control structure equipped with stop logs for water elevation control. The 48-inch-wide stop logs will be maintained approximately 1 inch below the normal water level of 1186.00 (1185.92). An 18” CMP discharge pipe will run east and daylight into the existing Lake Creek.

NRCS 378 & NRCS 656 standards were used to design the principal spillway. A summary of the design criteria is listed below.

NRCS 378 Table 2:

- Principal Spillway Capacity – None specified
 - For embankments between 0 and 20 feet height, drainage areas less than 20 acres, and less than 50 acre-feet of storage.

NRCS 656:

- Principal Spillway Capacity - 25-year, 24-hour storm without overtopping embankment, refers to NRCS 378 for all other spillway requirements.

To be conservative, it was determined that passage of the 2-year 24-hour storm would be used for the principal spillway design storm. This equates to a storm producing a rainfall depth of 3.00” and shall be passed by the principal spillway without use of the auxiliary spillway. In this design the auxiliary spillway is a natural floodplain overflow with an elevation of 1186.49’. The 2-year, 24-hour storm will produce a peak water surface elevation of 1186.33.

SOUTH WETLAND FREEBOARD DESIGN

The auxiliary spillway consists of three existing overflow locations that into the drainage ditch on the south side of the wetland. Based on NRCS 378, the auxiliary spillway should pass the 25-year, 24 hours storm with 1 foot of freeboard from the top of dam. This equates to a storm producing a rainfall depth of 5.60". The natural ground varies around the perimeter of the pool but is generally higher than 1187.0. The high-water elevation produces by the 25-year storm was 1186.56 and is contained within two of the three overflow locations. Furthermore, the 100-year storm produced a high-water elevation of 1186.71. This storm may overflow in other locations at the natural floodplain drain locations.

The freeboard criteria is not practical for this application as a dam within the floodway would require a no-rise condition that may not be permissible with the Iowa DNR. A variance request for NRCS should be prepared to waive the freeboard requirement for this site.

WATER QUALITY IMPROVEMENT

The wetlands drawdown was designed to meet NRCS 656 requirements. Wetlands will drawdown and return to design operating levels within 48 hours after a 10-year, 24-hour storm. To promote emergent vegetation, 50% of the pool area (98% for south wetland design and 99% for north design) shall have depths from 0-24 inches.

SLOPE DESIGN

Side slopes were designed to meet NRCS 656 requirements which references NRCS 378. Slopes designed with a ratio of three horizontal to one vertical (3:1) or flatter.

EMBANKMENT DESIGN

Per NRCS 378, top width required for dams with total heights less than 15 feet require a minimum of 10 feet top width. A 24-foot top width was chosen for this design to balance earthwork. The embankment will be overbuilt to account for minimum settlement of 5% of the total height of the dam. This equates to a final construction elevation of 1187.10' ($[2 \text{ feet} \times 0.05] + 1187.00$).

IMPOUNDMENT LIFE

The Impoundment life was calculated using estimated sediment delivery and NRCS standard total erosion rate estimates. The erosion rates are based on the Average Annual Soil Erosion by Water on Cropland and CRP Land, 1982, published by USDA and revised in December 2000. This indicated that the erosion rates for the area ranged from 3 to 5 tons per acre per year. Furthermore, sediment delivery was based on NRCS FOTG "Erosion & Sediment Delivery", (Chart I: Estimated sediment delivery for landform regions).

For the north wetland, the chart indicated a sediment delivery percentage of approximately 15% for a 32.6-acre drainage area located in the Des Moines Lobe Landform. For the south wetland, the chart indicated a sediment delivery percentage of approximately 28% for a 9.8-acre drainage area located in the Des Moines Lobe Landform. Finally, the estimated sediment storage is based on the normal pool storage volume which equates to 6.17 ac-ft for the north wetland and 2.71 ac-ft for the south wetland.

Based on the assumed soil erosion rate (5 T/Ac/yr), delivery ratio, a sediment unit weight of 100 PCF, and sediment capture rate of 70% of delivered sediment, approximately 22.0 tons of sediment per year (440.1 CF) is anticipated to be retained in the north wetland and approximately 12.4 tons of sediment per year (247.0 CF) is anticipated to be retained in the south wetland. This equates to an expected impoundment life of 611 years for the north wetland and 478 years for the south wetland.

It should be noted that this accounts only for the sediment anticipated from the overflow drainage areas and does not account for sediment that may be pumped in from the drainage ditch and Lake Creek. Sediment delivery should be monitored.

GEOTECHNICAL INVESTIGATION AND EVALUATION

A geotechnical investigation has not been completed for this project.

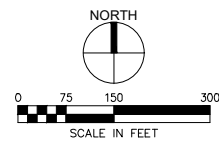
DRAINAGE AREA MAP

NORTH DRAINAGE AREA
AREA = 32.6 ACRES

NORTH NORMAL POOL
AREA = 7.35 ACRES

SOUTH DRAINAGE AREA
AREA = 9.8 ACRES

SOUTH NORMAL POOL
AREA = 4.65 ACRES



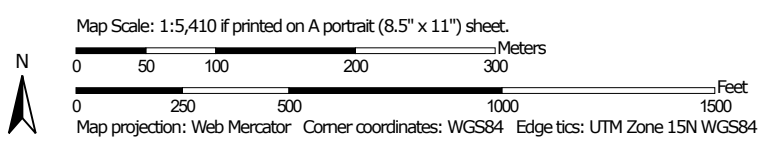
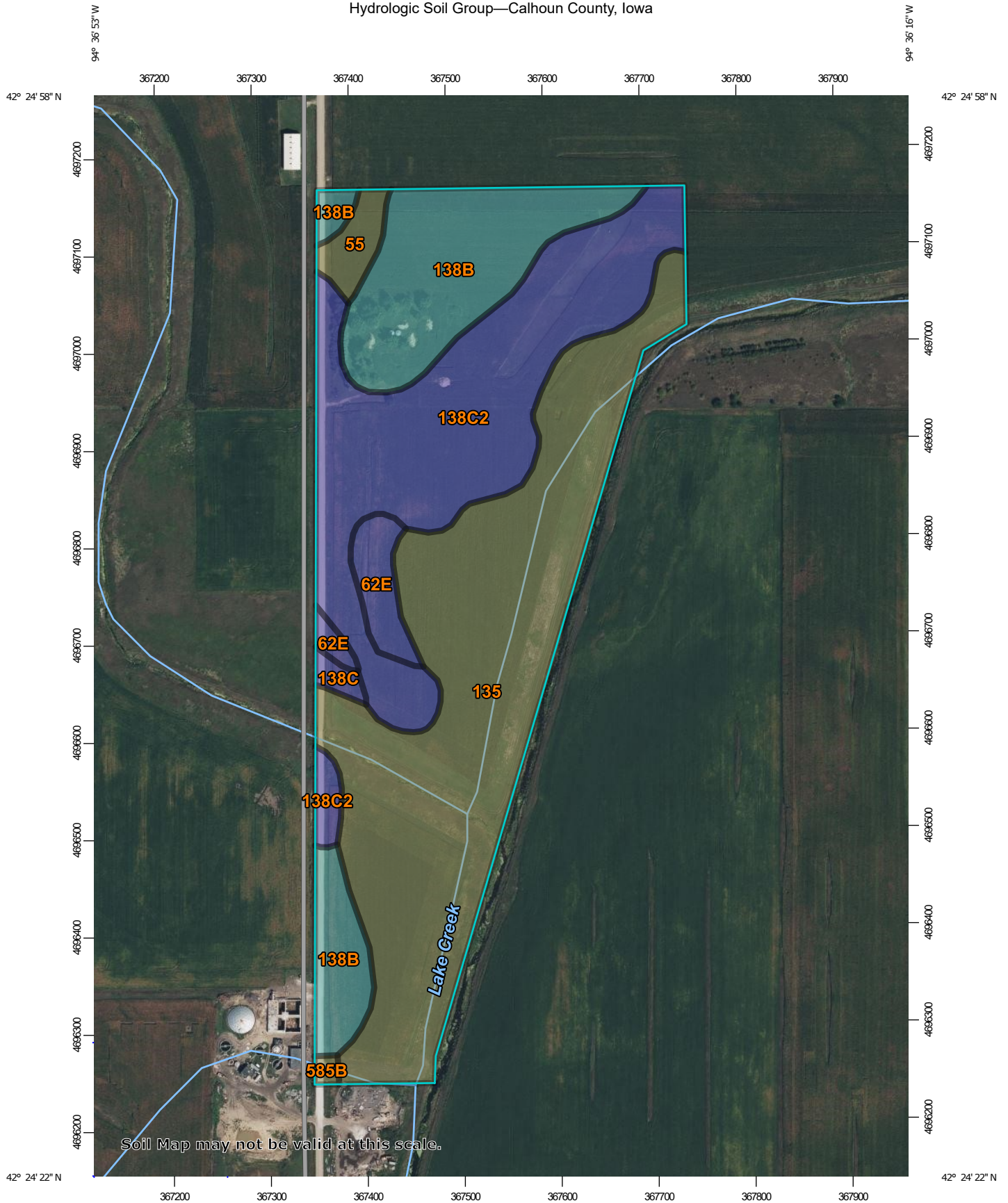
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DRAWN BY	GHK
APPROVED BY	DJJ
ISSUED FOR	BID DOCUMENTS
ISSUE DATE	1/10/2025
PROJECT NUMBER	2142206150
FIELD BOOK	...


SOIL MAP/LAND CHARACTERISTICS

Hydrologic Soil Group—Calhoun County, Iowa



MAP LEGEND

Area of Interest (AOI)









 Area of Interest (AOI)

Soils

Soil Rating Polygons





-  A
-  A/D
-  B
-  B/D
-  C
-  C/D
-  D
-  Not rated or not available

Soil Rating Lines

-  A
-  A/D
-  B
-  B/D
-  C
-  C/D
-  D
-  Not rated or not available

Soil Rating Points




-  A
-  A/D
-  B
-  B/D

-  C
-  C/D
-  D
-  Not rated or not available


Water Features

 Streams and Canals

Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

Background

 Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:15,800.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Calhoun County, Iowa
Survey Area Data: Version 34, Aug 29, 2024

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Sep 5, 2021—Oct 14, 2021

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
55	Nicollet clay loam, 1 to 3 percent slopes	C/D	1.2	2.0%
62E	Storden loam, 10 to 22 percent slopes, moderately eroded	B	1.9	3.2%
135	Coland clay loam, 0 to 2 percent slopes, occasionally flooded	C/D	26.1	44.9%
138B	Clarion loam, 2 to 6 percent slopes	C	11.0	19.0%
138C	Clarion loam, 6 to 10 percent slopes	B	0.4	0.7%
138C2	Clarion loam, 6 to 10 percent slopes, moderately eroded	B	17.4	30.0%
585B	Coland-Spillville complex, 2 to 5 percent slopes	C/D	0.2	0.3%
Totals for Area of Interest			58.1	100.0%

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

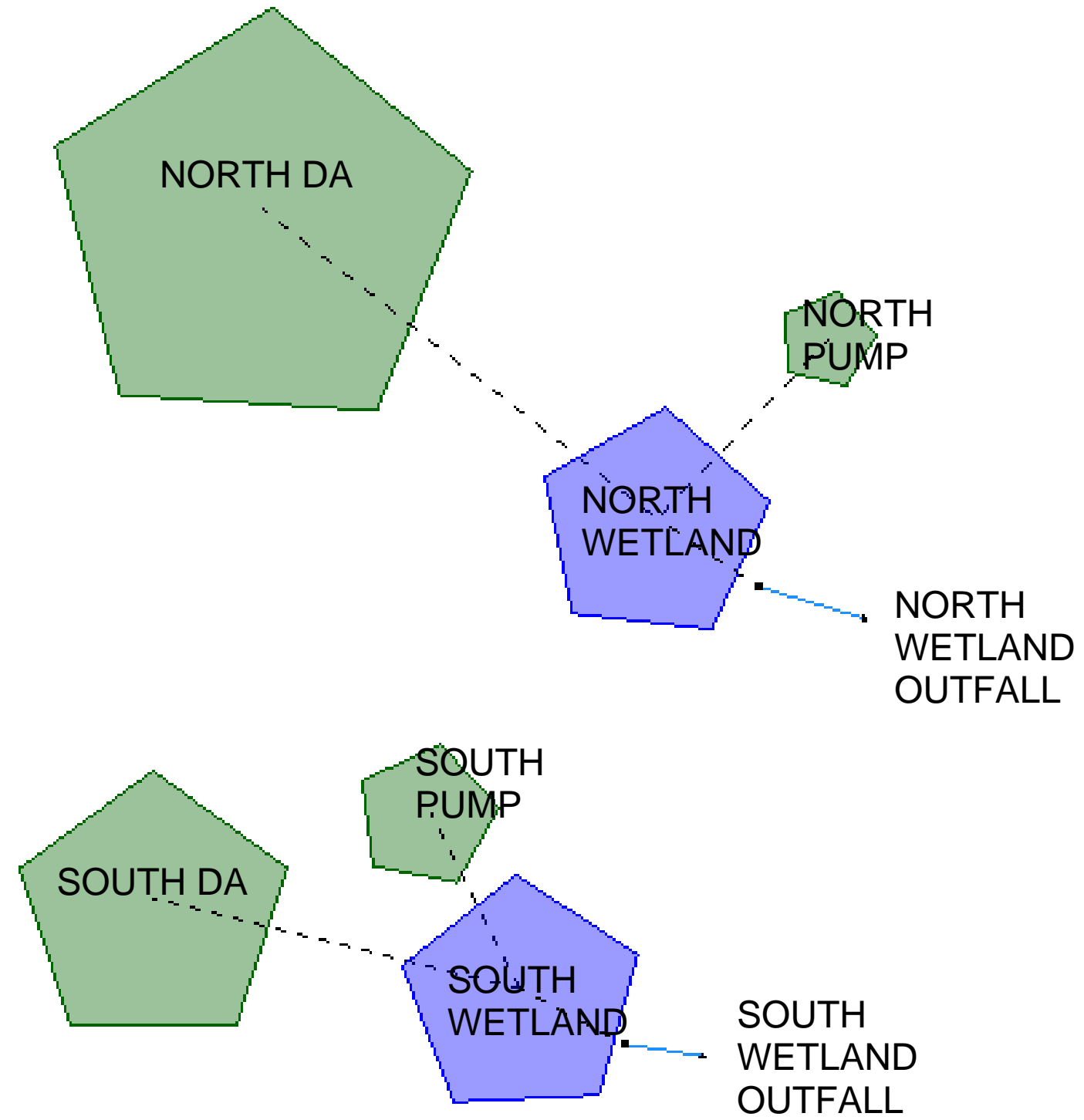
Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

PONDPACK DIAGRAM

Pondpack Diagram



HYDROLOGY & HYDRAULIC MODEL OUTPUT

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CAL883229B_Stormwater Report

Subsection: Master Network Summary

Catchments Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft ³ /s)
North DA	Post-Development 2 year	2	4.338	12.150	78.31
North DA	Post-Development 5 year	5	6.050	12.150	108.84
North DA	Post-Development 25 year	25	10.643	12.150	188.07
North DA	Post-Development 100 year	100	16.018	12.150	277.42
South DA	Post-Development 2 year	2	1.298	12.100	29.62
South DA	Post-Development 5 year	5	1.811	12.100	40.99
South DA	Post-Development 25 year	25	3.186	12.100	70.37
South DA	Post-Development 100 year	100	4.795	12.100	103.43
NorthPump	Post-Development 2 year	2	12.694	0.000	3.20
NorthPump	Post-Development 5 year	5	12.694	0.000	3.20
NorthPump	Post-Development 25 year	25	12.694	0.000	3.20
NorthPump	Post-Development 100 year	100	12.694	0.000	3.20
SouthPump	Post-Development 2 year	2	6.744	0.000	1.70
SouthPump	Post-Development 5 year	5	6.744	0.000	1.70
SouthPump	Post-Development 25 year	25	6.744	0.000	1.70
SouthPump	Post-Development 100 year	100	6.744	0.000	1.70

Node Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft ³ /s)
North Wetland Outfall	Post-Development 2 year	2	4.742	21.550	3.84
North Wetland Outfall	Post-Development 5 year	5	5.292	19.900	4.38
North Wetland Outfall	Post-Development 25 year	25	8.926	12.850	22.32
North Wetland Outfall	Post-Development 100 year	100	14.226	12.400	97.74

CAL883229B_Stormwater Report

Subsection: Master Network Summary

Node Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft ³ /s)
South Wetland Outfall	Post-Development 2 year	2	3.173	15.050	2.40
South Wetland Outfall	Post-Development 5 year	5	3.507	14.450	2.81
South Wetland Outfall	Post-Development 25 year	25	4.423	13.550	4.04
South Wetland Outfall	Post-Development 100 year	100	5.655	13.350	6.64

Pond Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft ³ /s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ac-ft)
North Wetland (IN)	Post-Development 2 year	2	10.685	12.150	81.51	(N/A)	(N/A)
North Wetland (OUT)	Post-Development 2 year	2	4.742	21.550	3.84	1,186.68	12.063
North Wetland (IN)	Post-Development 5 year	5	12.397	12.150	112.04	(N/A)	(N/A)
North Wetland (OUT)	Post-Development 5 year	5	5.292	19.900	4.38	1,186.81	13.348
North Wetland (IN)	Post-Development 25 year	25	16.990	12.150	191.27	(N/A)	(N/A)
North Wetland (OUT)	Post-Development 25 year	25	8.926	12.850	22.32	1,186.97	15.111
North Wetland (IN)	Post-Development 100 year	100	22.365	12.150	280.62	(N/A)	(N/A)
North Wetland (OUT)	Post-Development 100 year	100	14.226	12.400	97.74	1,187.09	16.531
South Wetland (IN)	Post-Development 2 year	2	4.670	12.100	31.32	(N/A)	(N/A)
South Wetland (OUT)	Post-Development 2 year	2	3.173	15.050	2.40	1,186.33	4.368

CAL883229B_Stormwater Report

Subsection: Master Network Summary

Pond Summary

Label	Scenario	Return Event (years)	Hydrograph Volume (ac-ft)	Time to Peak (hours)	Peak Flow (ft ³ /s)	Maximum Water Surface Elevation (ft)	Maximum Pond Storage (ac-ft)
South Wetland (IN)	Post-Development 5 year	5	5.183	12.100	42.69	(N/A)	(N/A)
South Wetland (OUT)	Post-Development 5 year	5	3.507	14.450	2.81	1,186.39	4.721
South Wetland (IN)	Post-Development 25 year	25	6.558	12.100	72.07	(N/A)	(N/A)
South Wetland (OUT)	Post-Development 25 year	25	4.423	13.550	4.04	1,186.56	5.708
South Wetland (IN)	Post-Development 100 year	100	8.167	12.100	105.13	(N/A)	(N/A)
South Wetland (OUT)	Post-Development 100 year	100	5.655	13.350	6.64	1,186.71	6.729

CAL883229B_Stormwater Report

Subsection: Time-Depth Curve

Return Event: 100 years

Label: MSE3

Storm Event: 100 year

Scenario: Post-Development 100 year

Time-Depth Curve: 100 year

Label	100 year
Start Time	0.000 hours
Increment	0.100 hours
End Time	24.000 hours
Return Event	100 years

CUMULATIVE RAINFALL (in)

Output Time Increment = 0.100 hours

Time on left represents time for first value in each row.

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
0.000	0.0	0.0	0.0	0.0	0.0
0.500	0.0	0.0	0.0	0.0	0.0
1.000	0.0	0.0	0.0	0.0	0.0
1.500	0.0	0.1	0.1	0.1	0.1
2.000	0.1	0.1	0.1	0.1	0.1
2.500	0.1	0.1	0.1	0.1	0.1
3.000	0.1	0.1	0.1	0.1	0.2
3.500	0.2	0.2	0.2	0.2	0.2
4.000	0.2	0.2	0.2	0.2	0.2
4.500	0.2	0.3	0.3	0.3	0.3
5.000	0.3	0.3	0.3	0.3	0.3
5.500	0.3	0.3	0.4	0.4	0.4
6.000	0.4	0.4	0.4	0.4	0.4
6.500	0.4	0.5	0.5	0.5	0.5
7.000	0.5	0.5	0.5	0.5	0.6
7.500	0.6	0.6	0.6	0.6	0.6
8.000	0.6	0.7	0.7	0.7	0.7
8.500	0.7	0.7	0.7	0.8	0.8
9.000	0.8	0.8	0.8	0.9	0.9
9.500	0.9	0.9	1.0	1.0	1.0
10.000	1.1	1.1	1.1	1.1	1.2
10.500	1.2	1.2	1.3	1.3	1.4
11.000	1.5	1.6	1.6	1.7	1.8
11.500	1.9	2.0	2.2	2.5	2.9
12.000	3.6	4.8	5.2	5.4	5.6
12.500	5.8	5.9	6.0	6.0	6.1
13.000	6.2	6.3	6.3	6.4	6.4
13.500	6.5	6.5	6.5	6.6	6.6
14.000	6.6	6.6	6.7	6.7	6.7
14.500	6.8	6.8	6.8	6.8	6.9
15.000	6.9	6.9	6.9	6.9	6.9
15.500	7.0	7.0	7.0	7.0	7.0
16.000	7.0	7.0	7.1	7.1	7.1
16.500	7.1	7.1	7.1	7.1	7.1

CAL883229B_Stormwater Report

Subsection: Time-Depth Curve

Return Event: 100 years

Label: MSE3

Storm Event: 100 year

Scenario: Post-Development 100 year

CUMULATIVE RAINFALL (in)

Output Time Increment = 0.100 hours

Time on left represents time for first value in each row.

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
17.000	7.2	7.2	7.2	7.2	7.2
17.500	7.2	7.2	7.2	7.3	7.3
18.000	7.3	7.3	7.3	7.3	7.3
18.500	7.3	7.3	7.4	7.4	7.4
19.000	7.4	7.4	7.4	7.4	7.4
19.500	7.4	7.4	7.4	7.5	7.5
20.000	7.5	7.5	7.5	7.5	7.5
20.500	7.5	7.5	7.5	7.5	7.5
21.000	7.5	7.5	7.6	7.6	7.6
21.500	7.6	7.6	7.6	7.6	7.6
22.000	7.6	7.6	7.6	7.6	7.6
22.500	7.6	7.6	7.6	7.6	7.6
23.000	7.6	7.6	7.6	7.7	7.7
23.500	7.7	7.7	7.7	7.7	7.7
24.000	7.7	(N/A)	(N/A)	(N/A)	(N/A)

CAL883229B_Stormwater Report

Subsection: Time-Depth Curve
 Label: MSE3
 Scenario: Post-Development 2 year

Return Event: 2 years
 Storm Event: 2 year

Time-Depth Curve: 2 year	
Label	2 year
Start Time	0.000 hours
Increment	0.100 hours
End Time	24.000 hours
Return Event	2 years

CUMULATIVE RAINFALL (in)
Output Time Increment = 0.100 hours

Time on left represents time for first value in each row.

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
0.000	0.0	0.0	0.0	0.0	0.0
0.500	0.0	0.0	0.0	0.0	0.0
1.000	0.0	0.0	0.0	0.0	0.0
1.500	0.0	0.0	0.0	0.0	0.0
2.000	0.0	0.0	0.0	0.0	0.0
2.500	0.0	0.0	0.0	0.0	0.0
3.000	0.0	0.1	0.1	0.1	0.1
3.500	0.1	0.1	0.1	0.1	0.1
4.000	0.1	0.1	0.1	0.1	0.1
4.500	0.1	0.1	0.1	0.1	0.1
5.000	0.1	0.1	0.1	0.1	0.1
5.500	0.1	0.1	0.1	0.1	0.1
6.000	0.2	0.2	0.2	0.2	0.2
6.500	0.2	0.2	0.2	0.2	0.2
7.000	0.2	0.2	0.2	0.2	0.2
7.500	0.2	0.2	0.2	0.2	0.2
8.000	0.3	0.3	0.3	0.3	0.3
8.500	0.3	0.3	0.3	0.3	0.3
9.000	0.3	0.3	0.3	0.3	0.3
9.500	0.4	0.4	0.4	0.4	0.4
10.000	0.4	0.4	0.4	0.4	0.5
10.500	0.5	0.5	0.5	0.5	0.6
11.000	0.6	0.6	0.6	0.7	0.7
11.500	0.7	0.8	0.9	1.0	1.1
12.000	1.4	1.9	2.0	2.1	2.2
12.500	2.3	2.3	2.3	2.4	2.4
13.000	2.4	2.5	2.5	2.5	2.5
13.500	2.5	2.6	2.6	2.6	2.6
14.000	2.6	2.6	2.6	2.6	2.6
14.500	2.6	2.7	2.7	2.7	2.7
15.000	2.7	2.7	2.7	2.7	2.7
15.500	2.7	2.7	2.7	2.7	2.8
16.000	2.8	2.8	2.8	2.8	2.8
16.500	2.8	2.8	2.8	2.8	2.8

CAL883229B_Stormwater Report

Subsection: Time-Depth Curve
 Label: MSE3
 Scenario: Post-Development 2 year

Return Event: 2 years
 Storm Event: 2 year

CUMULATIVE RAINFALL (in)
Output Time Increment = 0.100 hours
Time on left represents time for first value in each row.

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
17.000	2.8	2.8	2.8	2.8	2.8
17.500	2.8	2.8	2.8	2.8	2.9
18.000	2.9	2.9	2.9	2.9	2.9
18.500	2.9	2.9	2.9	2.9	2.9
19.000	2.9	2.9	2.9	2.9	2.9
19.500	2.9	2.9	2.9	2.9	2.9
20.000	2.9	2.9	2.9	2.9	2.9
20.500	2.9	2.9	3.0	3.0	3.0
21.000	3.0	3.0	3.0	3.0	3.0
21.500	3.0	3.0	3.0	3.0	3.0
22.000	3.0	3.0	3.0	3.0	3.0
22.500	3.0	3.0	3.0	3.0	3.0
23.000	3.0	3.0	3.0	3.0	3.0
23.500	3.0	3.0	3.0	3.0	3.0
24.000	3.0	(N/A)	(N/A)	(N/A)	(N/A)

CAL883229B_Stormwater Report

Subsection: Time-Depth Curve
 Label: MSE3
 Scenario: Post-Development 25 year

Return Event: 25 years
 Storm Event: 25 year

Time-Depth Curve: 25 year	
Label	25 year
Start Time	0.000 hours
Increment	0.100 hours
End Time	24.000 hours
Return Event	25 years

CUMULATIVE RAINFALL (in)
Output Time Increment = 0.100 hours
Time on left represents time for first value in each row.

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
0.000	0.0	0.0	0.0	0.0	0.0
0.500	0.0	0.0	0.0	0.0	0.0
1.000	0.0	0.0	0.0	0.0	0.0
1.500	0.0	0.0	0.0	0.0	0.0
2.000	0.1	0.1	0.1	0.1	0.1
2.500	0.1	0.1	0.1	0.1	0.1
3.000	0.1	0.1	0.1	0.1	0.1
3.500	0.1	0.1	0.1	0.1	0.1
4.000	0.1	0.2	0.2	0.2	0.2
4.500	0.2	0.2	0.2	0.2	0.2
5.000	0.2	0.2	0.2	0.2	0.2
5.500	0.2	0.3	0.3	0.3	0.3
6.000	0.3	0.3	0.3	0.3	0.3
6.500	0.3	0.3	0.3	0.4	0.4
7.000	0.4	0.4	0.4	0.4	0.4
7.500	0.4	0.4	0.4	0.4	0.5
8.000	0.5	0.5	0.5	0.5	0.5
8.500	0.5	0.5	0.5	0.6	0.6
9.000	0.6	0.6	0.6	0.6	0.6
9.500	0.7	0.7	0.7	0.7	0.7
10.000	0.8	0.8	0.8	0.8	0.9
10.500	0.9	0.9	0.9	1.0	1.0
11.000	1.1	1.1	1.2	1.3	1.3
11.500	1.4	1.5	1.6	1.8	2.1
12.000	2.6	3.5	3.8	4.0	4.1
12.500	4.2	4.3	4.3	4.4	4.5
13.000	4.5	4.6	4.6	4.6	4.7
13.500	4.7	4.7	4.8	4.8	4.8
14.000	4.8	4.8	4.9	4.9	4.9
14.500	4.9	4.9	5.0	5.0	5.0
15.000	5.0	5.0	5.0	5.0	5.1
15.500	5.1	5.1	5.1	5.1	5.1
16.000	5.1	5.1	5.1	5.2	5.2
16.500	5.2	5.2	5.2	5.2	5.2

CAL883229B_Stormwater Report

Subsection: Time-Depth Curve
 Label: MSE3
 Scenario: Post-Development 25 year

Return Event: 25 years
 Storm Event: 25 year

CUMULATIVE RAINFALL (in)
Output Time Increment = 0.100 hours
Time on left represents time for first value in each row.

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
17.000	5.2	5.2	5.2	5.2	5.3
17.500	5.3	5.3	5.3	5.3	5.3
18.000	5.3	5.3	5.3	5.3	5.3
18.500	5.3	5.4	5.4	5.4	5.4
19.000	5.4	5.4	5.4	5.4	5.4
19.500	5.4	5.4	5.4	5.4	5.4
20.000	5.4	5.5	5.5	5.5	5.5
20.500	5.5	5.5	5.5	5.5	5.5
21.000	5.5	5.5	5.5	5.5	5.5
21.500	5.5	5.5	5.5	5.5	5.5
22.000	5.5	5.5	5.5	5.5	5.6
22.500	5.6	5.6	5.6	5.6	5.6
23.000	5.6	5.6	5.6	5.6	5.6
23.500	5.6	5.6	5.6	5.6	5.6
24.000	5.6	(N/A)	(N/A)	(N/A)	(N/A)

CAL883229B_Stormwater Report

Subsection: Time-Depth Curve
 Label: MSE3
 Scenario: Post-Development 5 year

Return Event: 5 years
 Storm Event: 5 year

Time-Depth Curve: 5 year	
Label	5 year
Start Time	0.000 hours
Increment	0.100 hours
End Time	24.000 hours
Return Event	5 years

CUMULATIVE RAINFALL (in)
Output Time Increment = 0.100 hours
Time on left represents time for first value in each row.

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
0.000	0.0	0.0	0.0	0.0	0.0
0.500	0.0	0.0	0.0	0.0	0.0
1.000	0.0	0.0	0.0	0.0	0.0
1.500	0.0	0.0	0.0	0.0	0.0
2.000	0.0	0.0	0.0	0.0	0.0
2.500	0.0	0.0	0.1	0.1	0.1
3.000	0.1	0.1	0.1	0.1	0.1
3.500	0.1	0.1	0.1	0.1	0.1
4.000	0.1	0.1	0.1	0.1	0.1
4.500	0.1	0.1	0.1	0.1	0.1
5.000	0.1	0.1	0.1	0.2	0.2
5.500	0.2	0.2	0.2	0.2	0.2
6.000	0.2	0.2	0.2	0.2	0.2
6.500	0.2	0.2	0.2	0.2	0.2
7.000	0.2	0.3	0.3	0.3	0.3
7.500	0.3	0.3	0.3	0.3	0.3
8.000	0.3	0.3	0.3	0.3	0.3
8.500	0.3	0.4	0.4	0.4	0.4
9.000	0.4	0.4	0.4	0.4	0.4
9.500	0.4	0.5	0.5	0.5	0.5
10.000	0.5	0.5	0.5	0.6	0.6
10.500	0.6	0.6	0.6	0.7	0.7
11.000	0.7	0.8	0.8	0.8	0.9
11.500	0.9	1.0	1.1	1.2	1.4
12.000	1.7	2.3	2.5	2.7	2.7
12.500	2.8	2.9	2.9	2.9	3.0
13.000	3.0	3.1	3.1	3.1	3.1
13.500	3.2	3.2	3.2	3.2	3.2
14.000	3.2	3.2	3.3	3.3	3.3
14.500	3.3	3.3	3.3	3.3	3.3
15.000	3.4	3.4	3.4	3.4	3.4
15.500	3.4	3.4	3.4	3.4	3.4
16.000	3.4	3.4	3.4	3.4	3.5
16.500	3.5	3.5	3.5	3.5	3.5

CAL883229B_Stormwater Report

Subsection: Time-Depth Curve
 Label: MSE3
 Scenario: Post-Development 5 year

Return Event: 5 years
 Storm Event: 5 year

CUMULATIVE RAINFALL (in)
Output Time Increment = 0.100 hours
Time on left represents time for first value in each row.

Time (hours)	Depth (in)	Depth (in)	Depth (in)	Depth (in)	Depth (in)
17.000	3.5	3.5	3.5	3.5	3.5
17.500	3.5	3.5	3.5	3.5	3.5
18.000	3.5	3.6	3.6	3.6	3.6
18.500	3.6	3.6	3.6	3.6	3.6
19.000	3.6	3.6	3.6	3.6	3.6
19.500	3.6	3.6	3.6	3.6	3.6
20.000	3.6	3.6	3.7	3.7	3.7
20.500	3.7	3.7	3.7	3.7	3.7
21.000	3.7	3.7	3.7	3.7	3.7
21.500	3.7	3.7	3.7	3.7	3.7
22.000	3.7	3.7	3.7	3.7	3.7
22.500	3.7	3.7	3.7	3.7	3.7
23.000	3.7	3.7	3.7	3.7	3.7
23.500	3.7	3.7	3.7	3.7	3.7
24.000	3.7	(N/A)	(N/A)	(N/A)	(N/A)

CAL883229B_Stormwater Report

Subsection: Time of Concentration Calculations

Label: North DA

Scenario: Post-Development 2 year

Return Event: 2 years

Storm Event: 2 year

Time of Concentration Results

Segment #1: SCS Lag

Hydraulic Length	800.00 ft
CN	85.000
Slope	0.044 ft/ft
Average Velocity	1.24 ft/s
Segment Time of Concentration	0.179 hours

Time of Concentration (Composite)

Time of Concentration (Composite)	0.179 hours
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CAL883229B_Stormwater Report

Subsection: Time of Concentration Calculations

Label: North DA

Scenario: Post-Development 2 year

Return Event: 2 years

Storm Event: 2 year

==== SCS Lag

Tc = $0.000877 * (Lf^{0.8}) * ((1000/CN)-9)^{0.7} * (Sf^{-0.5})$

Where: Tc= Time of concentration, hours
Lf= Flow length, feet
CN= SCS Curve Number
Sf= Slope, ft/ft

CAL883229B_Stormwater Report

Subsection: Time of Concentration Calculations

Label: South DA

Scenario: Post-Development 2 year

Return Event: 2 years

Storm Event: 2 year

Time of Concentration Results

Segment #1: SCS Lag

Hydraulic Length	130.00 ft
CN	85.000
Slope	0.036 ft/ft
Average Velocity	0.78 ft/s
Segment Time of Concentration	0.046 hours

Time of Concentration (Composite)

Time of Concentration (Composite)	0.083 hours
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CAL883229B_Stormwater Report

Subsection: Time of Concentration Calculations

Label: South DA

Scenario: Post-Development 2 year

Return Event: 2 years

Storm Event: 2 year

==== SCS Lag

Tc = $0.000877 * (Lf^{0.8}) * ((1000/CN)-9)^{0.7} * (Sf^{-0.5})$

Where: Tc= Time of concentration, hours
Lf= Flow length, feet
CN= SCS Curve Number
Sf= Slope, ft/ft

CAL883229B_Stormwater Report

Subsection: Unit Hydrograph Summary
 Label: North DA
 Scenario: Post-Development 2 year

Return Event: 2 years
 Storm Event: 2 year

Storm Event	2 year
Return Event	2 years
Duration	24.000 hours
Depth	3.0 in
Time of Concentration (Composite)	0.179 hours
Area (User Defined)	1,420,056.000 ft ²

Computational Time Increment	0.024 hours
Time to Peak (Computed)	12.149 hours
Flow (Peak, Computed)	78.31 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	78.31 ft ³ /s

Drainage Area	
SCS CN (Composite)	85.000
Area (User Defined)	1,420,056.000 ft ²
Maximum Retention (Pervious)	1.8 in
Maximum Retention (Pervious, 20 percent)	0.4 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.6 in
Runoff Volume (Pervious)	4.338 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	4.338 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.179 hours
Computational Time Increment	0.024 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

CAL883229B_Stormwater Report

Subsection: Unit Hydrograph Summary

Label: North DA

Scenario: Post-Development 2 year

Return Event: 2 years

Storm Event: 2 year

SCS Unit Hydrograph Parameters

Unit peak, qp	206.33 ft ³ /s
Unit peak time, Tp	0.119 hours
Unit receding limb, Tr	0.477 hours
Total unit time, Tb	0.597 hours

CAL883229B_Stormwater Report

Subsection: Unit Hydrograph Summary
 Label: North DA
 Scenario: Post-Development 5 year

Return Event: 5 years
 Storm Event: 5 year

Storm Event	5 year
Return Event	5 years
Duration	24.000 hours
Depth	3.7 in
Time of Concentration (Composite)	0.179 hours
Area (User Defined)	1,420,056.000 ft ²

Computational Time Increment	0.024 hours
Time to Peak (Computed)	12.149 hours
Flow (Peak, Computed)	108.85 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	108.84 ft ³ /s

Drainage Area	
SCS CN (Composite)	85.000
Area (User Defined)	1,420,056.000 ft ²
Maximum Retention (Pervious)	1.8 in
Maximum Retention (Pervious, 20 percent)	0.4 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	2.2 in
Runoff Volume (Pervious)	6.050 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	6.050 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.179 hours
Computational Time Increment	0.024 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

CAL883229B_Stormwater Report

Subsection: Unit Hydrograph Summary

Label: North DA

Scenario: Post-Development 5 year

Return Event: 5 years

Storm Event: 5 year

SCS Unit Hydrograph Parameters

Unit peak, qp	206.33 ft ³ /s
Unit peak time, Tp	0.119 hours
Unit receding limb, Tr	0.477 hours
Total unit time, Tb	0.597 hours

CAL883229B_Stormwater Report

Subsection: Unit Hydrograph Summary
 Label: North DA
 Scenario: Post-Development 25 year

Return Event: 25 years
 Storm Event: 25 year

Storm Event	25 year
Return Event	25 years
Duration	24.000 hours
Depth	5.6 in
Time of Concentration (Composite)	0.179 hours
Area (User Defined)	1,420,056.000 ft ²

Computational Time Increment	0.024 hours
Time to Peak (Computed)	12.149 hours
Flow (Peak, Computed)	188.12 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	188.07 ft ³ /s

Drainage Area	
SCS CN (Composite)	85.000
Area (User Defined)	1,420,056.000 ft ²
Maximum Retention (Pervious)	1.8 in
Maximum Retention (Pervious, 20 percent)	0.4 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	3.9 in
Runoff Volume (Pervious)	10.642 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	10.643 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.179 hours
Computational Time Increment	0.024 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

CAL883229B_Stormwater Report

Subsection: Unit Hydrograph Summary

Label: North DA

Scenario: Post-Development 25 year

Return Event: 25 years

Storm Event: 25 year

SCS Unit Hydrograph Parameters

Unit peak, qp	206.33 ft ³ /s
Unit peak time, Tp	0.119 hours
Unit receding limb, Tr	0.477 hours
Total unit time, Tb	0.597 hours

CAL883229B_Stormwater Report

Subsection: Unit Hydrograph Summary
 Label: North DA
 Scenario: Post-Development 100 year

Return Event: 100 years
 Storm Event: 100 year

Storm Event	100 year
Return Event	100 years
Duration	24.000 hours
Depth	7.7 in
Time of Concentration (Composite)	0.179 hours
Area (User Defined)	1,420,056.000 ft ²

Computational Time Increment	0.024 hours
Time to Peak (Computed)	12.149 hours
Flow (Peak, Computed)	277.52 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.150 hours
Flow (Peak Interpolated Output)	277.42 ft ³ /s

Drainage Area	
SCS CN (Composite)	85.000
Area (User Defined)	1,420,056.000 ft ²
Maximum Retention (Pervious)	1.8 in
Maximum Retention (Pervious, 20 percent)	0.4 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	5.9 in
Runoff Volume (Pervious)	16.015 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	16.018 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.179 hours
Computational Time Increment	0.024 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

CAL883229B_Stormwater Report

Subsection: Unit Hydrograph Summary

Label: North DA

Scenario: Post-Development 100 year

Return Event: 100 years

Storm Event: 100 year

SCS Unit Hydrograph Parameters

Unit peak, qp	206.33 ft ³ /s
Unit peak time, Tp	0.119 hours
Unit receding limb, Tr	0.477 hours
Total unit time, Tb	0.597 hours

CAL883229B_Stormwater Report

Subsection: Read Hydrograph
 Label: NorthPump
 Scenario: Post-Development 2 year

Return Event: 2 years
 Storm Event: 2 year

Peak Discharge	3.20 ft ³ /s
Time to Peak	15.000 hours
Hydrograph Volume	12.694 ac-ft

HYDROGRAPH ORDINATES (ft³/s) Output Time Increment = 1.000 hours

Time on left represents time for first value in each row.

Time (hours)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)
0.000	3.20	3.20	3.20	3.20	3.20
5.000	3.20	3.20	3.20	3.20	3.20
10.000	3.20	3.20	3.20	3.20	3.20
15.000	3.20	3.20	3.20	3.20	3.20
20.000	3.20	3.20	3.20	3.20	3.20
25.000	3.20	3.20	3.20	3.20	3.20
30.000	3.20	3.20	3.20	3.20	3.20
35.000	3.20	3.20	3.20	3.20	3.20
40.000	3.20	3.20	3.20	3.20	3.20
45.000	3.20	3.20	3.20	3.20	(N/A)

CAL883229B_Stormwater Report

Subsection: Read Hydrograph
 Label: NorthPump
 Scenario: Post-Development 5 year

Return Event: 5 years
 Storm Event: 5 year

Peak Discharge	3.20 ft ³ /s
Time to Peak	15.000 hours
Hydrograph Volume	12.694 ac-ft

HYDROGRAPH ORDINATES (ft³/s)

Output Time Increment = 1.000 hours

Time on left represents time for first value in each row.

Time (hours)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)
0.000	3.20	3.20	3.20	3.20	3.20
5.000	3.20	3.20	3.20	3.20	3.20
10.000	3.20	3.20	3.20	3.20	3.20
15.000	3.20	3.20	3.20	3.20	3.20
20.000	3.20	3.20	3.20	3.20	3.20
25.000	3.20	3.20	3.20	3.20	3.20
30.000	3.20	3.20	3.20	3.20	3.20
35.000	3.20	3.20	3.20	3.20	3.20
40.000	3.20	3.20	3.20	3.20	3.20
45.000	3.20	3.20	3.20	3.20	(N/A)

CAL883229B_Stormwater Report

Subsection: Read Hydrograph
 Label: NorthPump
 Scenario: Post-Development 25 year

Return Event: 25 years
 Storm Event: 25 year

Peak Discharge	3.20 ft ³ /s
Time to Peak	15.000 hours
Hydrograph Volume	12.694 ac-ft

HYDROGRAPH ORDINATES (ft³/s)

Output Time Increment = 1.000 hours

Time on left represents time for first value in each row.

Time (hours)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)
0.000	3.20	3.20	3.20	3.20	3.20
5.000	3.20	3.20	3.20	3.20	3.20
10.000	3.20	3.20	3.20	3.20	3.20
15.000	3.20	3.20	3.20	3.20	3.20
20.000	3.20	3.20	3.20	3.20	3.20
25.000	3.20	3.20	3.20	3.20	3.20
30.000	3.20	3.20	3.20	3.20	3.20
35.000	3.20	3.20	3.20	3.20	3.20
40.000	3.20	3.20	3.20	3.20	3.20
45.000	3.20	3.20	3.20	3.20	(N/A)

CAL883229B_Stormwater Report

Subsection: Read Hydrograph

Label: NorthPump

Scenario: Post-Development 100 year

Return Event: 100 years

Storm Event: 100 year

Peak Discharge	3.20 ft ³ /s
Time to Peak	15.000 hours
Hydrograph Volume	12.694 ac-ft

HYDROGRAPH ORDINATES (ft³/s)

Output Time Increment = 1.000 hours

Time on left represents time for first value in each row.

Time (hours)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)
0.000	3.20	3.20	3.20	3.20	3.20
5.000	3.20	3.20	3.20	3.20	3.20
10.000	3.20	3.20	3.20	3.20	3.20
15.000	3.20	3.20	3.20	3.20	3.20
20.000	3.20	3.20	3.20	3.20	3.20
25.000	3.20	3.20	3.20	3.20	3.20
30.000	3.20	3.20	3.20	3.20	3.20
35.000	3.20	3.20	3.20	3.20	3.20
40.000	3.20	3.20	3.20	3.20	3.20
45.000	3.20	3.20	3.20	3.20	(N/A)

CAL883229B_Stormwater Report

Subsection: Unit Hydrograph Summary
 Label: South DA
 Scenario: Post-Development 2 year

Return Event: 2 years
 Storm Event: 2 year

Storm Event	2 year
Return Event	2 years
Duration	24.000 hours
Depth	3.0 in
Time of Concentration (Composite)	0.083 hours
Area (User Defined)	425,258.400 ft ²

Computational Time Increment	0.011 hours
Time to Peak (Computed)	12.111 hours
Flow (Peak, Computed)	30.36 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	29.62 ft ³ /s

Drainage Area	
SCS CN (Composite)	85.000
Area (User Defined)	425,258.400 ft ²
Maximum Retention (Pervious)	1.8 in
Maximum Retention (Pervious, 20 percent)	0.4 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	1.6 in
Runoff Volume (Pervious)	1.299 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	1.298 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.083 hours
Computational Time Increment	0.011 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

CAL883229B_Stormwater Report

Subsection: Unit Hydrograph Summary

Label: South DA

Scenario: Post-Development 2 year

Return Event: 2 years

Storm Event: 2 year

SCS Unit Hydrograph Parameters

Unit peak, qp	132.74 ft ³ /s
Unit peak time, Tp	0.056 hours
Unit receding limb, Tr	0.222 hours
Total unit time, Tb	0.278 hours

CAL883229B_Stormwater Report

Subsection: Unit Hydrograph Summary
 Label: South DA
 Scenario: Post-Development 5 year

Return Event: 5 years
 Storm Event: 5 year

Storm Event	5 year
Return Event	5 years
Duration	24.000 hours
Depth	3.7 in
Time of Concentration (Composite)	0.083 hours
Area (User Defined)	425,258.400 ft ²

Computational Time Increment	0.011 hours
Time to Peak (Computed)	12.111 hours
Flow (Peak, Computed)	41.87 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	40.99 ft ³ /s

Drainage Area	
SCS CN (Composite)	85.000
Area (User Defined)	425,258.400 ft ²
Maximum Retention (Pervious)	1.8 in
Maximum Retention (Pervious, 20 percent)	0.4 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	2.2 in
Runoff Volume (Pervious)	1.812 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	1.811 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.083 hours
Computational Time Increment	0.011 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

CAL883229B_Stormwater Report

Subsection: Unit Hydrograph Summary

Label: South DA

Scenario: Post-Development 5 year

Return Event: 5 years

Storm Event: 5 year

SCS Unit Hydrograph Parameters

Unit peak, qp	132.74 ft ³ /s
Unit peak time, Tp	0.056 hours
Unit receding limb, Tr	0.222 hours
Total unit time, Tb	0.278 hours

CAL883229B_Stormwater Report

Subsection: Unit Hydrograph Summary
 Label: South DA
 Scenario: Post-Development 25 year

Return Event: 25 years
 Storm Event: 25 year

Storm Event	25 year
Return Event	25 years
Duration	24.000 hours
Depth	5.6 in
Time of Concentration (Composite)	0.083 hours
Area (User Defined)	425,258.400 ft ²

Computational Time Increment	0.011 hours
Time to Peak (Computed)	12.111 hours
Flow (Peak, Computed)	71.56 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	70.37 ft ³ /s

Drainage Area	
SCS CN (Composite)	85.000
Area (User Defined)	425,258.400 ft ²
Maximum Retention (Pervious)	1.8 in
Maximum Retention (Pervious, 20 percent)	0.4 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	3.9 in
Runoff Volume (Pervious)	3.187 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	3.186 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.083 hours
Computational Time Increment	0.011 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

CAL883229B_Stormwater Report

Subsection: Unit Hydrograph Summary

Label: South DA

Scenario: Post-Development 25 year

Return Event: 25 years

Storm Event: 25 year

SCS Unit Hydrograph Parameters

Unit peak, qp	132.74 ft ³ /s
Unit peak time, Tp	0.056 hours
Unit receding limb, Tr	0.222 hours
Total unit time, Tb	0.278 hours

CAL883229B_Stormwater Report

Subsection: Unit Hydrograph Summary
 Label: South DA
 Scenario: Post-Development 100 year

Return Event: 100 years
 Storm Event: 100 year

Storm Event	100 year
Return Event	100 years
Duration	24.000 hours
Depth	7.7 in
Time of Concentration (Composite)	0.083 hours
Area (User Defined)	425,258.400 ft ²

Computational Time Increment	0.011 hours
Time to Peak (Computed)	12.111 hours
Flow (Peak, Computed)	104.92 ft ³ /s
Output Increment	0.050 hours
Time to Flow (Peak Interpolated Output)	12.100 hours
Flow (Peak Interpolated Output)	103.43 ft ³ /s

Drainage Area	
SCS CN (Composite)	85.000
Area (User Defined)	425,258.400 ft ²
Maximum Retention (Pervious)	1.8 in
Maximum Retention (Pervious, 20 percent)	0.4 in

Cumulative Runoff	
Cumulative Runoff Depth (Pervious)	5.9 in
Runoff Volume (Pervious)	4.796 ac-ft

Hydrograph Volume (Area under Hydrograph curve)	
Volume	4.795 ac-ft

SCS Unit Hydrograph Parameters	
Time of Concentration (Composite)	0.083 hours
Computational Time Increment	0.011 hours
Unit Hydrograph Shape Factor	483.432
K Factor	0.749
Receding/Rising, Tr/Tp	1.670

CAL883229B_Stormwater Report

Subsection: Unit Hydrograph Summary

Label: South DA

Scenario: Post-Development 100 year

Return Event: 100 years

Storm Event: 100 year

SCS Unit Hydrograph Parameters

Unit peak, qp	132.74 ft ³ /s
Unit peak time, Tp	0.056 hours
Unit receding limb, Tr	0.222 hours
Total unit time, Tb	0.278 hours

CAL883229B_Stormwater Report

Subsection: Unit Hydrograph (Hydrograph Table)

Return Event: 100 years

Label: South DA

Storm Event: 100 year

Scenario: Post-Development 100 year

Storm Event	100 year
Return Event	100 years
Duration	24.000 hours
Depth	7.7 in
Time of Concentration (Composite)	0.083 hours
Area (User Defined)	425,258.400 ft ²

HYDROGRAPH ORDINATES (ft³/s)

Output Time Increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)
5.700	0.00	0.00	0.01	0.02	0.02
5.950	0.03	0.04	0.04	0.05	0.06
6.200	0.06	0.07	0.08	0.08	0.09
6.450	0.10	0.11	0.11	0.12	0.13
6.700	0.14	0.14	0.15	0.16	0.17
6.950	0.17	0.18	0.19	0.20	0.21
7.200	0.21	0.22	0.23	0.24	0.25
7.450	0.26	0.26	0.27	0.28	0.29
7.700	0.30	0.31	0.31	0.32	0.33
7.950	0.34	0.35	0.36	0.37	0.38
8.200	0.39	0.40	0.41	0.41	0.42
8.450	0.43	0.44	0.45	0.46	0.47
8.700	0.48	0.49	0.50	0.51	0.52
8.950	0.53	0.54	0.67	0.84	0.90
9.200	0.93	0.96	0.98	1.00	1.03
9.450	1.05	1.07	1.10	1.13	1.15
9.700	1.17	1.20	1.22	1.25	1.27
9.950	1.29	1.32	1.34	1.37	1.39
10.200	1.42	1.44	1.47	1.49	1.51
10.450	1.54	1.57	1.88	2.27	2.51
10.700	2.72	2.93	3.14	3.35	3.57
10.950	3.79	4.03	4.26	4.51	4.75
11.200	5.01	5.27	5.53	5.80	6.07
11.450	6.35	6.63	7.93	9.54	11.33
11.700	13.22	15.94	18.98	23.24	27.96
11.950	39.68	53.77	76.94	103.43	81.20
12.200	45.13	32.57	25.81	21.70	18.25
12.450	15.84	13.65	11.60	9.57	8.87
12.700	8.51	8.22	7.96	7.70	7.43
12.950	7.16	6.90	6.63	6.36	6.10
13.200	5.83	5.56	5.30	5.03	4.75
13.450	4.48	4.21	3.64	2.99	2.81
13.700	2.76	2.74	2.72	2.71	2.69

CAL883229B_Stormwater Report

Subsection: Unit Hydrograph (Hydrograph Table)

Return Event: 100 years

Label: South DA

Storm Event: 100 year

Scenario: Post-Development 100 year

HYDROGRAPH ORDINATES (ft³/s)

Output Time Increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)
13.950	2.67	2.66	2.64	2.62	2.61
14.200	2.59	2.58	2.56	2.55	2.52
14.450	2.51	2.50	2.48	2.46	2.45
14.700	2.43	2.42	2.40	2.39	2.37
14.950	2.35	2.33	2.00	1.59	1.48
15.200	1.45	1.44	1.44	1.43	1.42
15.450	1.41	1.40	1.40	1.39	1.38
15.700	1.37	1.37	1.37	1.36	1.35
15.950	1.34	1.34	1.33	1.32	1.31
16.200	1.31	1.30	1.29	1.28	1.28
16.450	1.27	1.27	1.26	1.25	1.24
16.700	1.24	1.23	1.22	1.22	1.21
16.950	1.20	1.19	1.18	1.18	1.17
17.200	1.17	1.16	1.15	1.15	1.14
17.450	1.13	1.12	1.12	1.11	1.10
17.700	1.09	1.09	1.08	1.07	1.07
17.950	1.06	1.05	1.04	1.04	1.03
18.200	1.02	1.02	1.01	1.00	0.99
18.450	0.99	0.99	0.98	0.97	0.96
18.700	0.95	0.94	0.94	0.93	0.93
18.950	0.92	0.91	0.90	0.89	0.89
19.200	0.89	0.88	0.87	0.86	0.86
19.450	0.85	0.84	0.83	0.83	0.82
19.700	0.81	0.80	0.80	0.79	0.78
19.950	0.77	0.77	0.76	0.76	0.75
20.200	0.74	0.73	0.73	0.72	0.71
20.450	0.71	0.70	0.69	0.68	0.67
20.700	0.67	0.66	0.66	0.65	0.64
20.950	0.63	0.63	0.62	0.61	0.60
21.200	0.60	0.59	0.58	0.58	0.57
21.450	0.56	0.55	0.55	0.54	0.53
21.700	0.52	0.52	0.51	0.50	0.50
21.950	0.49	0.48	0.48	0.47	0.46
22.200	0.45	0.45	0.44	0.43	0.42
22.450	0.42	0.42	0.41	0.40	0.39
22.700	0.39	0.38	0.37	0.36	0.35
22.950	0.35	0.34	0.33	0.32	0.32
23.200	0.31	0.30	0.29	0.29	0.28
23.450	0.28	0.27	0.26	0.25	0.24
23.700	0.24	0.23	0.22	0.22	0.21
23.950	0.20	0.20	(N/A)	(N/A)	(N/A)

CAL883229B_Stormwater Report

Subsection: Read Hydrograph
 Label: SouthPump
 Scenario: Post-Development 2 year

Return Event: 2 years
 Storm Event: 2 year

Peak Discharge	1.70 ft ³ /s
Time to Peak	15.000 hours
Hydrograph Volume	6.744 ac-ft

HYDROGRAPH ORDINATES (ft³/s) Output Time Increment = 1.000 hours

Time on left represents time for first value in each row.

Time (hours)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)
0.000	1.70	1.70	1.70	1.70	1.70
5.000	1.70	1.70	1.70	1.70	1.70
10.000	1.70	1.70	1.70	1.70	1.70
15.000	1.70	1.70	1.70	1.70	1.70
20.000	1.70	1.70	1.70	1.70	1.70
25.000	1.70	1.70	1.70	1.70	1.70
30.000	1.70	1.70	1.70	1.70	1.70
35.000	1.70	1.70	1.70	1.70	1.70
40.000	1.70	1.70	1.70	1.70	1.70
45.000	1.70	1.70	1.70	1.70	(N/A)

CAL883229B_Stormwater Report

Subsection: Read Hydrograph
 Label: SouthPump
 Scenario: Post-Development 5 year

Return Event: 5 years
 Storm Event: 5 year

Peak Discharge	1.70 ft ³ /s
Time to Peak	15.000 hours
Hydrograph Volume	6.744 ac-ft

HYDROGRAPH ORDINATES (ft³/s) Output Time Increment = 1.000 hours

Time on left represents time for first value in each row.

Time (hours)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)
0.000	1.70	1.70	1.70	1.70	1.70
5.000	1.70	1.70	1.70	1.70	1.70
10.000	1.70	1.70	1.70	1.70	1.70
15.000	1.70	1.70	1.70	1.70	1.70
20.000	1.70	1.70	1.70	1.70	1.70
25.000	1.70	1.70	1.70	1.70	1.70
30.000	1.70	1.70	1.70	1.70	1.70
35.000	1.70	1.70	1.70	1.70	1.70
40.000	1.70	1.70	1.70	1.70	1.70
45.000	1.70	1.70	1.70	1.70	(N/A)

CAL883229B_Stormwater Report

Subsection: Read Hydrograph
 Label: SouthPump
 Scenario: Post-Development 25 year

Return Event: 25 years
 Storm Event: 25 year

Peak Discharge	1.70 ft ³ /s
Time to Peak	15.000 hours
Hydrograph Volume	6.744 ac-ft

HYDROGRAPH ORDINATES (ft³/s)

Output Time Increment = 1.000 hours

Time on left represents time for first value in each row.

Time (hours)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)
0.000	1.70	1.70	1.70	1.70	1.70
5.000	1.70	1.70	1.70	1.70	1.70
10.000	1.70	1.70	1.70	1.70	1.70
15.000	1.70	1.70	1.70	1.70	1.70
20.000	1.70	1.70	1.70	1.70	1.70
25.000	1.70	1.70	1.70	1.70	1.70
30.000	1.70	1.70	1.70	1.70	1.70
35.000	1.70	1.70	1.70	1.70	1.70
40.000	1.70	1.70	1.70	1.70	1.70
45.000	1.70	1.70	1.70	1.70	(N/A)

CAL883229B_Stormwater Report

Subsection: Read Hydrograph

Label: SouthPump

Scenario: Post-Development 100 year

Return Event: 100 years

Storm Event: 100 year

Peak Discharge	1.70 ft ³ /s
Time to Peak	15.000 hours
Hydrograph Volume	6.744 ac-ft

HYDROGRAPH ORDINATES (ft³/s)

Output Time Increment = 1.000 hours

Time on left represents time for first value in each row.

Time (hours)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)	Flow (ft ³ /s)
0.000	1.70	1.70	1.70	1.70	1.70
5.000	1.70	1.70	1.70	1.70	1.70
10.000	1.70	1.70	1.70	1.70	1.70
15.000	1.70	1.70	1.70	1.70	1.70
20.000	1.70	1.70	1.70	1.70	1.70
25.000	1.70	1.70	1.70	1.70	1.70
30.000	1.70	1.70	1.70	1.70	1.70
35.000	1.70	1.70	1.70	1.70	1.70
40.000	1.70	1.70	1.70	1.70	1.70
45.000	1.70	1.70	1.70	1.70	(N/A)

CAL883229B_Stormwater Report

Subsection: Addition Summary
Label: North Wetland Outfall
Scenario: Post-Development 2 year

Return Event: 2 years
Storm Event: 2 year

Summary for Hydrograph Addition at 'North Wetland Outfall'

Upstream Link	Upstream Node
Outlet-4	North Wetland

Node Inflows

Inflow Type	Element	Volume (ac-ft)	Time to Peak (hours)	Flow (Peak) (ft ³ /s)
Flow (From)	Outlet-4	4.742	21.550	3.84
Flow (In)	North Wetland Outfall	4.742	21.550	3.84

CAL883229B_Stormwater Report

Subsection: Addition Summary
Label: North Wetland Outfall
Scenario: Post-Development 5 year

Return Event: 5 years
Storm Event: 5 year

Summary for Hydrograph Addition at 'North Wetland Outfall'

Upstream Link	Upstream Node
Outlet-4	North Wetland

Node Inflows

Inflow Type	Element	Volume (ac-ft)	Time to Peak (hours)	Flow (Peak) (ft ³ /s)
Flow (From)	Outlet-4	5.292	19.900	4.38
Flow (In)	North Wetland Outfall	5.292	19.900	4.38

CAL883229B_Stormwater Report

Subsection: Addition Summary
Label: North Wetland Outfall
Scenario: Post-Development 25 year

Return Event: 25 years
Storm Event: 25 year

Summary for Hydrograph Addition at 'North Wetland Outfall'

Upstream Link	Upstream Node
Outlet-4	North Wetland

Node Inflows

Inflow Type	Element	Volume (ac-ft)	Time to Peak (hours)	Flow (Peak) (ft ³ /s)
Flow (From)	Outlet-4	8.926	12.850	22.32
Flow (In)	North Wetland Outfall	8.926	12.850	22.32

CAL883229B_Stormwater Report

Subsection: Addition Summary
Label: North Wetland Outfall
Scenario: Post-Development 100 year

Return Event: 100 years
Storm Event: 100 year

Summary for Hydrograph Addition at 'North Wetland Outfall'

Upstream Link	Upstream Node
Outlet-4	North Wetland

Node Inflows

Inflow Type	Element	Volume (ac-ft)	Time to Peak (hours)	Flow (Peak) (ft ³ /s)
Flow (From)	Outlet-4	14.226	12.400	97.74
Flow (In)	North Wetland Outfall	14.226	12.400	97.74

CAL883229B_Stormwater Report

Subsection: Addition Summary
Label: South Wetland Outfall
Scenario: Post-Development 2 year

Return Event: 2 years
Storm Event: 2 year

Summary for Hydrograph Addition at 'South Wetland Outfall'

Upstream Link	Upstream Node
South Wetland Outlet	South Wetland

Node Inflows

Inflow Type	Element	Volume (ac-ft)	Time to Peak (hours)	Flow (Peak) (ft ³ /s)
Flow (From)	South Wetland Outlet	3.173	15.050	2.40
Flow (In)	South Wetland Outfall	3.173	15.050	2.40

CAL883229B_Stormwater Report

Subsection: Addition Summary
Label: South Wetland Outfall
Scenario: Post-Development 5 year

Return Event: 5 years
Storm Event: 5 year

Summary for Hydrograph Addition at 'South Wetland Outfall'

Upstream Link	Upstream Node
South Wetland Outlet	South Wetland

Node Inflows

Inflow Type	Element	Volume (ac-ft)	Time to Peak (hours)	Flow (Peak) (ft ³ /s)
Flow (From)	South Wetland Outlet	3.507	14.450	2.81
Flow (In)	South Wetland Outfall	3.507	14.450	2.81

CAL883229B_Stormwater Report

Subsection: Addition Summary
Label: South Wetland Outfall
Scenario: Post-Development 25 year

Return Event: 25 years
Storm Event: 25 year

Summary for Hydrograph Addition at 'South Wetland Outfall'

Upstream Link	Upstream Node
South Wetland Outlet	South Wetland

Node Inflows

Inflow Type	Element	Volume (ac-ft)	Time to Peak (hours)	Flow (Peak) (ft ³ /s)
Flow (From)	South Wetland Outlet	4.423	13.550	4.04
Flow (In)	South Wetland Outfall	4.423	13.550	4.04

CAL883229B_Stormwater Report

Subsection: Addition Summary
Label: South Wetland Outfall
Scenario: Post-Development 100 year

Return Event: 100 years
Storm Event: 100 year

Summary for Hydrograph Addition at 'South Wetland Outfall'

Upstream Link	Upstream Node
South Wetland Outlet	South Wetland

Node Inflows

Inflow Type	Element	Volume (ac-ft)	Time to Peak (hours)	Flow (Peak) (ft ³ /s)
Flow (From)	South Wetland Outlet	5.655	13.350	6.64
Flow (In)	South Wetland Outfall	5.655	13.350	6.64

CAL883229B_Stormwater Report

Subsection: Time vs. Elevation
 Label: North Wetland (OUT)
 Scenario: Post-Development 2 year

Return Event: 2 years
 Storm Event: 2 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
0.000	1,186.00	1,186.00	1,186.00	1,186.00	1,186.01
0.250	1,186.01	1,186.01	1,186.01	1,186.01	1,186.01
0.500	1,186.01	1,186.02	1,186.02	1,186.02	1,186.02
0.750	1,186.02	1,186.02	1,186.02	1,186.03	1,186.03
1.000	1,186.03	1,186.03	1,186.03	1,186.03	1,186.03
1.250	1,186.04	1,186.04	1,186.04	1,186.04	1,186.04
1.500	1,186.04	1,186.04	1,186.04	1,186.05	1,186.05
1.750	1,186.05	1,186.05	1,186.05	1,186.05	1,186.05
2.000	1,186.06	1,186.06	1,186.06	1,186.06	1,186.06
2.250	1,186.06	1,186.06	1,186.06	1,186.07	1,186.07
2.500	1,186.07	1,186.07	1,186.07	1,186.07	1,186.07
2.750	1,186.07	1,186.08	1,186.08	1,186.08	1,186.08
3.000	1,186.08	1,186.08	1,186.08	1,186.08	1,186.09
3.250	1,186.09	1,186.09	1,186.09	1,186.09	1,186.09
3.500	1,186.09	1,186.09	1,186.10	1,186.10	1,186.10
3.750	1,186.10	1,186.10	1,186.10	1,186.10	1,186.10
4.000	1,186.10	1,186.11	1,186.11	1,186.11	1,186.11
4.250	1,186.11	1,186.11	1,186.11	1,186.11	1,186.12
4.500	1,186.12	1,186.12	1,186.12	1,186.12	1,186.12
4.750	1,186.12	1,186.12	1,186.12	1,186.13	1,186.13
5.000	1,186.13	1,186.13	1,186.13	1,186.13	1,186.13
5.250	1,186.13	1,186.13	1,186.14	1,186.14	1,186.14
5.500	1,186.14	1,186.14	1,186.14	1,186.14	1,186.14
5.750	1,186.14	1,186.14	1,186.15	1,186.15	1,186.15
6.000	1,186.15	1,186.15	1,186.15	1,186.15	1,186.15
6.250	1,186.15	1,186.16	1,186.16	1,186.16	1,186.16
6.500	1,186.16	1,186.16	1,186.16	1,186.16	1,186.16
6.750	1,186.16	1,186.17	1,186.17	1,186.17	1,186.17
7.000	1,186.17	1,186.17	1,186.17	1,186.17	1,186.17
7.250	1,186.17	1,186.18	1,186.18	1,186.18	1,186.18
7.500	1,186.18	1,186.18	1,186.18	1,186.18	1,186.18
7.750	1,186.18	1,186.18	1,186.19	1,186.19	1,186.19
8.000	1,186.19	1,186.19	1,186.19	1,186.19	1,186.19
8.250	1,186.19	1,186.19	1,186.20	1,186.20	1,186.20
8.500	1,186.20	1,186.20	1,186.20	1,186.20	1,186.20
8.750	1,186.20	1,186.20	1,186.20	1,186.21	1,186.21
9.000	1,186.21	1,186.21	1,186.21	1,186.21	1,186.21
9.250	1,186.21	1,186.21	1,186.21	1,186.21	1,186.21
9.500	1,186.22	1,186.22	1,186.22	1,186.22	1,186.22
9.750	1,186.22	1,186.22	1,186.22	1,186.22	1,186.22

CAL883229B_Stormwater Report

Subsection: Time vs. Elevation
 Label: North Wetland (OUT)
 Scenario: Post-Development 2 year

Return Event: 2 years
 Storm Event: 2 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
10.000	1,186.22	1,186.23	1,186.23	1,186.23	1,186.23
10.250	1,186.23	1,186.23	1,186.23	1,186.23	1,186.23
10.500	1,186.23	1,186.24	1,186.24	1,186.24	1,186.24
10.750	1,186.24	1,186.24	1,186.24	1,186.24	1,186.25
11.000	1,186.25	1,186.25	1,186.25	1,186.25	1,186.25
11.250	1,186.26	1,186.26	1,186.26	1,186.26	1,186.26
11.500	1,186.27	1,186.27	1,186.27	1,186.27	1,186.28
11.750	1,186.28	1,186.29	1,186.29	1,186.30	1,186.31
12.000	1,186.33	1,186.34	1,186.37	1,186.41	1,186.44
12.250	1,186.48	1,186.50	1,186.52	1,186.53	1,186.54
12.500	1,186.55	1,186.56	1,186.56	1,186.57	1,186.57
12.750	1,186.58	1,186.58	1,186.58	1,186.59	1,186.59
13.000	1,186.59	1,186.60	1,186.60	1,186.60	1,186.60
13.250	1,186.61	1,186.61	1,186.61	1,186.61	1,186.62
13.500	1,186.62	1,186.62	1,186.62	1,186.62	1,186.62
13.750	1,186.63	1,186.63	1,186.63	1,186.63	1,186.63
14.000	1,186.63	1,186.63	1,186.63	1,186.63	1,186.63
14.250	1,186.64	1,186.64	1,186.64	1,186.64	1,186.64
14.500	1,186.64	1,186.64	1,186.64	1,186.64	1,186.64
14.750	1,186.65	1,186.65	1,186.65	1,186.65	1,186.65
15.000	1,186.65	1,186.65	1,186.65	1,186.65	1,186.65
15.250	1,186.65	1,186.65	1,186.65	1,186.65	1,186.66
15.500	1,186.66	1,186.66	1,186.66	1,186.66	1,186.66
15.750	1,186.66	1,186.66	1,186.66	1,186.66	1,186.66
16.000	1,186.66	1,186.66	1,186.66	1,186.66	1,186.66
16.250	1,186.66	1,186.66	1,186.66	1,186.66	1,186.66
16.500	1,186.66	1,186.66	1,186.66	1,186.66	1,186.66
16.750	1,186.67	1,186.67	1,186.67	1,186.67	1,186.67
17.000	1,186.67	1,186.67	1,186.67	1,186.67	1,186.67
17.250	1,186.67	1,186.67	1,186.67	1,186.67	1,186.67
17.500	1,186.67	1,186.67	1,186.67	1,186.67	1,186.67
17.750	1,186.67	1,186.67	1,186.67	1,186.67	1,186.67
18.000	1,186.67	1,186.67	1,186.67	1,186.67	1,186.67
18.250	1,186.67	1,186.67	1,186.67	1,186.67	1,186.67
18.500	1,186.67	1,186.67	1,186.68	1,186.68	1,186.68
18.750	1,186.68	1,186.68	1,186.68	1,186.68	1,186.68
19.000	1,186.68	1,186.68	1,186.68	1,186.68	1,186.68
19.250	1,186.68	1,186.68	1,186.68	1,186.68	1,186.68
19.500	1,186.68	1,186.68	1,186.68	1,186.68	1,186.68
19.750	1,186.68	1,186.68	1,186.68	1,186.68	1,186.68
20.000	1,186.68	1,186.68	1,186.68	1,186.68	1,186.68

CAL883229B_Stormwater Report

Subsection: Time vs. Elevation
 Label: North Wetland (OUT)
 Scenario: Post-Development 2 year

Return Event: 2 years
 Storm Event: 2 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
20.250	1,186.68	1,186.68	1,186.68	1,186.68	1,186.68
20.500	1,186.68	1,186.68	1,186.68	1,186.68	1,186.68
20.750	1,186.68	1,186.68	1,186.68	1,186.68	1,186.68
21.000	1,186.68	1,186.68	1,186.68	1,186.68	1,186.68
21.250	1,186.68	1,186.68	1,186.68	1,186.68	1,186.68
21.500	1,186.68	1,186.68	1,186.68	1,186.68	1,186.68
21.750	1,186.68	1,186.68	1,186.68	1,186.68	1,186.68
22.000	1,186.68	1,186.68	1,186.68	1,186.68	1,186.68
22.250	1,186.68	1,186.68	1,186.68	1,186.68	1,186.68
22.500	1,186.68	1,186.68	1,186.68	1,186.68	1,186.68
22.750	1,186.68	1,186.68	1,186.68	1,186.68	1,186.68
23.000	1,186.68	1,186.68	1,186.68	1,186.68	1,186.68
23.250	1,186.68	1,186.68	1,186.68	1,186.68	1,186.68
23.500	1,186.68	1,186.68	1,186.68	1,186.68	1,186.68
23.750	1,186.68	1,186.68	1,186.68	1,186.68	1,186.68
24.000	1,186.68	(N/A)	(N/A)	(N/A)	(N/A)

CAL883229B_Stormwater Report

Subsection: Time vs. Elevation
 Label: North Wetland (OUT)
 Scenario: Post-Development 5 year

Return Event: 5 years
 Storm Event: 5 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
0.000	1,186.00	1,186.00	1,186.00	1,186.00	1,186.01
0.250	1,186.01	1,186.01	1,186.01	1,186.01	1,186.01
0.500	1,186.01	1,186.02	1,186.02	1,186.02	1,186.02
0.750	1,186.02	1,186.02	1,186.02	1,186.03	1,186.03
1.000	1,186.03	1,186.03	1,186.03	1,186.03	1,186.03
1.250	1,186.04	1,186.04	1,186.04	1,186.04	1,186.04
1.500	1,186.04	1,186.04	1,186.04	1,186.05	1,186.05
1.750	1,186.05	1,186.05	1,186.05	1,186.05	1,186.05
2.000	1,186.06	1,186.06	1,186.06	1,186.06	1,186.06
2.250	1,186.06	1,186.06	1,186.06	1,186.07	1,186.07
2.500	1,186.07	1,186.07	1,186.07	1,186.07	1,186.07
2.750	1,186.07	1,186.08	1,186.08	1,186.08	1,186.08
3.000	1,186.08	1,186.08	1,186.08	1,186.08	1,186.09
3.250	1,186.09	1,186.09	1,186.09	1,186.09	1,186.09
3.500	1,186.09	1,186.09	1,186.10	1,186.10	1,186.10
3.750	1,186.10	1,186.10	1,186.10	1,186.10	1,186.10
4.000	1,186.10	1,186.11	1,186.11	1,186.11	1,186.11
4.250	1,186.11	1,186.11	1,186.11	1,186.11	1,186.12
4.500	1,186.12	1,186.12	1,186.12	1,186.12	1,186.12
4.750	1,186.12	1,186.12	1,186.12	1,186.13	1,186.13
5.000	1,186.13	1,186.13	1,186.13	1,186.13	1,186.13
5.250	1,186.13	1,186.13	1,186.14	1,186.14	1,186.14
5.500	1,186.14	1,186.14	1,186.14	1,186.14	1,186.14
5.750	1,186.14	1,186.14	1,186.15	1,186.15	1,186.15
6.000	1,186.15	1,186.15	1,186.15	1,186.15	1,186.15
6.250	1,186.15	1,186.16	1,186.16	1,186.16	1,186.16
6.500	1,186.16	1,186.16	1,186.16	1,186.16	1,186.16
6.750	1,186.16	1,186.17	1,186.17	1,186.17	1,186.17
7.000	1,186.17	1,186.17	1,186.17	1,186.17	1,186.17
7.250	1,186.17	1,186.18	1,186.18	1,186.18	1,186.18
7.500	1,186.18	1,186.18	1,186.18	1,186.18	1,186.18
7.750	1,186.18	1,186.18	1,186.19	1,186.19	1,186.19
8.000	1,186.19	1,186.19	1,186.19	1,186.19	1,186.19
8.250	1,186.19	1,186.19	1,186.20	1,186.20	1,186.20
8.500	1,186.20	1,186.20	1,186.20	1,186.20	1,186.20
8.750	1,186.20	1,186.20	1,186.20	1,186.21	1,186.21
9.000	1,186.21	1,186.21	1,186.21	1,186.21	1,186.21
9.250	1,186.21	1,186.21	1,186.21	1,186.21	1,186.22
9.500	1,186.22	1,186.22	1,186.22	1,186.22	1,186.22
9.750	1,186.22	1,186.22	1,186.22	1,186.23	1,186.23

CAL883229B_Stormwater Report

Subsection: Time vs. Elevation
 Label: North Wetland (OUT)
 Scenario: Post-Development 5 year

Return Event: 5 years
 Storm Event: 5 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
10.000	1,186.23	1,186.23	1,186.23	1,186.23	1,186.23
10.250	1,186.23	1,186.23	1,186.24	1,186.24	1,186.24
10.500	1,186.24	1,186.24	1,186.24	1,186.24	1,186.25
10.750	1,186.25	1,186.25	1,186.25	1,186.25	1,186.25
11.000	1,186.26	1,186.26	1,186.26	1,186.26	1,186.27
11.250	1,186.27	1,186.27	1,186.27	1,186.28	1,186.28
11.500	1,186.28	1,186.29	1,186.29	1,186.30	1,186.30
11.750	1,186.31	1,186.32	1,186.33	1,186.34	1,186.35
12.000	1,186.37	1,186.40	1,186.44	1,186.49	1,186.53
12.250	1,186.57	1,186.59	1,186.61	1,186.63	1,186.64
12.500	1,186.66	1,186.67	1,186.67	1,186.68	1,186.69
12.750	1,186.69	1,186.70	1,186.70	1,186.71	1,186.71
13.000	1,186.71	1,186.72	1,186.72	1,186.72	1,186.73
13.250	1,186.73	1,186.73	1,186.74	1,186.74	1,186.74
13.500	1,186.75	1,186.75	1,186.75	1,186.75	1,186.75
13.750	1,186.75	1,186.76	1,186.76	1,186.76	1,186.76
14.000	1,186.76	1,186.76	1,186.76	1,186.76	1,186.77
14.250	1,186.77	1,186.77	1,186.77	1,186.77	1,186.77
14.500	1,186.77	1,186.77	1,186.77	1,186.78	1,186.78
14.750	1,186.78	1,186.78	1,186.78	1,186.78	1,186.78
15.000	1,186.78	1,186.78	1,186.78	1,186.79	1,186.79
15.250	1,186.79	1,186.79	1,186.79	1,186.79	1,186.79
15.500	1,186.79	1,186.79	1,186.79	1,186.79	1,186.79
15.750	1,186.79	1,186.79	1,186.79	1,186.79	1,186.79
16.000	1,186.79	1,186.79	1,186.79	1,186.79	1,186.79
16.250	1,186.79	1,186.79	1,186.79	1,186.79	1,186.80
16.500	1,186.80	1,186.80	1,186.80	1,186.80	1,186.80
16.750	1,186.80	1,186.80	1,186.80	1,186.80	1,186.80
17.000	1,186.80	1,186.80	1,186.80	1,186.80	1,186.80
17.250	1,186.80	1,186.80	1,186.80	1,186.80	1,186.80
17.500	1,186.80	1,186.80	1,186.80	1,186.80	1,186.80
17.750	1,186.80	1,186.80	1,186.80	1,186.80	1,186.80
18.000	1,186.80	1,186.80	1,186.80	1,186.80	1,186.80
18.250	1,186.80	1,186.80	1,186.80	1,186.80	1,186.80
18.500	1,186.80	1,186.80	1,186.80	1,186.80	1,186.80
18.750	1,186.80	1,186.80	1,186.80	1,186.80	1,186.80
19.000	1,186.80	1,186.80	1,186.81	1,186.81	1,186.81
19.250	1,186.81	1,186.81	1,186.81	1,186.81	1,186.81
19.500	1,186.81	1,186.81	1,186.81	1,186.81	1,186.81
19.750	1,186.81	1,186.81	1,186.81	1,186.81	1,186.81
20.000	1,186.81	1,186.81	1,186.81	1,186.81	1,186.81

CAL883229B_Stormwater Report

Subsection: Time vs. Elevation
 Label: North Wetland (OUT)
 Scenario: Post-Development 5 year

Return Event: 5 years
 Storm Event: 5 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
20.250	1,186.81	1,186.81	1,186.81	1,186.81	1,186.81
20.500	1,186.81	1,186.81	1,186.81	1,186.81	1,186.81
20.750	1,186.81	1,186.80	1,186.80	1,186.80	1,186.80
21.000	1,186.80	1,186.80	1,186.80	1,186.80	1,186.80
21.250	1,186.80	1,186.80	1,186.80	1,186.80	1,186.80
21.500	1,186.80	1,186.80	1,186.80	1,186.80	1,186.80
21.750	1,186.80	1,186.80	1,186.80	1,186.80	1,186.80
22.000	1,186.80	1,186.80	1,186.80	1,186.80	1,186.80
22.250	1,186.80	1,186.80	1,186.80	1,186.80	1,186.80
22.500	1,186.80	1,186.80	1,186.80	1,186.80	1,186.80
22.750	1,186.80	1,186.80	1,186.80	1,186.80	1,186.80
23.000	1,186.80	1,186.80	1,186.80	1,186.80	1,186.80
23.250	1,186.80	1,186.80	1,186.80	1,186.80	1,186.80
23.500	1,186.80	1,186.79	1,186.79	1,186.79	1,186.79
23.750	1,186.79	1,186.79	1,186.79	1,186.79	1,186.79
24.000	1,186.79	(N/A)	(N/A)	(N/A)	(N/A)

CAL883229B_Stormwater Report

Subsection: Time vs. Elevation
 Label: North Wetland (OUT)
 Scenario: Post-Development 25 year

Return Event: 25 years
 Storm Event: 25 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
0.000	1,186.00	1,186.00	1,186.00	1,186.00	1,186.01
0.250	1,186.01	1,186.01	1,186.01	1,186.01	1,186.01
0.500	1,186.01	1,186.02	1,186.02	1,186.02	1,186.02
0.750	1,186.02	1,186.02	1,186.02	1,186.03	1,186.03
1.000	1,186.03	1,186.03	1,186.03	1,186.03	1,186.03
1.250	1,186.04	1,186.04	1,186.04	1,186.04	1,186.04
1.500	1,186.04	1,186.04	1,186.04	1,186.05	1,186.05
1.750	1,186.05	1,186.05	1,186.05	1,186.05	1,186.05
2.000	1,186.06	1,186.06	1,186.06	1,186.06	1,186.06
2.250	1,186.06	1,186.06	1,186.06	1,186.07	1,186.07
2.500	1,186.07	1,186.07	1,186.07	1,186.07	1,186.07
2.750	1,186.07	1,186.08	1,186.08	1,186.08	1,186.08
3.000	1,186.08	1,186.08	1,186.08	1,186.08	1,186.09
3.250	1,186.09	1,186.09	1,186.09	1,186.09	1,186.09
3.500	1,186.09	1,186.09	1,186.10	1,186.10	1,186.10
3.750	1,186.10	1,186.10	1,186.10	1,186.10	1,186.10
4.000	1,186.10	1,186.11	1,186.11	1,186.11	1,186.11
4.250	1,186.11	1,186.11	1,186.11	1,186.11	1,186.12
4.500	1,186.12	1,186.12	1,186.12	1,186.12	1,186.12
4.750	1,186.12	1,186.12	1,186.12	1,186.13	1,186.13
5.000	1,186.13	1,186.13	1,186.13	1,186.13	1,186.13
5.250	1,186.13	1,186.13	1,186.14	1,186.14	1,186.14
5.500	1,186.14	1,186.14	1,186.14	1,186.14	1,186.14
5.750	1,186.14	1,186.14	1,186.15	1,186.15	1,186.15
6.000	1,186.15	1,186.15	1,186.15	1,186.15	1,186.15
6.250	1,186.15	1,186.16	1,186.16	1,186.16	1,186.16
6.500	1,186.16	1,186.16	1,186.16	1,186.16	1,186.16
6.750	1,186.16	1,186.17	1,186.17	1,186.17	1,186.17
7.000	1,186.17	1,186.17	1,186.17	1,186.17	1,186.17
7.250	1,186.17	1,186.18	1,186.18	1,186.18	1,186.18
7.500	1,186.18	1,186.18	1,186.18	1,186.18	1,186.18
7.750	1,186.19	1,186.19	1,186.19	1,186.19	1,186.19
8.000	1,186.19	1,186.19	1,186.19	1,186.19	1,186.19
8.250	1,186.20	1,186.20	1,186.20	1,186.20	1,186.20
8.500	1,186.20	1,186.20	1,186.20	1,186.21	1,186.21
8.750	1,186.21	1,186.21	1,186.21	1,186.21	1,186.21
9.000	1,186.21	1,186.22	1,186.22	1,186.22	1,186.22
9.250	1,186.22	1,186.22	1,186.22	1,186.23	1,186.23
9.500	1,186.23	1,186.23	1,186.23	1,186.23	1,186.24
9.750	1,186.24	1,186.24	1,186.24	1,186.24	1,186.24

CAL883229B_Stormwater Report

Subsection: Time vs. Elevation

Return Event: 25 years

Label: North Wetland (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
10.000	1,186.25	1,186.25	1,186.25	1,186.25	1,186.25
10.250	1,186.26	1,186.26	1,186.26	1,186.26	1,186.26
10.500	1,186.27	1,186.27	1,186.27	1,186.27	1,186.28
10.750	1,186.28	1,186.28	1,186.28	1,186.29	1,186.29
11.000	1,186.30	1,186.30	1,186.30	1,186.31	1,186.31
11.250	1,186.32	1,186.33	1,186.33	1,186.34	1,186.34
11.500	1,186.35	1,186.36	1,186.36	1,186.37	1,186.38
11.750	1,186.40	1,186.41	1,186.43	1,186.45	1,186.48
12.000	1,186.51	1,186.55	1,186.60	1,186.67	1,186.75
12.250	1,186.81	1,186.85	1,186.89	1,186.91	1,186.93
12.500	1,186.94	1,186.95	1,186.96	1,186.96	1,186.96
12.750	1,186.97	1,186.97	1,186.97	1,186.97	1,186.97
13.000	1,186.97	1,186.96	1,186.96	1,186.96	1,186.96
13.250	1,186.96	1,186.96	1,186.96	1,186.96	1,186.95
13.500	1,186.95	1,186.95	1,186.95	1,186.95	1,186.94
13.750	1,186.94	1,186.94	1,186.94	1,186.94	1,186.94
14.000	1,186.93	1,186.93	1,186.93	1,186.93	1,186.93
14.250	1,186.93	1,186.93	1,186.93	1,186.92	1,186.92
14.500	1,186.92	1,186.92	1,186.92	1,186.92	1,186.92
14.750	1,186.92	1,186.92	1,186.92	1,186.92	1,186.92
15.000	1,186.92	1,186.92	1,186.92	1,186.92	1,186.92
15.250	1,186.92	1,186.91	1,186.91	1,186.91	1,186.91
15.500	1,186.91	1,186.91	1,186.91	1,186.91	1,186.91
15.750	1,186.91	1,186.91	1,186.91	1,186.91	1,186.91
16.000	1,186.91	1,186.91	1,186.91	1,186.91	1,186.91
16.250	1,186.91	1,186.91	1,186.91	1,186.91	1,186.91
16.500	1,186.91	1,186.91	1,186.91	1,186.91	1,186.91
16.750	1,186.91	1,186.91	1,186.91	1,186.91	1,186.91
17.000	1,186.91	1,186.91	1,186.91	1,186.91	1,186.91
17.250	1,186.91	1,186.91	1,186.91	1,186.91	1,186.91
17.500	1,186.90	1,186.90	1,186.90	1,186.90	1,186.90
17.750	1,186.90	1,186.90	1,186.90	1,186.90	1,186.90
18.000	1,186.90	1,186.90	1,186.90	1,186.90	1,186.90
18.250	1,186.90	1,186.90	1,186.90	1,186.90	1,186.90
18.500	1,186.90	1,186.90	1,186.90	1,186.90	1,186.90
18.750	1,186.90	1,186.90	1,186.90	1,186.90	1,186.90
19.000	1,186.90	1,186.90	1,186.90	1,186.90	1,186.90
19.250	1,186.90	1,186.90	1,186.90	1,186.90	1,186.90
19.500	1,186.90	1,186.90	1,186.90	1,186.90	1,186.90
19.750	1,186.90	1,186.90	1,186.90	1,186.90	1,186.90
20.000	1,186.90	1,186.90	1,186.90	1,186.90	1,186.90

CAL883229B_Stormwater Report

Subsection: Time vs. Elevation
 Label: North Wetland (OUT)
 Scenario: Post-Development 25 year

Return Event: 25 years
 Storm Event: 25 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
20.250	1,186.90	1,186.90	1,186.90	1,186.90	1,186.90
20.500	1,186.90	1,186.90	1,186.90	1,186.90	1,186.90
20.750	1,186.90	1,186.90	1,186.90	1,186.90	1,186.90
21.000	1,186.90	1,186.90	1,186.90	1,186.90	1,186.90
21.250	1,186.90	1,186.90	1,186.90	1,186.90	1,186.90
21.500	1,186.90	1,186.90	1,186.90	1,186.90	1,186.90
21.750	1,186.90	1,186.90	1,186.90	1,186.90	1,186.90
22.000	1,186.90	1,186.90	1,186.90	1,186.90	1,186.90
22.250	1,186.90	1,186.90	1,186.90	1,186.90	1,186.90
22.500	1,186.90	1,186.90	1,186.90	1,186.90	1,186.90
22.750	1,186.90	1,186.89	1,186.89	1,186.89	1,186.89
23.000	1,186.89	1,186.89	1,186.89	1,186.89	1,186.89
23.250	1,186.89	1,186.89	1,186.89	1,186.89	1,186.89
23.500	1,186.89	1,186.89	1,186.89	1,186.89	1,186.89
23.750	1,186.89	1,186.89	1,186.89	1,186.89	1,186.89
24.000	1,186.89	(N/A)	(N/A)	(N/A)	(N/A)

CAL883229B_Stormwater Report

Subsection: Time vs. Elevation

Return Event: 100 years

Label: North Wetland (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
0.000	1,186.00	1,186.00	1,186.00	1,186.00	1,186.01
0.250	1,186.01	1,186.01	1,186.01	1,186.01	1,186.01
0.500	1,186.01	1,186.02	1,186.02	1,186.02	1,186.02
0.750	1,186.02	1,186.02	1,186.02	1,186.03	1,186.03
1.000	1,186.03	1,186.03	1,186.03	1,186.03	1,186.03
1.250	1,186.04	1,186.04	1,186.04	1,186.04	1,186.04
1.500	1,186.04	1,186.04	1,186.04	1,186.05	1,186.05
1.750	1,186.05	1,186.05	1,186.05	1,186.05	1,186.05
2.000	1,186.06	1,186.06	1,186.06	1,186.06	1,186.06
2.250	1,186.06	1,186.06	1,186.06	1,186.07	1,186.07
2.500	1,186.07	1,186.07	1,186.07	1,186.07	1,186.07
2.750	1,186.07	1,186.08	1,186.08	1,186.08	1,186.08
3.000	1,186.08	1,186.08	1,186.08	1,186.08	1,186.09
3.250	1,186.09	1,186.09	1,186.09	1,186.09	1,186.09
3.500	1,186.09	1,186.09	1,186.10	1,186.10	1,186.10
3.750	1,186.10	1,186.10	1,186.10	1,186.10	1,186.10
4.000	1,186.10	1,186.11	1,186.11	1,186.11	1,186.11
4.250	1,186.11	1,186.11	1,186.11	1,186.11	1,186.12
4.500	1,186.12	1,186.12	1,186.12	1,186.12	1,186.12
4.750	1,186.12	1,186.12	1,186.12	1,186.13	1,186.13
5.000	1,186.13	1,186.13	1,186.13	1,186.13	1,186.13
5.250	1,186.13	1,186.13	1,186.14	1,186.14	1,186.14
5.500	1,186.14	1,186.14	1,186.14	1,186.14	1,186.14
5.750	1,186.14	1,186.14	1,186.15	1,186.15	1,186.15
6.000	1,186.15	1,186.15	1,186.15	1,186.15	1,186.15
6.250	1,186.15	1,186.16	1,186.16	1,186.16	1,186.16
6.500	1,186.16	1,186.16	1,186.16	1,186.16	1,186.17
6.750	1,186.17	1,186.17	1,186.17	1,186.17	1,186.17
7.000	1,186.17	1,186.17	1,186.18	1,186.18	1,186.18
7.250	1,186.18	1,186.18	1,186.18	1,186.18	1,186.18
7.500	1,186.19	1,186.19	1,186.19	1,186.19	1,186.19
7.750	1,186.19	1,186.19	1,186.20	1,186.20	1,186.20
8.000	1,186.20	1,186.20	1,186.20	1,186.20	1,186.21
8.250	1,186.21	1,186.21	1,186.21	1,186.21	1,186.21
8.500	1,186.22	1,186.22	1,186.22	1,186.22	1,186.22
8.750	1,186.22	1,186.22	1,186.23	1,186.23	1,186.23
9.000	1,186.23	1,186.23	1,186.24	1,186.24	1,186.24
9.250	1,186.24	1,186.24	1,186.25	1,186.25	1,186.25
9.500	1,186.25	1,186.26	1,186.26	1,186.26	1,186.26
9.750	1,186.27	1,186.27	1,186.27	1,186.27	1,186.28

CAL883229B_Stormwater Report

Subsection: Time vs. Elevation

Return Event: 100 years

Label: North Wetland (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
10.000	1,186.28	1,186.28	1,186.29	1,186.29	1,186.29
10.250	1,186.29	1,186.30	1,186.30	1,186.30	1,186.31
10.500	1,186.31	1,186.31	1,186.32	1,186.32	1,186.32
10.750	1,186.33	1,186.33	1,186.34	1,186.35	1,186.35
11.000	1,186.36	1,186.36	1,186.37	1,186.38	1,186.39
11.250	1,186.40	1,186.40	1,186.41	1,186.42	1,186.43
11.500	1,186.44	1,186.45	1,186.47	1,186.48	1,186.50
11.750	1,186.51	1,186.53	1,186.55	1,186.58	1,186.61
12.000	1,186.66	1,186.72	1,186.80	1,186.90	1,186.99
12.250	1,187.05	1,187.08	1,187.09	1,187.09	1,187.08
12.500	1,187.08	1,187.07	1,187.06	1,187.05	1,187.04
12.750	1,187.03	1,187.03	1,187.02	1,187.02	1,187.01
13.000	1,187.01	1,187.01	1,187.00	1,187.00	1,187.00
13.250	1,187.00	1,186.99	1,186.99	1,186.99	1,186.99
13.500	1,186.98	1,186.98	1,186.98	1,186.97	1,186.97
13.750	1,186.97	1,186.96	1,186.96	1,186.96	1,186.95
14.000	1,186.95	1,186.95	1,186.95	1,186.95	1,186.94
14.250	1,186.94	1,186.94	1,186.94	1,186.94	1,186.94
14.500	1,186.94	1,186.94	1,186.93	1,186.93	1,186.93
14.750	1,186.93	1,186.93	1,186.93	1,186.93	1,186.93
15.000	1,186.93	1,186.93	1,186.93	1,186.93	1,186.93
15.250	1,186.92	1,186.92	1,186.92	1,186.92	1,186.92
15.500	1,186.92	1,186.92	1,186.92	1,186.92	1,186.92
15.750	1,186.92	1,186.92	1,186.92	1,186.92	1,186.92
16.000	1,186.91	1,186.91	1,186.91	1,186.91	1,186.91
16.250	1,186.91	1,186.91	1,186.91	1,186.91	1,186.91
16.500	1,186.91	1,186.91	1,186.91	1,186.91	1,186.91
16.750	1,186.91	1,186.91	1,186.91	1,186.91	1,186.91
17.000	1,186.91	1,186.91	1,186.91	1,186.91	1,186.91
17.250	1,186.91	1,186.91	1,186.91	1,186.91	1,186.91
17.500	1,186.91	1,186.91	1,186.91	1,186.91	1,186.91
17.750	1,186.91	1,186.91	1,186.91	1,186.91	1,186.91
18.000	1,186.91	1,186.91	1,186.91	1,186.91	1,186.91
18.250	1,186.91	1,186.91	1,186.91	1,186.91	1,186.91
18.500	1,186.91	1,186.91	1,186.91	1,186.91	1,186.91
18.750	1,186.91	1,186.91	1,186.91	1,186.91	1,186.91
19.000	1,186.91	1,186.91	1,186.91	1,186.91	1,186.91
19.250	1,186.91	1,186.91	1,186.91	1,186.91	1,186.91
19.500	1,186.91	1,186.91	1,186.91	1,186.91	1,186.91
19.750	1,186.91	1,186.91	1,186.91	1,186.91	1,186.90
20.000	1,186.90	1,186.90	1,186.90	1,186.90	1,186.90

CAL883229B_Stormwater Report

Subsection: Time vs. Elevation
 Label: North Wetland (OUT)
 Scenario: Post-Development 100 year

Return Event: 100 years
 Storm Event: 100 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
20.250	1,186.90	1,186.90	1,186.90	1,186.90	1,186.90
20.500	1,186.90	1,186.90	1,186.90	1,186.90	1,186.90
20.750	1,186.90	1,186.90	1,186.90	1,186.90	1,186.90
21.000	1,186.90	1,186.90	1,186.90	1,186.90	1,186.90
21.250	1,186.90	1,186.90	1,186.90	1,186.90	1,186.90
21.500	1,186.90	1,186.90	1,186.90	1,186.90	1,186.90
21.750	1,186.90	1,186.90	1,186.90	1,186.90	1,186.90
22.000	1,186.90	1,186.90	1,186.90	1,186.90	1,186.90
22.250	1,186.90	1,186.90	1,186.90	1,186.90	1,186.90
22.500	1,186.90	1,186.90	1,186.90	1,186.90	1,186.90
22.750	1,186.90	1,186.90	1,186.90	1,186.90	1,186.90
23.000	1,186.90	1,186.90	1,186.90	1,186.90	1,186.90
23.250	1,186.90	1,186.90	1,186.90	1,186.90	1,186.90
23.500	1,186.90	1,186.90	1,186.90	1,186.90	1,186.90
23.750	1,186.90	1,186.90	1,186.89	1,186.89	1,186.89
24.000	1,186.89	(N/A)	(N/A)	(N/A)	(N/A)

CAL883229B_Stormwater Report

Subsection: Time vs. Elevation
 Label: South Wetland (OUT)
 Scenario: Post-Development 2 year

Return Event: 2 years
 Storm Event: 2 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
0.000	1,186.00	1,186.00	1,186.00	1,186.00	1,186.00
0.250	1,186.00	1,186.00	1,186.00	1,186.01	1,186.01
0.500	1,186.01	1,186.01	1,186.01	1,186.01	1,186.01
0.750	1,186.01	1,186.01	1,186.02	1,186.02	1,186.02
1.000	1,186.02	1,186.02	1,186.02	1,186.02	1,186.02
1.250	1,186.02	1,186.03	1,186.03	1,186.03	1,186.03
1.500	1,186.03	1,186.03	1,186.03	1,186.03	1,186.03
1.750	1,186.03	1,186.04	1,186.04	1,186.04	1,186.04
2.000	1,186.04	1,186.04	1,186.04	1,186.04	1,186.04
2.250	1,186.04	1,186.05	1,186.05	1,186.05	1,186.05
2.500	1,186.05	1,186.05	1,186.05	1,186.05	1,186.05
2.750	1,186.05	1,186.05	1,186.06	1,186.06	1,186.06
3.000	1,186.06	1,186.06	1,186.06	1,186.06	1,186.06
3.250	1,186.06	1,186.06	1,186.06	1,186.07	1,186.07
3.500	1,186.07	1,186.07	1,186.07	1,186.07	1,186.07
3.750	1,186.07	1,186.07	1,186.07	1,186.07	1,186.07
4.000	1,186.08	1,186.08	1,186.08	1,186.08	1,186.08
4.250	1,186.08	1,186.08	1,186.08	1,186.08	1,186.08
4.500	1,186.08	1,186.08	1,186.08	1,186.09	1,186.09
4.750	1,186.09	1,186.09	1,186.09	1,186.09	1,186.09
5.000	1,186.09	1,186.09	1,186.09	1,186.09	1,186.09
5.250	1,186.09	1,186.10	1,186.10	1,186.10	1,186.10
5.500	1,186.10	1,186.10	1,186.10	1,186.10	1,186.10
5.750	1,186.10	1,186.10	1,186.10	1,186.10	1,186.10
6.000	1,186.10	1,186.10	1,186.11	1,186.11	1,186.11
6.250	1,186.11	1,186.11	1,186.11	1,186.11	1,186.11
6.500	1,186.11	1,186.11	1,186.11	1,186.11	1,186.11
6.750	1,186.11	1,186.11	1,186.11	1,186.11	1,186.11
7.000	1,186.12	1,186.12	1,186.12	1,186.12	1,186.12
7.250	1,186.12	1,186.12	1,186.12	1,186.12	1,186.12
7.500	1,186.12	1,186.12	1,186.12	1,186.12	1,186.12
7.750	1,186.12	1,186.12	1,186.12	1,186.12	1,186.12
8.000	1,186.13	1,186.13	1,186.13	1,186.13	1,186.13
8.250	1,186.13	1,186.13	1,186.13	1,186.13	1,186.13
8.500	1,186.13	1,186.13	1,186.13	1,186.13	1,186.13
8.750	1,186.13	1,186.13	1,186.13	1,186.13	1,186.13
9.000	1,186.13	1,186.13	1,186.13	1,186.14	1,186.14
9.250	1,186.14	1,186.14	1,186.14	1,186.14	1,186.14
9.500	1,186.14	1,186.14	1,186.14	1,186.14	1,186.14
9.750	1,186.14	1,186.14	1,186.14	1,186.14	1,186.14

CAL883229B_Stormwater Report

Subsection: Time vs. Elevation
 Label: South Wetland (OUT)
 Scenario: Post-Development 2 year

Return Event: 2 years
 Storm Event: 2 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
10.000	1,186.14	1,186.14	1,186.14	1,186.14	1,186.14
10.250	1,186.14	1,186.15	1,186.15	1,186.15	1,186.15
10.500	1,186.15	1,186.15	1,186.15	1,186.15	1,186.15
10.750	1,186.15	1,186.15	1,186.15	1,186.15	1,186.15
11.000	1,186.15	1,186.15	1,186.15	1,186.16	1,186.16
11.250	1,186.16	1,186.16	1,186.16	1,186.16	1,186.16
11.500	1,186.16	1,186.16	1,186.16	1,186.17	1,186.17
11.750	1,186.17	1,186.17	1,186.18	1,186.18	1,186.19
12.000	1,186.20	1,186.21	1,186.23	1,186.25	1,186.26
12.250	1,186.27	1,186.28	1,186.29	1,186.29	1,186.29
12.500	1,186.30	1,186.30	1,186.30	1,186.30	1,186.30
12.750	1,186.31	1,186.31	1,186.31	1,186.31	1,186.31
13.000	1,186.31	1,186.31	1,186.32	1,186.32	1,186.32
13.250	1,186.32	1,186.32	1,186.32	1,186.32	1,186.32
13.500	1,186.32	1,186.32	1,186.32	1,186.32	1,186.32
13.750	1,186.32	1,186.32	1,186.32	1,186.32	1,186.32
14.000	1,186.32	1,186.33	1,186.33	1,186.33	1,186.33
14.250	1,186.33	1,186.33	1,186.33	1,186.33	1,186.33
14.500	1,186.33	1,186.33	1,186.33	1,186.33	1,186.33
14.750	1,186.33	1,186.33	1,186.33	1,186.33	1,186.33
15.000	1,186.33	1,186.33	1,186.33	1,186.33	1,186.33
15.250	1,186.33	1,186.33	1,186.33	1,186.33	1,186.33
15.500	1,186.33	1,186.33	1,186.33	1,186.33	1,186.33
15.750	1,186.32	1,186.32	1,186.32	1,186.32	1,186.32
16.000	1,186.32	1,186.32	1,186.32	1,186.32	1,186.32
16.250	1,186.32	1,186.32	1,186.32	1,186.32	1,186.32
16.500	1,186.32	1,186.32	1,186.32	1,186.32	1,186.32
16.750	1,186.32	1,186.32	1,186.32	1,186.32	1,186.32
17.000	1,186.32	1,186.32	1,186.32	1,186.32	1,186.32
17.250	1,186.32	1,186.32	1,186.32	1,186.32	1,186.32
17.500	1,186.32	1,186.32	1,186.32	1,186.32	1,186.32
17.750	1,186.32	1,186.32	1,186.32	1,186.32	1,186.32
18.000	1,186.32	1,186.32	1,186.32	1,186.32	1,186.32
18.250	1,186.32	1,186.32	1,186.32	1,186.31	1,186.31
18.500	1,186.31	1,186.31	1,186.31	1,186.31	1,186.31
18.750	1,186.31	1,186.31	1,186.31	1,186.31	1,186.31
19.000	1,186.31	1,186.31	1,186.31	1,186.31	1,186.31
19.250	1,186.31	1,186.31	1,186.31	1,186.31	1,186.31
19.500	1,186.31	1,186.31	1,186.31	1,186.31	1,186.31
19.750	1,186.31	1,186.31	1,186.31	1,186.31	1,186.31
20.000	1,186.31	1,186.31	1,186.31	1,186.31	1,186.31

CAL883229B_Stormwater Report

Subsection: Time vs. Elevation
 Label: South Wetland (OUT)
 Scenario: Post-Development 2 year

Return Event: 2 years
 Storm Event: 2 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
20.250	1,186.31	1,186.31	1,186.31	1,186.31	1,186.31
20.500	1,186.31	1,186.31	1,186.30	1,186.30	1,186.30
20.750	1,186.30	1,186.30	1,186.30	1,186.30	1,186.30
21.000	1,186.30	1,186.30	1,186.30	1,186.30	1,186.30
21.250	1,186.30	1,186.30	1,186.30	1,186.30	1,186.30
21.500	1,186.30	1,186.30	1,186.30	1,186.30	1,186.30
21.750	1,186.30	1,186.30	1,186.30	1,186.30	1,186.30
22.000	1,186.30	1,186.30	1,186.30	1,186.30	1,186.30
22.250	1,186.30	1,186.30	1,186.30	1,186.30	1,186.30
22.500	1,186.30	1,186.29	1,186.29	1,186.29	1,186.29
22.750	1,186.29	1,186.29	1,186.29	1,186.29	1,186.29
23.000	1,186.29	1,186.29	1,186.29	1,186.29	1,186.29
23.250	1,186.29	1,186.29	1,186.29	1,186.29	1,186.29
23.500	1,186.29	1,186.29	1,186.29	1,186.29	1,186.29
23.750	1,186.29	1,186.29	1,186.29	1,186.29	1,186.29
24.000	1,186.29	(N/A)	(N/A)	(N/A)	(N/A)

CAL883229B_Stormwater Report

Subsection: Time vs. Elevation
 Label: South Wetland (OUT)
 Scenario: Post-Development 5 year

Return Event: 5 years
 Storm Event: 5 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
0.000	1,186.00	1,186.00	1,186.00	1,186.00	1,186.00
0.250	1,186.00	1,186.00	1,186.00	1,186.01	1,186.01
0.500	1,186.01	1,186.01	1,186.01	1,186.01	1,186.01
0.750	1,186.01	1,186.01	1,186.02	1,186.02	1,186.02
1.000	1,186.02	1,186.02	1,186.02	1,186.02	1,186.02
1.250	1,186.02	1,186.03	1,186.03	1,186.03	1,186.03
1.500	1,186.03	1,186.03	1,186.03	1,186.03	1,186.03
1.750	1,186.03	1,186.04	1,186.04	1,186.04	1,186.04
2.000	1,186.04	1,186.04	1,186.04	1,186.04	1,186.04
2.250	1,186.04	1,186.05	1,186.05	1,186.05	1,186.05
2.500	1,186.05	1,186.05	1,186.05	1,186.05	1,186.05
2.750	1,186.05	1,186.05	1,186.06	1,186.06	1,186.06
3.000	1,186.06	1,186.06	1,186.06	1,186.06	1,186.06
3.250	1,186.06	1,186.06	1,186.06	1,186.07	1,186.07
3.500	1,186.07	1,186.07	1,186.07	1,186.07	1,186.07
3.750	1,186.07	1,186.07	1,186.07	1,186.07	1,186.07
4.000	1,186.08	1,186.08	1,186.08	1,186.08	1,186.08
4.250	1,186.08	1,186.08	1,186.08	1,186.08	1,186.08
4.500	1,186.08	1,186.08	1,186.08	1,186.09	1,186.09
4.750	1,186.09	1,186.09	1,186.09	1,186.09	1,186.09
5.000	1,186.09	1,186.09	1,186.09	1,186.09	1,186.09
5.250	1,186.09	1,186.10	1,186.10	1,186.10	1,186.10
5.500	1,186.10	1,186.10	1,186.10	1,186.10	1,186.10
5.750	1,186.10	1,186.10	1,186.10	1,186.10	1,186.10
6.000	1,186.10	1,186.10	1,186.11	1,186.11	1,186.11
6.250	1,186.11	1,186.11	1,186.11	1,186.11	1,186.11
6.500	1,186.11	1,186.11	1,186.11	1,186.11	1,186.11
6.750	1,186.11	1,186.11	1,186.11	1,186.11	1,186.11
7.000	1,186.12	1,186.12	1,186.12	1,186.12	1,186.12
7.250	1,186.12	1,186.12	1,186.12	1,186.12	1,186.12
7.500	1,186.12	1,186.12	1,186.12	1,186.12	1,186.12
7.750	1,186.12	1,186.12	1,186.12	1,186.12	1,186.12
8.000	1,186.13	1,186.13	1,186.13	1,186.13	1,186.13
8.250	1,186.13	1,186.13	1,186.13	1,186.13	1,186.13
8.500	1,186.13	1,186.13	1,186.13	1,186.13	1,186.13
8.750	1,186.13	1,186.13	1,186.13	1,186.13	1,186.13
9.000	1,186.13	1,186.13	1,186.13	1,186.14	1,186.14
9.250	1,186.14	1,186.14	1,186.14	1,186.14	1,186.14
9.500	1,186.14	1,186.14	1,186.14	1,186.14	1,186.14
9.750	1,186.14	1,186.14	1,186.14	1,186.14	1,186.14

CAL883229B_Stormwater Report

Subsection: Time vs. Elevation
 Label: South Wetland (OUT)
 Scenario: Post-Development 5 year

Return Event: 5 years
 Storm Event: 5 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
10.000	1,186.14	1,186.14	1,186.14	1,186.15	1,186.15
10.250	1,186.15	1,186.15	1,186.15	1,186.15	1,186.15
10.500	1,186.15	1,186.15	1,186.15	1,186.15	1,186.15
10.750	1,186.15	1,186.15	1,186.15	1,186.16	1,186.16
11.000	1,186.16	1,186.16	1,186.16	1,186.16	1,186.16
11.250	1,186.16	1,186.16	1,186.17	1,186.17	1,186.17
11.500	1,186.17	1,186.17	1,186.17	1,186.18	1,186.18
11.750	1,186.18	1,186.19	1,186.19	1,186.20	1,186.21
12.000	1,186.22	1,186.24	1,186.27	1,186.30	1,186.31
12.250	1,186.33	1,186.34	1,186.34	1,186.35	1,186.35
12.500	1,186.36	1,186.36	1,186.36	1,186.37	1,186.37
12.750	1,186.37	1,186.37	1,186.37	1,186.37	1,186.38
13.000	1,186.38	1,186.38	1,186.38	1,186.38	1,186.38
13.250	1,186.38	1,186.39	1,186.39	1,186.39	1,186.39
13.500	1,186.39	1,186.39	1,186.39	1,186.39	1,186.39
13.750	1,186.39	1,186.39	1,186.39	1,186.39	1,186.39
14.000	1,186.39	1,186.39	1,186.39	1,186.39	1,186.39
14.250	1,186.39	1,186.39	1,186.39	1,186.39	1,186.39
14.500	1,186.39	1,186.39	1,186.39	1,186.39	1,186.39
14.750	1,186.39	1,186.39	1,186.39	1,186.39	1,186.39
15.000	1,186.39	1,186.39	1,186.39	1,186.39	1,186.39
15.250	1,186.39	1,186.39	1,186.39	1,186.39	1,186.39
15.500	1,186.39	1,186.39	1,186.39	1,186.39	1,186.38
15.750	1,186.38	1,186.38	1,186.38	1,186.38	1,186.38
16.000	1,186.38	1,186.38	1,186.38	1,186.38	1,186.38
16.250	1,186.38	1,186.38	1,186.38	1,186.38	1,186.38
16.500	1,186.38	1,186.38	1,186.38	1,186.38	1,186.38
16.750	1,186.38	1,186.38	1,186.38	1,186.38	1,186.38
17.000	1,186.38	1,186.38	1,186.37	1,186.37	1,186.37
17.250	1,186.37	1,186.37	1,186.37	1,186.37	1,186.37
17.500	1,186.37	1,186.37	1,186.37	1,186.37	1,186.37
17.750	1,186.37	1,186.37	1,186.37	1,186.37	1,186.37
18.000	1,186.37	1,186.37	1,186.37	1,186.37	1,186.37
18.250	1,186.37	1,186.37	1,186.37	1,186.36	1,186.36
18.500	1,186.36	1,186.36	1,186.36	1,186.36	1,186.36
18.750	1,186.36	1,186.36	1,186.36	1,186.36	1,186.36
19.000	1,186.36	1,186.36	1,186.36	1,186.36	1,186.36
19.250	1,186.36	1,186.36	1,186.36	1,186.36	1,186.36
19.500	1,186.36	1,186.36	1,186.36	1,186.36	1,186.35
19.750	1,186.35	1,186.35	1,186.35	1,186.35	1,186.35
20.000	1,186.35	1,186.35	1,186.35	1,186.35	1,186.35

CAL883229B_Stormwater Report

Subsection: Time vs. Elevation
 Label: South Wetland (OUT)
 Scenario: Post-Development 5 year

Return Event: 5 years
 Storm Event: 5 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
20.250	1,186.35	1,186.35	1,186.35	1,186.35	1,186.35
20.500	1,186.35	1,186.35	1,186.35	1,186.35	1,186.35
20.750	1,186.35	1,186.35	1,186.35	1,186.35	1,186.34
21.000	1,186.34	1,186.34	1,186.34	1,186.34	1,186.34
21.250	1,186.34	1,186.34	1,186.34	1,186.34	1,186.34
21.500	1,186.34	1,186.34	1,186.34	1,186.34	1,186.34
21.750	1,186.34	1,186.34	1,186.34	1,186.34	1,186.34
22.000	1,186.34	1,186.34	1,186.34	1,186.34	1,186.33
22.250	1,186.33	1,186.33	1,186.33	1,186.33	1,186.33
22.500	1,186.33	1,186.33	1,186.33	1,186.33	1,186.33
22.750	1,186.33	1,186.33	1,186.33	1,186.33	1,186.33
23.000	1,186.33	1,186.33	1,186.33	1,186.33	1,186.33
23.250	1,186.33	1,186.33	1,186.33	1,186.32	1,186.32
23.500	1,186.32	1,186.32	1,186.32	1,186.32	1,186.32
23.750	1,186.32	1,186.32	1,186.32	1,186.32	1,186.32
24.000	1,186.32	(N/A)	(N/A)	(N/A)	(N/A)

CAL883229B_Stormwater Report

Subsection: Time vs. Elevation

Return Event: 25 years

Label: South Wetland (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
0.000	1,186.00	1,186.00	1,186.00	1,186.00	1,186.00
0.250	1,186.00	1,186.00	1,186.00	1,186.01	1,186.01
0.500	1,186.01	1,186.01	1,186.01	1,186.01	1,186.01
0.750	1,186.01	1,186.01	1,186.02	1,186.02	1,186.02
1.000	1,186.02	1,186.02	1,186.02	1,186.02	1,186.02
1.250	1,186.02	1,186.03	1,186.03	1,186.03	1,186.03
1.500	1,186.03	1,186.03	1,186.03	1,186.03	1,186.03
1.750	1,186.03	1,186.04	1,186.04	1,186.04	1,186.04
2.000	1,186.04	1,186.04	1,186.04	1,186.04	1,186.04
2.250	1,186.04	1,186.05	1,186.05	1,186.05	1,186.05
2.500	1,186.05	1,186.05	1,186.05	1,186.05	1,186.05
2.750	1,186.05	1,186.05	1,186.06	1,186.06	1,186.06
3.000	1,186.06	1,186.06	1,186.06	1,186.06	1,186.06
3.250	1,186.06	1,186.06	1,186.06	1,186.07	1,186.07
3.500	1,186.07	1,186.07	1,186.07	1,186.07	1,186.07
3.750	1,186.07	1,186.07	1,186.07	1,186.07	1,186.07
4.000	1,186.08	1,186.08	1,186.08	1,186.08	1,186.08
4.250	1,186.08	1,186.08	1,186.08	1,186.08	1,186.08
4.500	1,186.08	1,186.08	1,186.08	1,186.09	1,186.09
4.750	1,186.09	1,186.09	1,186.09	1,186.09	1,186.09
5.000	1,186.09	1,186.09	1,186.09	1,186.09	1,186.09
5.250	1,186.09	1,186.10	1,186.10	1,186.10	1,186.10
5.500	1,186.10	1,186.10	1,186.10	1,186.10	1,186.10
5.750	1,186.10	1,186.10	1,186.10	1,186.10	1,186.10
6.000	1,186.10	1,186.10	1,186.11	1,186.11	1,186.11
6.250	1,186.11	1,186.11	1,186.11	1,186.11	1,186.11
6.500	1,186.11	1,186.11	1,186.11	1,186.11	1,186.11
6.750	1,186.11	1,186.11	1,186.11	1,186.11	1,186.11
7.000	1,186.12	1,186.12	1,186.12	1,186.12	1,186.12
7.250	1,186.12	1,186.12	1,186.12	1,186.12	1,186.12
7.500	1,186.12	1,186.12	1,186.12	1,186.12	1,186.12
7.750	1,186.12	1,186.12	1,186.12	1,186.12	1,186.13
8.000	1,186.13	1,186.13	1,186.13	1,186.13	1,186.13
8.250	1,186.13	1,186.13	1,186.13	1,186.13	1,186.13
8.500	1,186.13	1,186.13	1,186.13	1,186.13	1,186.13
8.750	1,186.13	1,186.13	1,186.14	1,186.14	1,186.14
9.000	1,186.14	1,186.14	1,186.14	1,186.14	1,186.14
9.250	1,186.14	1,186.14	1,186.14	1,186.14	1,186.14
9.500	1,186.14	1,186.15	1,186.15	1,186.15	1,186.15
9.750	1,186.15	1,186.15	1,186.15	1,186.15	1,186.15

CAL883229B_Stormwater Report

Subsection: Time vs. Elevation

Return Event: 25 years

Label: South Wetland (OUT)

Storm Event: 25 year

Scenario: Post-Development 25 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
10.000	1,186.15	1,186.15	1,186.15	1,186.15	1,186.16
10.250	1,186.16	1,186.16	1,186.16	1,186.16	1,186.16
10.500	1,186.16	1,186.16	1,186.16	1,186.16	1,186.17
10.750	1,186.17	1,186.17	1,186.17	1,186.17	1,186.17
11.000	1,186.18	1,186.18	1,186.18	1,186.18	1,186.18
11.250	1,186.19	1,186.19	1,186.19	1,186.20	1,186.20
11.500	1,186.20	1,186.20	1,186.21	1,186.21	1,186.22
11.750	1,186.23	1,186.23	1,186.25	1,186.26	1,186.27
12.000	1,186.30	1,186.33	1,186.38	1,186.42	1,186.45
12.250	1,186.47	1,186.49	1,186.50	1,186.51	1,186.51
12.500	1,186.52	1,186.52	1,186.53	1,186.53	1,186.53
12.750	1,186.53	1,186.54	1,186.54	1,186.54	1,186.54
13.000	1,186.54	1,186.55	1,186.55	1,186.55	1,186.55
13.250	1,186.55	1,186.55	1,186.55	1,186.55	1,186.55
13.500	1,186.55	1,186.56	1,186.56	1,186.56	1,186.55
13.750	1,186.55	1,186.55	1,186.55	1,186.55	1,186.55
14.000	1,186.55	1,186.55	1,186.55	1,186.55	1,186.55
14.250	1,186.55	1,186.55	1,186.55	1,186.55	1,186.55
14.500	1,186.55	1,186.55	1,186.55	1,186.55	1,186.55
14.750	1,186.55	1,186.55	1,186.55	1,186.55	1,186.55
15.000	1,186.55	1,186.55	1,186.54	1,186.54	1,186.54
15.250	1,186.54	1,186.54	1,186.54	1,186.54	1,186.54
15.500	1,186.54	1,186.54	1,186.54	1,186.54	1,186.54
15.750	1,186.53	1,186.53	1,186.53	1,186.53	1,186.53
16.000	1,186.53	1,186.53	1,186.53	1,186.53	1,186.53
16.250	1,186.53	1,186.53	1,186.53	1,186.52	1,186.52
16.500	1,186.52	1,186.52	1,186.52	1,186.52	1,186.52
16.750	1,186.52	1,186.52	1,186.52	1,186.52	1,186.52
17.000	1,186.52	1,186.51	1,186.51	1,186.51	1,186.51
17.250	1,186.51	1,186.51	1,186.51	1,186.51	1,186.51
17.500	1,186.51	1,186.51	1,186.51	1,186.51	1,186.50
17.750	1,186.50	1,186.50	1,186.50	1,186.50	1,186.50
18.000	1,186.50	1,186.50	1,186.50	1,186.50	1,186.50
18.250	1,186.50	1,186.50	1,186.49	1,186.49	1,186.49
18.500	1,186.49	1,186.49	1,186.49	1,186.49	1,186.49
18.750	1,186.49	1,186.49	1,186.49	1,186.49	1,186.49
19.000	1,186.48	1,186.48	1,186.48	1,186.48	1,186.48
19.250	1,186.48	1,186.48	1,186.48	1,186.48	1,186.48
19.500	1,186.48	1,186.48	1,186.48	1,186.47	1,186.47
19.750	1,186.47	1,186.47	1,186.47	1,186.47	1,186.47
20.000	1,186.47	1,186.47	1,186.47	1,186.47	1,186.47

CAL883229B_Stormwater Report

Subsection: Time vs. Elevation
 Label: South Wetland (OUT)
 Scenario: Post-Development 25 year

Return Event: 25 years
 Storm Event: 25 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
20.250	1,186.46	1,186.46	1,186.46	1,186.46	1,186.46
20.500	1,186.46	1,186.46	1,186.46	1,186.46	1,186.46
20.750	1,186.46	1,186.46	1,186.45	1,186.45	1,186.45
21.000	1,186.45	1,186.45	1,186.45	1,186.45	1,186.45
21.250	1,186.45	1,186.45	1,186.45	1,186.45	1,186.45
21.500	1,186.44	1,186.44	1,186.44	1,186.44	1,186.44
21.750	1,186.44	1,186.44	1,186.44	1,186.44	1,186.44
22.000	1,186.44	1,186.44	1,186.43	1,186.43	1,186.43
22.250	1,186.43	1,186.43	1,186.43	1,186.43	1,186.43
22.500	1,186.43	1,186.43	1,186.43	1,186.43	1,186.42
22.750	1,186.42	1,186.42	1,186.42	1,186.42	1,186.42
23.000	1,186.42	1,186.42	1,186.42	1,186.42	1,186.42
23.250	1,186.42	1,186.42	1,186.41	1,186.41	1,186.41
23.500	1,186.41	1,186.41	1,186.41	1,186.41	1,186.41
23.750	1,186.41	1,186.41	1,186.41	1,186.41	1,186.40
24.000	1,186.40	(N/A)	(N/A)	(N/A)	(N/A)

CAL883229B_Stormwater Report

Subsection: Time vs. Elevation

Return Event: 100 years

Label: South Wetland (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
0.000	1,186.00	1,186.00	1,186.00	1,186.00	1,186.00
0.250	1,186.00	1,186.00	1,186.00	1,186.01	1,186.01
0.500	1,186.01	1,186.01	1,186.01	1,186.01	1,186.01
0.750	1,186.01	1,186.01	1,186.02	1,186.02	1,186.02
1.000	1,186.02	1,186.02	1,186.02	1,186.02	1,186.02
1.250	1,186.02	1,186.03	1,186.03	1,186.03	1,186.03
1.500	1,186.03	1,186.03	1,186.03	1,186.03	1,186.03
1.750	1,186.03	1,186.04	1,186.04	1,186.04	1,186.04
2.000	1,186.04	1,186.04	1,186.04	1,186.04	1,186.04
2.250	1,186.04	1,186.05	1,186.05	1,186.05	1,186.05
2.500	1,186.05	1,186.05	1,186.05	1,186.05	1,186.05
2.750	1,186.05	1,186.05	1,186.06	1,186.06	1,186.06
3.000	1,186.06	1,186.06	1,186.06	1,186.06	1,186.06
3.250	1,186.06	1,186.06	1,186.06	1,186.07	1,186.07
3.500	1,186.07	1,186.07	1,186.07	1,186.07	1,186.07
3.750	1,186.07	1,186.07	1,186.07	1,186.07	1,186.07
4.000	1,186.08	1,186.08	1,186.08	1,186.08	1,186.08
4.250	1,186.08	1,186.08	1,186.08	1,186.08	1,186.08
4.500	1,186.08	1,186.08	1,186.08	1,186.09	1,186.09
4.750	1,186.09	1,186.09	1,186.09	1,186.09	1,186.09
5.000	1,186.09	1,186.09	1,186.09	1,186.09	1,186.09
5.250	1,186.09	1,186.10	1,186.10	1,186.10	1,186.10
5.500	1,186.10	1,186.10	1,186.10	1,186.10	1,186.10
5.750	1,186.10	1,186.10	1,186.10	1,186.10	1,186.10
6.000	1,186.10	1,186.10	1,186.11	1,186.11	1,186.11
6.250	1,186.11	1,186.11	1,186.11	1,186.11	1,186.11
6.500	1,186.11	1,186.11	1,186.11	1,186.11	1,186.11
6.750	1,186.11	1,186.11	1,186.11	1,186.12	1,186.12
7.000	1,186.12	1,186.12	1,186.12	1,186.12	1,186.12
7.250	1,186.12	1,186.12	1,186.12	1,186.12	1,186.12
7.500	1,186.12	1,186.12	1,186.12	1,186.13	1,186.13
7.750	1,186.13	1,186.13	1,186.13	1,186.13	1,186.13
8.000	1,186.13	1,186.13	1,186.13	1,186.13	1,186.13
8.250	1,186.13	1,186.13	1,186.14	1,186.14	1,186.14
8.500	1,186.14	1,186.14	1,186.14	1,186.14	1,186.14
8.750	1,186.14	1,186.14	1,186.14	1,186.14	1,186.14
9.000	1,186.15	1,186.15	1,186.15	1,186.15	1,186.15
9.250	1,186.15	1,186.15	1,186.15	1,186.15	1,186.15
9.500	1,186.16	1,186.16	1,186.16	1,186.16	1,186.16
9.750	1,186.16	1,186.16	1,186.16	1,186.17	1,186.17

CAL883229B_Stormwater Report

Subsection: Time vs. Elevation

Return Event: 100 years

Label: South Wetland (OUT)

Storm Event: 100 year

Scenario: Post-Development 100 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
10.000	1,186.17	1,186.17	1,186.17	1,186.17	1,186.17
10.250	1,186.17	1,186.18	1,186.18	1,186.18	1,186.18
10.500	1,186.18	1,186.18	1,186.18	1,186.19	1,186.19
10.750	1,186.19	1,186.19	1,186.20	1,186.20	1,186.20
11.000	1,186.20	1,186.21	1,186.21	1,186.21	1,186.22
11.250	1,186.22	1,186.23	1,186.23	1,186.23	1,186.24
11.500	1,186.24	1,186.25	1,186.26	1,186.26	1,186.27
11.750	1,186.28	1,186.30	1,186.31	1,186.33	1,186.36
12.000	1,186.39	1,186.44	1,186.50	1,186.56	1,186.60
12.250	1,186.63	1,186.64	1,186.66	1,186.67	1,186.68
12.500	1,186.68	1,186.69	1,186.69	1,186.69	1,186.70
12.750	1,186.70	1,186.70	1,186.70	1,186.71	1,186.71
13.000	1,186.71	1,186.71	1,186.71	1,186.71	1,186.71
13.250	1,186.71	1,186.71	1,186.71	1,186.71	1,186.71
13.500	1,186.71	1,186.71	1,186.71	1,186.71	1,186.71
13.750	1,186.71	1,186.71	1,186.71	1,186.70	1,186.70
14.000	1,186.70	1,186.70	1,186.70	1,186.70	1,186.70
14.250	1,186.70	1,186.69	1,186.69	1,186.69	1,186.69
14.500	1,186.69	1,186.69	1,186.69	1,186.69	1,186.69
14.750	1,186.68	1,186.68	1,186.68	1,186.68	1,186.68
15.000	1,186.68	1,186.68	1,186.68	1,186.67	1,186.67
15.250	1,186.67	1,186.67	1,186.67	1,186.67	1,186.66
15.500	1,186.66	1,186.66	1,186.66	1,186.66	1,186.66
15.750	1,186.65	1,186.65	1,186.65	1,186.65	1,186.65
16.000	1,186.65	1,186.65	1,186.64	1,186.64	1,186.64
16.250	1,186.64	1,186.64	1,186.64	1,186.64	1,186.64
16.500	1,186.63	1,186.63	1,186.63	1,186.63	1,186.63
16.750	1,186.63	1,186.63	1,186.62	1,186.62	1,186.62
17.000	1,186.62	1,186.62	1,186.62	1,186.62	1,186.62
17.250	1,186.62	1,186.61	1,186.61	1,186.61	1,186.61
17.500	1,186.61	1,186.61	1,186.61	1,186.61	1,186.60
17.750	1,186.60	1,186.60	1,186.60	1,186.60	1,186.60
18.000	1,186.60	1,186.60	1,186.60	1,186.60	1,186.59
18.250	1,186.59	1,186.59	1,186.59	1,186.59	1,186.59
18.500	1,186.59	1,186.59	1,186.59	1,186.58	1,186.58
18.750	1,186.58	1,186.58	1,186.58	1,186.58	1,186.58
19.000	1,186.58	1,186.58	1,186.57	1,186.57	1,186.57
19.250	1,186.57	1,186.57	1,186.57	1,186.57	1,186.57
19.500	1,186.57	1,186.56	1,186.56	1,186.56	1,186.56
19.750	1,186.56	1,186.56	1,186.56	1,186.56	1,186.56
20.000	1,186.56	1,186.55	1,186.55	1,186.55	1,186.55

CAL883229B_Stormwater Report

Subsection: Time vs. Elevation
 Label: South Wetland (OUT)
 Scenario: Post-Development 100 year

Return Event: 100 years
 Storm Event: 100 year

Time vs. Elevation (ft)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)	Elevation (ft)
20.250	1,186.55	1,186.55	1,186.55	1,186.55	1,186.55
20.500	1,186.54	1,186.54	1,186.54	1,186.54	1,186.54
20.750	1,186.54	1,186.54	1,186.54	1,186.54	1,186.54
21.000	1,186.53	1,186.53	1,186.53	1,186.53	1,186.53
21.250	1,186.53	1,186.53	1,186.53	1,186.53	1,186.53
21.500	1,186.52	1,186.52	1,186.52	1,186.52	1,186.52
21.750	1,186.52	1,186.52	1,186.52	1,186.52	1,186.52
22.000	1,186.51	1,186.51	1,186.51	1,186.51	1,186.51
22.250	1,186.51	1,186.51	1,186.51	1,186.51	1,186.51
22.500	1,186.50	1,186.50	1,186.50	1,186.50	1,186.50
22.750	1,186.50	1,186.50	1,186.50	1,186.50	1,186.50
23.000	1,186.49	1,186.49	1,186.49	1,186.49	1,186.49
23.250	1,186.49	1,186.49	1,186.49	1,186.49	1,186.49
23.500	1,186.48	1,186.48	1,186.48	1,186.48	1,186.48
23.750	1,186.48	1,186.48	1,186.48	1,186.48	1,186.48
24.000	1,186.47	(N/A)	(N/A)	(N/A)	(N/A)

CAL883229B_Stormwater Report

Subsection: Time vs. Volume
 Label: North Wetland
 Scenario: Post-Development 2 year

Return Event: 2 years
 Storm Event: 2 year

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
0.000	6.166	6.177	6.187	6.198	6.209
0.250	6.219	6.230	6.241	6.251	6.262
0.500	6.272	6.283	6.293	6.304	6.314
0.750	6.325	6.335	6.345	6.356	6.366
1.000	6.376	6.387	6.397	6.407	6.417
1.250	6.427	6.438	6.448	6.458	6.468
1.500	6.478	6.488	6.498	6.508	6.518
1.750	6.528	6.538	6.548	6.558	6.568
2.000	6.578	6.588	6.598	6.607	6.617
2.250	6.627	6.637	6.646	6.656	6.666
2.500	6.675	6.685	6.695	6.704	6.714
2.750	6.724	6.733	6.743	6.752	6.762
3.000	6.771	6.780	6.790	6.799	6.809
3.250	6.818	6.827	6.837	6.846	6.855
3.500	6.865	6.874	6.883	6.892	6.901
3.750	6.911	6.920	6.929	6.938	6.947
4.000	6.956	6.965	6.974	6.983	6.992
4.250	7.001	7.010	7.019	7.028	7.037
4.500	7.045	7.054	7.063	7.072	7.081
4.750	7.089	7.098	7.107	7.116	7.124
5.000	7.133	7.142	7.150	7.159	7.167
5.250	7.176	7.185	7.193	7.202	7.210
5.500	7.219	7.227	7.235	7.244	7.252
5.750	7.261	7.269	7.277	7.286	7.294
6.000	7.302	7.310	7.319	7.327	7.335
6.250	7.343	7.352	7.360	7.368	7.376
6.500	7.384	7.392	7.400	7.408	7.416
6.750	7.424	7.432	7.440	7.448	7.456
7.000	7.464	7.472	7.480	7.488	7.495
7.250	7.503	7.511	7.519	7.527	7.534
7.500	7.542	7.550	7.557	7.565	7.573
7.750	7.580	7.588	7.596	7.603	7.611
8.000	7.618	7.626	7.633	7.641	7.648
8.250	7.656	7.663	7.671	7.678	7.686
8.500	7.693	7.700	7.708	7.715	7.722
8.750	7.730	7.737	7.744	7.751	7.759
9.000	7.766	7.773	7.780	7.787	7.794
9.250	7.802	7.809	7.816	7.823	7.830
9.500	7.837	7.844	7.851	7.858	7.865
9.750	7.873	7.880	7.887	7.895	7.902

CAL883229B_Stormwater Report

Subsection: Time vs. Volume
 Label: North Wetland
 Scenario: Post-Development 2 year

Return Event: 2 years
 Storm Event: 2 year

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
10.000	7.910	7.917	7.925	7.933	7.940
10.250	7.948	7.956	7.964	7.973	7.981
10.500	7.989	7.997	8.006	8.015	8.024
10.750	8.034	8.045	8.055	8.067	8.078
11.000	8.091	8.103	8.117	8.131	8.146
11.250	8.162	8.178	8.196	8.214	8.233
11.500	8.253	8.275	8.298	8.325	8.357
11.750	8.394	8.439	8.492	8.559	8.643
12.000	8.757	8.918	9.152	9.466	9.805
12.250	10.099	10.324	10.469	10.586	10.683
12.500	10.764	10.832	10.891	10.940	10.983
12.750	11.022	11.059	11.094	11.127	11.159
13.000	11.190	11.220	11.249	11.276	11.302
13.250	11.328	11.352	11.375	11.397	11.417
13.500	11.437	11.455	11.471	11.486	11.498
13.750	11.510	11.521	11.532	11.542	11.553
14.000	11.563	11.573	11.583	11.593	11.603
14.250	11.613	11.623	11.633	11.642	11.652
14.500	11.661	11.671	11.680	11.689	11.698
14.750	11.707	11.716	11.725	11.734	11.743
15.000	11.752	11.760	11.768	11.775	11.780
15.250	11.785	11.790	11.795	11.799	11.803
15.500	11.808	11.812	11.816	11.820	11.825
15.750	11.829	11.833	11.837	11.841	11.845
16.000	11.849	11.853	11.857	11.861	11.864
16.250	11.868	11.872	11.876	11.879	11.883
16.500	11.886	11.890	11.893	11.897	11.900
16.750	11.904	11.907	11.910	11.914	11.917
17.000	11.920	11.923	11.926	11.930	11.933
17.250	11.936	11.939	11.942	11.945	11.947
17.500	11.950	11.953	11.956	11.959	11.961
17.750	11.964	11.967	11.969	11.972	11.974
18.000	11.977	11.979	11.982	11.984	11.986
18.250	11.989	11.991	11.993	11.995	11.998
18.500	12.000	12.002	12.004	12.006	12.008
18.750	12.010	12.012	12.014	12.015	12.017
19.000	12.019	12.021	12.022	12.024	12.026
19.250	12.027	12.029	12.030	12.032	12.033
19.500	12.035	12.036	12.038	12.039	12.040
19.750	12.041	12.043	12.044	12.045	12.046
20.000	12.047	12.048	12.049	12.050	12.051

CAL883229B_Stormwater Report

Subsection: Time vs. Volume
 Label: North Wetland
 Scenario: Post-Development 2 year

Return Event: 2 years
 Storm Event: 2 year

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
20.250	12.052	12.053	12.054	12.054	12.055
20.500	12.056	12.057	12.057	12.058	12.058
20.750	12.059	12.060	12.060	12.061	12.061
21.000	12.061	12.062	12.062	12.062	12.063
21.250	12.063	12.063	12.063	12.063	12.063
21.500	12.063	12.063	12.063	12.063	12.063
21.750	12.063	12.063	12.063	12.063	12.062
22.000	12.062	12.062	12.061	12.061	12.061
22.250	12.060	12.060	12.059	12.059	12.058
22.500	12.057	12.057	12.056	12.055	12.055
22.750	12.054	12.053	12.052	12.051	12.051
23.000	12.050	12.049	12.048	12.047	12.046
23.250	12.045	12.043	12.042	12.041	12.040
23.500	12.039	12.037	12.036	12.035	12.033
23.750	12.032	12.031	12.029	12.028	12.026
24.000	12.025	(N/A)	(N/A)	(N/A)	(N/A)

CAL883229B_Stormwater Report

Subsection: Time vs. Volume
 Label: North Wetland
 Scenario: Post-Development 5 year

Return Event: 5 years
 Storm Event: 5 year

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
0.000	6.166	6.177	6.187	6.198	6.209
0.250	6.219	6.230	6.241	6.251	6.262
0.500	6.272	6.283	6.293	6.304	6.314
0.750	6.325	6.335	6.345	6.356	6.366
1.000	6.376	6.387	6.397	6.407	6.417
1.250	6.427	6.438	6.448	6.458	6.468
1.500	6.478	6.488	6.498	6.508	6.518
1.750	6.528	6.538	6.548	6.558	6.568
2.000	6.578	6.588	6.598	6.607	6.617
2.250	6.627	6.637	6.646	6.656	6.666
2.500	6.675	6.685	6.695	6.704	6.714
2.750	6.724	6.733	6.743	6.752	6.762
3.000	6.771	6.780	6.790	6.799	6.809
3.250	6.818	6.827	6.837	6.846	6.855
3.500	6.865	6.874	6.883	6.892	6.901
3.750	6.911	6.920	6.929	6.938	6.947
4.000	6.956	6.965	6.974	6.983	6.992
4.250	7.001	7.010	7.019	7.028	7.037
4.500	7.045	7.054	7.063	7.072	7.081
4.750	7.089	7.098	7.107	7.116	7.124
5.000	7.133	7.142	7.150	7.159	7.167
5.250	7.176	7.185	7.193	7.202	7.210
5.500	7.219	7.227	7.235	7.244	7.252
5.750	7.261	7.269	7.277	7.286	7.294
6.000	7.302	7.310	7.319	7.327	7.335
6.250	7.343	7.352	7.360	7.368	7.376
6.500	7.384	7.392	7.400	7.408	7.416
6.750	7.424	7.432	7.440	7.448	7.456
7.000	7.464	7.472	7.480	7.488	7.495
7.250	7.503	7.511	7.519	7.527	7.534
7.500	7.542	7.550	7.557	7.565	7.573
7.750	7.580	7.588	7.596	7.603	7.611
8.000	7.618	7.626	7.633	7.641	7.648
8.250	7.656	7.663	7.671	7.678	7.686
8.500	7.693	7.700	7.708	7.715	7.722
8.750	7.730	7.737	7.744	7.752	7.759
9.000	7.767	7.774	7.782	7.789	7.797
9.250	7.805	7.813	7.821	7.829	7.837
9.500	7.846	7.854	7.862	7.871	7.880
9.750	7.889	7.898	7.907	7.916	7.925

CAL883229B_Stormwater Report

Subsection: Time vs. Volume
 Label: North Wetland
 Scenario: Post-Development 5 year

Return Event: 5 years
 Storm Event: 5 year

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
10.000	7.934	7.944	7.953	7.963	7.973
10.250	7.983	7.993	8.003	8.013	8.023
10.500	8.034	8.044	8.055	8.067	8.080
10.750	8.093	8.107	8.122	8.138	8.155
11.000	8.173	8.191	8.211	8.231	8.253
11.250	8.276	8.300	8.325	8.351	8.379
11.500	8.409	8.440	8.474	8.514	8.561
11.750	8.617	8.683	8.763	8.861	8.986
12.000	9.153	9.388	9.726	10.176	10.598
12.250	10.939	11.202	11.405	11.569	11.703
12.500	11.815	11.910	11.990	12.058	12.116
12.750	12.169	12.218	12.265	12.310	12.353
13.000	12.394	12.434	12.472	12.509	12.544
13.250	12.577	12.609	12.640	12.668	12.695
13.500	12.720	12.744	12.765	12.783	12.799
13.750	12.813	12.827	12.840	12.853	12.865
14.000	12.878	12.890	12.903	12.915	12.927
14.250	12.939	12.951	12.962	12.974	12.985
14.500	12.997	13.008	13.019	13.030	13.041
14.750	13.052	13.063	13.074	13.084	13.094
15.000	13.105	13.115	13.124	13.131	13.137
15.250	13.142	13.147	13.152	13.156	13.161
15.500	13.165	13.169	13.173	13.177	13.181
15.750	13.185	13.189	13.193	13.197	13.201
16.000	13.205	13.208	13.212	13.216	13.219
16.250	13.223	13.226	13.229	13.233	13.236
16.500	13.239	13.243	13.246	13.249	13.252
16.750	13.255	13.258	13.261	13.264	13.266
17.000	13.269	13.272	13.275	13.277	13.280
17.250	13.282	13.285	13.287	13.290	13.292
17.500	13.294	13.296	13.299	13.301	13.303
17.750	13.305	13.307	13.309	13.311	13.313
18.000	13.314	13.316	13.318	13.320	13.321
18.250	13.323	13.324	13.326	13.327	13.329
18.500	13.330	13.331	13.332	13.334	13.335
18.750	13.336	13.337	13.338	13.339	13.340
19.000	13.341	13.341	13.342	13.343	13.344
19.250	13.344	13.345	13.345	13.346	13.346
19.500	13.347	13.347	13.347	13.348	13.348
19.750	13.348	13.348	13.348	13.348	13.348
20.000	13.348	13.348	13.348	13.348	13.348

CAL883229B_Stormwater Report

Subsection: Time vs. Volume
 Label: North Wetland
 Scenario: Post-Development 5 year

Return Event: 5 years
 Storm Event: 5 year

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
20.250	13.347	13.347	13.347	13.346	13.346
20.500	13.345	13.345	13.344	13.344	13.343
20.750	13.342	13.341	13.341	13.340	13.339
21.000	13.338	13.337	13.336	13.335	13.334
21.250	13.332	13.331	13.330	13.329	13.327
21.500	13.326	13.325	13.323	13.322	13.320
21.750	13.318	13.317	13.315	13.313	13.312
22.000	13.310	13.308	13.306	13.304	13.302
22.250	13.300	13.298	13.296	13.294	13.292
22.500	13.289	13.287	13.285	13.282	13.280
22.750	13.278	13.275	13.273	13.270	13.267
23.000	13.265	13.262	13.259	13.257	13.254
23.250	13.251	13.248	13.245	13.242	13.239
23.500	13.236	13.233	13.230	13.227	13.224
23.750	13.220	13.217	13.214	13.210	13.207
24.000	13.203	(N/A)	(N/A)	(N/A)	(N/A)

CAL883229B_Stormwater Report

Subsection: Time vs. Volume

Return Event: 25 years

Label: North Wetland

Storm Event: 25 year

Scenario: Post-Development 25 year

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
0.000	6.166	6.177	6.187	6.198	6.209
0.250	6.219	6.230	6.241	6.251	6.262
0.500	6.272	6.283	6.293	6.304	6.314
0.750	6.325	6.335	6.345	6.356	6.366
1.000	6.376	6.387	6.397	6.407	6.417
1.250	6.427	6.438	6.448	6.458	6.468
1.500	6.478	6.488	6.498	6.508	6.518
1.750	6.528	6.538	6.548	6.558	6.568
2.000	6.578	6.588	6.598	6.607	6.617
2.250	6.627	6.637	6.646	6.656	6.666
2.500	6.675	6.685	6.695	6.704	6.714
2.750	6.724	6.733	6.743	6.752	6.762
3.000	6.771	6.780	6.790	6.799	6.809
3.250	6.818	6.827	6.837	6.846	6.855
3.500	6.865	6.874	6.883	6.892	6.901
3.750	6.911	6.920	6.929	6.938	6.947
4.000	6.956	6.965	6.974	6.983	6.992
4.250	7.001	7.010	7.019	7.028	7.037
4.500	7.045	7.054	7.063	7.072	7.081
4.750	7.089	7.098	7.107	7.116	7.124
5.000	7.133	7.142	7.150	7.159	7.167
5.250	7.176	7.185	7.193	7.202	7.210
5.500	7.219	7.227	7.235	7.244	7.252
5.750	7.261	7.269	7.277	7.286	7.294
6.000	7.302	7.310	7.319	7.327	7.335
6.250	7.343	7.352	7.360	7.368	7.376
6.500	7.384	7.392	7.400	7.408	7.416
6.750	7.424	7.432	7.440	7.448	7.456
7.000	7.464	7.472	7.480	7.488	7.496
7.250	7.504	7.513	7.521	7.529	7.538
7.500	7.546	7.554	7.563	7.571	7.580
7.750	7.589	7.597	7.606	7.615	7.624
8.000	7.633	7.641	7.650	7.659	7.669
8.250	7.678	7.687	7.696	7.706	7.715
8.500	7.724	7.734	7.743	7.753	7.763
8.750	7.772	7.782	7.792	7.802	7.812
9.000	7.822	7.832	7.842	7.854	7.865
9.250	7.877	7.890	7.903	7.916	7.929
9.500	7.942	7.955	7.969	7.983	7.997
9.750	8.011	8.026	8.041	8.055	8.070

CAL883229B_Stormwater Report

Subsection: Time vs. Volume

Return Event: 25 years

Label: North Wetland

Storm Event: 25 year

Scenario: Post-Development 25 year

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
10.000	8.086	8.101	8.117	8.133	8.149
10.250	8.165	8.181	8.198	8.215	8.232
10.500	8.249	8.267	8.286	8.307	8.330
10.750	8.354	8.381	8.409	8.440	8.472
11.000	8.506	8.541	8.579	8.619	8.662
11.250	8.706	8.753	8.802	8.854	8.908
11.500	8.965	9.026	9.093	9.172	9.264
11.750	9.373	9.504	9.661	9.854	10.096
12.000	10.400	10.768	11.290	11.980	12.720
12.250	13.355	13.844	14.221	14.501	14.700
12.500	14.846	14.949	15.020	15.063	15.089
12.750	15.102	15.109	15.111	15.110	15.106
13.000	15.100	15.092	15.082	15.070	15.058
13.250	15.043	15.028	15.012	14.995	14.976
13.500	14.957	14.937	14.916	14.892	14.866
13.750	14.841	14.817	14.795	14.774	14.755
14.000	14.738	14.722	14.707	14.694	14.681
14.250	14.670	14.659	14.650	14.641	14.633
14.500	14.625	14.618	14.612	14.605	14.600
14.750	14.594	14.590	14.585	14.581	14.577
15.000	14.573	14.569	14.564	14.557	14.549
15.250	14.540	14.532	14.524	14.517	14.510
15.500	14.503	14.497	14.492	14.487	14.483
15.750	14.478	14.475	14.471	14.468	14.465
16.000	14.462	14.459	14.457	14.454	14.452
16.250	14.450	14.448	14.447	14.445	14.443
16.500	14.442	14.440	14.439	14.438	14.436
16.750	14.435	14.434	14.433	14.432	14.431
17.000	14.430	14.429	14.428	14.427	14.426
17.250	14.425	14.424	14.424	14.423	14.422
17.500	14.421	14.420	14.420	14.419	14.418
17.750	14.417	14.416	14.416	14.415	14.414
18.000	14.413	14.413	14.412	14.411	14.411
18.250	14.410	14.409	14.408	14.408	14.407
18.500	14.406	14.405	14.405	14.404	14.403
18.750	14.403	14.402	14.401	14.401	14.400
19.000	14.399	14.398	14.398	14.397	14.396
19.250	14.396	14.395	14.394	14.393	14.393
19.500	14.392	14.391	14.391	14.390	14.389
19.750	14.389	14.388	14.387	14.386	14.386
20.000	14.385	14.384	14.384	14.383	14.382

CAL883229B_Stormwater Report

Subsection: Time vs. Volume
 Label: North Wetland
 Scenario: Post-Development 25 year

Return Event: 25 years
 Storm Event: 25 year

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
20.250	14.382	14.381	14.380	14.379	14.379
20.500	14.378	14.377	14.377	14.376	14.375
20.750	14.374	14.374	14.373	14.372	14.372
21.000	14.371	14.370	14.370	14.369	14.368
21.250	14.367	14.367	14.366	14.365	14.364
21.500	14.363	14.362	14.361	14.359	14.358
21.750	14.356	14.355	14.353	14.352	14.350
22.000	14.348	14.346	14.344	14.342	14.340
22.250	14.338	14.336	14.333	14.331	14.329
22.500	14.326	14.324	14.321	14.318	14.315
22.750	14.312	14.310	14.307	14.303	14.300
23.000	14.297	14.294	14.290	14.287	14.283
23.250	14.280	14.276	14.273	14.269	14.265
23.500	14.261	14.257	14.253	14.249	14.245
23.750	14.240	14.236	14.232	14.227	14.223
24.000	14.218	(N/A)	(N/A)	(N/A)	(N/A)

CAL883229B_Stormwater Report

Subsection: Time vs. Volume

Return Event: 100 years

Label: North Wetland

Storm Event: 100 year

Scenario: Post-Development 100 year

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
0.000	6.166	6.177	6.187	6.198	6.209
0.250	6.219	6.230	6.241	6.251	6.262
0.500	6.272	6.283	6.293	6.304	6.314
0.750	6.325	6.335	6.345	6.356	6.366
1.000	6.376	6.387	6.397	6.407	6.417
1.250	6.427	6.438	6.448	6.458	6.468
1.500	6.478	6.488	6.498	6.508	6.518
1.750	6.528	6.538	6.548	6.558	6.568
2.000	6.578	6.588	6.598	6.607	6.617
2.250	6.627	6.637	6.646	6.656	6.666
2.500	6.675	6.685	6.695	6.704	6.714
2.750	6.724	6.733	6.743	6.752	6.762
3.000	6.771	6.780	6.790	6.799	6.809
3.250	6.818	6.827	6.837	6.846	6.855
3.500	6.865	6.874	6.883	6.892	6.901
3.750	6.911	6.920	6.929	6.938	6.947
4.000	6.956	6.965	6.974	6.983	6.992
4.250	7.001	7.010	7.019	7.028	7.037
4.500	7.045	7.054	7.063	7.072	7.081
4.750	7.089	7.098	7.107	7.116	7.124
5.000	7.133	7.142	7.150	7.159	7.167
5.250	7.176	7.185	7.193	7.202	7.210
5.500	7.219	7.227	7.235	7.244	7.252
5.750	7.261	7.269	7.277	7.286	7.294
6.000	7.303	7.312	7.320	7.329	7.338
6.250	7.347	7.356	7.365	7.374	7.383
6.500	7.393	7.402	7.411	7.421	7.431
6.750	7.440	7.450	7.460	7.470	7.480
7.000	7.490	7.500	7.510	7.520	7.531
7.250	7.541	7.552	7.563	7.573	7.584
7.500	7.595	7.606	7.617	7.628	7.640
7.750	7.651	7.662	7.674	7.686	7.697
8.000	7.709	7.721	7.733	7.745	7.757
8.250	7.770	7.782	7.795	7.807	7.820
8.500	7.833	7.846	7.859	7.872	7.885
8.750	7.898	7.912	7.925	7.939	7.952
9.000	7.966	7.980	7.995	8.011	8.029
9.250	8.047	8.066	8.086	8.106	8.126
9.500	8.146	8.167	8.188	8.209	8.231
9.750	8.253	8.275	8.298	8.321	8.344

CAL883229B_Stormwater Report

Subsection: Time vs. Volume

Return Event: 100 years

Label: North Wetland

Storm Event: 100 year

Scenario: Post-Development 100 year

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
10.000	8.368	8.391	8.416	8.440	8.465
10.250	8.490	8.515	8.541	8.567	8.593
10.500	8.620	8.647	8.677	8.710	8.746
10.750	8.786	8.830	8.876	8.926	8.978
11.000	9.034	9.093	9.155	9.221	9.291
11.250	9.364	9.441	9.522	9.607	9.697
11.500	9.790	9.889	10.000	10.129	10.280
11.750	10.434	10.609	10.821	11.079	11.403
12.000	11.832	12.427	13.269	14.382	15.412
12.250	16.045	16.376	16.511	16.531	16.485
12.500	16.403	16.304	16.196	16.088	15.984
12.750	15.893	15.814	15.747	15.690	15.642
13.000	15.601	15.566	15.535	15.508	15.481
13.250	15.452	15.422	15.391	15.359	15.327
13.500	15.294	15.260	15.224	15.185	15.145
13.750	15.106	15.068	15.033	15.001	14.972
14.000	14.944	14.920	14.897	14.876	14.857
14.250	14.839	14.823	14.808	14.795	14.782
14.500	14.770	14.760	14.750	14.740	14.732
14.750	14.724	14.716	14.709	14.702	14.696
15.000	14.690	14.684	14.677	14.667	14.655
15.250	14.643	14.631	14.619	14.609	14.599
15.500	14.590	14.581	14.573	14.566	14.560
15.750	14.554	14.548	14.543	14.538	14.534
16.000	14.530	14.526	14.522	14.519	14.516
16.250	14.513	14.510	14.508	14.505	14.503
16.500	14.501	14.499	14.497	14.495	14.493
16.750	14.491	14.490	14.488	14.487	14.485
17.000	14.484	14.482	14.481	14.480	14.478
17.250	14.477	14.476	14.475	14.474	14.472
17.500	14.471	14.470	14.469	14.468	14.467
17.750	14.466	14.465	14.463	14.462	14.461
18.000	14.460	14.459	14.458	14.457	14.456
18.250	14.455	14.454	14.453	14.452	14.451
18.500	14.450	14.449	14.448	14.447	14.446
18.750	14.445	14.444	14.443	14.442	14.441
19.000	14.440	14.439	14.438	14.437	14.436
19.250	14.435	14.434	14.433	14.432	14.431
19.500	14.430	14.429	14.428	14.427	14.426
19.750	14.425	14.424	14.423	14.422	14.421
20.000	14.420	14.419	14.418	14.417	14.416

CAL883229B_Stormwater Report

Subsection: Time vs. Volume

Return Event: 100 years

Label: North Wetland

Storm Event: 100 year

Scenario: Post-Development 100 year

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
20.250	14.415	14.414	14.413	14.412	14.411
20.500	14.410	14.409	14.408	14.407	14.406
20.750	14.405	14.404	14.403	14.402	14.401
21.000	14.400	14.399	14.398	14.397	14.396
21.250	14.395	14.394	14.393	14.392	14.391
21.500	14.390	14.389	14.388	14.387	14.386
21.750	14.385	14.384	14.383	14.382	14.381
22.000	14.380	14.379	14.378	14.377	14.376
22.250	14.375	14.374	14.373	14.372	14.371
22.500	14.370	14.369	14.368	14.367	14.366
22.750	14.365	14.363	14.362	14.360	14.358
23.000	14.357	14.355	14.353	14.351	14.348
23.250	14.346	14.344	14.341	14.339	14.336
23.500	14.333	14.330	14.327	14.324	14.321
23.750	14.317	14.314	14.310	14.307	14.303
24.000	14.299	(N/A)	(N/A)	(N/A)	(N/A)

CAL883229B_Stormwater Report

Subsection: Time vs. Volume
 Label: South Wetland
 Scenario: Post-Development 2 year

Return Event: 2 years
 Storm Event: 2 year

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
0.000	2.705	2.695	2.701	2.706	2.711
0.250	2.717	2.722	2.727	2.733	2.738
0.500	2.743	2.748	2.753	2.759	2.764
0.750	2.769	2.774	2.779	2.784	2.789
1.000	2.794	2.799	2.804	2.809	2.814
1.250	2.819	2.824	2.829	2.834	2.839
1.500	2.844	2.848	2.853	2.858	2.863
1.750	2.867	2.872	2.877	2.881	2.886
2.000	2.891	2.895	2.900	2.905	2.909
2.250	2.914	2.918	2.923	2.927	2.932
2.500	2.936	2.941	2.945	2.950	2.954
2.750	2.958	2.963	2.967	2.971	2.976
3.000	2.980	2.984	2.988	2.993	2.997
3.250	3.001	3.005	3.009	3.014	3.018
3.500	3.022	3.026	3.030	3.034	3.038
3.750	3.042	3.046	3.050	3.054	3.058
4.000	3.062	3.066	3.070	3.074	3.078
4.250	3.082	3.085	3.089	3.093	3.097
4.500	3.101	3.104	3.108	3.112	3.116
4.750	3.119	3.123	3.127	3.130	3.134
5.000	3.138	3.141	3.145	3.149	3.152
5.250	3.156	3.159	3.163	3.166	3.170
5.500	3.173	3.177	3.180	3.184	3.186
5.750	3.189	3.192	3.195	3.198	3.201
6.000	3.204	3.206	3.209	3.212	3.215
6.250	3.218	3.220	3.223	3.226	3.228
6.500	3.231	3.234	3.237	3.239	3.242
6.750	3.244	3.247	3.250	3.252	3.255
7.000	3.257	3.260	3.263	3.265	3.268
7.250	3.270	3.273	3.275	3.278	3.280
7.500	3.283	3.285	3.287	3.290	3.292
7.750	3.295	3.297	3.299	3.302	3.304
8.000	3.307	3.309	3.311	3.314	3.316
8.250	3.318	3.320	3.323	3.325	3.327
8.500	3.329	3.332	3.334	3.336	3.338
8.750	3.340	3.343	3.345	3.347	3.349
9.000	3.351	3.353	3.356	3.358	3.360
9.250	3.362	3.364	3.366	3.368	3.370
9.500	3.372	3.374	3.376	3.378	3.380
9.750	3.382	3.385	3.387	3.389	3.391

CAL883229B_Stormwater Report

Subsection: Time vs. Volume
 Label: South Wetland
 Scenario: Post-Development 2 year

Return Event: 2 years
 Storm Event: 2 year

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
10.000	3.393	3.395	3.397	3.400	3.402
10.250	3.404	3.406	3.409	3.411	3.413
10.500	3.416	3.418	3.421	3.423	3.426
10.750	3.429	3.432	3.435	3.438	3.442
11.000	3.445	3.449	3.453	3.457	3.461
11.250	3.466	3.471	3.476	3.481	3.487
11.500	3.492	3.499	3.506	3.515	3.526
11.750	3.539	3.554	3.573	3.597	3.629
12.000	3.676	3.744	3.844	3.952	4.027
12.250	4.074	4.110	4.139	4.163	4.183
12.500	4.201	4.215	4.227	4.237	4.247
12.750	4.256	4.264	4.272	4.280	4.288
13.000	4.295	4.301	4.307	4.313	4.319
13.250	4.324	4.329	4.333	4.337	4.341
13.500	4.344	4.347	4.348	4.350	4.351
13.750	4.352	4.353	4.353	4.354	4.355
14.000	4.356	4.357	4.358	4.359	4.359
14.250	4.360	4.361	4.361	4.362	4.363
14.500	4.363	4.364	4.364	4.365	4.365
14.750	4.366	4.366	4.367	4.367	4.368
15.000	4.368	4.368	4.368	4.367	4.366
15.250	4.365	4.364	4.364	4.363	4.362
15.500	4.361	4.360	4.359	4.358	4.357
15.750	4.356	4.355	4.354	4.353	4.352
16.000	4.352	4.351	4.350	4.349	4.348
16.250	4.347	4.346	4.345	4.344	4.343
16.500	4.342	4.341	4.340	4.339	4.338
16.750	4.337	4.336	4.335	4.334	4.333
17.000	4.332	4.330	4.329	4.328	4.327
17.250	4.326	4.325	4.324	4.323	4.322
17.500	4.321	4.320	4.319	4.318	4.316
17.750	4.315	4.314	4.313	4.312	4.311
18.000	4.310	4.309	4.307	4.306	4.305
18.250	4.304	4.303	4.302	4.301	4.299
18.500	4.298	4.297	4.296	4.295	4.294
18.750	4.292	4.291	4.290	4.289	4.288
19.000	4.286	4.285	4.284	4.283	4.281
19.250	4.280	4.279	4.278	4.277	4.275
19.500	4.274	4.273	4.272	4.270	4.269
19.750	4.268	4.267	4.265	4.264	4.263
20.000	4.261	4.260	4.259	4.258	4.256

CAL883229B_Stormwater Report

Subsection: Time vs. Volume
 Label: South Wetland
 Scenario: Post-Development 2 year

Return Event: 2 years
 Storm Event: 2 year

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
20.250	4.255	4.254	4.252	4.251	4.250
20.500	4.248	4.247	4.246	4.244	4.243
20.750	4.242	4.240	4.239	4.238	4.236
21.000	4.235	4.234	4.232	4.231	4.230
21.250	4.228	4.227	4.226	4.224	4.223
21.500	4.221	4.220	4.219	4.217	4.216
21.750	4.215	4.213	4.212	4.210	4.209
22.000	4.207	4.206	4.205	4.203	4.202
22.250	4.200	4.199	4.198	4.196	4.195
22.500	4.193	4.192	4.190	4.189	4.187
22.750	4.186	4.185	4.183	4.182	4.180
23.000	4.179	4.177	4.176	4.174	4.173
23.250	4.171	4.170	4.168	4.167	4.165
23.500	4.164	4.162	4.161	4.159	4.158
23.750	4.156	4.155	4.153	4.152	4.150
24.000	4.149	(N/A)	(N/A)	(N/A)	(N/A)

CAL883229B_Stormwater Report

Subsection: Time vs. Volume
 Label: South Wetland
 Scenario: Post-Development 5 year

Return Event: 5 years
 Storm Event: 5 year

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
0.000	2.705	2.695	2.701	2.706	2.711
0.250	2.717	2.722	2.727	2.733	2.738
0.500	2.743	2.748	2.753	2.759	2.764
0.750	2.769	2.774	2.779	2.784	2.789
1.000	2.794	2.799	2.804	2.809	2.814
1.250	2.819	2.824	2.829	2.834	2.839
1.500	2.844	2.848	2.853	2.858	2.863
1.750	2.867	2.872	2.877	2.881	2.886
2.000	2.891	2.895	2.900	2.905	2.909
2.250	2.914	2.918	2.923	2.927	2.932
2.500	2.936	2.941	2.945	2.950	2.954
2.750	2.958	2.963	2.967	2.971	2.976
3.000	2.980	2.984	2.988	2.993	2.997
3.250	3.001	3.005	3.009	3.014	3.018
3.500	3.022	3.026	3.030	3.034	3.038
3.750	3.042	3.046	3.050	3.054	3.058
4.000	3.062	3.066	3.070	3.074	3.078
4.250	3.082	3.085	3.089	3.093	3.097
4.500	3.101	3.104	3.108	3.112	3.116
4.750	3.119	3.123	3.127	3.130	3.134
5.000	3.138	3.141	3.145	3.149	3.152
5.250	3.156	3.159	3.163	3.166	3.170
5.500	3.173	3.177	3.180	3.184	3.186
5.750	3.189	3.192	3.195	3.198	3.201
6.000	3.204	3.206	3.209	3.212	3.215
6.250	3.218	3.220	3.223	3.226	3.228
6.500	3.231	3.234	3.237	3.239	3.242
6.750	3.244	3.247	3.250	3.252	3.255
7.000	3.257	3.260	3.263	3.265	3.268
7.250	3.270	3.273	3.275	3.278	3.280
7.500	3.283	3.285	3.287	3.290	3.292
7.750	3.295	3.297	3.299	3.302	3.304
8.000	3.307	3.309	3.311	3.314	3.316
8.250	3.318	3.320	3.323	3.325	3.327
8.500	3.329	3.332	3.334	3.336	3.338
8.750	3.341	3.343	3.345	3.347	3.349
9.000	3.352	3.354	3.356	3.358	3.361
9.250	3.363	3.365	3.368	3.370	3.373
9.500	3.375	3.378	3.380	3.383	3.385
9.750	3.388	3.390	3.393	3.395	3.398

CAL883229B_Stormwater Report

Subsection: Time vs. Volume
 Label: South Wetland
 Scenario: Post-Development 5 year

Return Event: 5 years
 Storm Event: 5 year

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
10.000	3.401	3.403	3.406	3.409	3.412
10.250	3.414	3.417	3.420	3.423	3.426
10.500	3.429	3.432	3.435	3.439	3.442
10.750	3.446	3.450	3.455	3.460	3.464
11.000	3.470	3.475	3.481	3.487	3.493
11.250	3.499	3.506	3.514	3.521	3.529
11.500	3.538	3.547	3.558	3.572	3.587
11.750	3.606	3.629	3.657	3.692	3.739
12.000	3.806	3.904	4.045	4.195	4.300
12.250	4.364	4.413	4.452	4.484	4.511
12.500	4.534	4.554	4.569	4.582	4.594
12.750	4.605	4.616	4.626	4.636	4.645
13.000	4.654	4.662	4.670	4.677	4.683
13.250	4.689	4.695	4.700	4.705	4.709
13.500	4.712	4.715	4.716	4.717	4.717
13.750	4.718	4.718	4.719	4.719	4.719
14.000	4.720	4.720	4.720	4.720	4.720
14.250	4.720	4.721	4.721	4.721	4.721
14.500	4.721	4.721	4.721	4.720	4.720
14.750	4.720	4.720	4.720	4.719	4.719
15.000	4.719	4.718	4.717	4.715	4.713
15.250	4.711	4.709	4.707	4.705	4.703
15.500	4.701	4.699	4.697	4.695	4.693
15.750	4.691	4.689	4.687	4.685	4.683
16.000	4.681	4.679	4.677	4.675	4.673
16.250	4.671	4.669	4.667	4.665	4.663
16.500	4.660	4.658	4.656	4.654	4.652
16.750	4.650	4.648	4.646	4.644	4.642
17.000	4.640	4.638	4.636	4.634	4.631
17.250	4.629	4.627	4.625	4.623	4.621
17.500	4.619	4.617	4.615	4.613	4.610
17.750	4.608	4.606	4.604	4.602	4.600
18.000	4.598	4.596	4.593	4.591	4.589
18.250	4.587	4.585	4.583	4.581	4.578
18.500	4.576	4.574	4.572	4.570	4.568
18.750	4.565	4.563	4.561	4.559	4.557
19.000	4.555	4.552	4.550	4.548	4.546
19.250	4.544	4.542	4.539	4.537	4.535
19.500	4.533	4.531	4.528	4.526	4.524
19.750	4.522	4.520	4.517	4.515	4.513
20.000	4.511	4.508	4.506	4.504	4.502

CAL883229B_Stormwater Report

Subsection: Time vs. Volume
 Label: South Wetland
 Scenario: Post-Development 5 year

Return Event: 5 years
 Storm Event: 5 year

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
20.250	4.500	4.497	4.495	4.493	4.491
20.500	4.488	4.486	4.484	4.482	4.479
20.750	4.477	4.475	4.473	4.470	4.468
21.000	4.466	4.464	4.461	4.459	4.457
21.250	4.455	4.452	4.450	4.448	4.446
21.500	4.443	4.441	4.439	4.437	4.434
21.750	4.432	4.430	4.427	4.425	4.423
22.000	4.421	4.418	4.416	4.414	4.411
22.250	4.409	4.407	4.404	4.402	4.400
22.500	4.398	4.395	4.393	4.391	4.388
22.750	4.386	4.384	4.381	4.379	4.377
23.000	4.374	4.372	4.370	4.367	4.365
23.250	4.363	4.360	4.358	4.356	4.353
23.500	4.351	4.349	4.346	4.344	4.342
23.750	4.339	4.337	4.335	4.332	4.330
24.000	4.328	(N/A)	(N/A)	(N/A)	(N/A)

CAL883229B_Stormwater Report

Subsection: Time vs. Volume
 Label: South Wetland
 Scenario: Post-Development 25 year

Return Event: 25 years
 Storm Event: 25 year

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
0.000	2.705	2.695	2.701	2.706	2.711
0.250	2.717	2.722	2.727	2.733	2.738
0.500	2.743	2.748	2.753	2.759	2.764
0.750	2.769	2.774	2.779	2.784	2.789
1.000	2.794	2.799	2.804	2.809	2.814
1.250	2.819	2.824	2.829	2.834	2.839
1.500	2.844	2.848	2.853	2.858	2.863
1.750	2.867	2.872	2.877	2.881	2.886
2.000	2.891	2.895	2.900	2.905	2.909
2.250	2.914	2.918	2.923	2.927	2.932
2.500	2.936	2.941	2.945	2.950	2.954
2.750	2.958	2.963	2.967	2.971	2.976
3.000	2.980	2.984	2.988	2.993	2.997
3.250	3.001	3.005	3.009	3.014	3.018
3.500	3.022	3.026	3.030	3.034	3.038
3.750	3.042	3.046	3.050	3.054	3.058
4.000	3.062	3.066	3.070	3.074	3.078
4.250	3.082	3.085	3.089	3.093	3.097
4.500	3.101	3.104	3.108	3.112	3.116
4.750	3.119	3.123	3.127	3.130	3.134
5.000	3.138	3.141	3.145	3.149	3.152
5.250	3.156	3.159	3.163	3.166	3.170
5.500	3.173	3.177	3.180	3.184	3.186
5.750	3.189	3.192	3.195	3.198	3.201
6.000	3.204	3.206	3.209	3.212	3.215
6.250	3.218	3.220	3.223	3.226	3.228
6.500	3.231	3.234	3.237	3.239	3.242
6.750	3.244	3.247	3.250	3.252	3.255
7.000	3.258	3.260	3.263	3.265	3.268
7.250	3.271	3.273	3.276	3.279	3.281
7.500	3.284	3.287	3.289	3.292	3.295
7.750	3.297	3.300	3.303	3.306	3.308
8.000	3.311	3.314	3.317	3.319	3.322
8.250	3.325	3.328	3.330	3.333	3.336
8.500	3.339	3.342	3.345	3.347	3.350
8.750	3.353	3.356	3.359	3.362	3.365
9.000	3.368	3.371	3.374	3.377	3.381
9.250	3.385	3.388	3.392	3.396	3.399
9.500	3.403	3.407	3.411	3.415	3.419
9.750	3.423	3.427	3.431	3.435	3.439

CAL883229B_Stormwater Report

Subsection: Time vs. Volume
 Label: South Wetland
 Scenario: Post-Development 25 year

Return Event: 25 years
 Storm Event: 25 year

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
10.000	3.444	3.448	3.452	3.457	3.461
10.250	3.466	3.470	3.475	3.479	3.484
10.500	3.489	3.494	3.499	3.506	3.513
10.750	3.520	3.528	3.536	3.545	3.554
11.000	3.564	3.575	3.585	3.597	3.609
11.250	3.622	3.635	3.649	3.664	3.679
11.500	3.695	3.713	3.734	3.760	3.790
11.750	3.827	3.871	3.924	3.990	4.078
12.000	4.203	4.382	4.638	4.908	5.094
12.250	5.208	5.292	5.353	5.402	5.442
12.500	5.476	5.504	5.526	5.544	5.560
12.750	5.575	5.590	5.603	5.616	5.628
13.000	5.639	5.650	5.659	5.668	5.676
13.250	5.683	5.689	5.694	5.699	5.703
13.500	5.706	5.708	5.708	5.706	5.705
13.750	5.703	5.702	5.700	5.698	5.696
14.000	5.694	5.693	5.691	5.689	5.687
14.250	5.685	5.683	5.681	5.679	5.676
14.500	5.674	5.672	5.670	5.668	5.665
14.750	5.663	5.661	5.658	5.656	5.653
15.000	5.651	5.648	5.644	5.639	5.634
15.250	5.629	5.624	5.619	5.614	5.609
15.500	5.604	5.599	5.594	5.589	5.585
15.750	5.580	5.575	5.570	5.565	5.560
16.000	5.555	5.551	5.546	5.541	5.536
16.250	5.531	5.527	5.522	5.517	5.512
16.500	5.508	5.503	5.498	5.494	5.489
16.750	5.484	5.479	5.475	5.470	5.466
17.000	5.461	5.456	5.452	5.447	5.442
17.250	5.438	5.433	5.429	5.424	5.420
17.500	5.415	5.410	5.406	5.401	5.397
17.750	5.392	5.388	5.383	5.379	5.374
18.000	5.370	5.366	5.361	5.357	5.352
18.250	5.348	5.343	5.339	5.335	5.330
18.500	5.326	5.321	5.317	5.313	5.308
18.750	5.303	5.298	5.293	5.288	5.283
19.000	5.279	5.274	5.269	5.264	5.259
19.250	5.254	5.249	5.244	5.239	5.234
19.500	5.230	5.225	5.220	5.215	5.210
19.750	5.205	5.200	5.195	5.191	5.186
20.000	5.181	5.176	5.171	5.166	5.162

CAL883229B_Stormwater Report

Subsection: Time vs. Volume
 Label: South Wetland
 Scenario: Post-Development 25 year

Return Event: 25 years
 Storm Event: 25 year

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours
Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
20.250	5.157	5.152	5.147	5.142	5.137
20.500	5.133	5.128	5.123	5.118	5.113
20.750	5.108	5.104	5.099	5.094	5.089
21.000	5.084	5.080	5.075	5.070	5.065
21.250	5.061	5.056	5.051	5.046	5.042
21.500	5.037	5.032	5.027	5.022	5.018
21.750	5.013	5.008	5.004	4.999	4.994
22.000	4.989	4.985	4.980	4.975	4.970
22.250	4.966	4.961	4.956	4.952	4.947
22.500	4.942	4.937	4.933	4.928	4.923
22.750	4.919	4.914	4.909	4.905	4.900
23.000	4.895	4.891	4.886	4.881	4.877
23.250	4.872	4.867	4.863	4.858	4.853
23.500	4.849	4.844	4.839	4.835	4.830
23.750	4.825	4.821	4.816	4.812	4.807
24.000	4.802	(N/A)	(N/A)	(N/A)	(N/A)

CAL883229B_Stormwater Report

Subsection: Time vs. Volume

Return Event: 100 years

Label: South Wetland

Storm Event: 100 year

Scenario: Post-Development 100 year

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
0.000	2.705	2.695	2.701	2.706	2.711
0.250	2.717	2.722	2.727	2.733	2.738
0.500	2.743	2.748	2.753	2.759	2.764
0.750	2.769	2.774	2.779	2.784	2.789
1.000	2.794	2.799	2.804	2.809	2.814
1.250	2.819	2.824	2.829	2.834	2.839
1.500	2.844	2.848	2.853	2.858	2.863
1.750	2.867	2.872	2.877	2.881	2.886
2.000	2.891	2.895	2.900	2.905	2.909
2.250	2.914	2.918	2.923	2.927	2.932
2.500	2.936	2.941	2.945	2.950	2.954
2.750	2.958	2.963	2.967	2.971	2.976
3.000	2.980	2.984	2.988	2.993	2.997
3.250	3.001	3.005	3.009	3.014	3.018
3.500	3.022	3.026	3.030	3.034	3.038
3.750	3.042	3.046	3.050	3.054	3.058
4.000	3.062	3.066	3.070	3.074	3.078
4.250	3.082	3.085	3.089	3.093	3.097
4.500	3.101	3.104	3.108	3.112	3.116
4.750	3.119	3.123	3.127	3.130	3.134
5.000	3.138	3.141	3.145	3.149	3.152
5.250	3.156	3.159	3.163	3.166	3.170
5.500	3.173	3.177	3.180	3.184	3.186
5.750	3.189	3.192	3.195	3.198	3.201
6.000	3.204	3.207	3.210	3.213	3.216
6.250	3.219	3.222	3.225	3.228	3.231
6.500	3.234	3.237	3.240	3.243	3.247
6.750	3.250	3.253	3.256	3.259	3.262
7.000	3.266	3.269	3.272	3.275	3.279
7.250	3.282	3.285	3.288	3.292	3.295
7.500	3.299	3.302	3.305	3.309	3.312
7.750	3.316	3.319	3.323	3.326	3.330
8.000	3.333	3.337	3.340	3.344	3.347
8.250	3.351	3.355	3.358	3.362	3.366
8.500	3.369	3.373	3.377	3.381	3.384
8.750	3.388	3.392	3.396	3.400	3.404
9.000	3.408	3.412	3.416	3.422	3.427
9.250	3.432	3.438	3.443	3.449	3.454
9.500	3.460	3.466	3.472	3.478	3.484
9.750	3.490	3.496	3.502	3.508	3.514

CAL883229B_Stormwater Report

Subsection: Time vs. Volume

Return Event: 100 years

Label: South Wetland

Storm Event: 100 year

Scenario: Post-Development 100 year

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
10.000	3.521	3.527	3.534	3.540	3.547
10.250	3.554	3.561	3.567	3.574	3.581
10.500	3.588	3.596	3.605	3.615	3.626
10.750	3.638	3.651	3.664	3.678	3.693
11.000	3.709	3.726	3.743	3.762	3.781
11.250	3.802	3.823	3.845	3.869	3.893
11.500	3.919	3.947	3.982	4.023	4.072
11.750	4.130	4.200	4.285	4.390	4.529
12.000	4.726	5.007	5.396	5.766	6.020
12.250	6.165	6.271	6.354	6.420	6.475
12.500	6.519	6.554	6.580	6.600	6.618
12.750	6.634	6.649	6.663	6.675	6.687
13.000	6.697	6.705	6.712	6.718	6.722
13.250	6.726	6.728	6.729	6.728	6.727
13.500	6.725	6.721	6.715	6.707	6.699
13.750	6.691	6.683	6.674	6.666	6.658
14.000	6.650	6.642	6.634	6.626	6.618
14.250	6.610	6.602	6.594	6.586	6.578
14.500	6.570	6.563	6.555	6.547	6.539
14.750	6.532	6.524	6.516	6.509	6.501
15.000	6.494	6.485	6.476	6.465	6.454
15.250	6.444	6.433	6.422	6.412	6.402
15.500	6.391	6.381	6.371	6.361	6.351
15.750	6.341	6.332	6.322	6.313	6.303
16.000	6.294	6.285	6.275	6.266	6.257
16.250	6.248	6.240	6.231	6.222	6.213
16.500	6.205	6.196	6.188	6.180	6.171
16.750	6.163	6.155	6.147	6.139	6.131
17.000	6.123	6.116	6.108	6.100	6.093
17.250	6.085	6.078	6.070	6.063	6.056
17.500	6.048	6.041	6.034	6.027	6.020
17.750	6.013	6.006	5.999	5.993	5.986
18.000	5.979	5.972	5.965	5.958	5.951
18.250	5.944	5.937	5.930	5.923	5.916
18.500	5.909	5.902	5.895	5.888	5.881
18.750	5.874	5.868	5.861	5.854	5.847
19.000	5.840	5.834	5.827	5.820	5.813
19.250	5.807	5.800	5.793	5.787	5.780
19.500	5.773	5.767	5.760	5.753	5.747
19.750	5.740	5.734	5.727	5.721	5.714
20.000	5.708	5.701	5.695	5.688	5.682

CAL883229B_Stormwater Report

Subsection: Time vs. Volume

Return Event: 100 years

Label: South Wetland

Storm Event: 100 year

Scenario: Post-Development 100 year

Time vs. Volume (ac-ft)

Output Time increment = 0.050 hours

Time on left represents time for first value in each row.

Time (hours)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)	Volume (ac-ft)
20.250	5.675	5.669	5.662	5.656	5.649
20.500	5.643	5.637	5.630	5.624	5.618
20.750	5.611	5.605	5.599	5.592	5.586
21.000	5.580	5.573	5.567	5.561	5.555
21.250	5.548	5.542	5.536	5.530	5.524
21.500	5.517	5.511	5.505	5.499	5.493
21.750	5.487	5.481	5.474	5.468	5.462
22.000	5.456	5.450	5.444	5.438	5.432
22.250	5.426	5.420	5.414	5.408	5.402
22.500	5.396	5.390	5.384	5.378	5.372
22.750	5.366	5.360	5.354	5.348	5.343
23.000	5.337	5.331	5.325	5.319	5.313
23.250	5.307	5.300	5.294	5.287	5.281
23.500	5.274	5.267	5.261	5.254	5.248
23.750	5.241	5.234	5.228	5.221	5.215
24.000	5.208	(N/A)	(N/A)	(N/A)	(N/A)

CAL883229B_Stormwater Report

Subsection: Outlet Input Data
 Label: North Wetland
 Scenario: Post-Development 2 year

Return Event: 2 years
 Storm Event: 2 year

Requested Pond Water Surface Elevations	
Minimum (Headwater)	1,184.00 ft
Increment (Headwater)	0.50 ft
Maximum (Headwater)	1,188.00 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Stand Pipe	24" Riser	Forward	18" CMP	1,185.50	1,188.00
Culvert-Circular	18" CMP	Forward	WCS Stop Log	1,182.00	1,188.00
Rectangular Weir	WCS Stop Log	Forward	18" CMP Outlet	1,185.92	1,188.00
Culvert-Circular	18" CMP Outlet	Forward	TW	1,181.00	1,188.00
Irregular Weir	Overflow 1	Forward	TW	1,186.90	1,188.00
Tailwater Settings	Tailwater			(N/A)	(N/A)

CAL883229B_Stormwater Report

Subsection: Outlet Input Data
Label: North Wetland
Scenario: Post-Development 2 year

Return Event: 2 years
Storm Event: 2 year

Structure ID: 24" Riser	
Structure Type: Stand Pipe	
<hr/>	
Number of Openings	1
Elevation	1,185.50 ft
Diameter	24.0 in
Orifice Area	3.1 ft ²
Orifice Coefficient	0.600
Weir Length	6.28 ft
Weir Coefficient	3.00 (ft ^{0.5})/s
K Reverse	1.000
Manning's n	0.000
Kev, Charged Riser	0.000
Weir Submergence	False
Orifice H to crest	False

CAL883229B_Stormwater Report

Subsection: Outlet Input Data
 Label: North Wetland
 Scenario: Post-Development 2 year

Return Event: 2 years
 Storm Event: 2 year

Structure ID: 18" CMP Outlet	
Structure Type: Culvert-Circular	
Number of Barrels	1
Diameter	18.0 in
Length	31.00 ft
Length (Computed Barrel)	31.00 ft
Slope (Computed)	0.000 ft/ft
<hr/>	
Outlet Control Data	
Manning's n	0.013
Ke	0.200
Kb	0.018
Kr	0.000
Convergence Tolerance	0.00 ft
<hr/>	
Inlet Control Data	
Equation Form	Form 1
K	0.0045
M	2.0000
C	0.0317
Y	0.6900
T1 ratio (HW/D)	1.095
T2 ratio (HW/D)	1.197
Slope Correction Factor	-0.500

Use unsubmerged inlet control 0 equation below T1 elevation.

Use submerged inlet control 0 equation above T2 elevation

In transition zone between unsubmerged and submerged inlet control, interpolate between flows at T1 & T2...

T1 Elevation	1,182.64 ft	T1 Flow	7.58 ft ³ /s
T2 Elevation	1,182.80 ft	T2 Flow	8.66 ft ³ /s

CAL883229B_Stormwater Report

Subsection: Outlet Input Data
 Label: North Wetland
 Scenario: Post-Development 2 year

Return Event: 2 years
 Storm Event: 2 year

Structure ID: WCS Stop Log	
Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	1,185.92 ft
Weir Length	4.00 ft
Weir Coefficient	3.00 (ft ^{0.5})/s

Structure ID: Overflow 1
Structure Type: Irregular Weir

Station (ft)	Elevation (ft)
2.00	1,188.00
50.00	1,186.90
320.00	1,186.90
368.00	1,188.00

Lowest Elevation	1,186.90 ft
Weir Coefficient	3.00 (ft ^{0.5})/s

Structure ID: 18" CMP	
Structure Type: Culvert-Circular	
Number of Barrels	1
Diameter	18.0 in
Length	145.00 ft
Length (Computed Barrel)	145.00 ft
Slope (Computed)	0.007 ft/ft

Outlet Control Data	
Manning's n	0.013
Ke	0.200
Kb	0.018
Kr	0.000
Convergence Tolerance	0.00 ft

Inlet Control Data	
Equation Form	Form 1
K	0.0045
M	2.0000
C	0.0317
Y	0.6900
T1 ratio (HW/D)	1.092
T2 ratio (HW/D)	1.194

CAL883229B_Stormwater Report

Subsection: Outlet Input Data
Label: North Wetland
Scenario: Post-Development 2 year

Return Event: 2 years
Storm Event: 2 year

Inlet Control Data

Slope Correction Factor	-0.500
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Use unsubmerged inlet control 0 equation below T1 elevation.

Use submerged inlet control 0 equation above T2 elevation

In transition zone between unsubmerged and submerged inlet control, interpolate between flows at T1 & T2...

T1 Elevation	1,183.64 ft	T1 Flow	7.58 ft ³ /s
T2 Elevation	1,183.79 ft	T2 Flow	8.66 ft ³ /s

CAL883229B_Stormwater Report

Subsection: Outlet Input Data
Label: North Wetland
Scenario: Post-Development 2 year

Return Event: 2 years
Storm Event: 2 year

Structure ID: TW	
Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall

Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft ³ /s
Flow Tolerance (Maximum)	10.000 ft ³ /s

CAL883229B_Stormwater Report

Subsection: Outlet Input Data
 Label: North Wetland
 Scenario: Post-Development 5 year

Return Event: 5 years
 Storm Event: 5 year

Requested Pond Water Surface Elevations	
Minimum (Headwater)	1,184.00 ft
Increment (Headwater)	0.50 ft
Maximum (Headwater)	1,188.00 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Stand Pipe	24" Riser	Forward	18" CMP	1,185.50	1,188.00
Culvert-Circular	18" CMP	Forward	WCS Stop Log	1,182.00	1,188.00
Rectangular Weir	WCS Stop Log	Forward	18" CMP Outlet	1,185.92	1,188.00
Culvert-Circular	18" CMP Outlet	Forward	TW	1,181.00	1,188.00
Irregular Weir	Overflow 1	Forward	TW	1,186.90	1,188.00
Tailwater Settings	Tailwater			(N/A)	(N/A)

CAL883229B_Stormwater Report

Subsection: Outlet Input Data
Label: North Wetland
Scenario: Post-Development 5 year

Return Event: 5 years
Storm Event: 5 year

Structure ID: 24" Riser	
Structure Type: Stand Pipe	
<hr/>	
Number of Openings	1
Elevation	1,185.50 ft
Diameter	24.0 in
Orifice Area	3.1 ft ²
Orifice Coefficient	0.600
Weir Length	6.28 ft
Weir Coefficient	3.00 (ft ^{0.5})/s
K Reverse	1.000
Manning's n	0.000
Kev, Charged Riser	0.000
Weir Submergence	False
Orifice H to crest	False

CAL883229B_Stormwater Report

Subsection: Outlet Input Data
 Label: North Wetland
 Scenario: Post-Development 5 year

Return Event: 5 years
 Storm Event: 5 year

Structure ID: 18" CMP Outlet	
Structure Type: Culvert-Circular	
Number of Barrels	1
Diameter	18.0 in
Length	31.00 ft
Length (Computed Barrel)	31.00 ft
Slope (Computed)	0.000 ft/ft
<hr/>	
Outlet Control Data	
Manning's n	0.013
Ke	0.200
Kb	0.018
Kr	0.000
Convergence Tolerance	0.00 ft
<hr/>	
Inlet Control Data	
Equation Form	Form 1
K	0.0045
M	2.0000
C	0.0317
Y	0.6900
T1 ratio (HW/D)	1.095
T2 ratio (HW/D)	1.197
Slope Correction Factor	-0.500

Use unsubmerged inlet control 0 equation below T1 elevation.

Use submerged inlet control 0 equation above T2 elevation

In transition zone between unsubmerged and submerged inlet control, interpolate between flows at T1 & T2...

T1 Elevation	1,182.64 ft	T1 Flow	7.58 ft ³ /s
T2 Elevation	1,182.80 ft	T2 Flow	8.66 ft ³ /s

CAL883229B_Stormwater Report

Subsection: Outlet Input Data
 Label: North Wetland
 Scenario: Post-Development 5 year

Return Event: 5 years
 Storm Event: 5 year

Structure ID: WCS Stop Log	
Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	1,185.92 ft
Weir Length	4.00 ft
Weir Coefficient	3.00 (ft ^{0.5})/s

Structure ID: Overflow 1
Structure Type: Irregular Weir

Station (ft)	Elevation (ft)
2.00	1,188.00
50.00	1,186.90
320.00	1,186.90
368.00	1,188.00

Lowest Elevation	1,186.90 ft
Weir Coefficient	3.00 (ft ^{0.5})/s

Structure ID: 18" CMP	
Structure Type: Culvert-Circular	
Number of Barrels	1
Diameter	18.0 in
Length	145.00 ft
Length (Computed Barrel)	145.00 ft
Slope (Computed)	0.007 ft/ft

Outlet Control Data	
Manning's n	0.013
Ke	0.200
Kb	0.018
Kr	0.000
Convergence Tolerance	0.00 ft

Inlet Control Data	
Equation Form	Form 1
K	0.0045
M	2.0000
C	0.0317
Y	0.6900
T1 ratio (HW/D)	1.092
T2 ratio (HW/D)	1.194

CAL883229B_Stormwater Report

Subsection: Outlet Input Data
Label: North Wetland
Scenario: Post-Development 5 year

Return Event: 5 years
Storm Event: 5 year

Inlet Control Data	
Slope Correction Factor	-0.500

Use unsubmerged inlet control 0 equation below T1 elevation.
Use submerged inlet control 0 equation above T2 elevation

In transition zone between unsubmerged and submerged inlet control, interpolate between flows at T1 & T2...

T1 Elevation	1,183.64 ft	T1 Flow	7.58 ft ³ /s
T2 Elevation	1,183.79 ft	T2 Flow	8.66 ft ³ /s

CAL883229B_Stormwater Report

Subsection: Outlet Input Data
Label: North Wetland
Scenario: Post-Development 5 year

Return Event: 5 years
Storm Event: 5 year

Structure ID: TW	
Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall

Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft ³ /s
Flow Tolerance (Maximum)	10.000 ft ³ /s

CAL883229B_Stormwater Report

Subsection: Outlet Input Data
 Label: North Wetland
 Scenario: Post-Development 25 year

Return Event: 25 years
 Storm Event: 25 year

Requested Pond Water Surface Elevations	
Minimum (Headwater)	1,184.00 ft
Increment (Headwater)	0.50 ft
Maximum (Headwater)	1,188.00 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Stand Pipe	24" Riser	Forward	18" CMP	1,185.50	1,188.00
Culvert-Circular	18" CMP	Forward	WCS Stop Log	1,182.00	1,188.00
Rectangular Weir	WCS Stop Log	Forward	18" CMP Outlet	1,185.92	1,188.00
Culvert-Circular	18" CMP Outlet	Forward	TW	1,181.00	1,188.00
Irregular Weir	Overflow 1	Forward	TW	1,186.90	1,188.00
Tailwater Settings	Tailwater			(N/A)	(N/A)

CAL883229B_Stormwater Report

Subsection: Outlet Input Data
Label: North Wetland
Scenario: Post-Development 25 year

Return Event: 25 years
Storm Event: 25 year

Structure ID: 24" Riser	
Structure Type: Stand Pipe	
<hr/>	
Number of Openings	1
Elevation	1,185.50 ft
Diameter	24.0 in
Orifice Area	3.1 ft ²
Orifice Coefficient	0.600
Weir Length	6.28 ft
Weir Coefficient	3.00 (ft ^{0.5})/s
K Reverse	1.000
Manning's n	0.000
Kev, Charged Riser	0.000
Weir Submergence	False
Orifice H to crest	False

CAL883229B_Stormwater Report

Subsection: Outlet Input Data
 Label: North Wetland
 Scenario: Post-Development 25 year

Return Event: 25 years
 Storm Event: 25 year

Structure ID: 18" CMP Outlet	
Structure Type: Culvert-Circular	
Number of Barrels	1
Diameter	18.0 in
Length	31.00 ft
Length (Computed Barrel)	31.00 ft
Slope (Computed)	0.000 ft/ft
Outlet Control Data	
Manning's n	0.013
Ke	0.200
Kb	0.018
Kr	0.000
Convergence Tolerance	0.00 ft
Inlet Control Data	
Equation Form	Form 1
K	0.0045
M	2.0000
C	0.0317
Y	0.6900
T1 ratio (HW/D)	1.095
T2 ratio (HW/D)	1.197
Slope Correction Factor	-0.500

Use unsubmerged inlet control 0 equation below T1 elevation.

Use submerged inlet control 0 equation above T2 elevation

In transition zone between unsubmerged and submerged inlet control, interpolate between flows at T1 & T2...

T1 Elevation	1,182.64 ft	T1 Flow	7.58 ft ³ /s
T2 Elevation	1,182.80 ft	T2 Flow	8.66 ft ³ /s

CAL883229B_Stormwater Report

Subsection: Outlet Input Data
 Label: North Wetland
 Scenario: Post-Development 25 year

Return Event: 25 years
 Storm Event: 25 year

Structure ID: WCS Stop Log	
Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	1,185.92 ft
Weir Length	4.00 ft
Weir Coefficient	3.00 (ft ^{0.5})/s

Structure ID: Overflow 1
Structure Type: Irregular Weir

Station (ft)	Elevation (ft)
2.00	1,188.00
50.00	1,186.90
320.00	1,186.90
368.00	1,188.00

Lowest Elevation	1,186.90 ft
Weir Coefficient	3.00 (ft ^{0.5})/s

Structure ID: 18" CMP	
Structure Type: Culvert-Circular	
Number of Barrels	1
Diameter	18.0 in
Length	145.00 ft
Length (Computed Barrel)	145.00 ft
Slope (Computed)	0.007 ft/ft

Outlet Control Data	
Manning's n	0.013
Ke	0.200
Kb	0.018
Kr	0.000
Convergence Tolerance	0.00 ft

Inlet Control Data	
Equation Form	Form 1
K	0.0045
M	2.0000
C	0.0317
Y	0.6900
T1 ratio (HW/D)	1.092
T2 ratio (HW/D)	1.194

CAL883229B_Stormwater Report

Subsection: Outlet Input Data
Label: North Wetland
Scenario: Post-Development 25 year

Return Event: 25 years
Storm Event: 25 year

Inlet Control Data	
Slope Correction Factor	-0.500

Use unsubmerged inlet control 0 equation below T1 elevation.
Use submerged inlet control 0 equation above T2 elevation

In transition zone between unsubmerged and submerged inlet control, interpolate between flows at T1 & T2...

T1 Elevation	1,183.64 ft	T1 Flow	7.58 ft ³ /s
T2 Elevation	1,183.79 ft	T2 Flow	8.66 ft ³ /s

CAL883229B_Stormwater Report

Subsection: Outlet Input Data

Label: North Wetland

Scenario: Post-Development 25 year

Return Event: 25 years

Storm Event: 25 year

Structure ID: TW	
Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall

Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft ³ /s
Flow Tolerance (Maximum)	10.000 ft ³ /s

CAL883229B_Stormwater Report

Subsection: Outlet Input Data

Label: North Wetland

Scenario: Post-Development 100 year

Return Event: 100 years

Storm Event: 100 year

Requested Pond Water Surface Elevations

Minimum (Headwater)	1,184.00 ft
Increment (Headwater)	0.50 ft
Maximum (Headwater)	1,188.00 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Stand Pipe	24" Riser	Forward	18" CMP	1,185.50	1,188.00
Culvert-Circular	18" CMP	Forward	WCS Stop Log	1,182.00	1,188.00
Rectangular Weir	WCS Stop Log	Forward	18" CMP Outlet	1,185.92	1,188.00
Culvert-Circular	18" CMP Outlet	Forward	TW	1,181.00	1,188.00
Irregular Weir	Overflow 1	Forward	TW	1,186.90	1,188.00
Tailwater Settings	Tailwater			(N/A)	(N/A)

CAL883229B_Stormwater Report

Subsection: Outlet Input Data

Label: North Wetland

Scenario: Post-Development 100 year

Return Event: 100 years

Storm Event: 100 year

Structure ID: 24" Riser
Structure Type: Stand Pipe

Number of Openings	1
Elevation	1,185.50 ft
Diameter	24.0 in
Orifice Area	3.1 ft ²
Orifice Coefficient	0.600
Weir Length	6.28 ft
Weir Coefficient	3.00 (ft ^{0.5})/s
K Reverse	1.000
Manning's n	0.000
Kev, Charged Riser	0.000
Weir Submergence	False
Orifice H to crest	False

CAL883229B_Stormwater Report

Subsection: Outlet Input Data

Label: North Wetland

Scenario: Post-Development 100 year

Return Event: 100 years

Storm Event: 100 year

Structure ID: 18" CMP Outlet	
Structure Type: Culvert-Circular	
Number of Barrels	1
Diameter	18.0 in
Length	31.00 ft
Length (Computed Barrel)	31.00 ft
Slope (Computed)	0.000 ft/ft

Outlet Control Data	
Manning's n	0.013
Ke	0.200
Kb	0.018
Kr	0.000
Convergence Tolerance	0.00 ft

Inlet Control Data	
Equation Form	Form 1
K	0.0045
M	2.0000
C	0.0317
Y	0.6900
T1 ratio (HW/D)	1.095
T2 ratio (HW/D)	1.197
Slope Correction Factor	-0.500

Use unsubmerged inlet control 0 equation below T1 elevation.

Use submerged inlet control 0 equation above T2 elevation

In transition zone between unsubmerged and submerged inlet control, interpolate between flows at T1 & T2...

T1 Elevation	1,182.64 ft	T1 Flow	7.58 ft ³ /s
T2 Elevation	1,182.80 ft	T2 Flow	8.66 ft ³ /s

CAL883229B_Stormwater Report

Subsection: Outlet Input Data

Label: North Wetland

Scenario: Post-Development 100 year

Return Event: 100 years

Storm Event: 100 year

Structure ID: WCS Stop Log	
Structure Type: Rectangular Weir	
Number of Openings	1
Elevation	1,185.92 ft
Weir Length	4.00 ft
Weir Coefficient	3.00 (ft ^{0.5})/s

Structure ID: Overflow 1
Structure Type: Irregular Weir

Station (ft)	Elevation (ft)
2.00	1,188.00
50.00	1,186.90
320.00	1,186.90
368.00	1,188.00

Lowest Elevation	1,186.90 ft
Weir Coefficient	3.00 (ft ^{0.5})/s

Structure ID: 18" CMP	
Structure Type: Culvert-Circular	
Number of Barrels	1
Diameter	18.0 in
Length	145.00 ft
Length (Computed Barrel)	145.00 ft
Slope (Computed)	0.007 ft/ft

Outlet Control Data	
Manning's n	0.013
Ke	0.200
Kb	0.018
Kr	0.000
Convergence Tolerance	0.00 ft

Inlet Control Data	
Equation Form	Form 1
K	0.0045
M	2.0000
C	0.0317
Y	0.6900
T1 ratio (HW/D)	1.092
T2 ratio (HW/D)	1.194

CAL883229B_Stormwater Report

Subsection: Outlet Input Data

Label: North Wetland

Scenario: Post-Development 100 year

Return Event: 100 years

Storm Event: 100 year

Inlet Control Data

Slope Correction Factor	-0.500
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Use unsubmerged inlet control 0 equation below T1 elevation.

Use submerged inlet control 0 equation above T2 elevation

In transition zone between unsubmerged and submerged inlet control, interpolate between flows at T1 & T2...

T1 Elevation	1,183.64 ft	T1 Flow	7.58 ft ³ /s
T2 Elevation	1,183.79 ft	T2 Flow	8.66 ft ³ /s

CAL883229B_Stormwater Report

Subsection: Outlet Input Data

Label: North Wetland

Scenario: Post-Development 100 year

Return Event: 100 years

Storm Event: 100 year

Structure ID: TW	
Structure Type: TW Setup, DS Channel	
Tailwater Type	Free Outfall

Convergence Tolerances	
Maximum Iterations	30
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft ³ /s
Flow Tolerance (Maximum)	10.000 ft ³ /s

CAL883229B_Stormwater Report

Subsection: Outlet Input Data
 Label: South Wetland
 Scenario: Post-Development 2 year

Return Event: 2 years
 Storm Event: 2 year

Requested Pond Water Surface Elevations	
Minimum (Headwater)	1,183.10 ft
Increment (Headwater)	0.50 ft
Maximum (Headwater)	1,187.00 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Stand Pipe	24" Riser	Forward	18" CMP	1,185.50	1,187.00
Culvert-Circular	18" CMP	Forward	WCS Stop Log	1,181.00	1,187.00
Rectangular Weir	WCS Stop Log	Forward	18" CMP Outlet	1,185.92	1,187.00
Culvert-Circular	18" CMP Outlet	Forward	TW	1,180.50	1,187.00
Irregular Weir	Overflow 1	Forward	TW	1,186.49	1,187.00
Irregular Weir	Overflow 3	Forward	TW	1,186.71	1,187.00
Irregular Weir	Overflow 2	Forward	TW	1,186.81	1,187.00
Tailwater Settings	Tailwater			(N/A)	(N/A)

CAL883229B_Stormwater Report

Subsection: Outlet Input Data
Label: South Wetland
Scenario: Post-Development 2 year

Return Event: 2 years
Storm Event: 2 year

Structure ID: 24" Riser	
Structure Type: Stand Pipe	
<hr/>	
Number of Openings	1
Elevation	1,185.50 ft
Diameter	24.0 in
Orifice Area	3.1 ft ²
Orifice Coefficient	0.600
Weir Length	6.28 ft
Weir Coefficient	3.00 (ft ^{0.5})/s
K Reverse	1.000
Manning's n	0.000
Kev, Charged Riser	0.000
Weir Submergence	False
Orifice H to crest	False

CAL883229B_Stormwater Report

Subsection: Outlet Input Data
 Label: South Wetland
 Scenario: Post-Development 2 year

Return Event: 2 years
 Storm Event: 2 year

Structure ID: 18" CMP Outlet	
Structure Type: Culvert-Circular	
Number of Barrels	1
Diameter	18.0 in
Length	57.00 ft
Length (Computed Barrel)	57.00 ft
Slope (Computed)	0.009 ft/ft
<hr/>	
Outlet Control Data	
Manning's n	0.013
Ke	0.200
Kb	0.018
Kr	0.000
Convergence Tolerance	0.00 ft
<hr/>	
Inlet Control Data	
Equation Form	Form 1
K	0.0045
M	2.0000
C	0.0317
Y	0.6900
T1 ratio (HW/D)	1.091
T2 ratio (HW/D)	1.193
Slope Correction Factor	-0.500

Use unsubmerged inlet control 0 equation below T1 elevation.

Use submerged inlet control 0 equation above T2 elevation

In transition zone between unsubmerged and submerged inlet control, interpolate between flows at T1 & T2...

T1 Elevation	1,182.14 ft	T1 Flow	7.58 ft ³ /s
T2 Elevation	1,182.29 ft	T2 Flow	8.66 ft ³ /s

CAL883229B_Stormwater Report

Subsection: Outlet Input Data
Label: South Wetland
Scenario: Post-Development 2 year

Return Event: 2 years
Storm Event: 2 year

Structure ID: WCS Stop Log	
Structure Type: Rectangular Weir	
<hr/>	
Number of Openings	1
Elevation	1,185.92 ft
Weir Length	4.00 ft
Weir Coefficient	3.00 (ft ^{0.5})/s

CAL883229B_Stormwater Report

Subsection: Outlet Input Data
 Label: South Wetland
 Scenario: Post-Development 2 year

Return Event: 2 years
 Storm Event: 2 year

Structure ID: 18" CMP	
Structure Type: Culvert-Circular	
Number of Barrels	1
Diameter	18.0 in
Length	57.00 ft
Length (Computed Barrel)	57.00 ft
Slope (Computed)	0.009 ft/ft
<hr/>	
Outlet Control Data	
Manning's n	0.013
Ke	0.200
Kb	0.018
Kr	0.000
Convergence Tolerance	0.00 ft
<hr/>	
Inlet Control Data	
Equation Form	Form 1
K	0.0045
M	2.0000
C	0.0317
Y	0.6900
T1 ratio (HW/D)	1.091
T2 ratio (HW/D)	1.193
Slope Correction Factor	-0.500

Use unsubmerged inlet control 0 equation below T1 elevation.

Use submerged inlet control 0 equation above T2 elevation

In transition zone between unsubmerged and submerged inlet control, interpolate between flows at T1 & T2...

T1 Elevation	1,182.64 ft	T1 Flow	7.58 ft ³ /s
T2 Elevation	1,182.79 ft	T2 Flow	8.66 ft ³ /s

CAL883229B_Stormwater Report

Subsection: Outlet Input Data
Label: South Wetland
Scenario: Post-Development 2 year

Return Event: 2 years
Storm Event: 2 year

Convergence Tolerances	
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft ³ /s
Flow Tolerance (Maximum)	10.000 ft ³ /s

CAL883229B_Stormwater Report

Subsection: Outlet Input Data
 Label: South Wetland
 Scenario: Post-Development 5 year

Return Event: 5 years
 Storm Event: 5 year

Requested Pond Water Surface Elevations	
Minimum (Headwater)	1,183.10 ft
Increment (Headwater)	0.50 ft
Maximum (Headwater)	1,187.00 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Stand Pipe	24" Riser	Forward	18" CMP	1,185.50	1,187.00
Culvert-Circular	18" CMP	Forward	WCS Stop Log	1,181.00	1,187.00
Rectangular Weir	WCS Stop Log	Forward	18" CMP Outlet	1,185.92	1,187.00
Culvert-Circular	18" CMP Outlet	Forward	TW	1,180.50	1,187.00
Irregular Weir	Overflow 1	Forward	TW	1,186.49	1,187.00
Irregular Weir	Overflow 3	Forward	TW	1,186.71	1,187.00
Irregular Weir	Overflow 2	Forward	TW	1,186.81	1,187.00
Tailwater Settings	Tailwater			(N/A)	(N/A)

CAL883229B_Stormwater Report

Subsection: Outlet Input Data
Label: South Wetland
Scenario: Post-Development 5 year

Return Event: 5 years
Storm Event: 5 year

Structure ID: 24" Riser	
Structure Type: Stand Pipe	
<hr/>	
Number of Openings	1
Elevation	1,185.50 ft
Diameter	24.0 in
Orifice Area	3.1 ft ²
Orifice Coefficient	0.600
Weir Length	6.28 ft
Weir Coefficient	3.00 (ft ^{0.5})/s
K Reverse	1.000
Manning's n	0.000
Kev, Charged Riser	0.000
Weir Submergence	False
Orifice H to crest	False

CAL883229B_Stormwater Report

Subsection: Outlet Input Data
 Label: South Wetland
 Scenario: Post-Development 5 year

Return Event: 5 years
 Storm Event: 5 year

Structure ID: 18" CMP Outlet	
Structure Type: Culvert-Circular	
Number of Barrels	1
Diameter	18.0 in
Length	57.00 ft
Length (Computed Barrel)	57.00 ft
Slope (Computed)	0.009 ft/ft
<hr/>	
Outlet Control Data	
Manning's n	0.013
Ke	0.200
Kb	0.018
Kr	0.000
Convergence Tolerance	0.00 ft
<hr/>	
Inlet Control Data	
Equation Form	Form 1
K	0.0045
M	2.0000
C	0.0317
Y	0.6900
T1 ratio (HW/D)	1.091
T2 ratio (HW/D)	1.193
Slope Correction Factor	-0.500

Use unsubmerged inlet control 0 equation below T1 elevation.

Use submerged inlet control 0 equation above T2 elevation

In transition zone between unsubmerged and submerged inlet control, interpolate between flows at T1 & T2...

T1 Elevation	1,182.14 ft	T1 Flow	7.58 ft ³ /s
T2 Elevation	1,182.29 ft	T2 Flow	8.66 ft ³ /s

CAL883229B_Stormwater Report

Subsection: Outlet Input Data
Label: South Wetland
Scenario: Post-Development 5 year

Return Event: 5 years
Storm Event: 5 year

Structure ID: WCS Stop Log	
Structure Type: Rectangular Weir	
<hr/>	
Number of Openings	1
Elevation	1,185.92 ft
Weir Length	4.00 ft
Weir Coefficient	3.00 (ft ^{0.5})/s

CAL883229B_Stormwater Report

Subsection: Outlet Input Data
 Label: South Wetland
 Scenario: Post-Development 5 year

Return Event: 5 years
 Storm Event: 5 year

Structure ID: 18" CMP	
Structure Type: Culvert-Circular	
Number of Barrels	1
Diameter	18.0 in
Length	57.00 ft
Length (Computed Barrel)	57.00 ft
Slope (Computed)	0.009 ft/ft
<hr/>	
Outlet Control Data	
Manning's n	0.013
Ke	0.200
Kb	0.018
Kr	0.000
Convergence Tolerance	0.00 ft
<hr/>	
Inlet Control Data	
Equation Form	Form 1
K	0.0045
M	2.0000
C	0.0317
Y	0.6900
T1 ratio (HW/D)	1.091
T2 ratio (HW/D)	1.193
Slope Correction Factor	-0.500

Use unsubmerged inlet control 0 equation below T1 elevation.

Use submerged inlet control 0 equation above T2 elevation

In transition zone between unsubmerged and submerged inlet control, interpolate between flows at T1 & T2...

T1 Elevation	1,182.64 ft	T1 Flow	7.58 ft ³ /s
T2 Elevation	1,182.79 ft	T2 Flow	8.66 ft ³ /s

CAL883229B_Stormwater Report

Subsection: Outlet Input Data
Label: South Wetland
Scenario: Post-Development 5 year

Return Event: 5 years
Storm Event: 5 year

Convergence Tolerances	
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft ³ /s
Flow Tolerance (Maximum)	10.000 ft ³ /s

CAL883229B_Stormwater Report

Subsection: Outlet Input Data
 Label: South Wetland
 Scenario: Post-Development 25 year

Return Event: 25 years
 Storm Event: 25 year

Requested Pond Water Surface Elevations	
Minimum (Headwater)	1,183.10 ft
Increment (Headwater)	0.50 ft
Maximum (Headwater)	1,187.00 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Stand Pipe	24" Riser	Forward	18" CMP	1,185.50	1,187.00
Culvert-Circular	18" CMP	Forward	WCS Stop Log	1,181.00	1,187.00
Rectangular Weir	WCS Stop Log	Forward	18" CMP Outlet	1,185.92	1,187.00
Culvert-Circular	18" CMP Outlet	Forward	TW	1,180.50	1,187.00
Irregular Weir	Overflow 1	Forward	TW	1,186.49	1,187.00
Irregular Weir	Overflow 3	Forward	TW	1,186.71	1,187.00
Irregular Weir	Overflow 2	Forward	TW	1,186.81	1,187.00
Tailwater Settings	Tailwater			(N/A)	(N/A)

CAL883229B_Stormwater Report

Subsection: Outlet Input Data
Label: South Wetland
Scenario: Post-Development 25 year

Return Event: 25 years
Storm Event: 25 year

Structure ID: 24" Riser	
Structure Type: Stand Pipe	
<hr/>	
Number of Openings	1
Elevation	1,185.50 ft
Diameter	24.0 in
Orifice Area	3.1 ft ²
Orifice Coefficient	0.600
Weir Length	6.28 ft
Weir Coefficient	3.00 (ft ^{0.5})/s
K Reverse	1.000
Manning's n	0.000
Kev, Charged Riser	0.000
Weir Submergence	False
Orifice H to crest	False

CAL883229B_Stormwater Report

Subsection: Outlet Input Data
 Label: South Wetland
 Scenario: Post-Development 25 year

Return Event: 25 years
 Storm Event: 25 year

Structure ID: 18" CMP Outlet	
Structure Type: Culvert-Circular	
Number of Barrels	1
Diameter	18.0 in
Length	57.00 ft
Length (Computed Barrel)	57.00 ft
Slope (Computed)	0.009 ft/ft
<hr/>	
Outlet Control Data	
Manning's n	0.013
Ke	0.200
Kb	0.018
Kr	0.000
Convergence Tolerance	0.00 ft
<hr/>	
Inlet Control Data	
Equation Form	Form 1
K	0.0045
M	2.0000
C	0.0317
Y	0.6900
T1 ratio (HW/D)	1.091
T2 ratio (HW/D)	1.193
Slope Correction Factor	-0.500

Use unsubmerged inlet control 0 equation below T1 elevation.

Use submerged inlet control 0 equation above T2 elevation

In transition zone between unsubmerged and submerged inlet control, interpolate between flows at T1 & T2...

T1 Elevation	1,182.14 ft	T1 Flow	7.58 ft ³ /s
T2 Elevation	1,182.29 ft	T2 Flow	8.66 ft ³ /s

CAL883229B_Stormwater Report

Subsection: Outlet Input Data
Label: South Wetland
Scenario: Post-Development 25 year

Return Event: 25 years
Storm Event: 25 year

Structure ID: WCS Stop Log	
Structure Type: Rectangular Weir	
<hr/>	
Number of Openings	1
Elevation	1,185.92 ft
Weir Length	4.00 ft
Weir Coefficient	3.00 (ft ^{0.5})/s

CAL883229B_Stormwater Report

Subsection: Outlet Input Data
 Label: South Wetland
 Scenario: Post-Development 25 year

Return Event: 25 years
 Storm Event: 25 year

Structure ID: 18" CMP	
Structure Type: Culvert-Circular	
Number of Barrels	1
Diameter	18.0 in
Length	57.00 ft
Length (Computed Barrel)	57.00 ft
Slope (Computed)	0.009 ft/ft
<hr/>	
Outlet Control Data	
Manning's n	0.013
Ke	0.200
Kb	0.018
Kr	0.000
Convergence Tolerance	0.00 ft
<hr/>	
Inlet Control Data	
Equation Form	Form 1
K	0.0045
M	2.0000
C	0.0317
Y	0.6900
T1 ratio (HW/D)	1.091
T2 ratio (HW/D)	1.193
Slope Correction Factor	-0.500

Use unsubmerged inlet control 0 equation below T1 elevation.

Use submerged inlet control 0 equation above T2 elevation

In transition zone between unsubmerged and submerged inlet control, interpolate between flows at T1 & T2...

T1 Elevation	1,182.64 ft	T1 Flow	7.58 ft ³ /s
T2 Elevation	1,182.79 ft	T2 Flow	8.66 ft ³ /s

CAL883229B_Stormwater Report

Subsection: Outlet Input Data
Label: South Wetland
Scenario: Post-Development 25 year

Return Event: 25 years
Storm Event: 25 year

Convergence Tolerances	
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft ³ /s
Flow Tolerance (Maximum)	10.000 ft ³ /s

CAL883229B_Stormwater Report

Subsection: Outlet Input Data

Label: South Wetland

Scenario: Post-Development 100 year

Return Event: 100 years

Storm Event: 100 year

Requested Pond Water Surface Elevations

Minimum (Headwater)	1,183.10 ft
Increment (Headwater)	0.50 ft
Maximum (Headwater)	1,187.00 ft

Outlet Connectivity

Structure Type	Outlet ID	Direction	Outfall	E1 (ft)	E2 (ft)
Stand Pipe	24" Riser	Forward	18" CMP	1,185.50	1,187.00
Culvert-Circular	18" CMP	Forward	WCS Stop Log	1,181.00	1,187.00
Rectangular Weir	WCS Stop Log	Forward	18" CMP Outlet	1,185.92	1,187.00
Culvert-Circular	18" CMP Outlet	Forward	TW	1,180.50	1,187.00
Irregular Weir	Overflow 1	Forward	TW	1,186.49	1,187.00
Irregular Weir	Overflow 3	Forward	TW	1,186.71	1,187.00
Irregular Weir	Overflow 2	Forward	TW	1,186.81	1,187.00
Tailwater Settings	Tailwater			(N/A)	(N/A)

CAL883229B_Stormwater Report

Subsection: Outlet Input Data

Label: South Wetland

Scenario: Post-Development 100 year

Return Event: 100 years

Storm Event: 100 year

Structure ID: 24" Riser
Structure Type: Stand Pipe

Number of Openings	1
Elevation	1,185.50 ft
Diameter	24.0 in
Orifice Area	3.1 ft ²
Orifice Coefficient	0.600
Weir Length	6.28 ft
Weir Coefficient	3.00 (ft ^{0.5})/s
K Reverse	1.000
Manning's n	0.000
Kev, Charged Riser	0.000
Weir Submergence	False
Orifice H to crest	False

CAL883229B_Stormwater Report

Subsection: Outlet Input Data

Label: South Wetland

Scenario: Post-Development 100 year

Return Event: 100 years

Storm Event: 100 year

Structure ID: 18" CMP Outlet	
Structure Type: Culvert-Circular	
Number of Barrels	1
Diameter	18.0 in
Length	57.00 ft
Length (Computed Barrel)	57.00 ft
Slope (Computed)	0.009 ft/ft

Outlet Control Data	
Manning's n	0.013
Ke	0.200
Kb	0.018
Kr	0.000
Convergence Tolerance	0.00 ft

Inlet Control Data	
Equation Form	Form 1
K	0.0045
M	2.0000
C	0.0317
Y	0.6900
T1 ratio (HW/D)	1.091
T2 ratio (HW/D)	1.193
Slope Correction Factor	-0.500

Use unsubmerged inlet control 0 equation below T1 elevation.

Use submerged inlet control 0 equation above T2 elevation

In transition zone between unsubmerged and submerged inlet control, interpolate between flows at T1 & T2...

T1 Elevation	1,182.14 ft	T1 Flow	7.58 ft ³ /s
T2 Elevation	1,182.29 ft	T2 Flow	8.66 ft ³ /s

CAL883229B_Stormwater Report

Subsection: Outlet Input Data

Label: South Wetland

Scenario: Post-Development 100 year

Return Event: 100 years

Storm Event: 100 year

Structure ID: WCS Stop Log	
Structure Type: Rectangular Weir	
<hr/>	
Number of Openings	1
Elevation	1,185.92 ft
Weir Length	4.00 ft
Weir Coefficient	3.00 (ft ^{0.5})/s

CAL883229B_Stormwater Report

Subsection: Outlet Input Data

Label: South Wetland

Scenario: Post-Development 100 year

Return Event: 100 years

Storm Event: 100 year

Structure ID: 18" CMP	
Structure Type: Culvert-Circular	
Number of Barrels	1
Diameter	18.0 in
Length	57.00 ft
Length (Computed Barrel)	57.00 ft
Slope (Computed)	0.009 ft/ft
<hr/>	
Outlet Control Data	
Manning's n	0.013
Ke	0.200
Kb	0.018
Kr	0.000
Convergence Tolerance	0.00 ft
<hr/>	
Inlet Control Data	
Equation Form	Form 1
K	0.0045
M	2.0000
C	0.0317
Y	0.6900
T1 ratio (HW/D)	1.091
T2 ratio (HW/D)	1.193
Slope Correction Factor	-0.500

Use unsubmerged inlet control 0 equation below T1 elevation.

Use submerged inlet control 0 equation above T2 elevation

In transition zone between unsubmerged and submerged inlet control, interpolate between flows at T1 & T2...

T1 Elevation	1,182.64 ft	T1 Flow	7.58 ft ³ /s
T2 Elevation	1,182.79 ft	T2 Flow	8.66 ft ³ /s

CAL883229B_Stormwater Report

Subsection: Outlet Input Data

Label: South Wetland

Scenario: Post-Development 100 year

Return Event: 100 years

Storm Event: 100 year

Convergence Tolerances	
Tailwater Tolerance (Minimum)	0.01 ft
Tailwater Tolerance (Maximum)	0.50 ft
Headwater Tolerance (Minimum)	0.01 ft
Headwater Tolerance (Maximum)	0.50 ft
Flow Tolerance (Minimum)	0.001 ft ³ /s
Flow Tolerance (Maximum)	10.000 ft ³ /s

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