

Inflow Hydrograph: e:\pondpack\12003\100-IN .HYD
 Rating Table file: e:\pondpack\12003\BASINA1 .PND

----INITIAL CONDITIONS----
 Elevation = 542.00 ft
 Outflow = 0.00 cfs
 Storage = 0 cu-ft

GIVEN POND DATA			INTERMEDIATE ROUTING COMPUTATIONS	
ELEVATION (ft)	OUTFLOW (cfs)	STORAGE (cu-ft)	2S/t (cfs)	2S/t + 0 (cfs)
542.00	0.0	0	0.0	0.0
542.20	0.1	13	0.4	0.5
542.40	0.4	101	3.4	3.8
542.60	0.8	339	11.3	12.1
542.80	1.2	773	25.8	27.0
543.00	1.6	1,263	42.1	43.7
543.20	2.3	1,782	59.4	61.7
543.40	2.6	2,332	77.7	80.3
543.60	2.9	2,911	97.0	99.9
543.80	3.2	3,523	117.4	120.6
544.00	3.4	4,167	138.9	142.3
544.20	3.6	4,843	161.4	165.0
544.40	3.9	5,552	185.1	189.0
544.60	4.1	6,294	209.8	213.9
544.80	4.2	7,069	235.6	239.8
545.00	4.4	7,880	262.7	267.1
545.20	4.6	8,726	290.9	295.5
545.40	4.8	9,608	320.3	325.1
545.60	4.9	10,527	350.9	355.8
545.80	5.1	11,483	382.8	387.9
546.00	5.3	12,479	416.0	421.3
546.20	5.4	13,512	450.4	455.8
546.40	5.8	14,584	486.1	491.9
546.60	6.5	15,694	523.1	529.6
546.80	7.4	16,845	561.5	568.9
547.00	8.4	18,035	601.2	609.6
547.20	9.6	19,267	642.2	651.8
547.40	10.9	20,540	684.7	695.6
547.60	12.2	21,855	728.5	740.7
547.80	6.5	23,214	773.8	780.3
548.00	6.6	24,617	820.6	827.2

GIVEN POND DATA			INTERMEDIATE ROUTING COMPUTATIONS	
ELEVATION (ft)	OUTFLOW (cfs)	STORAGE (cu-ft)	2S/t (cfs)	2S/t + 0 (cfs)
548.20	6.7	26,063	868.8	875.5
548.40	6.8	27,553	918.4	925.2
548.60	7.0	29,088	969.6	976.6
548.80	7.1	30,668	1022.2	1029.3
549.00	7.2	32,293	1076.4	1083.6
549.20	7.3	33,965	1132.2	1139.5
549.40	7.4	35,684	1189.5	1196.9
549.60	7.5	37,451	1248.4	1255.9
549.80	7.6	39,266	1308.9	1316.5

Time increment (t) = 1.0 min.

Pond File: e:\pondpack\12003\BASINA1 .PND
 Inflow Hydrograph: e:\pondpack\12003\100-IN .HYD
 Outflow Hydrograph: e:\pondpack\12003\100-OUT1.HYD

INFLOW HYDROGRAPH

ROUTING COMPUTATIONS

TIME (min)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - 0 (cfs)	2S/t + 0 (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
0.0	0.00	-----	0.0	0.0	0.00	542.00
1.0	12.32	12.3	10.7	12.3	0.81	542.60
2.0	24.64	37.0	44.2	47.7	1.75	543.04
3.0	24.64	49.3	87.8	93.4	2.80	543.53
4.0	24.64	49.3	130.4	137.1	3.35	543.95
5.0	24.64	49.3	172.1	179.7	3.78	544.32
6.0	24.64	49.3	213.1	221.4	4.13	544.66
7.0	24.64	49.3	253.7	262.4	4.37	544.97
8.0	24.64	49.3	293.7	303.0	4.65	545.25
9.0	24.64	49.3	333.2	343.0	4.86	545.52
10.0	24.64	49.3	372.4	382.5	5.07	545.77
11.0	24.64	49.3	411.1	421.7	5.30	546.00
12.0	24.64	49.3	449.4	460.3	5.45	546.23
13.0	24.64	49.3	486.9	498.7	5.93	546.44
14.0	24.64	49.3	522.9	536.2	6.65	546.63
15.0	24.64	49.3	557.2	572.1	7.48	546.82
16.0	24.64	49.3	589.8	606.5	8.32	546.98
17.0	24.64	49.3	620.6	639.1	9.24	547.14
18.0	24.64	49.3	649.6	669.9	10.14	547.28
19.0	24.64	49.3	676.9	698.9	11.00	547.41
20.0	24.64	49.3	702.6	726.2	11.78	547.54
21.0	12.32	37.0	715.2	739.6	12.17	547.59
22.0	0.00	12.3	703.9	727.6	11.82	547.54
23.0	0.00	0.0	681.6	703.9	11.14	547.44
24.0	0.00	0.0	660.7	681.6	10.49	547.34
25.0	0.00	0.0	640.9	660.7	9.86	547.24
26.0	0.00	0.0	622.4	640.9	9.29	547.15
27.0	0.00	0.0	604.8	622.4	8.76	547.06
28.0	0.00	0.0	588.3	604.8	8.28	546.98
29.0	0.00	0.0	572.5	588.3	7.88	546.90
30.0	0.00	0.0	557.5	572.5	7.49	546.82
31.0	0.00	0.0	543.3	557.5	7.14	546.74
32.0	0.00	0.0	529.6	543.3	6.81	546.67
33.0	0.00	0.0	516.6	529.6	6.50	546.60
34.0	0.00	0.0	504.1	516.6	6.26	546.53
35.0	0.00	0.0	492.1	504.1	6.03	546.46
36.0	0.00	0.0	480.5	492.1	5.80	546.40
37.0	0.00	0.0	469.1	480.5	5.67	546.34
38.0	0.00	0.0	458.0	469.1	5.55	546.27
39.0	0.00	0.0	447.2	458.0	5.42	546.21
40.0	0.00	0.0	436.4	447.2	5.37	546.15
41.0	0.00	0.0	425.7	436.4	5.34	546.09
42.0	0.00	0.0	415.1	425.7	5.31	546.03
43.0	0.00	0.0	404.6	415.1	5.26	545.96
44.0	0.00	0.0	394.2	404.6	5.20	545.90

Pond File: e:\pondpack\12003\BASINA1 .PND
 Inflow Hydrograph: e:\pondpack\12003\100-IN .HYD
 Outflow Hydrograph: e:\pondpack\12003\100-OUT1.HYD

INFLOW HYDROGRAPH

ROUTING COMPUTATIONS

TIME (min)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
45.0	0.00	0.0	383.9	394.2	5.14	545.84
46.0	0.00	0.0	373.8	383.9	5.08	545.78
47.0	0.00	0.0	363.7	373.8	5.01	545.71
48.0	0.00	0.0	353.8	363.7	4.95	545.65
49.0	0.00	0.0	344.0	353.8	4.89	545.59
50.0	0.00	0.0	334.3	344.0	4.86	545.52
51.0	0.00	0.0	324.7	334.3	4.83	545.46
52.0	0.00	0.0	315.1	324.7	4.80	545.40
53.0	0.00	0.0	305.6	315.1	4.73	545.33
54.0	0.00	0.0	296.3	305.6	4.67	545.27
55.0	0.00	0.0	287.1	296.3	4.61	545.21
56.0	0.00	0.0	278.0	287.1	4.54	545.14
57.0	0.00	0.0	269.0	278.0	4.48	545.08
58.0	0.00	0.0	260.2	269.0	4.41	545.01
59.0	0.00	0.0	251.5	260.2	4.35	544.95
60.0	0.00	0.0	242.9	251.5	4.29	544.89
61.0	0.00	0.0	234.5	242.9	4.22	544.82
62.0	0.00	0.0	226.1	234.5	4.18	544.76
63.0	0.00	0.0	217.8	226.1	4.15	544.69
64.0	0.00	0.0	209.6	217.8	4.12	544.63
65.0	0.00	0.0	201.5	209.6	4.07	544.57
66.0	0.00	0.0	193.5	201.5	4.00	544.50
67.0	0.00	0.0	185.6	193.5	3.94	544.44
68.0	0.00	0.0	177.9	185.6	3.86	544.37
69.0	0.00	0.0	170.3	177.9	3.76	544.31
70.0	0.00	0.0	163.0	170.3	3.67	544.24
71.0	0.00	0.0	155.9	163.0	3.58	544.18
72.0	0.00	0.0	148.8	155.9	3.52	544.12
73.0	0.00	0.0	141.9	148.8	3.46	544.06
74.0	0.00	0.0	135.1	141.9	3.40	544.00
75.0	0.00	0.0	128.4	135.1	3.33	543.93
76.0	0.00	0.0	121.9	128.4	3.27	543.87
77.0	0.00	0.0	115.5	121.9	3.21	543.81
78.0	0.00	0.0	109.2	115.5	3.13	543.75
79.0	0.00	0.0	103.2	109.2	3.03	543.69
80.0	0.00	0.0	97.3	103.2	2.95	543.63
81.0	0.00	0.0	91.5	97.3	2.86	543.57
82.0	0.00	0.0	86.0	91.5	2.77	543.51
83.0	0.00	0.0	80.6	86.0	2.69	543.46
84.0	0.00	0.0	75.4	80.6	2.60	543.40
85.0	0.00	0.0	70.4	75.4	2.52	543.35
86.0	0.00	0.0	65.5	70.4	2.44	543.29
87.0	0.00	0.0	60.8	65.5	2.36	543.24
88.0	0.00	0.0	56.2	60.8	2.26	543.19
89.0	0.00	0.0	52.1	56.2	2.09	543.14
90.0	0.00	0.0	48.2	52.1	1.93	543.09

Pond File: e:\pondpack\12003\BASINA1 .PND
 Inflow Hydrograph: e:\pondpack\12003\100-IN .HYD
 Outflow Hydrograph: e:\pondpack\12003\100-OUT1.HYD

INFLOW HYDROGRAPH

ROUTING COMPUTATIONS

TIME (min)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
91.0	0.00	0.0	44.7	48.2	1.78	543.05
92.0	0.00	0.0	41.4	44.7	1.64	543.01
93.0	0.00	0.0	38.3	41.4	1.54	542.97
94.0	0.00	0.0	35.4	38.3	1.47	542.94
95.0	0.00	0.0	32.6	35.4	1.40	542.90
96.0	0.00	0.0	29.9	32.6	1.33	542.87
97.0	0.00	0.0	27.4	29.9	1.27	542.83
98.0	0.00	0.0	24.9	27.4	1.21	542.80
99.0	0.00	0.0	22.6	24.9	1.15	542.77
100.0	0.00	0.0	20.5	22.6	1.08	542.74
101.0	0.00	0.0	18.4	20.5	1.03	542.71
102.0	0.00	0.0	16.5	18.4	0.97	542.69
103.0	0.00	0.0	14.7	16.5	0.92	542.66
104.0	0.00	0.0	12.9	14.7	0.87	542.63
105.0	0.00	0.0	11.3	12.9	0.82	542.61
106.0	0.00	0.0	9.8	11.3	0.76	542.58
107.0	0.00	0.0	8.4	9.8	0.69	542.54
108.0	0.00	0.0	7.1	8.4	0.62	542.51
109.0	0.00	0.0	6.0	7.1	0.56	542.48
110.0	0.00	0.0	5.0	6.0	0.51	542.45
111.0	0.00	0.0	4.1	5.0	0.46	542.43
112.0	0.00	0.0	3.2	4.1	0.42	542.41
113.0	0.00	0.0	2.5	3.2	0.35	542.37
114.0	0.00	0.0	2.0	2.5	0.29	542.32
115.0	0.00	0.0	1.5	2.0	0.23	542.29
116.0	0.00	0.0	1.1	1.5	0.19	542.26
117.0	0.00	0.0	0.8	1.1	0.16	542.24
118.0	0.00	0.0	0.6	0.8	0.13	542.22
119.0	0.00	0.0	0.3	0.6	0.10	542.20
120.0	0.00	0.0	0.2	0.3	0.07	542.13
121.0	0.00	0.0	0.1	0.2	0.04	542.08
122.0	0.00	0.0	0.1	0.1	0.03	542.05
123.0	0.00	0.0	0.1	0.1	0.02	542.03
124.0	0.00	0.0	0.0	0.1	0.01	542.02
125.0	0.00	0.0	0.0	0.0	0.01	542.01
126.0	0.00	0.0	0.0	0.0	0.00	542.01
127.0	0.00	0.0	0.0	0.0	0.00	542.00
128.0	0.00	0.0	0.0	0.0	0.00	542.00
129.0	0.00	0.0	0.0	0.0	0.00	542.00
130.0	0.00	0.0	0.0	0.0	0.00	542.00
131.0	0.00	0.0	0.0	0.0	0.00	542.00
132.0	0.00	0.0	0.0	0.0	0.00	542.00
133.0	0.00	0.0	0.0	0.0	0.00	542.00
134.0	0.00	0.0	0.0	0.0	0.00	542.00
135.0	0.00	0.0	0.0	0.0	0.00	542.00
136.0	0.00	0.0	0.0	0.0	0.00	542.00

POND-2 Version: 5.20 S/N:
 EXECUTED: 04-01-2003 13:21:05 100

Page 6
 Return Freq: 100 years

Pond File: e:\pondpack\12003\BASINA1 .PND
 Inflow Hydrograph: e:\pondpack\12003\100-IN .HYD
 Outflow Hydrograph: e:\pondpack\12003\100-OUT1.HYD

INFLOW HYDROGRAPH

ROUTING COMPUTATIONS

TIME (min)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
137.0	0.00	0.0	0.0	0.0	0.00	542.00
138.0	0.00	0.0	0.0	0.0	0.00	542.00
139.0	0.00	0.0	0.0	0.0	0.00	542.00
140.0	0.00	0.0	0.0	0.0	0.00	542.00
141.0	0.00	0.0	0.0	0.0	0.00	542.00
142.0	0.00	0.0	0.0	0.0	0.00	542.00
143.0	0.00	0.0	0.0	0.0	0.00	542.00
144.0	0.00	0.0	0.0	0.0	0.00	542.00
145.0	0.00	0.0	0.0	0.0	0.00	542.00
146.0	0.00	0.0	0.0	0.0	0.00	542.00
147.0	0.00	0.0	0.0	0.0	0.00	542.00
148.0	0.00	0.0	0.0	0.0	0.00	542.00
149.0	0.00	0.0	0.0	0.0	0.00	542.00
150.0	0.00	0.0	0.0	0.0	0.00	542.00
151.0	0.00	0.0	0.0	0.0	0.00	542.00

***** SUMMARY OF ROUTING COMPUTATIONS *****

Pond File: e:\pondpack\12003\BASINA1 .PND
Inflow Hydrograph: e:\pondpack\12003\100-IN .HYD
Outflow Hydrograph: e:\pondpack\12003\100-OUT1.HYD

Starting Pond W.S. Elevation = 542.00 ft

***** Summary of Peak Outflow and Peak Elevation *****

Peak Inflow = 24.64 cfs
Peak Outflow = 12.17 cfs
Peak Elevation = 547.59 ft

***** Summary of Approximate Peak Storage *****

Initial Storage = 0 cu-ft
Peak Storage From Storm = 21,822 cu-ft

Total Storage in Pond = 21,822 cu-ft

POND-2 Version: 5.20 S/N:

100

Page 8

Return Freq: 100 years

Pond File: e:\pondpack\12003\BASINA1 .PND

Inflow Hydrograph: e:\pondpack\12003\100-IN .HYD

Outflow Hydrograph: e:\pondpack\12003\100-OUT1.HYD

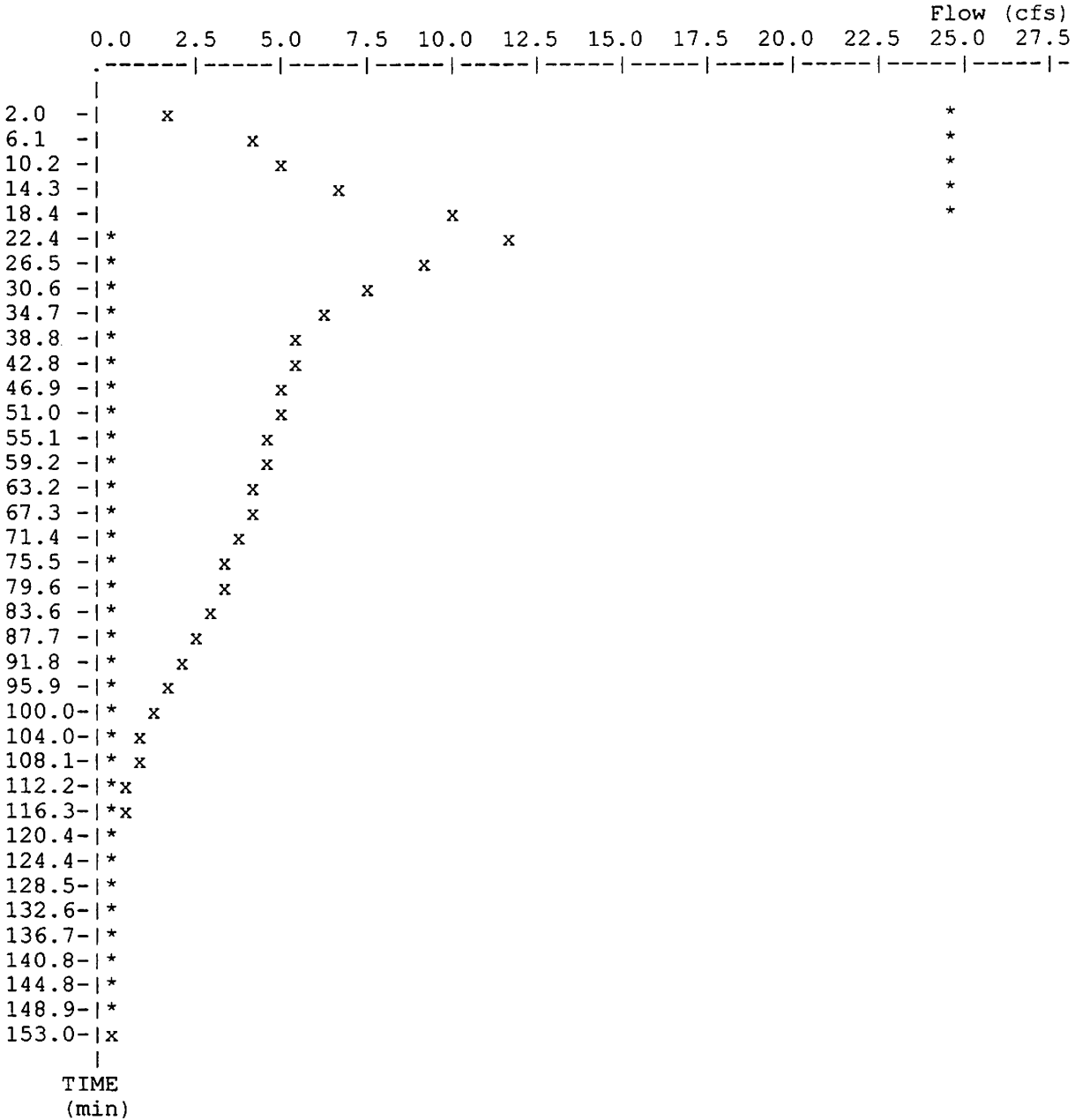
EXECUTED: 04-01-2003

Peak Inflow = 24.64 cfs

13:21:05

Peak Outflow = 12.17 cfs

Peak Elevation = 547.59 ft



x File: e:\pondpack\12003\100-OUT1.HYD Qmax = 12.2 cfs
 * File: e:\pondpack\12003\100-IN .HYD Qmax = 24.6 cfs

POND-2 Version: 5.20
 S/N:

CALCULATED 04-01-2003 13:27:53
 DISK FILE: e:\pondpack\12003\BASINB1 .VOL

Planimeter scale: 1 inch = 1 ft.

Elevation (ft)	Planimeter (sq.in.)	Area (sq.ft)	A1+A2+sq ^r (A1*A2) (sq.ft)	* Volume (cubic-ft)	Volume Sum (cubic-ft)
542.50	0.00	0	0	0	0
544.00	2,165.00	2,165	2,165	1,083	1,083
546.00	4,139.00	4,139	9,297	6,198	7,281
548.00	6,629.00	6,629	16,006	10,671	17,952
549.00	8,045.00	8,045	21,977	7,326	25,277
549.50	8,791.00	8,791	25,246	4,208	29,485

Elevations With Areas Interpolated From
 The Closest Two Planimeter Readings

547.29	-----	5,678	14,665	6,306	13,587
547.50	-----	5,952	15,054	7,527	14,808

$$IA = (\text{sq. rt}(\text{Areal}) + ((E_i - E_1) / (E_2 - E_1)) * (\text{sq. rt}(\text{Area}_2) - \text{sq. rt}(\text{Areal})))^2$$

where: E1, E2 = Closest two elevations with planimeter data
 Ei = Elevation at which to interpolate area
 Areal, Area2 = Areas computed for E1, E2, respectively
 IA = Interpolated area for Ei

* Incremental volume computed by the Conic Method for Reservoir Volumes.

$$\text{Volume} = (1/3) * (EL_2 - EL_1) * (\text{Areal} + \text{Area}_2 + \text{sq. rt.}(\text{Areal} * \text{Area}_2))$$

where: EL1, EL2 = Lower and upper elevations of the increment
 Areal, Area2 = Areas computed for EL1, EL2, respectively
 Volume = Incremental volume between EL1 and EL2

Outlet Structure File: BASINB1 .STR

POND-2 Version: 5.20

S/N:

Date Executed:

Time Executed:

***** COMPOSITE OUTFLOW SUMMARY *****

Elevation (ft)	Q (cfs)	Contributing Structures
542.50	0.0	1
542.70	0.1	1
542.90	0.2	1
543.10	0.5	2
543.30	0.6	2
543.50	0.7	2
543.70	0.8	2
543.90	0.9	2
544.10	0.9	2
544.30	1.0	2
544.50	1.1	2
544.70	1.1	2
544.90	1.2	2
545.10	1.2	2
545.30	1.3	2
545.50	1.3	2
545.70	1.4	2
545.90	1.4	2
546.10	1.5	2 +3
546.30	1.7	2 +3
546.50	2.0	2 +3
546.70	2.3	2 +3
546.90	2.7	2 +3
547.10	3.2	2 +3
547.30	3.7	2 +3
547.50	1.8	2
547.70	1.8	2
547.90	1.8	2
548.10	1.9	2
548.30	1.9	2
548.50	2.0	2
548.70	2.0	2
548.90	2.0	2
549.10	2.1	2
549.30	2.1	2
549.50	0.0	

Outlet Structure File: BASINB1 .STR

POND-2 Version: 5.20

S/N:

Date Executed:

Time Executed:

Outlet Structure File: e:\pondpack\12003\BASINB1 .STR

Planimeter Input File: e:\pondpack\12003\BASINB1 .VOL

Rating Table Output File: e:\pondpack\12003\BASINB1 .PND

Min. Elev.(ft) = 542.5 Max. Elev.(ft) = 549.5 Incr.(ft) = .2

Additional elevations (ft) to be included in table:

* * * * *

SYSTEM CONNECTIVITY

Structure	No.	Q Table	Q Table
-----	---	-----	-----
WEIR-VR	1		-> 1
ORIFICE	2	? 1	-> A
WEIR-VR	3		-> 3

Outflow rating table summary was stored in file:

e:\pondpack\12003\BASINB1 .PND

Outlet Structure File: BASINB1 .STR

POND-2 Version: 5.20

S/N:

Date Executed:

Time Executed:

>>>>> Structure No. 1 <<<<<<
(Input Data)

WEIR-VR

Weir - Vertical Rectangular

E1 elev.(ft)?	542.5
E2 elev.(ft)?	543.083
Weir coefficient?	3
Weir elev.(ft)?	542.5
Length (ft)?	.292
Contracted/Suppressed (C/S)?	S

Outlet Structure File: BASINB1 .STR

POND-2 Version: 5.20

S/N:

Date Executed:

Time Executed:

>>>>> Structure No. 2 <<<<<<
(Input Data)

ORIFICE

Orifice - Based on Area and Datum Elevation

E1 elev.(ft)?	543.083
E2 elev.(ft)?	549.5
Orifice coeff.?	.6
Invert elev.(ft)?	542.5
Datum elev.(ft) ?	542.792
Orifice area (sq ft)?	.170

Outlet Structure File: BASINB1 .STR

POND-2 Version: 5.20

S/N:

Date Executed:

Time Executed:

>>>>> Structure No. 3 <<<<<<
(Input Data)

WEIR-VR

Weir - Vertical Rectangular

E1 elev.(ft)?	546.10
E2 elev.(ft)?	547.50
Weir coefficient?	3
Weir elev.(ft)?	546.10
Length (ft)?	.5
Contracted/Suppressed (C/S)?	S

Outlet Structure File: BASINB1 .STR

POND-2 Version: 5.20

S/N:

Date Executed:

Time Executed:

Outflow Rating Table for Structure #1

WEIR-VR Weir - Vertical Rectangular

***** INLET CONTROL ASSUMED *****

Elevation (ft)	Q (cfs)	Computation Messages
542.50	0.0	H =0.0
542.70	0.1	H =.2
542.90	0.2	H =.4
543.10	0.0	E = or > E2=543.083
543.30	0.0	E = or > E2=543.083
543.50	0.0	E = or > E2=543.083
543.70	0.0	E = or > E2=543.083
543.90	0.0	E = or > E2=543.083
544.10	0.0	E = or > E2=543.083
544.30	0.0	E = or > E2=543.083
544.50	0.0	E = or > E2=543.083
544.70	0.0	E = or > E2=543.083
544.90	0.0	E = or > E2=543.083
545.10	0.0	E = or > E2=543.083
545.30	0.0	E = or > E2=543.083
545.50	0.0	E = or > E2=543.083
545.70	0.0	E = or > E2=543.083
545.90	0.0	E = or > E2=543.083
546.10	0.0	E = or > E2=543.083
546.30	0.0	E = or > E2=543.083
546.50	0.0	E = or > E2=543.083
546.70	0.0	E = or > E2=543.083
546.90	0.0	E = or > E2=543.083
547.10	0.0	E = or > E2=543.083
547.30	0.0	E = or > E2=543.083
547.50	0.0	E = or > E2=543.083
547.70	0.0	E = or > E2=543.083
547.90	0.0	E = or > E2=543.083
548.10	0.0	E = or > E2=543.083
548.30	0.0	E = or > E2=543.083
548.50	0.0	E = or > E2=543.083
548.70	0.0	E = or > E2=543.083
548.90	0.0	E = or > E2=543.083
549.10	0.0	E = or > E2=543.083

Outlet Structure File: BASINB1 .STR

POND-2 Version: 5.20

S/N:

Date Executed:

Time Executed:

>>>> CONTINUED from previous page <<<<

Outflow Rating Table for Structure #1

WEIR-VR Weir - Vertical Rectangular

***** INLET CONTROL ASSUMED *****

Elevation (ft)	Q (cfs)	Computation Messages
549.30	0.0	E = or > E2=543.083
549.50	0.0	E = or > E2=543.083

C = 3 L (ft) = .292

H (ft) = Table elev. - Invert elev. (542.5 ft)

Q (cfs) = C * L * (H**1.5) -- Suppressed Weir

Outlet Structure File: BASINB1 .STR

POND-2 Version: 5.20

S/N:

Date Executed:

Time Executed:

Outflow Rating Table for Structure #2

ORIFICE Orifice - Based on Area and Datum Elevation

Elevation (ft)	Q (cfs)	Computation Messages
542.50	0.0	E < E1=543.083
542.70	0.0	E < E1=543.083
542.90	0.0	E < E1=543.083
543.10	0.5	H =.308
543.30	0.6	H =.508
543.50	0.7	H =.708
543.70	0.8	H =.908
543.90	0.9	H =1.108
544.10	0.9	H =1.308
544.30	1.0	H =1.508
544.50	1.1	H =1.708
544.70	1.1	H =1.908
544.90	1.2	H =2.108
545.10	1.2	H =2.308
545.30	1.3	H =2.508
545.50	1.3	H =2.708
545.70	1.4	H =2.908
545.90	1.4	H =3.108
546.10	1.5	H =3.308
546.30	1.5	H =3.508
546.50	1.6	H =3.708
546.70	1.6	H =3.908
546.90	1.7	H =4.108
547.10	1.7	H =4.308
547.30	1.7	H =4.508
547.50	1.8	H =4.708
547.70	1.8	H =4.908
547.90	1.8	H =5.108
548.10	1.9	H =5.308
548.30	1.9	H =5.508
548.50	2.0	H =5.708
548.70	2.0	H =5.908
548.90	2.0	H =6.108
549.10	2.1	H =6.308

Outlet Structure File: BASINB1 .STR

POND-2 Version: 5.20
Date Executed:

S/N:
Time Executed:

>>>> CONTINUED from previous page <<<<

Outflow Rating Table for Structure #2
ORIFICE Orifice - Based on Area and Datum Elevation

Elevation (ft)	Q (cfs)	Computation Messages
549.30	2.1	H =6.508
549.50	0.0	E = or > E2=549.5

C = .6 A = .17 sq.ft.

H (ft) = Table elev. - Datum elev. (542.792 ft)

Q (cfs) = C * A * $\text{sqr}(2g * H)$

Outlet Structure File: BASINB1 .STR

POND-2 Version: 5.20

S/N:

Date Executed:

Time Executed:

Outflow Rating Table for Structure #3

WEIR-VR Weir - Vertical Rectangular

***** INLET CONTROL ASSUMED *****

Elevation (ft)	Q (cfs)	Computation Messages
542.50	0.0	E < Inv.El. = 546.1
542.70	0.0	E < Inv.El. = 546.1
542.90	0.0	E < Inv.El. = 546.1
543.10	0.0	E < Inv.El. = 546.1
543.30	0.0	E < Inv.El. = 546.1
543.50	0.0	E < Inv.El. = 546.1
543.70	0.0	E < Inv.El. = 546.1
543.90	0.0	E < Inv.El. = 546.1
544.10	0.0	E < Inv.El. = 546.1
544.30	0.0	E < Inv.El. = 546.1
544.50	0.0	E < Inv.El. = 546.1
544.70	0.0	E < Inv.El. = 546.1
544.90	0.0	E < Inv.El. = 546.1
545.10	0.0	E < Inv.El. = 546.1
545.30	0.0	E < Inv.El. = 546.1
545.50	0.0	E < Inv.El. = 546.1
545.70	0.0	E < Inv.El. = 546.1
545.90	0.0	E < Inv.El. = 546.1
546.10	0.0	H =0.0
546.30	0.1	H =.2
546.50	0.4	H =.4
546.70	0.7	H =.6
546.90	1.1	H =.8
547.10	1.5	H =1.0
547.30	2.0	H =1.2
547.50	0.0	E = or > E2=547.50
547.70	0.0	E = or > E2=547.50
547.90	0.0	E = or > E2=547.50
548.10	0.0	E = or > E2=547.50
548.30	0.0	E = or > E2=547.50
548.50	0.0	E = or > E2=547.50
548.70	0.0	E = or > E2=547.50
548.90	0.0	E = or > E2=547.50
549.10	0.0	E = or > E2=547.50

Outlet Structure File: BASINB1 .STR

POND-2 Version: 5.20

S/N:

Date Executed:

Time Executed:

>>>> CONTINUED from previous page <<<<<

Outflow Rating Table for Structure #3

WEIR-VR Weir - Vertical Rectangular

***** INLET CONTROL ASSUMED *****

Elevation (ft)	Q (cfs)	Computation Messages
549.30	0.0	E = or > E2=547.50
549.50	0.0	E = or > E2=547.50

C = 3 L (ft) = .5

H (ft) = Table elev. - Invert elev. (546.1 ft)

Q (cfs) = C * L * (H**1.5) -- Suppressed Weir

Outlet Structure File: BASINB1 .STR

POND-2 Version: 5.20

S/N:

Date Executed:

Time Executed:

Outflow Rating Table A

Table A = 1 ? 2

<u>Elevation (ft)</u>	<u>Q (cfs)</u>	<u>Contributing Structures</u>
542.50	0.0	1
542.70	0.1	1
542.90	0.2	1
543.10	0.5	2
543.30	0.6	2
543.50	0.7	2
543.70	0.8	2
543.90	0.9	2
544.10	0.9	2
544.30	1.0	2
544.50	1.1	2
544.70	1.1	2
544.90	1.2	2
545.10	1.2	2
545.30	1.3	2
545.50	1.3	2
545.70	1.4	2
545.90	1.4	2
546.10	1.5	2
546.30	1.5	2
546.50	1.6	2
546.70	1.6	2
546.90	1.7	2
547.10	1.7	2
547.30	1.7	2
547.50	1.8	2
547.70	1.8	2
547.90	1.8	2
548.10	1.9	2
548.30	1.9	2
548.50	2.0	2
548.70	2.0	2
548.90	2.0	2
549.10	2.1	2
549.30	2.1	2
549.50	0.0	-

Inflow Hydrograph: e:\pondpack\12003\2B-IN .HYD
 Rating Table file: e:\pondpack\12003\BASINB1 .PND

----INITIAL CONDITIONS----
 Elevation = 542.50 ft
 Outflow = 0.00 cfs
 Storage = 0 cu-ft

GIVEN POND DATA			INTERMEDIATE ROUTING COMPUTATIONS	
ELEVATION (ft)	OUTFLOW (cfs)	STORAGE (cu-ft)	2S/t (cfs)	2S/t + 0 (cfs)
542.50	0.0	0	0.0	0.0
542.70	0.1	3	0.1	0.2
542.90	0.2	20	0.7	0.9
543.10	0.5	69	2.3	2.8
543.30	0.6	164	5.5	6.1
543.50	0.7	321	10.7	11.4
543.70	0.8	554	18.5	19.3
543.90	0.9	880	29.3	30.2
544.10	0.9	1,303	43.4	44.3
544.30	1.0	1,770	59.0	60.0
544.50	1.1	2,272	75.7	76.8
544.70	1.1	2,810	93.7	94.8
544.90	1.2	3,386	112.9	114.1
545.10	1.2	4,000	133.3	134.5
545.30	1.3	4,655	155.2	156.5
545.50	1.3	5,351	178.4	179.7
545.70	1.4	6,090	203.0	204.4
545.90	1.4	6,873	229.1	230.5
546.10	1.5	7,700	256.7	258.2
546.30	1.7	8,573	285.8	287.5
546.50	2.0	9,491	316.4	318.4
546.70	2.3	10,456	348.5	350.8
546.90	2.7	11,469	382.3	385.0
547.10	3.2	12,531	417.7	420.9
547.30	3.7	13,643	454.8	458.5
547.50	1.8	14,808	493.6	495.4
547.70	1.8	16,025	534.2	536.0
547.90	1.8	17,296	576.5	578.3
548.10	1.9	18,621	620.7	622.6
548.30	1.9	20,001	666.7	668.6
548.50	2.0	21,437	714.6	716.6

GIVEN POND DATA

ELEVATION (ft)	OUTFLOW (cfs)	STORAGE (cu-ft)
548.70	2.0	22,930
548.90	2.0	24,480
549.10	2.1	26,089
549.30	2.1	27,757

INTERMEDIATE ROUTING
 COMPUTATIONS

2S/t (cfs)	2S/t + 0 (cfs)
764.3	766.3
816.0	818.0
869.6	871.7
925.2	927.3

Time increment (t) = 1.0 min.

Pond File: e:\pondpack\12003\BASINB1 .PND
 Inflow Hydrograph: e:\pondpack\12003\2B-IN .HYD
 Outflow Hydrograph: e:\pondpack\12003\2BOUT1 .HYD

INFLOW HYDROGRAPH

ROUTING COMPUTATIONS

TIME (min)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - 0 (cfs)	2S/t + 0 (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
0.0	0.00	-----	0.0	0.0	0.00	542.50
1.0	1.30	1.3	0.8	1.3	0.27	542.94
2.0	2.59	3.9	3.5	4.7	0.56	543.21
3.0	3.89	6.5	8.7	10.0	0.67	543.45
4.0	5.18	9.1	16.2	17.7	0.78	543.66
5.0	5.18	10.4	24.8	26.5	0.87	543.83
6.0	5.18	10.4	33.4	35.2	0.90	543.97
7.0	5.18	10.4	41.9	43.7	0.90	544.09
8.0	5.18	10.4	50.4	52.3	0.95	544.20
9.0	5.18	10.4	58.7	60.8	1.00	544.31
10.0	5.18	10.4	67.0	69.1	1.05	544.41
11.0	5.18	10.4	75.2	77.4	1.10	544.51
12.0	5.18	10.4	83.3	85.5	1.10	544.60
13.0	5.18	10.4	91.5	93.7	1.10	544.69
14.0	5.18	10.4	99.6	101.8	1.14	544.77
15.0	5.18	10.4	107.6	109.9	1.18	544.86
16.0	5.18	10.4	115.5	117.9	1.20	544.94
17.0	5.18	10.4	123.5	125.9	1.20	545.02
18.0	5.18	10.4	131.4	133.8	1.20	545.09
19.0	5.18	10.4	139.3	141.8	1.23	545.17
20.0	5.18	10.4	147.2	149.7	1.27	545.24
21.0	3.89	9.1	153.6	156.2	1.30	545.30
22.0	2.59	6.5	157.5	160.1	1.30	545.33
23.0	1.30	3.9	158.8	161.4	1.30	545.34
24.0	0.00	1.3	157.5	160.1	1.30	545.33
25.0	0.00	0.0	154.9	157.5	1.30	545.31
26.0	0.00	0.0	152.3	154.9	1.29	545.29
27.0	0.00	0.0	149.8	152.3	1.28	545.26
28.0	0.00	0.0	147.2	149.8	1.27	545.24
29.0	0.00	0.0	144.7	147.2	1.26	545.22
30.0	0.00	0.0	142.2	144.7	1.25	545.19
31.0	0.00	0.0	139.7	142.2	1.23	545.17
32.0	0.00	0.0	137.3	139.7	1.22	545.15
33.0	0.00	0.0	134.9	137.3	1.21	545.13
34.0	0.00	0.0	132.5	134.9	1.20	545.10
35.0	0.00	0.0	130.1	132.5	1.20	545.08
36.0	0.00	0.0	127.7	130.1	1.20	545.06
37.0	0.00	0.0	125.3	127.7	1.20	545.03
38.0	0.00	0.0	122.9	125.3	1.20	545.01
39.0	0.00	0.0	120.5	122.9	1.20	544.99
40.0	0.00	0.0	118.1	120.5	1.20	544.96
41.0	0.00	0.0	115.7	118.1	1.20	544.94
42.0	0.00	0.0	113.3	115.7	1.20	544.92
43.0	0.00	0.0	110.9	113.3	1.20	544.89
44.0	0.00	0.0	108.5	110.9	1.18	544.87

Pond File: e:\pondpack\12003\BASINB1 .PND
 Inflow Hydrograph: e:\pondpack\12003\2B-IN .HYD
 Outflow Hydrograph: e:\pondpack\12003\2BOUT1 .HYD

INFLOW HYDROGRAPH

ROUTING COMPUTATIONS

TIME (min)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
45.0	0.00	0.0	106.2	108.5	1.17	544.84
46.0	0.00	0.0	103.8	106.2	1.16	544.82
47.0	0.00	0.0	101.5	103.8	1.15	544.79
48.0	0.00	0.0	99.3	101.5	1.14	544.77
49.0	0.00	0.0	97.0	99.3	1.12	544.75
50.0	0.00	0.0	94.8	97.0	1.11	544.72
51.0	0.00	0.0	92.6	94.8	1.10	544.70
52.0	0.00	0.0	90.4	92.6	1.10	544.68
53.0	0.00	0.0	88.2	90.4	1.10	544.65
54.0	0.00	0.0	86.0	88.2	1.10	544.63
55.0	0.00	0.0	83.8	86.0	1.10	544.60
56.0	0.00	0.0	81.6	83.8	1.10	544.58
57.0	0.00	0.0	79.4	81.6	1.10	544.55
58.0	0.00	0.0	77.2	79.4	1.10	544.53
59.0	0.00	0.0	75.0	77.2	1.10	544.50
60.0	0.00	0.0	72.8	75.0	1.09	544.48
61.0	0.00	0.0	70.7	72.8	1.08	544.45
62.0	0.00	0.0	68.6	70.7	1.06	544.43
63.0	0.00	0.0	66.4	68.6	1.05	544.40
64.0	0.00	0.0	64.4	66.4	1.04	544.38
65.0	0.00	0.0	62.3	64.4	1.03	544.35
66.0	0.00	0.0	60.3	62.3	1.01	544.33
67.0	0.00	0.0	58.3	60.3	1.00	544.30
68.0	0.00	0.0	56.3	58.3	0.99	544.28
69.0	0.00	0.0	54.4	56.3	0.98	544.25
70.0	0.00	0.0	52.4	54.4	0.96	544.23
71.0	0.00	0.0	50.5	52.4	0.95	544.20
72.0	0.00	0.0	48.6	50.5	0.94	544.18
73.0	0.00	0.0	46.8	48.6	0.93	544.15
74.0	0.00	0.0	45.0	46.8	0.92	544.13
75.0	0.00	0.0	43.2	45.0	0.90	544.11
76.0	0.00	0.0	41.4	43.2	0.90	544.08
77.0	0.00	0.0	39.6	41.4	0.90	544.06
78.0	0.00	0.0	37.8	39.6	0.90	544.03
79.0	0.00	0.0	36.0	37.8	0.90	544.01
80.0	0.00	0.0	34.2	36.0	0.90	543.98
81.0	0.00	0.0	32.4	34.2	0.90	543.96
82.0	0.00	0.0	30.6	32.4	0.90	543.93
83.0	0.00	0.0	28.8	30.6	0.90	543.90
84.0	0.00	0.0	27.0	28.8	0.89	543.87
85.0	0.00	0.0	25.2	27.0	0.87	543.84
86.0	0.00	0.0	23.5	25.2	0.85	543.81
87.0	0.00	0.0	21.9	23.5	0.84	543.78
88.0	0.00	0.0	20.2	21.9	0.82	543.75
89.0	0.00	0.0	18.6	20.2	0.81	543.72
90.0	0.00	0.0	17.0	18.6	0.79	543.68

Pond File: e:\pondpack\12003\BASINB1 .PND
 Inflow Hydrograph: e:\pondpack\12003\2B-IN .HYD
 Outflow Hydrograph: e:\pondpack\12003\2BOUT1 .HYD

INFLOW HYDROGRAPH

ROUTING COMPUTATIONS

TIME (min)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - 0 (cfs)	2S/t + 0 (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
91.0	0.00	0.0	15.5	17.0	0.77	543.64
92.0	0.00	0.0	14.0	15.5	0.75	543.60
93.0	0.00	0.0	12.5	14.0	0.73	543.57
94.0	0.00	0.0	11.1	12.5	0.71	543.53
95.0	0.00	0.0	9.7	11.1	0.69	543.49
96.0	0.00	0.0	8.3	9.7	0.67	543.44
97.0	0.00	0.0	7.1	8.3	0.64	543.39
98.0	0.00	0.0	5.8	7.1	0.62	543.34
99.0	0.00	0.0	4.6	5.8	0.59	543.28
100.0	0.00	0.0	3.5	4.6	0.56	543.21
101.0	0.00	0.0	2.5	3.5	0.52	543.14
102.0	0.00	0.0	1.6	2.5	0.45	543.07
103.0	0.00	0.0	1.0	1.6	0.31	542.97
104.0	0.00	0.0	0.5	1.0	0.21	542.91
105.0	0.00	0.0	0.2	0.5	0.15	542.80
106.0	0.00	0.0	0.0	0.2	0.11	542.71
107.0	0.00	0.0	-0.0	0.0	0.01	542.52
108.0	0.00	0.0	-0.0	-0.0	0.00	542.50
109.0	0.00	0.0	-0.0	-0.0	0.00	542.50
110.0	0.00	0.0	-0.0	-0.0	0.00	542.50
111.0	0.00	0.0	-0.0	-0.0	0.00	542.50
112.0	0.00	0.0	-0.0	-0.0	0.00	542.50
113.0	0.00	0.0	-0.0	-0.0	0.00	542.50
114.0	0.00	0.0	-0.0	-0.0	0.00	542.50
115.0	0.00	0.0	-0.0	-0.0	0.00	542.50
116.0	0.00	0.0	-0.0	-0.0	0.00	542.50
117.0	0.00	0.0	-0.0	-0.0	0.00	542.50
118.0	0.00	0.0	-0.0	-0.0	0.00	542.50
119.0	0.00	0.0	-0.0	-0.0	0.00	542.50
120.0	0.00	0.0	-0.0	-0.0	0.00	542.50
121.0	0.00	0.0	-0.0	-0.0	0.00	542.50
122.0	0.00	0.0	-0.0	-0.0	0.00	542.50
123.0	0.00	0.0	-0.0	-0.0	0.00	542.50
124.0	0.00	0.0	-0.0	-0.0	0.00	542.50
125.0	0.00	0.0	-0.0	-0.0	0.00	542.50
126.0	0.00	0.0	-0.0	-0.0	0.00	542.50
127.0	0.00	0.0	-0.0	-0.0	0.00	542.50
128.0	0.00	0.0	-0.0	-0.0	0.00	542.50
129.0	0.00	0.0	-0.0	-0.0	0.00	542.50
130.0	0.00	0.0	-0.0	-0.0	0.00	542.50
131.0	0.00	0.0	-0.0	-0.0	0.00	542.50
132.0	0.00	0.0	-0.0	-0.0	0.00	542.50
133.0	0.00	0.0	-0.0	-0.0	0.00	542.50
134.0	0.00	0.0	-0.0	-0.0	0.00	542.50
135.0	0.00	0.0	-0.0	-0.0	0.00	542.50
136.0	0.00	0.0	-0.0	-0.0	0.00	542.50

Pond File: e:\pondpack\12003\BASINB1 .PND
 Inflow Hydrograph: e:\pondpack\12003\2B-IN .HYD
 Outflow Hydrograph: e:\pondpack\12003\2BOUT1 .HYD

INFLOW HYDROGRAPH

ROUTING COMPUTATIONS

TIME (min)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
137.0	0.00	0.0	-0.0	-0.0	0.00	542.50
138.0	0.00	0.0	-0.0	-0.0	0.00	542.50
139.0	0.00	0.0	-0.0	-0.0	0.00	542.50
140.0	0.00	0.0	-0.0	-0.0	0.00	542.50
141.0	0.00	0.0	-0.0	-0.0	0.00	542.50
142.0	0.00	0.0	-0.0	-0.0	0.00	542.50
143.0	0.00	0.0	-0.0	-0.0	0.00	542.50
144.0	0.00	0.0	-0.0	-0.0	0.00	542.50
145.0	0.00	0.0	-0.0	-0.0	0.00	542.50
146.0	0.00	0.0	-0.0	-0.0	0.00	542.50
147.0	0.00	0.0	-0.0	-0.0	0.00	542.50
148.0	0.00	0.0	-0.0	-0.0	0.00	542.50
149.0	0.00	0.0	-0.0	-0.0	0.00	542.50
150.0	0.00	0.0	-0.0	-0.0	0.00	542.50
151.0	0.00	0.0	-0.0	-0.0	0.00	542.50

***** SUMMARY OF ROUTING COMPUTATIONS *****

Pond File: e:\pondpack\12003\BASINB1 .PND
Inflow Hydrograph: e:\pondpack\12003\2B-IN .HYD
Outflow Hydrograph: e:\pondpack\12003\2BOUT1 .HYD

Starting Pond W.S. Elevation = 542.50 ft

***** Summary of Peak Outflow and Peak Elevation *****

Peak Inflow = 5.18 cfs
Peak Outflow = 1.30 cfs
Peak Elevation = 545.34 ft

***** Summary of Approximate Peak Storage *****

Initial Storage = 0 cu-ft
Peak Storage From Storm = 4,803 cu-ft

Total Storage in Pond = 4,803 cu-ft

Pond File: e:\pondpack\12003\BASINB1 .PND

Inflow Hydrograph: e:\pondpack\12003\2B-IN .HYD

Outflow Hydrograph: e:\pondpack\12003\2BOUT1 .HYD

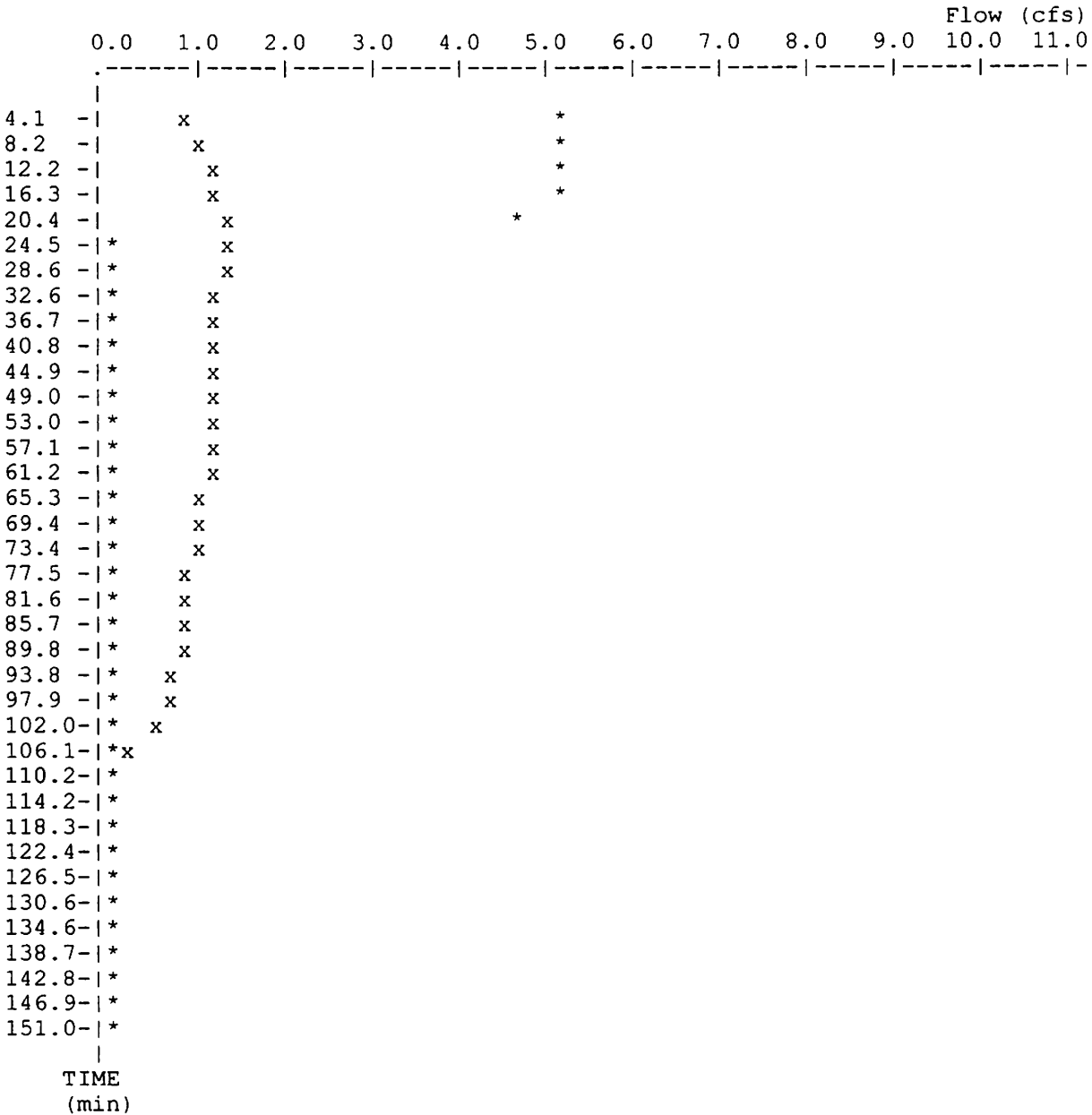
EXECUTED: 04-01-2003

Peak Inflow = 5.18 cfs

13:29:57

Peak Outflow = 1.30 cfs

Peak Elevation = 545.34 ft



x File: e:\pondpack\12003\2BOUT1 .HYD Qmax = 1.3 cfs
 * File: e:\pondpack\12003\2B-IN .HYD Qmax = 5.2 cfs

Inflow Hydrograph: e:\pondpack\12003\15B-IN .HYD
 Rating Table file: e:\pondpack\12003\BASINB1 .PND

----INITIAL CONDITIONS----
 Elevation = 542.50 ft
 Outflow = 0.00 cfs
 Storage = 0 cu-ft

GIVEN POND DATA			INTERMEDIATE ROUTING COMPUTATIONS	
ELEVATION (ft)	OUTFLOW (cfs)	STORAGE (cu-ft)	2S/t (cfs)	2S/t + 0 (cfs)
542.50	0.0	0	0.0	0.0
542.70	0.1	3	0.1	0.2
542.90	0.2	20	0.7	0.9
543.10	0.5	69	2.3	2.8
543.30	0.6	164	5.5	6.1
543.50	0.7	321	10.7	11.4
543.70	0.8	554	18.5	19.3
543.90	0.9	880	29.3	30.2
544.10	0.9	1,303	43.4	44.3
544.30	1.0	1,770	59.0	60.0
544.50	1.1	2,272	75.7	76.8
544.70	1.1	2,810	93.7	94.8
544.90	1.2	3,386	112.9	114.1
545.10	1.2	4,000	133.3	134.5
545.30	1.3	4,655	155.2	156.5
545.50	1.3	5,351	178.4	179.7
545.70	1.4	6,090	203.0	204.4
545.90	1.4	6,873	229.1	230.5
546.10	1.5	7,700	256.7	258.2
546.30	1.7	8,573	285.8	287.5
546.50	2.0	9,491	316.4	318.4
546.70	2.3	10,456	348.5	350.8
546.90	2.7	11,469	382.3	385.0
547.10	3.2	12,531	417.7	420.9
547.30	3.7	13,643	454.8	458.5
547.50	1.8	14,808	493.6	495.4
547.70	1.8	16,025	534.2	536.0
547.90	1.8	17,296	576.5	578.3
548.10	1.9	18,621	620.7	622.6
548.30	1.9	20,001	666.7	668.6
548.50	2.0	21,437	714.6	716.6

GIVEN POND DATA			INTERMEDIATE ROUTING COMPUTATIONS	
ELEVATION (ft)	OUTFLOW (cfs)	STORAGE (cu-ft)	2S/t (cfs)	2S/t + 0 (cfs)
548.70	2.0	22,930	764.3	766.3
548.90	2.0	24,480	816.0	818.0
549.10	2.1	26,089	869.6	871.7
549.30	2.1	27,757	925.2	927.3

Time increment (t) = 1.0 min.

Pond File: e:\pondpack\12003\BASINB1 .PND
 Inflow Hydrograph: e:\pondpack\12003\15B-IN .HYD
 Outflow Hydrograph: e:\pondpack\12003\15BOUT1 .HYD

INFLOW HYDROGRAPH

ROUTING COMPUTATIONS

TIME (min)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - 0 (cfs)	2S/t + 0 (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
0.0	0.00	-----	0.0	0.0	0.00	542.50
1.0	2.13	2.1	1.3	2.1	0.39	543.03
2.0	4.26	6.4	6.5	7.7	0.63	543.36
3.0	6.38	10.6	15.6	17.1	0.77	543.65
4.0	8.51	14.9	28.7	30.5	0.90	543.90
5.0	8.51	17.0	43.9	45.7	0.91	544.12
6.0	8.51	17.0	58.9	60.9	1.01	544.31
7.0	8.51	17.0	73.7	75.9	1.09	544.49
8.0	8.51	17.0	88.5	90.7	1.10	544.65
9.0	8.51	17.0	103.2	105.5	1.16	544.81
10.0	8.51	17.0	117.8	120.2	1.20	544.96
11.0	8.51	17.0	132.5	134.9	1.20	545.10
12.0	8.51	17.0	146.9	149.5	1.27	545.24
13.0	8.51	17.0	161.4	164.0	1.30	545.36
14.0	8.51	17.0	175.8	178.4	1.30	545.49
15.0	8.51	17.0	190.1	192.8	1.35	545.61
16.0	8.51	17.0	204.3	207.1	1.40	545.72
17.0	8.51	17.0	218.5	221.3	1.40	545.83
18.0	8.51	17.0	232.7	235.6	1.42	545.94
19.0	8.51	17.0	246.8	249.7	1.47	546.04
20.0	8.51	17.0	260.7	263.8	1.54	546.14
21.0	6.38	14.9	272.4	275.6	1.62	546.22
22.0	4.26	10.6	279.7	283.0	1.67	546.27
23.0	2.13	6.4	282.7	286.1	1.69	546.29
24.0	0.00	2.1	281.5	284.8	1.68	546.28
25.0	0.00	0.0	278.2	281.5	1.66	546.26
26.0	0.00	0.0	274.9	278.2	1.64	546.24
27.0	0.00	0.0	271.7	274.9	1.61	546.21
28.0	0.00	0.0	268.5	271.7	1.59	546.19
29.0	0.00	0.0	265.3	268.5	1.57	546.17
30.0	0.00	0.0	262.2	265.3	1.55	546.15
31.0	0.00	0.0	259.2	262.2	1.53	546.13
32.0	0.00	0.0	256.2	259.2	1.51	546.11
33.0	0.00	0.0	253.2	256.2	1.49	546.09
34.0	0.00	0.0	250.2	253.2	1.48	546.06
35.0	0.00	0.0	247.3	250.2	1.47	546.04
36.0	0.00	0.0	244.3	247.3	1.46	546.02
37.0	0.00	0.0	241.4	244.3	1.45	546.00
38.0	0.00	0.0	238.6	241.4	1.44	545.98
39.0	0.00	0.0	235.7	238.6	1.43	545.96
40.0	0.00	0.0	232.9	235.7	1.42	545.94
41.0	0.00	0.0	230.1	232.9	1.41	545.92
42.0	0.00	0.0	227.3	230.1	1.40	545.90
43.0	0.00	0.0	224.5	227.3	1.40	545.88
44.0	0.00	0.0	221.7	224.5	1.40	545.85

Pond File: e:\pondpack\12003\BASINB1 .PND
 Inflow Hydrograph: e:\pondpack\12003\15B-IN .HYD
 Outflow Hydrograph: e:\pondpack\12003\15BOUT1 .HYD

INFLOW HYDROGRAPH

ROUTING COMPUTATIONS

TIME (min)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - 0 (cfs)	2S/t + 0 (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
45.0	0.00	0.0	218.9	221.7	1.40	545.83
46.0	0.00	0.0	216.1	218.9	1.40	545.81
47.0	0.00	0.0	213.3	216.1	1.40	545.79
48.0	0.00	0.0	210.5	213.3	1.40	545.77
49.0	0.00	0.0	207.7	210.5	1.40	545.75
50.0	0.00	0.0	204.9	207.7	1.40	545.72
51.0	0.00	0.0	202.1	204.9	1.40	545.70
52.0	0.00	0.0	199.3	202.1	1.39	545.68
53.0	0.00	0.0	196.5	199.3	1.38	545.66
54.0	0.00	0.0	193.8	196.5	1.37	545.64
55.0	0.00	0.0	191.1	193.8	1.36	545.61
56.0	0.00	0.0	188.4	191.1	1.35	545.59
57.0	0.00	0.0	185.7	188.4	1.34	545.57
58.0	0.00	0.0	183.1	185.7	1.32	545.55
59.0	0.00	0.0	180.4	183.1	1.31	545.53
60.0	0.00	0.0	177.8	180.4	1.30	545.51
61.0	0.00	0.0	175.2	177.8	1.30	545.48
62.0	0.00	0.0	172.6	175.2	1.30	545.46
63.0	0.00	0.0	170.0	172.6	1.30	545.44
64.0	0.00	0.0	167.4	170.0	1.30	545.42
65.0	0.00	0.0	164.8	167.4	1.30	545.39
66.0	0.00	0.0	162.2	164.8	1.30	545.37
67.0	0.00	0.0	159.6	162.2	1.30	545.35
68.0	0.00	0.0	157.0	159.6	1.30	545.33
69.0	0.00	0.0	154.4	157.0	1.30	545.30
70.0	0.00	0.0	151.8	154.4	1.29	545.28
71.0	0.00	0.0	149.3	151.8	1.28	545.26
72.0	0.00	0.0	146.7	149.3	1.27	545.23
73.0	0.00	0.0	144.2	146.7	1.26	545.21
74.0	0.00	0.0	141.7	144.2	1.24	545.19
75.0	0.00	0.0	139.3	141.7	1.23	545.17
76.0	0.00	0.0	136.8	139.3	1.22	545.14
77.0	0.00	0.0	134.4	136.8	1.21	545.12
78.0	0.00	0.0	132.0	134.4	1.20	545.10
79.0	0.00	0.0	129.6	132.0	1.20	545.08
80.0	0.00	0.0	127.2	129.6	1.20	545.05
81.0	0.00	0.0	124.8	127.2	1.20	545.03
82.0	0.00	0.0	122.4	124.8	1.20	545.01
83.0	0.00	0.0	120.0	122.4	1.20	544.98
84.0	0.00	0.0	117.6	120.0	1.20	544.96
85.0	0.00	0.0	115.2	117.6	1.20	544.93
86.0	0.00	0.0	112.8	115.2	1.20	544.91
87.0	0.00	0.0	110.4	112.8	1.19	544.89
88.0	0.00	0.0	108.1	110.4	1.18	544.86
89.0	0.00	0.0	105.7	108.1	1.17	544.84
90.0	0.00	0.0	103.4	105.7	1.16	544.81

Pond File: e:\pondpack\12003\BASINB1 .PND
 Inflow Hydrograph: e:\pondpack\12003\15B-IN .HYD
 Outflow Hydrograph: e:\pondpack\12003\15BOUT1 .HYD

INFLOW HYDROGRAPH

ROUTING COMPUTATIONS

TIME (min)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - 0 (cfs)	2S/t + 0 (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
91.0	0.00	0.0	101.1	103.4	1.14	544.79
92.0	0.00	0.0	98.9	101.1	1.13	544.77
93.0	0.00	0.0	96.6	98.9	1.12	544.74
94.0	0.00	0.0	94.4	96.6	1.11	544.72
95.0	0.00	0.0	92.2	94.4	1.10	544.70
96.0	0.00	0.0	90.0	92.2	1.10	544.67
97.0	0.00	0.0	87.8	90.0	1.10	544.65
98.0	0.00	0.0	85.6	87.8	1.10	544.62
99.0	0.00	0.0	83.4	85.6	1.10	544.60
100.0	0.00	0.0	81.2	83.4	1.10	544.57
101.0	0.00	0.0	79.0	81.2	1.10	544.55
102.0	0.00	0.0	76.8	79.0	1.10	544.52
103.0	0.00	0.0	74.6	76.8	1.10	544.50
104.0	0.00	0.0	72.4	74.6	1.09	544.47
105.0	0.00	0.0	70.3	72.4	1.07	544.45
106.0	0.00	0.0	68.2	70.3	1.06	544.42
107.0	0.00	0.0	66.1	68.2	1.05	544.40
108.0	0.00	0.0	64.0	66.1	1.04	544.37
109.0	0.00	0.0	61.9	64.0	1.02	544.35
110.0	0.00	0.0	59.9	61.9	1.01	544.32
111.0	0.00	0.0	57.9	59.9	1.00	544.30
112.0	0.00	0.0	55.9	57.9	0.99	544.27
113.0	0.00	0.0	54.0	55.9	0.97	544.25
114.0	0.00	0.0	52.1	54.0	0.96	544.22
115.0	0.00	0.0	50.2	52.1	0.95	544.20
116.0	0.00	0.0	48.3	50.2	0.94	544.17
117.0	0.00	0.0	46.4	48.3	0.93	544.15
118.0	0.00	0.0	44.6	46.4	0.91	544.13
119.0	0.00	0.0	42.8	44.6	0.90	544.10
120.0	0.00	0.0	41.0	42.8	0.90	544.08
121.0	0.00	0.0	39.2	41.0	0.90	544.05
122.0	0.00	0.0	37.4	39.2	0.90	544.03
123.0	0.00	0.0	35.6	37.4	0.90	544.00
124.0	0.00	0.0	33.8	35.6	0.90	543.98
125.0	0.00	0.0	32.0	33.8	0.90	543.95
126.0	0.00	0.0	30.2	32.0	0.90	543.93
127.0	0.00	0.0	28.4	30.2	0.90	543.90
128.0	0.00	0.0	26.7	28.4	0.88	543.87
129.0	0.00	0.0	24.9	26.7	0.87	543.83
130.0	0.00	0.0	23.2	24.9	0.85	543.80
131.0	0.00	0.0	21.5	23.2	0.84	543.77
132.0	0.00	0.0	19.9	21.5	0.82	543.74
133.0	0.00	0.0	18.3	19.9	0.81	543.71
134.0	0.00	0.0	16.7	18.3	0.79	543.68
135.0	0.00	0.0	15.2	16.7	0.77	543.64
136.0	0.00	0.0	13.7	15.2	0.75	543.60

Pond File: e:\pondpack\12003\BASINB1 .PND
 Inflow Hydrograph: e:\pondpack\12003\15B-IN .HYD
 Outflow Hydrograph: e:\pondpack\12003\15BOUT1 .HYD

INFLOW HYDROGRAPH

ROUTING COMPUTATIONS

TIME (min)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - 0 (cfs)	2S/t + 0 (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
137.0	0.00	0.0	12.2	13.7	0.73	543.56
138.0	0.00	0.0	10.8	12.2	0.71	543.52
139.0	0.00	0.0	9.4	10.8	0.69	543.48
140.0	0.00	0.0	8.1	9.4	0.66	543.43
141.0	0.00	0.0	6.8	8.1	0.64	543.38
142.0	0.00	0.0	5.6	6.8	0.61	543.33
143.0	0.00	0.0	4.4	5.6	0.59	543.27
144.0	0.00	0.0	3.3	4.4	0.55	543.20
145.0	0.00	0.0	2.3	3.3	0.52	543.13
146.0	0.00	0.0	1.5	2.3	0.42	543.05
147.0	0.00	0.0	0.9	1.5	0.29	542.96
148.0	0.00	0.0	0.5	0.9	0.20	542.90
149.0	0.00	0.0	0.2	0.5	0.14	542.78
150.0	0.00	0.0	-0.0	0.2	0.10	542.70
151.0	0.00	0.0	-0.0	-0.0	0.00	542.50

***** SUMMARY OF ROUTING COMPUTATIONS *****

Pond File: e:\pondpack\12003\BASINB1 .PND
Inflow Hydrograph: e:\pondpack\12003\15B-IN .HYD
Outflow Hydrograph: e:\pondpack\12003\15BOUT1 .HYD

Starting Pond W.S. Elevation = 542.50 ft

***** Summary of Peak Outflow and Peak Elevation *****

Peak Inflow = 8.51 cfs
Peak Outflow = 1.69 cfs
Peak Elevation = 546.29 ft

***** Summary of Approximate Peak Storage *****

Initial Storage = 0 cu-ft
Peak Storage From Storm = 8,532 cu-ft

Total Storage in Pond = 8,532 cu-ft

POND-2 Version: 5.20 S/N:

Page 8

15

Return Freq: 15 years

Pond File: e:\pondpack\12003\BASINB1 .PND

Inflow Hydrograph: e:\pondpack\12003\15B-IN .HYD

Outflow Hydrograph: e:\pondpack\12003\15BOUT1 .HYD

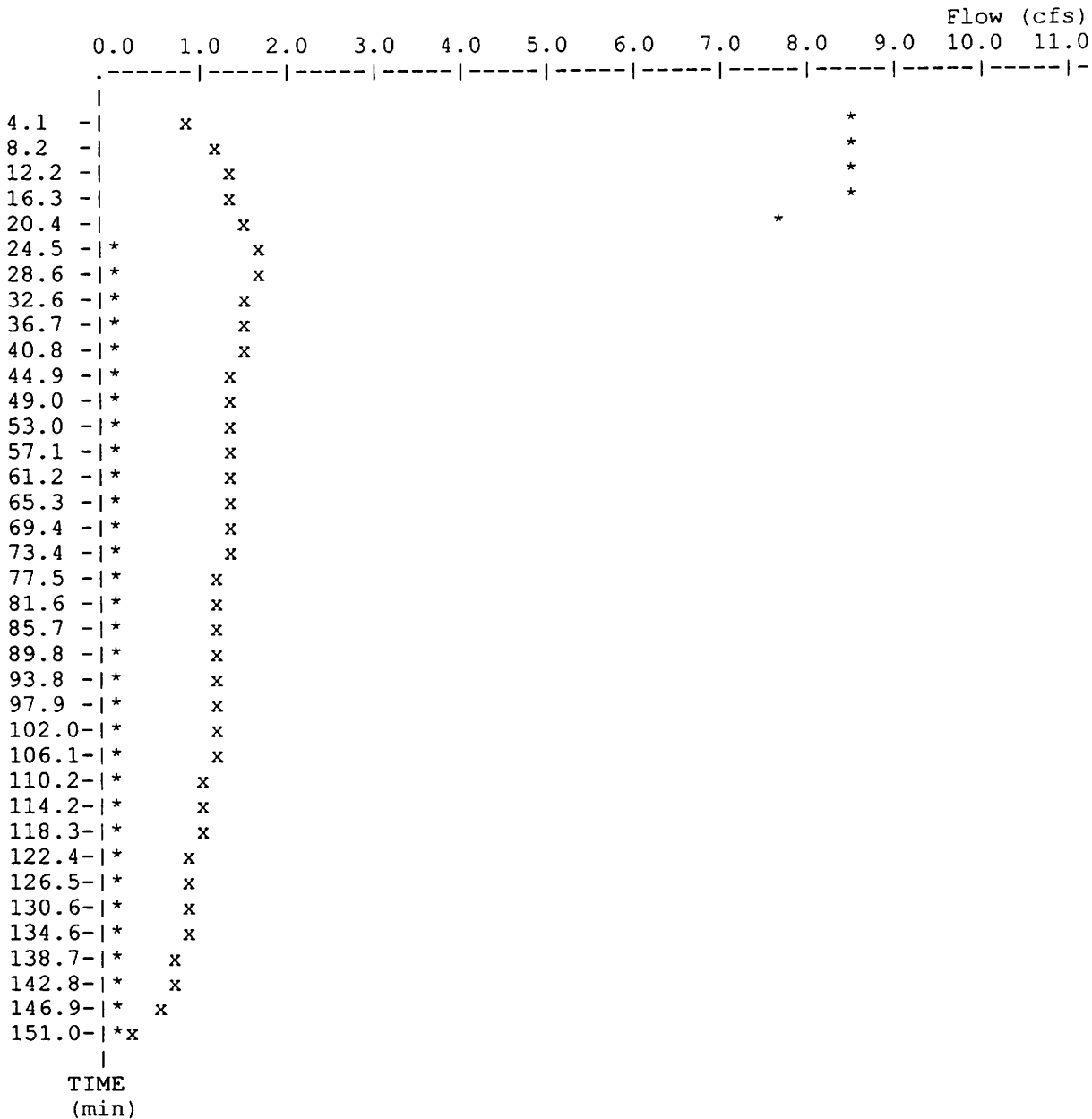
EXECUTED: 04-01-2003

13:29:57

Peak Inflow = 8.51 cfs

Peak Outflow = 1.69 cfs

Peak Elevation = 546.29 ft



x File: e:\pondpack\12003\15BOUT1 .HYD Qmax = 1.7 cfs
 * File: e:\pondpack\12003\15B-IN .HYD Qmax = 8.5 cfs

Inflow Hydrograph: e:\pondpack\12003\25B-IN .HYD
 Rating Table file: e:\pondpack\12003\BASINB1 .PND

----INITIAL CONDITIONS----
 Elevation = 542.50 ft
 Outflow = 0.00 cfs
 Storage = 0 cu-ft

GIVEN POND DATA			INTERMEDIATE ROUTING COMPUTATIONS	
ELEVATION (ft)	OUTFLOW (cfs)	STORAGE (cu-ft)	2S/t (cfs)	2S/t + 0 (cfs)
542.50	0.0	0	0.0	0.0
542.70	0.1	3	0.1	0.2
542.90	0.2	20	0.7	0.9
543.10	0.5	69	2.3	2.8
543.30	0.6	164	5.5	6.1
543.50	0.7	321	10.7	11.4
543.70	0.8	554	18.5	19.3
543.90	0.9	880	29.3	30.2
544.10	0.9	1,303	43.4	44.3
544.30	1.0	1,770	59.0	60.0
544.50	1.1	2,272	75.7	76.8
544.70	1.1	2,810	93.7	94.8
544.90	1.2	3,386	112.9	114.1
545.10	1.2	4,000	133.3	134.5
545.30	1.3	4,655	155.2	156.5
545.50	1.3	5,351	178.4	179.7
545.70	1.4	6,090	203.0	204.4
545.90	1.4	6,873	229.1	230.5
546.10	1.5	7,700	256.7	258.2
546.30	1.7	8,573	285.8	287.5
546.50	2.0	9,491	316.4	318.4
546.70	2.3	10,456	348.5	350.8
546.90	2.7	11,469	382.3	385.0
547.10	3.2	12,531	417.7	420.9
547.30	3.7	13,643	454.8	458.5
547.50	1.8	14,808	493.6	495.4
547.70	1.8	16,025	534.2	536.0
547.90	1.8	17,296	576.5	578.3
548.10	1.9	18,621	620.7	622.6
548.30	1.9	20,001	666.7	668.6
548.50	2.0	21,437	714.6	716.6

GIVEN POND DATA

ELEVATION (ft)	OUTFLOW (cfs)	STORAGE (cu-ft)
548.70	2.0	22,930
548.90	2.0	24,480
549.10	2.1	26,089
549.30	2.1	27,757

INTERMEDIATE ROUTING
COMPUTATIONS

2S/t (cfs)	2S/t + 0 (cfs)
764.3	766.3
816.0	818.0
869.6	871.7
925.2	927.3

Time increment (t) = 1.0 min.

Pond File: e:\pondpack\12003\BASINB1 .PND
 Inflow Hydrograph: e:\pondpack\12003\25B-IN .HYD
 Outflow Hydrograph: e:\pondpack\12003\25BOUT1 .HYD

INFLOW HYDROGRAPH

ROUTING COMPUTATIONS

TIME (min)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
0.0	0.00	-----	0.0	0.0	0.00	542.50
1.0	2.63	2.6	1.7	2.6	0.47	543.08
2.0	5.26	7.9	8.2	9.6	0.67	543.43
3.0	7.88	13.1	19.7	21.4	0.82	543.74
4.0	10.51	18.4	36.3	38.1	0.90	544.01
5.0	10.51	21.0	55.4	57.4	0.98	544.27
6.0	10.51	21.0	74.2	76.4	1.10	544.50
7.0	10.51	21.0	93.0	95.2	1.10	544.70
8.0	10.51	21.0	111.6	114.0	1.20	544.90
9.0	10.51	21.0	130.3	132.7	1.20	545.08
10.0	10.51	21.0	148.7	151.3	1.28	545.25
11.0	10.51	21.0	167.2	169.8	1.30	545.41
12.0	10.51	21.0	185.5	188.2	1.33	545.57
13.0	10.51	21.0	203.7	206.5	1.40	545.72
14.0	10.51	21.0	221.9	224.7	1.40	545.86
15.0	10.51	21.0	240.1	243.0	1.45	545.99
16.0	10.51	21.0	258.1	261.1	1.52	546.12
17.0	10.51	21.0	275.8	279.1	1.64	546.24
18.0	10.51	21.0	293.2	296.8	1.79	546.36
19.0	10.51	21.0	310.3	314.3	1.96	546.47
20.0	10.51	21.0	327.1	331.4	2.12	546.58
21.0	7.88	18.4	341.0	345.5	2.25	546.67
22.0	5.26	13.1	349.5	354.1	2.34	546.72
23.0	2.63	7.9	352.6	357.4	2.38	546.74
24.0	0.00	2.6	350.5	355.2	2.35	546.73
25.0	0.00	0.0	345.9	350.5	2.30	546.70
26.0	0.00	0.0	341.4	345.9	2.25	546.67
27.0	0.00	0.0	337.0	341.4	2.21	546.64
28.0	0.00	0.0	332.7	337.0	2.17	546.61
29.0	0.00	0.0	328.4	332.7	2.13	546.59
30.0	0.00	0.0	324.2	328.4	2.09	546.56
31.0	0.00	0.0	320.1	324.2	2.05	546.54
32.0	0.00	0.0	316.1	320.1	2.02	546.51
33.0	0.00	0.0	312.1	316.1	1.98	546.49
34.0	0.00	0.0	308.2	312.1	1.94	546.46
35.0	0.00	0.0	304.4	308.2	1.90	546.43
36.0	0.00	0.0	300.7	304.4	1.86	546.41
37.0	0.00	0.0	297.0	300.7	1.83	546.39
38.0	0.00	0.0	293.5	297.0	1.79	546.36
39.0	0.00	0.0	289.9	293.5	1.76	546.34
40.0	0.00	0.0	286.5	289.9	1.72	546.32
41.0	0.00	0.0	283.1	286.5	1.69	546.29
42.0	0.00	0.0	279.8	283.1	1.67	546.27
43.0	0.00	0.0	276.5	279.8	1.65	546.25
44.0	0.00	0.0	273.2	276.5	1.62	546.22

Pond File: e:\pondpack\12003\BASINB1 .PND
 Inflow Hydrograph: e:\pondpack\12003\25B-IN .HYD
 Outflow Hydrograph: e:\pondpack\12003\25BOUT1 .HYD

INFLOW HYDROGRAPH

ROUTING COMPUTATIONS

TIME (min)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
45.0	0.00	0.0	270.0	273.2	1.60	546.20
46.0	0.00	0.0	266.8	270.0	1.58	546.18
47.0	0.00	0.0	263.7	266.8	1.56	546.16
48.0	0.00	0.0	260.7	263.7	1.54	546.14
49.0	0.00	0.0	257.6	260.7	1.52	546.12
50.0	0.00	0.0	254.6	257.6	1.50	546.10
51.0	0.00	0.0	251.6	254.6	1.49	546.07
52.0	0.00	0.0	248.7	251.6	1.48	546.05
53.0	0.00	0.0	245.8	248.7	1.47	546.03
54.0	0.00	0.0	242.9	245.8	1.46	546.01
55.0	0.00	0.0	240.0	242.9	1.44	545.99
56.0	0.00	0.0	237.1	240.0	1.43	545.97
57.0	0.00	0.0	234.2	237.1	1.42	545.95
58.0	0.00	0.0	231.4	234.2	1.41	545.93
59.0	0.00	0.0	228.6	231.4	1.40	545.91
60.0	0.00	0.0	225.8	228.6	1.40	545.89
61.0	0.00	0.0	223.0	225.8	1.40	545.86
62.0	0.00	0.0	220.2	223.0	1.40	545.84
63.0	0.00	0.0	217.4	220.2	1.40	545.82
64.0	0.00	0.0	214.6	217.4	1.40	545.80
65.0	0.00	0.0	211.8	214.6	1.40	545.78
66.0	0.00	0.0	209.0	211.8	1.40	545.76
67.0	0.00	0.0	206.2	209.0	1.40	545.74
68.0	0.00	0.0	203.4	206.2	1.40	545.71
69.0	0.00	0.0	200.6	203.4	1.40	545.69
70.0	0.00	0.0	197.9	200.6	1.38	545.67
71.0	0.00	0.0	195.1	197.9	1.37	545.65
72.0	0.00	0.0	192.4	195.1	1.36	545.62
73.0	0.00	0.0	189.7	192.4	1.35	545.60
74.0	0.00	0.0	187.0	189.7	1.34	545.58
75.0	0.00	0.0	184.3	187.0	1.33	545.56
76.0	0.00	0.0	181.7	184.3	1.32	545.54
77.0	0.00	0.0	179.1	181.7	1.31	545.52
78.0	0.00	0.0	176.5	179.1	1.30	545.49
79.0	0.00	0.0	173.9	176.5	1.30	545.47
80.0	0.00	0.0	171.3	173.9	1.30	545.45
81.0	0.00	0.0	168.7	171.3	1.30	545.43
82.0	0.00	0.0	166.1	168.7	1.30	545.41
83.0	0.00	0.0	163.5	166.1	1.30	545.38
84.0	0.00	0.0	160.9	163.5	1.30	545.36
85.0	0.00	0.0	158.3	160.9	1.30	545.34
86.0	0.00	0.0	155.7	158.3	1.30	545.32
87.0	0.00	0.0	153.1	155.7	1.30	545.29
88.0	0.00	0.0	150.5	153.1	1.28	545.27
89.0	0.00	0.0	148.0	150.5	1.27	545.25
90.0	0.00	0.0	145.5	148.0	1.26	545.22

Pond File: e:\pondpack\12003\BASINB1 .PND

Inflow Hydrograph: e:\pondpack\12003\25B-IN .HYD

Outflow Hydrograph: e:\pondpack\12003\25BOUT1 .HYD

INFLOW HYDROGRAPH

ROUTING COMPUTATIONS

TIME (min)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - 0 (cfs)	2S/t + 0 (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
91.0	0.00	0.0	143.0	145.5	1.25	545.20
92.0	0.00	0.0	140.5	143.0	1.24	545.18
93.0	0.00	0.0	138.0	140.5	1.23	545.15
94.0	0.00	0.0	135.6	138.0	1.22	545.13
95.0	0.00	0.0	133.2	135.6	1.20	545.11
96.0	0.00	0.0	130.8	133.2	1.20	545.09
97.0	0.00	0.0	128.4	130.8	1.20	545.06
98.0	0.00	0.0	126.0	128.4	1.20	545.04
99.0	0.00	0.0	123.6	126.0	1.20	545.02
100.0	0.00	0.0	121.2	123.6	1.20	544.99
101.0	0.00	0.0	118.8	121.2	1.20	544.97
102.0	0.00	0.0	116.4	118.8	1.20	544.95
103.0	0.00	0.0	114.0	116.4	1.20	544.92
104.0	0.00	0.0	111.6	114.0	1.20	544.90
105.0	0.00	0.0	109.2	111.6	1.19	544.87
106.0	0.00	0.0	106.9	109.2	1.17	544.85
107.0	0.00	0.0	104.5	106.9	1.16	544.83
108.0	0.00	0.0	102.2	104.5	1.15	544.80
109.0	0.00	0.0	100.0	102.2	1.14	544.78
110.0	0.00	0.0	97.7	100.0	1.13	544.75
111.0	0.00	0.0	95.5	97.7	1.12	544.73
112.0	0.00	0.0	93.3	95.5	1.10	544.71
113.0	0.00	0.0	91.1	93.3	1.10	544.68
114.0	0.00	0.0	88.9	91.1	1.10	544.66
115.0	0.00	0.0	86.7	88.9	1.10	544.63
116.0	0.00	0.0	84.5	86.7	1.10	544.61
117.0	0.00	0.0	82.3	84.5	1.10	544.59
118.0	0.00	0.0	80.1	82.3	1.10	544.56
119.0	0.00	0.0	77.9	80.1	1.10	544.54
120.0	0.00	0.0	75.7	77.9	1.10	544.51
121.0	0.00	0.0	73.5	75.7	1.09	544.49
122.0	0.00	0.0	71.3	73.5	1.08	544.46
123.0	0.00	0.0	69.2	71.3	1.07	544.43
124.0	0.00	0.0	67.1	69.2	1.05	544.41
125.0	0.00	0.0	65.0	67.1	1.04	544.38
126.0	0.00	0.0	62.9	65.0	1.03	544.36
127.0	0.00	0.0	60.9	62.9	1.02	544.33
128.0	0.00	0.0	58.9	60.9	1.01	544.31
129.0	0.00	0.0	56.9	58.9	0.99	544.29
130.0	0.00	0.0	54.9	56.9	0.98	544.26
131.0	0.00	0.0	53.0	54.9	0.97	544.24
132.0	0.00	0.0	51.1	53.0	0.96	544.21
133.0	0.00	0.0	49.2	51.1	0.94	544.19
134.0	0.00	0.0	47.3	49.2	0.93	544.16
135.0	0.00	0.0	45.5	47.3	0.92	544.14
136.0	0.00	0.0	43.7	45.5	0.91	544.11

Pond File: e:\pondpack\12003\BASINB1 .PND
 Inflow Hydrograph: e:\pondpack\12003\25B-IN .HYD
 Outflow Hydrograph: e:\pondpack\12003\25BOUT1 .HYD

INFLOW HYDROGRAPH

ROUTING COMPUTATIONS

TIME (min)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
137.0	0.00	0.0	41.9	43.7	0.90	544.09
138.0	0.00	0.0	40.1	41.9	0.90	544.07
139.0	0.00	0.0	38.3	40.1	0.90	544.04
140.0	0.00	0.0	36.5	38.3	0.90	544.01
141.0	0.00	0.0	34.7	36.5	0.90	543.99
142.0	0.00	0.0	32.9	34.7	0.90	543.96
143.0	0.00	0.0	31.1	32.9	0.90	543.94
144.0	0.00	0.0	29.3	31.1	0.90	543.91
145.0	0.00	0.0	27.5	29.3	0.89	543.88
146.0	0.00	0.0	25.8	27.5	0.88	543.85
147.0	0.00	0.0	24.0	25.8	0.86	543.82
148.0	0.00	0.0	22.4	24.0	0.84	543.79
149.0	0.00	0.0	20.7	22.4	0.83	543.76
150.0	0.00	0.0	19.1	20.7	0.81	543.73
151.0	0.00	0.0	17.5	19.1	0.80	543.69

***** SUMMARY OF ROUTING COMPUTATIONS *****

Pond File: e:\pondpack\12003\BASINB1 .PND
Inflow Hydrograph: e:\pondpack\12003\25B-IN .HYD
Outflow Hydrograph: e:\pondpack\12003\25BOUT1 .HYD

Starting Pond W.S. Elevation = 542.50 ft

***** Summary of Peak Outflow and Peak Elevation *****

Peak Inflow = 10.51 cfs
Peak Outflow = 2.38 cfs
Peak Elevation = 546.74 ft

***** Summary of Approximate Peak Storage *****

Initial Storage = 0 cu-ft
Peak Storage From Storm = 10,649 cu-ft

Total Storage in Pond = 10,649 cu-ft

POND-2 Version: 5.20 S/N:

Page 8

25

Return Freq: 25 years

Pond File: e:\pondpack\12003\BASINB1 .PND

Inflow Hydrograph: e:\pondpack\12003\25B-IN .HYD

Outflow Hydrograph: e:\pondpack\12003\25BOUT1 .HYD

EXECUTED: 04-01-2003

13:29:57

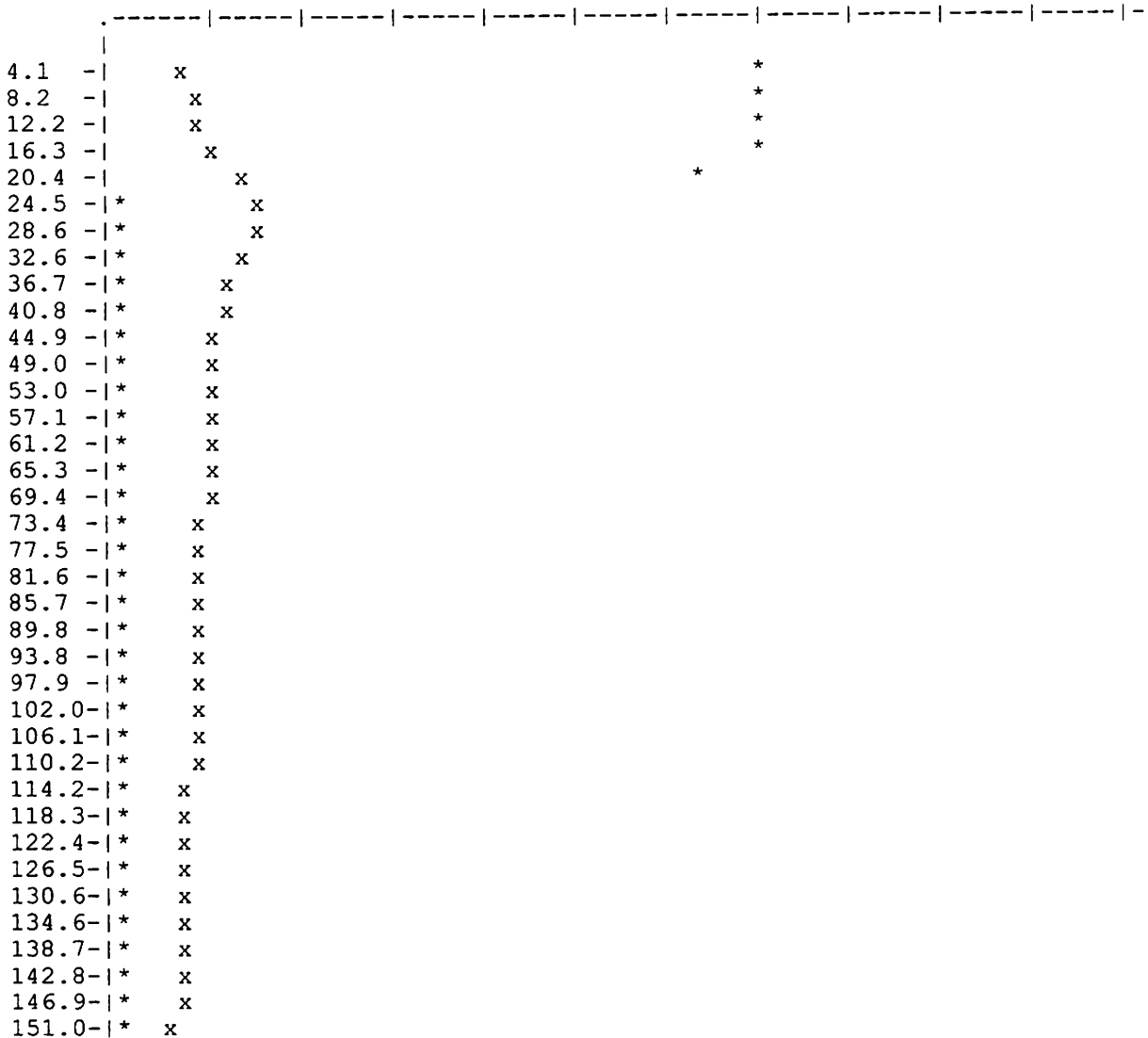
Peak Inflow = 10.51 cfs

Peak Outflow = 2.38 cfs

Peak Elevation = 546.74 ft

Flow (cfs)

0.0 1.5 3.0 4.5 6.0 7.5 9.0 10.5 12.0 13.5 15.0 16.5



TIME
(min)

x File: e:\pondpack\12003\25BOUT1 .HYD Qmax = 2.4 cfs
* File: e:\pondpack\12003\25B-IN .HYD Qmax = 10.5 cfs

Inflow Hydrograph: e:\pondpack\12003\100B-IN .HYD
 Rating Table file: e:\pondpack\12003\BASINB1 .PND

-----INITIAL CONDITIONS-----

Elevation = 542.50 ft
 Outflow = 0.00 cfs
 Storage = 0 cu-ft

GIVEN POND DATA			INTERMEDIATE ROUTING COMPUTATIONS	
ELEVATION (ft)	OUTFLOW (cfs)	STORAGE (cu-ft)	2S/t (cfs)	2S/t + 0 (cfs)
542.50	0.0	0	0.0	0.0
542.70	0.1	3	0.1	0.2
542.90	0.2	20	0.7	0.9
543.10	0.5	69	2.3	2.8
543.30	0.6	164	5.5	6.1
543.50	0.7	321	10.7	11.4
543.70	0.8	554	18.5	19.3
543.90	0.9	880	29.3	30.2
544.10	0.9	1,303	43.4	44.3
544.30	1.0	1,770	59.0	60.0
544.50	1.1	2,272	75.7	76.8
544.70	1.1	2,810	93.7	94.8
544.90	1.2	3,386	112.9	114.1
545.10	1.2	4,000	133.3	134.5
545.30	1.3	4,655	155.2	156.5
545.50	1.3	5,351	178.4	179.7
545.70	1.4	6,090	203.0	204.4
545.90	1.4	6,873	229.1	230.5
546.10	1.5	7,700	256.7	258.2
546.30	1.7	8,573	285.8	287.5
546.50	2.0	9,491	316.4	318.4
546.70	2.3	10,456	348.5	350.8
546.90	2.7	11,469	382.3	385.0
547.10	3.2	12,531	417.7	420.9
547.30	3.7	13,643	454.8	458.5
547.50	1.8	14,808	493.6	495.4
547.70	1.8	16,025	534.2	536.0
547.90	1.8	17,296	576.5	578.3
548.10	1.9	18,621	620.7	622.6
548.30	1.9	20,001	666.7	668.6
548.50	2.0	21,437	714.6	716.6

GIVEN POND DATA

ELEVATION (ft)	OUTFLOW (cfs)	STORAGE (cu-ft)
548.70	2.0	22,930
548.90	2.0	24,480
549.10	2.1	26,089
549.30	2.1	27,757

INTERMEDIATE ROUTING
 COMPUTATIONS

2S/t (cfs)	2S/t + 0 (cfs)
764.3	766.3
816.0	818.0
869.6	871.7
925.2	927.3

Time increment (t) = 1.0 min.

Pond File: e:\pondpack\12003\BASINB1 .PND
 Inflow Hydrograph: e:\pondpack\12003\100B-IN .HYD
 Outflow Hydrograph: e:\pondpack\12003\100BOUT1.HYD

INFLOW HYDROGRAPH

ROUTING COMPUTATIONS

TIME (min)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - 0 (cfs)	2S/t + 0 (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
0.0	0.00	----	0.0	0.0	0.00	542.50
1.0	3.36	3.4	2.3	3.4	0.52	543.13
2.0	6.72	10.1	11.0	12.4	0.71	543.53
3.0	10.08	16.8	26.0	27.8	0.88	543.86
4.0	13.44	23.5	47.7	49.5	0.93	544.17
5.0	13.44	26.9	72.4	74.6	1.09	544.47
6.0	13.44	26.9	97.0	99.3	1.12	544.75
7.0	13.44	26.9	121.5	123.9	1.20	545.00
8.0	13.44	26.9	145.9	148.4	1.26	545.23
9.0	13.44	26.9	170.1	172.7	1.30	545.44
10.0	13.44	26.9	194.3	197.0	1.37	545.64
11.0	13.44	26.9	218.4	221.2	1.40	545.83
12.0	13.44	26.9	242.3	245.2	1.45	546.01
13.0	13.44	26.9	266.1	269.2	1.58	546.18
14.0	13.44	26.9	289.4	292.9	1.75	546.34
15.0	13.44	26.9	312.3	316.3	1.98	546.49
16.0	13.44	26.9	334.8	339.2	2.19	546.63
17.0	13.44	26.9	356.9	361.7	2.43	546.76
18.0	13.44	26.9	378.4	383.7	2.69	546.89
19.0	13.44	26.9	399.3	405.3	2.98	547.01
20.0	13.44	26.9	419.6	426.2	3.27	547.13
21.0	10.08	23.5	436.2	443.2	3.50	547.22
22.0	6.72	16.8	445.7	453.0	3.63	547.27
23.0	3.36	10.1	448.5	455.8	3.66	547.29
24.0	0.00	3.4	444.6	451.8	3.61	547.26
25.0	0.00	0.0	437.6	444.6	3.52	547.23
26.0	0.00	0.0	430.7	437.6	3.42	547.19
27.0	0.00	0.0	424.1	430.7	3.33	547.15
28.0	0.00	0.0	417.6	424.1	3.24	547.12
29.0	0.00	0.0	411.3	417.6	3.15	547.08
30.0	0.00	0.0	405.1	411.3	3.07	547.05
31.0	0.00	0.0	399.2	405.1	2.98	547.01
32.0	0.00	0.0	393.4	399.2	2.90	546.98
33.0	0.00	0.0	387.7	393.4	2.82	546.95
34.0	0.00	0.0	382.3	387.7	2.74	546.92
35.0	0.00	0.0	376.9	382.3	2.67	546.88
36.0	0.00	0.0	371.7	376.9	2.61	546.85
37.0	0.00	0.0	366.6	371.7	2.54	546.82
38.0	0.00	0.0	361.7	366.6	2.49	546.79
39.0	0.00	0.0	356.8	361.7	2.43	546.76
40.0	0.00	0.0	352.1	356.8	2.37	546.74
41.0	0.00	0.0	347.4	352.1	2.31	546.71
42.0	0.00	0.0	342.9	347.4	2.27	546.68
43.0	0.00	0.0	338.4	342.9	2.23	546.65
44.0	0.00	0.0	334.1	338.4	2.19	546.62

Pond File: e:\pondpack\12003\BASINB1 .PND
 Inflow Hydrograph: e:\pondpack\12003\100B-IN .HYD
 Outflow Hydrograph: e:\pondpack\12003\100BOUT1.HYD

INFLOW HYDROGRAPH

ROUTING COMPUTATIONS

TIME (min)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
45.0	0.00	0.0	329.8	334.1	2.15	546.60
46.0	0.00	0.0	325.6	329.8	2.11	546.57
47.0	0.00	0.0	321.4	325.6	2.07	546.54
48.0	0.00	0.0	317.4	321.4	2.03	546.52
49.0	0.00	0.0	313.4	317.4	1.99	546.49
50.0	0.00	0.0	309.5	313.4	1.95	546.47
51.0	0.00	0.0	305.7	309.5	1.91	546.44
52.0	0.00	0.0	301.9	305.7	1.88	546.42
53.0	0.00	0.0	298.2	301.9	1.84	546.39
54.0	0.00	0.0	294.6	298.2	1.80	546.37
55.0	0.00	0.0	291.1	294.6	1.77	546.35
56.0	0.00	0.0	287.6	291.1	1.74	546.32
57.0	0.00	0.0	284.2	287.6	1.70	546.30
58.0	0.00	0.0	280.9	284.2	1.68	546.28
59.0	0.00	0.0	277.6	280.9	1.65	546.25
60.0	0.00	0.0	274.3	277.6	1.63	546.23
61.0	0.00	0.0	271.1	274.3	1.61	546.21
62.0	0.00	0.0	267.9	271.1	1.59	546.19
63.0	0.00	0.0	264.8	267.9	1.57	546.17
64.0	0.00	0.0	261.7	264.8	1.54	546.14
65.0	0.00	0.0	258.6	261.7	1.52	546.12
66.0	0.00	0.0	255.6	258.6	1.50	546.10
67.0	0.00	0.0	252.6	255.6	1.49	546.08
68.0	0.00	0.0	249.7	252.6	1.48	546.06
69.0	0.00	0.0	246.7	249.7	1.47	546.04
70.0	0.00	0.0	243.8	246.7	1.46	546.02
71.0	0.00	0.0	240.9	243.8	1.45	546.00
72.0	0.00	0.0	238.0	240.9	1.44	545.98
73.0	0.00	0.0	235.2	238.0	1.43	545.95
74.0	0.00	0.0	232.4	235.2	1.42	545.93
75.0	0.00	0.0	229.5	232.4	1.41	545.91
76.0	0.00	0.0	226.7	229.5	1.40	545.89
77.0	0.00	0.0	223.9	226.7	1.40	545.87
78.0	0.00	0.0	221.1	223.9	1.40	545.85
79.0	0.00	0.0	218.3	221.1	1.40	545.83
80.0	0.00	0.0	215.5	218.3	1.40	545.81
81.0	0.00	0.0	212.7	215.5	1.40	545.79
82.0	0.00	0.0	209.9	212.7	1.40	545.76
83.0	0.00	0.0	207.1	209.9	1.40	545.74
84.0	0.00	0.0	204.3	207.1	1.40	545.72
85.0	0.00	0.0	201.5	204.3	1.40	545.70
86.0	0.00	0.0	198.8	201.5	1.39	545.68
87.0	0.00	0.0	196.0	198.8	1.38	545.65
88.0	0.00	0.0	193.3	196.0	1.37	545.63
89.0	0.00	0.0	190.6	193.3	1.36	545.61
90.0	0.00	0.0	187.9	190.6	1.34	545.59

Pond File: e:\pondpack\12003\BASINB1 .PND
 Inflow Hydrograph: e:\pondpack\12003\100B-IN .HYD
 Outflow Hydrograph: e:\pondpack\12003\100BOUT1.HYD

INFLOW HYDROGRAPH

ROUTING COMPUTATIONS

TIME (min)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - O (cfs)	2S/t + O (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
91.0	0.00	0.0	185.2	187.9	1.33	545.57
92.0	0.00	0.0	182.6	185.2	1.32	545.54
93.0	0.00	0.0	179.9	182.6	1.31	545.52
94.0	0.00	0.0	177.3	179.9	1.30	545.50
95.0	0.00	0.0	174.7	177.3	1.30	545.48
96.0	0.00	0.0	172.1	174.7	1.30	545.46
97.0	0.00	0.0	169.5	172.1	1.30	545.44
98.0	0.00	0.0	166.9	169.5	1.30	545.41
99.0	0.00	0.0	164.3	166.9	1.30	545.39
100.0	0.00	0.0	161.7	164.3	1.30	545.37
101.0	0.00	0.0	159.1	161.7	1.30	545.35
102.0	0.00	0.0	156.5	159.1	1.30	545.32
103.0	0.00	0.0	153.9	156.5	1.30	545.30
104.0	0.00	0.0	151.4	153.9	1.29	545.28
105.0	0.00	0.0	148.8	151.4	1.28	545.25
106.0	0.00	0.0	146.3	148.8	1.27	545.23
107.0	0.00	0.0	143.8	146.3	1.25	545.21
108.0	0.00	0.0	141.3	143.8	1.24	545.18
109.0	0.00	0.0	138.8	141.3	1.23	545.16
110.0	0.00	0.0	136.4	138.8	1.22	545.14
111.0	0.00	0.0	134.0	136.4	1.21	545.12
112.0	0.00	0.0	131.6	134.0	1.20	545.09
113.0	0.00	0.0	129.2	131.6	1.20	545.07
114.0	0.00	0.0	126.8	129.2	1.20	545.05
115.0	0.00	0.0	124.4	126.8	1.20	545.02
116.0	0.00	0.0	122.0	124.4	1.20	545.00
117.0	0.00	0.0	119.6	122.0	1.20	544.98
118.0	0.00	0.0	117.2	119.6	1.20	544.95
119.0	0.00	0.0	114.8	117.2	1.20	544.93
120.0	0.00	0.0	112.4	114.8	1.20	544.91
121.0	0.00	0.0	110.0	112.4	1.19	544.88
122.0	0.00	0.0	107.6	110.0	1.18	544.86
123.0	0.00	0.0	105.3	107.6	1.17	544.83
124.0	0.00	0.0	103.0	105.3	1.15	544.81
125.0	0.00	0.0	100.7	103.0	1.14	544.79
126.0	0.00	0.0	98.4	100.7	1.13	544.76
127.0	0.00	0.0	96.2	98.4	1.12	544.74
128.0	0.00	0.0	94.0	96.2	1.11	544.71
129.0	0.00	0.0	91.8	94.0	1.10	544.69
130.0	0.00	0.0	89.6	91.8	1.10	544.67
131.0	0.00	0.0	87.4	89.6	1.10	544.64
132.0	0.00	0.0	85.2	87.4	1.10	544.62
133.0	0.00	0.0	83.0	85.2	1.10	544.59
134.0	0.00	0.0	80.8	83.0	1.10	544.57
135.0	0.00	0.0	78.6	80.8	1.10	544.54
136.0	0.00	0.0	76.4	78.6	1.10	544.52

Pond File: e:\pondpack\12003\BASINB1 .PND
 Inflow Hydrograph: e:\pondpack\12003\100B-IN .HYD
 Outflow Hydrograph: e:\pondpack\12003\100BOUT1.HYD

INFLOW HYDROGRAPH

ROUTING COMPUTATIONS

TIME (min)	INFLOW (cfs)	I1+I2 (cfs)	2S/t - 0 (cfs)	2S/t + 0 (cfs)	OUTFLOW (cfs)	ELEVATION (ft)
137.0	0.00	0.0	74.2	76.4	1.10	544.49
138.0	0.00	0.0	72.0	74.2	1.08	544.47
139.0	0.00	0.0	69.9	72.0	1.07	544.44
140.0	0.00	0.0	67.8	69.9	1.06	544.42
141.0	0.00	0.0	65.7	67.8	1.05	544.39
142.0	0.00	0.0	63.6	65.7	1.03	544.37
143.0	0.00	0.0	61.6	63.6	1.02	544.34
144.0	0.00	0.0	59.5	61.6	1.01	544.32
145.0	0.00	0.0	57.6	59.5	1.00	544.29
146.0	0.00	0.0	55.6	57.6	0.98	544.27
147.0	0.00	0.0	53.6	55.6	0.97	544.24
148.0	0.00	0.0	51.7	53.6	0.96	544.22
149.0	0.00	0.0	49.8	51.7	0.95	544.19
150.0	0.00	0.0	48.0	49.8	0.94	544.17
151.0	0.00	0.0	46.1	48.0	0.92	544.15

***** SUMMARY OF ROUTING COMPUTATIONS *****

Pond File: e:\pondpack\12003\BASINB1 .PND
Inflow Hydrograph: e:\pondpack\12003\100B-IN .HYD
Outflow Hydrograph: e:\pondpack\12003\100BOUT1.HYD

Starting Pond W.S. Elevation = 542.50 ft

***** Summary of Peak Outflow and Peak Elevation *****

Peak Inflow = 13.44 cfs
Peak Outflow = 3.66 cfs
Peak Elevation = 547.29 ft

***** Summary of Approximate Peak Storage *****

Initial Storage = 0 cu-ft
Peak Storage From Storm = 13,564 cu-ft

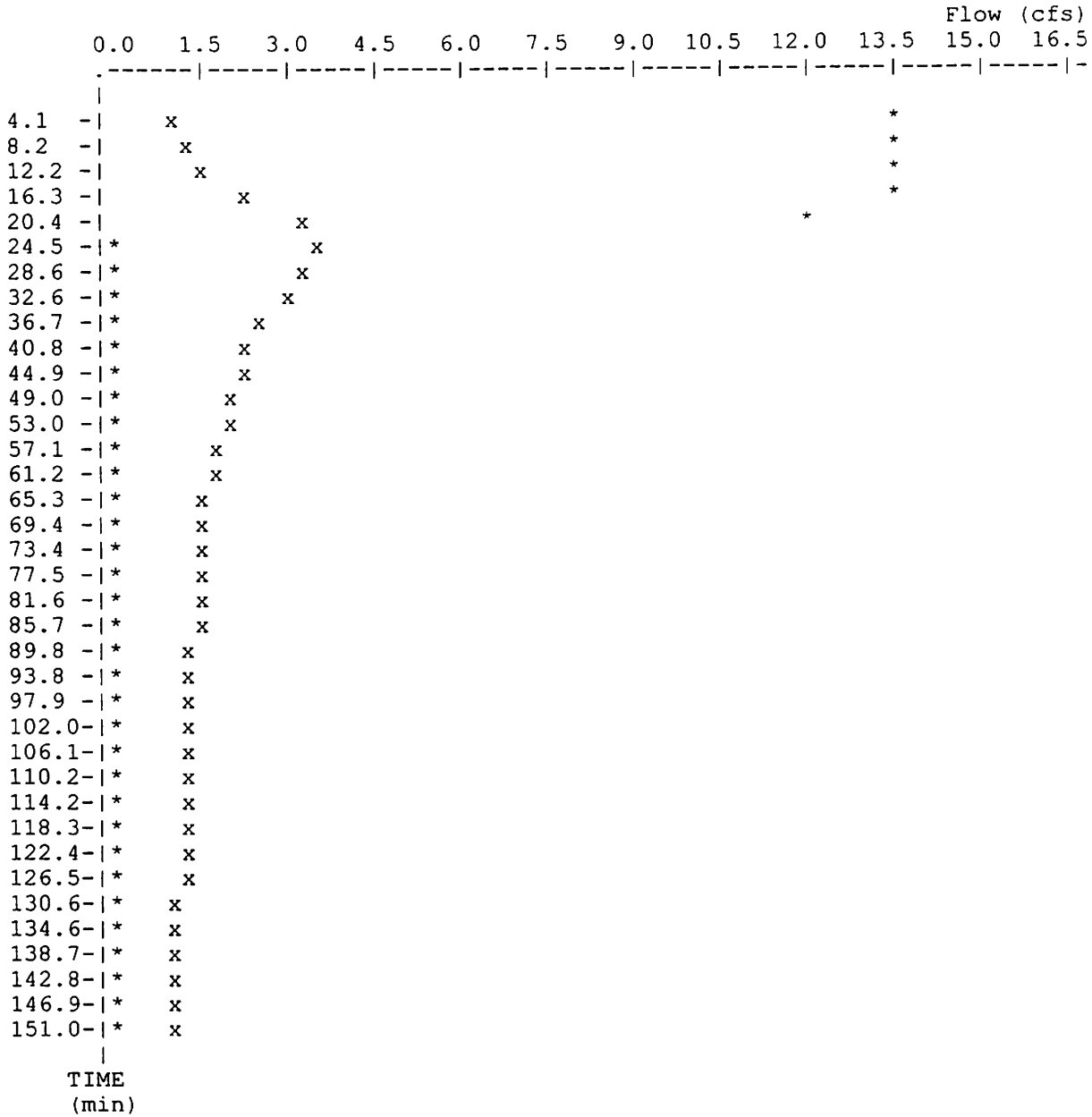
Total Storage in Pond = 13,564 cu-ft

Pond File: e:\pondpack\12003\BASINB1 .PND
 Inflow Hydrograph: e:\pondpack\12003\100B-IN .HYD
 Outflow Hydrograph: e:\pondpack\12003\100BOUT1.HYD

EXECUTED: 04-01-2003

Peak Inflow = 13.44 cfs
 Peak Outflow = 3.66 cfs
 Peak Elevation = 547.29 ft

13:29:57



x File: e:\pondpack\12003\100BOUT1.HYD Qmax = 3.7 cfs
 * File: e:\pondpack\12003\100B-IN .HYD Qmax = 13.4 cfs

BASINBSWALE

Channel Calculator

BASIN B SWALE FOR 2 YEAR STORM

Given Input Data:

Shape Rectangular
Solving for Depth of Flow
Flowrate 5.1800 cfs
Slope 0.0078 ft/ft
Manning's n 0.0130
Height 0.5000 ft
Bottom width 4.0000 ft

Computed Results:

Depth 0.3089 ft
Velocity 4.1921 fps
Full Flowrate 10.9612 cfs
Flow area 1.2357 ft²
Flow perimeter 4.6178 ft
Hydraulic radius 0.2676 ft
Top width 4.0000 ft
Area 2.0000 ft²
Perimeter 5.0000 ft
Percent full 61.7831 %

Critical Information

Critical depth 0.0000 ft
Critical slope 0.0000 ft/ft
Critical velocity 0.0000 fps
Critical area 0.0000 ft²
Critical perimeter 0.0000 ft
Critical hydraulic radius 0.0000 ft
Critical top width 0.0000 ft
Specific energy 0.0000 ft
Minimum energy 0.0000 ft
Froude number 0.0000
Flow condition Critical

18INCHCMP

Manning Pipe Calculator
18" CMP DOWNSTREAM OF FE 30

Given Input Data:

Shape Circular
Solving for Depth of Flow
Diameter 1.5000 ft
Flowrate 8.5400 cfs
Slope 0.0210 ft/ft
Manning's n 0.0240

Computed Results:

Depth 1.2840 ft
Area 1.7671 ft²
Wetted Area 1.6105 ft²
Wetted Perimeter 3.5447 ft
Perimeter 4.7124 ft
Velocity 5.3028 fps
Hydraulic Radius 0.4543 ft
Percent Full 85.5995 %
Full flow Flowrate 8.2454 cfs
Full flow velocity 4.6659 fps

Critical Information

Critical depth 1.1634 ft
Critical slope 0.0229 ft/ft
Critical velocity 5.6792 fps
Critical area 1.5037 ft²
Critical perimeter 3.1831 ft
Critical hydraulic radius 0.4724 ft
Critical top width 1.5000 ft
Specific energy 1.6664 ft
Minimum energy 1.7451 ft
Froude number 0.9500
Flow condition Subcritical

BASINASWALE

Channel Calculator

BASIN A SWALE FOR 2 YEAR STORM

Given Input Data:

Shape Rectangular
Solving for Depth of Flow
Flowrate 9.5200 cfs
Slope 0.0100 ft/ft
Manning's n 0.0130
Height 0.5000 ft
Bottom width 4.0000 ft

Computed Results:

Depth 0.4210 ft
Velocity 5.6531 fps
Full Flowrate 12.4112 cfs
Flow area 1.6840 ft²
Flow perimeter 4.8420 ft
Hydraulic radius 0.3478 ft
Top width 4.0000 ft
Area 2.0000 ft²
Perimeter 5.0000 ft
Percent full 84.2010 %

Critical Information

Critical depth 0.0000 ft
Critical slope 0.0000 ft/ft
Critical velocity 0.0000 fps
Critical area 0.0000 ft²
Critical perimeter 0.0000 ft
Critical hydraulic radius 0.0000 ft
Critical top width 0.0000 ft
Specific energy 0.0000 ft
Minimum energy 0.0000 ft
Froude number 0.0000
Flow condition Critical