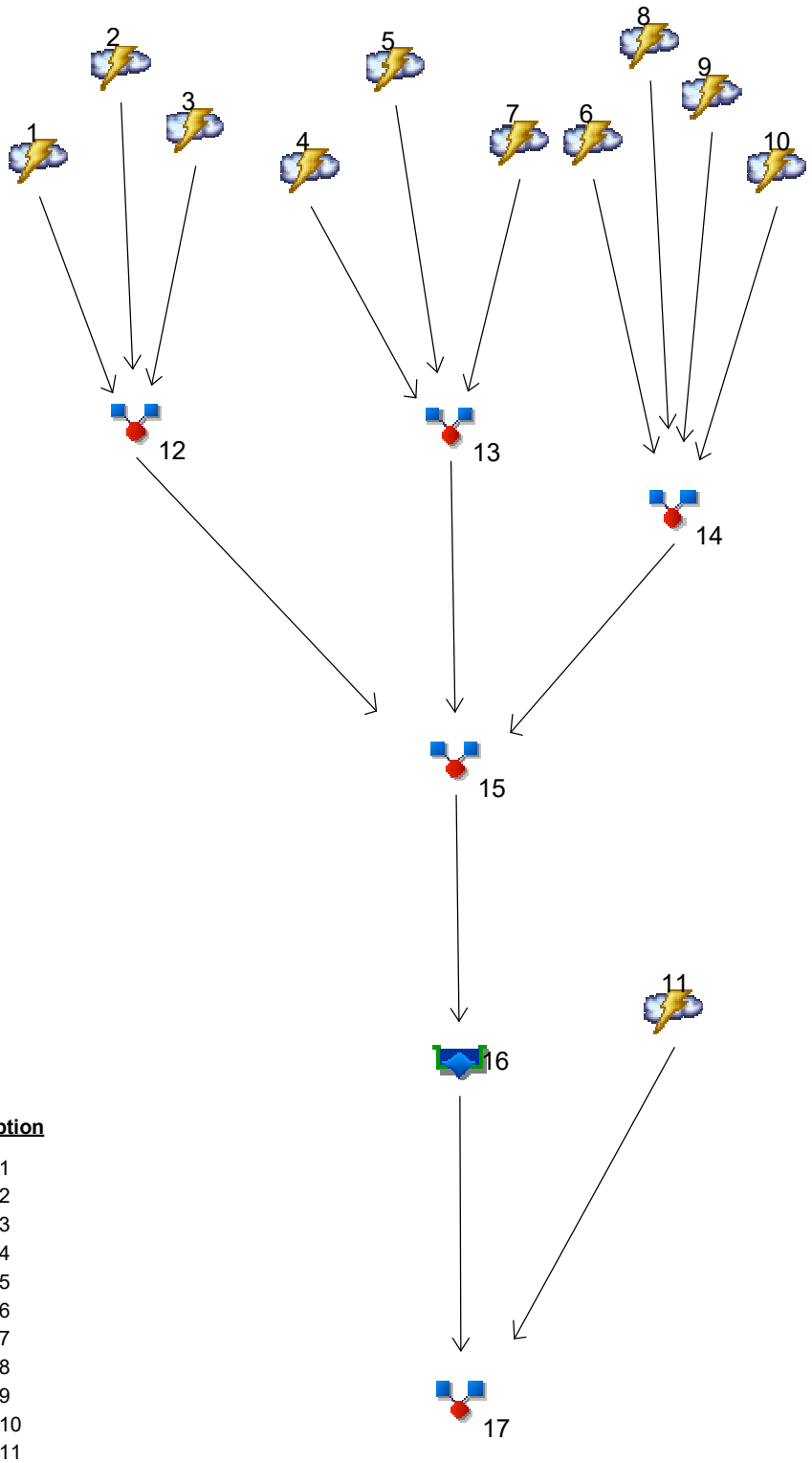
Watershed Model Schematic



Legend

Hyd.	Origin	Description
1	Rational	Area 2-1
2	Rational	Area 2-2
3	Rational	Area 2-3
4	Rational	Area 2-4
5	Rational	Area 2-5
6	Rational	Area 2-6
7	Rational	Area 2-7
8	Rational	Area 2-8
9	Rational	Area 2-9
10	Rational	Area 2-10
11	Rational	Area 2-11
12	Combine	Combined 1
13	Combine	Combined 2
14	Combine	Combined 3
15	Combine	TOTAL TO DETENTION
16	Reservoir	TOTAL DETENTION
17	Combine	TOTAL RUNOFF

Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	12.79	1	10	7,677	------	------	------	Area 2-1
2	Rational	5.927	1	10	3,556	------	------	------	Area 2-2
3	Rational	17.09	1	7	7,176	------	------	------	Area 2-3
4	Rational	3.689	1	5	1,107	------	------	------	Area 2-4
5	Rational	0.681	1	5	204	------	------	------	Area 2-5
6	Rational	4.067	1	5	1,220	------	------	------	Area 2-6
7	Rational	2.378	1	5	714	------	------	------	Area 2-7
8	Rational	1.348	1	5	404	------	------	------	Area 2-8
9	Rational	1.168	1	5	350	------	------	------	Area 2-9
10	Rational	1.700	1	5	510	------	------	------	Area 2-10
11	Rational	0.832	1	5	250	------	------	------	Area 2-11
12	Combine	30.19	1	7	18,409	1, 2, 3,	------	------	Combined 1
13	Combine	6.749	1	5	2,025	4, 5, 7,	------	------	Combined 2
14	Combine	8.283	1	5	2,485	6, 8, 9,	------	------	Combined 3
15	Combine	39.21	1	7	22,919	10, 12, 13, 14	------	------	TOTAL TO DETENTION
16	Reservoir	0.421	1	20	22,902	15	981.88	22,571	TOTAL DETENTION
17	Combine	1.025	1	5	23,151	11, 16	------	------	TOTAL RUNOFF

Hydrograph Report

Hyd. No. 1

Area 2-1

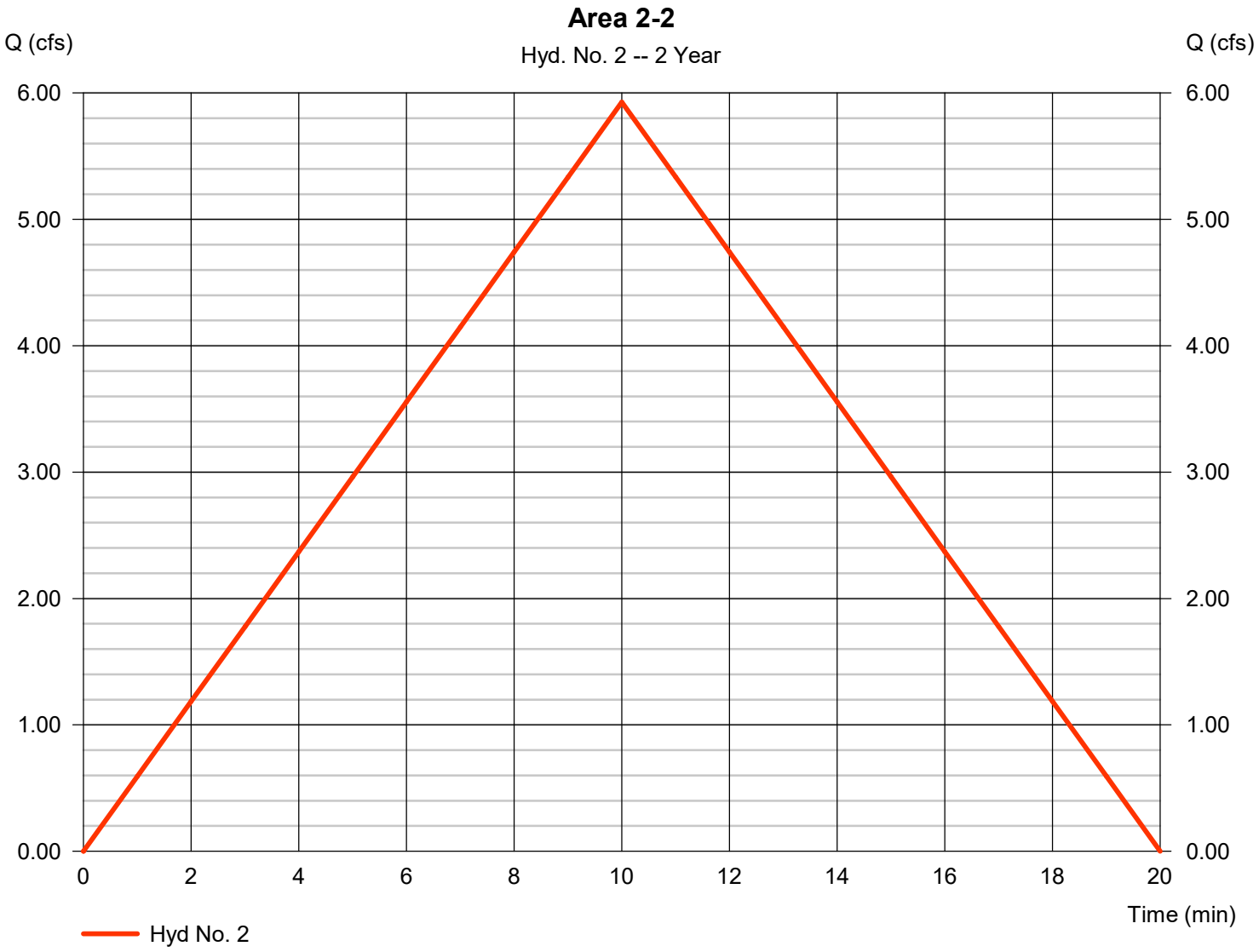
Hydrograph type	= Rational	Peak discharge	= 12.79 cfs
Storm frequency	= 2 yrs	Time to peak	= 10 min
Time interval	= 1 min	Hyd. volume	= 7,677 cuft
Drainage area	= 9.380 ac	Runoff coeff.	= 0.31
Intensity	= 4.400 in/hr	Tc by User	= 10.00 min
IDF Curve	= KCAPWA.IDF	Asc/Rec limb fact	= 1/1

Hydrograph Report

Hyd. No. 2

Area 2-2

Hydrograph type	= Rational	Peak discharge	= 5.927 cfs
Storm frequency	= 2 yrs	Time to peak	= 10 min
Time interval	= 1 min	Hyd. volume	= 3,556 cuft
Drainage area	= 4.490 ac	Runoff coeff.	= 0.3
Intensity	= 4.400 in/hr	Tc by User	= 10.00 min
IDF Curve	= KCAPWA.IDF	Asc/Rec limb fact	= 1/1

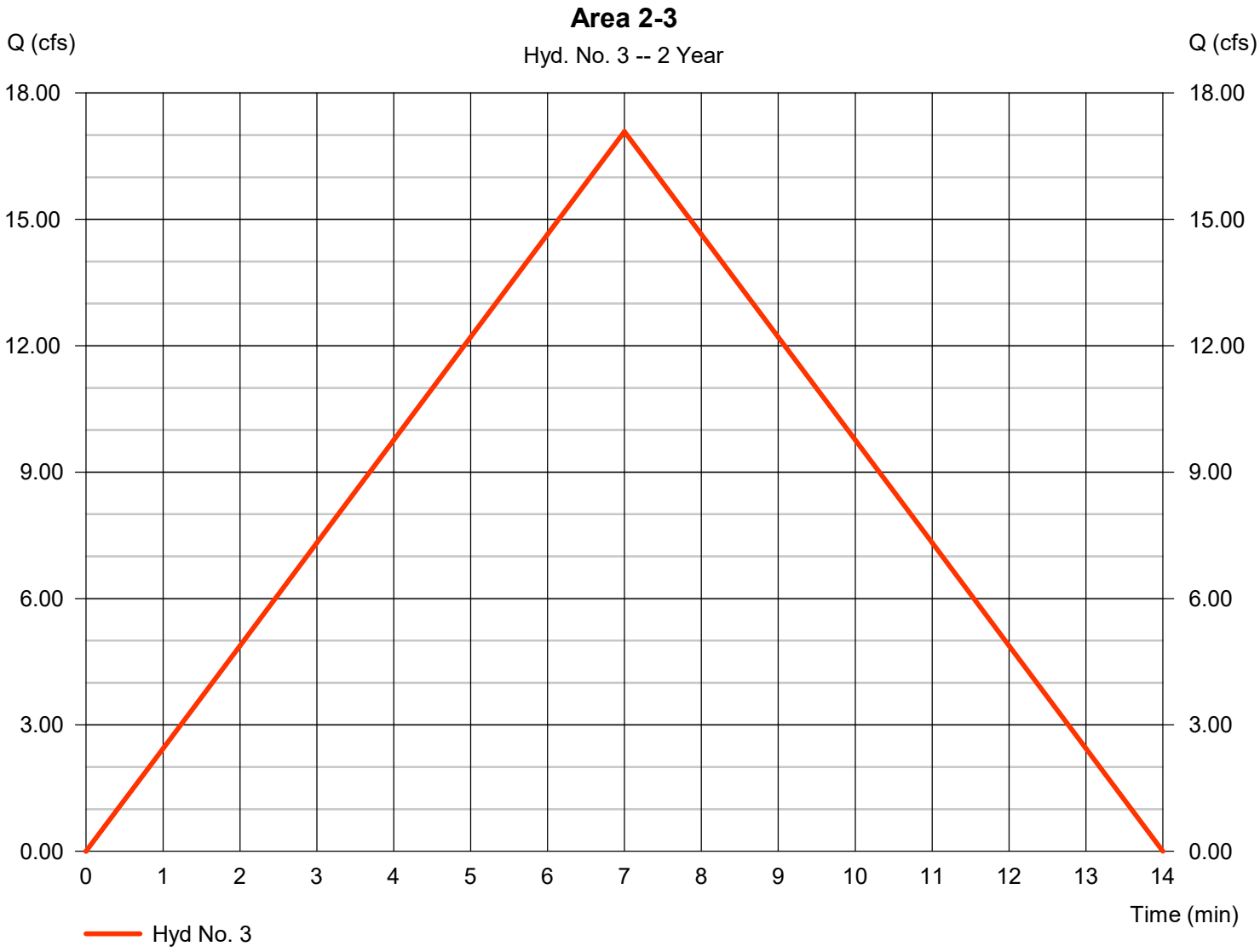


Hydrograph Report

Hyd. No. 3

Area 2-3

Hydrograph type	=	Rational	Peak discharge	=	17.09 cfs
Storm frequency	=	2 yrs	Time to peak	=	7 min
Time interval	=	1 min	Hyd. volume	=	7,176 cuft
Drainage area	=	11.500 ac	Runoff coeff.	=	0.3
Intensity	=	4.952 in/hr	Tc by User	=	7.00 min
IDF Curve	=	KCAPWA.IDF	Asc/Rec limb fact	=	1/1

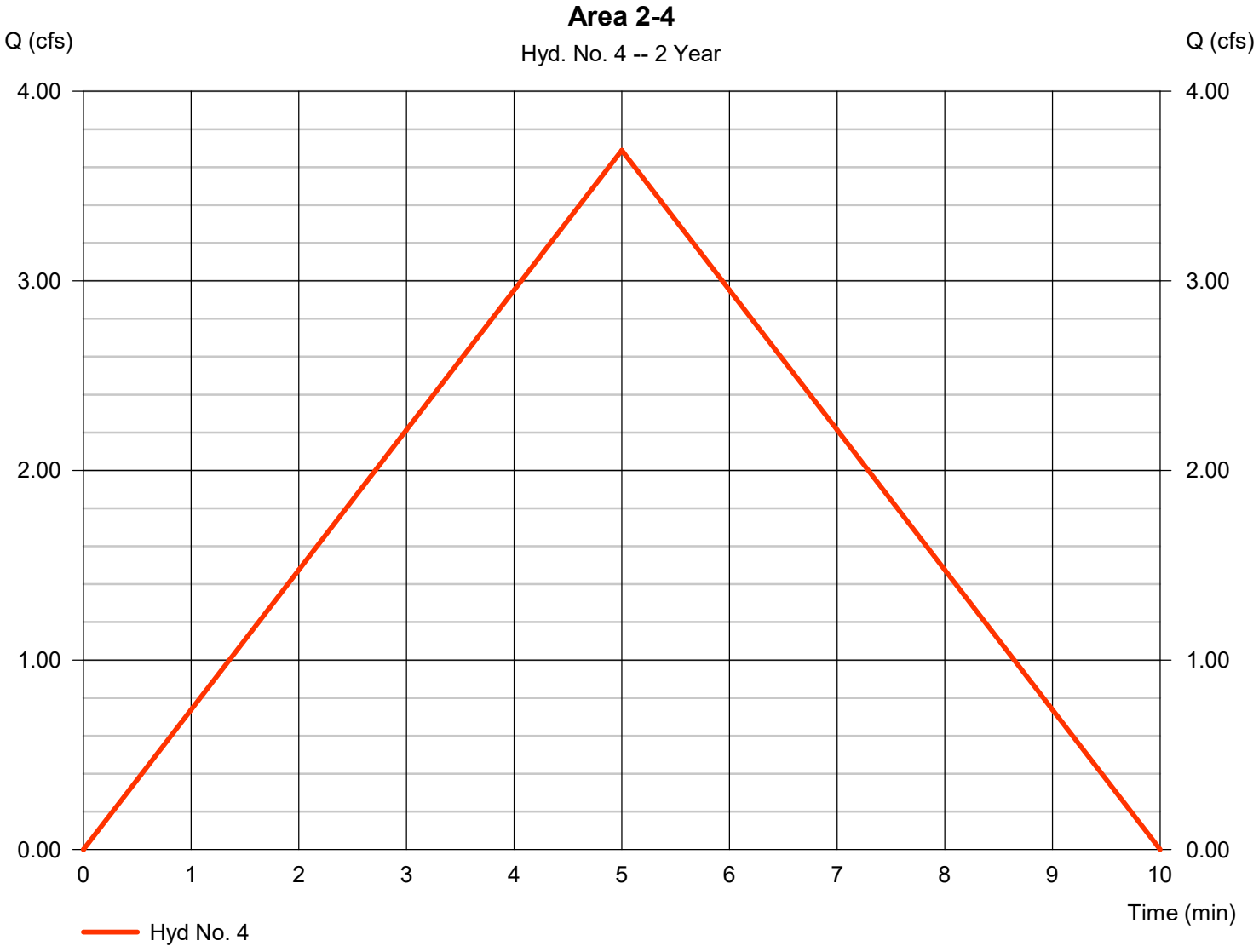


Hydrograph Report

Hyd. No. 4

Area 2-4

Hydrograph type	= Rational	Peak discharge	= 3.689 cfs
Storm frequency	= 2 yrs	Time to peak	= 5 min
Time interval	= 1 min	Hyd. volume	= 1,107 cuft
Drainage area	= 1.050 ac	Runoff coeff.	= 0.65
Intensity	= 5.406 in/hr	Tc by User	= 5.00 min
IDF Curve	= KCAPWA.IDF	Asc/Rec limb fact	= 1/1



Hydrograph Report

Hyd. No. 5

Area 2-5

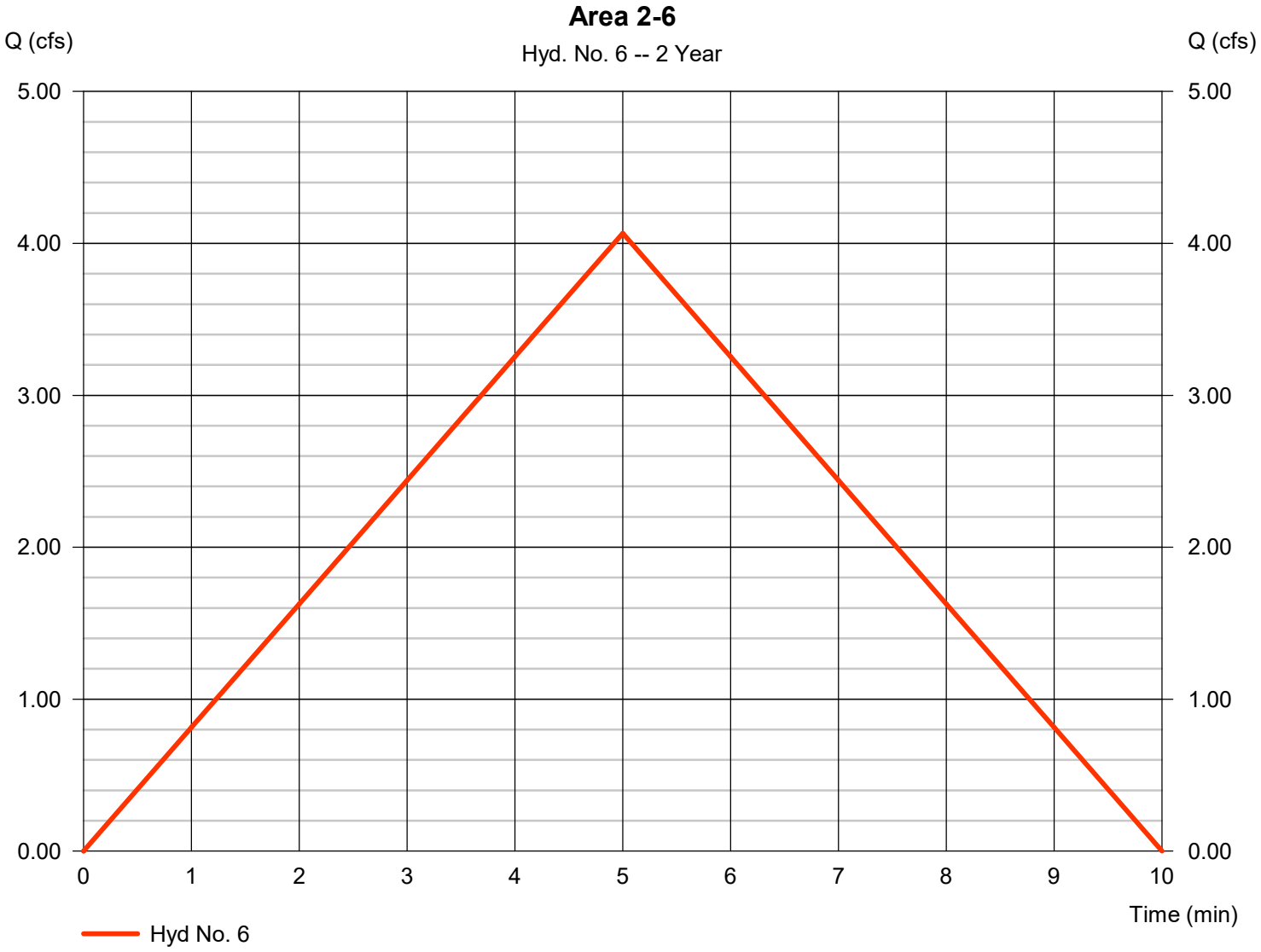
Hydrograph type	= Rational	Peak discharge	= 0.681 cfs
Storm frequency	= 2 yrs	Time to peak	= 5 min
Time interval	= 1 min	Hyd. volume	= 204 cuft
Drainage area	= 0.200 ac	Runoff coeff.	= 0.63
Intensity	= 5.406 in/hr	Tc by User	= 5.00 min
IDF Curve	= KCAPWA.IDF	Asc/Rec limb fact	= 1/1

Hydrograph Report

Hyd. No. 6

Area 2-6

Hydrograph type	= Rational	Peak discharge	= 4.067 cfs
Storm frequency	= 2 yrs	Time to peak	= 5 min
Time interval	= 1 min	Hyd. volume	= 1,220 cuft
Drainage area	= 0.990 ac	Runoff coeff.	= 0.76
Intensity	= 5.406 in/hr	Tc by User	= 5.00 min
IDF Curve	= KCAPWA.IDF	Asc/Rec limb fact	= 1/1

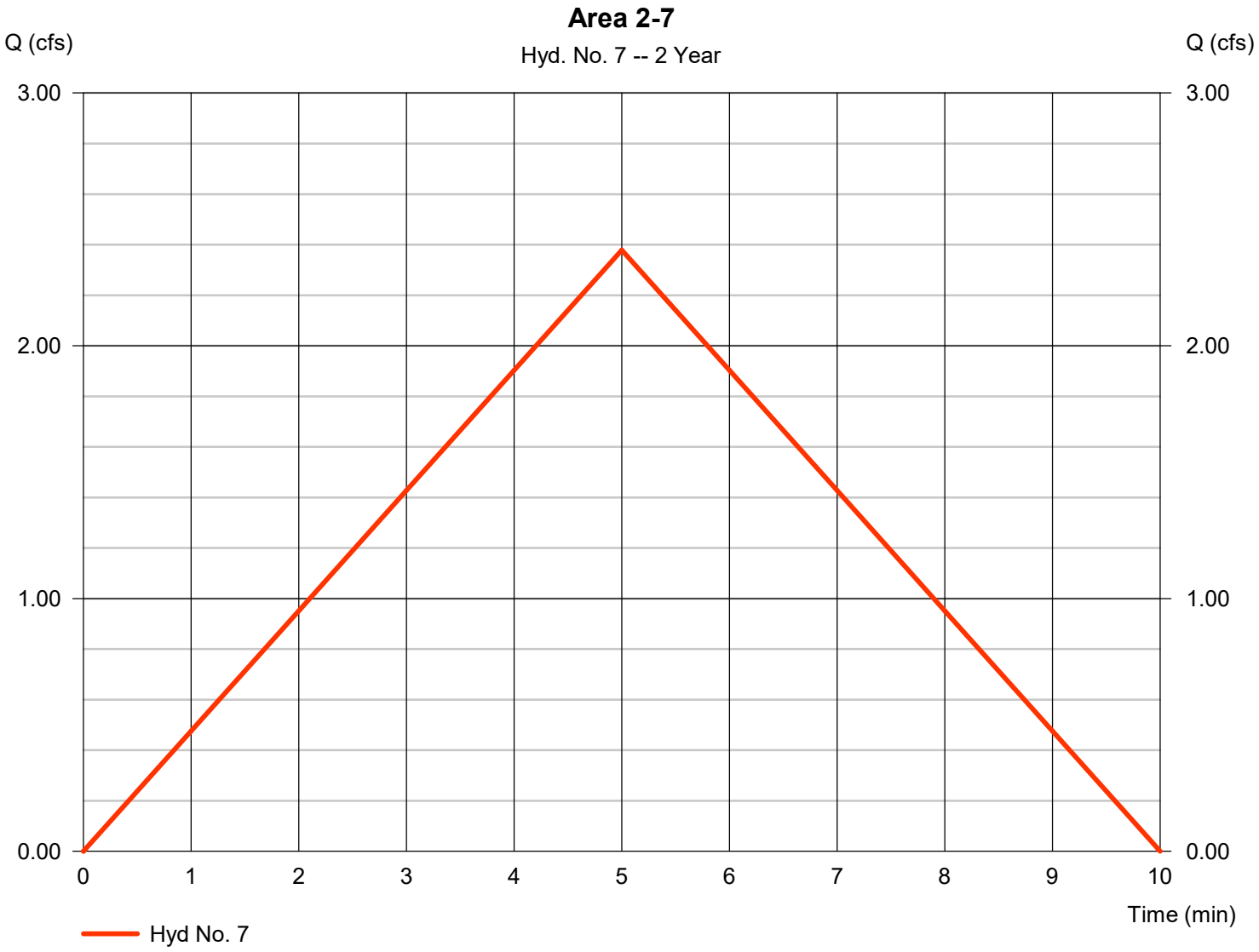


Hydrograph Report

Hyd. No. 7

Area 2-7

Hydrograph type	= Rational	Peak discharge	= 2.378 cfs
Storm frequency	= 2 yrs	Time to peak	= 5 min
Time interval	= 1 min	Hyd. volume	= 714 cuft
Drainage area	= 0.500 ac	Runoff coeff.	= 0.88
Intensity	= 5.406 in/hr	Tc by User	= 5.00 min
IDF Curve	= KCAPWA.IDF	Asc/Rec limb fact	= 1/1

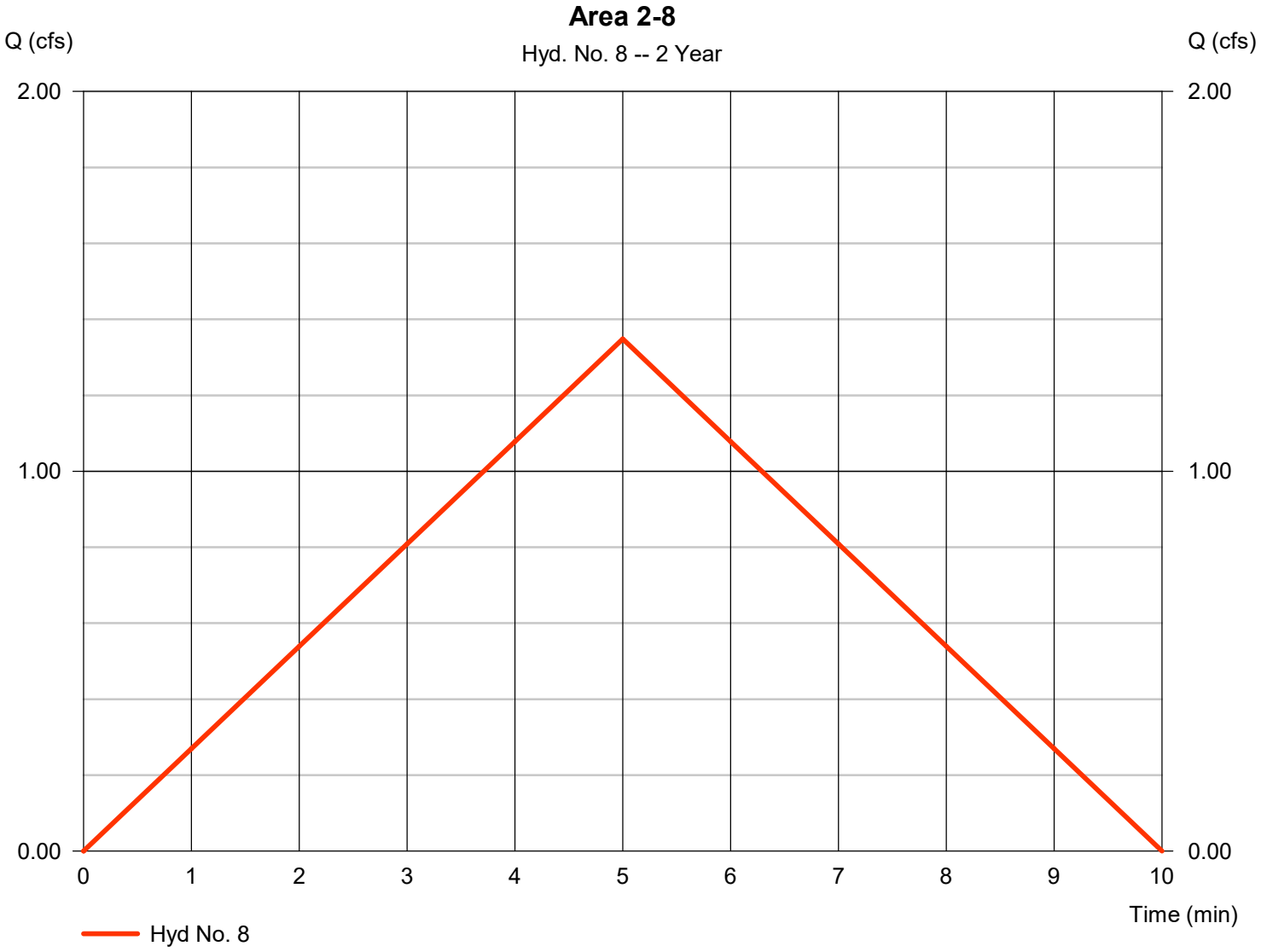


Hydrograph Report

Hyd. No. 8

Area 2-8

Hydrograph type	= Rational	Peak discharge	= 1.348 cfs
Storm frequency	= 2 yrs	Time to peak	= 5 min
Time interval	= 1 min	Hyd. volume	= 404 cuft
Drainage area	= 0.290 ac	Runoff coeff.	= 0.86
Intensity	= 5.406 in/hr	Tc by User	= 5.00 min
IDF Curve	= KCAPWA.IDF	Asc/Rec limb fact	= 1/1

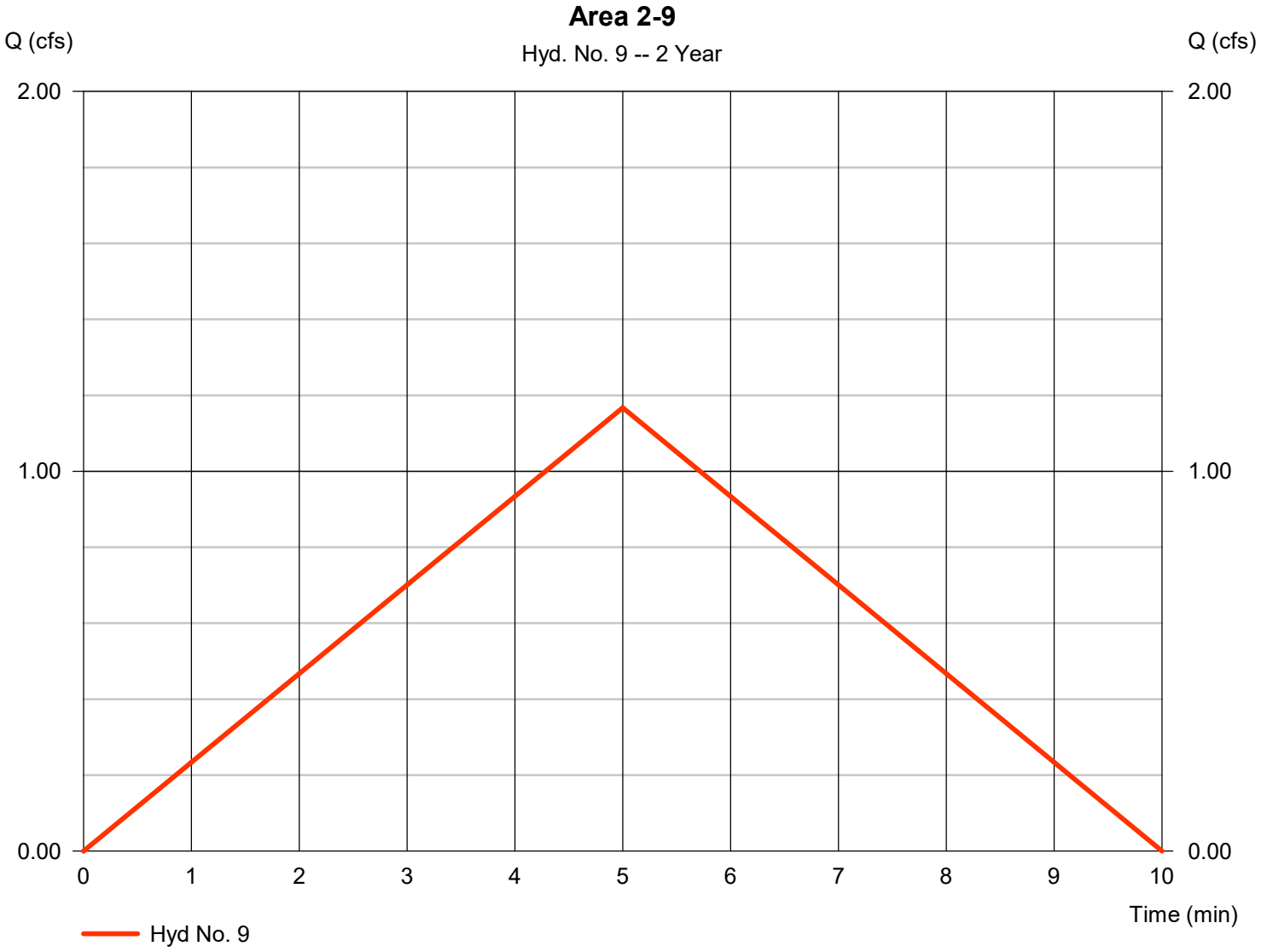


Hydrograph Report

Hyd. No. 9

Area 2-9

Hydrograph type	= Rational	Peak discharge	= 1.168 cfs
Storm frequency	= 2 yrs	Time to peak	= 5 min
Time interval	= 1 min	Hyd. volume	= 350 cuft
Drainage area	= 0.240 ac	Runoff coeff.	= 0.9
Intensity	= 5.406 in/hr	Tc by User	= 5.00 min
IDF Curve	= KCAPWA.IDF	Asc/Rec limb fact	= 1/1

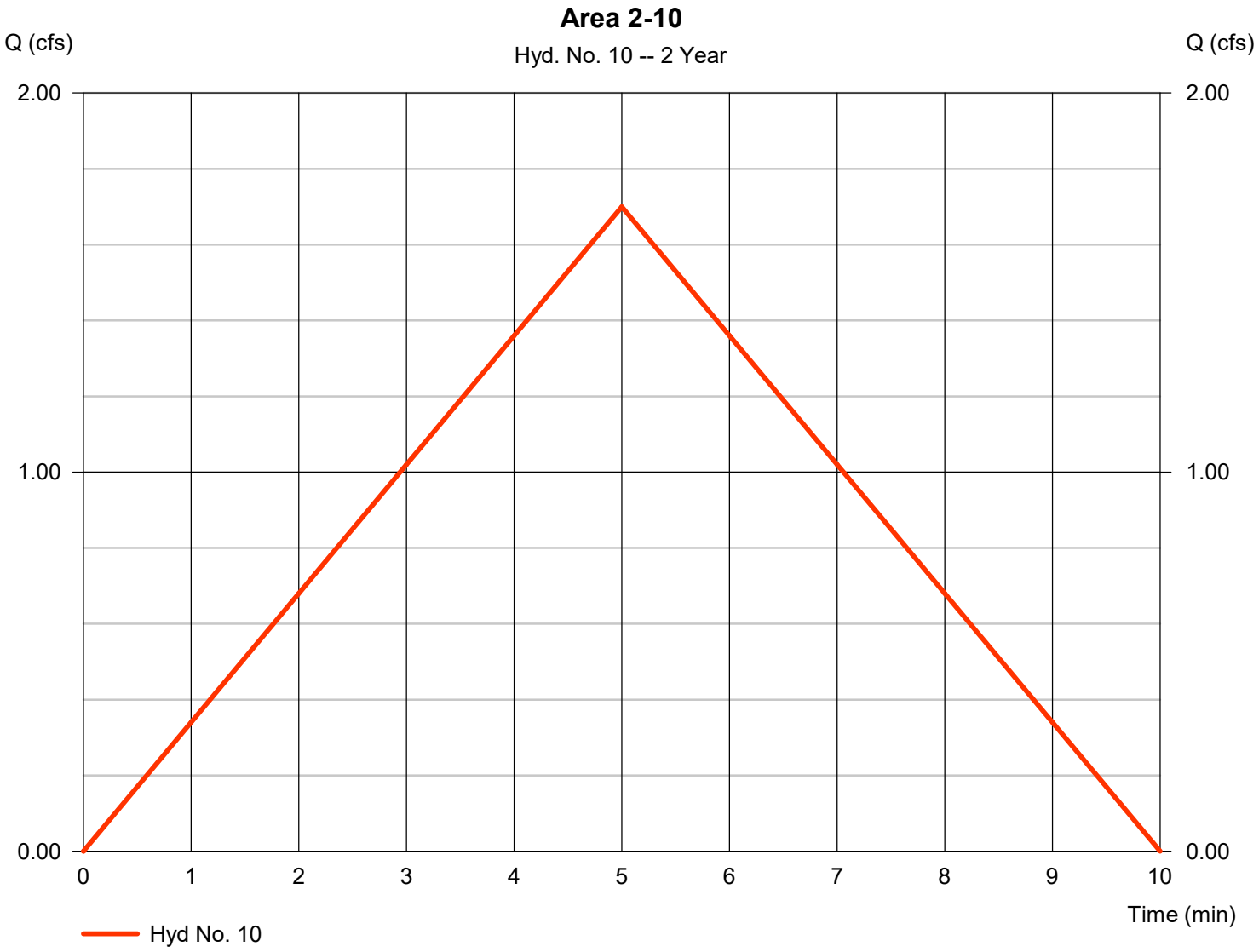


Hydrograph Report

Hyd. No. 10

Area 2-10

Hydrograph type	= Rational	Peak discharge	= 1.700 cfs
Storm frequency	= 2 yrs	Time to peak	= 5 min
Time interval	= 1 min	Hyd. volume	= 510 cuft
Drainage area	= 0.370 ac	Runoff coeff.	= 0.85
Intensity	= 5.406 in/hr	Tc by User	= 5.00 min
IDF Curve	= KCAPWA.IDF	Asc/Rec limb fact	= 1/1



Hydrograph Report

Hyd. No. 11

Area 2-11

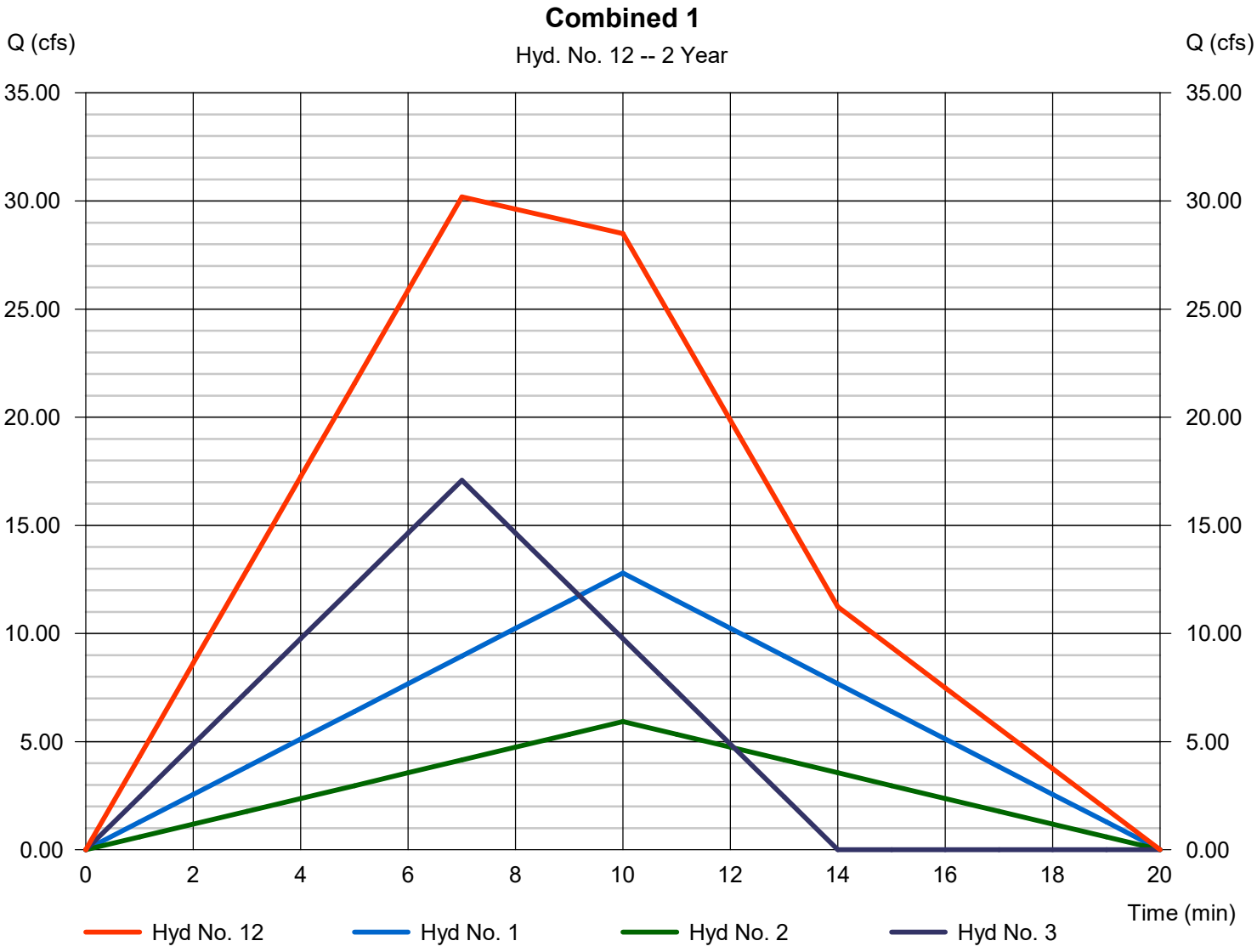
Hydrograph type	= Rational	Peak discharge	= 0.832 cfs
Storm frequency	= 2 yrs	Time to peak	= 5 min
Time interval	= 1 min	Hyd. volume	= 250 cuft
Drainage area	= 0.350 ac	Runoff coeff.	= 0.44
Intensity	= 5.406 in/hr	Tc by User	= 5.00 min
IDF Curve	= KCAPWA.IDF	Asc/Rec limb fact	= 1/1

Hydrograph Report

Hyd. No. 12

Combined 1

Hydrograph type	=	Combine	Peak discharge	=	30.19 cfs
Storm frequency	=	2 yrs	Time to peak	=	7 min
Time interval	=	1 min	Hyd. volume	=	18,409 cuft
Inflow hyds.	=	1, 2, 3	Contrib. drain. area	=	25.370 ac

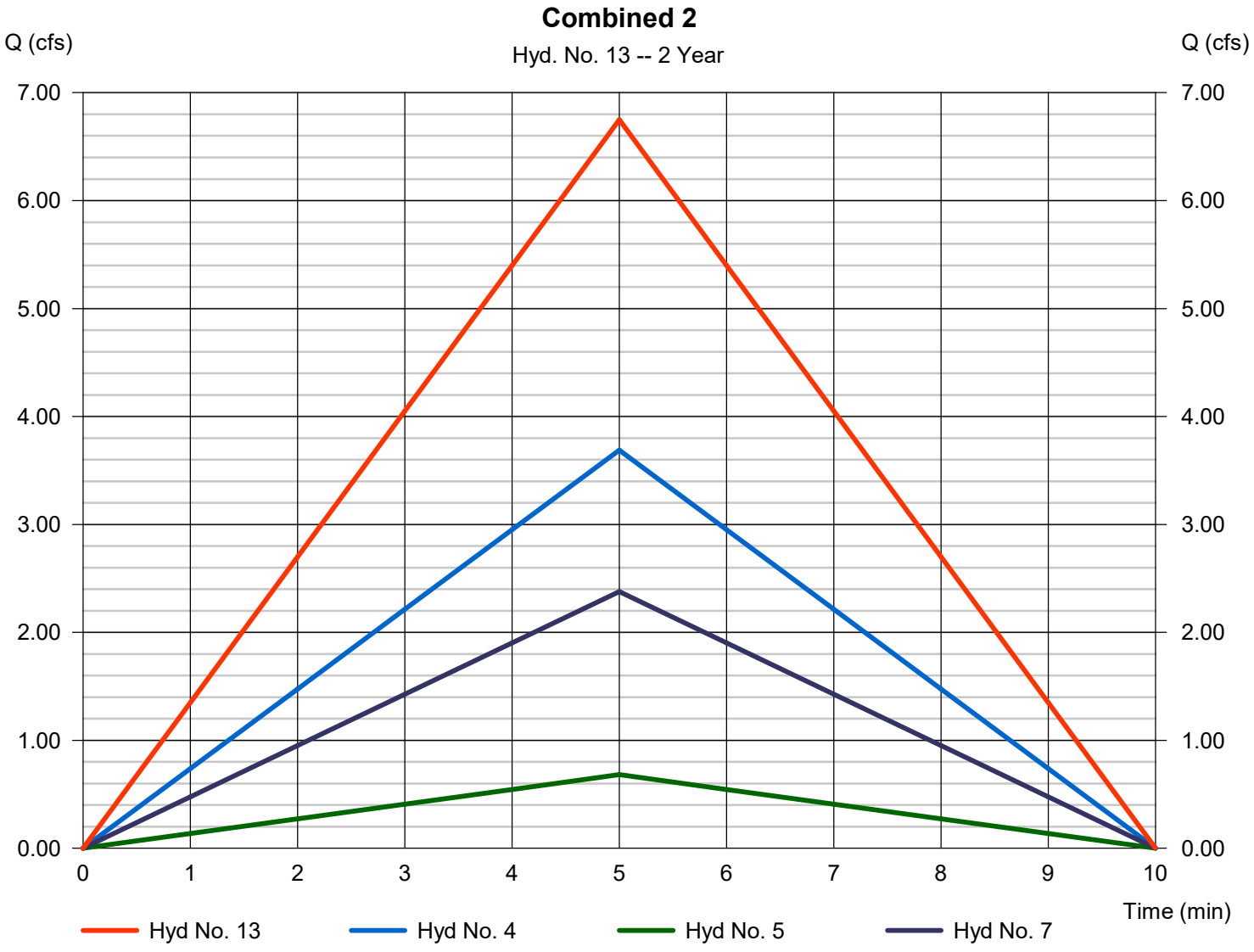


Hydrograph Report

Hyd. No. 13

Combined 2

Hydrograph type	= Combine	Peak discharge	= 6.749 cfs
Storm frequency	= 2 yrs	Time to peak	= 5 min
Time interval	= 1 min	Hyd. volume	= 2,025 cuft
Inflow hyds.	= 4, 5, 7	Contrib. drain. area	= 1.750 ac

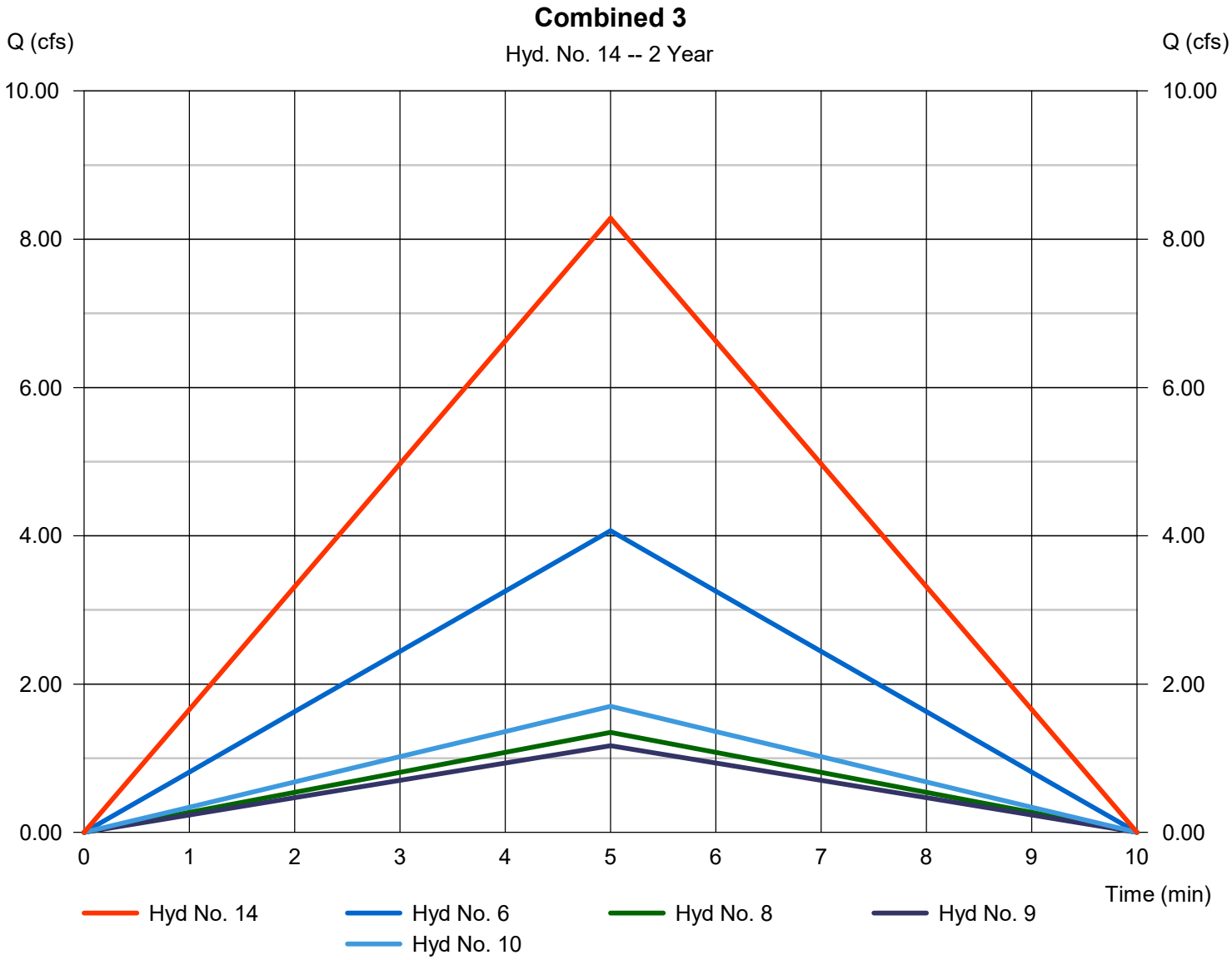


Hydrograph Report

Hyd. No. 14

Combined 3

Hydrograph type	= Combine	Peak discharge	= 8.283 cfs
Storm frequency	= 2 yrs	Time to peak	= 5 min
Time interval	= 1 min	Hyd. volume	= 2,485 cuft
Inflow hyds.	= 6, 8, 9, 10	Contrib. drain. area	= 1.890 ac

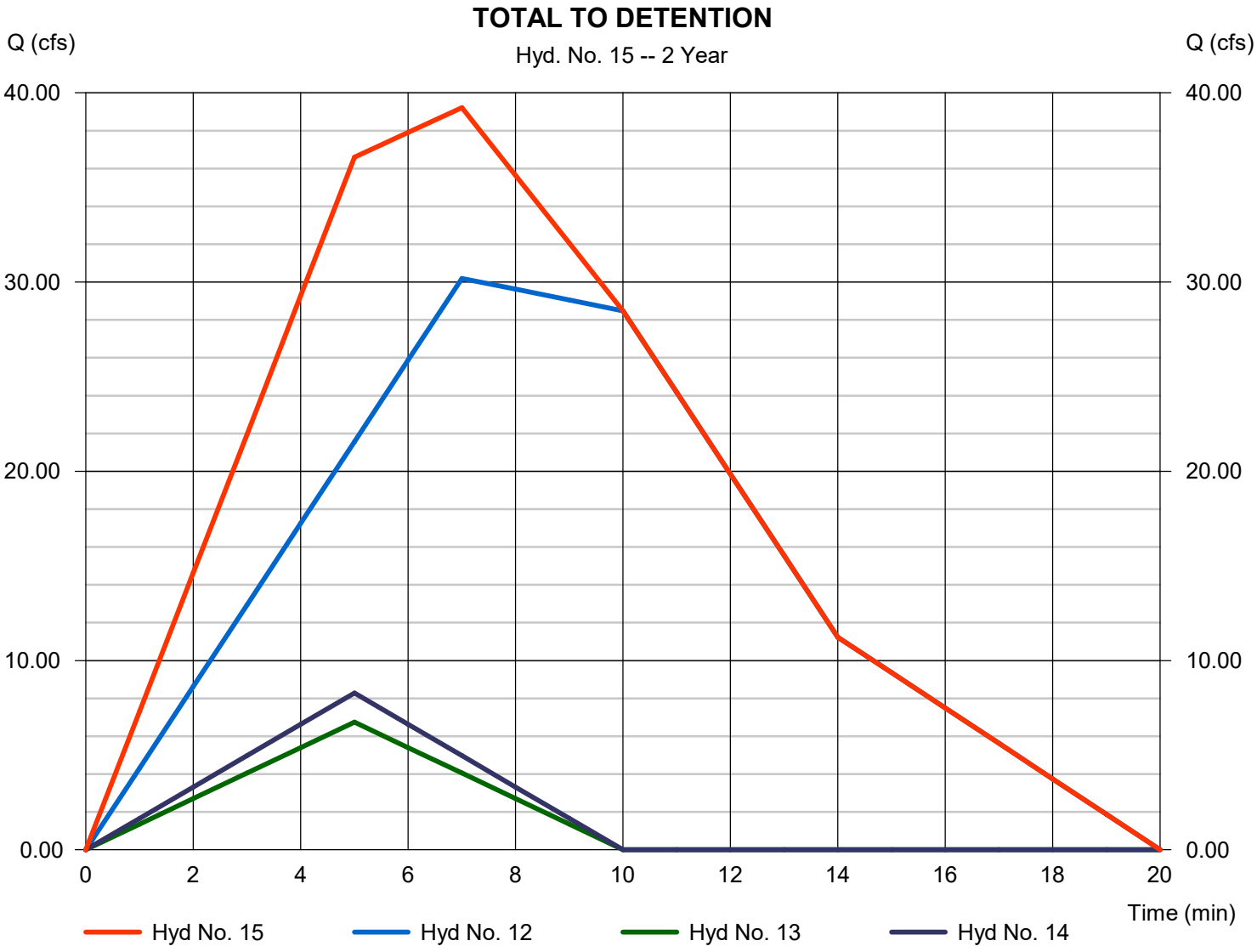


Hydrograph Report

Hyd. No. 15

TOTAL TO DETENTION

Hydrograph type	= Combine	Peak discharge	= 39.21 cfs
Storm frequency	= 2 yrs	Time to peak	= 7 min
Time interval	= 1 min	Hyd. volume	= 22,919 cuft
Inflow hyds.	= 12, 13, 14	Contrib. drain. area	= 0.000 ac



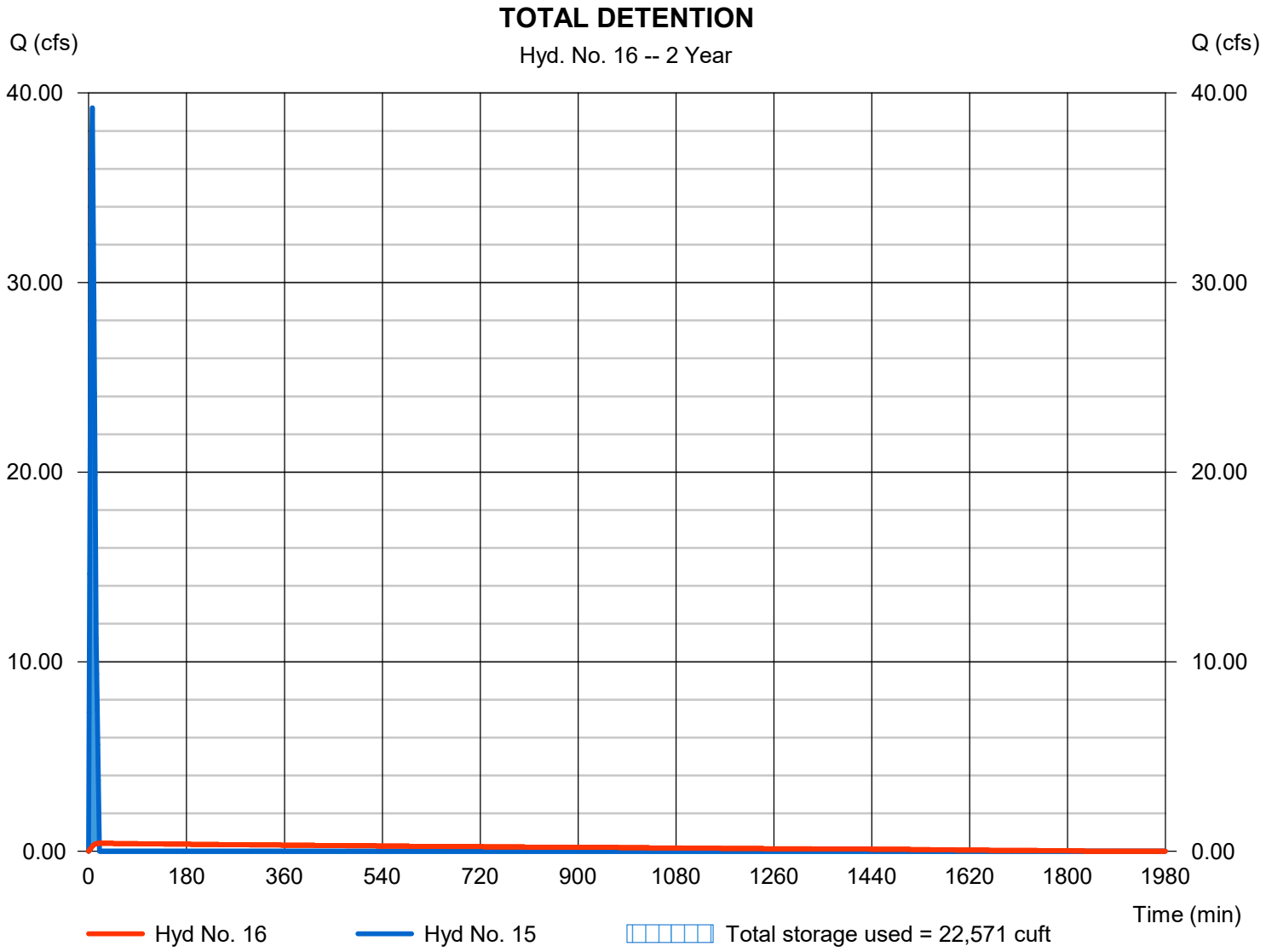
Hydrograph Report

Hyd. No. 16

TOTAL DETENTION

Hydrograph type	=	Reservoir	Peak discharge	=	0.421 cfs
Storm frequency	=	2 yrs	Time to peak	=	20 min
Time interval	=	1 min	Hyd. volume	=	22,902 cuft
Inflow hyd. No.	=	15 - TOTAL TO DETENTION	Max. Elevation	=	981.88 ft
Reservoir name	=	Detention	Max. Storage	=	22,571 cuft

Storage Indication method used.



Pond Report

Pond No. 1 - Detention

Pond Data

Contours -User-defined contour areas. Conic method used for volume calculation. Begining Elevation = 977.00 ft

Stage / Storage Table

Stage (ft)	Elevation (ft)	Contour area (sqft)	Incr. Storage (cuft)	Total storage (cuft)
0.00	977.00	219	0	0
1.00	978.00	710	441	441
2.00	979.00	1,615	1,132	1,573
3.00	980.00	2,989	2,267	3,840
4.00	981.00	5,425	4,147	7,986
5.00	982.00	7,694	6,526	14,512
6.00	983.00	10,086	8,862	23,374
7.00	984.00	12,756	11,394	34,768
8.00	985.00	15,758	14,229	48,997
9.00	986.00	19,224	17,461	66,458
10.00	987.00	23,324	21,239	87,697

Culvert / Orifice Structures

	[A]	[B]	[C]	[PrfRsr]
Rise (in)	= 42.00	36.00	15.00	1.50
Span (in)	= 42.00	36.00	15.00	1.50
No. Barrels	= 1	1	1	6
Invert El. (ft)	= 976.75	983.47	982.94	977.14
Length (ft)	= 15.00	0.00	0.00	5.80
Slope (%)	= 2.00	0.00	0.00	n/a
N-Value	= .013	.013	.013	n/a
Orifice Coeff.	= 0.60	0.60	0.60	0.60
Multi-Stage	= n/a	Yes	Yes	Yes

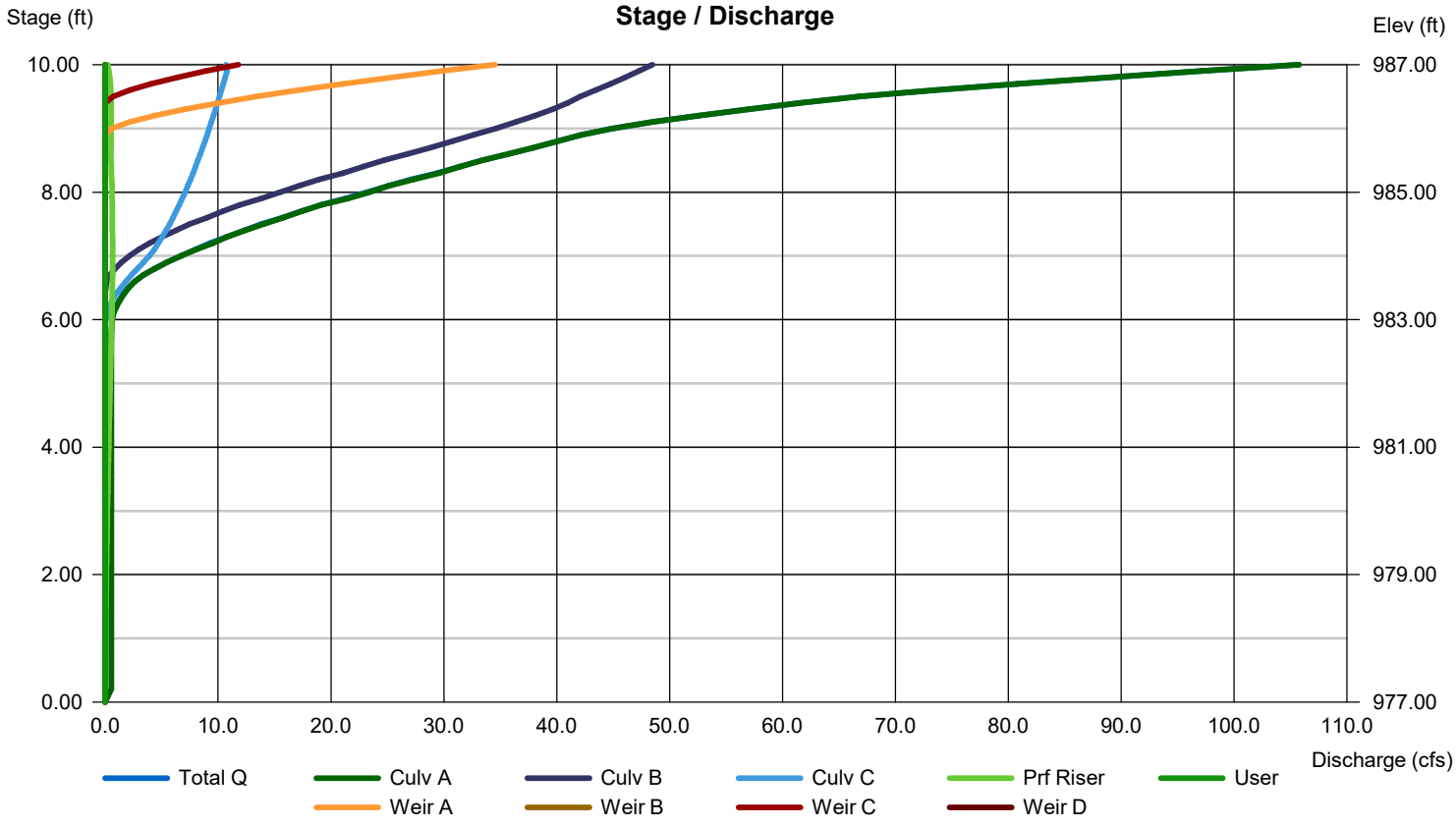
Weir Structures

	[A]	[B]	[C]	[D]
Crest Len (ft)	= 12.00	0.00	10.00	0.00
Crest El. (ft)	= 985.93	0.00	986.41	0.00
Weir Coeff.	= 2.60	2.60	2.60	3.33
Weir Type	= Broad	Broad	Broad	---
Multi-Stage	= Yes	Yes	Yes	No

Exfil.(in/hr) = 0.000 (by Wet area)

TW Elev. (ft) = 0.00

Note: Culvert/Orifice outflows are analyzed under inlet (ic) and outlet (oc) control. Weir risers checked for orifice conditions (ic) and submergence (s).

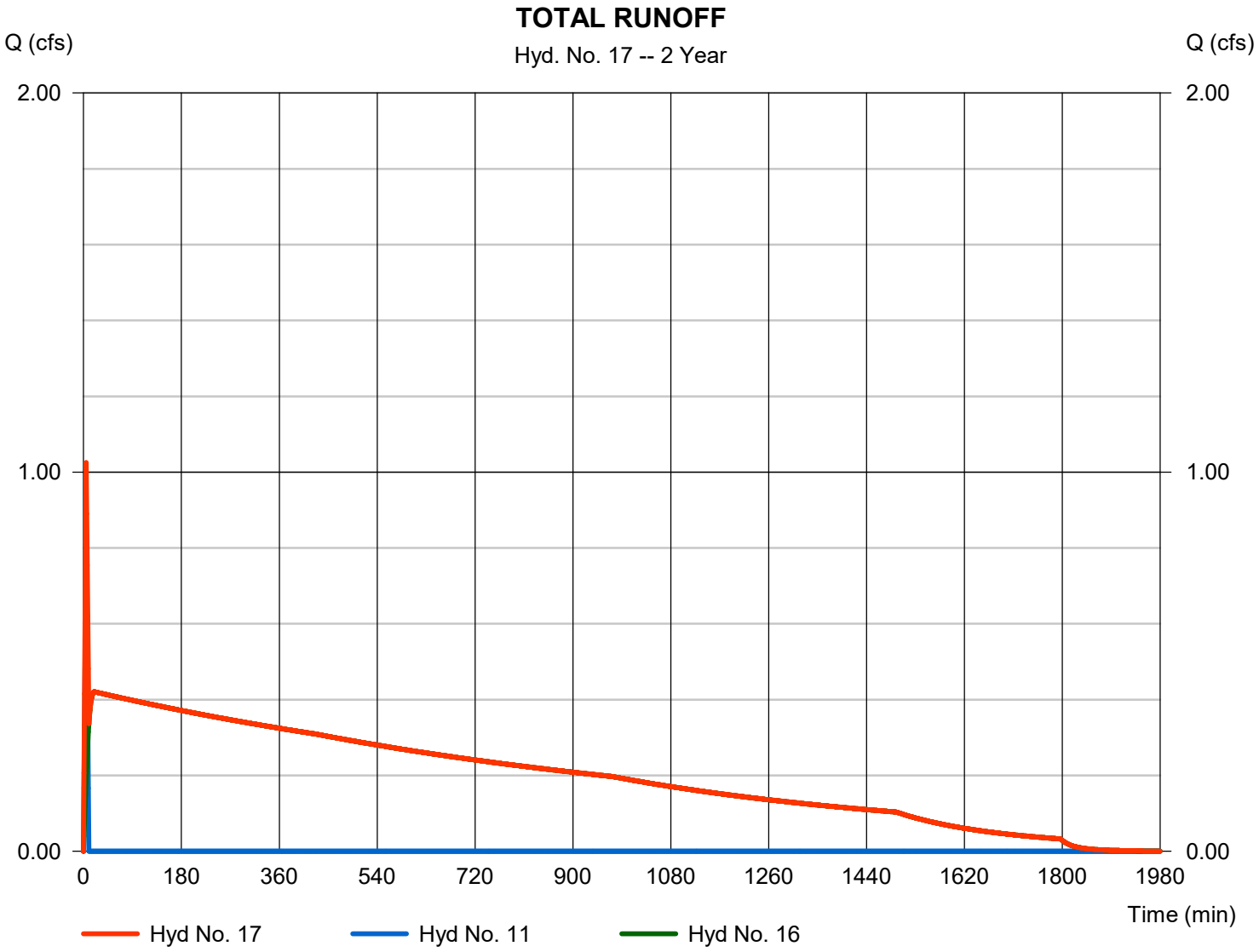


Hydrograph Report

Hyd. No. 17

TOTAL RUNOFF

Hydrograph type	=	Combine	Peak discharge	=	1.025 cfs
Storm frequency	=	2 yrs	Time to peak	=	5 min
Time interval	=	1 min	Hyd. volume	=	23,151 cuft
Inflow hyds.	=	11, 16	Contrib. drain. area	=	0.350 ac



Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

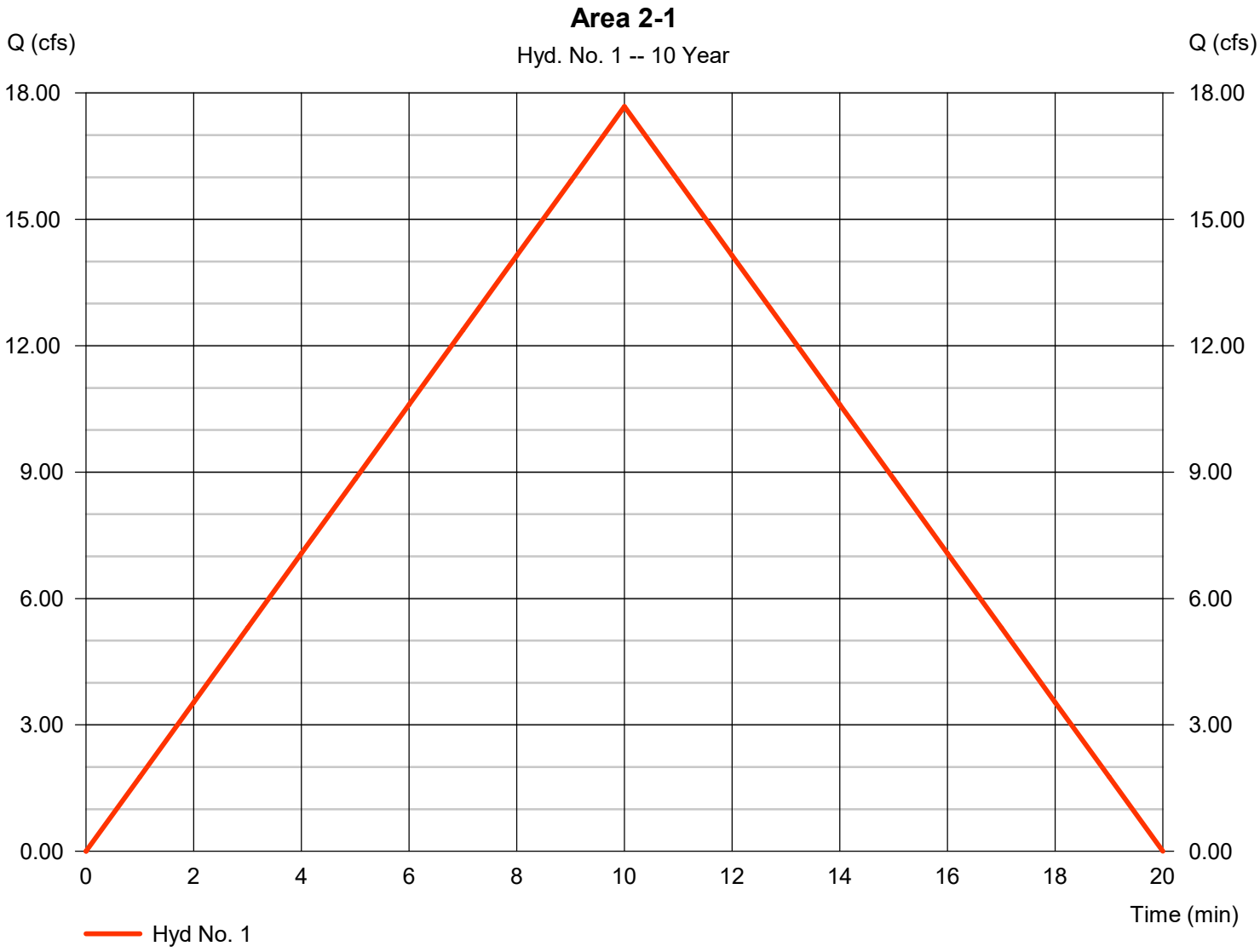
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	17.68	1	10	10,606	------	------	------	Area 2-1
2	Rational	8.189	1	10	4,913	------	------	------	Area 2-2
3	Rational	23.40	1	7	9,828	------	------	------	Area 2-3
4	Rational	5.015	1	5	1,505	------	------	------	Area 2-4
5	Rational	0.926	1	5	278	------	------	------	Area 2-5
6	Rational	5.529	1	5	1,659	------	------	------	Area 2-6
7	Rational	3.233	1	5	970	------	------	------	Area 2-7
8	Rational	1.833	1	5	550	------	------	------	Area 2-8
9	Rational	1.587	1	5	476	------	------	------	Area 2-9
10	Rational	2.311	1	5	693	------	------	------	Area 2-10
11	Rational	1.132	1	5	339	------	------	------	Area 2-11
12	Combine	41.51	1	7	25,347	1, 2, 3,	------	------	Combined 1
13	Combine	9.175	1	5	2,752	4, 5, 7,	------	------	Combined 2
14	Combine	11.26	1	5	3,378	6, 8, 9,	------	------	Combined 3
15	Combine	53.77	1	7	31,478	10, 12, 13, 14	------	------	TOTAL TO DETENTION
16	Reservoir	0.520	1	20	31,461	15	982.60	31,053	TOTAL DETENTION
17	Combine	1.353	1	5	31,800	11, 16	------	------	TOTAL RUNOFF

Hydrograph Report

Hyd. No. 1

Area 2-1

Hydrograph type	= Rational	Peak discharge	= 17.68 cfs
Storm frequency	= 10 yrs	Time to peak	= 10 min
Time interval	= 1 min	Hyd. volume	= 10,606 cuft
Drainage area	= 9.380 ac	Runoff coeff.	= 0.31
Intensity	= 6.079 in/hr	Tc by User	= 10.00 min
IDF Curve	= KCAPWA.IDF	Asc/Rec limb fact	= 1/1

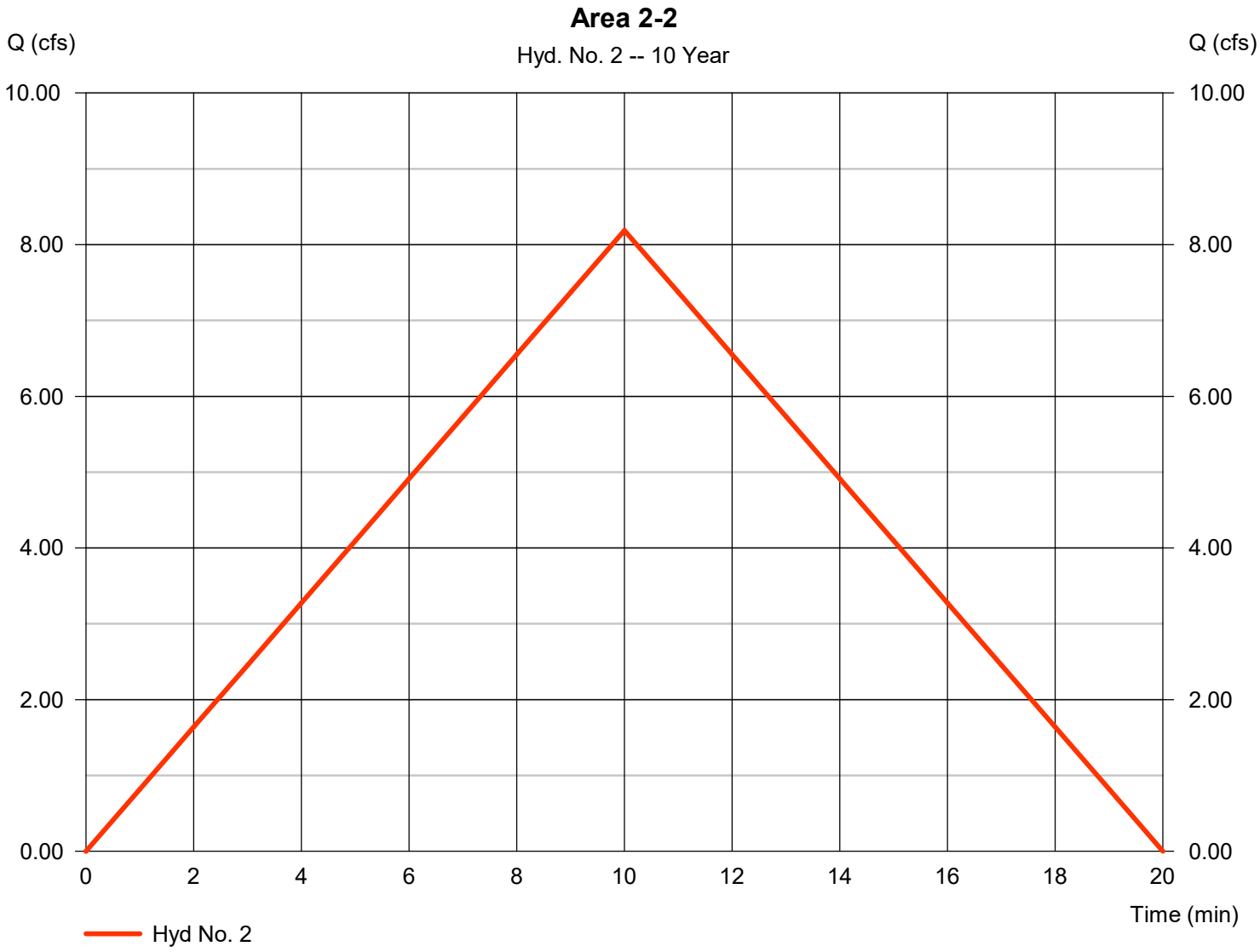


Hydrograph Report

Hyd. No. 2

Area 2-2

Hydrograph type	= Rational	Peak discharge	= 8.189 cfs
Storm frequency	= 10 yrs	Time to peak	= 10 min
Time interval	= 1 min	Hyd. volume	= 4,913 cuft
Drainage area	= 4.490 ac	Runoff coeff.	= 0.3
Intensity	= 6.079 in/hr	Tc by User	= 10.00 min
IDF Curve	= KCAPWA.IDF	Asc/Rec limb fact	= 1/1

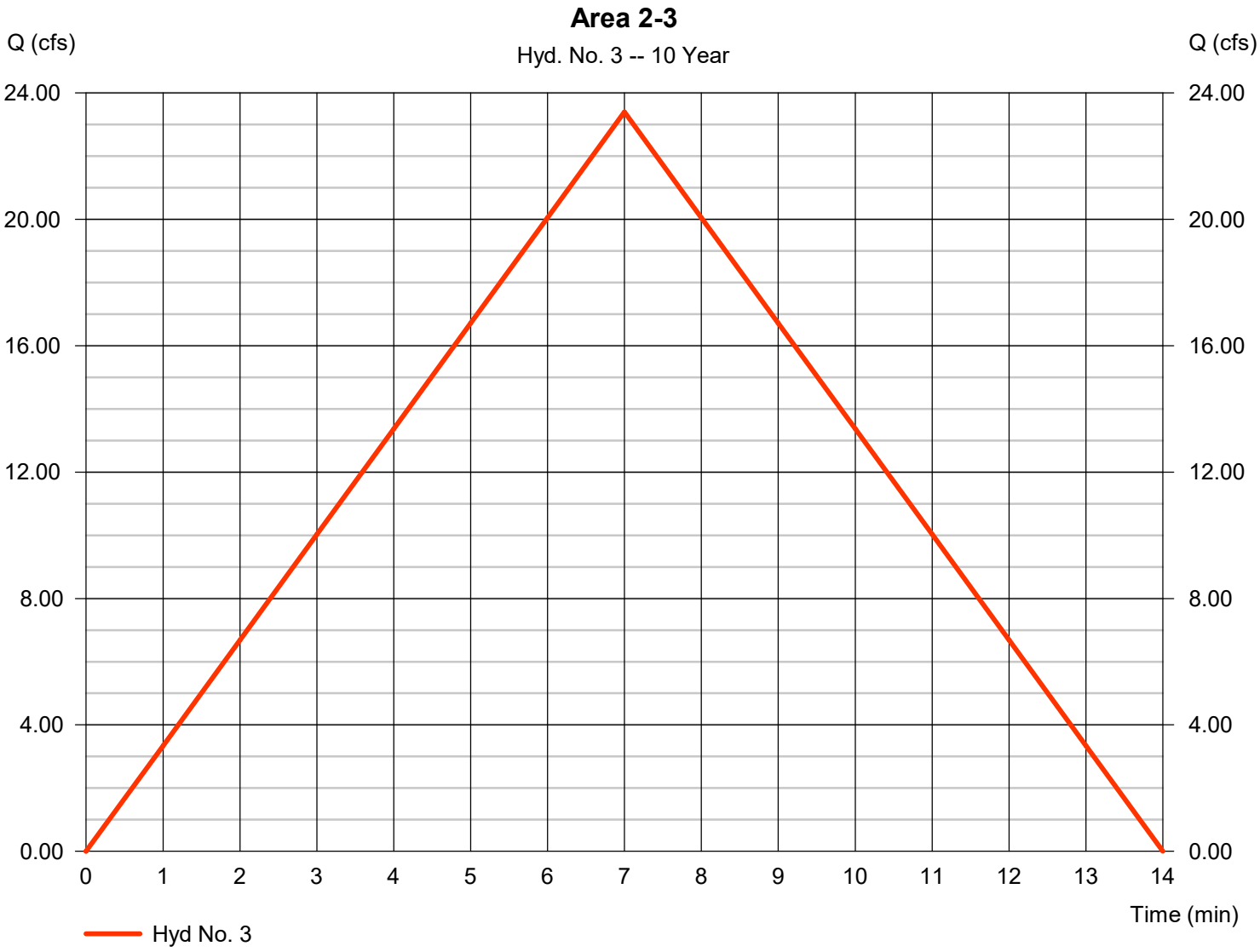


Hydrograph Report

Hyd. No. 3

Area 2-3

Hydrograph type	=	Rational	Peak discharge	=	23.40 cfs
Storm frequency	=	10 yrs	Time to peak	=	7 min
Time interval	=	1 min	Hyd. volume	=	9,828 cuft
Drainage area	=	11.500 ac	Runoff coeff.	=	0.3
Intensity	=	6.782 in/hr	Tc by User	=	7.00 min
IDF Curve	=	KCAPWA.IDF	Asc/Rec limb fact	=	1/1

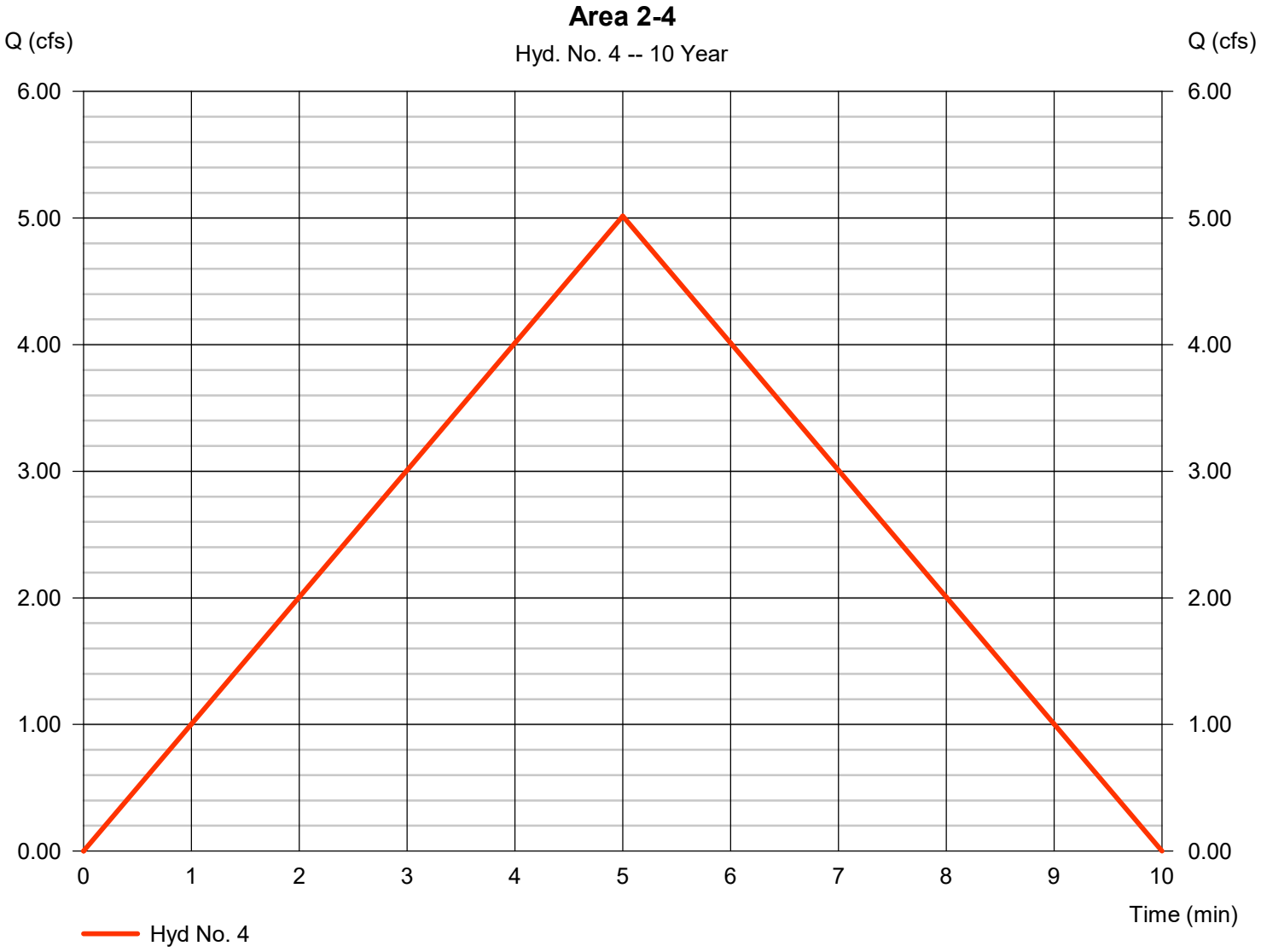


Hydrograph Report

Hyd. No. 4

Area 2-4

Hydrograph type	= Rational	Peak discharge	= 5.015 cfs
Storm frequency	= 10 yrs	Time to peak	= 5 min
Time interval	= 1 min	Hyd. volume	= 1,505 cuft
Drainage area	= 1.050 ac	Runoff coeff.	= 0.65
Intensity	= 7.348 in/hr	Tc by User	= 5.00 min
IDF Curve	= KCAPWA.IDF	Asc/Rec limb fact	= 1/1

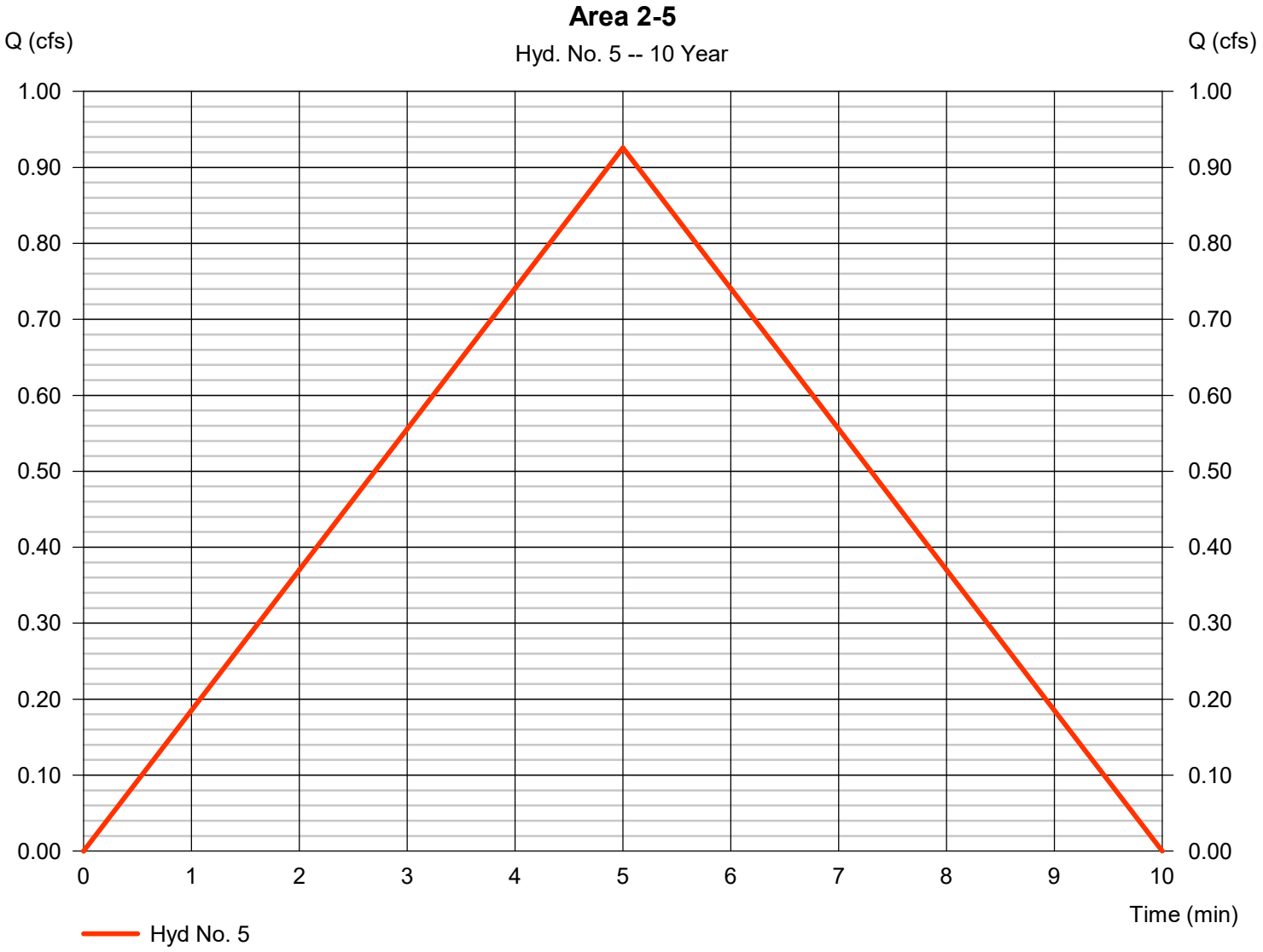


Hydrograph Report

Hyd. No. 5

Area 2-5

Hydrograph type	= Rational	Peak discharge	= 0.926 cfs
Storm frequency	= 10 yrs	Time to peak	= 5 min
Time interval	= 1 min	Hyd. volume	= 278 cuft
Drainage area	= 0.200 ac	Runoff coeff.	= 0.63
Intensity	= 7.348 in/hr	Tc by User	= 5.00 min
IDF Curve	= KCAPWA.IDF	Asc/Rec limb fact	= 1/1

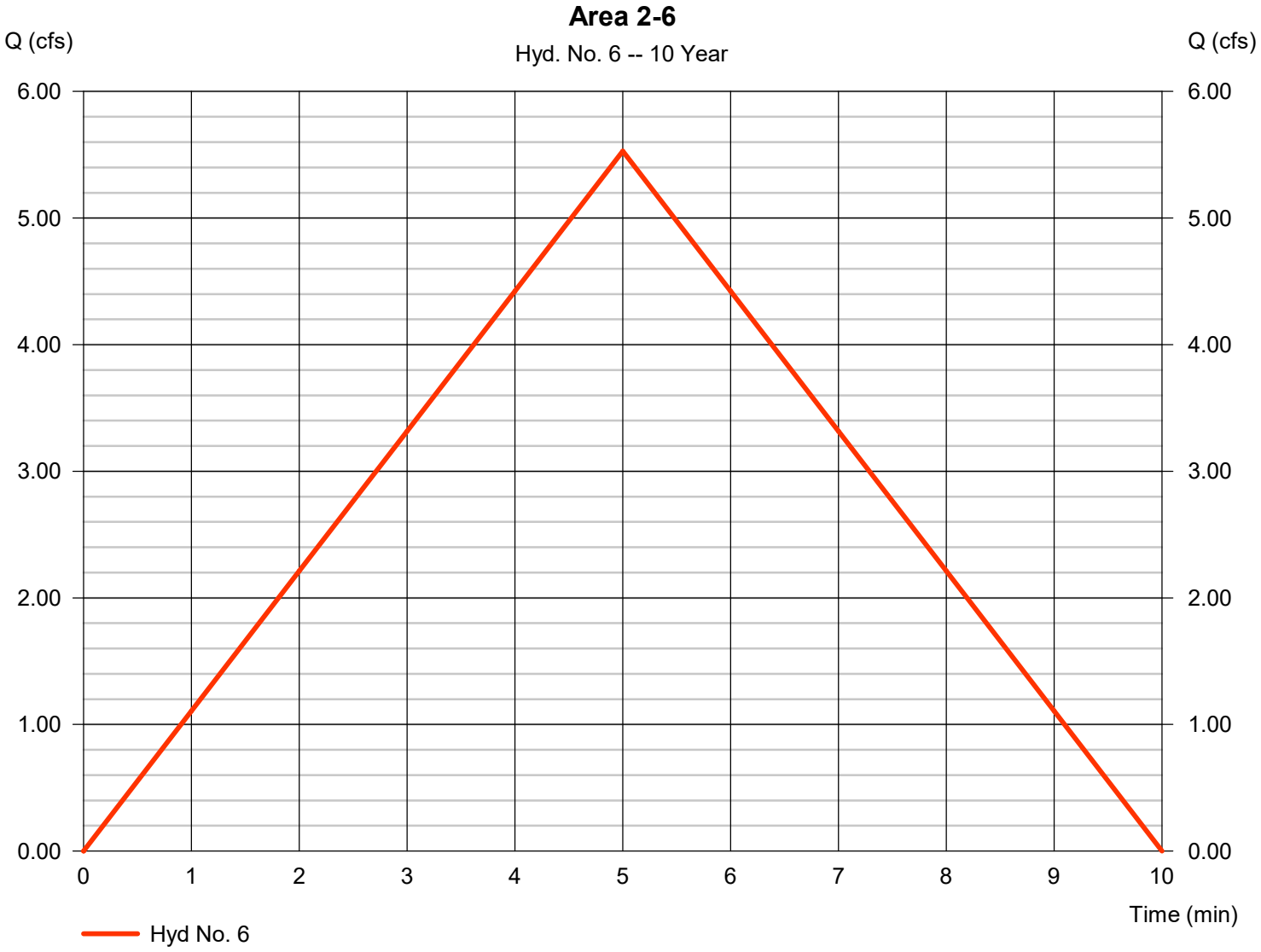


Hydrograph Report

Hyd. No. 6

Area 2-6

Hydrograph type	= Rational	Peak discharge	= 5.529 cfs
Storm frequency	= 10 yrs	Time to peak	= 5 min
Time interval	= 1 min	Hyd. volume	= 1,659 cuft
Drainage area	= 0.990 ac	Runoff coeff.	= 0.76
Intensity	= 7.348 in/hr	Tc by User	= 5.00 min
IDF Curve	= KCAPWA.IDF	Asc/Rec limb fact	= 1/1

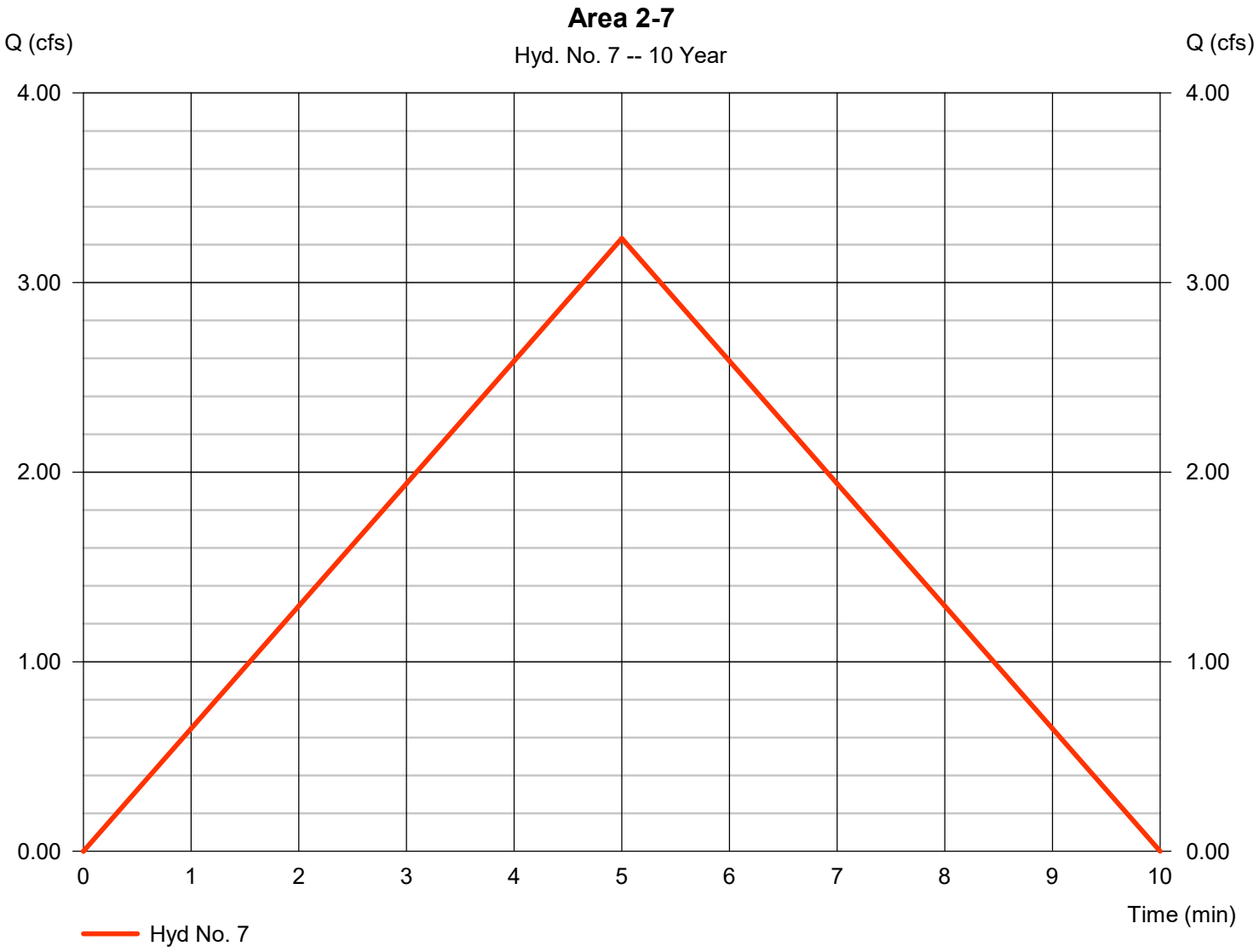


Hydrograph Report

Hyd. No. 7

Area 2-7

Hydrograph type	= Rational	Peak discharge	= 3.233 cfs
Storm frequency	= 10 yrs	Time to peak	= 5 min
Time interval	= 1 min	Hyd. volume	= 970 cuft
Drainage area	= 0.500 ac	Runoff coeff.	= 0.88
Intensity	= 7.348 in/hr	Tc by User	= 5.00 min
IDF Curve	= KCAPWA.IDF	Asc/Rec limb fact	= 1/1

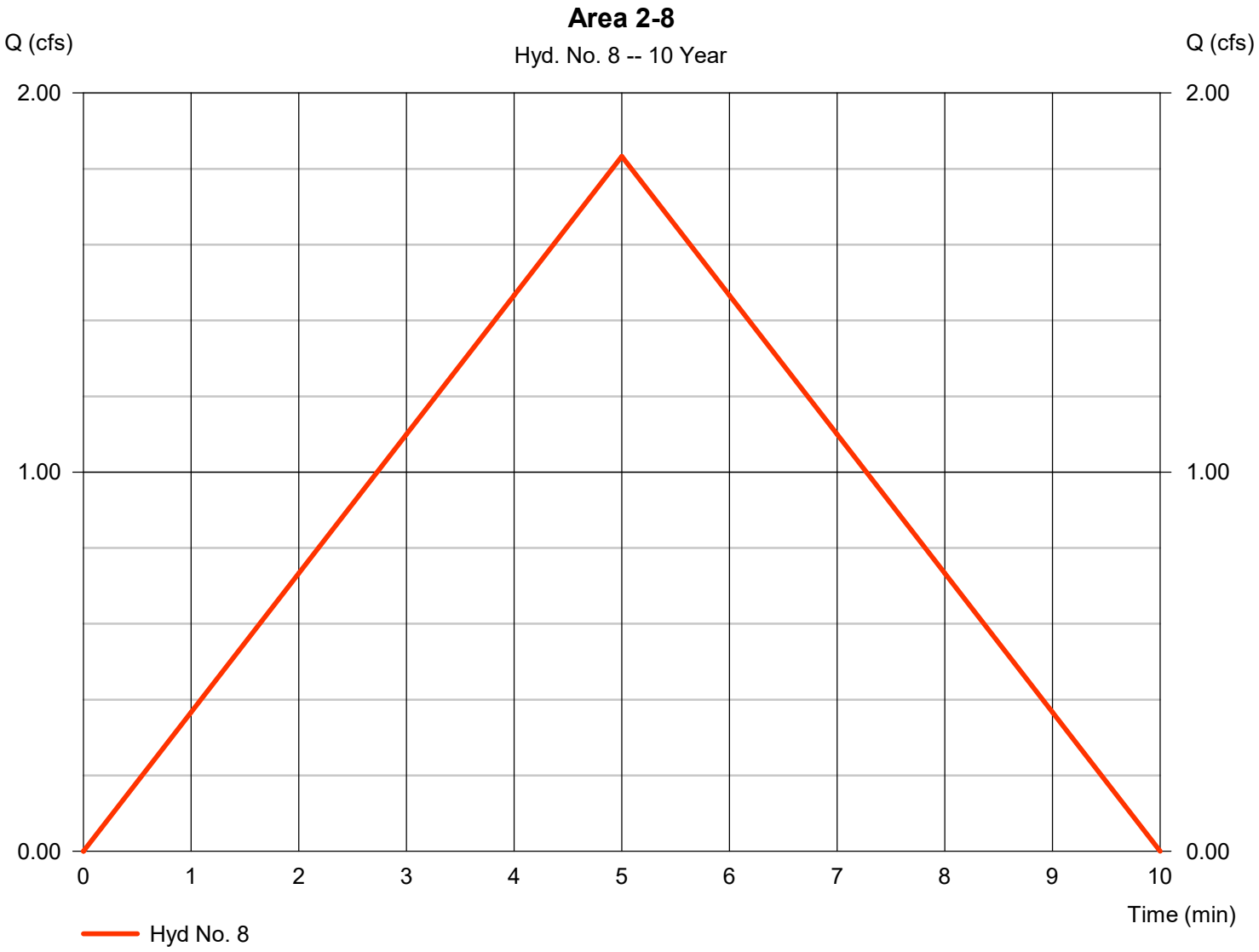


Hydrograph Report

Hyd. No. 8

Area 2-8

Hydrograph type	= Rational	Peak discharge	= 1.833 cfs
Storm frequency	= 10 yrs	Time to peak	= 5 min
Time interval	= 1 min	Hyd. volume	= 550 cuft
Drainage area	= 0.290 ac	Runoff coeff.	= 0.86
Intensity	= 7.348 in/hr	Tc by User	= 5.00 min
IDF Curve	= KCAPWA.IDF	Asc/Rec limb fact	= 1/1

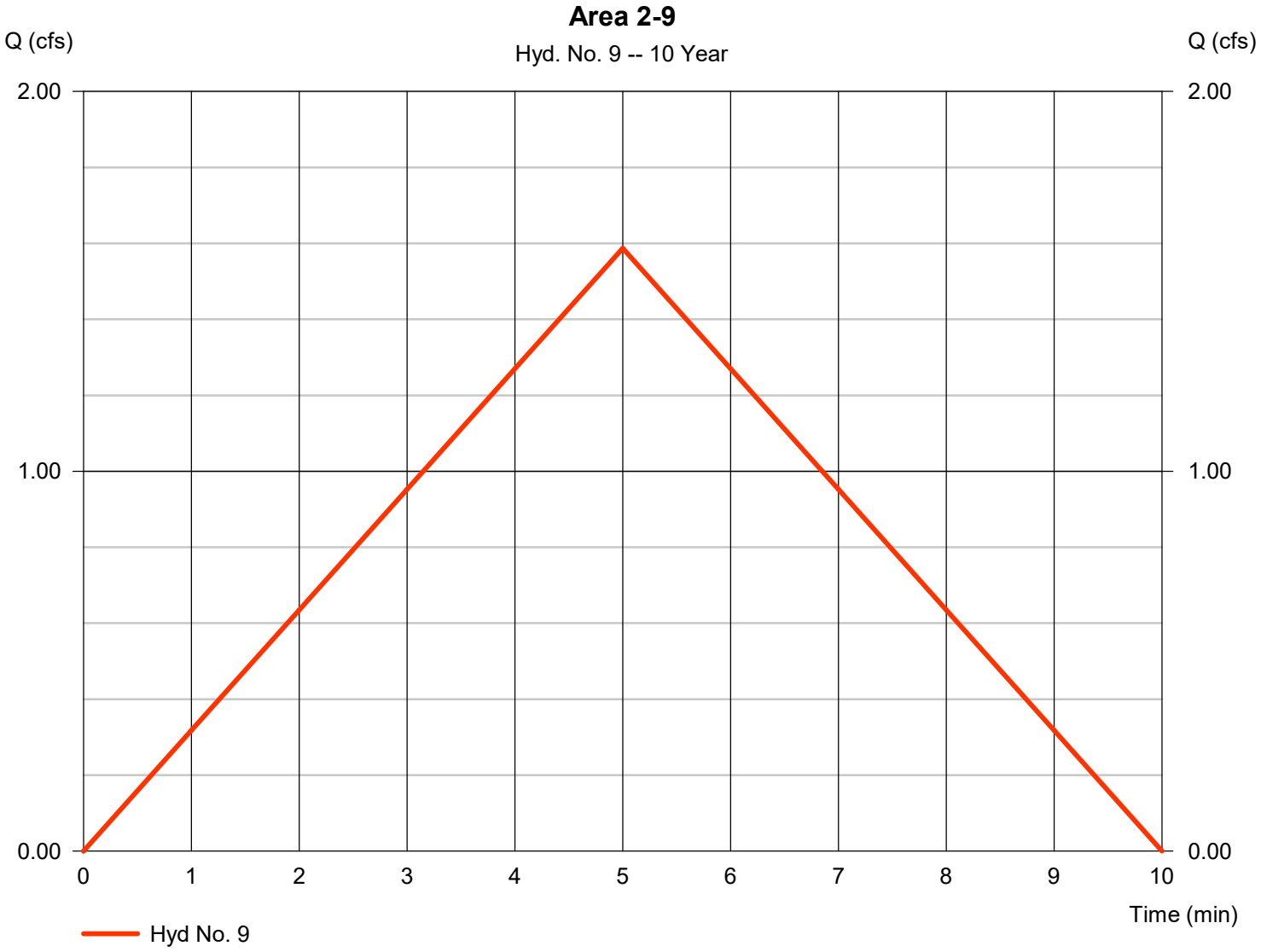


Hydrograph Report

Hyd. No. 9

Area 2-9

Hydrograph type	= Rational	Peak discharge	= 1.587 cfs
Storm frequency	= 10 yrs	Time to peak	= 5 min
Time interval	= 1 min	Hyd. volume	= 476 cuft
Drainage area	= 0.240 ac	Runoff coeff.	= 0.9
Intensity	= 7.348 in/hr	Tc by User	= 5.00 min
IDF Curve	= KCAPWA.IDF	Asc/Rec limb fact	= 1/1



Hydrograph Report

Hyd. No. 10

Area 2-10

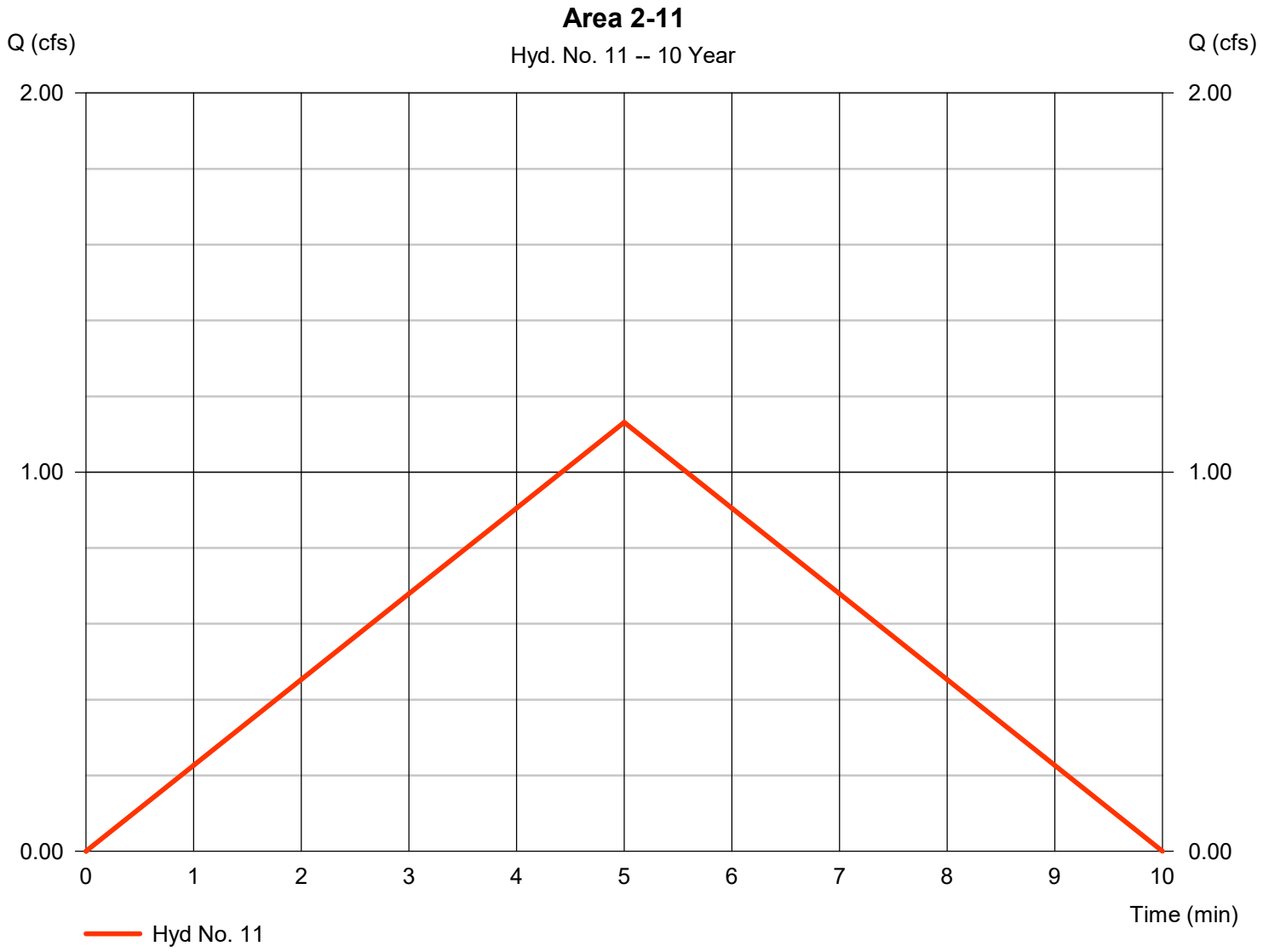
Hydrograph type	=	Rational	Peak discharge	=	2.311 cfs
Storm frequency	=	10 yrs	Time to peak	=	5 min
Time interval	=	1 min	Hyd. volume	=	693 cuft
Drainage area	=	0.370 ac	Runoff coeff.	=	0.85
Intensity	=	7.348 in/hr	Tc by User	=	5.00 min
IDF Curve	=	KCAPWA.IDF	Asc/Rec limb fact	=	1/1

Hydrograph Report

Hyd. No. 11

Area 2-11

Hydrograph type	=	Rational	Peak discharge	=	1.132 cfs
Storm frequency	=	10 yrs	Time to peak	=	5 min
Time interval	=	1 min	Hyd. volume	=	339 cuft
Drainage area	=	0.350 ac	Runoff coeff.	=	0.44
Intensity	=	7.348 in/hr	Tc by User	=	5.00 min
IDF Curve	=	KCAPWA.IDF	Asc/Rec limb fact	=	1/1

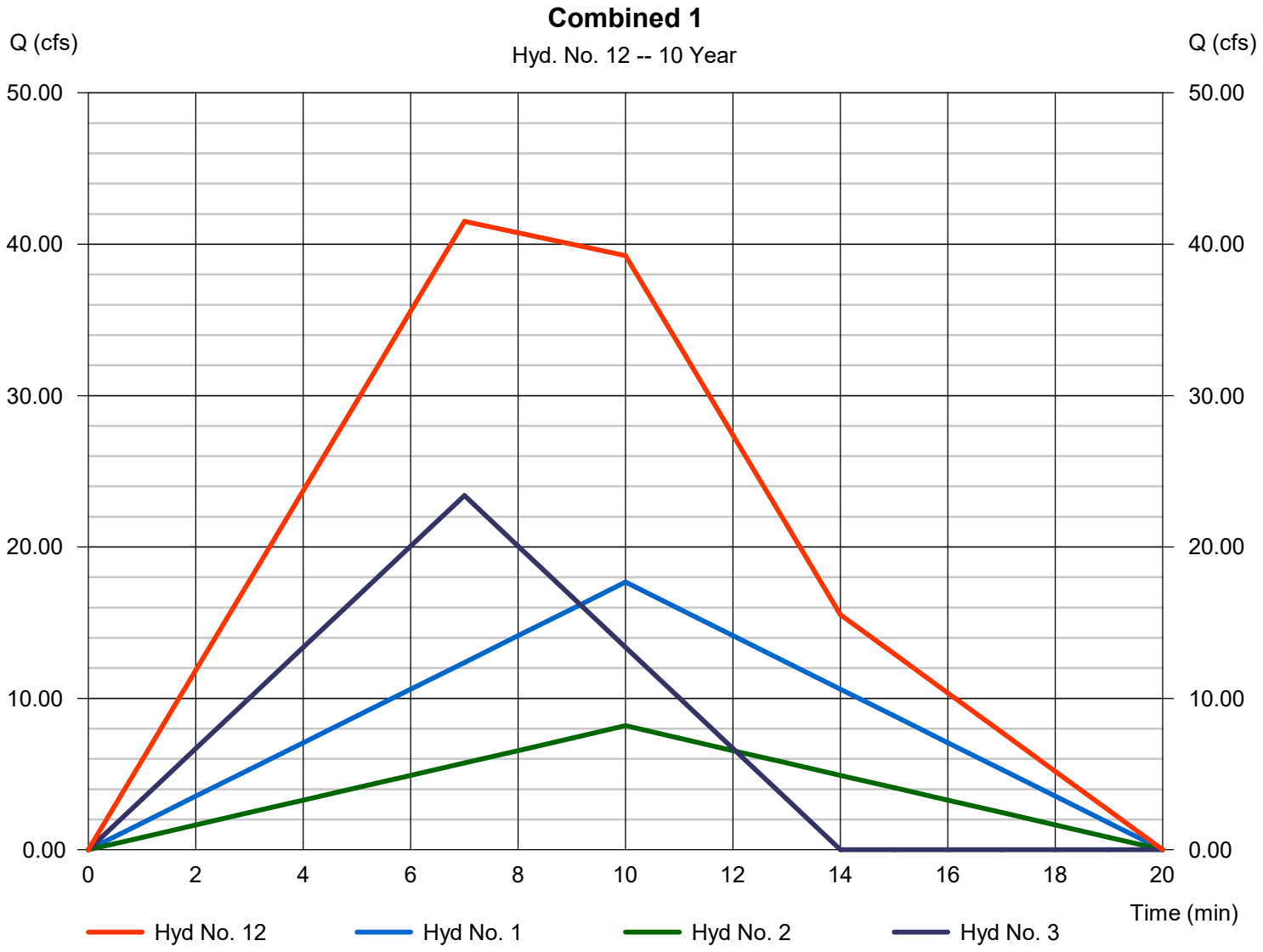


Hydrograph Report

Hyd. No. 12

Combined 1

Hydrograph type	= Combine	Peak discharge	= 41.51 cfs
Storm frequency	= 10 yrs	Time to peak	= 7 min
Time interval	= 1 min	Hyd. volume	= 25,347 cuft
Inflow hyds.	= 1, 2, 3	Contrib. drain. area	= 25.370 ac

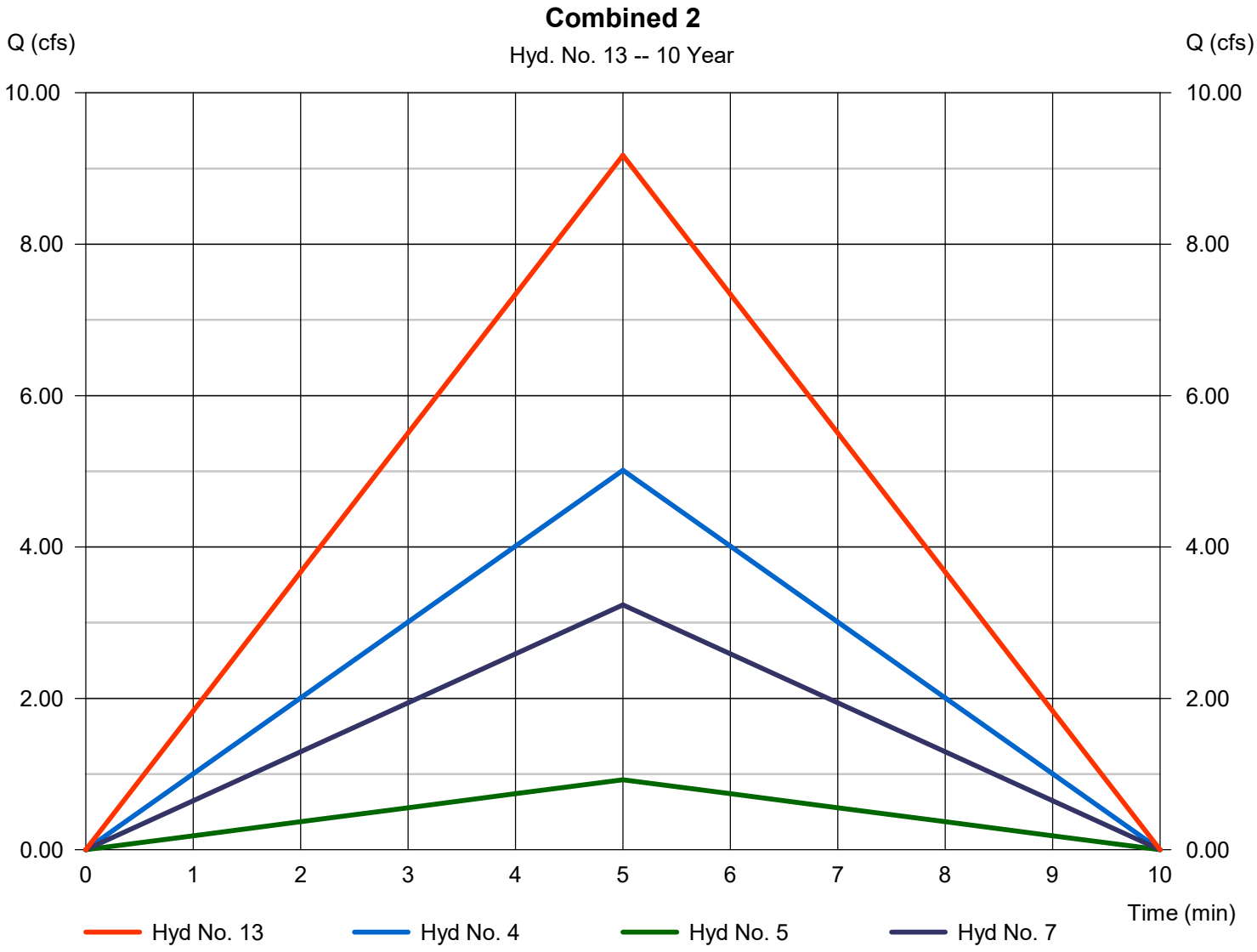


Hydrograph Report

Hyd. No. 13

Combined 2

Hydrograph type	= Combine	Peak discharge	= 9.175 cfs
Storm frequency	= 10 yrs	Time to peak	= 5 min
Time interval	= 1 min	Hyd. volume	= 2,752 cuft
Inflow hyds.	= 4, 5, 7	Contrib. drain. area	= 1.750 ac

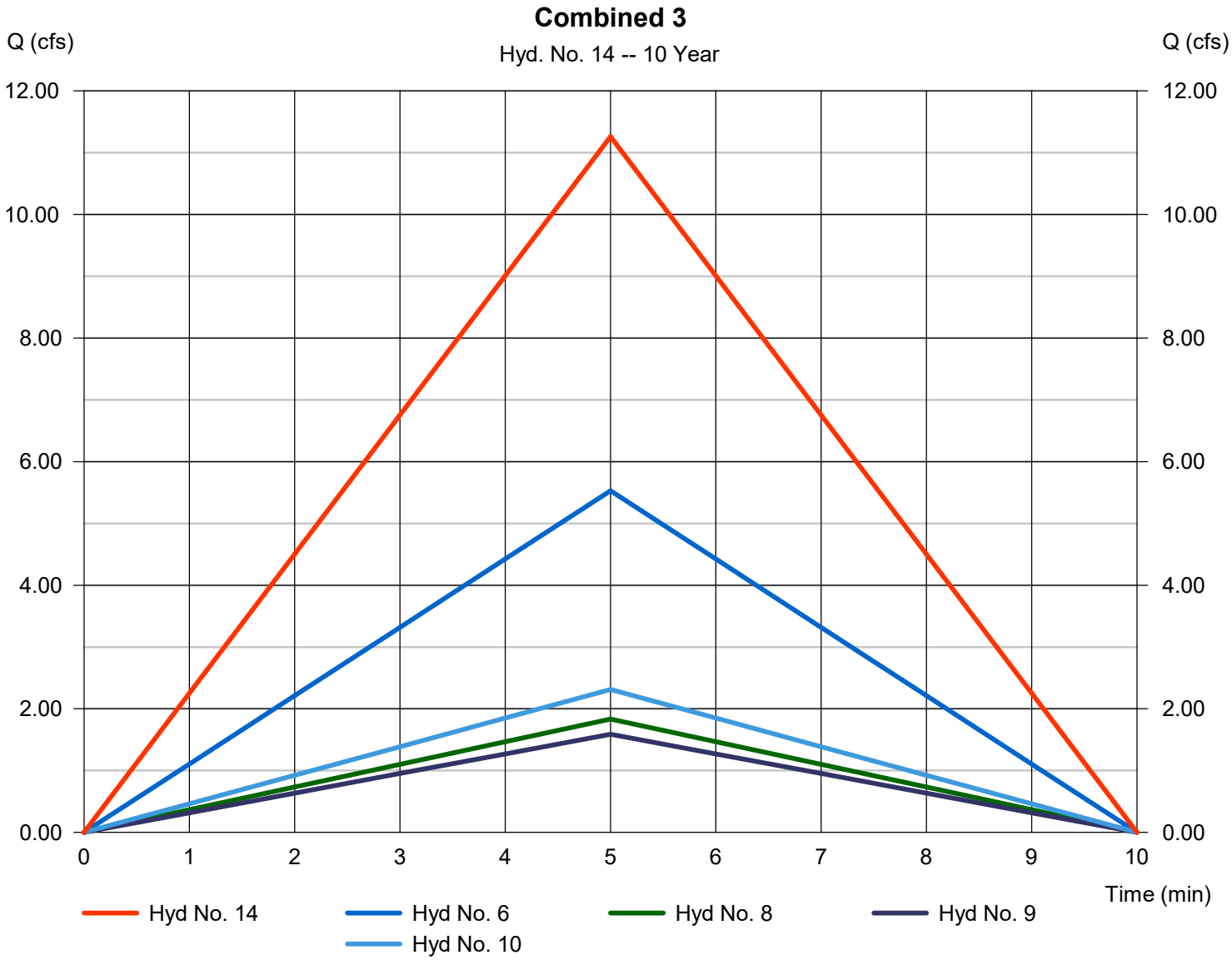


Hydrograph Report

Hyd. No. 14

Combined 3

Hydrograph type	=	Combine	Peak discharge	=	11.26 cfs
Storm frequency	=	10 yrs	Time to peak	=	5 min
Time interval	=	1 min	Hyd. volume	=	3,378 cuft
Inflow hyds.	=	6, 8, 9, 10	Contrib. drain. area	=	1.890 ac

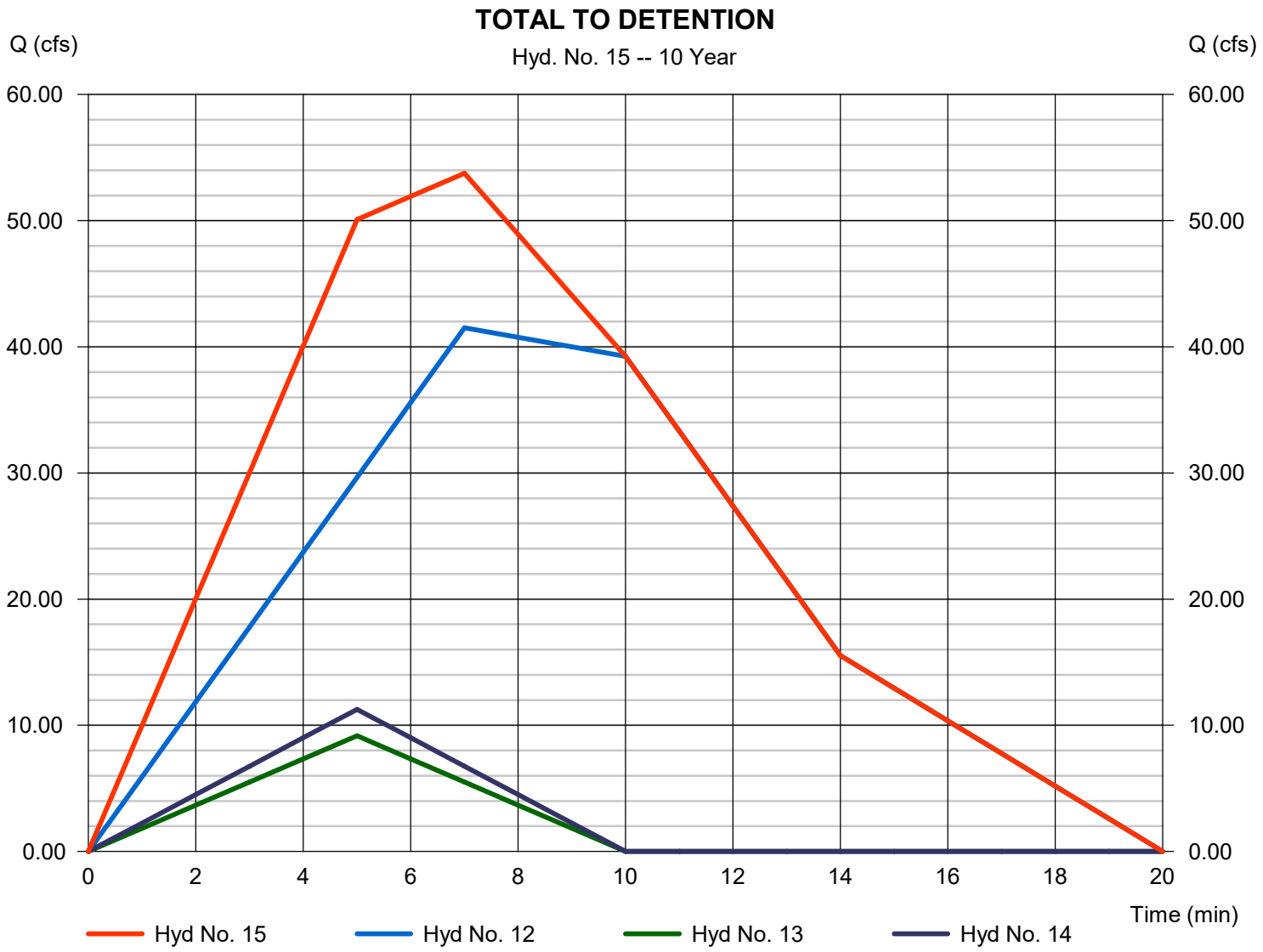


Hydrograph Report

Hyd. No. 15

TOTAL TO DETENTION

Hydrograph type	=	Combine	Peak discharge	=	53.77 cfs
Storm frequency	=	10 yrs	Time to peak	=	7 min
Time interval	=	1 min	Hyd. volume	=	31,478 cuft
Inflow hyds.	=	12, 13, 14	Contrib. drain. area	=	0.000 ac



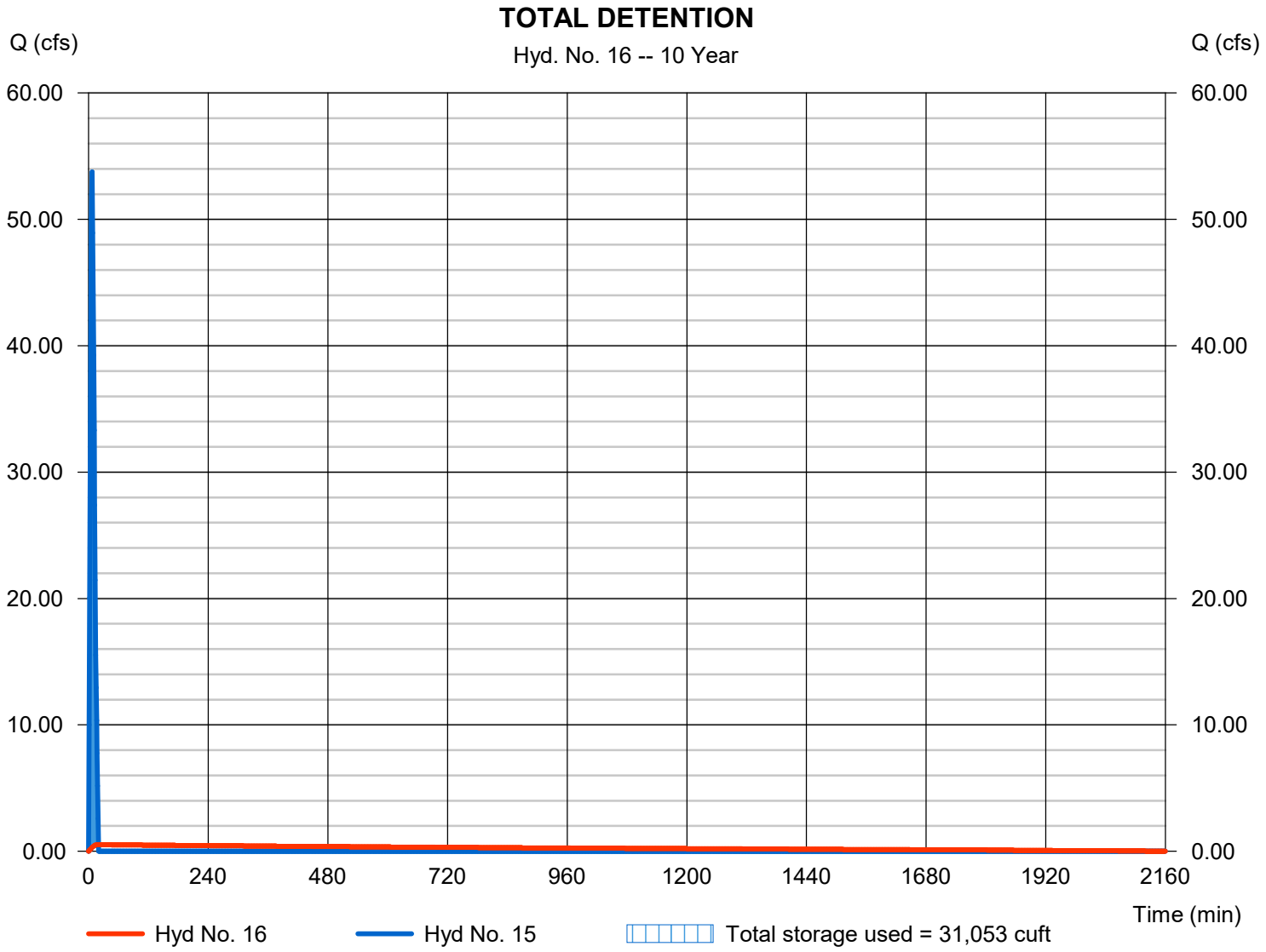
Hydrograph Report

Hyd. No. 16

TOTAL DETENTION

Hydrograph type	=	Reservoir	Peak discharge	=	0.520 cfs
Storm frequency	=	10 yrs	Time to peak	=	20 min
Time interval	=	1 min	Hyd. volume	=	31,461 cuft
Inflow hyd. No.	=	15 - TOTAL TO DETENTION	Max. Elevation	=	982.60 ft
Reservoir name	=	Detention	Max. Storage	=	31,053 cuft

Storage Indication method used.

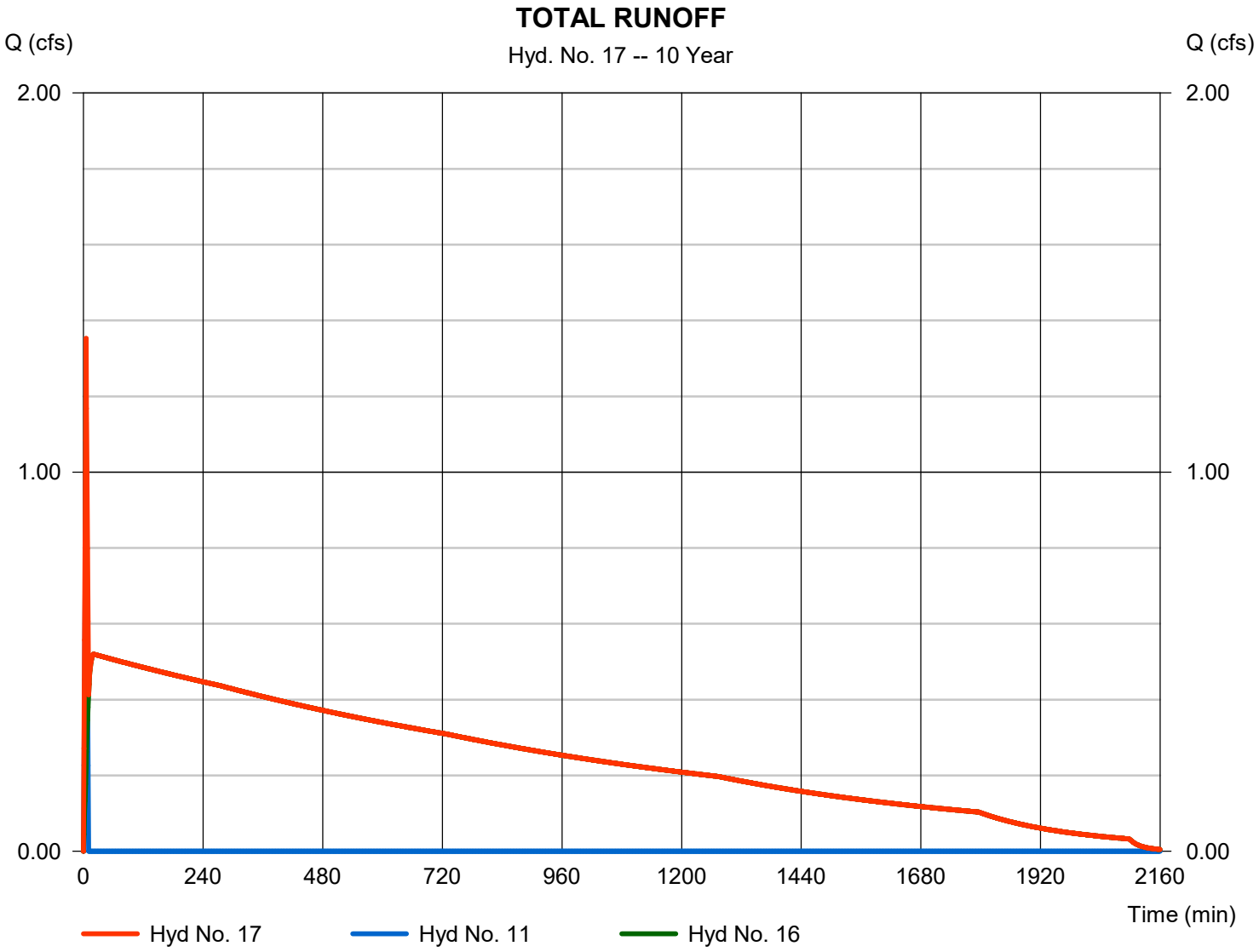


Hydrograph Report

Hyd. No. 17

TOTAL RUNOFF

Hydrograph type	= Combine	Peak discharge	= 1.353 cfs
Storm frequency	= 10 yrs	Time to peak	= 5 min
Time interval	= 1 min	Hyd. volume	= 31,800 cuft
Inflow hyds.	= 11, 16	Contrib. drain. area	= 0.350 ac



Hydrograph Summary Report

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023

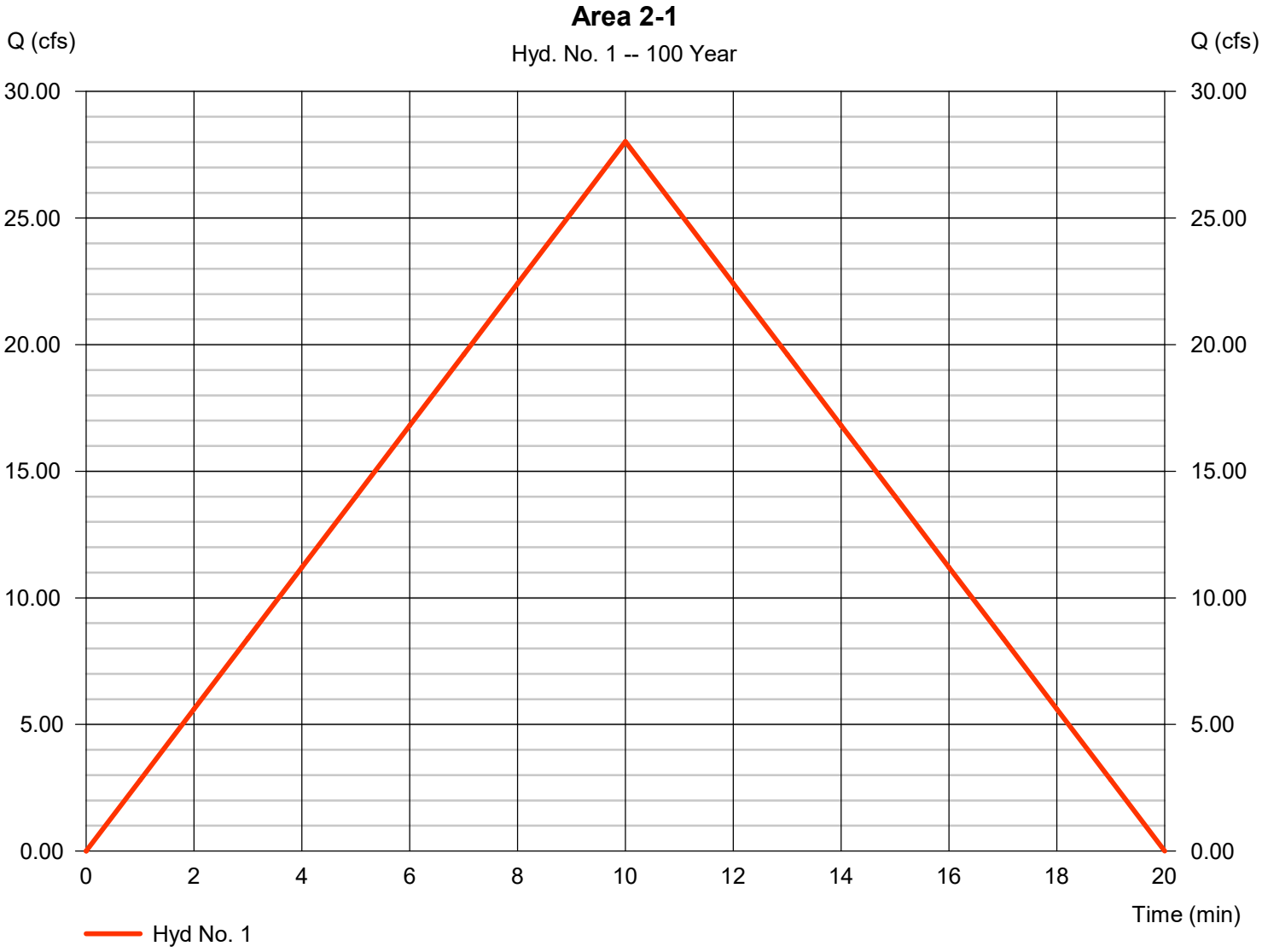
Hyd. No.	Hydrograph type (origin)	Peak flow (cfs)	Time interval (min)	Time to Peak (min)	Hyd. volume (cuft)	Inflow hyd(s)	Maximum elevation (ft)	Total strge used (cuft)	Hydrograph Description
1	Rational	28.02	1	10	16,812	------	------	------	Area 2-1
2	Rational	12.98	1	10	7,788	------	------	------	Area 2-2
3	Rational	39.03	1	7	16,394	------	------	------	Area 2-3
4	Rational	8.784	1	5	2,635	------	------	------	Area 2-4
5	Rational	1.622	1	5	487	------	------	------	Area 2-5
6	Rational	9.684	1	5	2,905	------	------	------	Area 2-6
7	Rational	5.663	1	5	1,699	------	------	------	Area 2-7
8	Rational	3.210	1	5	963	------	------	------	Area 2-8
9	Rational	2.780	1	5	834	------	------	------	Area 2-9
10	Rational	4.048	1	5	1,214	------	------	------	Area 2-10
11	Rational	1.982	1	5	595	------	------	------	Area 2-11
12	Combine	67.73	1	7	40,993	1, 2, 3,	------	------	Combined 1
13	Combine	16.07	1	5	4,821	4, 5, 7,	------	------	Combined 2
14	Combine	19.72	1	5	5,917	6, 8, 9,	------	------	Combined 3
15	Combine	89.21	1	7	51,731	10, 12, 13, 14	------	------	TOTAL TO DETENTION
16	Reservoir	5.839	1	19	51,714	15	983.93	49,378	TOTAL DETENTION
17	Combine	5.839	1	19	52,308	11, 16	------	------	TOTAL RUNOFF

Hydrograph Report

Hyd. No. 1

Area 2-1

Hydrograph type	= Rational	Peak discharge	= 28.02 cfs
Storm frequency	= 100 yrs	Time to peak	= 10 min
Time interval	= 1 min	Hyd. volume	= 16,812 cuft
Drainage area	= 9.380 ac	Runoff coeff.	= 0.31
Intensity	= 9.636 in/hr	Tc by User	= 10.00 min
IDF Curve	= KCAPWA.IDF	Asc/Rec limb fact	= 1/1

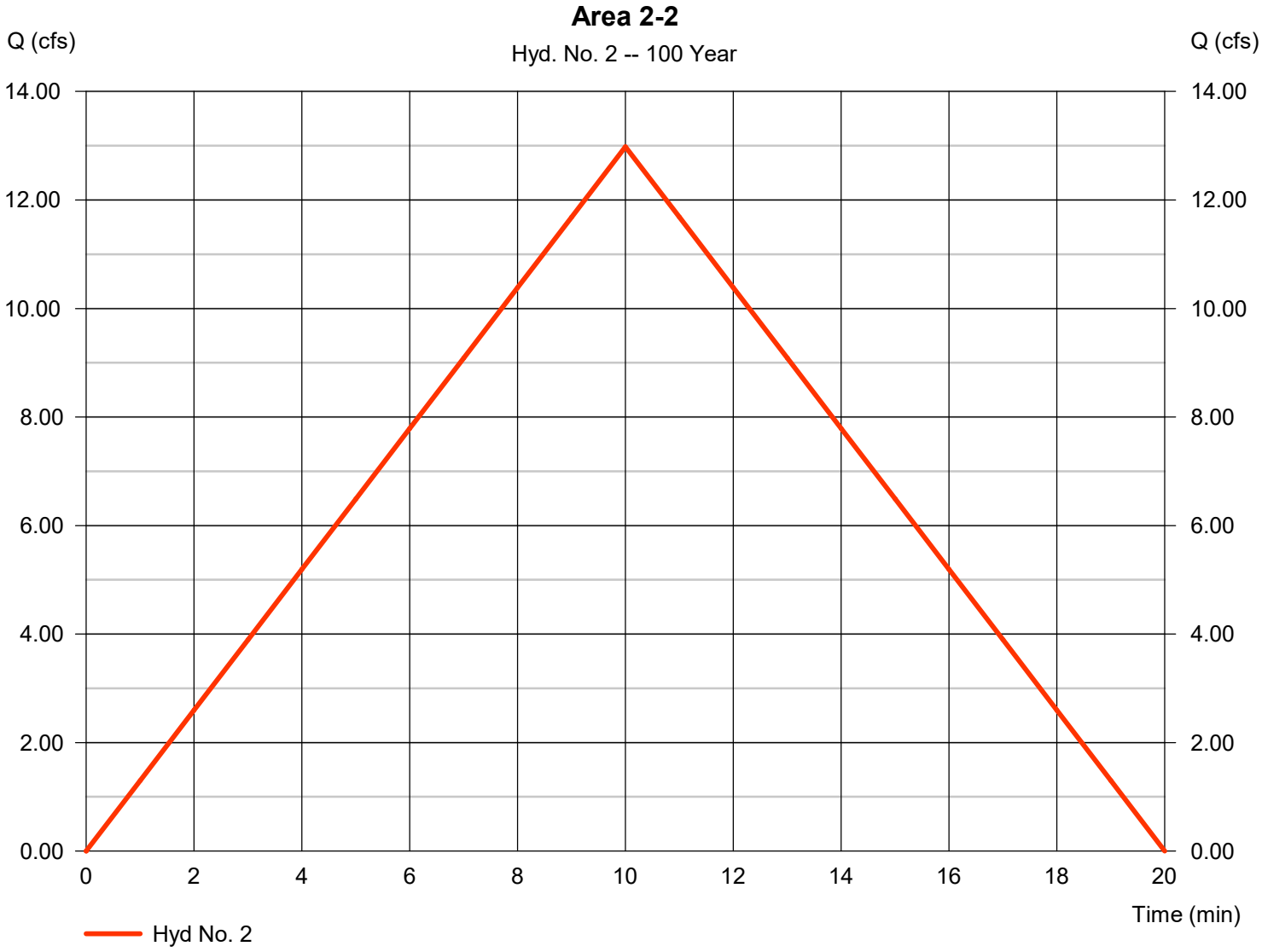


Hydrograph Report

Hyd. No. 2

Area 2-2

Hydrograph type	= Rational	Peak discharge	= 12.98 cfs
Storm frequency	= 100 yrs	Time to peak	= 10 min
Time interval	= 1 min	Hyd. volume	= 7,788 cuft
Drainage area	= 4.490 ac	Runoff coeff.	= 0.3
Intensity	= 9.636 in/hr	Tc by User	= 10.00 min
IDF Curve	= KCAPWA.IDF	Asc/Rec limb fact	= 1/1

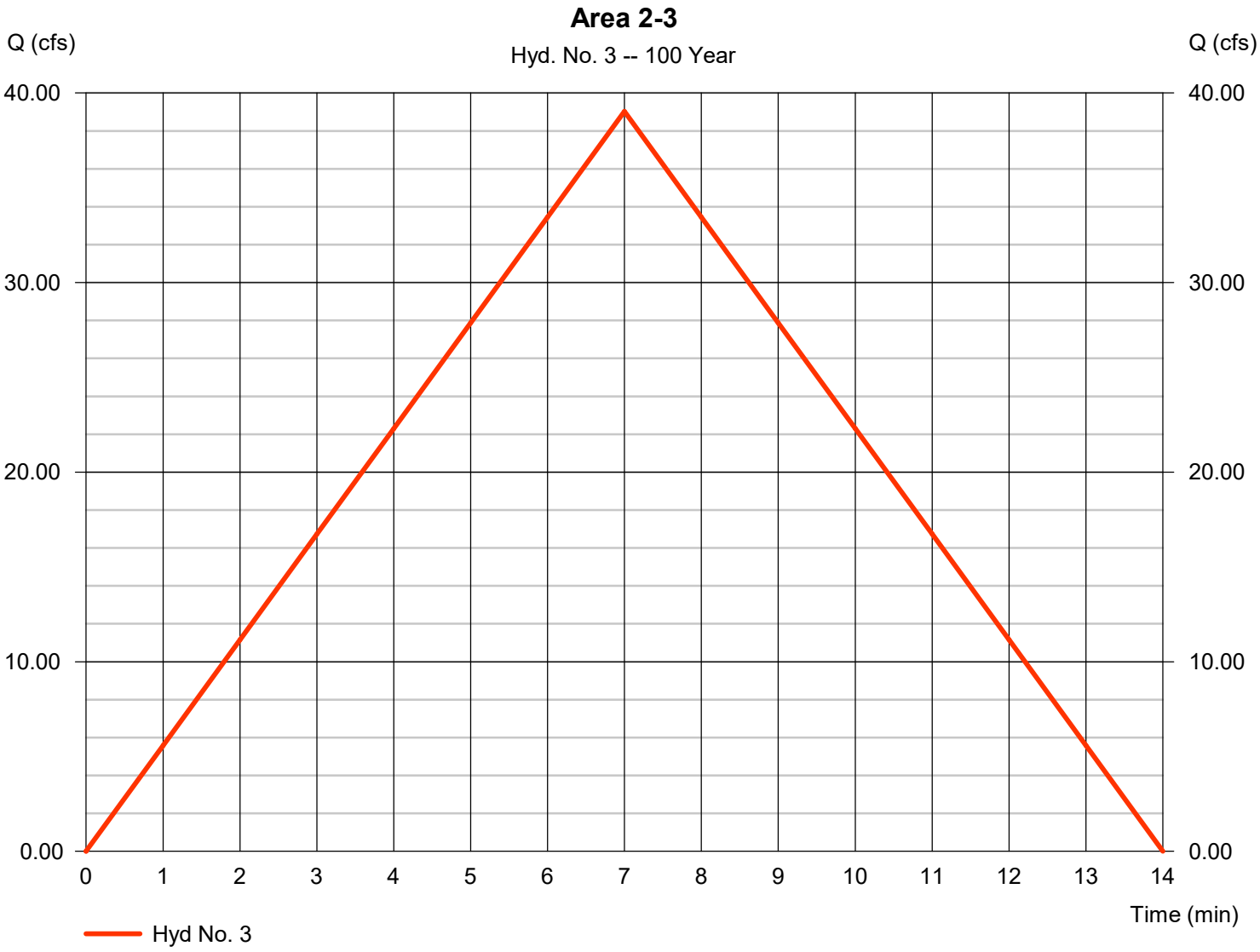


Hydrograph Report

Hyd. No. 3

Area 2-3

Hydrograph type	=	Rational	Peak discharge	=	39.03 cfs
Storm frequency	=	100 yrs	Time to peak	=	7 min
Time interval	=	1 min	Hyd. volume	=	16,394 cuft
Drainage area	=	11.500 ac	Runoff coeff.	=	0.3
Intensity	=	11.314 in/hr	Tc by User	=	7.00 min
IDF Curve	=	KCAPWA.IDF	Asc/Rec limb fact	=	1/1

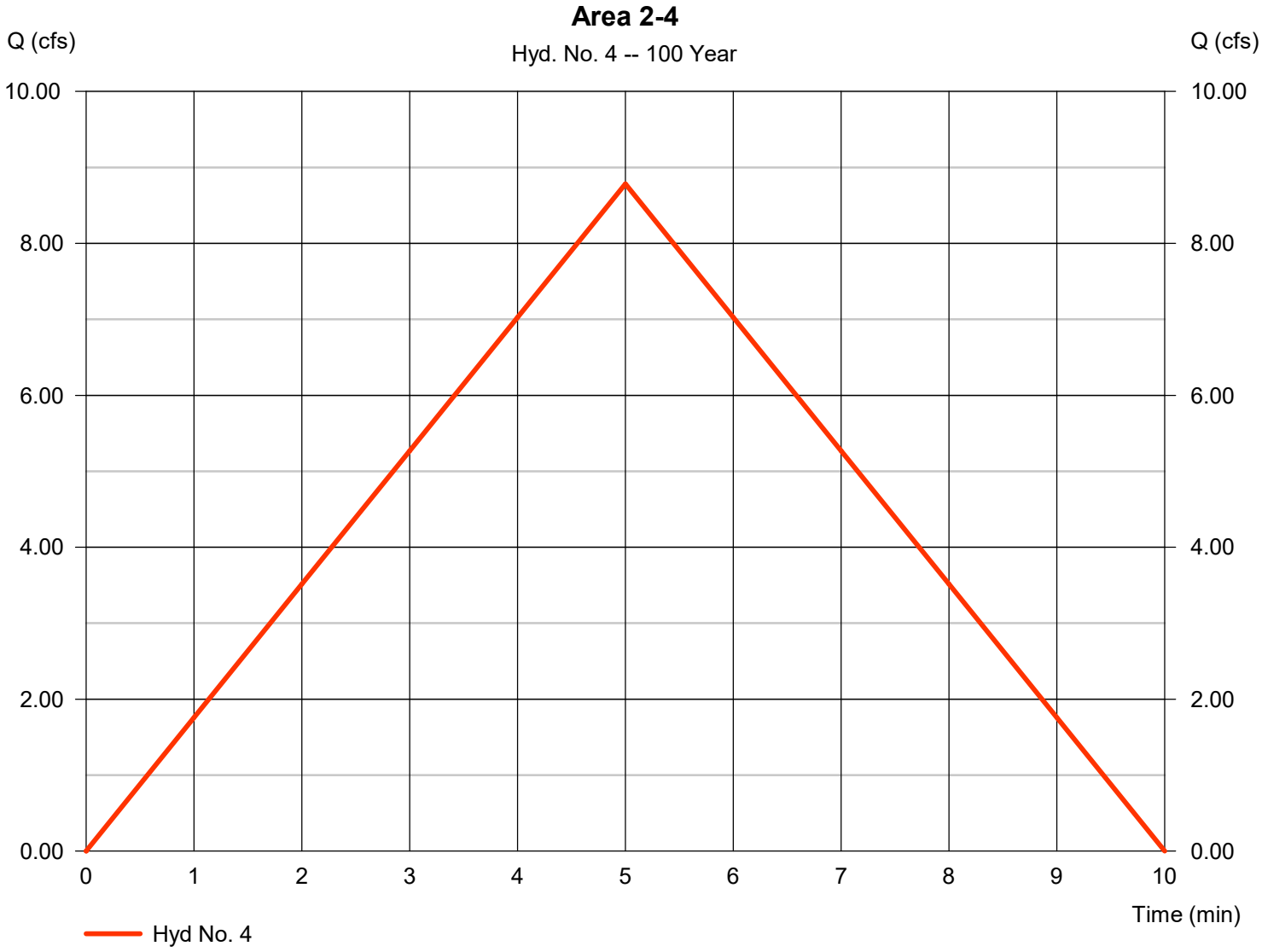


Hydrograph Report

Hyd. No. 4

Area 2-4

Hydrograph type	=	Rational	Peak discharge	=	8.784 cfs
Storm frequency	=	100 yrs	Time to peak	=	5 min
Time interval	=	1 min	Hyd. volume	=	2,635 cuft
Drainage area	=	1.050 ac	Runoff coeff.	=	0.65
Intensity	=	12.871 in/hr	Tc by User	=	5.00 min
IDF Curve	=	KCAPWA.IDF	Asc/Rec limb fact	=	1/1

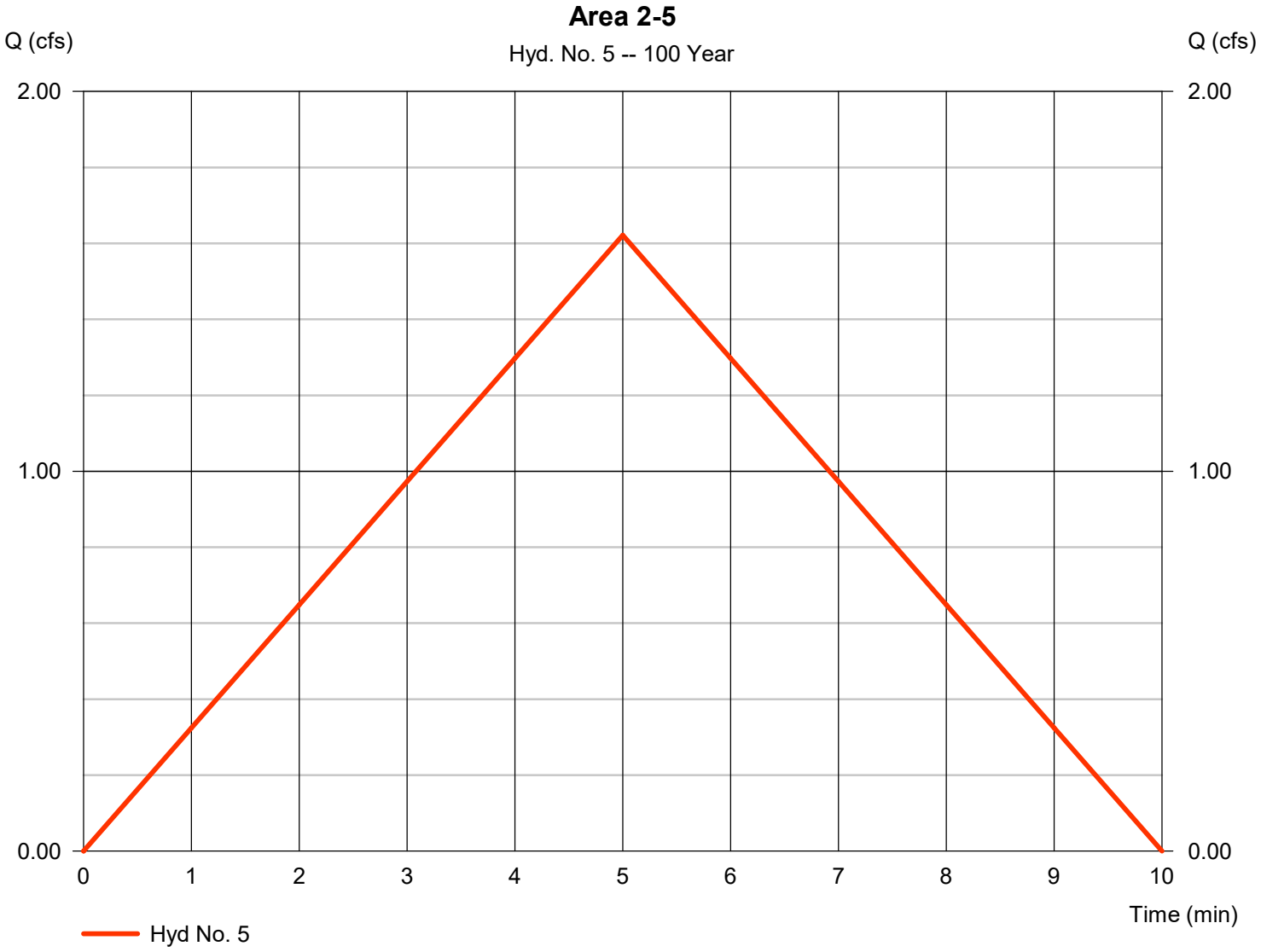


Hydrograph Report

Hyd. No. 5

Area 2-5

Hydrograph type	= Rational	Peak discharge	= 1.622 cfs
Storm frequency	= 100 yrs	Time to peak	= 5 min
Time interval	= 1 min	Hyd. volume	= 487 cuft
Drainage area	= 0.200 ac	Runoff coeff.	= 0.63
Intensity	= 12.871 in/hr	Tc by User	= 5.00 min
IDF Curve	= KCAPWA.IDF	Asc/Rec limb fact	= 1/1

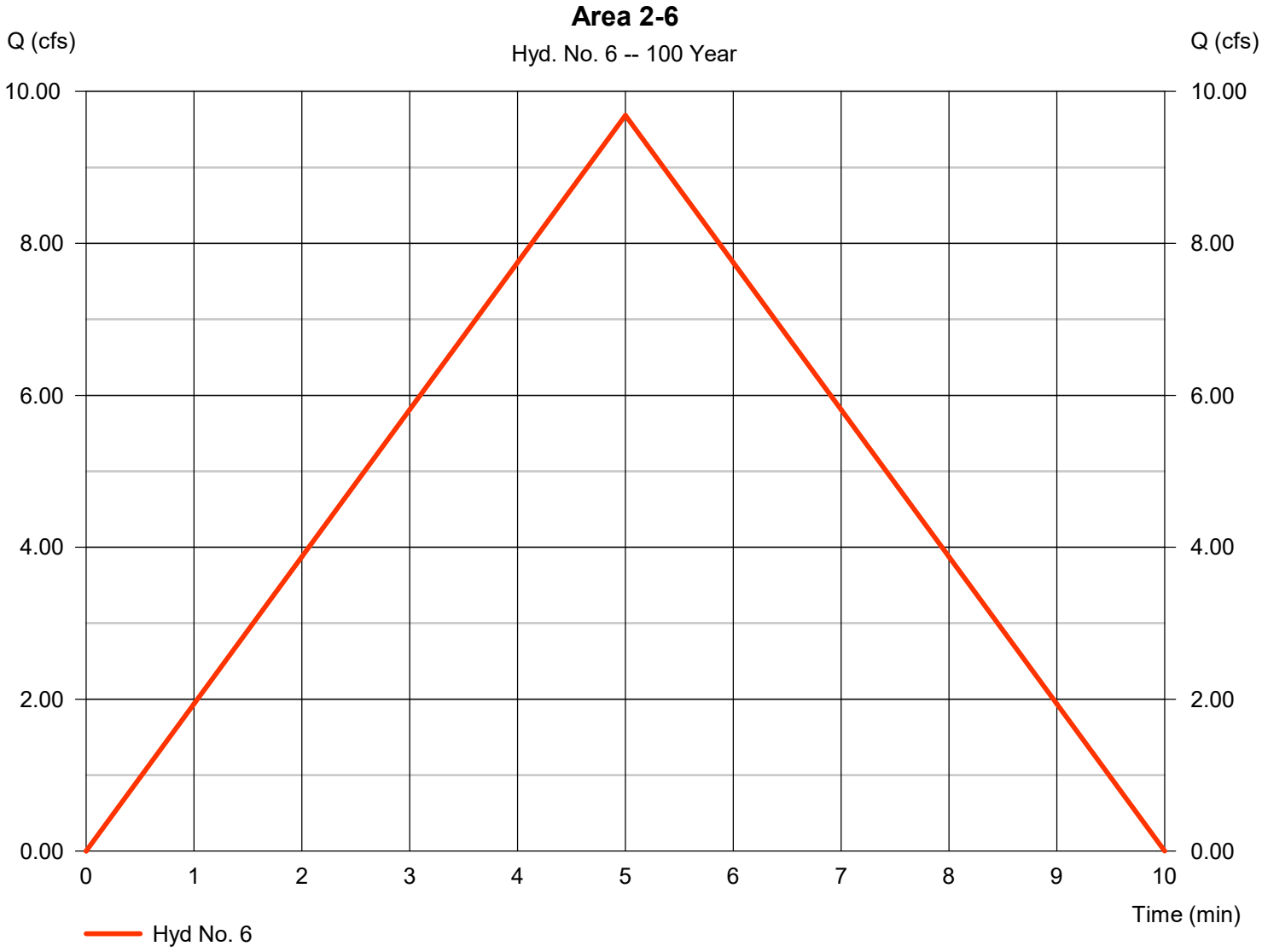


Hydrograph Report

Hyd. No. 6

Area 2-6

Hydrograph type	= Rational	Peak discharge	= 9.684 cfs
Storm frequency	= 100 yrs	Time to peak	= 5 min
Time interval	= 1 min	Hyd. volume	= 2,905 cuft
Drainage area	= 0.990 ac	Runoff coeff.	= 0.76
Intensity	= 12.871 in/hr	Tc by User	= 5.00 min
IDF Curve	= KCAPWA.IDF	Asc/Rec limb fact	= 1/1

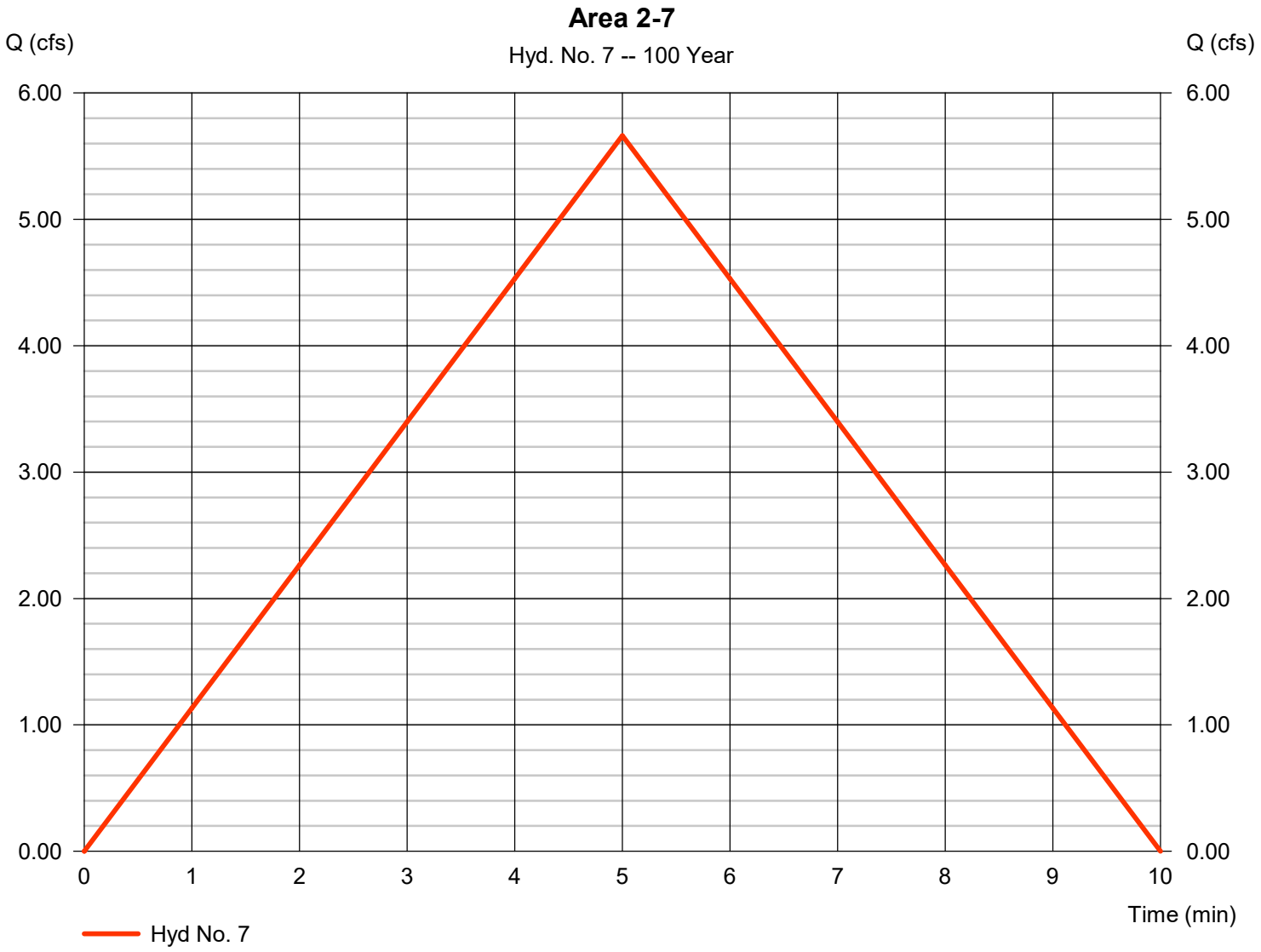


Hydrograph Report

Hyd. No. 7

Area 2-7

Hydrograph type	=	Rational	Peak discharge	=	5.663 cfs
Storm frequency	=	100 yrs	Time to peak	=	5 min
Time interval	=	1 min	Hyd. volume	=	1,699 cuft
Drainage area	=	0.500 ac	Runoff coeff.	=	0.88
Intensity	=	12.871 in/hr	Tc by User	=	5.00 min
IDF Curve	=	KCAPWA.IDF	Asc/Rec limb fact	=	1/1

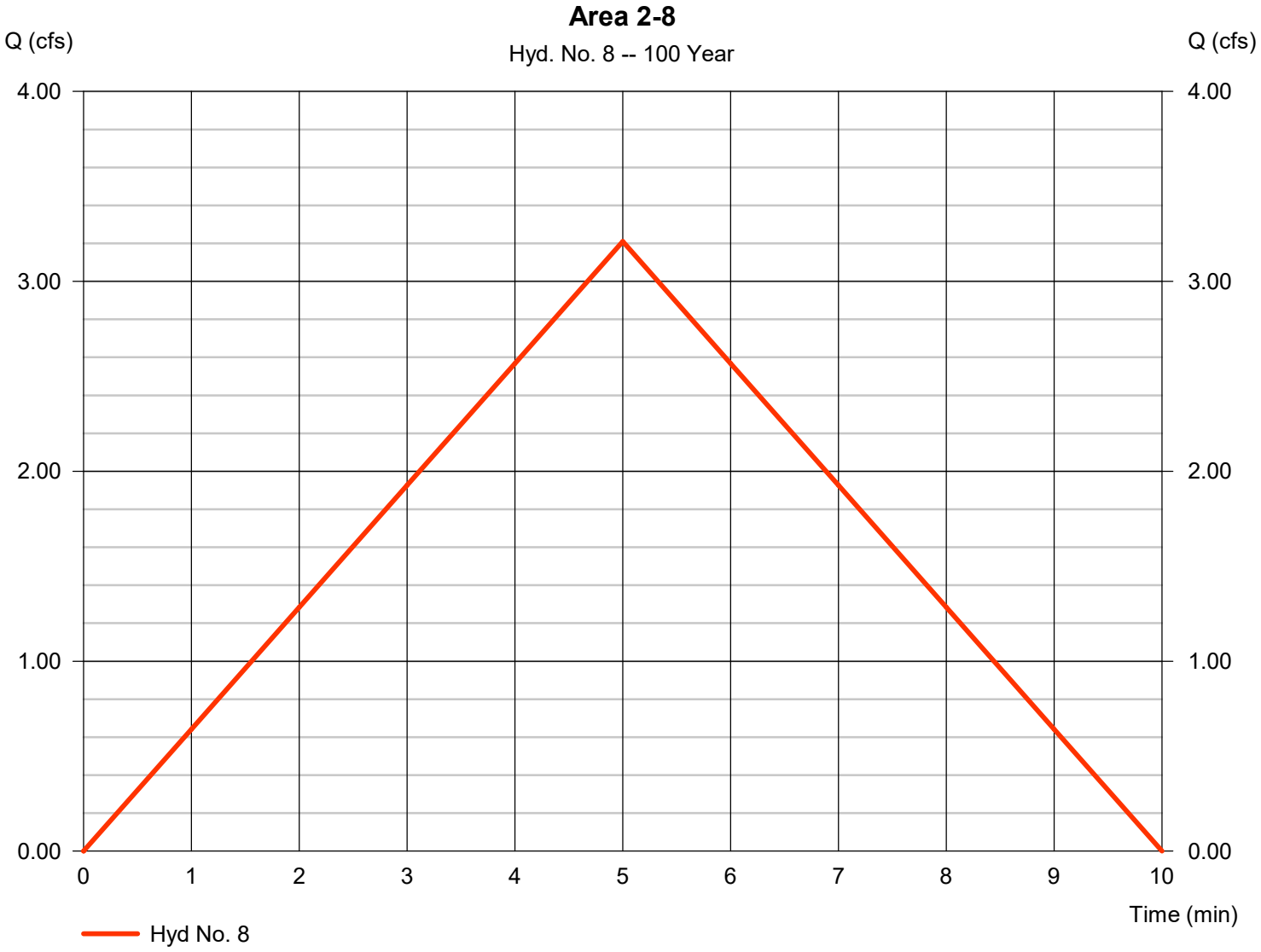


Hydrograph Report

Hyd. No. 8

Area 2-8

Hydrograph type	= Rational	Peak discharge	= 3.210 cfs
Storm frequency	= 100 yrs	Time to peak	= 5 min
Time interval	= 1 min	Hyd. volume	= 963 cuft
Drainage area	= 0.290 ac	Runoff coeff.	= 0.86
Intensity	= 12.871 in/hr	Tc by User	= 5.00 min
IDF Curve	= KCAPWA.IDF	Asc/Rec limb fact	= 1/1

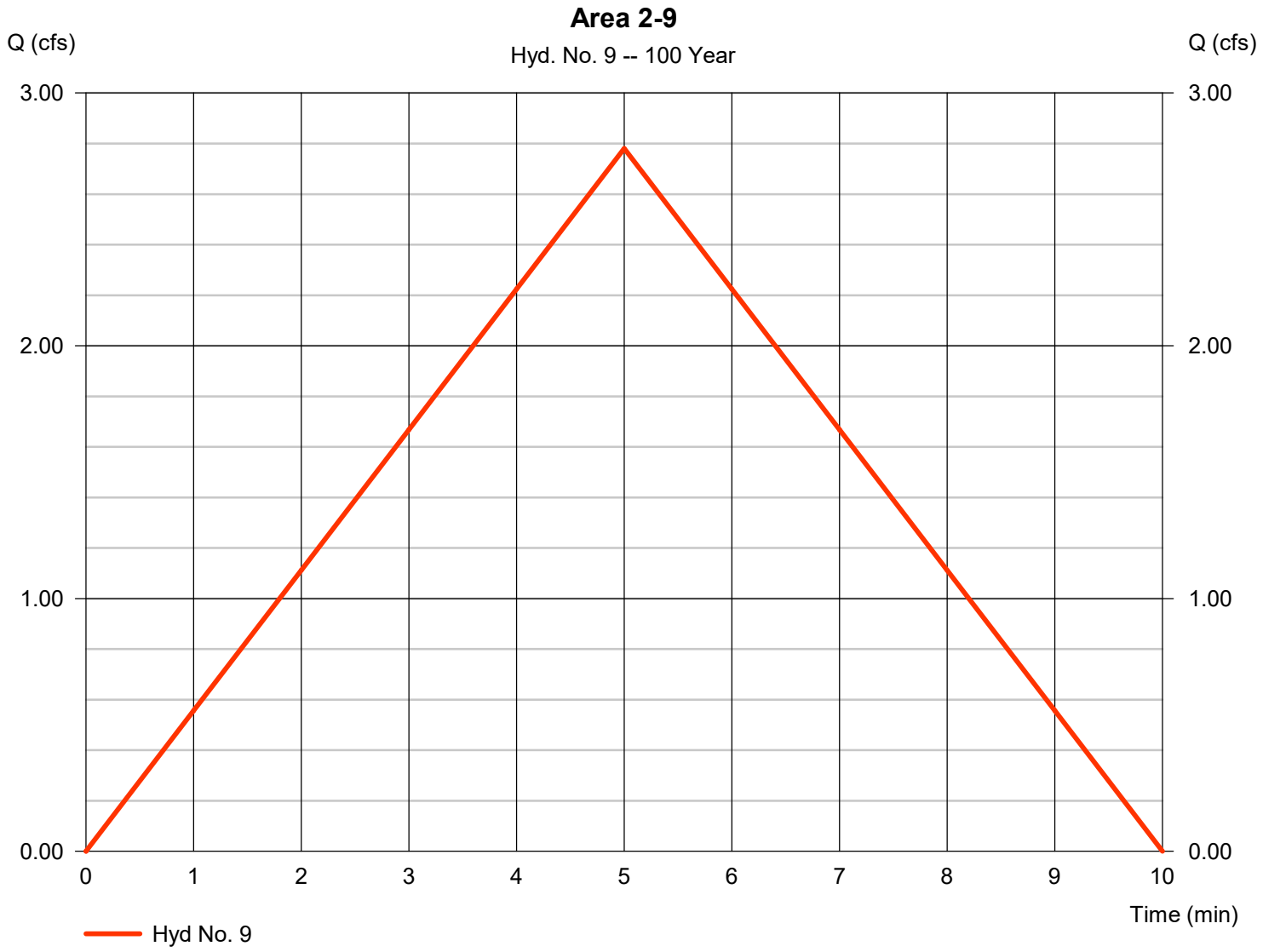


Hydrograph Report

Hyd. No. 9

Area 2-9

Hydrograph type	=	Rational	Peak discharge	=	2.780 cfs
Storm frequency	=	100 yrs	Time to peak	=	5 min
Time interval	=	1 min	Hyd. volume	=	834 cuft
Drainage area	=	0.240 ac	Runoff coeff.	=	0.9
Intensity	=	12.871 in/hr	Tc by User	=	5.00 min
IDF Curve	=	KCAPWA.IDF	Asc/Rec limb fact	=	1/1

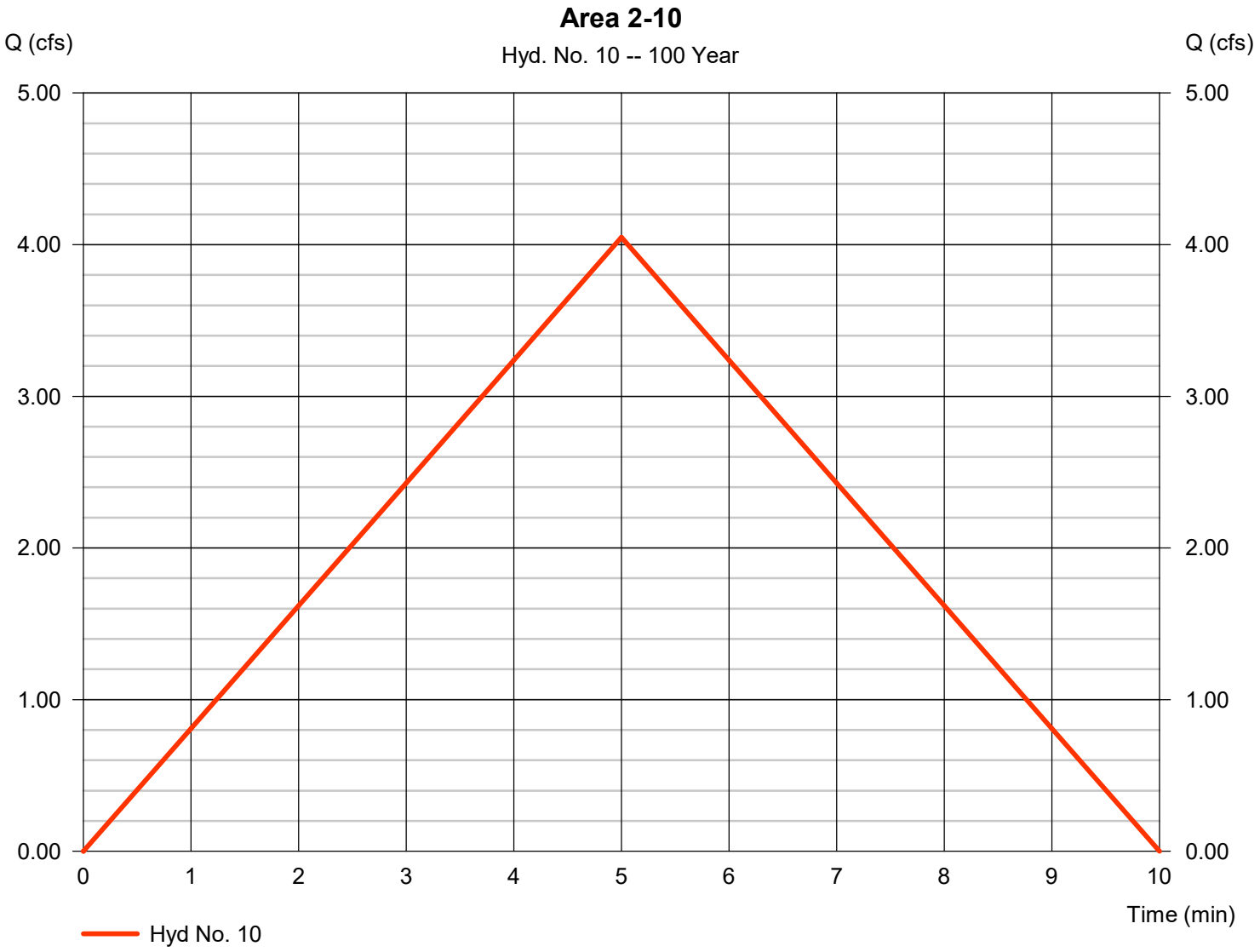


Hydrograph Report

Hyd. No. 10

Area 2-10

Hydrograph type	= Rational	Peak discharge	= 4.048 cfs
Storm frequency	= 100 yrs	Time to peak	= 5 min
Time interval	= 1 min	Hyd. volume	= 1,214 cuft
Drainage area	= 0.370 ac	Runoff coeff.	= 0.85
Intensity	= 12.871 in/hr	Tc by User	= 5.00 min
IDF Curve	= KCAPWA.IDF	Asc/Rec limb fact	= 1/1

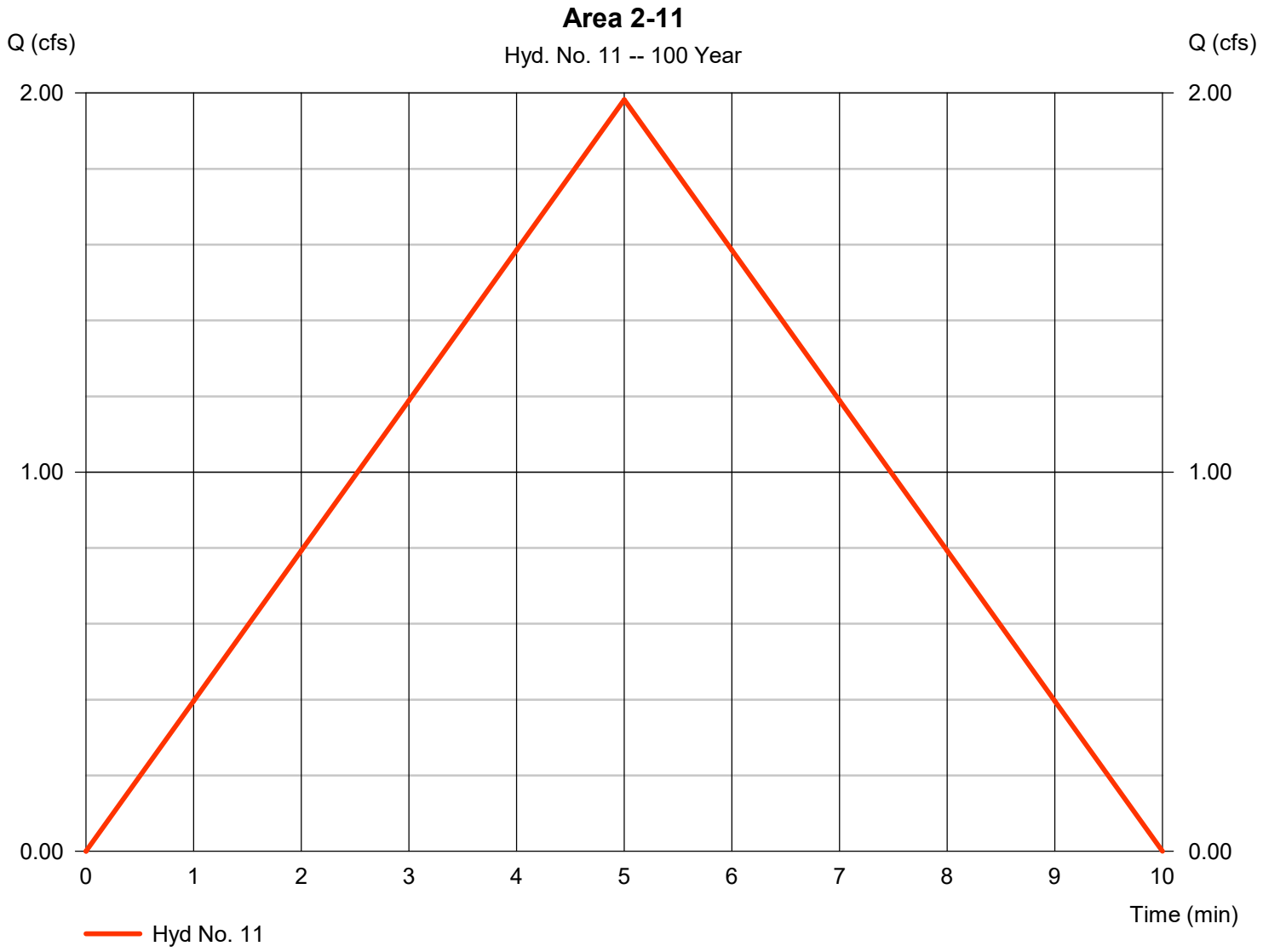


Hydrograph Report

Hyd. No. 11

Area 2-11

Hydrograph type	= Rational	Peak discharge	= 1.982 cfs
Storm frequency	= 100 yrs	Time to peak	= 5 min
Time interval	= 1 min	Hyd. volume	= 595 cuft
Drainage area	= 0.350 ac	Runoff coeff.	= 0.44
Intensity	= 12.871 in/hr	Tc by User	= 5.00 min
IDF Curve	= KCAPWA.IDF	Asc/Rec limb fact	= 1/1

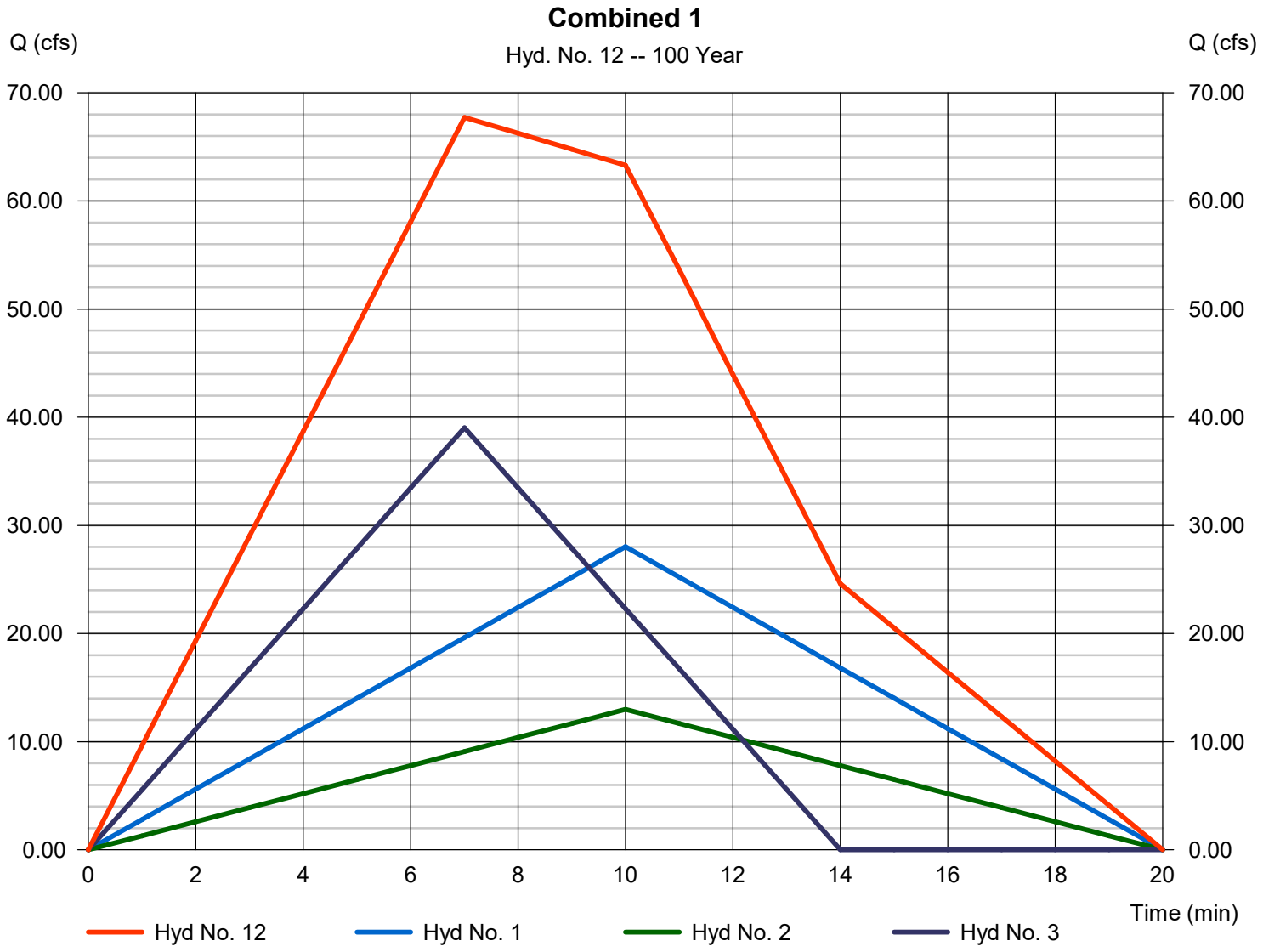


Hydrograph Report

Hyd. No. 12

Combined 1

Hydrograph type	= Combine	Peak discharge	= 67.73 cfs
Storm frequency	= 100 yrs	Time to peak	= 7 min
Time interval	= 1 min	Hyd. volume	= 40,993 cuft
Inflow hyds.	= 1, 2, 3	Contrib. drain. area	= 25.370 ac

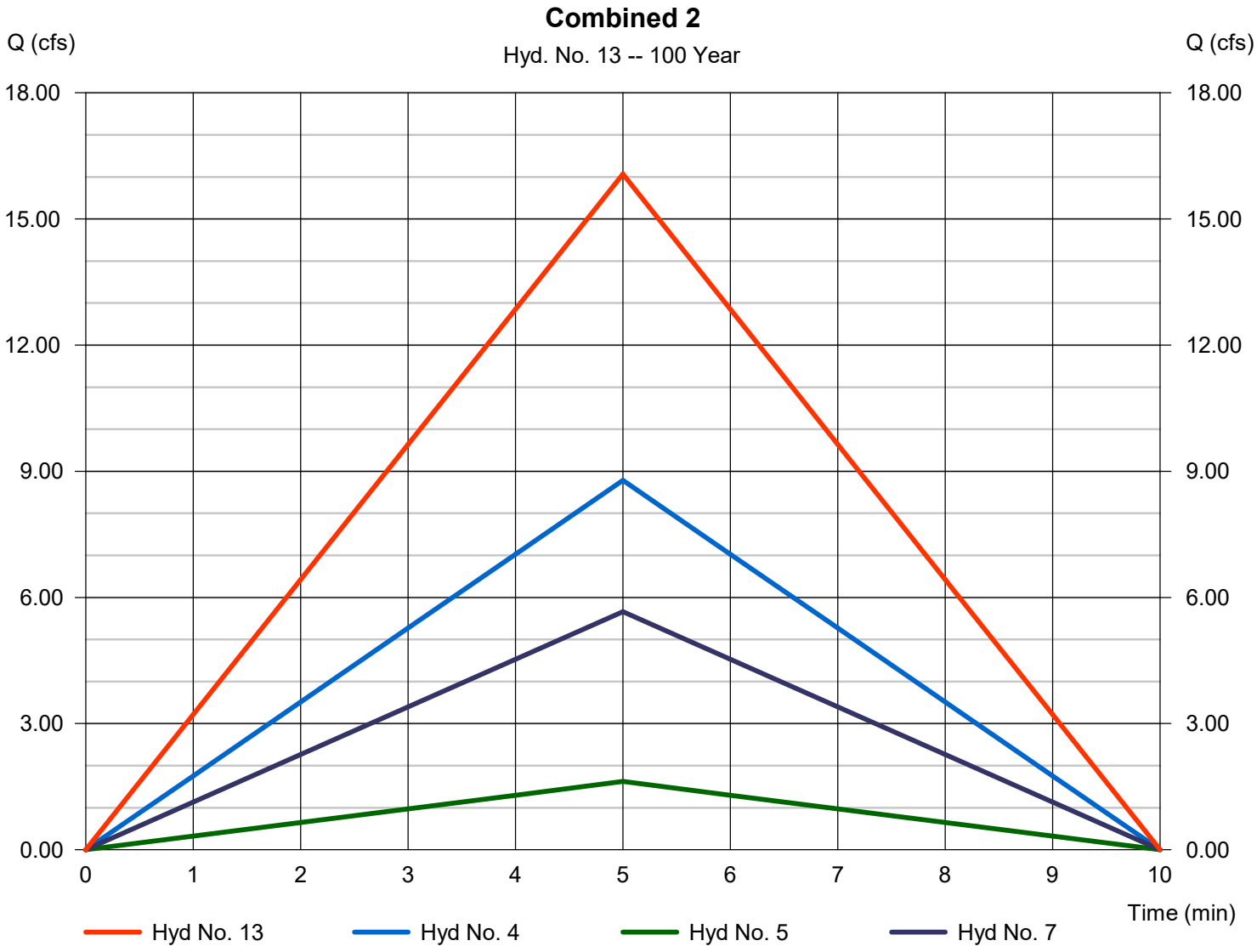


Hydrograph Report

Hyd. No. 13

Combined 2

Hydrograph type	= Combine	Peak discharge	= 16.07 cfs
Storm frequency	= 100 yrs	Time to peak	= 5 min
Time interval	= 1 min	Hyd. volume	= 4,821 cuft
Inflow hyds.	= 4, 5, 7	Contrib. drain. area	= 1.750 ac

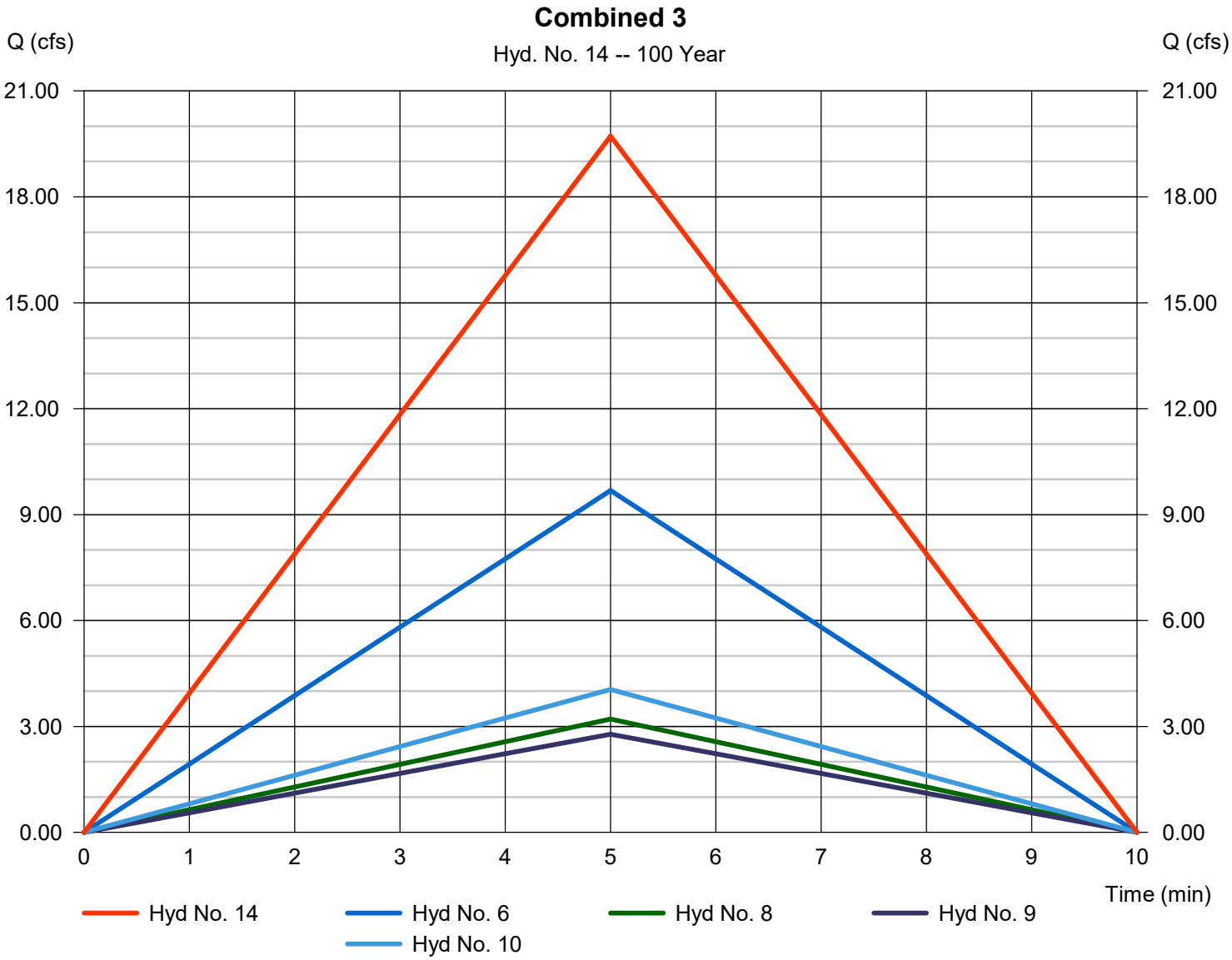


Hydrograph Report

Hyd. No. 14

Combined 3

Hydrograph type	= Combine	Peak discharge	= 19.72 cfs
Storm frequency	= 100 yrs	Time to peak	= 5 min
Time interval	= 1 min	Hyd. volume	= 5,917 cuft
Inflow hyds.	= 6, 8, 9, 10	Contrib. drain. area	= 1.890 ac

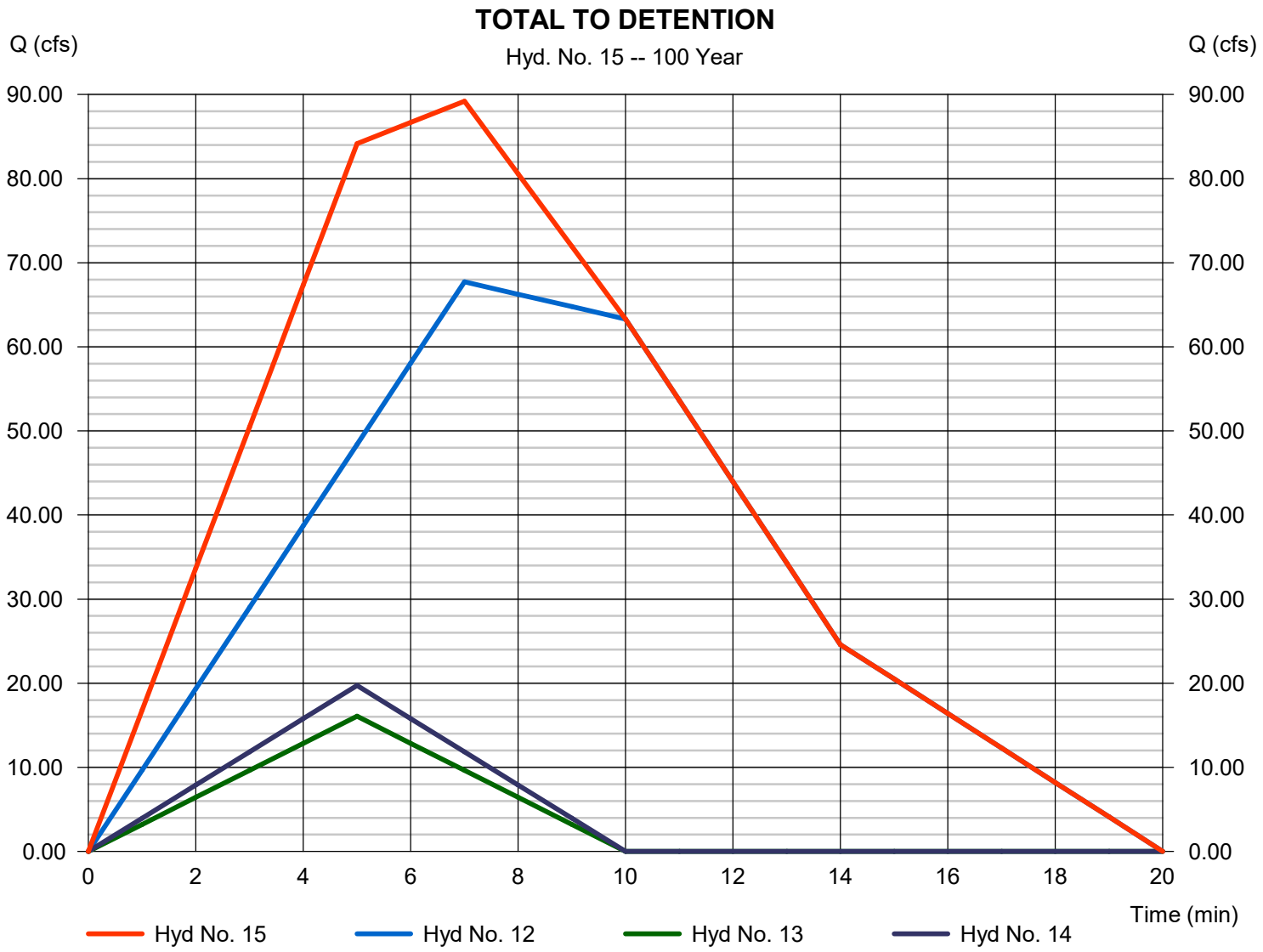


Hydrograph Report

Hyd. No. 15

TOTAL TO DETENTION

Hydrograph type	=	Combine	Peak discharge	=	89.21 cfs
Storm frequency	=	100 yrs	Time to peak	=	7 min
Time interval	=	1 min	Hyd. volume	=	51,731 cuft
Inflow hyds.	=	12, 13, 14	Contrib. drain. area	=	0.000 ac



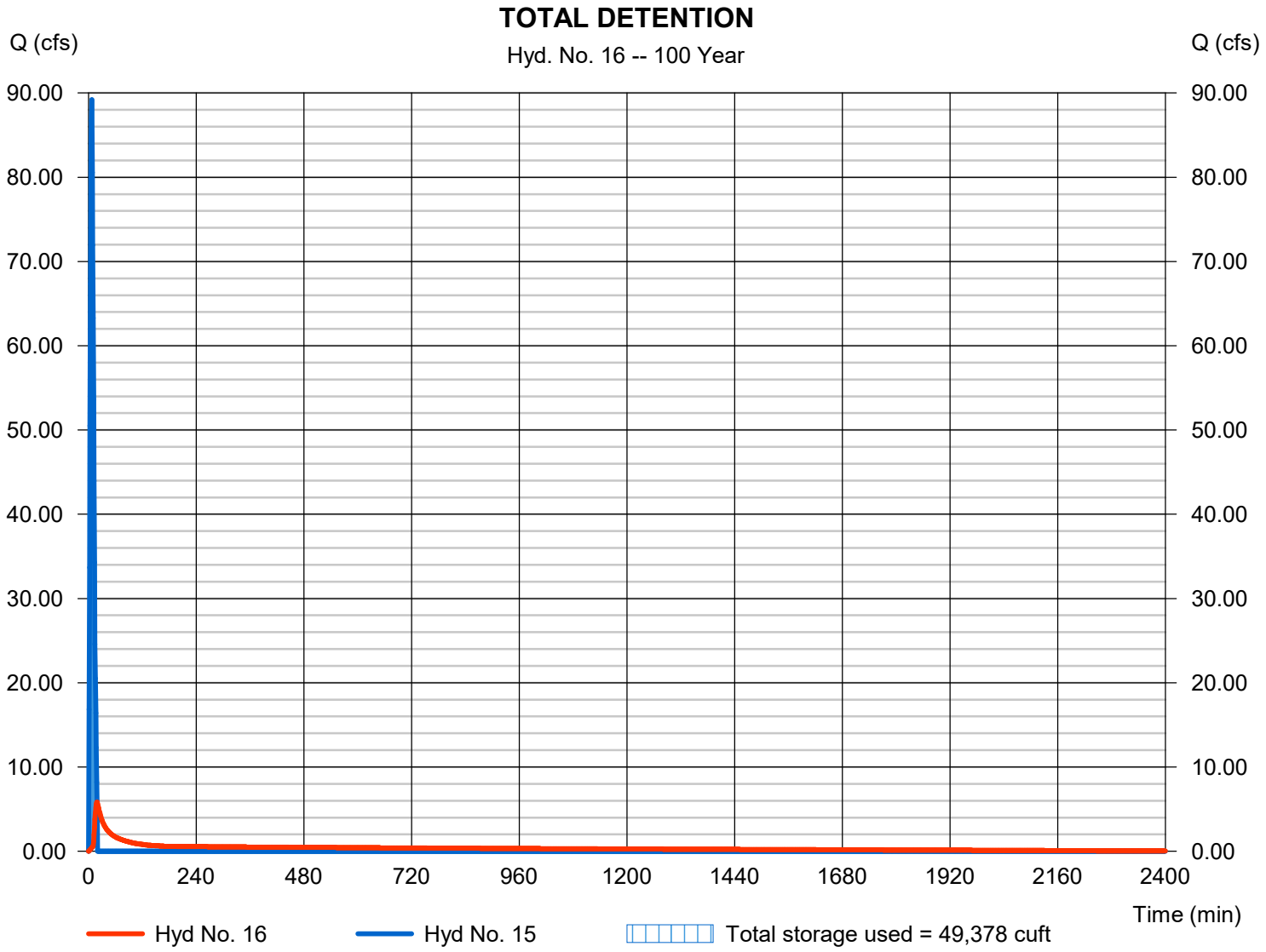
Hydrograph Report

Hyd. No. 16

TOTAL DETENTION

Hydrograph type	=	Reservoir	Peak discharge	=	5.839 cfs
Storm frequency	=	100 yrs	Time to peak	=	19 min
Time interval	=	1 min	Hyd. volume	=	51,714 cuft
Inflow hyd. No.	=	15 - TOTAL TO DETENTION	Max. Elevation	=	983.93 ft
Reservoir name	=	Detention	Max. Storage	=	49,378 cuft

Storage Indication method used.

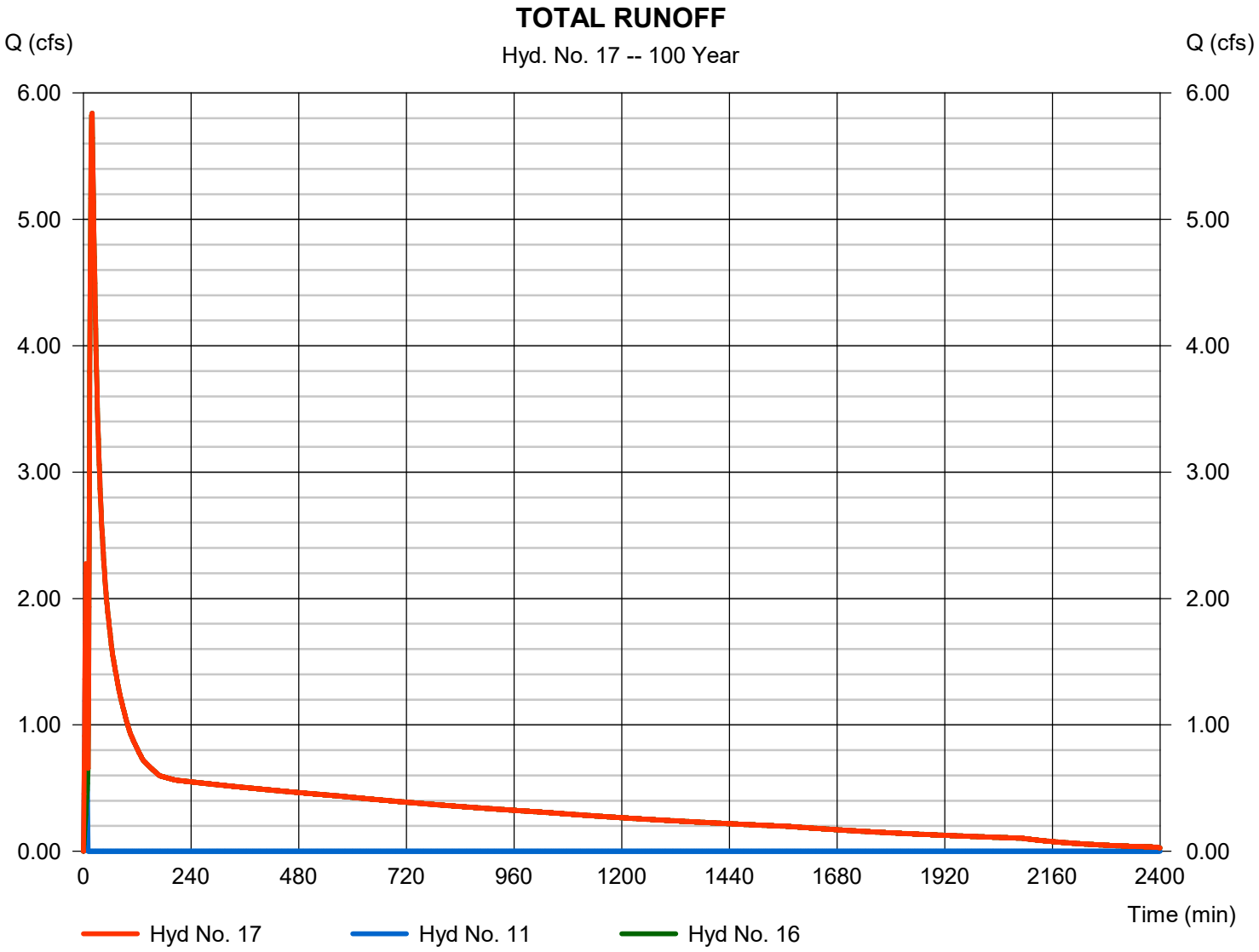


Hydrograph Report

Hyd. No. 17

TOTAL RUNOFF

Hydrograph type	=	Combine	Peak discharge	=	5.839 cfs
Storm frequency	=	100 yrs	Time to peak	=	19 min
Time interval	=	1 min	Hyd. volume	=	52,308 cuft
Inflow hyds.	=	11, 16	Contrib. drain. area	=	0.350 ac



Hydraflow Table of Contents

as-built test.gpw

Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2023 Friday, 09 / 23 / 2022