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INDUSTRI-PLEX SITE REMEDIAL TRUST

WOBURN, MASSACHUSET

100% DESIGN REPORT PART I

INDUSTRI-PLEX SITE WOBURN, MASSACHUSETTS

Volume 3 of 8

Prepared by:

Golder Associates
Mt. Laurel, New Jersey

In Association with:

Jordan, Jones and Goulding
Normandeau Associates
Sasaki Associates
Husch & Eppenberger
Environmental Systems Group Monsanto

SRT-DESIGN-11
903-6400

APRIL 19

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100% DESIGN REPORT
PART I

INDUSTRI-PLEX SITE
WOBURN, MASSACHUSETTS

VOLUME 3 OF 8

ISRT-DESIGN-11

Prepared for:

Industri-Plex Site Remedial Trust
36 Commerce Way
Woburn, Massachusetts

Prepared by:

GOLDER ASSOCIATES INC.

In Association with:

Jordan, Jones and Goulding
Normandeau Associates
Sasaki Associates
Husch and Eppenberger
Environmental Systems Group Monsanto

April 1992 Project No.: 903-6400

100% DESIGN REPORT
PART I

INDUSTRI-PLEX SITE

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APPENDIX 10-E

Analysis of On-Site Subwatersheds (Proposed Conditions)

Subwatershed Areas

Golder Associates	SUBJECT Proposed On-Site Drainage Areas		
	Job No. 93-6400.50	Made by LP/AH	Date 12/3/91
	Ref. LRT-100%	Checked DEF	Sheet 1 of 3
		Reviewed CRM	

Objective: To find the areas of the subwatersheds that flow onto & through the site under proposed conditions.

Method: Using the digital planimeter, the [illegible] outlined. Upon completing the loop around the subarea, a reading was taken. This was done twice and the average of these reading was used as the actual area for use in the HEC-1 analysis.

Golder Associates

SUBJECT Proposed On-site Drainage Areas		
Job No. 903-6400	Made by AH/DP	Date 12-2-91
Ref. ISRT - 100%	Checked VEET	Sheet 2 of 3
	Reviewed CNM	

Sub watershed	Area (s.f.)	Area (sq. mi.)
1P (HB1B)	586,500	0.021
2PN (HB1AN)	214,000	0.008
2PS (HB1AS)	157,000	0.006
3PE	64,945	0.002
3PW	289,655	0.010
* 4P	470,900	0.017
* 4PS	85,600	0.003
* 5PN	222,167	0.008
* 5PS	1,416,493	0.051
* 6PN	1,029,320	0.037
6PS	407,185	0.015
* 7P	42,160	0.002
* 8P	605,740	0.022
* 9P	299,383	0.011
10P (CW2)	737,500	0.026
11P	1,908,360	0.068

Golder Associates

SUBJECT Proposed On-Site Drainage Areas		
Job No. 03-6400	Made by AH/DP	Date 12-2-01
Ref ISRT - 100%	Checked [illegible]	Sheet 3 of 3
	Reviewed CRM	

Subwatershed	Area (s.f.)	Area (sq. mi)	
* 12P (NB1)	428,000	0.015	✓
* 13P (NB2)	242,600	0.009	✓
* 14P (NB4)	1,002,400	0.036	
15P (SB5)	426,500	0.015	✓
16P (SB4)	38,000	0.001	✓
17P (SB3)	458,800	0.016	✓
18P (SB2)	308,000	0.011	
19P (NB3)	98,100	0.004	✓
20P (NB5)	475,500	0.017	
21P (SB7)	404,200	0.014	
22P (SB6)	106,100	0.004	
23P (SB1)	894,600	0.032	✓

* These areas were recalculated after the 95% Design Report due to selection of landowner options and/or removal of the formerly proposed road.

Curve Numbers

Golder Associates	SUBJECT Proposed OnSite CN Calculations		
	Job No. [illegible]	Made by [illegible]	Date [illegible]
	Ref. [illegible]RT-100[illegible]	Checked [illegible]	Sheet 1 of 16
		Reviewed [illegible]	

Objective: To calculate the weighted CN number for each of the onsite subwatersheds taking into account the proposed soil cap

Method: For each subwatershed, determine the percentage of each hydrologic soil type (A,B,C,D) that exists. Within each soil Type, determine the percentage & accompanying CN for each use. Calculate the weighted land use CN by summing the multiplication of CN by percentage of use & divide by 100 $\left[CN_f = \frac{\Sigma(CN_i \times \%_i)}{100} \right]$.

Calculate the subwatershed weighted CN by summing the multiplication of the percentage by the CN_f of each soil Type & divide by 100

$$\left[\text{weighted } CN = \frac{\Sigma(CN_f \times \%\text{Area})}{100} \right]$$

Assumptions: 1) The percentages were derived by planimetering the areas in question.

2) Even though the soil remedy is to place a 16" thick soil cover using "B" type soil, the CN will be calculated using the existing soil types.

Golder Associates

SUBJECT Proposed On-Site CN Calculations		
Job No. 903-6400	Made by AHIR	Date 12-3-91
Ref. ISPT-100-6	Checked VEE 7	Sheet 2 of 16
	Reviewed CRM	

	Subwatershed	CN
	1P	87
	2PN	85
	2PS	96
	3PE	98
	3PW	78
*	4P	91
*	4PS	97
*	5PN	78
*	5PS	83
*	6PN	89
*	6PS	79
*	7P	81
*	8P	81
*	9P	82
	10P	92
	11P	91
†	12P (NB1)	78
†	13P (NB2)	70

Golder Associates	SUBJECT Proposed On-Site CN Calculations		
	Job No. 903-6400	Made by AH, DP	Date 12-3-91
	Ref ISRT - 100%	Checked USZ	Sheet 3 of 16
		Reviewed CAM	

Subwatershed	CN
† 14P (NB4)	78
15P	86
† 16P (SB4)	86
† 17P (SB3)	87
† 18P (SB2)	95
† 19P (NB3)	70
† 20P (NB5)	79
† 21P (SB7)	73
† 22P (SB6)	73
† 23P (SB1)	88

† The CN has not been altered by the remediation, please refer to the existing CN calculations for the existing equivalent subwatershed as shown in parentheses.

* These curve numbers were recalculated after the 95% Design Report due to the selection of the landowner options and/or the removal of the formerly proposed road.

Golder Associates	SUBJECT Proposed On-Site CN Calculation		
	Job No. [illegible]	Made by SP	Date [illegible]
	Ref. [illegible]	Checked [illegible]	Sheet 4 of 6
		Reviewed [illegible]	

Subwatershed IP: 586,500 sf

Soil Type	% Area	Use	CN#/Use	CN$_p$	% Area N_p
C	272,160/586,500	Impervious 172,980 sf	98/ 63%	88	4048
	46%	Brush-fair 99,180 sf	70/ 37%		
D	314,340/586,500	Impervious 121,520 sf	98/ 39%	86	4644
	54%	Brush-fair 123,360	77/ 39%		
		Open Space - good 69,460	80/ 22%		
TOTAL	100				8692

$$\text{Weighted CN} = \frac{8692}{100} = \underline{\underline{87}}$$

Golder Associates	SUBJECT CN Calculations - [illegible]		
	Job No. [illegible] Ref. [illegible] 1000	Made by [illegible] Checked SMM Reviewed [illegible]	Date [illegible] Sheet 5 of 16

Subwatershed 2PN (North): 214,000 sf

Soil Type	% Area	Use	CN#/Use	CNf	% x CNf
C	112,330 / 214,000	Impervious (42,730)	98 / 38%	83	4316
	52%	Open Space (69,600) (Good)	74 / 62%		
D	101,670 / 214,000	Impervious (35,960)	98 / 35%	87	4176
	48%	Open Space (58,220)	80 / 58%		
		Gravel (7500)	91 / 7%		
TOTAL	100	—	—	—	8492

weighted CNf = $\frac{8492}{100}$ = **85**

Subwatershed 2PS (South): 157,100 sf

Soil Type	% Area	Use	CN#/Use	CNf	% x CNf
C	118,960 / 157,100	Impervious (113460)	98 / 95%	93	7448
	76%	Gravel (5500)	89 / 5%		
		Open Space (0) (Good)	74 / 0		
D	38,140 / 157,100	Impervious (20,460)	98 / 54%	90	2160
	24%	Gravel (2500)	91 / 7%		
		Open Space (15,080) (Good)	80 / 39%		
					9608

weighted CN = $\frac{9608}{100}$ = **96**

Golder Associates	SUBJECT [illegible]
	Job No. [illegible] / Ref. [illegible] / Made by [illegible] / Checked [illegible] / Reviewed [illegible] / Date [illegible] / Sheet 6 of 16

Subwatershed EPE: 64,945 sf

Soil Type	% Area	Use	CN/% Use	CN_c	% A x CN_c
C	100	Impervious (64945 sf)	98/ 100	98	9800

weighted CN = $\frac{9800}{100}$ = 98

Subwatershed SPW: 289,055 sf

Soil Type	% Area	Use	CN/% Use	CN_c	% A x CN_c
C	273,935/289,055 94%	Impervious (93775 sf)	98/ 34%	75	7332
		Gravel (23,360 sf)	89/ [illegible]		
		Brush-good (156,200 sf)	65/ 57%		
D	15120/289,055 6%	Impervious (7440 sf)	98/ 46%	85	510
		Brush-good (3680 sf)	73/ 54%		
TOTAL	100				7842

weighted CN = $\frac{7842}{100}$ ≈ 78

Golder Associates	SUBJECT Proposed Onsite CN Calculation		
	Job No. [illegible] Ref. TKT-100%	Made by [illegible] Checked [illegible] Reviewed [illegible]	Date [illegible] Sheet 7 of 6

Subwatershed 4P: 470,900 sf

Soil Type	% Area	Use	CN#/Use	CNc	% A x CNc
C	447,900/470,900	Impervious 264,930 s.f.	98 / 59%		
	95%	Open Space - good 98,230 s.f.	74 / 22%	91	3645
		Gravel 84,740 s.f.	39 / 19%		
D	5000/470,900	Impervious 16800 sf	98 / 73%	93	372
	5%	Open Space - good 6700 sf	80 / 27%		
TOTAL	100%				9110

weighted CN = $\frac{9110}{100}$ = 91

Golder Associates	SUBJECT Proposed On-Site CN Calculations		
	Job No. 903-6400.412 Ref. ISRT-100%	Made by JEF Checked AH Reviewed CLM	Date 10-7-91 Sheet 8 of 16

Proposed CN - (85,600 sf) - APS

Soil Type	% Area	Use	CN#/use%	CN_f	% Area x CN_f
C	100	Impervious (pav, roof) (81,700 sf)	98/95%	97	9700
		Open Space-good (3900 sf)	74/5%		

$$\text{weighted CN} = \frac{9700}{100} = 97$$

Golder Associates	SUBJECT Proposed On-Site CN Calculations		
	Job No. 903-6400 Ref ISPT - 100%	Made by AA Checked [illegible] Reviewed [illegible]	Date 12-3-91 Sheet 9 of 16

Subwatershed SPN: 222,167 s.f.

Soil Type	% Area	Use	CN* / Use	CN_c	% A * CN_c
C	92,277/222,167 42%	Impervious (37,205 s.f.) Open Space (good) (88,557 s.f.)	98 / 4% 74 / 96%	75	3,150
D	129,890/222,167 58%	Open Space (good) (129,890 s.f.)	80 / 100%	80	4,640
Totals	100%				7,790

weighted CN = $\frac{7790}{100}$ = 78

Subwatershed SPS: 1,416,493 s.f.

Soil Type	% Area	Use	CN* / Use	CN_c	% A * CN_c
C	999,613/1,416,493 70%	Impervious (389,050 s.f.) Open Space (good) (577,063 s.f.) Gravel (32,500 s.f.)	98 / 39% 74 / 58% 89 / 3%	84	5,880
D	417,880/1,416,493 30%	Open Space (good) (404,280 s.f.) Gravel (13,600 s.f.)	80 / 97% 91 / 3%	80	2,400
Totals	100%				8,280

weighted CN = $\frac{8280}{100}$ = 83

Golder Associates	SUBJECT Proposed [illegible] CN [illegible]		
	Job No. [illegible]	Made by [illegible]	Date 12-3-91
	Ref. [illegible]27 100%	Checked AH	Sheet 10 of 16
		Reviewed Chm	

Subwatershed 6PN: 1,029,820 sf

Soil Type	% Area	Use	CN #/use	CNf	%A x CNf
B	196667/1,029,820	Brush - poor (47740 sf)	67 / 24%	91	1729
	19%	Impermeable Cap (148,927 sf)	98 / 76%		
C	97,960/1,029,820	Open Space - good (36,350 sf)	74 / 35	81	810
	10%	Brush - poor (35,690 sf)	77 / 36%		
		Impervious - cap & water (25420 sf)	98 / 26%		
D	735,193/1,029,820	Wood - good (94,[illegible])	77 / 13%	90	6390
	71%	Open Space - good (219,909 sf)	80 / 30%		
		Impervious (411,124 sf)	98 / 56%		
		Gravel (9920 sf)	91 / 1%		
TOTAL	100				8929

weighted CN = $\frac{8929}{100}$ = **89**

Golder Associates	SUBJECT Proposed [illegible] CN Calculation		
	Job No.	Made by [illegible]	Date 12-3-91
	Ref. [illegible] 100°	Checked AH	Sheet 11 of 16
		Reviewed Chm	

Sub-watershed GPS: 407,135 sf

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
C	141,980 / 407,135	Open Space - good (121,520 sf)	74 / 86%	77	2695
	35%	Impervious (20,460 sf)	98 / [illegible]		
D	[illegible]	Open Space - good (265,2[illegible] sf)	80 / [illegible]%	80	5200
	65%				
TOTAL	100				7,895

Weighted CN = $\frac{7895}{100} \approx \underline{\underline{79}}$

Golder Associates	SUBJECT Proposed On-Site CN Calculations		
	Job No. 903.6400	Made by AH	Date 12-4-91
	Ref. ISRT - 100%	Checked VEEF	Sheet 12 of 16
		Reviewed CHM	

Subwatershed 7P: 42,160 s.f.

Soil Type	% Area	Use	CN#/Use	CN_f	% Area × CN_f
D	42,160/42,160	Open Space (good) (39,160 s.f.)	80/93%	81	8,100
	100%	Gravel (3000 s.f.)	91/7%		
Totals	100%				8100

weighted CN = 8100/100 = 81

Subwatershed 8P: 605,740 s.f.

Soil Type	% Area	Use	CN#/Use	CN_f	% Area × CN_f
C	124000/605,740	Impervious (39,110 s.f.)	98/32%		
	20%	Open Space (good) (82,410 s.f.)	74/66%	82	1,640
		Gravel (2,480 s.f.)	89/2%		
D	481,740/605,740	Impervious (40,300 s.f.)	98/8%		
	80%	Open Space (good) (346,270 s.f.)	80/72%	81	6,480
		Gravel (3,720 s.f.)	91/1%		
		Woods (good) (91,450 s.f.)	77/19%		
Totals	100%				8120

weighted CN = 8120/100 = 81

Golder Associates	SUBJECT Proposed Onsite CN [illegible]		
	Job No. [illegible]	Made by [illegible]	Date [illegible]
	Ref. [illegible] 100	Checked SMM	Sheet 13 of 16
		Reviewed CAM	

Subwatershed 9P : 299,393 sf

Soil Type	% Area	Use	CN*/Use	[illegible]	% Area [illegible]
[illegible]	278,[illegible] [illegible] 93%	Impervious (97,340 sf) Open Space [illegible] (180,963 sf)	98/35% [illegible]	82	76[illegible]6
[illegible]	[illegible]	Open Space [illegible] ([illegible])	80/100	[illegible]	[illegible]
TOTAL	100				8[illegible]

weighted CN = [illegible]

Golder Associates	SUBJECT [illegible]		
	Job No. [illegible] Ref. [illegible] 100	Made by [illegible] Checked [illegible] Reviewed [illegible]	Date [illegible] Sheet 14 of 6

Subwatershed 10P: 737,500 sf

Soil Type	% Area	Use	CN# / %	CN	% A x CN
C	100	Impervious 538,160	98 / 73%	92	9200
		Open Space - good 160900	74 / 22%		
		Gravel - [illegible] 35440	[illegible]		
TOTAL	100				9200

$$\text{weighted CN} = \frac{9200}{100} = \underline{\underline{92}}$$

Golder Associates	SUBJECT [illegible]		
	Job No. [illegible] Ref. [illegible] 100	Made by [illegible] Checked [illegible] Reviewed [illegible]	Date [illegible] Sheet 15 of 16

Subwatershed HP: [illegible]

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
C	[illegible]	Impervious (713,[illegible] sf)	[illegible] / [illegible]	91	8099
	59%	Open Space - poor (529,820 sf)	36 / 31%		
		Open Space - good (118,000 sf)	[illegible] / 7%		
		Gravel (323,485 sf)	[illegible] / 19%		
D	[illegible]	Impervious (6200 sf)	[illegible] / 3%	90	990
	19%	Open Space - poor (136,400 sf)	[illegible] / 63%		
		Gravel (75,640 sf)	[illegible] / 34%		
TOTAL	100				9089

weighted CN = $\frac{9089}{100} \approx \underline{\underline{91}}$

Golder Associates	SUBJECT Proposed Onsite CN Calculations		
	Job No. [illegible] Ref. 1CKT-100-	Made by LP Checked [illegible] Reviewed CLM	Date 7/24/[illegible] Sheet 16 of 16

Subwatershed 1SP: 426,500 sf

Soil Type	% Area	Use	CN*/Use	CNc	%A x CNc
C	26040/426500	Impervious (6200 sf)	98/24%	[illegible]	474
	6%	Woods-fair (19340 sf)	[illegible]		
D	[illegible]/426500	Impervious (101,060 sf)	98/25%		
	94%	Woods-fair (32,530 sf)	79/21%	86	8084
		Brush-poor (166,180 sf)	83/41%		
		Open space [illegible] (50340 sf)	80/13%		
TOTAL	100				8558

weighted CN = [illegible]/100 = [illegible]

APPENDIX - A

Table 2-2a.—Runoff curve numbers for urban areas[1]

Cover description		Curve numbers for hydrologic soil group—			
Cover type and hydrologic condition	Average percent impervious area[2]	A	B	C	D
Fully developed urban areas (vegetation established)					
Open space (lawns, parks, golf courses, cemeteries, etc.)[3]:					
Poor condition (grass cover < 50%)		68	79	86	89
Fair condition (grass cover 50% to 75%)		49	69	79	84
Good condition (grass cover > 75%)		39	61	74	80
Impervious areas:					
Paved parking lots, roofs, driveways, etc. (excluding right-of-way)		98	98	98	98
Streets and roads:					
Paved; curbs and storm sewers (excluding right-of-way)		98	98	98	98
Paved; open ditches (including right-of-way)		83	89	92	93
Gravel (including right-of-way)		76	85	89	91
Dirt (including right-of-way)		72	82	87	89
Western desert urban areas:					
Natural desert landscaping (pervious areas only)[4]		63	77	85	88
Artificial desert landscaping (impervious weed barrier, desert shrub with 1- to 2-inch sand or gravel mulch and basin borders)		96	96	96	96
Urban districts:					
Commercial and business	85	89	92	94	95
Industrial	72	81	88	91	93
Residential districts by average lot size:					
1/8 acre or less (town houses)	65	77	85	90	92
1/4 acre	38	61	75	83	87
1/3 acre	30	57	72	81	86
1/2 acre	25	54	70	80	85
1 acre	20	51	68	79	84
2 acres	12	46	65	77	82
Developing urban areas					
Newly graded areas (pervious areas only, no vegetation)[5]		77	86	91	94
Idle lands (CN's are determined using cover types similar to those in table 2-2c).					

[1]Average runoff condition, and $I_a = 0.2S$.
[2]The average percent impervious area shown was used to develop the composite CN's. Other assumptions are as follows: impervious areas are directly connected to the drainage system, impervious areas have a CN of 98, and pervious areas are considered equivalent to open space in good hydrologic condition. CN's for other combinations of conditions may be computed using figure 2-3 or 2-4.
[3]CN's shown are equivalent to those of pasture. Composite CN's may be computed for other combinations of open space cover type.
[4]Composite CN's for natural desert landscaping should be computed using figures 2-3 or 2-4 based on the impervious area percentage (CN = 98) and the pervious area CN. The pervious area CN's are assumed equivalent to desert shrub in poor hydrologic condition.
[5]Composite CN's to use for the design of temporary measures during grading and construction should be computed using figure 2-3 or 2-4, based on the degree of development (impervious area percentage) and the CN's for the newly graded pervious areas.

Table 2-2c.—Runoff curve numbers for other agricultural lands[1]

Cover description		Curve numbers for hydrologic soil group—			
Cover type	Hydrologic condition	A	B	C	D
Pasture, grassland, or range—continuous forage for grazing.[2]	Poor	68	79	86	89
	Fair	49	69	79	84
	Good	39	61	74	80
Meadow—continuous grass, protected from grazing and generally mowed for hay.	—	30	58	71	78
Brush—brush-weed-grass mixture with brush the major element.[3]	Poor	48	67	77	83
	Fair	35	56	70	77
	Good	[4]30	48	65	73
Woods—grass combination (orchard or tree farm).[5]	Poor	57	73	82	86
	Fair	43	65	76	82
	Good	32	58	72	79
Woods.[6]	Poor	45	66	77	83
	Fair	36	60	73	79
	Good	[4]30	55	70	77
Farmsteads—buildings, lanes, driveways, and surrounding lots.	—	59	74	82	86

[1]Average runoff condition, and $I_a = 0.2S$.

[2]*Poor:* <50% ground cover or heavily grazed with no mulch.
Fair: 50 to 75% ground cover and not heavily grazed.
Good: >75% ground cover and lightly or only occasionally grazed.

[3]*Poor:* <50% ground cover.
Fair: 50 to 75% ground cover.
Good: >75% ground cover.

[4]Actual curve number is less than 30; use CN = 30 for runoff computations.

[5]CN's shown were computed for areas with 50% woods and 50% grass (pasture) cover. Other combinations of conditions may be computed from the CN's for woods and pasture.

[6]*Poor:* Forest litter, small trees, and brush are destroyed by heavy grazing or regular burning.
Fair: Woods are grazed but not burned, and some forest litter covers the soil.
Good: Woods are protected from grazing, and litter and brush adequately cover the soil.

Times of Concentration

Golder Associates	SUBJECT Proposed OnSite Tc Calculations		
	Job No. 903-6400 510	Made by DP	Date
	Ref. ISRT-100	Checked DSS7	Sheet 1 of 16
		Reviewed CRM	

Objective: To determine the time of concentration (Tc) for the proposed conditions of the on-Site subwatersheds flowing onto and through the Site.

Methods: Using the methods [illegible] out [illegible] in chapter [illegible] the US Dept of Agriculture SCS TR-55 manual, determine the Tc for each subwatershed.

References: USDA, SCS TR-55 manual

Golder Associates

SUBJECT Proposed On-Site T_c Calculations		
Job No. 903-6400 Ref. ISRT - 100%	Made by AH Checked [illegible] Reviewed CRM	Date 12-3-91 Sheet 2 of 16

	Subwatershed	T_c (hr)
†	1P (HB1B)	0.52
	2PN	0.47
	2PS	0.04
	3PE	0.04
	3PW	0.40
	4P	0.69
	4PS	0.13
	5PN	0.72
*	5PS	0.87
	6PN	0.25
	6PS	0.26
	7P	0.18
*	8P	0.41
*	9P	0.31
	10P	0.37
†	11P (HB4B)	0.53
†	12P (NB1)	0.73
†	13P (NB2)	0.81

Golder Associates	SUBJECT Proposed On-Site T_c Calculations		
	Job No. 903-6400	Made by AH	Date 12-3-91
	Ref. ISRT - 100%	Checked [illegible]	Sheet 3 of 16
		Reviewed [illegible]	

	Subwatershed	T_c
†	14P (NB4)	0.75
†	15P (SB5)	0.44
	16P+17P	0.12
†	18P (SB2)	0.10
†	19P (NB3)	0.56
†	20P (NB5)	0.54
†	21P (SB7)	0.42
†	22P (SB6)	0.35
†	23P (SB1)	0.25

† The T_c has not been altered by the remediation. please refer to the existing T_c calculations for the existing equivalent subwatershed as shown in parentheses.

* These T_c's were recalculated after the 95% Design Report due to the selection of the landowner options and/or the removal of the formerly proposed road.

Golder Associates	SUBJECT Proposed On-Site Tc Calculation		
	Job No. [illegible]	Made by DP	Date 7/15/9[illegible]
	Ref. INKT-100's	Checked [illegible]	Sheet 4 of 16
		Reviewed CRM	

Subwatershed 2PN

Sheet Flow

$L = 263'$
$\Delta h = 72.5 - 70' = 2.5'$
$S = 2.5/263 = 0.010'/'$

$$T_{SF} = \frac{0.007(nL)^{.8}}{(P)^{.5}(S)^{.4}}$$

From TR55 Table 3-1 $n = 0.15$ (short grass)

$$T_{SF} = \frac{0.007[0.15(263)]^{.8}}{(3.2)^{.5}(0.010)^{.4}} = \underline{\underline{0.47\ hr}}$$

Subwatershed 2PS

$L = 200'$
$\Delta H = 73.3' - 70' = 3.3'$
$S = 3.3/200 = 0.02'/'$

$$T_{SF} = \frac{0.007(nL)^{.8}}{(P)^{.5}(S)^{.4}}$$

TABLE 3-1 $n = 0.011$ (paved)

$$T_{SF} = \frac{0.007[0.011(200)]^{.8}}{(3.2)^{.5}(0.02)^{.4}} = \underline{\underline{0.04\ hr}}$$

Golder Associates	SUBJECT Proposed Onsite Tc Calculations		
	Job No. [illegible]	Made by DP	Date [illegible]
	Ref. [illegible]-100	Checked [illegible]	Sheet 5 of 16
		Reviewed [illegible]	

Subwatershed 3PE

Sheet Flow:

$L = 50'$
$\Delta h = [illegible] - [illegible] = [illegible]'$
$S = [illegible]/50 = 0.05$ [illegible]
[illegible] (paved) from [illegible] 3-1

$$[illegible] = \frac{[illegible](50))^{.8}}{(3.2)^{.5}(0.05)^{.4}} = \underline{0.008\ hr}$$

Shallow Concentrated Flow

$L = 290'$
$\Delta h = [illegible] - 64 = 6'$
$S = [illegible]/290 = 0.021$ [illegible]
$V = 3.0$ fps (paved) from fig. 3-1

$$T_{sc} = \frac{290}{3600(3)} = \underline{0.027\ hr}$$

$$T_c = 0.008 + 0.027 = 0.035\ hr$$

$$T_c = \underline{\underline{0.04\ hr}}$$

Golder Associates	SUBJECT Proposed Onsite Tc Calculations		
	Job No. [illegible]	Made by DF	Date [illegible]
	Ref. ISRT 100's	Checked [illegible]	Sheet 6 of 16
		Reviewed [illegible]	

Subwatershed 3PW:

Sheet Flow:

$L = 300'$
$\Delta h = 74 - 68 = 6'$
$S = 6/300 = 0.02\%$
$n = 0.15$ from table 3-1

$$T_{SF} = \frac{0.007\,(0.15(300))^{.8}}{(3.2)^{.5}\,(0.02)^{.4}} = \underline{0.39\,hr}$$

Shallow Concentrated Flow

$L = 137'$
$\Delta h = [illegible] = 4.2'$
$S = [illegible] = 0.031\%$
$V = 2.3$ fps (unpaved) from Fig 3-1

$$T_{SC} = \frac{137}{3600(2.3)} = \underline{0.01\,hr}$$

$$T_C = 0.39 + 0.01 = \underline{\underline{0.40\,hr}}$$

Golder Associates	SUBJECT T_c for onsite subwatersheds - Proposed		
	Job No. 903-6400.310 Ref. ISRT - 100%	Made by mk. Checked TYT Reviewed CRM	Date 12-3-91 Sheet 7 of 16

Subwatershed 4P

A. Sheet Flow

$L = 300$
$\Delta h = 71.7 - 70 = 1.7$ ft.
$S = 1.7/300 = 0.01$ ft/ft $\quad n = 0.15$ (short grass)

$$T_{tsf} = \frac{0.007\left[(0.15)(300)\right]^{0.8}}{(3.2)^{.5}\,(0.01)^{0.4}} = \underline{0.52 \text{ hr.}}$$

B. Shallow Concentrated Flow

$L = 1070$ ft.
$\Delta h = 70 - 62 = 8$ ft
$S = 8/1070 = 0.01$ ft/ft. $\quad n = 0.15$ (short grass)
from TR55 Fig 3-1 $\quad V$ (unpaved) $= 1.8$ ft/s.

$$T_{tsc} = \frac{L}{3600\,V} = \frac{1070 \text{ ft}}{3600(1.8)} = \underline{0.17 \text{ hr.}}$$

$$T_c = T_{tsp} + T_{tsc} = 0.52 \text{ hr} + 0.17 \text{ hr.} = \underline{\underline{0.69 \text{ hr.}}}$$

Golder Associates	SUBJECT Proposed On-Site t_c Calculations		
	Job No. 903-6420 Ref. ISRT	Made by [illegible] Checked [illegible] Reviewed	Date 10-7-91 Sheet 8 of 16

Time of Concentration →
Subwatershed 4PS

A Sheet flow

$L = 220$ ft $\qquad n = 0.011$

$\Delta h = 0.3$ ft $\qquad P_2 = 3.2$ in

$S = 0.0014$ %

$$T_t = \frac{0.007\,(nL)^{0.8}}{P_2^{0.5}\,S^{0.4}} = \frac{(0.007)[(0.011)(220)]^{0.8}}{(3.2)^{0.5}\,(0.0014)^{0.4}} = 0.11 \text{ hr.}$$

B Shallow Concentr. Flow

$L = 140$, $\Delta h = 2$ ft $\Big\}$ $S = 0.0143$% (paved); $V = 2.5$ fps

$$T_t = \frac{L}{3600\,V} = \frac{140}{(3600)(2.5)} = 0.02 \text{ hr.}$$

$T_c = 0.13$ hr.

Golder Associates	SUBJECT Proposed On-Site T_c Calculations		
	Job No. 903-6400	Made by [illegible]	Date 11-25-[illegible]
	Ref. ISRT-100%	Checked [illegible]	Sheet 9 of 16
		Reviewed	

Subwatershed SPN

A Sheet Flow

$L = 300'$
$\Delta h = 72.1 - 70.0 = 2.1$
$s = 2.1/300 = .007$
$n = .15$ (short grass from Table 3-1)

$$T_{sf} = \frac{0.007(nL)^{.8}}{(P_2)^{.5}\, s^{.4}}$$

$$T_{sf} = \frac{0.007[(.15)(300)]^{.8}}{(3.2)^{.5}\,(.007)^{.4}} = .60 \text{ hr}$$

B Shallow Concentrated Flow

$L = 390'$
$\Delta h = 70.0 - 68.9 = 1.1$
$s = 1.1/390 = .003$
$V = .884$ fps using $V = 16.1345(s)^{.5}$ from Appendix F (unpaved)

$$T_{sc} = \frac{L}{3600\,V}$$

$$T_{sc} = \frac{390}{3600(.884)} = .12 \text{ hr}$$

$$T_c = T_{sf} + T_{sc} = .60 + .12 = .72 \text{ hr}$$

Golder Associates	SUBJECT Proposed On-Site T_c Calculations		
	Job No. 903-6400	Made by AH	Date 12-3-91
	Ref. ISRI 100%	Checked [illegible]	Sheet 10 of 16
		Reviewed [illegible]	

Subwatershed 5PS

A Sheet Flow

① $L = 40'$

$\Delta h = 93.9 - 86 = 7.9$

$s = 7.9/40 = .198$

$n = .80$ (dense underbrush from Table 3-1)

$$T_{sf} = \frac{(.007)(nL)^{.8}}{(P_2)^{.5}(s)^{.4}}$$

$$T_{sf} = \frac{(.007)[(.80)(40)]^{.8}}{(3.2)^{.5}(.198)^{.4}} = 0.12 \text{ hrs}$$

② $L = 260'$

$\Delta h = 86 - 72 = 14$

$s = 14/260 = .054$

$n = .15$ (short grass from Table 3-1)

$$T_{sf} = \frac{(.007)[(.15)(260)]^{.8}}{(3.2)^{.5}(.054)^{.4}} = 0.24 \text{ hrs}$$

B Shallow Concentrated Flow

$L = 1920'$

$\Delta h = 72 - 64.0 = 8$

$s = 8/1920 = .004$

$V = 1.04$ fps using $V = 16.1345(s)^{.5}$ from Appendix F

$$T_{sc} = \frac{1920}{(3600)(1.04)} = 0.51 \text{ hrs} \qquad T_{sc} = \frac{L}{(3600V)}$$

$$T_c = T_{sf} + T_{sc}$$

$$= .12 + .24 + .51 = 0.87 \text{ hrs}$$

Golder Associates	SUBJECT Proposed OnSite Tc Calculation		
	Job No. [illegible] Ref. [illegible]KT-100[illegible]	Made by LP Checked [illegible] Reviewed [illegible]	Date [illegible] Sheet 11 of 16

Subwatershed 6PN: (wetland 1C)

Sheet flow:

$L = 300'$

$\Delta h = 98.4 - 76' = 22.4$ $\quad T_{SF} = \frac{0.007(nL)^{.8}}{(P)^{.5}(S)^{.4}}$

$S = 22/300 = 0.07\%$

$n = 0.15$ short grass from Table 3-1

$$T_{SF} = \frac{0.007[.15(300)]^{.8}}{(3.2)^{.5}(0.07)^{.4}} = \underline{0.24\ hr}$$

Shallow Concentrated Flow

$L = 150'$

$\Delta H = 76 - 69 = 7'$ $\quad T_{SC} = \frac{L}{3600V}$

$S = 7/150 = 0.05\%$

$V = 3.6$ fps from fig 3-1

$$T_{SC} = \frac{150}{3600(3.6)} = \underline{0.01\ hr}$$

$$T_C = 0.24 + 0.01 = \underline{\underline{0.25\ hr}}$$

Golder Associates	SUBJECT Proposed On-Site T_c Calculations		
	Job No. 903-6400	Made by VEE 7	Date 7-30-91
	Ref. ISRT-100%	Checked DP	Sheet 12 of 16
		Reviewed CLM	

Subwatershed GPS

A Sheet flow

$L = 300$ ft

$\Delta h = 106 - 82.5 = 23.5$ ft

$S = \frac{\Delta h}{L} = \frac{23.5}{300} = 0.078\%$

$n = 0.15$ (short grass)

$$T_{sf} = \frac{0.007\,(nL)^{0.8}}{P_2^{0.5}\,S^{0.4}} = \frac{0.007\,[(0.15)(300)]^{0.8}}{(3.2)^{0.5}\,(0.078)^{0.4}} = 0.228 \text{ hr}$$

B Shallow conc. flow

$L = 350$ ft

$\Delta h = 82.5 - 69 = 13.5$ ft

$S = \frac{\Delta h}{L} = \frac{13.5 \text{ ft}}{350 \text{ ft}} = 0.039\%$

$V = 3.2$ fps

$$T_{sf} = \frac{L}{3600V} = \frac{(350)}{3600(3.2)} = 0.030\%$$

$T_c = 0.228 \text{ hr} + 0.030 \text{ hr} = 0.258 \text{ hr}$

$T_c \approx \underline{\underline{0.26 \text{ hr.}}}$

Golder Associates	SUBJECT Proposed On-Site Tc Calculations		
	Job No. 903-6400	Made by [illegible]	Date 7-30-91
	Ref. 1SKT-100%	Checked DP	Sheet 13 of 16
		Reviewed [illegible]	

Subwatershed 7P

A Sheet flow

$L = 175$ ft

$\Delta h = 117 - 84 = 33$ ft

$S = \frac{33}{175} = 0.189$ ft/ft

$n = \frac{1}{2}(0.15 + 0.4) = 0.28$

$$T_{sf} = \frac{(0.007)[(0.28)(175)]^{0.8}}{(3.2)^{0.5}(0.189)^{0.4}} = 0.171 \text{ hr}$$

B Shallow Conc. Flow

$L = 130$ ft

$\Delta h = 84 - 72 = 12$ ft

$S = \frac{12}{130} = 0.092$ ft/ft

$V = 4.8$ fps

$$T_{scf} = \frac{L}{3600V} = \frac{(130)}{3600(4.8)} = 0.008 \text{ hr}$$

$$T_c = 0.171 + 0.008 \text{ hr} = 0.179 \text{ hr} \approx \underline{0.18 \text{ hr}}$$

Golder Associates	SUBJECT Proposed Onsite CN Calculations		
	Job No. [illegible] Ref. 15LT-100%	Made by [illegible] Checked [illegible] Reviewed [illegible]	Date 7-1-91 Sheet 14 of 16

Subwatershed 8P:

Sheet Flow:

L = 150'
Δh = 132.4 - 118 = 14.4
s = 0.096%
n = ½(0.4 + 0.8) = 0.6 Table 3-1

$$T_{SF} = \frac{0.007(.6 \cdot 150)^{.8}}{(32)^{.5}(0.096)^{.4}} = \underline{0.366 \text{ hr}}$$

Shallow Concentrated Flow:

L = 680'
Δh = 118 - 74 = 44.0
s = 44.0/680 = .065
V = 4.10 Fig 3-1

T_{SC} = 0.046

T_C = 0.366 + .046 = 0.41 hr

Golder Associates	SUBJECT Proposed On Site Tc Calculation		
	Job No. 903-6400 Ref. ISRT - 100%	Made by [illegible] Checked DF Reviewed CBM	Date 7-30-91 Sheet 15 of 16

Subwatershed 9P

A Sheet flow

$L = 300\ ft$

$\Delta h = 106 - 84 = 22\ ft$

$S = \frac{\Delta h}{L} = \frac{22\ ft}{300\ ft} = 0.073\%$

$n = 0.15$ (short grass)

$$T_{sf} = \frac{(0.007)[0.15(300)]^{0.8}}{(3.2)^{0.5}(0.073)^{0.4}} = 0.234\ hr$$

B Shallow Conc. flow

$L = 610\ ft$

$\Delta h = 84 - 70\ ft = 14\ ft$

$S = \frac{14}{610} = 0.023\%$

$V = 2.4\ fps$

$$T_{scf} = \frac{(610)}{(3600)(2.4)} = 0.071\ hr$$

$$T_c = 0.234 + 0.071 = \underline{0.31}\ hr.$$

Golder Associates	SUBJECT Proposed Drainage Tc Calculations		
	Job No. [illegible]	Made by [illegible]	Date [illegible]
	Ref. BKT - 100%	Checked [illegible]	Sheet 16 of 16
		Reviewed [illegible]	

Subwatershed 10P

A Sheet Flow

① L = 94'
$\Delta h = 94 - 92 = 2'$
$S = 2/94 = 0.021\ \%$
$n = 0.15$ (short grass) from table 3-1

$T_{SF} = \frac{0.007(nL)^{.8}}{(P_2)^{.5}(S)^{.4}}$

$T_{SF} = \frac{0.007(.15(94))^{.8}}{(3.2)^{.5}(.021)^{.4}} = \underline{0.15\ hr}$

② L = 75'
$\Delta h = 92 - 72 = 20'$
$S = 20/75 = 0.267\ \%$
$n = 0.15$

$T_{SF} = \frac{0.007[.15(75)]^{.8}}{(3.2)^{.5}(0.267)^{.4}} = \underline{0.05\ hr}$

③ L = 131
$\Delta H = 72 - 66.6 = 5.4'$
$S = 5.4/131 = 0.041\ \%$
$n = 0.011$ (paved)

$T_{SF} = \frac{0.007[.011(131)]^{.8}}{(3.2)^{.5}(.041)^{.4}} = \underline{0.02\ hr}$

B Shallow Concentrated Flow

L = 600'
$\Delta h = 66.6 - 65 = 1.6'$
$S = 1.6/600 = 0.003\ \%$
$V = 20.3282(0.003)^{0.5} = 1.11$ fps from App F (paved) TR55

$T_{SC} = \frac{600}{3600(1.11)} = \underline{0.15\ hr}$

$T_C = 0.15 + 0.05 + 0.02 + 0.15 = \underline{0.37\ hr}$

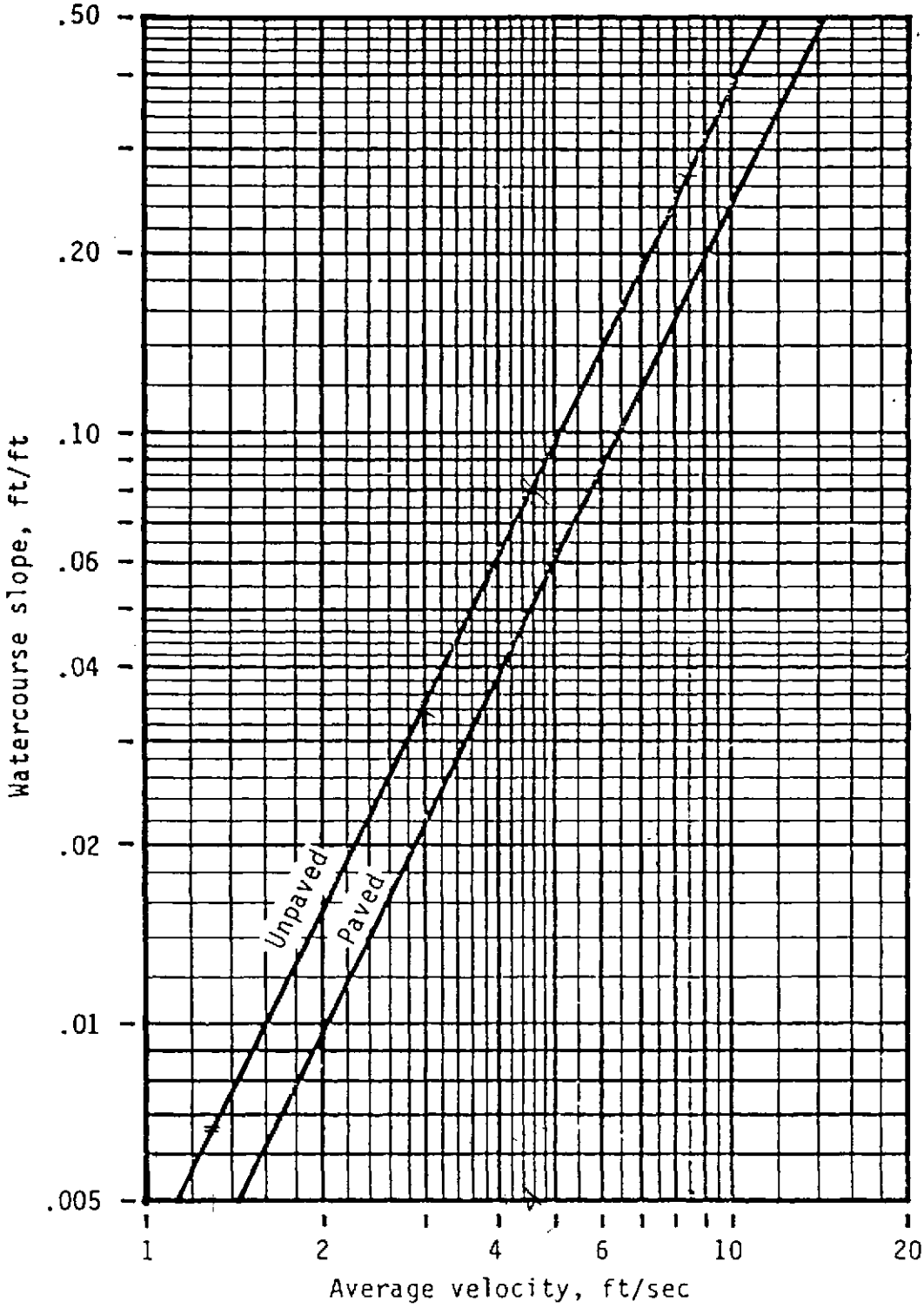


Figure 3-1.—Average velocities for estimating travel time for shallow concentrated flow.

Sheet flow

Sheet flow is flow over plane surfaces. It usually occurs in the headwater of streams. With sheet flow, the friction value (Manning's n) is an effective roughness coefficient that includes the effect of raindrop impact; drag over the plane surface; obstacles such as litter, crop ridges, and rocks; and erosion and transportation of sediment. These n values are for very shallow flow depths of about 0.1 foot or so. Table 3-1 gives Manning's n values for sheet flow for various surface conditions.

For sheet flow of less than 300 feet, use Manning's kinematic solution (Overton and Meadows 1976) to compute T_t:

$$T_t = \frac{0.007\,(nL)^{0.8}}{(P_2)^{0.5}\,s^{0.4}} \qquad \text{[Eq. 3-3]}$$

Table 3-1.—Roughness coefficients (Manning's n) for sheet flow

Surface description	n[1]
Smooth surfaces (concrete, asphalt, gravel, or bare soil)	0.011
Fallow (no residue)	0.05
Cultivated soils:	
Residue cover ≤20%	0.06
Residue cover >20%	0.17
Grass:	
Short grass prairie	0.15
Dense grasses[2]	0.24
Bermudagrass	0.41
Range (natural)	0.13
Woods:[3]	
Light underbrush	0.40
Dense underbrush	0.80

[1]The n values are a composite of information compiled by Engman (1986).
[2]Includes species such as weeping lovegrass, bluegrass, buffalo grass, blue grama grass, and native grass mixtures.
[3]When selecting n, consider cover to a height of about 0.1 ft. This is the only part of the plant cover that will obstruct sheet flow.

where

T_t = travel time (hr),
n = Manning's roughness coefficient (table 3-1),
L = flow length (ft),
P_2 = 2-year, 24-hour rainfall (in), and
s = slope of hydraulic grade line (land slope, ft/ft).

This simplified form of the Manning's kinematic solution is based on the following: (1) shallow steady uniform flow, (2) constant intensity of rainfall excess (that part of a rain available for runoff), (3) rainfall duration of 24 hours, and (4) minor effect of infiltration on travel time. Rainfall depth can be obtained from appendix B.

Shallow concentrated flow

After a maximum of 300 feet, sheet flow usually becomes shallow concentrated flow. The average velocity for this flow can be determined from figure 3-1, in which average velocity is a function of watercourse slope and type of channel. For slopes less than 0.005 ft/ft, use equations given in appendix F for figure 3-1. Tillage can affect the direction of shallow concentrated flow. Flow may not always be directly down the watershed slope if tillage runs across the slope.

After determining average velocity in figure 3-1, use equation 3-1 to estimate travel time for the shallow concentrated flow segment.

Open channels

Open channels are assumed to begin where surveyed cross section information has been obtained, where channels are visible on aerial photographs, or where blue lines (indicating streams) appear on United States Geological Survey (USGS) quadrangle sheets. Manning's equation or water surface profile information can be used to estimate average flow velocity. Average flow velocity is usually determined for bank-full elevation.

Storage vs Elevation Relationships

Golder Associates	SUBJECT Channel Surface Area vs. Elevation - Proposed Conditions		
	Job No. 903 6400.310 Ref. ISRT 100%	Made by AD Checked DP Reviewed CRM	Date 8-5-91 Sheet 1 of 4

Objective: To calculate surface areas for specific elevations in the Commerce Way channel (Ditch D) from the roadway t-junction to limit of Custodial Trust property.

Methods: Using channel cross sections provided by TWM Northeast, Inc., the width of the channels at specified elevations were calculated. The widths of adjacent channel sections were averaged. These averaged widths were then multiplied by the distance between the channels resulting in the surface area.

If the existing channel bank slope was steeper than 1.5:1, a new slope was developed by filling from the existing top of bank down to the channel bottom, maintaining a slope of 1.5:1. The existing width of the channel bottom decreased when this filling was done. If the existing channel bank slope was 1.5:1 or flatter, it was not altered.

Golder Associates	SUBJECT: Subwatershed Storage Capacity Surface Area / Elevation - Proposed Cond.		
	Job No. 903 6400.310 Ref. ISRT - 100%	Made by RD Checked DP Reviewed CAM	Date 8-6-91 Sheet 2 of 4

Subwatershed CW1 - CW1CHL (Ditch D)

Section	1 & 2	2 & 4	4 & 5	5 & 7	7 & 9	Total Area ft^2 (ac)
Dist. Between Sections - Ft.	145	230	130	145	125	
Elevation (Ft)						
63	—	—	—	—	$\frac{125}{2}(0+9.5)$ 594	594 (0.0136 ac)
64	$\frac{145}{2}(0+8.3)$ 602	$\frac{230}{2}(8.3+0)$ 955	$\frac{130}{2}(0+6.6)$ 429	$\frac{145}{2}(6.6+8.56)$ 1099	$\frac{125}{2}(8.56+12.5)$ 1316	4401 (0.1010)
65	$\frac{145}{2}(0+12.2)$ 885	$\frac{230}{2}(12.2+10.9)$ 2657	$\frac{130}{2}(10.9+9.6)$ 1333	$\frac{145}{2}(9.6+12)$ 1566	$\frac{125}{2}(12+15.5)$ 1719	8160 (0.1873)
66	$\frac{145}{2}(0+16.1)$ 1167	$\frac{230}{2}(16.1+13.9)$ 3450	$\frac{130}{2}(13.9+12.6)$ 1723	$\frac{145}{2}(12.6+15.44)$ 2033	$\frac{125}{2}(15.44+18.5)$ 2121	10494 (0.2409)
67	$\frac{145}{2}(0+20.1)$ 1457	$\frac{230}{2}(20.1+16.9)$ 4255	$\frac{130}{2}(16.9+15.6)$ 2113	$\frac{145}{2}(15.6+18.88)$ 2450	$\frac{125}{2}(18.88+21.5)$ 2524	12799 (0.2938)
68	$\frac{145}{2}(0+24.0)$ 1740	$\frac{230}{2}(24.0+19.9)$ 5049	$\frac{130}{2}(19.9+18.6)$ 2503	$\frac{145}{2}(18.6+22.32)$ 2907	$\frac{125}{2}(22.32+24.5)$ 2926	15185 (0.3486)

Golder Associates	SUBJECT Surface Area vs. Elevation - Proposed		
	Job No. 903-6400 Ref. ISRT-100%	Made by DEE7 Checked DP Reviewed CRM	Date 8-7-91 Sheet 3 of 4

Subwatershed 9P (Atlantic Avenue Drainway Extension)

Section	Distance Between Sections	Distance Across Channel at Elevations							
		60	62.5	63.5	64.5	65.5	66.5	67.5	68
1&2 area	137	0	0	0	$\frac{137}{2}(0+3)$ 205.5	$\frac{137}{2}(3+7)$ 685	$\frac{137}{2}(7+11)$ 1233	$\frac{137}{2}(11+15)$ 1781	$\frac{137}{2}(13+17)$ 2055
2&3 area	136	0	0	$\frac{136}{2}(0+3)$ 204	$\frac{136}{2}(3+7)$ 680	$\frac{136}{2}(7+11)$ 1224	$\frac{136}{2}(11+15)$ 1760	$\frac{136}{2}(15+19)$ 2312	$\frac{136}{2}(17+21)$ 2584
3&4 area	137	0	$\frac{137}{2}(0+3)$ 205.5	$\frac{137}{2}(3+7)$ 685	$\frac{137}{2}(7+11)$ 1233	$\frac{137}{2}(11+15)$ 1781	$\frac{137}{2}(15+19)$ 2329	$\frac{137}{2}(19+23)$ 2877	$\frac{137}{2}(21+25)$ 3151
4&5 area	26	$\frac{26}{2}(0+10)$ 130	$\frac{26}{2}(3+16.5)$ 253.5	$\frac{26}{2}(7+19)$ 338	$\frac{26}{2}(11+21.5)$ 422.5	$\frac{26}{2}(15+24)$ 507	$\frac{26}{2}(19+27)$ 598	$\frac{26}{2}(23+31)$ 702	$\frac{26}{2}(25+33)$ 754
Total:	—	130 (0.003 ac)	459 (0.011 ac)	1227 (0.028 ac)	2541 (0.058 ac)	4197 (0.096 ac)	5928 (0.136 ac)	7672 (0.176 ac)	8544 (0.196 ac)

Golder Associates	SUBJECT Surface Area vs. Elevation - Proposed		
	Job No 903-6400	Made by AH	Date 12-2-91
	Ref. JSRT-100%	Checked VEEF	Sheet 4 of 4
		Reviewed CNM	

Subwatershed 7P

Section	Distance Between Sections	Distance Across Channel at Elevation					
		67.10	68	69	70	71	72
1-2	120'	$\frac{120}{2}(0+4)$	$\frac{120}{2}(5.8+0)$	$\frac{120}{2}(4.4+7.8)$	$\frac{120}{2}(6.4+9.8)$	$\frac{120}{2}(11.8+8.4)$	$\frac{120}{2}(13.8+10.4)$
		240 s.f.	348 s.f.	732 s.f.	972 s.f.	1,212 s.f.	1,452 s.f.
		0.006 ac	0.008 ac	0.017 ac	0.022 ac	0.028	0.033 ac

Golder Associates	SUBJECT Surface Area vs Elevation - Prop -		
	Job No. 903-6400.310	Made by DP	Date 8-8-91
	Ref. ISRT - 100%	Checked UEE7	Sheet 1 of 4
		Reviewed CRM	

Objective: To calculate surface areas for specific elevations in on-site channels and swamps/storage basins.

Methods: 1.) Using channel cross sections provided by TWM NorthEast, Inc, the width of the channels at specified elevations were calculated. The widths of adjacent channel sections were averaged. These averaged widths were then multiplied by the distance between the channel SECTION resulting in the surface area.

2) Where only one channel cross section was given, a typical cross section of that channel was maintained throughout the channel using the As-builts of Commerce Way, as provided by the city of Woburn. For example, CW1CHL and SB34CHL.

Golder Associates	SUBJECT Surface Area vs. Elevation - Prop		
	Job No. 903-6400.310 Ref. 1SRT - 10070	Made by DP Checked VEE 7 Reviewed CRM	Date 8/8/91 Sheet 2 of 4

3) For areas containing depressions, the cross sections from TLUM NorthEast, Inc, were utilized along with the bathymetric topography from TLUM NorthEast, Inc. to analyze total surface area per elevation.

4) For DRAINAGE AREA HB1A the surface area of the depression was planimetered using the SAIC Engineers 100' scale topographic drawing. For elevation 69 in the channel, the cross-sections by TLUM Northeast were used and the area of the channel was added to the depression area to result in total surface area at elevation 69.

References: 1.) As-builts of Commerce Way by Dana F. Perkins and Assoc., Inc.

Golder Associates	SUBJECT Proposed Onsite Surface Area vs Elev		
	Job No. 903-6400.310	Made by DP	Date 8/5/91
	Ref. ISRT-100%	Checked VEE7	Sheet 3 of 4
		Reviewed CAR	

Subwatershed ZPN

Elev	Surface Area (sf) of		Total Surface Area (sf)
	Det. Basin & P/X Depression	Sections 3 & 4 of ZPNCHL	
70	70573	1050	71,623 (1.64ac)
71	74,538	1470	76,008 (1.74ac)
72	77,563	1890	79453 (1.82ac)

Golder Associates	SUBJECT Proposed Onsite Surface Area vs Elev.		
	Job No. 903-6400.310 Ref. ISRT-100%	Made by SP Checked UEE7 Reviewed CRM	Date 8/5/91 Sheet 4 of 4

Subwatershed 2PS : 2PSCHL (Ditch A),
(New Boston Street Drainway)

Section	Distance between sections	Distance across Channel at Elevations 66.5	67	67.8	68.5	69	69.4
5 & 6 area (sf)	112 ft	⊖	⊖	⊖	$\frac{112}{2}$(0+5) 280	$\frac{112}{2}$(5+6.5) 644	$\frac{112}{2}$(6.2+7.7) 778.4
6 & 7 area (sf)	110 ft	⊖	⊖	$\frac{110}{2}$(0+5) 275	$\frac{110}{2}$(5+7.1) 665.5	$\frac{110}{2}$(6.5+8.6) 830.5	$\frac{110}{2}$(7.7+9.8) 962.5
7 & 8 area (sf)	38 ft	$\frac{38}{2}$(0+7.18) 136.4	$\frac{38}{2}$(0+8.9) 169.1	$\frac{38}{2}$(5+11.67) 316.7	$\frac{38}{2}$(7.1+14.09) 402.6	$\frac{38}{2}$(8.6+15.82) 464	$\frac{38}{2}$(9.8+17.2) 513
TOTAL		136.4 (0.003ac)	169.1 (0.004ac)	591.7 (0.014ac)	1348.1 (0.031ac)	1938.5 (0.045ac)	2253.9 (0.052

Golder Associates	SUBJECT Storage vs. Elevation - On Site - Prop.		
	Job No. 903-6400 Ref. ISRT-100%	Made by VEET Checked CEB Reviewed CEM	Date 8-8-91 Sheet 1 of 8

Objective: To evaluate the storage vs. elevation relationship of the swamp / storage basins on-site.

Methods: Using the 100' scale topographic drawing from SAIC Engineers, determine the upper limits of the storage area. Then, using a planimeter, determine the area that each contour within the storage area occupies (in sf and acres). Using the average end method, evaluate, the storage/volume capabilities for each contour interval. The sum of the volume for each interval yields the total storage/volume of the swamp/storage area.
For depressions/wetlands where bathymetric information is available, these plans were used.

Golder Associates	SUBJECT Storage vs. Elevation - On-Site - Prop.		
	Job No. 903-6400 Ref. ISRT - 100%	Made by UEE7 Checked DP Reviewed CNM	Date 8-8-91 Sheet 2 of 8

Note: A. The minimum storage elevation for the on-site storage areas was determined using one of the following sources.

1. the water level elevation as shown on the SAK topography, dated April, 1990.

2. the top of aquifer elevations as on the "top of aquifer plan" by GAI in progress.

3. the invert elevation of the outlet, if any.

4. the water elevation at the time of the bathymetric survey by TWM Northeast

B. The surface area vs. elevation relationships were provided to HEC-1. The volume calculations provided herein were determined for comparison with HEC-1.

Golder Associates	SUBJECT Storage vs. Elevation - Prop. Cond.		
	Job No. 903-6400	Made by UEE7	Date 8-3-91
	Ref. ISRT-100%	Checked DP	Sheet 3 of 8
		Reviewed Chm	

Detention Basin (2PS), storage area No 2

Elevation (ft)	Area (sf.)	Avg. Area (sf)	Depth (ft)	Volume (cf.)	Cum. Volume (cf.)
66	(100x30)=3000 (0.069 ac)				
		3408	1	3408	3408
67	(106x36)=3816 (0.088 ac)				
		4260	1	4260	7668
68	(112x42)=4704 (0.108 ac)				
		5184	1	5184	12,852
69	(118x48)=5664 (0.130 ac)				
		6180	1	6180	19,032 (0.437 ac ft)
70	(124x54)=6696 (0.154 ac.)				

Minimum Storage Elevation = 66

Maximum Storage Elevation = 70 (with 1' freeboard)

Cumulative Storage = 19,032 sf. (0.437 ac-ft)

Golder Associates	SUBJECT Proposed OnSite Storage v. Elev		
	Job No. 903 6400 310	Made by DP	Date 8/5/91
	Ref. ISRT-1007	Checked JEE7	Sheet 4 of 8
		Reviewed CNM	

Subwatershed 3PE

Elev	Area (sf)	Avg Area (sf)	Depth (ft)	Volume	Cum Volume
63	(47 x 32) 1504 (0.035ac)				
		1759	1	1759	1759
64	(53x38) 2014 (0.046ac)				
		2305	1	2305	4064
65	(59x44) 2596 (0.060ac)				
		2923	1	2923	6987 (0.160 ac-ft)
66	(65x50) 3250 (0.075ac)				

Minimum Storage Elevation 63

Maximum Storage Elevation: 66

Total Storage Volume: 6987 cf
(0.160 acre ft)

Golder Associates	SUBJECT Storage vs. Elevation - Prop		
	Job No. 903-6400	Made by USE 7	Date 7-17-91
	Ref. ISRT 100%	Checked	Sheet 5 of 8
		Reviewed CRM	

Subwatershed 4P (Wetland 8)

Elev (ft)	Area (ft²)	Avg. Area (ft²)	Depth (ft)	Volume (ft³)	Cum. Volume (ft³)
60.6	34,875 (0.80 ac)				
		43,090	0.7	30,163	30,163
61.3	51,305 (1.18 ac)				
		56,885	0.7	39819	69,982
62	62,465 (1.43 ac)				
		73,470	1.3	95,511	165,493
63.3	84,475 (1.94 ac)				

Maximum storage elevation = 63.3

Minimum storage elevation = 60.6

Total Storage Volume = 165,493 cf (3.80 acre-ft)

Golder Associates	SUBJECT Storage vs. Elevation - Proposed		
	Job No. 903-6400.910	Made by VEF	Date 10-7-91
	Ref. ISRT	Checked AH	Sheet 6 of 8
		Reviewed	

Surface Area vs. Elevation (4PS) - Detention Basin

Elev (ft)	Area (sf)	Avg. Area. (sf)	Depth (ft)	Volume (cf.)	Cum. Volume (c.f)
59	30x70 = 2100 (0.0482ac)	2418	1	2418	2418
60	36x76 = 2736 (0.0628ac.)	3090	1	3090	5508
61	42x82 = 3444 (0.0791 ac.)	3834	1	3834	9342
62	48x88 = 4224 (0.0970 ac.)				

Minimum Storage Elevation: 59

Maximum Storage Elevation: 62

Total Storage Volume: 9342 cf.

Golder Associates	SUBJECT Storage vs. Elevation - Proposed		
	Job No. 903-6400 Ref. 1SRT-100%RTC	Made by UEZ Checked MMS Reviewed	Date 3-21-92 Sheet 7 of 8

Creation Wetland (GPS)

Elevation (ft MSL)	Area (s.f.)	Ave Area (sf)	Depth (ft)	Volume (cf)	Cum. Volume (cf)
67	32,860 ✓ (0.754 ac)				
68	86,180 ✓ (1.978 ac)	59,520	1	59,520	59,520
69	128,640 ✓ (2.953 ac)	107,410	1	107,410	166,930
71	150,660 ✓ (3.459 ac)	139,650	2	279,300	446,230
73	167,245 ✓ (3.839 ac)	158,952.5	2	317,905	764,135 ✓

Min. Storage Elev = 67

Max Storage Elev = 73

Cumulative Storage = 764,135 cf = 17.54 acre-ft ✓

Golder Associates	SUBJECT Proposed On-Site Storage vs Elevation		
	Job No. 903-6400 Ref. ISRT-100%	Made by MK Checked AH Reviewed	Date 11-21-91 Sheet 8 of 8

Wetland 1C (6PN)

Elevation (ft.)	Area (s.f.)	Ave. Area (s.f.)	Depth (ft.)	Volume (c.f.)	Cum. Volume (c.f.)
71	232,191 (5.330ac)				
		254,976	1	254,976	254,976
72	277,760 (6.376ac)				
		319,610	2	639,220	894,196
74	361,460 (8.298ac)				

Min. Storage Elevation = 71'

Max Storage Elevation = 74'

Cumulative Storage = 894,196 c.f.

Rating Table Calculations for the West Branch of the Aberjona River

Golder Associates	SUBJECT ISRT - WETLAND 1C OUTFLOW		
	Job No. 903-6400	Made by CRM	Date 5-19-92
	Ref.	Checked VEF	Sheet 1 of 14
		Reviewed [illegible]	

PURPOSE: Analyse the stormwater outflow from the Western point of Wetland 1C towards the Aberjona River after remediation.

METHOD: The western outflow point of Wetland 1C (see sheet 5\14) is composed of several individual hydraulic structures. These structures are as follows:

a) southern riprap channel
b) northern riprap channel
c) two- 30 inch diameter culverts
d) one- 24 inch diameter culvert.

During storm events, the above four structures will have an influence on the outflow leaving the western side of Wetland 1C. The calculations presented will analyze the flow capabilities of the individual structures and then compare these individual flow capabilities to determine which of the structures will be more hydraulically restrictive. Upon determining which of the structures is more restrictive, an outflow verses depth of flow in Wetland 1C will be determined. This relationship will then be used for stormwater modelling of Wetland 1C.

The analysis will be broken into the following steps.

1. analyze the southern riprap channel as open channel flow and weir flow at its entrance. This will set up the beginning elevation versus discharge relationship for Wetland 1C. (sheets 6 and 8)

2. determine the head required to pass the flows generated in #1 above through the 30 inch diameter culvert located downstream in the southern riprap channel. (sheet 9)

3. determine if the head required in #2 above will result in an elevation higher or lower than the stage elevation in Wetland 1C. This will determine if the culvert or the hydraulics of the southern riprap channel are more restrictive. (sheet 11)

4. prepare similar analysis for the northern riprap channel and its associated 30 inch diameter culvert. (sheets 7,8,and 9)

5. using flows transmitted by the above structures, analyze the outflow characteristics of the downstream 24 inch diameter rcp. After comparing the outflow characteristics of the various structures, use this information to determine the stage versus discharge relationship for Wetland 1C. (sheet 13)

Golder Associates	SUBJECT ISRT WETLAND IC OUTFLOW		
	Job No. 903-6400 Ref.	Made by CRM Checked VKF Reviewed	Date 7-30-92 Sheet 2 of 14

CALCULATION: THE WESTERN OUTFLOW CONSISTS OF THE FOLLOWING STRUCTURES (see sheet 5/14)

a) SOUTHERN RIPRAP CHANNEL
b) NORTHERN RIPRAP CHANNEL
c) 2 - 30" dia culverts
d) 1 - 24" dia culvert

DETERMINE CONTROLING STRUCTURES

THE CHANNELS ARE CONSIDERED AS A TWO STRUCTURE UNIT.

a) weir
b) open flow

FROM ANALYSING FLOW CONDITIONS, IT IS FOUND THAT THE ENTRANCE TO THE CHANNEL {WEIR} IS MORE RESTRICTIVE THAN OPEN CHANNEL FLOW. (See sheet 8/14)

THE 30" DIA CULVERT WAS COMPARED AGAINST THE FLOW CAPABILITIES OF THE SOUTHERN WEIR & FOUND TO BE LESS RESTRICTIVE THAN THE WEIR (See sheet 11/14)

THE 24" DIA CULVERT WAS COMPARED WITH THE CHANNELS & FOUND TO

Golder Associates	SUBJECT ISRT.		
	Job No. 903-6400	Made by CRM	Date 3-30-92
	Ref.	Checked VEF	Sheet 3 of 14
		Reviewed GSB	

HAVE LIMITING HYDRAULICS. (see sheet 13/14)

THE CONTROLLING STRUCTURES ARE THE ENTRANCES TO THE CHANNELS & THE 24" CULVERT.

OUTFLOW SCENERIO

INITIAL WATER SURFACE ELEVATION IN WETLAND IC IS 71.0. THIS IS THE INVERT OF THE SOUTHERN CHANNEL. (see schematic on 5/14)
AS THE WATER SURFACE RISES, FLOW OCCURES IN THE SOUTHERN CHANNEL. AT THIS POINT FLOW INTO THE 24" CULVERT IS NOT RESTRICTIVE.

WITH CONTINUED RISE IN WATER SURFACE ELEV IN Wetland IC FLOW ENTERS THE NORTHERN CHANNEL. DUE TO THE LOWER INVERT ELEVATION OF THE 24" CULVERT, 67.10, SUFFICIENT HEAD CAN BE BUILT UP TO PASS THE FLOWS FROM THE 2 CHANNELS WITHOUT EFFECTING THE INFLOW TO THESE CHANNELS.

WITH FURTHER INCREASE IN STAGE IN WETLAND IC, THE 24" CULVERT BECOMES THE SOLE RESTRICTIVE STRUCTURE. THE 2 CHANNELS HAVE BACKED UP AND THE STAGE ELEVATION IN WETLAND IC IS THE DRIVING HEAD FOR THE 24" CULVERT. THE CULVERT IS FIRST REGULATED BY INLET CONTROL & THEN OUTLET CONTROL

Golder Associates	SUBJECT ISRT		
	Job No. 903-6400	Made by CRM	Date 3-30-92
	Ref.	Checked VKT	Sheet 4 of 14
		Reviewed [illegible]	

COMPOSITE OUTFLOW TO ABERJONA FROM WETLAND 1C

ELEVATION	STRUCTURE 1 (WEIR)	2 (WEIR)	3 (CULVERT)	OUTFLOW (C.F.S.)
71.0	0	—	—	0
71.5	4	0	~~30~~	4
72.0	12.1	4	~~30~~	16.1
72.5	~~27.7~~	~~12.1~~	31	31
73.0	—	—	32	32

~~30~~ ⇒ INDICATES THAT VALUE NOT USED TO CALCULATE OUTFLOW. (STRUCTURES ARE NOT CONSIDERED AS THE MOST RESTRICTIVE)

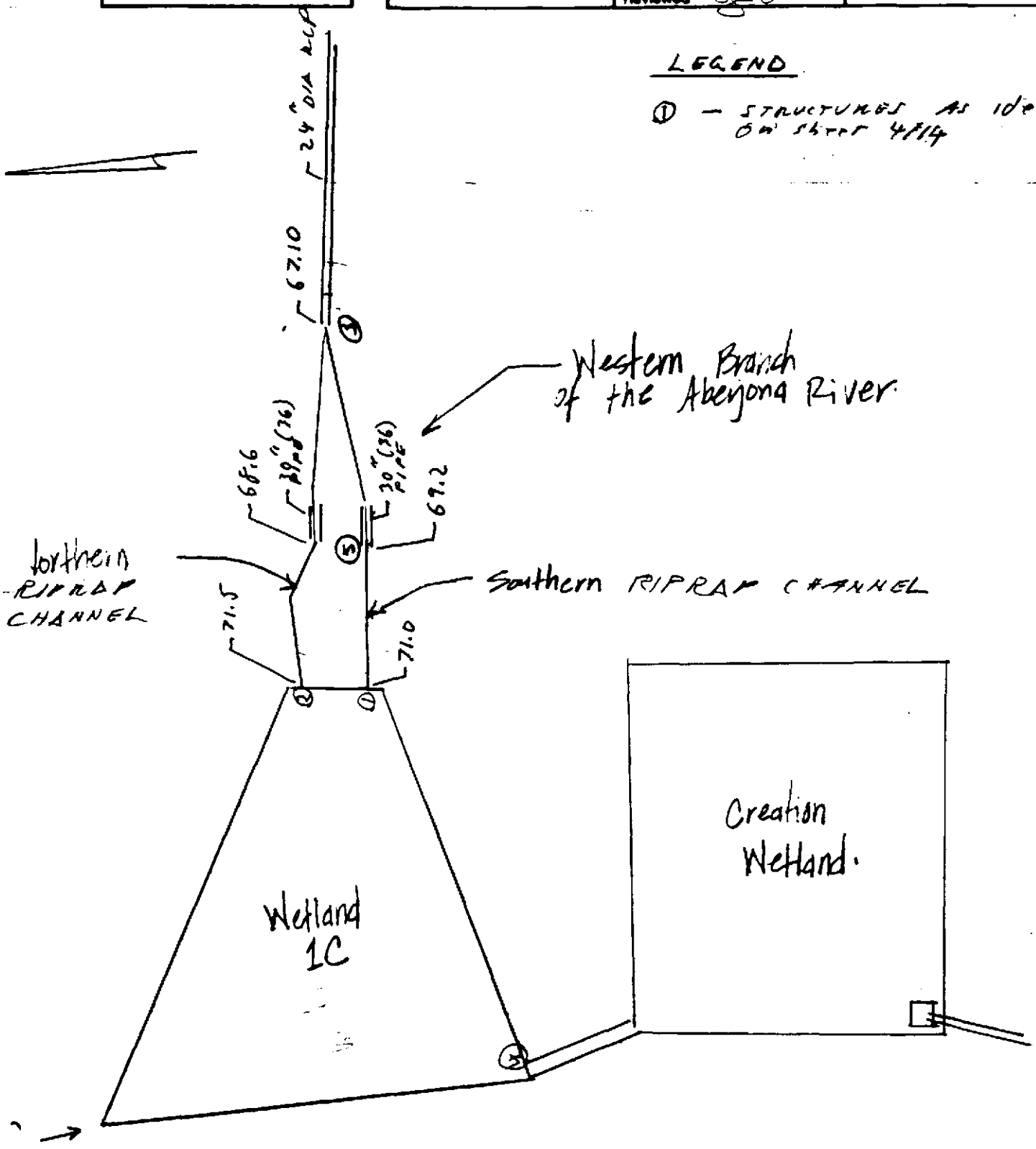
Method of CALCULATION: First, develop a rating table for weir flow through the southern channel. 2nd, evaluate southern channel flow depth based upon weir flow rates to determine if the channel is restrictive. Third, determine the head vs. Q relationship for the 30" culvert (5) and the 24" culvert (3) under inlet control. From these relationships, determine the head required to pass Q from the weir (1) through the 30" culvert (5). This comparison will reveal which structure (1) or (5) is more restrictive. Finally, with the head vs. outflow relationship for the more restrictive structure ((1) or (5)), evaluate the discharge vs. flow depth relationship for the Aberjona after the confluence of the southern and northern channels. Compare this relationship with the head vs. Q relationship for the 24" culvert (3) already developed to determine which is more restrictive. Using all of these relationships compile an outflow rating table from Wetland 1C into

Golder Associates

SUBJECT ISAT		
Job No. 903-6000	Made by CRT	Date 3-30-92
Ref.	Checked VEX	Sheet 5 of 14
	Reviewed	

LEGEND

① – STRUCTURES AS IDENTIFIED ON SHEET 4/14



Outlet Structure File: VERN .STR

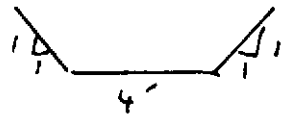
POND-2 Version: 5.16 S/N: 1295130217
Date Executed: Time Executed:

****
OUTLETS FOR WETLAND 1C - PROPOSED

Southern Channel

****

Outflow Rating Table for Structure # 1
WEIR-XY Weir - Defined by X, Y Coordinates



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

DEPTH OF FLOW	Elevation (ft)	Q (cfs)	Computation Messages	
	71.00	0.0	E = Y min= 71	
	71.10	0.3	W(ft)=4.18	Max. D(ft)=.1
	71.20	1.0	W(ft)=4.36	Max. D(ft)=.2
	71.30	1.8	W(ft)=4.54	Max. D(ft)=.3
	71.40	2.8	W(ft)=4.72	Max. D(ft)=.4
.5	71.50	4.0	W(ft)=4.9	Max. D(ft)=.5
	71.60	5.3	W(ft)=5.08	Max. D(ft)=.6
	71.70	6.8	W(ft)=5.26	Max. D(ft)=.7
	71.80	8.4	W(ft)=5.44	Max. D(ft)=.8
	71.90	10.2	W(ft)=5.62	Max. D(ft)=.9
1.0	72.00	12.1	W(ft)=5.8	Max. D(ft)=1.0
	72.10	14.1	W(ft)=5.98	Max. D(ft)=1.1
	72.20	16.3	W(ft)=6.16	Max. D(ft)=1.2
	72.30	18.6	W(ft)=6.34	Max. D(ft)=1.3
	72.40	21.1	W(ft)=6.52	Max. D(ft)=1.4
1.5	72.50	23.7	W(ft)=6.7	Max. D(ft)=1.5
	72.60	26.4	W(ft)=6.88	Max. D(ft)=1.6
	72.70	29.3	W(ft)=7.06	Max. D(ft)=1.7
	72.80	32.3	W(ft)=7.24	Max. D(ft)=1.8
	72.90	35.5	W(ft)=7.420	Max. D(ft)=1.9
2.0	73.00	38.8	W(ft)=7.6	Max. D(ft)=2.0
	73.10	42.2	W(ft)=7.78	Max. D(ft)=2.1
	73.20	45.8	W(ft)=7.960	Max. D(ft)=2.2
	73.30	49.6	W(ft)=8.14	Max. D(ft)=2.3
	73.40	53.4	W(ft)=8.320	Max. D(ft)=2.4
2.5	73.50	57.5	W(ft)=8.5	Max. D(ft)=2.5
	73.60	61.6	W(ft)=8.68	Max. D(ft)=2.6
	73.70	66.0	W(ft)=8.860	Max. D(ft)=2.7
	73.80	70.4	W(ft)=9.04	Max. D(ft)=2.8
	73.90	75.1	W(ft)=9.22	Max. D(ft)=2.9
3.0	74.00	79.8	W(ft)=9.400	Max. D(ft)=3.0
	74.10	84.8	W(ft)=9.580	Max. D(ft)=3.1
	74.20	89.8	W(ft)=9.76	Max. D(ft)=3.2
	74.30	95.1	W(ft)=9.940	Max. D(ft)=3.3
	74.40	100.5	W(ft)=10.12	Max. D(ft)=3.4
	74.50	106.0	W(ft)=10.3	Max. D(ft)=3.5
	74.60	111.7	W(ft)=10.48	Max. D(ft)=3.6

Outlet Structure File: ROBTI .STR

POND-2 Version: 5.16 S/N: 1295130217
Date Executed: Time Executed:

****
OUTLETS FOR WETLAND 1C - PROPOSED
NORTHERN CHANNEL

****

Outflow Rating Table for Structure #2
WEIR-XY Weir - Defined by X, Y Coordinates

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

Elevation (ft)	Q (cfs)	Computation Messages	
71.50	0.0	E = Y min= 71.5	
71.60	0.3	W(ft)=4.18	Max. D(ft)=.1
71.70	1.0	W(ft)=4.36	Max. D(ft)=.2
71.80	1.8	W(ft)=4.54	Max. D(ft)=.3
71.90	2.8	W(ft)=4.72	Max. D(ft)=.4
72.00	4.0	W(ft)=4.9	Max. D(ft)=.5
72.10	5.3	W(ft)=5.08	Max. D(ft)=.6
72.20	6.8	W(ft)=5.26	Max. D(ft)=.7
72.30	8.4	W(ft)=5.44	Max. D(ft)=.8
72.40	10.2	W(ft)=5.62	Max. D(ft)=.9
72.50	12.1	W(ft)=5.8	Max. D(ft)=1.0
72.60	14.1	W(ft)=5.98	Max. D(ft)=1.1
72.70	16.3	W(ft)=6.16	Max. D(ft)=1.2
72.80	18.6	W(ft)=6.34	Max. D(ft)=1.3
72.90	21.1	W(ft)=6.52	Max. D(ft)=1.4
73.00	23.7	W(ft)=6.7	Max. D(ft)=1.5
73.10	26.4	W(ft)=6.88	Max. D(ft)=1.6
73.20	29.3	W(ft)=7.06	Max. D(ft)=1.7
73.30	32.3	W(ft)=7.24	Max. D(ft)=1.8
73.40	35.5	W(ft)=7.420	Max. D(ft)=1.9
73.50	38.8	W(ft)=7.6	Max. D(ft)=2.0
73.60	42.2	W(ft)=7.78	Max. D(ft)=2.1
73.70	45.8	W(ft)=7.960	Max. D(ft)=2.2
73.80	49.6	W(ft)=8.14	Max. D(ft)=2.3
73.90	53.4	W(ft)=8.320	Max. D(ft)=2.4
74.00	57.5	W(ft)=8.5	Max. D(ft)=2.5
74.10	61.6	W(ft)=8.68	Max. D(ft)=2.6
74.20	66.0	W(ft)=8.860	Max. D(ft)=2.7
74.30	70.4	W(ft)=9.04	Max. D(ft)=2.8
74.40	75.1	W(ft)=9.22	Max. D(ft)=2.9
74.50	0.0	E = or > E2=74.5	

CALCULATING CHANNEL DEPTH OF FLOW BASED ON Q'S PASSED THROUGH WEIR AT GIVEN HEAD

CHANNEL SLOPE (ft/ft)	BASE WIDTH (ft.)	SIDE SLOPE L	SIDE SLOPE R	MATERIAL	'n	DESIGN Q* (cfs)	FLOW DEPTH (ft)	WEIR HEAD**
0.005	4.00	1.0	1.0	RIP-RAP	0.031	4.0	0.49	0.50
0.005	4.00	1.0	1.0	RIP-RAP	0.031	12.1	0.93	1.00
0.005	4.00	1.0	1.0	rip	0.031	23.7	1.37	1.50
0.005	4.00	1.0	1.0	rip	0.031	38.8	1.80	2.00
0.005	4.00	1.0	1.0	RIPRAP	0.031	57.5	2.24	2.50
0.005	4.00	1.0	1.0	RIPRAP	0.031	79.8	2.66	3.00

For a given Q, the depth of flow in the channel is less than the head @ the weir required to pass the same Q

*Q's Taken from sheet 5/14

DEPFWEIR

** Weir head required to convey comparable design Q.

8/14

Golder Associates	SUBJECT ISRT		
	Job No. 903-6400 Ref.	Made by CRM Checked VEX Reviewed GSE	Date 4-7-92 Sheet 9 of 14

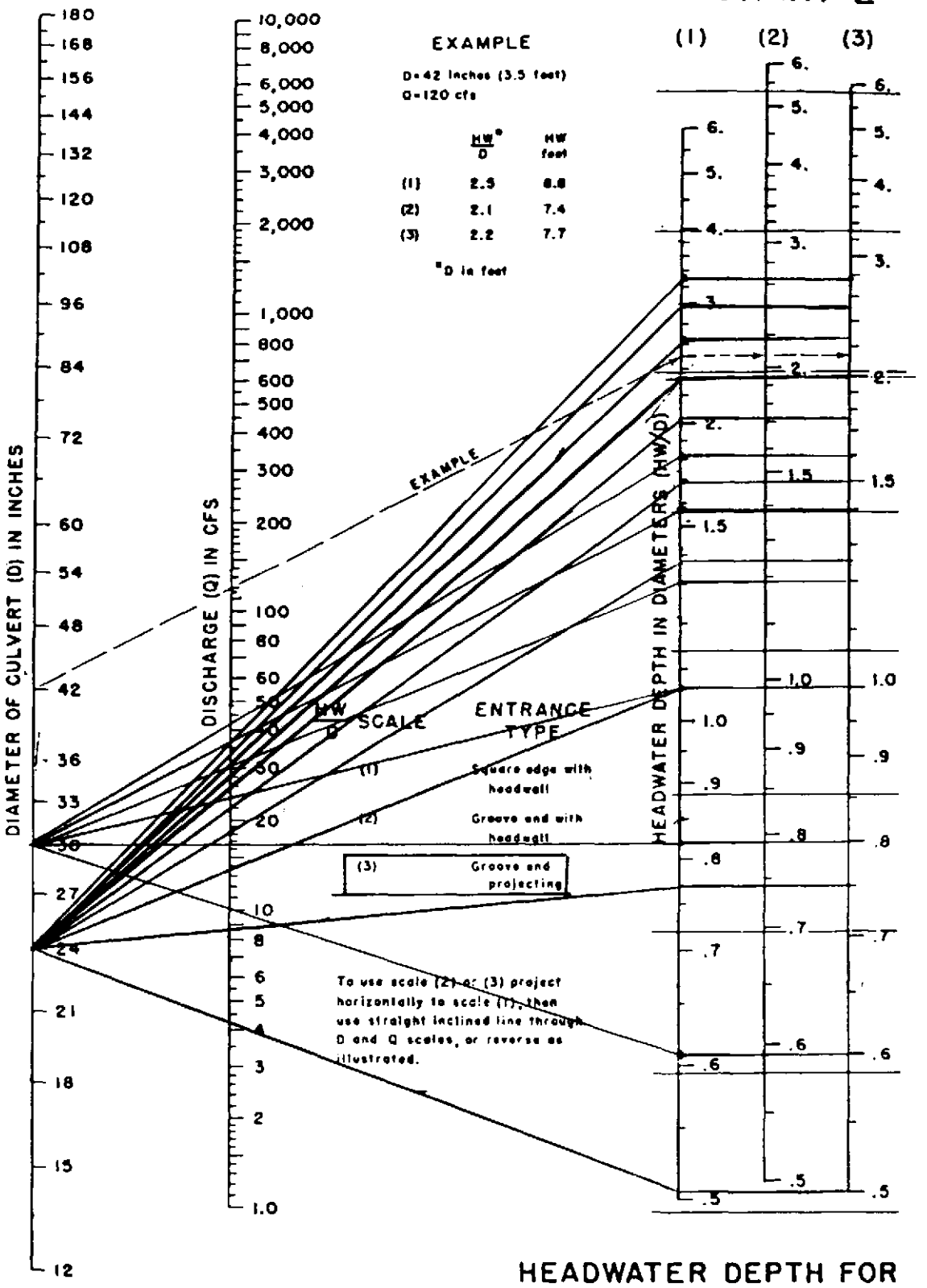
Tabulated Values of Q for 24" + 30" culvert with inlet control + Various depths of flow

DEPTH	HW/D	HW/D	Q	Q
	30" pipe	24" pipe	30" pipe	24" pipe
0.5	0.2	0.25		
1.0	0.4	0.5		4.25
1.5	0.6	0.75	10	9
2.0	0.8	1.0	16.5	14
2.5	1.0	1.25	24	18
3.0	1.2	1.5	30	22
3.5	1.4	1.75	37	26
4.0	1.6	2.0	43	28
4.5	1.8	2.25		30
5.0		2.5		34
5.5		2.75		36

Note: Values taken from chart attached as sheet 10/14

10/14

CHART 2



HEADWATER SCALES 2&3
REVISED MAY 1964

BUREAU OF PUBLIC ROADS JAN. 1963

HEADWATER DEPTH FOR CONCRETE PIPE CULVERTS WITH INLET CONTROL

Golder Associates	SUBJECT Comparison of 30" & weir		
	Job No.	Made by CRM	Date 4/7/92
	Ref.	Checked VEF	Sheet 11 of 14
		Reviewed JBS	

DETERMINE The relationship between ELEVATIONS IN WETLAND IC & 30" culvert discharges.

Analyze SOUTH BRANCH OF WETLAND IC OUTLET

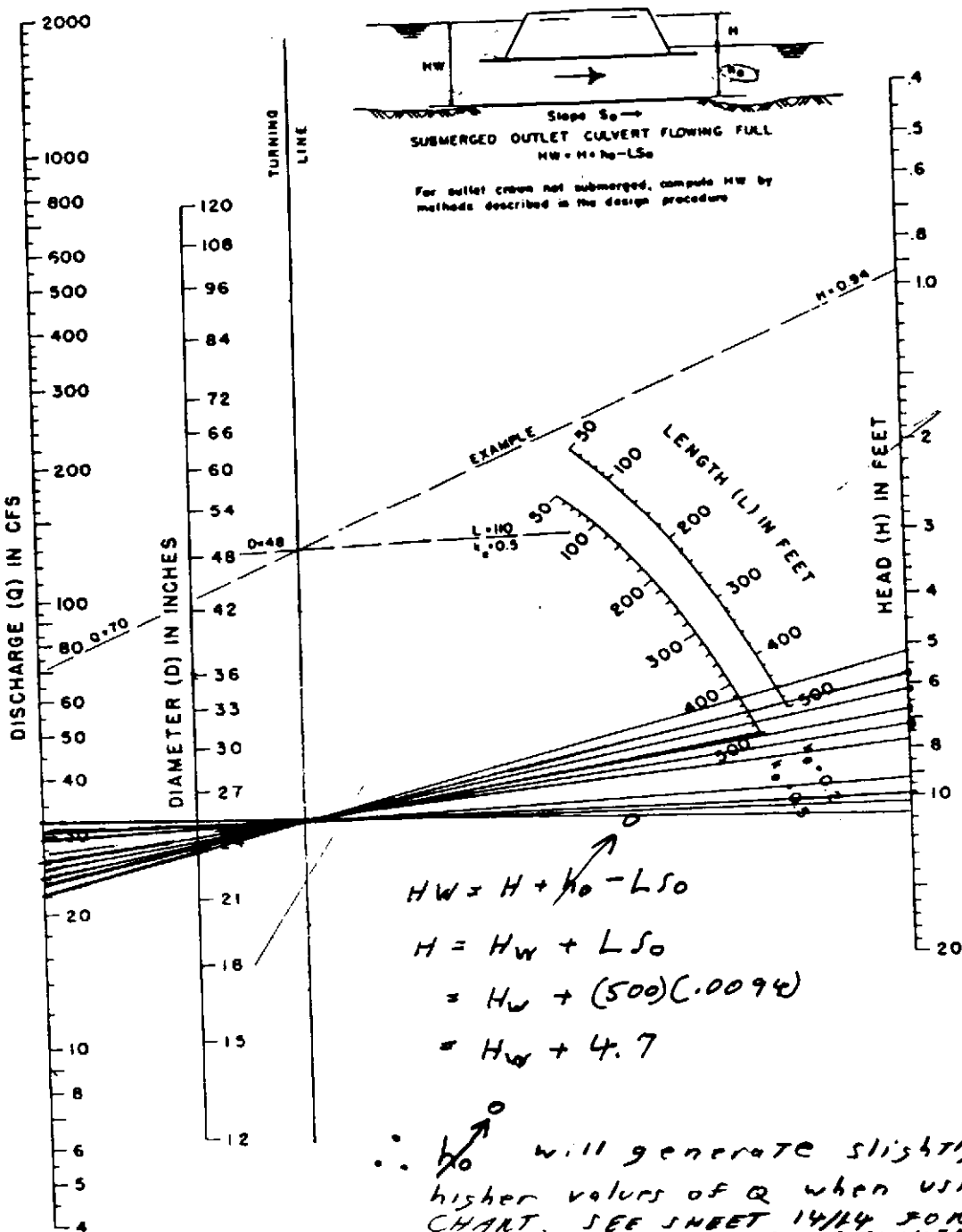
WETLAND IC ELEV	"WEIR" DISCHARGE [sheet (6/14)]	Required H.W. TO PASS Q (sheet 9/14)	*HEAD WATER ELEVATION
71.0	0		
71.5	4		
72.0	12.1	1.6	70.8
72.5	23.7	2.5	71.7
73.0	38.8	3.6	72.8

* HEADWATER ELEV = INV 30" CULVERT + REQUIRED HW.

= 69.2 + HW

A WEIR IS The restrictive element when compared to the 30" culvert.

CHART 9



$HW = H + h_o - LS_o$

$H = H_w + LS_o$

$= H_w + (500)(.0094)$

$= H_w + 4.7$

$\therefore$ h_o will generate slightly higher values of Q when using this CHART. SEE SHEET 14/14 FOR COMPARISON WITH INFORMATION OBTAINED WITH JEDCAD

H.W.	Q
0.5	22
1.0	24
1.5	24
2.0	25
2.5	26
3.0	27
3.5	28
4.0	29
4.5	30
5.0	30
5.5	31

HW	Q
60	32

HEAD FOR
CONCRETE PIPE CULVERTS
FLOWING FULL
n = 0.012

BUREAU OF PUBLIC ROADS JAN. 1963

Hw Vs Q for 24" Dia
OUTLET CONTROL

ANALYSIS OF 4 FOOT WIDE RIPRAP CHANNEL TO THE ABERJONA WITH VARYING DEPTHS OF FLOW (FOR THE W.B. of A.R. after the confluence of the Northern and Southern Channels between the 30"-culverts and the 24" culvert)

CHANNEL	CHANNEL SLOPE (ft/ft)	BASE WIDTH (ft.)	SIDE SLOPE L	SIDE SLOPE R	MATERIAL	'n		CHANNEL DEPTH (ft)	CHANNEL CAPACITY (cfs)
OUTFLOW	0.005	4.00	2.0	2.0	RIP-RAP	0.031		0.50	4.6
TO	0.005	4.00	2.0	2.0	RIP-RAP	0.031		1.00	16.2
ABERJONA	0.005	4.00	2.0	2.0	rip	0.031		1.50	35.1
RIVER	0.005	4.00	2.0	2.0	rip	0.031		2.00	62.5
	0.005	4.00	2.0	2.0	RIPRAP	0.031		2.50	99.1
	0.005	4.00	2.0	2.0	RIPRAP	0.031		3.00	146.1

DEPTH	24" (from 9/14) Q	30" (from 9/14) Q
0.5		
1.0	4.25	
1.5	9	10
2.0	14	17
2.5	18	24
3.0	22	30
3.5	26	

24" RCP w/ INLET CONTROL
30" RCP w/ INLET CONTROL

(24" culvert more restrictive than channel)

Golder Associates	SUBJECT ISRT - WETLAND IC OUTFLOW		
	Job No. 903-6400	Made by CRM	Date 5-19-99
	Ref.	Checked	Sheet 14 of 14
		Reviewed	

PURPOSE: DETERMINE OUTFLOW CHARACTERISTICS OF A 24" DIA RCP WITH THE FOLLOWING CHARACTERISTICS:

500 FEET LONG
1% SLOPE
ENTRANCE COEF: 'K' = 0.5
n = 0.012

METHOD: USE SEDCAD* VERSION 3, PRODUCED BY CIVIL SOFTWARE DESIGN.

MODEL AS A TRICKLE TUBE

CALCULATION: (computer results presented below)

HW*	Q cfs*
0	0
0.5	1.5
1.0	4.2
1.5	7.7
2.0	11.8
2.5	16.1
3.0	19.5
3.5	22.4
4.0	25.0
4.5	27.0
5.0	27.9

*VALUES TAKEN IN RELATION TO INVERT OF 24" RCP

HEC-1

25 Year, 24 Hour Storm

1

****

FLOOD HYDROGRAPH PACKAGE HEC-1 (IBM XT 512K VERSION) -FEB 1,1985

U.S. ARMY CORPS OF ENGINEERS, THE HYDROLOGIC ENGINEERING CENTER, 609 SECOND STREET, DAVIS, CA. 95616

****

THIS HEC-1 VERSION CONTAINS ALL OPTIONS EXCEPT ECONOMICS, AND THE NUMBER OF PLANS ARE REDUCED TO 3

1 HEC-1 INPUT PAGE 1

```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  1           ID        ISRT, WOBURN, MASSACHUSETTS
  2           ID        ON-SITE SUBWATERSHEDS
  3           ID        DETAILED STORAGE AND STREAM NETWORK
  4           ID        PROPOSED CONDITIONS - 25 YR, 24 HR STORM
              *DIAGRAM
  5           IT      15 28FEB91     100      97
  6           IN      15 28FEB91     100
  7           IO       5

  8           KK      5E
  9           KO       1
 10           KM        DIRECT INPUT HYDROGRAPH FOR FLOW FROM 5E
 11           BA    0.07
 12           QI       0       0       0       0       0       0       0       0       0       0
 13           QI       0       0       0       0       0       0       0       0       0       0
 14           QI       0       0       0       0       0       0       0       0       0       0
 15           QI       0       0       0       0       0       0       0       0       0       1
 16           QI       1       1       1       2       2       3       5       8      16      39
 17           QI      61      52      36      25      18      13      10       9       8       7
 18           QI       6       6       6       6       6       6       5       5       5       5
 19           QI       5       5       4       4       3       3       3       3       2       2
 20           QI       2       2       2       2       2       2       2       2       2       2
 21           QI       2       2       2       2       2       2       2

 22           KK   6CSWP
 23           KO       1
 24           KM        DIRECT INPUT HYDROGRAPH FOR FLOW FROM READING, UNDER RTE 93
 25           BA    0.93
 26           QI       0       0       0       0       0       0       0       0       0       0
 27           QI       0       0       0       0       0       0       0       0       0       0
 28           QI       0       0       0       0       0       0       0       0       0       0
 29           QI       0       0       0       0       0       0       0       0       0       1
 30           QI       2       3       5       7       9      14      22      35      65     122
 31           QI     146     157     163     165     166     166     166     165     164     162
 32           QI     160     158     155     152     147     139     129     119      75      56
 33           QI      52      49      47      44      40      36      33      31      28      27
 34           QI      26      25      24      24      23      23      23      22      22      22
 35           QI      22      21      21      21      21      21      21

 36           KK     12P
 37           KO       1
 38           KM        SCS RUNOFF CALCULATION
 39           BA   0.015
 40           PH               0     0.5     1.1     2.1     2.7     3.0     3.6     4.5     5.2
 41           LS              78
 42           UD    0.44
```

```
 43          KK   6C24P
 44          KM        COMBINE HYDROGRAPHS FOR 5E, 6CSWP AND 12P
 45          HC       3
1                                          HEC-1 INPUT                                                  PAGE  2

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


 46          KK  12PCHL
 47          KO       1
 48          KM        STORAGE ROUTING THROUGH NORTH BRANCH CHANNEL
 49          RS       1    STOR       0
 50          RC    0.08    0.03    0.08     400  0.0063    69.5
 51          RX       0       5      10      11      17      18      23      28
 52          RY    70.5      70    69.5    67.5    67.5    69.5      70    70.5

 53          KK     13P
 54          KO       1
 55          KM        SCS RUNOFF CALCULATION
 56          BA   0.009
 57          PH               0     0.5     1.1     2.1     2.7     3.0     3.6     4.5     5.2
 58          LS              70
 59          UD    0.49

 60          KK     19P
 61          KO       1
 62          KM        SCS RUNOFF CALCULATION
 63          BA   0.004
 64          PH               0     0.5     1.1     2.1     2.7     3.0     3.6     4.5     5.2
 65          LS              70
 66          UD    0.34

 67          KK  19PCHL
 68          KO       1
 69          KM        STORAGE ROUTING THROUGH RTE 93 E/W CHANNEL
 70          RS       1    STOR       0
 71          RC   0.080   0.030   0.080     430   0.007      67
 72          RX       0       5      10      11      14      15      20      25
 73          RY      68    67.5      67      66      66      67    67.5      68

 74          KK  121319
 75          KM        COMBINE HYDROGRAPHS FOR 12PCHL, 13P, & 19PCHL
 76          HC       3

 77          KK     20P
 78          KO       1
 79          KM        SCS RUNOFF CALCULATION
 80          BA   0.017
 81          PH               0     0.5     1.1     2.1     2.7     3.0     3.6     4.5     5.2
 82          LS              79
 83          UD    0.32

 84          KK  20PSWP
 85          KO       1
 86          KM        ROUTING THROUGH WETLAND 3B
 87          RS       1    ELEV    66.5
 88          SA   1.084   1.586   3.737
 89          SE    66.5    67.2    68.2
 90          SS    68.1      30     3.0     1.5
1                                          HEC-1 INPUT                                                  PAGE  3

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


 91          KK     14P
 92          KO       1
```

```
 93          KM        SCS RUNOFF CALCULATION
 94          BA   0.036
 95          PH              0     0.5     1.1     2.1     2.7     3.0     3.6     4.5     5.2
 96          LS             78
 97          UD    0.45

 98          KK    NBAR
 99          KM        COMBINE HYDROGRAPHS FOR 121319, 20PSWP & 14P
100          HC       3

101          KK  14PCHL
102          KO       1
103          KM        STORAGE ROUTING THROUGH NORTH BRANCH TO COMMERCE WAY
104          RS       1    ELEV    61.6
105          SA       0   0.514   0.743   0.912   1.300
106          SE    61.6      64    64.5      65      66
107          SL    62.6    3.14     0.6     0.5
108          SS    64.9       0     3.0     1.5

109          KK  6PWBAR
110          KO       1
111          KM        DIRECT INPUT OF HYDROGRAPH FROM WETLAND 1C (6PN) TO WBAR
112          KM        (SEE POND2: APPENDIX 10-G)
113          BA   0.302
114          QI       0       0       0       0       0       0       0       0       0       0
115          QI       0       0       0       0       0     .01     .03     .09     .14     .21
116          QI     .27     .35     .43     .50     .56     .63     .70     .73     .90    1.03
117          QI    1.15    1.26    1.29    1.41    1.54    1.67    1.70    1.83    1.98    2.02
118          QI    2.17    2.28    2.49    2.65    2.77    2.99    3.28    3.79    5.52   10.01
119          QI   14.67   17.61   19.75   20.99   21.61   22.29   22.41   22.71   23.12   23.08
120          QI   23.29   23.46   23.31   23.42   23.44   23.36   23.21   23.31   23.13   22.99
121          QI   23.09   22.83   22.64   22.75   22.57   22.16   22.13   21.76   21.66   21.62
122          QI   21.19   20.94   20.72   20.46   20.14   19.67   19.43   18.89   18.66   18.22
123          QI   17.72   17.45   16.96   16.51   16.36   16.00   15.68

124          KK      8P
125          KO       1
126          KM        SCS RUNOFF CALCULATION
127          BA   0.022
128          PH              0     0.5     1.1     2.1     2.7     3.0     3.6     4.5     5.2
129          LS             81
130          UD    0.25

131          KK     15P
132          KO       1
133          KM        SCS RUNOFF CALCULATION
134          BA   0.015
135          PH              0     0.5     1.1     2.1     2.7     3.0     3.6     4.5     5.2
136          LS             86
137          UD    0.26
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

138          KK  15PSWP
139          KO       1
140          KM        STORAGE ROUTING THROUGH WETLAND 3C
141          RS       1    ELEV    62.4
142          SA   1.020   2.247   3.131   3.834
143          SE      62      63      64    65.0
144          SL    62.4    1.23     0.6     0.5
145          SS    64.9      30     3.0     1.5

146          KK   6815P
147          KM        COMBINE HYDROGRAPHS FOR 6PN, 8P, 14PCHL, & 15PSWP
```

```
148          HC       4

149          KK   8PCHL
150          KO       1
151          KM        STORAGE ROUTING THROUGH 8P CHANNEL
152          RS       1    ELEV      61
153          SA       0   0.014   0.101   0.187   0.241   0.294   0.349
154          SE      61      63      64      65      66      67      68
155          SL    62.6   12.57     0.6     0.5
156          SS    67.9       0     3.0     1.5

157          KK     10P
158          KO       1
159          KM        SCS RUNOFF CALCULATION
160          BA   0.026
161          PH               0     0.5     1.1     2.1     2.7     3.0     3.6     4.5     5.2
162          LS              92
163          UD    0.22

164          KK    810P
165          KM        COMBINE HYDROGRAPHS FOR 8PCHL & 10P RUNOFF
166          HC       2

167          KK  10PCHL
168          KO       1
169          KM        STORAGE ROUTING THROUGH 10P CHANNEL
170          RS       1    ELEV    59.9
171          SA       0   0.082   0.129   0.178   0.225   0.241
172          SE    59.9      61      63      65      67    67.7
173          SL    61.8   12.57     0.6     0.5
174          SS    67.5      30     3.0     1.5

175          KK  16&17P
176          KO       1
177          KM        SCS RUNOFF CALCULATION - 16P & 17P
178          BA   0.017
179          PH               0     0.5     1.1     2.1     2.7     3.0     3.6     4.5     5.2
180          LS              87
181          UD    0.07
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

182          KK  1617PD
183          KO       1
184          KM        STORAGE ROUTING THROUGH 16P & 17P
185          RS       1    ELEV    59.1
186          SA   0.228   0.484   1.708
187          SE    63.5    65.7      66
188          SS    65.9      40     3.0     1.5

189          KK  1017PD
190          KM        COMBINE HYDROGRAPHS FOR 10CHL & 1617PD
191          HC       2

192          KK  1617CH
193          KO       1
194          KM        STORAGE ROUTING THROUGH COMMERCE WAY at 16P & 17P
195          RS       1    ELEV    59.1
196          SA       0   0.033   0.064   0.095   0.123
197          SE    59.1      60      62      64      66
198          SL    61.4   12.57     0.6     0.5
199          SS    65.9       0     3.0     1.5

200          KK  11PCHL
```

```
201        KO      1
202        KM        STORAGE ROUTING THROUGH COMMERCE WAY AT 11P
203        RS      1    ELEV    57.8
204        SA      0   0.047   0.067   0.088   0.110   0.128
205        SE   57.8      59      61      63      65    66.8
206        SL     59   12.57     0.6     0.5
207        SS   66.7       0   - 3.0     1.5

208        KK    21P
209        KO      1
210        KM        SCS RUNOFF CALCULATION
211        BA  0.014
212        PH              0     0.5     1.1     2.1     2.7     3.0     3.6     4.5     5.2
213        LS             73
214        UD   0.25

215        KK    22P
216        KO      1
217        KM        SCS RUNOFF CALCULATION
218        BA  0.004
219        PH              0     0.5     1.1     2.1     2.7     3.0     3.6     4.5     5.2
220        LS             73
221        UD   0.21

222        KK  21&22P
223        KM        COMBINE HYDROGRAPHS FOR 21P & 22P
224        HC      2
```



```
LINE       ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

225        KK  21PCHL
226        KO      1
227        KM        STORAGE ROUTING THROUGH 21P CHANNEL
228        RS      1    STOR       0
229        RC   0.08    0.03    0.08     900   0.002      70
230        RX      0       5      10      13      18      21      26      31
231        RY     71    70.5      70      67      67      70    70.5      71

232        KK    23P
233        KO      1
234        KM        SCS RUNOFF CALCULATION
235        BA  0.032
236        PH              0     0.5     1.1     2.1     2.7     3.0     3.6     4.5     5.2
237        LS             88
238        UD   0.15

239        KK    18P
240        KO      1
241        KM        SCS RUNOFF CALCULATION
242        BA  0.011
243        PH              0     0.5     1.1     2.1     2.7     3.0     3.6     4.5     5.2
244        LS             95
245        UD   0.06

246        KK  PHCOMB
247        KM        COMBINE HYDROGRAPHS FOR 23P, 18P, 21PCHL, & 11PCHL
248        HC      4

249        KK   8CSWP
250        KO      1
251        KM        DIRECT INPUT HYDROGRAPH FROM READING, UNDER RTE 93
252        BA   1.43
253        QI      0       0       0       0       0       0       0       0       1       3
254        QI      4       6       7       8       9      10      10      10      10      10
```

```
255        QI      11      11      11      11      11      11      11      11      11      11
256        QI      11      11      11      11      11      11      12      13      14      16
257        QI      19      22      25      29      35      42      54      73     112     207
258        QI     342     429     445     422     383     346     314     291     274     262
259        QI     253     246     241     237     233     228     223     218     212     206
260        QI     199     192     184     172     154     138     124     112     101      93
261        QI      86      81      77      73      71      69      67      65      64      63
262        QI      62      61      60      59      58      57      57

263        KK  CW&PP
264        KM        COMBINE HYDROGRAPHS FOR PHILLIPS POND
265        HC       2

266        KK   PHPND
267        KO       1
268        KM        STORAGE ROUTING THROUGH PHILLIPS POND
269        RS       1    ELEV      57
270        SA   3.914   4.830   5.514   7.530   8.809  11.892
271        SE      57    59.5    60.6      62      64      66
272        SL    57.5   14.14     0.6     0.5
1                                        HEC-1 INPUT                                          PAGE  7

LINE       ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

273        SS    65.9      40     3.0     1.5

274        KK     11P
275        KO       1
276        KM        SCS RUNOFF CALCULATION
277        BA   0.068
278        PH              0     0.5     1.1     2.1     2.7     3.0     3.6     4.5     5.2
279        LS              91
280        UD    0.32

281        KK    MAWL
282        KO       1
283        KM        DIRECT INPUT HYDROGRAPH FROM MITIGATION AREA WETLAND
284        KM        (SEE POND2: APPENDIX 10-G)
285        BA    0.01
286        QI       0       0       0       0       0       0       0       0       0       0
287        QI       0       0       0       0       0       0       0       0       0       0
288        QI       0       0       0     .01     .01     .01     .01     .02     .02     .02
289        QI     .03     .03     .04     .05     .06     .07     .08     .09     .10     .11
290        QI     .13     .15     .18     .21     .25     .30     .37     .45     .64    1.08
291        QI    1.64    2.22    2.43    2.80    3.25    3.68    4.04    4.34    4.63    4.92
292        QI    5.24    5.59    6.07    6.56    7.05    7.53    8.09    8.63    9.10    9.55
293        QI    9.98   10.45   10.89   11.32   11.70   12.07   12.42   12.72   12.87   13.02
294        QI   13.16   13.29   13.44   13.65   13.82   13.97   14.10   14.21   14.29   14.36
295        QI   14.42   14.46   14.48   14.49   14.49   14.47   14.44

296        KK      9P
297        KO       1
298        KM        SCS RUNOFF CALCULATION
299        BA   0.011
300        PH              0     0.5     1.1     2.1     2.7     3.0     3.6     4.5     5.2
301        LS              82
302        UD    0.19

303        KK     5PN
304        KO       1
305        KM        SCS RUNOFF CALCULATION
306        BA    .008
307        PH              0     0.5     1.1     2.1     2.7     3.0     3.6     4.5     5.2
308        LS              78
309        UD     .43
```

```
KK   MA5PN
KO       1
KM        COMBINE HYDROGRAPHS FOR 9P, 5PN & MAWL
HC       3

KK  AADWEX
KO       1
KM        STORAGE ROUTING THROUGH ATLANTIC AVENUE DRAINWAY EXTENSION
RS       1    ELEV    60.0
SA   0.003   0.011   0.028   0.058   0.096   0.136   0.176   0.196
SE      60    62.5    63.5    64.5    65.5    66.5    67.5    68.0
SL    61.9   37.70     0.6     0.5
SS    67.9       0     3.0     1.5
```



```
LINE      ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

KK     5PS
KO       1
KM        SCS RUNOFF CALCULATION
BA   0.051
PH              0     0.5     1.1     2.1     2.7     3.0     3.6     4.5     5.2
LS             83
UD    0.52

KK  RECHRG
KO       1
KM         DIRECT INPUT OF HYDROGRAPH FROM RECHARGE BASIN
BA    .001
QI      .6      .6      .6      .6      .6      .6      .6      .6      .6      .6
QI      .6      .6      .6      .6      .6      .6      .6      .6      .6      .6
QI      .6      .6      .6      .6      .6      .6      .6      .6      .6      .6
QI      .6      .6      .6      .6      .6      .6      .6      .6      .6      .6
QI      .6      .6      .6      .6      .6      .6      .6      .6      .6      .6
QI      .6      .6      .6      .6      .6      .6      .6      .6      .6      .6
QI      .6      .6      .6      .6      .6      .6      .6      .6      .6      .6
QI      .6      .6      .6      .6      .6      .6      .6      .6      .6      .6
QI      .6      .6      .6      .6      .6      .6      .6      .6      .6      .6
QI      .6      .6      .6      .6      .6      .6      .6

KK  5PSAAD
KM        COMBINE HYDROGRAPHS FOR 5PS, RECHARGE BASIN & AADWEX
HC       3

KK  SHD10C
KO       1
KM        STORAGE ROUTING THROUGH ATLANTIC AVENUE CHANNEL at RR TRACKS
RS       1    STOR       0
RC    0.08    0.03    0.08     800   0.007      63
RX       0      10      20      28      42      50      60      70
RY      63    62.5      62    54.2    54.2      62    62.5      63

KK  4DCHAB
KO       1
KM        DIRECT INPUT OF HYDROGRAPH FROM NW WOBURN & WILMINGTON
BA   0.259
QI       0       0       0       0       0       0       0       0       0       0
QI       0       0       0       0       0       0       0       0       0       0
QI       0       0       0       0       0       0       0       0       0       0
QI       0       0       0       0       0       0       0       1       1       1
QI       1       2       2       3       3       5       7      12      24      62
QI      85      63      43      32      25      21      19      18      17      17
QI      17      17      18      18      18      18      19      19      19      19
QI      19      19      19      19      18      18      18      17      17      17
QI      17      17      17      17      17      17      17      17      17      16
```

```
 366        QI      16      16      16      16      16      15      15
1                                        HEC-1 INPUT

LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


 367        KK     2PN
 368        KO       1
 369        KM        SCS RUNOFF CALCULATION
 370        BA   0.008
 371        PH              0     0.5     1.1     2.1     2.7     3.0     3.6     4.5     5.2
 372        LS             85
 373        UD    0.28

 374        KK   4D2PN
 375        KM        COMBINE HYDROGRAPHS FROM 4DCHAB & 2PN
 376        HC       2

 377        KK   PXDPR
 378        KO       1
 379        KM        ROUTING OF NW WOBURN & WILMINGTON THROUGH PX DEPRESSED AREA
 380        RS       1    ELEV    68.9
 381        SA       0    .291    .721    .936
 382        SE    68.0      69      70      71
 383        SL   69.65    9.62     0.6     0.5
 384        SS    72.3       0     3.0     1.5

 385        KK   4ECHL
 386        KO       1
 387        KM        DIRECT INPUT OF HYDROGRAPH FROM NW WOBURN & WILMINGTON
 388        BA    0.30
 389        QI       0       0       0       0       0       0       0       0       0       0
 390        QI       0       0       0       0       0       0       0       0       0       0
 391        QI       0       0       0       0       0       0       0       0       0       0
 392        QI       0       0       0       0       0       0       1       3       3       4
 393        QI       5       6       8      10      12      18      27      42      61      75
 394        QI      75      75      75      75      75      75      75      75      75      75
 395        QI      64      48      32      27      27      26      25      24      23      22
 396        QI      21      21      20      18      15      13      12      11      11      11
 397        QI      10      10      10      10       9       9       9       9       9       9
 398        QI       8       8       8       8       8       8       8

 399        KK      1P
 400        KO       1
 401        KM        SCS RUNOFF CALCULATION
 402        BA   0.021
 403        PH              0     0.5     1.1     2.1     2.7     3.0     3.6     4.5     5.2
 404        LS             87
 405        UD    0.31

 406        KK    4E1P
 407        KM        COMBINE HYDROGRAPHS FROM 4ECHL & 1P
 408        HC       2

 409        KK  EWCLPX
 410        KO       1
 411        KM        CHANNEL ROUTING THROUGH E/W CHANNEL AT PX REALTY
 412        RS       1    STOR       0
 413        RC   0.080   0.030   0.080     250  0.0032    70.5
 414        RX       0       5      10      16      22      28      38      48
1                                        HEC-1 INPUT                                    PAGE 10

LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 415        RY      72      71      70    64.4    64.4      70    70.2    70.5
```

```
416        KK     2PS
417        KO       1
418        KM        SCS RUNOFF CALCULATION
419        BA   0.006
420        PH              0     0.5     1.1     2.1     2.7     3.0     3.6     4.5     5.2
421        LS             96
422        UD    0.02

423        KK   2PSDB
424        KO       1
425        KM        ROUTING OF 2PS THROUGH DETENTION BASIN
426        RS       1    ELEV    66.0
427        SA   0.069   0.088   0.108   0.130   0.154
428        SE      66      67      68      69      70
429        SL      66    0.79     0.6     0.5
430        SS    69.9       0     3.0     1.5

431        KK    1&2P
432        KM        COMBINE HYDROGRAPHS FROM PX DEPRESSED AREA, 1P & 2P RUNOFF
433        HC       3

434        KK  2PSCHL
435        KO       1
436        KM        STORAGE ROUTING THROUGH N/S CHANNEL AT PX REALTY
437        RS       1    ELEV    66.4
438        SA       0   0.016   0.019   0.033   0.041   0.066   0.074
439        SE    66.4    66.5      67    67.5    68.0      69    69.4
440        SL   59.70    7.07     0.6     0.5
441        SS    69.3       0     3.0     1.5

442        KK  DI2PSC
443        KO       1
444        KM        DIRECT INPUT HYDROGRAPH FOR FLOW FROM 2PSCHL (MODIFIED PEAK)
445        BA     .59
446        QI       0       6       6       6       6       6       6       6       6       6
447        QI       6       6       6       6       6       6       6       6       6       6
448        QI       6       6       6       6       6       6       6       6       6       6
449        QI       6       6       6       6       6       6       6       6       6       6
450        QI       6       8      10      13      18      26      39      60      93     110
451        QI     110     110     110     110     110     110     110     105      98      96
452        QI      89      68      57      47      50      47      48      46      46      44
453        QI      43      42      42      39      36      33      32      30      29      29
454        QI      29      28      28      28      28      27      27      27      27      27
455        QI      25      25      25      25      25      24      24

456        KK     4PS
457        KO       1
458        KM        SCS RUNOFF CALCULATION
459        BA   0.003
460        PH              0     0.5     1.1     2.1     2.7     3.0     3.6     4.5     5.2
461        LS             97
462        UD    0.08
```



```
LINE       ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

463        KK   4PSDB
464        KO       1
465        KM        STORAGE ROUTING THROUGH DETENSION BASIN AT DAGATA
466        RS       1 ELEV 59
467        SA   0.048   0.063   0.079   0.097
468        SE      59      60      61      62
469        SL      59    0.44     0.6     0.5
470        SS    61.9       0     3.0     1.5
```

```
471          KK     4P
472          KO      1
473          KM        SCS RUNOFF CALCULATION
474          BA   0.017
475          PH              0     0.5     1.1     2.1     2.7     3.0     3.6     4.5     5.2
476          LS             91
477          UD    0.41

478          KK    124P
479          KM        COMBINE HYDROGRAPHS FROM  2SPCHL, 4P, & 4PSDB
480          HC      3

481          KK   4PSWP
482          KO      1
483          KM        STORAGE ROUTING THROUGH WET AREA IN B.E. ROW
484          RS      1    ELEV    60.6
485          SA   0.801   1.178   1.430   1.939
486          SE    60.6    61.3    62.0    63.3
487          SS    60.6      10     3.0     1.5

488          KK     3PE
489          KO      1
490          KM        SCS RUNOFF CALCULATION
491          BA   0.002
492          PH              0     0.5     1.1     2.1     2.7     3.0     3.6     4.5     5.2
493          LS             98
494          UD    0.02

495          KK   3PEDB
496          KO      1
497          KM        STORAGE ROUTING DETENTION BASIN AT PEBCO
498          RS      1    ELEV      63
499          SA   0.035   0.046   0.060   0.075
500          SE      63      64      65      66
501          SL    63.5    0.79     0.6     0.5
502          SS    66.9       0     3.0     1.5

503          KK     3PW
504          KO      1
505          KM        SCS RUNOFF CALCULATION
506          BA   0.010
507          PH              0     0.5     1.1     2.1     2.7     3.0     3.6     4.5     5.2
508          LS             78
509          UD    0.24
```

1 HEC-1 INPUT PAGE 12

```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

510          KK    3PEW
511          KO      1
512          KM        COMBINE HYDROGRAPHS FROM 3PEDB & 3PW
513          HC      2
514          ZZ
```

1

SCHEMATIC DIAGRAM OF STREAM NETWORK

```
INPUT
 LINE     (V) ROUTING          (--->) DIVERSION OR PUMP FLOW

  NO.     (.) CONNECTOR        (<---) RETURN OF DIVERTED OR PUMPED FLOW

   8          5E
               .
               .
  22           .        6CSWP
               .            .
```

```
          .          .
 36       .          .        12P
          .          .          .
          .          .          .
 43    6C24P.......................
          V
          V
 46    12PCHL
          .
          .
 53       .        13P
          .          .
          .          .
 60       .          .        19P
          .          .          V
          .          .          V
 67       .          .     19PCHL
          .          .          .
          .          .          .
 74    121319.......................
          .
          .
 77       .        20P
          .          V
          .          V
 84       .     20PSWP
          .          .
          .          .
 91       .          .        14P
          .          .
          .          .          .
 98     NBAR.......................
          V
          V
101    14PCHL
          .
          .
109       .     6PWBAR
          .          .
          .          .
124       .          .         8P
          .          .          .
          .          .          .
131       .          .          .        15P
          .          .          .          V
          .          .          .          V
138       .          .          .     15PSWP
          .          .          .          .
          .          .          .          .
146    6815P.................................
          V
          V
149    8PCHL
          .
          .
157       .        10P
          .          .
          .          .
164     810P............
          V
          V
 7     10PCHL
          .
          .
175       .     16&17P
          .          V
```

```
            .          V
182         .      1617PD
            .          .
            .          .
189     1017PD............
            V
            V
192     1617CH
            V
            V
200     11PCHL
            .
            .
208         .        21P
            .          .
            .          .
215         .          .        22P
            .          .          .
            .          .          .
222         .     21&22P...........
            .          V
            .          V
225         .     21PCHL
            .          .
            .          .
232         .          .        23P
            .          .          .
            .          .          .
239         .          .          .        18P
            .          .          .          .
            .          .          .          .
246     PHCOMB...................................
            .
            .
249         .      8CSWP
            .          .
            .          .
263     CW&PP ...........
            V
            V
266      PHPND
            .
            .
274         .        11P
            .          .
            .          .
281         .          .       MAWL
            .          .          .
            .          .          .
296         .          .          .         9P
            .          .          .          .
            .          .          .          .
303         .          .          .          .        5PN
            .          .          .          .          .
            .          .          .          .          .
310         .          .     MA5PN........................
            .          .          V
            .          .          V
314         .          .     AADWEX
            .          .          .
            .          .          .
322         .          .          .        5PS
            .          .          .          .
            .          .          .          .
329         .          .          .          .     RECHRG
            .          .          .          .          .
```

```
         .         .         .         .         .
343      .         .     5PSAAD.......................
         .         .         V
         .         .         V
346      .         .     SHD10C
         .         .         .
         .         .         .
353      .         .         .     4DCHAB
         .         .         .         .
         .         .         .         .
367      .         .         .         .       2PN
         .         .         .         .         .
         .         .         .         .         .
374      .         .         .     4D2PN............
         .         .         .         V
         .         .         .         V
377      .         .         .     PXDPR
         .         .         .         .
         .         .         .         .
385      .         .         .         .     4ECHL
         .         .         .         .         .
         .         .         .         .         .
399      .         .         .         .         .        1P
         .         .         .         .         .         .
         .         .         .         .         .         .
406      .         .         .         .      4E1P............
         .         .         .         .         V
         .         .         .         .         V
409      .         .         .         .    EWCLPX
         .         .         .         .         .
         .         .         .         .         .
416      .         .         .         .         .       2PS
         .         .         .         .         .         V
         .         .         .         .         .         V
423      .         .         .         .         .     2PSDB
         .         .         .         .         .         .
         .         .         .         .         .         .
431      .         .         .     1&2P.......................
         .         .         .         V
         .         .         .         V
434      .         .         .     2PSCHL
         .         .         .         .
         .         .         .         .
442      .         .         .         .    D12PSC
         .         .         .         .         .
         .         .         .         .         .
456      .         .         .         .         .       4PS
         .         .         .         .         .         V
         .         .         .         .         .         V
463      .         .         .         .         .     4PSDB
         .         .         .         .         .         .
         .         .         .         .         .         .
471      .         .         .         .         .         .       4P
         .         .         .         .         .         .         .
         .         .         .         .         .         .         .
478      .         .         .         .      124P.......................
         .         .         .         .         V
         .         .         .         .         V
481      .         .         .         .     4PSWP
         .         .         .         .         .
         .         .         .         .         .
[illegible]8 .         .         .         .         .       3PE
         .         .         .         .         .         V
         .         .         .         .         .         V
495      .         .         .         .         .     3PEDB
         .         .         .         .         .         .
```

```
                .         .         .         .         .         .
  503           .         .         .         .         .         .        3PW
                .         .         .         .         .         .         .
                .         .         .         .         .         .         .
  510           .         .         .         .         .       3PEW............

(***) RUNOFF ALSO COMPUTED AT THIS LOCATION
1                                                          ****
                          FLOOD HYDROGRAPH PACKAGE HEC-1 (IBM XT 512K VERSION) -FEB 1,1985
              U.S. ARMY CORPS OF ENGINEERS, THE HYDROLOGIC ENGINEERING CENTER, 609 SECOND STREET, DAVIS, CA. 95616
                                                           ****



                          ISRT, WOBURN, MASSACHUSETTS
                          ON-SITE SUBWATERSHEDS
                          DETAILED STORAGE AND STREAM NETWORK
                          PROPOSED CONDITIONS - 25 YR, 24 HR STORM

   7 IO         OUTPUT CONTROL VARIABLES
                      IPRNT          5  PRINT CONTROL
                      IPLOT          0  PLOT CONTROL
                      QSCAL         0.  HYDROGRAPH PLOT SCALE

     IT         HYDROGRAPH TIME DATA
                       NMIN         15  MINUTES IN COMPUTATION INTERVAL
                      IDATE     28FEB91  STARTING DATE
                      ITIME        0100  STARTING TIME
                         NQ         97  NUMBER OF HYDROGRAPH ORDINATES
                     NDDATE      1MAR91  ENDING DATE
                     NDTIME        0100  ENDING TIME

                 COMPUTATION INTERVAL     .25 HOURS
                      TOTAL TIME BASE   24.00 HOURS

         ENGLISH UNITS


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***


           **************
           *            *
   8 KK    *        5E  *
           *            *
           **************

   9 KO         OUTPUT CONTROL VARIABLES
                      IPRNT          1  PRINT CONTROL
                      IPLOT          0  PLOT CONTROL
                      QSCAL         0.  HYDROGRAPH PLOT SCALE
                          DIRECT INPUT HYDROGRAPH FOR FLOW FROM 5E

   6 IN         TIME DATA FOR INPUT TIME SERIES
                      JXMIN         15  TIME INTERVAL IN MINUTES
                     JXDATE     28FEB91  STARTING DATE
                     JXTIME        100  STARTING TIME

              SUBBASIN RUNOFF DATA

  11 BA         SUBBASIN CHARACTERISTICS
                      TAREA        .07  SUBBASIN AREA

                                                           ***
```

HYDROGRAPH AT STATION 5E

DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW
28 FEB 0100	1	0.	28 FEB 0715	26	0.	28 FEB 1330	51	61.	28 FEB 1945	76	3.
28 FEB 0115	2	0.	28 FEB 0730	27	0.	28 FEB 1345	52	52.	28 FEB 2000	77	3.
28 FEB 0130	3	0.	28 FEB 0745	28	0.	28 FEB 1400	53	36.	28 FEB 2015	78	3.
28 FEB 0145	4	0.	28 FEB 0800	29	0.	28 FEB 1415	54	25.	28 FEB 2030	79	2.
28 FEB 0200	5	0.	28 FEB 0815	30	0.	28 FEB 1430	55	18.	28 FEB 2045	80	2.
28 FEB 0215	6	0.	28 FEB 0830	31	0.	28 FEB 1445	56	13.	28 FEB 2100	81	2.
28 FEB 0230	7	0.	28 FEB 0845	32	0.	28 FEB 1500	57	10.	28 FEB 2115	82	2.
28 FEB 0245	8	0.	28 FEB 0900	33	0.	28 FEB 1515	58	9.	28 FEB 2130	83	2.
28 FEB 0300	9	0.	28 FEB 0915	34	0.	28 FEB 1530	59	8.	28 FEB 2145	84	2.
28 FEB 0315	10	0.	28 FEB 0930	35	0.	28 FEB 1545	60	7.	28 FEB 2200	85	2.
28 FEB 0330	11	0.	28 FEB 0945	36	0.	28 FEB 1600	61	6.	28 FEB 2215	86	2.
28 FEB 0345	12	0.	28 FEB 1000	37	0.	28 FEB 1615	62	6.	28 FEB 2230	87	2.
28 FEB 0400	13	0.	28 FEB 1015	38	0.	28 FEB 1630	63	6.	28 FEB 2245	88	2.
28 FEB 0415	14	0.	28 FEB 1030	39	0.	28 FEB 1645	64	6.	28 FEB 2300	89	2.
28 FEB 0430	15	0.	28 FEB 1045	40	1.	28 FEB 1700	65	6.	28 FEB 2315	90	2.
28 FEB 0445	16	0.	28 FEB 1100	41	1.	28 FEB 1715	66	6.	28 FEB 2330	91	2.
28 FEB 0500	17	0.	28 FEB 1115	42	1.	28 FEB 1730	67	5.	28 FEB 2345	92	2.
28 FEB 0515	18	0.	28 FEB 1130	43	1.	28 FEB 1745	68	5.	1 MAR 0000	93	2.
28 FEB 0530	19	0.	28 FEB 1145	44	2.	28 FEB 1800	69	5.	1 MAR 0015	94	2.
28 FEB 0545	20	0.	28 FEB 1200	45	2.	28 FEB 1815	70	5.	1 MAR 0030	95	2.
28 FEB 0600	21	0.	28 FEB 1215	46	3.	28 FEB 1830	71	5.	1 MAR 0045	96	2.
28 FEB 0615	22	0.	28 FEB 1230	47	5.	28 FEB 1845	72	5.	1 MAR 0100	97	2.
28 FEB 0630	23	0.	28 FEB 1245	48	8.	28 FEB 1900	73	4.			
28 FEB 0645	24	0.	28 FEB 1300	49	16.	28 FEB 1915	74	4.			
28 FEB 0700	25	0.	28 FEB 1315	50	39.	28 FEB 1930	75	3.			

PEAK FLOW (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	24.00-HR
+		(CFS)				
+ 61.	12.50		15.	5.	5.	5.
		(INCHES)	2.009	2.441	2.441	2.441
		(AC-FT)	8.	9.	9.	9.

CUMULATIVE AREA = .07 SQ MI

*** ***

```
          **************
          *            *
 22 KK    *     6CSWP  *
          *            *
          **************
```

23 KO OUTPUT CONTROL VARIABLES

IPRNT	1	PRINT CONTROL
IPLOT	0	PLOT CONTROL
QSCAL	0.	HYDROGRAPH PLOT SCALE

DIRECT INPUT HYDROGRAPH FOR FLOW FROM READING, UNDER RTE 93

6 IN TIME DATA FOR INPUT TIME SERIES

```
                JXMIN          15  TIME INTERVAL IN MINUTES
                JXDATE     28FEB91  STARTING DATE
                JXTIME         100  STARTING TIME

          SUBBASIN RUNOFF DATA

 25 BA        SUBBASIN CHARACTERISTICS
                TAREA          .93  SUBBASIN AREA

                                                    ***
```

HYDROGRAPH AT STATION 6CSWP

DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW
28 FEB 0100	1	0.	28 FEB 0715	26	0.	28 FEB 1330	51	146.	28 FEB 1945	76	36.
28 FEB 0115	2	0.	28 FEB 0730	27	0.	28 FEB 1345	52	157.	28 FEB 2000	77	33.
28 FEB 0130	3	0.	28 FEB 0745	28	0.	28 FEB 1400	53	163.	28 FEB 2015	78	31.
28 FEB 0145	4	0.	28 FEB 0800	29	0.	28 FEB 1415	54	165.	28 FEB 2030	79	28.
28 FEB 0200	5	0.	28 FEB 0815	30	0.	28 FEB 1430	55	166.	28 FEB 2045	80	27.
28 FEB 0215	6	0.	28 FEB 0830	31	0.	28 FEB 1445	56	166.	28 FEB 2100	81	26.
28 FEB 0230	7	0.	28 FEB 0845	32	0.	28 FEB 1500	57	166.	28 FEB 2115	82	25.
28 FEB 0245	8	0.	28 FEB 0900	33	0.	28 FEB 1515	58	165.	28 FEB 2130	83	24.
28 FEB 0300	9	0.	28 FEB 0915	34	0.	28 FEB 1530	59	164.	28 FEB 2145	84	24.
28 FEB 0315	10	0.	28 FEB 0930	35	0.	28 FEB 1545	60	162.	28 FEB 2200	85	23.
28 FEB 0330	11	0.	28 FEB 0945	36	0.	28 FEB 1600	61	160.	28 FEB 2215	86	23.
28 FEB 0345	12	0.	28 FEB 1000	37	0.	28 FEB 1615	62	158.	28 FEB 2230	87	23.
28 FEB 0400	13	0.	28 FEB 1015	38	0.	28 FEB 1630	63	155.	28 FEB 2245	88	22.
28 FEB 0415	14	0.	28 FEB 1030	39	0.	28 FEB 1645	64	152.	28 FEB 2300	89	22.
28 FEB 0430	15	0.	28 FEB 1045	40	1.	28 FEB 1700	65	147.	28 FEB 2315	90	22.
28 FEB 0445	16	0.	28 FEB 1100	41	2.	28 FEB 1715	66	139.	28 FEB 2330	91	22.
28 FEB 0500	17	0.	28 FEB 1115	42	3.	28 FEB 1730	67	129.	28 FEB 2345	92	21.
28 FEB 0515	18	0.	28 FEB 1130	43	5.	28 FEB 1745	68	119.	1 MAR 0000	93	21.
28 FEB 0530	19	0.	28 FEB 1145	44	7.	28 FEB 1800	69	75.	1 MAR 0015	94	21.
28 FEB 0545	20	0.	28 FEB 1200	45	9.	28 FEB 1815	70	56.	1 MAR 0030	95	21.
28 FEB 0600	21	0.	28 FEB 1215	46	14.	28 FEB 1830	71	52.	1 MAR 0045	96	21.
28 FEB 0615	22	0.	28 FEB 1230	47	22.	28 FEB 1845	72	49.	1 MAR 0100	97	21.
28 FEB 0630	23	0.	28 FEB 1245	48	35.	28 FEB 1900	73	47.			
28 FEB 0645	24	0.	28 FEB 1300	49	65.	28 FEB 1915	74	44.			
28 FEB 0700	25	0.	28 FEB 1315	50	122.	28 FEB 1930	75	40.			

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.00-HR
+ (CFS)	(HR)					
		(CFS)				
+ 166.	13.50		133.	41.	41.	41.
		(INCHES)	1.329	1.647	1.647	1.647
		(AC-FT)	66.	82.	82.	82.

CUMULATIVE AREA = .93 SQ MI

```
*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

          **************
          *            *
 36 KK    *      12P   *
```

```
        *          *
        **************

37 KO          OUTPUT CONTROL VARIABLES
                     IPRNT           1  PRINT CONTROL
                     IPLOT           0  PLOT CONTROL
                     QSCAL          0.  HYDROGRAPH PLOT SCALE
                              SCS RUNOFF CALCULATION

             SUBBASIN RUNOFF DATA

39 BA          SUBBASIN CHARACTERISTICS
                     TAREA         .01  SUBBASIN AREA

               PRECIPITATION DATA

40 PH                                DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
               ..... HYDRO-35 ......   ............... TP-40 ...............   ........... TP-49 ...........
               5-MIN  15-MIN  60-MIN    2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                 .50    1.10    2.10    2.70    3.00    3.60    4.50    5.20     .00     .00     .00     .00

                                                  STORM AREA =     .01

41 LS          SCS LOSS RATE
                     STRTL         .56  INITIAL ABSTRACTION
                    CRVNBR       78.00  CURVE NUMBER
                     RTIMP         .00  PERCENT IMPERVIOUS AREA

42 UD          SCS DIMENSIONLESS UNITGRAPH
                      TLAG         .44  LAG

                                                          ***

 :ING *** TIME INTERVAL IS GREATER THAN .29*LAG

                                                      UNIT HYDROGRAPH
                                                  11 END-OF-PERIOD ORDINATES
               5.       13.       11.        5.        3.        1.        1.        0.        0.        0.
               0.

*****************************************************************************************************************************

                                                HYDROGRAPH AT STATION      12P

*****************************************************************************************************************************
                                                                  *
      DA MON HRMN  ORD    RAIN    LOSS  EXCESS     COMP Q        *      DA MON HRMN  ORD    RAIN    LOSS  EXCESS     COMP Q
                                                                  *
      28 FEB 0100    1     .00     .00     .00         0.        *      28 FEB 1315   50    1.10     .35     .75         9.
      28 FEB 0115    2     .01     .01     .00         0.        *      28 FEB 1330   51     .28     .07     .21        14.
      28 FEB 0130    3     .01     .01     .00         0.        *      28 FEB 1345   52     .18     .04     .14        13.
      28 FEB 0145    4     .01     .01     .00         0.        *      28 FEB 1400   53     .14     .03     .11         9.
      28 FEB 0200    5     .01     .01     .00         0.        *      28 FEB 1415   54     .08     .02     .07         7.
      28 FEB 0215    6     .01     .01     .00         0.        *      28 FEB 1430   55     .07     .01     .06         5.
      28 FEB 0230    7     .01     .01     .00         0.        *      28 FEB 1445   56     .06     .01     .05         3.
      28 FEB 0245    8     .01     .01     .00         0.        *      28 FEB 1500   57     .06     .01     .05         3.
      28 FEB 0300    9     .01     .01     .00         0.        *      28 FEB 1515   58     .05     .01     .04         2.
      28 FEB 0315   10     .01     .01     .00         0.        *      28 FEB 1530   59     .05     .01     .04         2.
      28 FEB 0330   11     .01     .01     .00         0.        *      28 FEB 1545   60     .04     .01     .04         2.
      28 FEB 0345   12     .01     .01     .00         0.        *      28 FEB 1600   61     .04     .01     .03         2.
      28 FEB 0400   13     .01     .01     .00         0.        *      28 FEB 1615   62     .05     .01     .04         1.
      28 FEB 0415   14     .01     .01     .00         0.        *      28 FEB 1630   63     .05     .01     .04         1.
      28 FEB 0430   15     .01     .01     .00         0.        *      28 FEB 1645   64     .04     .01     .04         1.
      28 FEB 0445   16     .01     .01     .00         0.        *      28 FEB 1700   65     .04     .01     .03         1.
      28 FEB 0500   17     .02     .02     .00         0.        *      28 FEB 1715   66     .04     .01     .03         1.
      28 FEB 0515   18     .02     .02     .00         0.        *      28 FEB 1730   67     .04     .01     .03         1.
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28 FEB 0530	19	.02	.02	.00	0.	*	28 FEB 1745	68	.04	.01	.03	1.
28 FEB 0545	20	.02	.02	.00	0.	*	28 FEB 1800	69	.04	.01	.03	1.
28 FEB 0600	21	.02	.02	.00	0.	*	28 FEB 1815	70	.03	.01	.03	1.
28 FEB 0615	22	.02	.02	.00	0.	*	28 FEB 1830	71	.03	.01	.03	1.
28 FEB 0630	23	.02	.02	.00	0.	*	28 FEB 1845	72	.03	.01	.03	1.
28 FEB 0645	24	.02	.02	.00	0.	*	28 FEB 1900	73	.03	.00	.03	1.
28 FEB 0700	25	.02	.02	.00	0.	*	28 FEB 1915	74	.02	.00	.02	1.
28 FEB 0715	26	.03	.03	.00	0.	*	28 FEB 1930	75	.02	.00	.02	1.
28 FEB 0730	27	.03	.03	.00	0.	*	28 FEB 1945	76	.02	.00	.02	1.
28 FEB 0745	28	.03	.03	.00	0.	*	28 FEB 2000	77	.02	.00	.01	1.
28 FEB 0800	29	.03	.03	.00	0.	*	28 FEB 2015	78	.02	.00	.01	1.
28 FEB 0815	30	.03	.03	.00	0.	*	28 FEB 2030	79	.02	.00	.01	1.
28 FEB 0830	31	.04	.04	.00	0.	*	28 FEB 2045	80	.02	.00	.01	1.
28 FEB 0845	32	.04	.04	.00	0.	*	28 FEB 2100	81	.02	.00	.01	1.
28 FEB 0900	33	.04	.04	.00	0.	*	28 FEB 2115	82	.02	.00	.01	1.
28 FEB 0915	34	.04	.04	.00	0.	*	28 FEB 2130	83	.02	.00	.01	1.
28 FEB 0930	35	.04	.04	.00	0.	*	28 FEB 2145	84	.01	.00	.01	1.
28 FEB 0945	36	.04	.04	.00	0.	*	28 FEB 2200	85	.01	.00	.01	0.
28 FEB 1000	37	.05	.04	.01	0.	*	28 FEB 2215	86	.01	.00	.01	0.
28 FEB 1015	38	.04	.03	.01	0.	*	28 FEB 2230	87	.01	.00	.01	0.
28 FEB 1030	39	.04	.04	.01	0.	*	28 FEB 2245	88	.01	.00	.01	0.
28 FEB 1045	40	.05	.04	.01	0.	*	28 FEB 2300	89	.01	.00	.01	0.
28 FEB 1100	41	.05	.04	.01	0.	*	28 FEB 2315	90	.01	.00	.01	0.
28 FEB 1115	42	.05	.04	.01	0.	*	28 FEB 2330	91	.01	.00	.01	0.
28 FEB 1130	43	.06	.04	.02	0.	*	28 FEB 2345	92	.01	.00	.01	0.
28 FEB 1145	44	.07	.05	.02	1.	*	1 MAR 0000	93	.01	.00	.01	0.
28 FEB 1200	45	.08	.05	.03	1.	*	1 MAR 0015	94	.01	.00	.01	0.
28 FEB 1215	46	.13	.08	.05	1.	*	1 MAR 0030	95	.01	.00	.01	0.
28 FEB 1230	47	.16	.09	.06	1.	*	1 MAR 0045	96	.01	.00	.01	0.
28 FEB 1245	48	.23	.12	.11	2.	*	1 MAR 0100	97	.01	.00	.01	0.
28 FEB 1300	49	.49	.22	.27	4.	*						
						*						

****

TOTAL RAINFALL = 5.20, TOTAL LOSS = 2.32, TOTAL EXCESS = 2.88

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.00-HR
+ (CFS)	(HR)					
		(CFS)				
+ 14.	12.50		4.	1.	1.	1.
		(INCHES)	2.332	2.858	2.858	2.858
		(AC-FT)	2.	2.	2.	2.

CUMULATIVE AREA = .01 SQ MI

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          **************
          *            *
46 KK     *    12PCHL  *
          *            *
          **************
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47 KO OUTPUT CONTROL VARIABLES

IPRNT	1	PRINT CONTROL
IPLOT	0	PLOT CONTROL
QSCAL	0.	HYDROGRAPH PLOT SCALE

STORAGE ROUTING THROUGH NORTH BRANCH CHANNEL

HYDROGRAPH ROUTING DATA

```
49 RS          STORAGE ROUTING
                    NSTPS          1  NUMBER OF SUBREACHES
                     ITYP       STOR  TYPE OF INITIAL CONDITION
                   RSVRIC        .00  INITIAL CONDITION
                        X        .00 WORKING R AND D COEFFICIENT

50 RC          NORMAL DEPTH CHANNEL ROUTING
                      ANL       .080  LEFT OVERBANK N-VALUE
                     ANCH       .030  MAIN CHANNEL N-VALUE
                      ANR       .080  RIGHT OVERBANK N-VALUE
                    RLNTH       400.  REACH LENGTH
                      SEL      .0063  ENERGY SLOPE
                    ELMAX       69.5  MAX. ELEV. FOR STORAGE/OUTFLOW CALCULATION

                                      CROSS-SECTION DATA
                        --- LEFT OVERBANK --- + ------ MAIN CHANNEL ------- + --- RIGHT OVERBANK ---
52 RY        ELEVATION    70.50    70.00    69.50    67.50    67.50    69.50    70.00    70.50
51 RX        DISTANCE       .00     5.00    10.00    11.00    17.00    18.00    23.00    28.00

                                                  ***

                                      COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

          STORAGE      .00      .01      .01      .02      .02      .03      .04      .04      .05      .06
          OUTFLOW      .00      .55     1.72     3.36     5.38     7.74    10.40    13.36    16.58    20.05
        ELEVATION    67.50    67.61    67.71    67.82    67.92    68.03    68.13    68.24    68.34    68.45

          STORAGE      .06      .07      .08      .08      .09      .10      .11      .11      .12      .13
          OUTFLOW    23.77    27.72    31.90    36.29    40.89    45.71    50.73    55.95    61.36    66.98
        ELEVATION    68.55    68.66    68.76    68.87    68.97    69.08    69.18    69.29    69.39    69.50

   WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN        1. TO       67.
               THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
               THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

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                                      HYDROGRAPH AT STATION   12PCHL

*****************************************************************************************************************************
                                          *                                          *
 DA MON HRMN ORD  OUTFLOW  STORAGE   STAGE * DA MON HRMN ORD  OUTFLOW  STORAGE   STAGE * DA MON HRMN ORD  OUTFLOW  STORAGE   STAGE
                                          *                                          *
 28 FEB 0100  1      0.       .0    67.5 * 28 FEB 0915  34      0.       .0    67.5 * 28 FEB 1730  67     136.       .2    70.8
 28 FEB 0115  2      0.       .0    67.5 * 28 FEB 0930  35      0.       .0    67.5 * 28 FEB 1745  68     126.       .2    70.6
 28 FEB 0130  3      0.       .0    67.5 * 28 FEB 0945  36      0.       .0    67.5 * 28 FEB 1800  69      86.       .2    69.9
 28 FEB 0145  4      0.       .0    67.5 * 28 FEB 1000  37      0.       .0    67.5 * 28 FEB 1815  70      61.       .1    69.4
 28 FEB 0200  5      0.       .0    67.5 * 28 FEB 1015  38      0.       .0    67.5 * 28 FEB 1830  71      60.       .1    69.4
 28 FEB 0215  6      0.       .0    67.5 * 28 FEB 1030  39      0.       .0    67.5 * 28 FEB 1845  72      54.       .1    69.3
 28 FEB 0230  7      0.       .0    67.5 * 28 FEB 1045  40      1.       .0    67.7 * 28 FEB 1900  73      53.       .1    69.2
 28 FEB 0245  8      0.       .0    67.5 * 28 FEB 1100  41      3.       .0    67.8 * 28 FEB 1915  74      49.       .1    69.1
 28 FEB 0300  9      0.       .0    67.5 * 28 FEB 1115  42      4.       .0    67.9 * 28 FEB 1930  75      45.       .1    69.1
 28 FEB 0315 10      0.       .0    67.5 * 28 FEB 1130  43      6.       .0    68.0 * 28 FEB 1945  76      40.       .1    68.9
 28 FEB 0330 11      0.       .0    67.5 * 28 FEB 1145  44      9.       .0    68.1 * 28 FEB 2000  77      37.       .1    68.9
 28 FEB 0345 12      0.       .0    67.5 * 28 FEB 1200  45     12.       .0    68.2 * 28 FEB 2015  78      35.       .1    68.8
 28 FEB 0400 13      0.       .0    67.5 * 28 FEB 1215  46     17.       .1    68.4 * 28 FEB 2030  79      31.       .1    68.7
 28 FEB 0415 14      0.       .0    67.5 * 28 FEB 1230  47     27.       .1    68.7 * 28 FEB 2045  80      29.       .1    68.7
 28 FEB 0430 15      0.       .0    67.5 * 28 FEB 1245  48     43.       .1    69.0 * 28 FEB 2100  81      29.       .1    68.7
 28 FEB 0445 16      0.       .0    67.5 * 28 FEB 1300  49     81.       .1    69.8 * 28 FEB 2115  82      27.       .1    68.6
 28 FEB 0500 17      0.       .0    67.5 * 28 FEB 1315  50    163.       .3    71.3 * 28 FEB 2130  83      27.       .1    68.6
 28 FEB 0515 18      0.       .0    67.5 * 28 FEB 1330  51    221.       .3    72.4 * 28 FEB 2145  84      26.       .1    68.6
 28 FEB 0530 19      0.       .0    67.5 * 28 FEB 1345  52    223.       .3    72.4 * 28 FEB 2200  85      26.       .1    68.6
 28 FEB 0545 20      0.       .0    67.5 * 28 FEB 1400  53    210.       .3    72.2 * 28 FEB 2215  86      25.       .1    68.6
 28 FEB 0600 21      0.       .0    67.5 * 28 FEB 1415  54    197.       .3    71.9 * 28 FEB 2230  87      26.       .1    68.6
 28 FEB 0615 22      0.       .0    67.5 * 28 FEB 1430  55    189.       .3    71.8 * 28 FEB 2245  88      25.       .1    68.6
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28 FEB 0630  23      0.      .0    67.5 * 28 FEB 1445  56     183.      .3    71.7 * 28 FEB 2300  89      24.      .1    68.6
28 FEB 0645  24      0.      .0    67.5 * 28 FEB 1500  57     179.      .3    71.6 * 28 FEB 2315  90      24.      .1    68.6
28 FEB 0700  25      0.      .0    67.5 * 28 FEB 1515  58     176.      .3    71.6 * 28 FEB 2330  91      24.      .1    68.6
28 FEB 0715  26      0.      .0    67.5 * 28 FEB 1530  59     174.      .3    71.5 * 28 FEB 2345  92      24.      .1    68.5
28 FEB 0730  27      0.      .0    67.5 * 28 FEB 1545  60     171.      .3    71.4 *  1 MAR 0000  93      23.      .1    6
28 FEB 0745  28      0.      .0    67.5 * 28 FEB 1600  61     168.      .3    71.4 *  1 MAR 0015  94      23.      .1    68.5
28 FEB 0800  29      0.      .0    67.5 * 28 FEB 1615  62     166.      .3    71.3 *  1 MAR 0030  95      23.      .1    68.5
28 FEB 0815  30      0.      .0    67.5 * 28 FEB 1630  63     163.      .3    71.3 *  1 MAR 0045  96      23.      .1    68.5
28 FEB 0830  31      0.      .0    67.5 * 28 FEB 1645  64     160.      .3    71.2 *  1 MAR 0100  97      23.      .1    68.5
28 FEB 0845  32      0.      .0    67.5 * 28 FEB 1700  65     155.      .2    71.1 *
28 FEB 0900  33      0.      .0    67.5 * 28 FEB 1715  66     147.      .2    71.0 *
                                       *                                          *
*****************************************************************************************************************************

 PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     24.00-HR
+  (CFS)       (HR)
                          (CFS)
+    223.     12.75                  152.         47.         47.         47.
                        (INCHES)    1.390       1.718       1.718       1.718
                         (AC-FT)     75.         93.         93.         93.

PEAK STORAGE   TIME                          MAXIMUM AVERAGE STORAGE
                                     6-HR       24-HR       72-HR     24.00-HR
+ (AC-FT)      (HR)
       0.     12.75                    0.          0.          0.          0.

 PEAK STAGE    TIME                          MAXIMUM AVERAGE STAGE
                                     6-HR       24-HR       72-HR     24.00-HR
+  (FEET)      (HR)
    72.42     12.75                  71.09       68.77       68.77       68.77

                        CUMULATIVE AREA =    1.01 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***


          **************
          *            *
  53 KK   *       13P  *
          *            *
          **************

  54 KO        OUTPUT CONTROL VARIABLES
                     IPRNT          1  PRINT CONTROL
                     IPLOT          0  PLOT CONTROL
                     QSCAL         0.  HYDROGRAPH PLOT SCALE
                              SCS RUNOFF CALCULATION

             SUBBASIN RUNOFF DATA

  56 BA        SUBBASIN CHARACTERISTICS
                     TAREA        .01  SUBBASIN AREA

               PRECIPITATION DATA

  57 PH                                DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
               ..... HYDRO-35 ......   ............... TP-40 ...............   ........... TP-49 ...........
               5-MIN  15-MIN  60-MIN    2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                 .50    1.10    2.10    2.70    3.00    3.60    4.50    5.20     .00     .00     .00     .00

                                                  STORM AREA =     .01
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58 LS          SCS LOSS RATE
                    STRTL        .86  INITIAL ABSTRACTION
                   CRVNBR      70.00  CURVE NUMBER
                    RTIMP        .00  PERCENT IMPERVIOUS AREA

   UD          SCS DIMENSIONLESS UNITGRAPH
                     TLAG        .49  LAG

                                                    ***

WARNING *** TIME INTERVAL IS GREATER THAN .29*LAG

                                          UNIT HYDROGRAPH
                                      12 END-OF-PERIOD ORDINATES
            2.       7.       7.       4.       2.       1.       1.       0.       0.       0.
            0.       0.
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HYDROGRAPH AT STATION 13P

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DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
28	FEB	0100	1	.00	.00	.00	0.	*	28	FEB	1315	50	1.10	.53	.57	3.
28	FEB	0115	2	.01	.01	.00	0.	*	28	FEB	1330	51	.28	.11	.17	6.
28	FEB	0130	3	.01	.01	.00	0.	*	28	FEB	1345	52	.18	.06	.11	6.
28	FEB	0145	4	.01	.01	.00	0.	*	28	FEB	1400	53	.14	.05	.09	5.
28	FEB	0200	5	.01	.01	.00	0.	*	28	FEB	1415	54	.08	.03	.06	3.
28	FEB	0215	6	.01	.01	.00	0.	*	28	FEB	1430	55	.07	.02	.05	3.
28	FEB	0230	7	.01	.01	.00	0.	*	28	FEB	1445	56	.06	.02	.04	2.
28	FEB	0245	8	.01	.01	.00	0.	*	28	FEB	1500	57	.06	.02	.04	1.
28	FEB	0300	9	.01	.01	.00	0.	*	28	FEB	1515	58	.05	.02	.04	1.
28	FEB	0315	10	.01	.01	.00	0.	*	28	FEB	1530	59	.05	.01	.03	1.
28	FEB	0330	11	.01	.01	.00	0.	*	28	FEB	1545	60	.04	.01	.03	1.
28	FEB	0345	12	.01	.01	.00	0.	*	28	FEB	1600	61	.04	.01	.03	1.
28	FEB	0400	13	.01	.01	.00	0.	*	28	FEB	1615	62	.05	.01	.03	1.
28	FEB	0415	14	.01	.01	.00	0.	*	28	FEB	1630	63	.05	.01	.03	1.
28	FEB	0430	15	.01	.01	.00	0.	*	28	FEB	1645	64	.04	.01	.03	1.
28	FEB	0445	16	.01	.01	.00	0.	*	28	FEB	1700	65	.04	.01	.03	1.
28	FEB	0500	17	.02	.02	.00	0.	*	28	FEB	1715	66	.04	.01	.03	1.
28	FEB	0515	18	.02	.02	.00	0.	*	28	FEB	1730	67	.04	.01	.03	1.
28	FEB	0530	19	.02	.02	.00	0.	*	28	FEB	1745	68	.04	.01	.03	1.
28	FEB	0545	20	.02	.02	.00	0.	*	28	FEB	1800	69	.04	.01	.03	1.
28	FEB	0600	21	.02	.02	.00	0.	*	28	FEB	1815	70	.03	.01	.02	1.
28	FEB	0615	22	.02	.02	.00	0.	*	28	FEB	1830	71	.03	.01	.02	1.
28	FEB	0630	23	.02	.02	.00	0.	*	28	FEB	1845	72	.03	.01	.02	1.
28	FEB	0645	24	.02	.02	.00	0.	*	28	FEB	1900	73	.03	.01	.02	1.
28	FEB	0700	25	.02	.02	.00	0.	*	28	FEB	1915	74	.02	.01	.01	1.
28	FEB	0715	26	.03	.03	.00	0.	*	28	FEB	1930	75	.02	.01	.01	0.
28	FEB	0730	27	.03	.03	.00	0.	*	28	FEB	1945	76	.02	.00	.01	0.
28	FEB	0745	28	.03	.03	.00	0.	*	28	FEB	2000	77	.02	.00	.01	0.
28	FEB	0800	29	.03	.03	.00	0.	*	28	FEB	2015	78	.02	.00	.01	0.
28	FEB	0815	30	.03	.03	.00	0.	*	28	FEB	2030	79	.02	.00	.01	0.
28	FEB	0830	31	.04	.04	.00	0.	*	28	FEB	2045	80	.02	.00	.01	0.
28	FEB	0845	32	.04	.04	.00	0.	*	28	FEB	2100	81	.02	.00	.01	0.
28	FEB	0900	33	.04	.04	.00	0.	*	28	FEB	2115	82	.02	.00	.01	0.
28	FEB	0915	34	.04	.04	.00	0.	*	28	FEB	2130	83	.02	.00	.01	0.
28	FEB	0930	35	.04	.04	.00	0.	*	28	FEB	2145	84	.01	.00	.01	0.
28	FEB	0945	36	.04	.04	.00	0.	*	28	FEB	2200	85	.01	.00	.01	0.
28	FEB	1000	37	.05	.05	.00	0.	*	28	FEB	2215	86	.01	.00	.01	0.
28	FEB	1015	38	.04	.04	.00	0.	*	28	FEB	2230	87	.01	.00	.01	0.
28	FEB	1030	39	.04	.04	.00	0.	*	28	FEB	2245	88	.01	.00	.01	0.
28	FEB	1045	40	.05	.05	.00	0.	*	28	FEB	2300	89	.01	.00	.01	0.
28	FEB	1100	41	.05	.05	.00	0.	*	28	FEB	2315	90	.01	.00	.01	0.

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28 FEB 1115   42    .05    .05    .00        0.      *     28 FEB 2330   91    .01    .00    .01        0.
28 FEB 1130   43    .06    .06    .01        0.      *     28 FEB 2345   92    .01    .00    .01        0.
28 FEB 1145   44    .07    .06    .01        0.      *      1 MAR 0000   93    .01    .00    .01        0.
28 FEB 1200   45    .08    .07    .01        0.      *      1 MAR 0015   94    .01    .00    .01        0.
28 FEB 1215   46    .13    .11    .02        0.      *      1 MAR 0030   95    .01    .00    .01        0.
28 FEB 1230   47    .16    .12    .03        0.      *      1 MAR 0045   96    .01    .00    .01        0.
28 FEB 1245   48    .23    .16    .06        1.      *      1 MAR 0100   97    .01    .00    .01        0.
28 FEB 1300   49    .49    .31    .18        1.      *
                                                      *
*****************************************************************************************************************

   TOTAL RAINFALL =    5.20, TOTAL LOSS =    3.01, TOTAL EXCESS =    2.19

 PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                    6-HR       24-HR       72-HR     24.00-HR
+  (CFS)       (HR)
                         (CFS)
+      6.     12.75                  2.          1.          1.          1.
                      (INCHES)    1.787       2.162       2.162       2.162
                       (AC-FT)       1.          1.          1.          1.

                       CUMULATIVE AREA =     .01 SQ MI



*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***


          **************
          *            *
  60 KK   *       19P  *
          *            *
          **************

  61 KO        OUTPUT CONTROL VARIABLES
                     IPRNT           1  PRINT CONTROL
                     IPLOT           0  PLOT CONTROL
                     QSCAL          0.  HYDROGRAPH PLOT SCALE
                              SCS RUNOFF CALCULATION

             SUBBASIN RUNOFF DATA

  63 BA        SUBBASIN CHARACTERISTICS
                     TAREA         .00  SUBBASIN AREA

               PRECIPITATION DATA

  64 PH                              DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
               ..... HYDRO-35 ......   ............... TP-40 ...............   ........... TP-49 ...........
               5-MIN  15-MIN  60-MIN    2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                 .50    1.10    2.10    2.70    3.00    3.60    4.50    5.20     .00     .00     .00     .00

                                                  STORM AREA =     .00

  65 LS        SCS LOSS RATE
                     STRTL         .86  INITIAL ABSTRACTION
                    CRVNBR       70.00  CURVE NUMBER
                     RTIMP         .00  PERCENT IMPERVIOUS AREA

  66 UD        SCS DIMENSIONLESS UNITGRAPH
                      TLAG         .34  LAG

                                                          ***

WARNING *** TIME INTERVAL IS GREATER THAN .29*LAG
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UNIT HYDROGRAPH
9 END-OF-PERIOD ORDINATES

2. 4. 2. 1. 0. 0. 0. 0. 0.

HYDROGRAPH AT STATION 19P

DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
28 FEB 0100	1	.00	.00	.00	0.	28 FEB 1315	50	1.10	.53	.57	2.
28 FEB 0115	2	.01	.01	.00	0.	28 FEB 1330	51	.28	.11	.17	3.
28 FEB 0130	3	.01	.01	.00	0.	28 FEB 1345	52	.18	.06	.11	2.
28 FEB 0145	4	.01	.01	.00	0.	28 FEB 1400	53	.14	.05	.09	2.
28 FEB 0200	5	.01	.01	.00	0.	28 FEB 1415	54	.08	.03	.06	1.
28 FEB 0215	6	.01	.01	.00	0.	28 FEB 1430	55	.07	.02	.05	1.
28 FEB 0230	7	.01	.01	.00	0.	28 FEB 1445	56	.06	.02	.04	1.
28 FEB 0245	8	.01	.01	.00	0.	28 FEB 1500	57	.06	.02	.04	1.
28 FEB 0300	9	.01	.01	.00	0.	28 FEB 1515	58	.05	.02	.04	0.
28 FEB 0315	10	.01	.01	.00	0.	28 FEB 1530	59	.05	.01	.03	0.
28 FEB 0330	11	.01	.01	.00	0.	28 FEB 1545	60	.04	.01	.03	0.
28 FEB 0345	12	.01	.01	.00	0.	28 FEB 1600	61	.04	.01	.03	0.
28 FEB 0400	13	.01	.01	.00	0.	28 FEB 1615	62	.05	.01	.03	0.
28 FEB 0415	14	.01	.01	.00	0.	28 FEB 1630	63	.05	.01	.03	0.
28 FEB 0430	15	.01	.01	.00	0.	28 FEB 1645	64	.04	.01	.03	0.
28 FEB 0445	16	.01	.01	.00	0.	28 FEB 1700	65	.04	.01	.03	0.
28 FEB 0500	17	.02	.02	.00	0.	28 FEB 1715	66	.04	.01	.03	0.
28 FEB 0515	18	.02	.02	.00	0.	28 FEB 1730	67	.04	.01	.03	0.
28 FEB 0530	19	.02	.02	.00	0.	28 FEB 1745	68	.04	.01	.03	0.
28 FEB 0545	20	.02	.02	.00	0.	28 FEB 1800	69	.04	.01	.03	0.
28 FEB 0600	21	.02	.02	.00	0.	28 FEB 1815	70	.03	.01	.02	0.
28 FEB 0615	22	.02	.02	.00	0.	28 FEB 1830	71	.03	.01	.02	0.
28 FEB 0630	23	.02	.02	.00	0.	28 FEB 1845	72	.03	.01	.02	0.
28 FEB 0645	24	.02	.02	.00	0.	28 FEB 1900	73	.03	.01	.02	0.
28 FEB 0700	25	.02	.02	.00	0.	28 FEB 1915	74	.02	.01	.01	0.
28 FEB 0715	26	.03	.03	.00	0.	28 FEB 1930	75	.02	.01	.01	0.
28 FEB 0730	27	.03	.03	.00	0.	28 FEB 1945	76	.02	.00	.01	0.
28 FEB 0745	28	.03	.03	.00	0.	28 FEB 2000	77	.02	.00	.01	0.
28 FEB 0800	29	.03	.03	.00	0.	28 FEB 2015	78	.02	.00	.01	0.
28 FEB 0815	30	.03	.03	.00	0.	28 FEB 2030	79	.02	.00	.01	0.
28 FEB 0830	31	.04	.04	.00	0.	28 FEB 2045	80	.02	.00	.01	0.
28 FEB 0845	32	.04	.04	.00	0.	28 FEB 2100	81	.02	.00	.01	0.
28 FEB 0900	33	.04	.04	.00	0.	28 FEB 2115	82	.02	.00	.01	0.
28 FEB 0915	34	.04	.04	.00	0.	28 FEB 2130	83	.02	.00	.01	0.
28 FEB 0930	35	.04	.04	.00	0.	28 FEB 2145	84	.01	.00	.01	0.
28 FEB 0945	36	.04	.04	.00	0.	28 FEB 2200	85	.01	.00	.01	0.
28 FEB 1000	37	.05	.05	.00	0.	28 FEB 2215	86	.01	.00	.01	0.
28 FEB 1015	38	.04	.04	.00	0.	28 FEB 2230	87	.01	.00	.01	0.
28 FEB 1030	39	.04	.04	.00	0.	28 FEB 2245	88	.01	.00	.01	0.
28 FEB 1045	40	.05	.05	.00	0.	28 FEB 2300	89	.01	.00	.01	0.
28 FEB 1100	41	.05	.05	.00	0.	28 FEB 2315	90	.01	.00	.01	0.
28 FEB 1115	42	.05	.05	.00	0.	28 FEB 2330	91	.01	.00	.01	0.
28 FEB 1130	43	.06	.06	.01	0.	28 FEB 2345	92	.01	.00	.01	0.
28 FEB 1145	44	.07	.06	.01	0.	1 MAR 0000	93	.01	.00	.01	0.
28 FEB 1200	45	.08	.07	.01	0.	1 MAR 0015	94	.01	.00	.01	0.
28 FEB 1215	46	.13	.11	.02	0.	1 MAR 0030	95	.01	.00	.01	0.
28 FEB 1230	47	.16	.12	.03	0.	1 MAR 0045	96	.01	.00	.01	0.
28 FEB 1245	48	.23	.16	.06	0.	1 MAR 0100	97	.01	.00	.01	0.
28 FEB 1300	49	.49	.31	.18	1.						

TOTAL RAINFALL = 5.20, TOTAL LOSS = 3.01, TOTAL EXCESS = 2.19

```
 PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                    6-HR       24-HR       72-HR     24.00-HR
+  (CFS)       (HR)
                          (CFS)
+       3.     12.50                  1.          0.          0.          0.
                        (INCHES)   1.792       2.169       2.169       2.169
                         (AC-FT)     0.          0.          0.          0.

                         CUMULATIVE AREA =     .00 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***


          **************
          *            *
 67 KK    *    19PCHL  *
          *            *
          **************

 68 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           1  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                              STORAGE ROUTING THROUGH RTE 93 E/W CHANNEL

             HYDROGRAPH ROUTING DATA

 70 RS          STORAGE ROUTING
                      NSTPS           1  NUMBER OF SUBREACHES
                       ITYP        STOR  TYPE OF INITIAL CONDITION
                     RSVRIC         .00  INITIAL CONDITION
                          X         .00 WORKING R AND D COEFFICIENT

 71 RC          NORMAL DEPTH CHANNEL ROUTING
                        ANL        .080  LEFT OVERBANK N-VALUE
                       ANCH        .030  MAIN CHANNEL N-VALUE
                        ANR        .080  RIGHT OVERBANK N-VALUE
                      RLNTH        430.  REACH LENGTH
                        SEL       .0070  ENERGY SLOPE
                      ELMAX        67.0  MAX. ELEV. FOR STORAGE/OUTFLOW CALCULATION

                                        CROSS-SECTION DATA
                        --- LEFT OVERBANK --- + ------ MAIN CHANNEL ------- + --- RIGHT OVERBANK ---
 73 RY        ELEVATION    68.00     67.50     67.00     66.00     66.00     67.00     67.50     68.00
 72 RX        DISTANCE       .00      5.00     10.00     11.00     14.00     15.00     20.00     25.00

                                                          ***

                                        COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

          STORAGE       .00       .00       .00       .00       .01       .01       .01       .01       .01       .02
          OUTFLOW       .00       .09       .29       .57       .92      1.34      1.81      2.35      2.94      3.58
        ELEVATION     66.00     66.05     66.11     66.16     66.21     66.26     66.32     66.37     66.42     66.47

          STORAGE       .02       .02       .02       .02       .03       .03       .03       .03       .04       .04
          OUTFLOW      4.28      5.03      5.84      6.69      7.60      8.56      9.58     10.64     11.76     12.93
        ELEVATION     66.53     66.58     66.63     66.68     66.74     66.79     66.84     66.89     66.95     67.00

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN        0. TO       13.
               THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
               THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)
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HYDROGRAPH AT STATION 19PCHL

DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE
28	FEB	0100	1	0.	.0	66.0	28	FEB	0915	34	0.	.0	66.0	28	FEB	1730	67	0.	.0	66.1
28	FEB	0115	2	0.	.0	66.0	28	FEB	0930	35	0.	.0	66.0	28	FEB	1745	68	0.	.0	66.1
28	FEB	0130	3	0.	.0	66.0	28	FEB	0945	36	0.	.0	66.0	28	FEB	1800	69	0.	.0	66.1
28	FEB	0145	4	0.	.0	66.0	28	FEB	1000	37	0.	.0	66.0	28	FEB	1815	70	0.	.0	66.1
28	FEB	0200	5	0.	.0	66.0	28	FEB	1015	38	0.	.0	66.0	28	FEB	1830	71	0.	.0	66.1
28	FEB	0215	6	0.	.0	66.0	28	FEB	1030	39	0.	.0	66.0	28	FEB	1845	72	0.	.0	66.1
28	FEB	0230	7	0.	.0	66.0	28	FEB	1045	40	0.	.0	66.0	28	FEB	1900	73	0.	.0	66.1
28	FEB	0245	8	0.	.0	66.0	28	FEB	1100	41	0.	.0	66.0	28	FEB	1915	74	0.	.0	66.1
28	FEB	0300	9	0.	.0	66.0	28	FEB	1115	42	0.	.0	66.0	28	FEB	1930	75	0.	.0	66.1
28	FEB	0315	10	0.	.0	66.0	28	FEB	1130	43	0.	.0	66.0	28	FEB	1945	76	0.	.0	66.1
28	FEB	0330	11	0.	.0	66.0	28	FEB	1145	44	0.	.0	66.0	28	FEB	2000	77	0.	.0	66.1
28	FEB	0345	12	0.	.0	66.0	28	FEB	1200	45	0.	.0	66.0	28	FEB	2015	78	0.	.0	66.1
28	FEB	0400	13	0.	.0	66.0	28	FEB	1215	46	0.	.0	66.0	28	FEB	2030	79	0.	.0	66.1
28	FEB	0415	14	0.	.0	66.0	28	FEB	1230	47	0.	.0	66.1	28	FEB	2045	80	0.	.0	66.1
28	FEB	0430	15	0.	.0	66.0	28	FEB	1245	48	0.	.0	66.1	28	FEB	2100	81	0.	.0	66.1
28	FEB	0445	16	0.	.0	66.0	28	FEB	1300	49	1.	.0	66.2	28	FEB	2115	82	0.	.0	66.1
28	FEB	0500	17	0.	.0	66.0	28	FEB	1315	50	2.	.0	66.3	28	FEB	2130	83	0.	.0	66.1
28	FEB	0515	18	0.	.0	66.0	28	FEB	1330	51	3.	.0	66.4	28	FEB	2145	84	0.	.0	66.1
28	FEB	0530	19	0.	.0	66.0	28	FEB	1345	52	3.	.0	66.4	28	FEB	2200	85	0.	.0	66.1
28	FEB	0545	20	0.	.0	66.0	28	FEB	1400	53	2.	.0	66.3	28	FEB	2215	86	0.	.0	66.1
28	FEB	0600	21	0.	.0	66.0	28	FEB	1415	54	1.	.0	66.3	28	FEB	2230	87	0.	.0	66.1
28	FEB	0615	22	0.	.0	66.0	28	FEB	1430	55	1.	.0	66.2	28	FEB	2245	88	0.	.0	66.1
28	FEB	0630	23	0.	.0	66.0	28	FEB	1445	56	1.	.0	66.2	28	FEB	2300	89	0.	.0	66.1
	FEB	0645	24	0.	.0	66.0	28	FEB	1500	57	1.	.0	66.2	28	FEB	2315	90	0.	.0	66.1
	FEB	0700	25	0.	.0	66.0	28	FEB	1515	58	0.	.0	66.1	28	FEB	2330	91	0.	.0	66.1
28	FEB	0715	26	0.	.0	66.0	28	FEB	1530	59	0.	.0	66.1	28	FEB	2345	92	0.	.0	66.1
28	FEB	0730	27	0.	.0	66.0	28	FEB	1545	60	0.	.0	66.1	1	MAR	0000	93	0.	.0	66.1
28	FEB	0745	28	0.	.0	66.0	28	FEB	1600	61	0.	.0	66.1	1	MAR	0015	94	0.	.0	66.1
28	FEB	0800	29	0.	.0	66.0	28	FEB	1615	62	0.	.0	66.1	1	MAR	0030	95	0.	.0	66.1
28	FEB	0815	30	0.	.0	66.0	28	FEB	1630	63	0.	.0	66.1	1	MAR	0045	96	0.	.0	66.1
28	FEB	0830	31	0.	.0	66.0	28	FEB	1645	64	0.	.0	66.1	1	MAR	0100	97	0.	.0	66.1
28	FEB	0845	32	0.	.0	66.0	28	FEB	1700	65	0.	.0	66.1							
28	FEB	0900	33	0.	.0	66.0	28	FEB	1715	66	0.	.0	66.1							

PEAK FLOW (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	24.00-HR
3.	12.50	(CFS)	1.	0.	0.	0.
		(INCHES)	1.791	2.162	2.162	2.162
		(AC-FT)	0.	0.	0.	0.

PEAK STORAGE (AC-FT)	TIME (HR)	MAXIMUM AVERAGE STORAGE 6-HR	24-HR	72-HR	24.00-HR
0.	12.50	0.	0.	0.	0.

PEAK STAGE (FEET)	TIME (HR)	MAXIMUM AVERAGE STAGE 6-HR	24-HR	72-HR	24.00-HR
66.44	12.50	66.17	66.06	66.06	66.06

CUMULATIVE AREA = .00 SQ MI

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*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

          **************
          *            *
 77 KK    *      20P   *
          *            *
          **************

 78 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           1  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                               SCS RUNOFF CALCULATION

              SUBBASIN RUNOFF DATA

 80 BA          SUBBASIN CHARACTERISTICS
                      TAREA         .02  SUBBASIN AREA

                PRECIPITATION DATA

 81 PH                                DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
                ..... HYDRO-35 ......   ............... TP-40 ...............   ........... TP-49 ...........
                5-MIN  15-MIN  60-MIN    2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                  .50    1.10    2.10    2.70    3.00    3.60    4.50    5.20     .00     .00     .00     .00

                                                   STORM AREA =     .02

 82 LS          SCS LOSS RATE
                      STRTL         .53  INITIAL ABSTRACTION
                     CRVNBR       79.00  CURVE NUMBER
                      RTIMP         .00  PERCENT IMPERVIOUS AREA

 83 UD          SCS DIMENSIONLESS UNITGRAPH
                       TLAG         .32  LAG

                                                        ***

WARNING *** TIME INTERVAL IS GREATER THAN .29*LAG

                                                   UNIT HYDROGRAPH
                                              8 END-OF-PERIOD ORDINATES
              11.       18.        9.        4.        1.        1.        0.        0.

*****************************************************************************************************************************************

                                              HYDROGRAPH AT STATION      20P

*****************************************************************************************************************************************
                                                                 *
     DA MON HRMN  ORD    RAIN    LOSS  EXCESS     COMP Q        *      DA MON HRMN  ORD    RAIN    LOSS  EXCESS     COMP Q
                                                                 *
     28 FEB 0100    1     .00     .00     .00         0.        *      28 FEB 1315   50    1.10     .33     .77        15.
     28 FEB 0115    2     .01     .01     .00         0.        *      28 FEB 1330   51     .28     .06     .22        20.
     28 FEB 0130    3     .01     .01     .00         0.        *      28 FEB 1345   52     .18     .04     .14        14.
     28 FEB 0145    4     .01     .01     .00         0.        *      28 FEB 1400   53     .14     .03     .11         9.
     28 FEB 0200    5     .01     .01     .00         0.        *      28 FEB 1415   54     .08     .02     .07         6.
     28 FEB 0215    6     .01     .01     .00         0.        *      28 FEB 1430   55     .07     .01     .06         4.
     28 FEB 0230    7     .01     .01     .00         0.        *      28 FEB 1445   56     .06     .01     .05         3.
     28 FEB 0245    8     .01     .01     .00         0.        *      28 FEB 1500   57     .06     .01     .05         3.
     28 FEB 0300    9     .01     .01     .00         0.        *      28 FEB 1515   58     .05     .01     .04         2.
     28 FEB 0315   10     .01     .01     .00         0.        *      28 FEB 1530   59     .05     .01     .04         2.
     28 FEB 0330   11     .01     .01     .00         0.        *      28 FEB 1545   60     .04     .01     .04         2.
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28 FEB 0345	12	.01	.01	.00	0.	*	28 FEB 1600	61	.04	.01	.03	2.
28 FEB 0400	13	.01	.01	.00	0.	*	28 FEB 1615	62	.05	.01	.04	2.
28 FEB 0415	14	.01	.01	.00	0.	*	28 FEB 1630	63	.05	.01	.04	2.
28 FEB 0430	15	.01	.01	.00	0.	*	28 FEB 1645	64	.04	.01	.04	2.
28 FEB 0445	16	.01	.01	.00	0.	*	28 FEB 1700	65	.04	.01	.03	2.
28 FEB 0500	17	.02	.02	.00	0.	*	28 FEB 1715	66	.04	.01	.03	2.
28 FEB 0515	18	.02	.02	.00	0.	*	28 FEB 1730	67	.04	.01	.03	1.
28 FEB 0530	19	.02	.02	.00	0.	*	28 FEB 1745	68	.04	.01	.03	1.
28 FEB 0545	20	.02	.02	.00	0.	*	28 FEB 1800	69	.04	.01	.03	1.
28 FEB 0600	21	.02	.02	.00	0.	*	28 FEB 1815	70	.03	.01	.03	1.
28 FEB 0615	22	.02	.02	.00	0.	*	28 FEB 1830	71	.03	.00	.03	1.
28 FEB 0630	23	.02	.02	.00	0.	*	28 FEB 1845	72	.03	.00	.03	1.
28 FEB 0645	24	.02	.02	.00	0.	*	28 FEB 1900	73	.03	.00	.03	1.
28 FEB 0700	25	.02	.02	.00	0.	*	28 FEB 1915	74	.02	.00	.02	1.
28 FEB 0715	26	.03	.03	.00	0.	*	28 FEB 1930	75	.02	.00	.02	1.
28 FEB 0730	27	.03	.03	.00	0.	*	28 FEB 1945	76	.02	.00	.02	1.
28 FEB 0745	28	.03	.03	.00	0.	*	28 FEB 2000	77	.02	.00	.02	1.
28 FEB 0800	29	.03	.03	.00	0.	*	28 FEB 2015	78	.02	.00	.01	1.
28 FEB 0815	30	.03	.03	.00	0.	*	28 FEB 2030	79	.02	.00	.01	1.
28 FEB 0830	31	.04	.04	.00	0.	*	28 FEB 2045	80	.02	.00	.01	1.
28 FEB 0845	32	.04	.04	.00	0.	*	28 FEB 2100	81	.02	.00	.01	1.
28 FEB 0900	33	.04	.04	.00	0.	*	28 FEB 2115	82	.02	.00	.01	1.
28 FEB 0915	34	.04	.04	.00	0.	*	28 FEB 2130	83	.02	.00	.01	1.
28 FEB 0930	35	.04	.04	.00	0.	*	28 FEB 2145	84	.01	.00	.01	1.
28 FEB 0945	36	.04	.04	.01	0.	*	28 FEB 2200	85	.01	.00	.01	1.
28 FEB 1000	37	.05	.04	.01	0.	*	28 FEB 2215	86	.01	.00	.01	1.
28 FEB 1015	38	.04	.03	.01	0.	*	28 FEB 2230	87	.01	.00	.01	1.
28 FEB 1030	39	.04	.03	.01	0.	*	28 FEB 2245	88	.01	.00	.01	1.
28 FEB 1045	40	.05	.04	.01	0.	*	28 FEB 2300	89	.01	.00	.01	1.
28 FEB 1100	41	.05	.04	.01	0.	*	28 FEB 2315	90	.01	.00	.01	1.
28 FEB 1115	42	.05	.04	.02	1.	*	28 FEB 2330	91	.01	.00	.01	0.
28 FEB 1130	43	.06	.04	.02	1.	*	28 FEB 2345	92	.01	.00	.01	0.
28 FEB 1145	44	.07	.04	.02	1.	*	1 MAR 0000	93	.01	.00	.01	0.
28 FEB 1200	45	.08	.05	.03	1.	*	1 MAR 0015	94	.01	.00	.01	0.
28 FEB 1215	46	.13	.08	.05	1.	*	1 MAR 0030	95	.01	.00	.01	0.
28 FEB 1230	47	.16	.09	.07	2.	*	1 MAR 0045	96	.01	.00	.01	0.
28 FEB 1245	48	.23	.11	.11	3.	*	1 MAR 0100	97	.01	.00	.01	0.
28 FEB 1300	49	.49	.21	.28	6.	*						
						*						

****

TOTAL RAINFALL = 5.20, TOTAL LOSS = 2.23, TOTAL EXCESS = 2.97

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.00-HR
+ (CFS)	(HR)					
		(CFS)				
+ 20.	12.50		4.	1.	1.	1.
		(INCHES)	2.407	2.956	2.956	2.956
		(AC-FT)	2.	3.	3.	3.

CUMULATIVE AREA = .02 SQ MI

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              **************
              *            *
      KK      *    20PSWP  *
              *            *
              **************
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85 KO OUTPUT CONTROL VARIABLES

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                IPRNT          1  PRINT CONTROL
                IPLOT          0  PLOT CONTROL
                QSCAL         0.  HYDROGRAPH PLOT SCALE
                        ROUTING THROUGH WETLAND 3B

          HYDROGRAPH ROUTING DATA

 87 RS        STORAGE ROUTING
                NSTPS          1  NUMBER OF SUBREACHES
                 ITYP       ELEV  TYPE OF INITIAL CONDITION
                RSVRIC      66.50  INITIAL CONDITION
                    X        .00 WORKING R AND D COEFFICIENT

 88 SA          AREA        1.1       1.6       3.7

 89 SE        ELEVATION     66.50     67.20     68.20

 90 SS        SPILLWAY
                 CREL       68.10  SPILLWAY CREST ELEVATION
                SPWID       30.00  SPILLWAY WIDTH
                 COQW        3.00  WEIR COEFFICIENT
                 EXPW        1.50  EXPONENT OF HEAD

                                                  ***

                                  COMPUTED STORAGE-ELEVATION DATA

        STORAGE       .00       .93      3.51
      ELEVATION     66.50     67.20     68.20

                                  COMPUTED OUTFLOW-ELEVATION DATA

        OUTFLOW       .00       .00       .00       .00       .01       .03       .06       .11       .17       .25
      ELEVATION     66.50     68.10     68.10     68.10     68.10     68.10     68.11     68.11     68.12     68.12

        OUTFLOW       .36       .49       .65       .84      1.07      1.34      1.65      2.00      2.40      2.85
      ELEVATION     68.13     68.13     68.14     68.14     68.15     68.16     68.17     68.18     68.19     68.20

                                  COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

        STORAGE       .00       .93      3.15      3.19      3.24      3.29      3.34      3.40      3.47      3.51
        OUTFLOW       .00       .00       .00       .11       .36       .65      1.07      1.65      2.40      2.85
      ELEVATION     66.50     67.20     68.10     68.11     68.13     68.14     68.15     68.17     68.19     68.20

*****************************************************************************************************************************

                                  HYDROGRAPH AT STATION   20PSWP

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                                                *                                                *
 DA MON HRMN ORD  OUTFLOW  STORAGE   STAGE * DA MON HRMN ORD  OUTFLOW  STORAGE   STAGE * DA MON HRMN ORD  OUTFLOW  STORAGE   STAGE
                                                *                                                *
 28 FEB 0100   1      0.       .0    66.5 * 28 FEB 0915  34      0.       .0    66.5 * 28 FEB 1730  67      0.      2.2    67.7
 28 FEB 0115   2      0.       .0    66.5 * 28 FEB 0930  35      0.       .0    66.5 * 28 FEB 1745  68      0.      2.2    67.7
 28 FEB 0130   3      0.       .0    66.5 * 28 FEB 0945  36      0.       .0    66.5 * 28 FEB 1800  69      0.      2.3    67.7
 28 FEB 0145   4      0.       .0    66.5 * 28 FEB 1000  37      0.       .0    66.5 * 28 FEB 1815  70      0.      2.3    67.8
 28 FEB 0200   5      0.       .0    66.5 * 28 FEB 1015  38      0.       .0    66.5 * 28 FEB 1830  71      0.      2.3    67.8
 28 FEB 0215   6      0.       .0    66.5 * 28 FEB 1030  39      0.       .0    66.5 * 28 FEB 1845  72      0.      2.4    67
 28 FEB 0230   7      0.       .0    66.5 * 28 FEB 1045  40      0.       .0    66.5 * 28 FEB 1900  73      0.      2.4    6
 28 FEB 0245   8      0.       .0    66.5 * 28 FEB 1100  41      0.       .0    66.5 * 28 FEB 1915  74      0.      2.4    67.8
 28 FEB 0300   9      0.       .0    66.5 * 28 FEB 1115  42      0.       .0    66.5 * 28 FEB 1930  75      0.      2.4    67.8
 28 FEB 0315  10      0.       .0    66.5 * 28 FEB 1130  43      0.       .1    66.5 * 28 FEB 1945  76      0.      2.4    67.8
 28 FEB 0330  11      0.       .0    66.5 * 28 FEB 1145  44      0.       .1    66.6 * 28 FEB 2000  77      0.      2.5    67.8
 28 FEB 0345  12      0.       .0    66.5 * 28 FEB 1200  45      0.       .1    66.6 * 28 FEB 2015  78      0.      2.5    67.8
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28 FEB 0400	13	0.	.0	66.5	*	28 FEB 1215	46	0.	.1	66.6	*	28 FEB 2030	79	0.	2.5	67.8
28 FEB 0415	14	0.	.0	66.5	*	28 FEB 1230	47	0.	.2	66.6	*	28 FEB 2045	80	0.	2.5	67.8
28 FEB 0430	15	0.	.0	66.5	*	28 FEB 1245	48	0.	.2	66.7	*	28 FEB 2100	81	0.	2.5	67.8
28 FEB 0445	16	0.	.0	66.5	*	28 FEB 1300	49	0.	.3	66.7	*	28 FEB 2115	82	0.	2.5	67.8
FEB 0500	17	0.	.0	66.5	*	28 FEB 1315	50	0.	.5	66.9	*	28 FEB 2130	83	0.	2.5	67.8
FEB 0515	18	0.	.0	66.5	*	28 FEB 1330	51	0.	.9	67.2	*	28 FEB 2145	84	0.	2.5	67.9
28 FEB 0530	19	0.	.0	66.5	*	28 FEB 1345	52	0.	1.2	67.3	*	28 FEB 2200	85	0.	2.6	67.9
28 FEB 0545	20	0.	.0	66.5	*	28 FEB 1400	53	0.	1.4	67.4	*	28 FEB 2215	86	0.	2.6	67.9
28 FEB 0600	21	0.	.0	66.5	*	28 FEB 1415	54	0.	1.6	67.5	*	28 FEB 2230	87	0.	2.6	67.9
28 FEB 0615	22	0.	.0	66.5	*	28 FEB 1430	55	0.	1.7	67.5	*	28 FEB 2245	88	0.	2.6	67.9
28 FEB 0630	23	0.	.0	66.5	*	28 FEB 1445	56	0.	1.8	67.5	*	28 FEB 2300	89	0.	2.6	67.9
28 FEB 0645	24	0.	.0	66.5	*	28 FEB 1500	57	0.	1.8	67.6	*	28 FEB 2315	90	0.	2.6	67.9
28 FEB 0700	25	0.	.0	66.5	*	28 FEB 1515	58	0.	1.9	67.6	*	28 FEB 2330	91	0.	2.6	67.9
28 FEB 0715	26	0.	.0	66.5	*	28 FEB 1530	59	0.	1.9	67.6	*	28 FEB 2345	92	0.	2.6	67.9
28 FEB 0730	27	0.	.0	66.5	*	28 FEB 1545	60	0.	2.0	67.6	*	1 MAR 0000	93	0.	2.6	67.9
28 FEB 0745	28	0.	.0	66.5	*	28 FEB 1600	61	0.	2.0	67.6	*	1 MAR 0015	94	0.	2.7	67.9
28 FEB 0800	29	0.	.0	66.5	*	28 FEB 1615	62	0.	2.0	67.7	*	1 MAR 0030	95	0.	2.7	67.9
28 FEB 0815	30	0.	.0	66.5	*	28 FEB 1630	63	0.	2.1	67.7	*	1 MAR 0045	96	0.	2.7	67.9
28 FEB 0830	31	0.	.0	66.5	*	28 FEB 1645	64	0.	2.1	67.7	*	1 MAR 0100	97	0.	2.7	67.9
28 FEB 0845	32	0.	.0	66.5	*	28 FEB 1700	65	0.	2.1	67.7	*					
28 FEB 0900	33	0.	.0	66.5	*	28 FEB 1715	66	0.	2.2	67.7	*					
					*						*					

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PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.00-HR
+ (CFS)	(HR)					
		(CFS)				
+ 0.	.25		0.	0.	0.	0.
		(INCHES)	.000	.000	.000	.000
		(AC-FT)	0.	0.	0.	0.

K STORAGE	TIME	MAXIMUM AVERAGE STORAGE			
		6-HR	24-HR	72-HR	24.00-HR
+ (AC-FT)	(HR)				
3.	24.00	3.	1.	1.	1.

PEAK STAGE	TIME	MAXIMUM AVERAGE STAGE			
		6-HR	24-HR	72-HR	24.00-HR
+ (FEET)	(HR)				
67.91	24.00	67.86	67.11	67.11	67.11

CUMULATIVE AREA = .02 SQ MI

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            **************
            *            *
  91 KK     *       14P  *
            *            *
            **************

  92 KO          OUTPUT CONTROL VARIABLES
                       IPRNT           1  PRINT CONTROL
                       IPLOT           0  PLOT CONTROL
                       QSCAL          0.  HYDROGRAPH PLOT SCALE
                               SCS RUNOFF CALCULATION

              SUBBASIN RUNOFF DATA

  94 BA          SUBBASIN CHARACTERISTICS
                       TAREA         .04  SUBBASIN AREA
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PRECIPITATION DATA

95 PH DEPTHS FOR 0-PERCENT HYPOTHETICAL STORM

..... HYDRO-35			..... TP-40					..... TP-49			
5-MIN	15-MIN	60-MIN	2-HR	3-HR	6-HR	12-HR	24-HR	2-DAY	4-DAY	7-DAY	10-DAY
.50	1.10	2.10	2.70	3.00	3.60	4.50	5.20	.00	.00	.00	.00

STORM AREA = .04

96 LS SCS LOSS RATE

STRTL	.56	INITIAL ABSTRACTION
CRVNBR	78.00	CURVE NUMBER
RTIMP	.00	PERCENT IMPERVIOUS AREA

97 UD SCS DIMENSIONLESS UNITGRAPH

TLAG	.45	LAG

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WARNING *** TIME INTERVAL IS GREATER THAN .29*LAG

UNIT HYDROGRAPH
11 END-OF-PERIOD ORDINATES

11.	30.	26.	13.	7.	3.	2.	1.	0.	0.
0.									

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HYDROGRAPH AT STATION 14P

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DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
28 FEB 0100	1	.00	.00	.00	0.	*	28 FEB 1315	50	1.10	.35	.75	21.
28 FEB 0115	2	.01	.01	.00	0.	*	28 FEB 1330	51	.28	.07	.21	34.
28 FEB 0130	3	.01	.01	.00	0.	*	28 FEB 1345	52	.18	.04	.14	32.
28 FEB 0145	4	.01	.01	.00	0.	*	28 FEB 1400	53	.14	.03	.11	23.
28 FEB 0200	5	.01	.01	.00	0.	*	28 FEB 1415	54	.08	.02	.07	16.
28 FEB 0215	6	.01	.01	.00	0.	*	28 FEB 1430	55	.07	.01	.06	12.
28 FEB 0230	7	.01	.01	.00	0.	*	28 FEB 1445	56	.06	.01	.05	9.
28 FEB 0245	8	.01	.01	.00	0.	*	28 FEB 1500	57	.06	.01	.05	7.
28 FEB 0300	9	.01	.01	.00	0.	*	28 FEB 1515	58	.05	.01	.04	5.
28 FEB 0315	10	.01	.01	.00	0.	*	28 FEB 1530	59	.05	.01	.04	5.
28 FEB 0330	11	.01	.01	.00	0.	*	28 FEB 1545	60	.04	.01	.04	4.
28 FEB 0345	12	.01	.01	.00	0.	*	28 FEB 1600	61	.04	.01	.03	4.
28 FEB 0400	13	.01	.01	.00	0.	*	28 FEB 1615	62	.05	.01	.04	4.
28 FEB 0415	14	.01	.01	.00	0.	*	28 FEB 1630	63	.05	.01	.04	3.
28 FEB 0430	15	.01	.01	.00	0.	*	28 FEB 1645	64	.04	.01	.04	3.
28 FEB 0445	16	.01	.01	.00	0.	*	28 FEB 1700	65	.04	.01	.03	3.
28 FEB 0500	17	.02	.02	.00	0.	*	28 FEB 1715	66	.04	.01	.03	3.
28 FEB 0515	18	.02	.02	.00	0.	*	28 FEB 1730	67	.04	.01	.03	3.
28 FEB 0530	19	.02	.02	.00	0.	*	28 FEB 1745	68	.04	.01	.03	3.
28 FEB 0545	20	.02	.02	.00	0.	*	28 FEB 1800	69	.04	.01	.03	3.
28 FEB 0600	21	.02	.02	.00	0.	*	28 FEB 1815	70	.03	.01	.03	3.
28 FEB 0615	22	.02	.02	.00	0.	*	28 FEB 1830	71	.03	.01	.03	3.
28 FEB 0630	23	.02	.02	.00	0.	*	28 FEB 1845	72	.03	.01	.03	3.
28 FEB 0645	24	.02	.02	.00	0.	*	28 FEB 1900	73	.03	.00	.03	3.
28 FEB 0700	25	.02	.02	.00	0.	*	28 FEB 1915	74	.02	.00	.02	2.
28 FEB 0715	26	.03	.03	.00	0.	*	28 FEB 1930	75	.02	.00	.02	2.
28 FEB 0730	27	.03	.03	.00	0.	*	28 FEB 1945	76	.02	.00	.02	2.
28 FEB 0745	28	.03	.03	.00	0.	*	28 FEB 2000	77	.02	.00	.01	2.
28 FEB 0800	29	.03	.03	.00	0.	*	28 FEB 2015	78	.02	.00	.01	1.
28 FEB 0815	30	.03	.03	.00	0.	*	28 FEB 2030	79	.02	.00	.01	1.
28 FEB 0830	31	.04	.04	.00	0.	*	28 FEB 2045	80	.02	.00	.01	1.

28 FEB 0845	32	.04	.04	.00	0.	*	28 FEB 2100	81	.02	.00	.01	1.
28 FEB 0900	33	.04	.04	.00	0.	*	28 FEB 2115	82	.02	.00	.01	1.
28 FEB 0915	34	.04	.04	.00	0.	*	28 FEB 2130	83	.02	.00	.01	1.
28 FEB 0930	35	.04	.04	.00	0.	*	28 FEB 2145	84	.01	.00	.01	1.
28 FEB 0945	36	.04	.04	.00	0.	*	28 FEB 2200	85	.01	.00	.01	1.
28 FEB 1000	37	.05	.04	.01	0.	*	28 FEB 2215	86	.01	.00	.01	1.
28 FEB 1015	38	.04	.03	.01	0.	*	28 FEB 2230	87	.01	.00	.01	1.
28 FEB 1030	39	.04	.04	.01	1.	*	28 FEB 2245	88	.01	.00	.01	1.
28 FEB 1045	40	.05	.04	.01	1.	*	28 FEB 2300	89	.01	.00	.01	1.
28 FEB 1100	41	.05	.04	.01	1.	*	28 FEB 2315	90	.01	.00	.01	1.
28 FEB 1115	42	.05	.04	.01	1.	*	28 FEB 2330	91	.01	.00	.01	1.
28 FEB 1130	43	.06	.04	.02	1.	*	28 FEB 2345	92	.01	.00	.01	1.
28 FEB 1145	44	.07	.05	.02	1.	*	1 MAR 0000	93	.01	.00	.01	1.
28 FEB 1200	45	.08	.05	.03	2.	*	1 MAR 0015	94	.01	.00	.01	1.
28 FEB 1215	46	.13	.08	.05	2.	*	1 MAR 0030	95	.01	.00	.01	1.
28 FEB 1230	47	.16	.09	.06	3.	*	1 MAR 0045	96	.01	.00	.01	1.
28 FEB 1245	48	.23	.12	.11	5.	*	1 MAR 0100	97	.01	.00	.01	1.
28 FEB 1300	49	.49	.22	.27	9.	*						
						*						

****

TOTAL RAINFALL = 5.20, TOTAL LOSS = 2.32, TOTAL EXCESS = 2.88

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	24.00-HR
+ (CFS)	(HR)					
		(CFS)				
+ 34.	12.50		9.	3.	3.	3.
		(INCHES)	2.332	2.857	2.857	2.857
		(AC-FT)	4.	5.	5.	5.

CUMULATIVE AREA = .04 SQ MI

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            *            *
101 KK      *    14PCHL  *
            *            *
            **************

102 KO          OUTPUT CONTROL VARIABLES
                      IPRNT          1  PRINT CONTROL
                      IPLOT          0  PLOT CONTROL
                      QSCAL         0.  HYDROGRAPH PLOT SCALE
                               STORAGE ROUTING THROUGH NORTH BRANCH TO COMMERCE WAY

                HYDROGRAPH ROUTING DATA

104 RS          STORAGE ROUTING
                      NSTPS          1  NUMBER OF SUBREACHES
                       ITYP       ELEV  TYPE OF INITIAL CONDITION
                      RSVRIC     61.60  INITIAL CONDITION
                          X        .00 WORKING R AND D COEFFICIENT

105 SA                AREA         .0       .5       .7       .9      1.3

  5 SE          ELEVATION      61.60    64.00    64.50    65.00    66.00

107 SL          LOW-LEVEL OUTLET
                      ELEVL      62.60  ELEVATION AT CENTER OF OUTLET
                      CAREA       3.14  CROSS-SECTIONAL AREA
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                    COQL        .60  COEFFICIENT
                    EXPL        .50  EXPONENT OF HEAD

108 SS        SPILLWAY
                    CREL      64.90  SPILLWAY CREST ELEVATION
                   SPWID        .00  SPILLWAY WIDTH
                    COQW        .00  WEIR COEFFICIENT
                    EXPW       1.50  EXPONENT OF HEAD
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COMPUTED STORAGE-ELEVATION DATA

STORAGE	.00	.41	.72	1.14	2.24
ELEVATION	61.60	64.00	64.50	65.00	66.00

COMPUTED OUTFLOW-ELEVATION DATA

OUTFLOW	.00	.00	14.61	15.41	16.30	17.30	18.43	19.71	21.19	22.91
ELEVATION	61.60	62.60	63.54	63.64	63.76	63.91	64.09	64.30	64.57	64.90

COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

STORAGE	.00	.03	.22	.25	.30	.37	.41	.46	.59	.72
OUTFLOW	.00	.00	14.61	15.41	16.30	17.30	17.88	18.43	19.71	20.83
ELEVATION	61.60	62.60	63.54	63.64	63.76	63.91	64.00	64.09	64.30	64.50

STORAGE	.77	1.05	1.14	2.24
OUTFLOW	21.19	22.91	23.41	27.86
ELEVATION	64.57	64.90	65.00	66.00

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HYDROGRAPH AT STATION 14PCHL

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DA MON HRMN	ORD	OUTFLOW	STORAGE	STAGE	*	DA MON HRMN	ORD	OUTFLOW	STORAGE	STAGE	*	DA MON HRMN	ORD	OUTFLOW	STORAGE	STAGE
28 FEB 0100	1	0.	.0	61.6	*	28 FEB 0915	34	0.	.0	61.6	*	28 FEB 1730	67	145.	31.2	92.3
28 FEB 0115	2	0.	.0	61.6	*	28 FEB 0930	35	0.	.0	61.7	*	28 FEB 1745	68	144.	31.0	92.1
28 FEB 0130	3	0.	.0	61.6	*	28 FEB 0945	36	0.	.0	61.9	*	28 FEB 1800	69	142.	30.3	91.5
28 FEB 0145	4	0.	.0	61.6	*	28 FEB 1000	37	0.	.0	62.1	*	28 FEB 1815	70	136.	29.0	90.4
28 FEB 0200	5	0.	.0	61.6	*	28 FEB 1015	38	0.	.0	62.5	*	28 FEB 1830	71	131.	27.6	89.1
28 FEB 0215	6	0.	.0	61.6	*	28 FEB 1030	39	0.	.0	62.6	*	28 FEB 1845	72	125.	26.2	87.8
28 FEB 0230	7	0.	.0	61.6	*	28 FEB 1045	40	1.	.0	62.7	*	28 FEB 1900	73	119.	24.9	86.6
28 FEB 0245	8	0.	.0	61.6	*	28 FEB 1100	41	3.	.1	62.8	*	28 FEB 1915	74	114.	23.6	85.4
28 FEB 0300	9	0.	.0	61.6	*	28 FEB 1115	42	4.	.1	62.9	*	28 FEB 1930	75	109.	22.3	84.2
28 FEB 0315	10	0.	.0	61.6	*	28 FEB 1130	43	6.	.1	63.0	*	28 FEB 1945	76	104.	21.0	83.1
28 FEB 0330	11	0.	.0	61.6	*	28 FEB 1145	44	9.	.1	63.2	*	28 FEB 2000	77	99.	19.8	81.9
28 FEB 0345	12	0.	.0	61.6	*	28 FEB 1200	45	12.	.2	63.3	*	28 FEB 2015	78	94.	18.6	80.8
28 FEB 0400	13	0.	.0	61.6	*	28 FEB 1215	46	15.	.2	63.6	*	28 FEB 2030	79	89.	17.4	79.8
28 FEB 0415	14	0.	.0	61.6	*	28 FEB 1230	47	18.	.4	64.0	*	28 FEB 2045	80	85.	16.3	78.7
28 FEB 0430	15	0.	.0	61.6	*	28 FEB 1245	48	22.	.8	64.7	*	28 FEB 2100	81	80.	15.2	77.8
28 FEB 0445	16	0.	.0	61.6	*	28 FEB 1300	49	26.	1.8	65.6	*	28 FEB 2115	82	76.	14.2	76.9
28 FEB 0500	17	0.	.0	61.6	*	28 FEB 1315	50	35.	4.1	67.7	*	28 FEB 2130	83	72.	13.2	76.0
28 FEB 0515	18	0.	.0	61.6	*	28 FEB 1330	51	51.	7.8	71.1	*	28 FEB 2145	84	69.	12.4	75.2
28 FEB 0530	19	0.	.0	61.6	*	28 FEB 1345	52	68.	12.1	74.9	*	28 FEB 2200	85	66.	11.6	74.5
28 FEB 0545	20	0.	.0	61.6	*	28 FEB 1400	53	82.	15.7	78.3	*	28 FEB 2215	86	62.	10.8	73.8
28 FEB 0600	21	0.	.0	61.6	*	28 FEB 1415	54	94.	18.6	80.9	*	28 FEB 2230	87	60.	10.1	73
28 FEB 0615	22	0.	.0	61.6	*	28 FEB 1430	55	104.	20.9	83.0	*	28 FEB 2245	88	57.	9.4	72
28 FEB 0630	23	0.	.0	61.6	*	28 FEB 1445	56	111.	22.8	84.7	*	28 FEB 2300	89	54.	8.8	72.0
28 FEB 0645	24	0.	.0	61.6	*	28 FEB 1500	57	118.	24.4	86.2	*	28 FEB 2315	90	52.	8.2	71.5
28 FEB 0700	25	0.	.0	61.6	*	28 FEB 1515	58	123.	25.8	87.4	*	28 FEB 2330	91	50.	7.7	71.0
28 FEB 0715	26	0.	.0	61.6	*	28 FEB 1530	59	128.	26.9	88.4	*	28 FEB 2345	92	48.	7.2	70.5

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 28 FEB 0730  27      0.       .0    61.6 * 28 FEB 1545  60     132.     27.9    89.4 *  1 MAR 0000  93      46.      6.8    70.1
 28 FEB 0745  28      0.       .0    61.6 * 28 FEB 1600  61     135.     28.8    90.1 *  1 MAR 0015  94      44.      6.3    69.7
 28 FEB 0800  29      0.       .0    61.6 * 28 FEB 1615  62     138.     29.5    90.8 *  1 MAR 0030  95      43.      6.0    69.4
 28 FEB 0815  30      0.       .0    61.6 * 28 FEB 1630  63     141.     30.1    91.3 *  1 MAR 0045  96      41.      5.6    69.0
  FEB 0830  31      0.       .0    61.6 * 28 FEB 1645  64     143.     30.6    91.8 *  1 MAR 0100  97      40.      5.3    68.7
  EB 0845  32      0.       .0    61.6 * 28 FEB 1700  65     144.     31.0    92.1 *
 28 FEB 0900  33      0.       .0    61.6 * 28 FEB 1715  66     145.     31.2    92.3 *
                                         *                                           *
*****************************************************************************************************************************

 PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     24.00-HR
+  (CFS)       (HR)
                          (CFS)
+    145.     16.50                  126.         48.         48.          48.
                        (INCHES)    1.084       1.643       1.643        1.643
                         (AC-FT)     62.         95.         95.          95.

 PEAK STORAGE   TIME                         MAXIMUM AVERAGE STORAGE
                                     6-HR       24-HR       72-HR     24.00-HR
+  (AC-FT)      (HR)
      31.     16.50                   26.          9.          9.           9.

 PEAK STAGE    TIME                          MAXIMUM AVERAGE STAGE
                                     6-HR       24-HR       72-HR     24.00-HR
+  (FEET)      (HR)
    92.33     16.50                 88.03       71.37       71.37        71.37

                        CUMULATIVE AREA =    1.08 SQ MI


   *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***


           **************
           *            *
 109 KK    *    6PWBAR  *
           *            *
           **************

 110 KO          OUTPUT CONTROL VARIABLES
                       IPRNT           1  PRINT CONTROL
                       IPLOT           0  PLOT CONTROL
                       QSCAL          0.  HYDROGRAPH PLOT SCALE
                                DIRECT INPUT OF HYDROGRAPH FROM WETLAND 1C (6PN) TO WBAR
                                (SEE POND2: APPENDIX 10-G)

   6 IN          TIME DATA FOR INPUT TIME SERIES
                       JXMIN          15  TIME INTERVAL IN MINUTES
                      JXDATE     28FEB91  STARTING DATE
                      JXTIME         100  STARTING TIME

               SUBBASIN RUNOFF DATA

 113 BA          SUBBASIN CHARACTERISTICS
                       TAREA         .30  SUBBASIN AREA

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                                                HYDROGRAPH AT STATION   6PWBAR

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DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW
28 FEB 0100	1	0.	28 FEB 0715	26	1.	28 FEB 1330	51	15.	28 FEB 1945	76	22.
28 FEB 0115	2	0.	28 FEB 0730	27	1.	28 FEB 1345	52	18.	28 FEB 2000	77	22.
28 FEB 0130	3	0.	28 FEB 0745	28	1.	28 FEB 1400	53	20.	28 FEB 2015	78	22.
28 FEB 0145	4	0.	28 FEB 0800	29	1.	28 FEB 1415	54	21.	28 FEB 2030	79	22.
28 FEB 0200	5	0.	28 FEB 0815	30	1.	28 FEB 1430	55	22.	28 FEB 2045	80	22.
28 FEB 0215	6	0.	28 FEB 0830	31	1.	28 FEB 1445	56	22.	28 FEB 2100	81	21.
28 FEB 0230	7	0.	28 FEB 0845	32	1.	28 FEB 1500	57	22.	28 FEB 2115	82	21.
28 FEB 0245	8	0.	28 FEB 0900	33	1.	28 FEB 1515	58	23.	28 FEB 2130	83	21.
28 FEB 0300	9	0.	28 FEB 0915	34	1.	28 FEB 1530	59	23.	28 FEB 2145	84	20.
28 FEB 0315	10	0.	28 FEB 0930	35	2.	28 FEB 1545	60	23.	28 FEB 2200	85	20.
28 FEB 0330	11	0.	28 FEB 0945	36	2.	28 FEB 1600	61	23.	28 FEB 2215	86	20.
28 FEB 0345	12	0.	28 FEB 1000	37	2.	28 FEB 1615	62	23.	28 FEB 2230	87	19.
28 FEB 0400	13	0.	28 FEB 1015	38	2.	28 FEB 1630	63	23.	28 FEB 2245	88	19.
28 FEB 0415	14	0.	28 FEB 1030	39	2.	28 FEB 1645	64	23.	28 FEB 2300	89	19.
28 FEB 0430	15	0.	28 FEB 1045	40	2.	28 FEB 1700	65	23.	28 FEB 2315	90	18.
28 FEB 0445	16	0.	28 FEB 1100	41	2.	28 FEB 1715	66	23.	28 FEB 2330	91	18.
28 FEB 0500	17	0.	28 FEB 1115	42	2.	28 FEB 1730	67	23.	28 FEB 2345	92	17.
28 FEB 0515	18	0.	28 FEB 1130	43	2.	28 FEB 1745	68	23.	1 MAR 0000	93	17.
28 FEB 0530	19	0.	28 FEB 1145	44	3.	28 FEB 1800	69	23.	1 MAR 0015	94	17.
28 FEB 0545	20	0.	28 FEB 1200	45	3.	28 FEB 1815	70	23.	1 MAR 0030	95	16.
28 FEB 0600	21	0.	28 FEB 1215	46	3.	28 FEB 1830	71	23.	1 MAR 0045	96	16.
28 FEB 0615	22	0.	28 FEB 1230	47	3.	28 FEB 1845	72	23.	1 MAR 0100	97	16.
28 FEB 0630	23	0.	28 FEB 1245	48	4.	28 FEB 1900	73	23.			
28 FEB 0645	24	1.	28 FEB 1300	49	6.	28 FEB 1915	74	23.			
28 FEB 0700	25	1.	28 FEB 1315	50	10.	28 FEB 1930	75	23.			

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PEAK FLOW (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	24.00-HR
		(CFS)				
+ 23.	15.25		23.	11.	11.	11.
		(INCHES)	.703	1.324	1.324	1.324
		(AC-FT)	11.	21.	21.	21.

CUMULATIVE AREA = .30 SQ MI

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            **************
            *            *
 124 KK     *        8P  *
            *            *
            **************

 125 KO          OUTPUT CONTROL VARIABLES
                       IPRNT          1  PRINT CONTROL
                       IPLOT          0  PLOT CONTROL
                       QSCAL         0.  HYDROGRAPH PLOT SCALE
                               SCS RUNOFF CALCULATION

              SUBBASIN RUNOFF DATA

 127 BA          SUBBASIN CHARACTERISTICS
                       TAREA        .02  SUBBASIN AREA

                 PRECIPITATION DATA
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128 PH DEPTHS FOR 0-PERCENT HYPOTHETICAL STORM

..... HYDRO-35			..... TP-40					..... TP-49			
5-MIN	15-MIN	60-MIN	2-HR	3-HR	6-HR	12-HR	24-HR	2-DAY	4-DAY	7-DAY	10-DAY
.50	1.10	2.10	2.70	3.00	3.60	4.50	5.20	.00	.00	.00	.00

STORM AREA = .02

129 LS SCS LOSS RATE

STRTL	.47	INITIAL ABSTRACTION
CRVNBR	81.00	CURVE NUMBER
RTIMP	.00	PERCENT IMPERVIOUS AREA

130 UD SCS DIMENSIONLESS UNITGRAPH

TLAG	.25	LAG

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WARNING *** TIME INTERVAL IS GREATER THAN .29*LAG

UNIT HYDROGRAPH
7 END-OF-PERIOD ORDINATES

22. 23. 8. 3. 1. 0. 0.

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HYDROGRAPH AT STATION 8P

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DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
28	FEB	0100	1	.00	.00	.00	0.	*	28	FEB	1315	50	1.10	.28	.82	26.
28	FEB	0115	2	.01	.01	.00	0.	*	28	FEB	1330	51	.28	.05	.23	27.
28	FEB	0130	3	.01	.01	.00	0.	*	28	FEB	1345	52	.18	.03	.15	16.
28	FEB	0145	4	.01	.01	.00	0.	*	28	FEB	1400	53	.14	.02	.12	10.
28	FEB	0200	5	.01	.01	.00	0.	*	28	FEB	1415	54	.08	.01	.07	7.
28	FEB	0215	6	.01	.01	.00	0.	*	28	FEB	1430	55	.07	.01	.06	5.
28	FEB	0230	7	.01	.01	.00	0.	*	28	FEB	1445	56	.06	.01	.05	4.
28	FEB	0245	8	.01	.01	.00	0.	*	28	FEB	1500	57	.06	.01	.05	3.
28	FEB	0300	9	.01	.01	.00	0.	*	28	FEB	1515	58	.05	.01	.04	3.
28	FEB	0315	10	.01	.01	.00	0.	*	28	FEB	1530	59	.05	.01	.04	3.
28	FEB	0330	11	.01	.01	.00	0.	*	28	FEB	1545	60	.04	.01	.04	2.
28	FEB	0345	12	.01	.01	.00	0.	*	28	FEB	1600	61	.04	.01	.04	2.
28	FEB	0400	13	.01	.01	.00	0.	*	28	FEB	1615	62	.05	.01	.04	2.
28	FEB	0415	14	.01	.01	.00	0.	*	28	FEB	1630	63	.05	.01	.04	2.
28	FEB	0430	15	.01	.01	.00	0.	*	28	FEB	1645	64	.04	.01	.04	2.
28	FEB	0445	16	.01	.01	.00	0.	*	28	FEB	1700	65	.04	.01	.04	2.
28	FEB	0500	17	.02	.02	.00	0.	*	28	FEB	1715	66	.04	.01	.03	2.
28	FEB	0515	18	.02	.02	.00	0.	*	28	FEB	1730	67	.04	.00	.03	2.
28	FEB	0530	19	.02	.02	.00	0.	*	28	FEB	1745	68	.04	.00	.03	2.
28	FEB	0545	20	.02	.02	.00	0.	*	28	FEB	1800	69	.04	.00	.03	2.
28	FEB	0600	21	.02	.02	.00	0.	*	28	FEB	1815	70	.03	.00	.03	2.
28	FEB	0615	22	.02	.02	.00	0.	*	28	FEB	1830	71	.03	.00	.03	2.
28	FEB	0630	23	.02	.02	.00	0.	*	28	FEB	1845	72	.03	.00	.03	2.
28	FEB	0645	24	.02	.02	.00	0.	*	28	FEB	1900	73	.03	.00	.03	2.
28	FEB	0700	25	.02	.02	.00	0.	*	28	FEB	1915	74	.02	.00	.02	1.
28	FEB	0715	26	.03	.03	.00	0.	*	28	FEB	1930	75	.02	.00	.02	1.
28	FEB	0730	27	.03	.03	.00	0.	*	28	FEB	1945	76	.02	.00	.02	1.
28	FEB	0745	28	.03	.03	.00	0.	*	28	FEB	2000	77	.02	.00	.02	1.
28	FEB	0800	29	.03	.03	.00	0.	*	28	FEB	2015	78	.02	.00	.02	1.
28	FEB	0815	30	.03	.03	.00	0.	*	28	FEB	2030	79	.02	.00	.01	1.
28	FEB	0830	31	.04	.03	.00	0.	*	28	FEB	2045	80	.02	.00	.01	1.
28	FEB	0845	32	.04	.03	.00	0.	*	28	FEB	2100	81	.02	.00	.01	1.
28	FEB	0900	33	.04	.03	.00	0.	*	28	FEB	2115	82	.02	.00	.01	1.
28	FEB	0915	34	.04	.03	.01	0.	*	28	FEB	2130	83	.02	.00	.01	1.
28	FEB	0930	35	.04	.04	.01	0.	*	28	FEB	2145	84	.01	.00	.01	1.

28 FEB 0945	36	.04	.04	.01	0.	*	28 FEB 2200	85	.01	.00	.01	1.
28 FEB 1000	37	.05	.04	.01	0.	*	28 FEB 2215	86	.01	.00	.01	1.
28 FEB 1015	38	.04	.03	.01	1.	*	28 FEB 2230	87	.01	.00	.01	1.
28 FEB 1030	39	.04	.03	.01	1.	*	28 FEB 2245	88	.01	.00	.01	1.
28 FEB 1045	40	.05	.03	.01	1.	*	28 FEB 2300	89	.01	.00	.01	1.
28 FEB 1100	41	.05	.03	.02	1.	*	28 FEB 2315	90	.01	.00	.01	1.
28 FEB 1115	42	.05	.04	.02	1.	*	28 FEB 2330	91	.01	.00	.01	1.
28 FEB 1130	43	.06	.04	.02	1.	*	28 FEB 2345	92	.01	.00	.01	1.
28 FEB 1145	44	.07	.04	.03	1.	*	1 MAR 0000	93	.01	.00	.01	1.
28 FEB 1200	45	.08	.05	.03	2.	*	1 MAR 0015	94	.01	.00	.01	1.
28 FEB 1215	46	.13	.07	.06	2.	*	1 MAR 0030	95	.01	.00	.01	1.
28 FEB 1230	47	.16	.08	.08	3.	*	1 MAR 0045	96	.01	.00	.01	1.
28 FEB 1245	48	.23	.10	.13	5.	*	1 MAR 0100	97	.01	.00	.01	1.
28 FEB 1300	49	.49	.18	.31	10.	*						
						*						

****

TOTAL RAINFALL = 5.20, TOTAL LOSS = 2.04, TOTAL EXCESS = 3.16

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	24.00-HR
+ (CFS)	(HR)					
		(CFS)				
+ 27.	12.50		6.	2.	2.	2.
		(INCHES)	2.547	3.148	3.148	3.148
		(AC-FT)	3.	4.	4.	4.

CUMULATIVE AREA = .02 SQ MI

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            **************
            *            *
131 KK      *       15P  *
            *            *
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132 KO OUTPUT CONTROL VARIABLES

IPRNT	1	PRINT CONTROL
IPLOT	0	PLOT CONTROL
QSCAL	0.	HYDROGRAPH PLOT SCALE

SCS RUNOFF CALCULATION

SUBBASIN RUNOFF DATA

134 BA SUBBASIN CHARACTERISTICS

TAREA	.01	SUBBASIN AREA

PRECIPITATION DATA

135 PH DEPTHS FOR 0-PERCENT HYPOTHETICAL STORM

..... HYDRO-35			..... TP-40					..... TP-49			
5-MIN	15-MIN	60-MIN	2-HR	3-HR	6-HR	12-HR	24-HR	2-DAY	4-DAY	7-DAY	10-DAY
.50	1.10	2.10	2.70	3.00	3.60	4.50	5.20	.00	.00	.00	.00

STORM AREA = .01

136 LS SCS LOSS RATE

STRTL	.33	INITIAL ABSTRACTION
CRVNBR	86.00	CURVE NUMBER
RTIMP	.00	PERCENT IMPERVIOUS AREA

137 UD SCS DIMENSIONLESS UNITGRAPH
TLAG .26 LAG

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NING *** TIME INTERVAL IS GREATER THAN .29*LAG

UNIT HYDROGRAPH
7 END-OF-PERIOD ORDINATES

14. 16. 6. 2. 1. 0. 0.

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HYDROGRAPH AT STATION 15P

****

DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
28 FEB 0100	1	.00	.00	.00	0.	*	28 FEB 1315	50	1.10	.18	.92	20.
28 FEB 0115	2	.01	.01	.00	0.	*	28 FEB 1330	51	.28	.03	.25	21.
28 FEB 0130	3	.01	.01	.00	0.	*	28 FEB 1345	52	.18	.02	.16	12.
28 FEB 0145	4	.01	.01	.00	0.	*	28 FEB 1400	53	.14	.01	.13	8.
28 FEB 0200	5	.01	.01	.00	0.	*	28 FEB 1415	54	.08	.01	.08	5.
28 FEB 0215	6	.01	.01	.00	0.	*	28 FEB 1430	55	.07	.01	.07	4.
28 FEB 0230	7	.01	.01	.00	0.	*	28 FEB 1445	56	.06	.01	.06	3.
28 FEB 0245	8	.01	.01	.00	0.	*	28 FEB 1500	57	.06	.01	.05	2.
28 FEB 0300	9	.01	.01	.00	0.	*	28 FEB 1515	58	.05	.00	.05	2.
28 FEB 0315	10	.01	.01	.00	0.	*	28 FEB 1530	59	.05	.00	.04	2.
28 FEB 0330	11	.01	.01	.00	0.	*	28 FEB 1545	60	.04	.00	.04	2.
28 FEB 0345	12	.01	.01	.00	0.	*	28 FEB 1600	61	.04	.00	.04	2.
28 FEB 0400	13	.01	.01	.00	0.	*	28 FEB 1615	62	.05	.00	.04	2.
28 FEB 0415	14	.01	.01	.00	0.	*	28 FEB 1630	63	.05	.00	.04	2.
28 FEB 0430	15	.01	.01	.00	0.	*	28 FEB 1645	64	.04	.00	.04	2.
28 FEB 0445	16	.01	.01	.00	0.	*	28 FEB 1700	65	.04	.00	.04	2.
28 FEB 0500	17	.02	.02	.00	0.	*	28 FEB 1715	66	.04	.00	.04	1.
28 FEB 0515	18	.02	.02	.00	0.	*	28 FEB 1730	67	.04	.00	.03	1.
28 FEB 0530	19	.02	.02	.00	0.	*	28 FEB 1745	68	.04	.00	.03	1.
28 FEB 0545	20	.02	.02	.00	0.	*	28 FEB 1800	69	.04	.00	.03	1.
28 FEB 0600	21	.02	.02	.00	0.	*	28 FEB 1815	70	.03	.00	.03	1.
28 FEB 0615	22	.02	.02	.00	0.	*	28 FEB 1830	71	.03	.00	.03	1.
28 FEB 0630	23	.02	.02	.00	0.	*	28 FEB 1845	72	.03	.00	.03	1.
28 FEB 0645	24	.02	.02	.00	0.	*	28 FEB 1900	73	.03	.00	.03	1.
28 FEB 0700	25	.02	.02	.00	0.	*	28 FEB 1915	74	.02	.00	.02	1.
28 FEB 0715	26	.03	.03	.00	0.	*	28 FEB 1930	75	.02	.00	.02	1.
28 FEB 0730	27	.03	.03	.00	0.	*	28 FEB 1945	76	.02	.00	.02	1.
28 FEB 0745	28	.03	.03	.00	0.	*	28 FEB 2000	77	.02	.00	.02	1.
28 FEB 0800	29	.03	.03	.00	0.	*	28 FEB 2015	78	.02	.00	.02	1.
28 FEB 0815	30	.03	.03	.01	0.	*	28 FEB 2030	79	.02	.00	.02	1.
28 FEB 0830	31	.04	.03	.01	0.	*	28 FEB 2045	80	.02	.00	.02	1.
28 FEB 0845	32	.04	.03	.01	0.	*	28 FEB 2100	81	.02	.00	.01	1.
28 FEB 0900	33	.04	.03	.01	0.	*	28 FEB 2115	82	.02	.00	.01	1.
28 FEB 0915	34	.04	.03	.01	0.	*	28 FEB 2130	83	.02	.00	.01	1.
28 FEB 0930	35	.04	.03	.01	0.	*	28 FEB 2145	84	.01	.00	.01	1.
28 FEB 0945	36	.04	.03	.02	1.	*	28 FEB 2200	85	.01	.00	.01	1.
28 FEB 1000	37	.05	.03	.02	1.	*	28 FEB 2215	86	.01	.00	.01	1.
28 FEB 1015	38	.04	.02	.02	1.	*	28 FEB 2230	87	.01	.00	.01	1.
28 FEB 1030	39	.04	.02	.02	1.	*	28 FEB 2245	88	.01	.00	.01	0.
28 FEB 1045	40	.05	.03	.02	1.	*	28 FEB 2300	89	.01	.00	.01	0.
28 FEB 1100	41	.05	.03	.02	1.	*	28 FEB 2315	90	.01	.00	.01	0.
28 FEB 1115	42	.05	.03	.03	1.	*	28 FEB 2330	91	.01	.00	.01	0.
28 FEB 1130	43	.06	.03	.03	1.	*	28 FEB 2345	92	.01	.00	.01	0.
28 FEB 1145	44	.07	.03	.04	1.	*	1 MAR 0000	93	.01	.00	.01	0.
28 FEB 1200	45	.08	.03	.04	1.	*	1 MAR 0015	94	.01	.00	.01	0.
28 FEB 1215	46	.13	.05	.08	2.	*	1 MAR 0030	95	.01	.00	.01	0.
28 FEB 1230	47	.16	.06	.10	3.	*	1 MAR 0045	96	.01	.00	.01	0.

```
      28 FEB 1245   48     .23     .07     .16         4.       *       1 MAR 0100   97     .01     .00     .01         0.
      28 FEB 1300   49     .49     .12     .37         8.       *
                                                                *
*****************************************************************************************************************************

    TOTAL RAINFALL =    5.20, TOTAL LOSS =    1.55, TOTAL EXCESS =    3.65

 PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     24.00-HR
+  (CFS)       (HR)
                          (CFS)
+     21.     12.50                    5.          1.          1.          1.
                       (INCHES)     2.892       3.638       3.638       3.638
                        (AC-FT)        2.          3.          3.          3.

                        CUMULATIVE AREA =     .01 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***


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            *            *
 138 KK     *    15PSWP  *
            *            *
            **************

 139 KO          OUTPUT CONTROL VARIABLES
                       IPRNT           1  PRINT CONTROL
                       IPLOT           0  PLOT CONTROL
                       QSCAL          0.  HYDROGRAPH PLOT SCALE
                                STORAGE ROUTING THROUGH WETLAND 3C

               HYDROGRAPH ROUTING DATA

 141 RS          STORAGE ROUTING
                       NSTPS           1  NUMBER OF SUBREACHES
                        ITYP        ELEV  TYPE OF INITIAL CONDITION
                      RSVRIC       62.40  INITIAL CONDITION
                           X         .00 WORKING R AND D COEFFICIENT

 142 SA               AREA         1.0       2.2       3.1       3.8

 143 SE          ELEVATION       62.00     63.00     64.00     65.00

 144 SL          LOW-LEVEL OUTLET
                       ELEVL       62.40  ELEVATION AT CENTER OF OUTLET
                       CAREA        1.23  CROSS-SECTIONAL AREA
                        COQL         .60  COEFFICIENT
                        EXPL         .50  EXPONENT OF HEAD

 145 SS          SPILLWAY
                        CREL       64.90  SPILLWAY CREST ELEVATION
                       SPWID       30.00  SPILLWAY WIDTH
                        COQW        3.00  WEIR COEFFICIENT
                        EXPW        1.50  EXPONENT OF HEAD

                                                          ***

                                                COMPUTED STORAGE-ELEVATION DATA

           STORAGE        .00      1.59      4.27      7.75
         ELEVATION      62.00     63.00     64.00     65.00
```

COMPUTED OUTFLOW-ELEVATION DATA

OUTFLOW	.00	.00	4.62	4.98	5.40	5.90	6.50	7.24	8.16	9.36
ELEVATION	62.00	62.40	63.01	63.11	63.23	63.39	63.61	63.89	64.30	64.90
OUTFLOW	9.37	9.41	9.48	9.61	9.81	10.10	10.49	10.99	11.62	12.39
ELEVATION	64.90	64.91	64.91	64.92	64.93	64.94	64.95	64.97	64.98	65.00

COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

STORAGE	.00	.49	1.59	1.84	2.14	2.54	3.11	3.94	4.27	5.24
OUTFLOW	.00	.00	4.58	4.98	5.40	5.90	6.50	7.24	7.49	8.16
ELEVATION	62.00	62.40	63.00	63.11	63.23	63.39	63.61	63.89	64.00	64.30
STORAGE	7.37	7.41	7.47	7.51	7.56	7.61	7.68	7.75		
OUTFLOW	9.36	9.48	9.81	10.10	10.49	10.99	11.62	12.39		
ELEVATION	64.90	64.91	64.93	64.94	64.95	64.97	64.98	65.00		

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HYDROGRAPH AT STATION 15PSWP

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DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE
28	FEB	0100	1	0.	.5	62.4	28	FEB	0915	34	0.	.5	62.4	28	FEB	1730	67	3.	1.3	62.8
28	FEB	0115	2	0.	.5	62.4	28	FEB	0930	35	0.	.5	62.4	28	FEB	1745	68	3.	1.2	62.8
28	FEB	0130	3	0.	.5	62.4	28	FEB	0945	36	0.	.5	62.4	28	FEB	1800	69	3.	1.2	62.8
28	FEB	0145	4	0.	.5	62.4	28	FEB	1000	37	0.	.5	62.4	28	FEB	1815	70	3.	1.2	62.8
28	FEB	0200	5	0.	.5	62.4	28	FEB	1015	38	0.	.5	62.4	28	FEB	1830	71	3.	1.1	62.7
28	FEB	0215	6	0.	.5	62.4	28	FEB	1030	39	0.	.6	62.4	28	FEB	1845	72	3.	1.1	62.7
	FEB	0230	7	0.	.5	62.4	28	FEB	1045	40	0.	.6	62.4	28	FEB	1900	73	2.	1.1	62.7
28	FEB	0245	8	0.	.5	62.4	28	FEB	1100	41	0.	.6	62.4	28	FEB	1915	74	2.	1.0	62.7
28	FEB	0300	9	0.	.5	62.4	28	FEB	1115	42	0.	.6	62.5	28	FEB	1930	75	2.	1.0	62.7
28	FEB	0315	10	0.	.5	62.4	28	FEB	1130	43	0.	.6	62.5	28	FEB	1945	76	2.	1.0	62.7
28	FEB	0330	11	0.	.5	62.4	28	FEB	1145	44	0.	.6	62.5	28	FEB	2000	77	2.	1.0	62.7
28	FEB	0345	12	0.	.5	62.4	28	FEB	1200	45	1.	.6	62.5	28	FEB	2015	78	2.	.9	62.6
28	FEB	0400	13	0.	.5	62.4	28	FEB	1215	46	1.	.7	62.5	28	FEB	2030	79	2.	.9	62.6
28	FEB	0415	14	0.	.5	62.4	28	FEB	1230	47	1.	.7	62.5	28	FEB	2045	80	2.	.9	62.6
28	FEB	0430	15	0.	.5	62.4	28	FEB	1245	48	1.	.7	62.5	28	FEB	2100	81	2.	.9	62.6
28	FEB	0445	16	0.	.5	62.4	28	FEB	1300	49	1.	.9	62.6	28	FEB	2115	82	1.	.8	62.6
28	FEB	0500	17	0.	.5	62.4	28	FEB	1315	50	3.	1.1	62.7	28	FEB	2130	83	1.	.8	62.6
28	FEB	0515	18	0.	.5	62.4	28	FEB	1330	51	4.	1.5	62.9	28	FEB	2145	84	1.	.8	62.6
28	FEB	0530	19	0.	.5	62.4	28	FEB	1345	52	5.	1.7	63.0	28	FEB	2200	85	1.	.8	62.6
28	FEB	0545	20	0.	.5	62.4	28	FEB	1400	53	5.	1.8	63.1	28	FEB	2215	86	1.	.8	62.6
28	FEB	0600	21	0.	.5	62.4	28	FEB	1415	54	5.	1.8	63.1	28	FEB	2230	87	1.	.8	62.6
28	FEB	0615	22	0.	.5	62.4	28	FEB	1430	55	5.	1.8	63.1	28	FEB	2245	88	1.	.8	62.5
28	FEB	0630	23	0.	.5	62.4	28	FEB	1445	56	5.	1.8	63.1	28	FEB	2300	89	1.	.7	62.5
28	FEB	0645	24	0.	.5	62.4	28	FEB	1500	57	5.	1.8	63.1	28	FEB	2315	90	1.	.7	62.5
28	FEB	0700	25	0.	.5	62.4	28	FEB	1515	58	5.	1.7	63.0	28	FEB	2330	91	1.	.7	62.5
28	FEB	0715	26	0.	.5	62.4	28	FEB	1530	59	5.	1.6	63.0	28	FEB	2345	92	1.	.7	62.5
28	FEB	0730	27	0.	.5	62.4	28	FEB	1545	60	5.	1.6	63.0	1	MAR	0000	93	1.	.7	62.5
28	FEB	0745	28	0.	.5	62.4	28	FEB	1600	61	4.	1.5	63.0	1	MAR	0015	94	1.	.7	62.5
28	FEB	0800	29	0.	.5	62.4	28	FEB	1615	62	4.	1.5	62.9	1	MAR	0030	95	1.	.7	62.5
28	FEB	0815	30	0.	.5	62.4	28	FEB	1630	63	4.	1.4	62.9	1	MAR	0045	96	1.	.7	62.5
28	FEB	0830	31	0.	.5	62.4	28	FEB	1645	64	4.	1.4	62.9	1	MAR	0100	97	1.	.7	62.5
28	FEB	0845	32	0.	.5	62.4	28	FEB	1700	65	4.	1.3	62.9							
28	FEB	0900	33	0.	.5	62.4	28	FEB	1715	66	3.	1.3	62.8							

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PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	24.00-HR
+ (CFS)	(HR)				

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                          (CFS)
+       5.     13.25                    4.          1.          1.          1.
                        (INCHES)     2.380       3.412       3.412       3.412
                         (AC-FT)        2.          3.          3.          3.

 PEAK STORAGE   TIME                          MAXIMUM AVERAGE STORAGE
                                        6-HR       24-HR       72-HR     24.00-HR
+  (AC-FT)      (HR)
        2.     13.25                    1.          1.          1.          1.

  PEAK STAGE    TIME                          MAXIMUM AVERAGE STAGE
                                        6-HR       24-HR       72-HR     24.00-HR
+   (FEET)      (HR)
     63.11     13.25                  62.92       62.58       62.58       62.58

                         CUMULATIVE AREA =     .01 SQ MI


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            **************
            *            *
 149 KK     *     8PCHL  *
            *            *
            **************

 150 KO          OUTPUT CONTROL VARIABLES
                       IPRNT           1  PRINT CONTROL
                       IPLOT           0  PLOT CONTROL
                       QSCAL          0.  HYDROGRAPH PLOT SCALE
                                STORAGE ROUTING THROUGH 8P CHANNEL

               HYDROGRAPH ROUTING DATA

 152 RS          STORAGE ROUTING
                       NSTPS           1  NUMBER OF SUBREACHES
                        ITYP        ELEV  TYPE OF INITIAL CONDITION
                      RSVRIC       61.00  INITIAL CONDITION
                           X         .00 WORKING R AND D COEFFICIENT

 153 SA               AREA          .0        .0        .1        .2        .2        .3        .3

 154 SE          ELEVATION       61.00     63.00     64.00     65.00     66.00     67.00     68.00

 155 SL          LOW-LEVEL OUTLET
                       ELEVL       62.60  ELEVATION AT CENTER OF OUTLET
                       CAREA       12.57  CROSS-SECTIONAL AREA
                        COQL         .60  COEFFICIENT
                        EXPL         .50  EXPONENT OF HEAD

 156 SS          SPILLWAY
                        CREL       67.90  SPILLWAY CREST ELEVATION
                       SPWID         .00  SPILLWAY WIDTH
                        COQW         .00  WEIR COEFFICIENT
                        EXPW        1.50  EXPONENT OF HEAD

                                                          ***

                                                COMPUTED STORAGE-ELEVATION DATA

            STORAGE        .00       .01       .06       .20       .42       .68      1.00
          ELEVATION      61.00     63.00     64.00     65.00     66.00     67.00     68.00
```

COMPUTED OUTFLOW-ELEVATION DATA

OUTFLOW	.00	.00	83.18	88.26	94.00	100.53	108.04	116.77	127.02	139.25
ELEVATION	61.00	62.60	64.49	64.73	65.01	65.36	65.79	66.33	67.01	67.90

COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

STORAGE	.00	.00	.01	.06	.12	.15	.20	.20	.27	.37
OUTFLOW	.00	.00	38.26	71.57	83.18	88.26	93.71	94.00	100.53	108.04
ELEVATION	61.00	62.60	63.00	64.00	64.49	64.73	65.00	65.01	65.36	65.79
STORAGE	.42	.50	.68	.97	1.00					
OUTFLOW	111.53	116.77	126.88	139.25	140.56					
ELEVATION	66.00	66.33	67.00	67.90	68.00					

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 0. TO 94.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

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HYDROGRAPH AT STATION 8PCHL

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DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE
28	FEB	0100	1	0.	.0	61.0	28	FEB	0915	34	2.	.0	62.6	28	FEB	1730	67	173.	1.9	70.5
28	FEB	0115	2	0.	.0	61.0	28	FEB	0930	35	2.	.0	62.6	28	FEB	1745	68	173.	1.9	70.5
28	FEB	0130	3	0.	.0	61.0	28	FEB	0945	36	2.	.0	62.6	28	FEB	1800	69	172.	1.8	70.4
28	FEB	0145	4	0.	.0	61.0	28	FEB	1000	37	2.	.0	62.6	28	FEB	1815	70	169.	1.8	70.2
	FEB	0200	5	0.	.0	61.0	28	FEB	1015	38	3.	.0	62.6	28	FEB	1830	71	164.	1.6	69.8
	FEB	0215	6	0.	.0	61.0	28	FEB	1030	39	3.	.0	62.6	28	FEB	1845	72	159.	1.5	69.4
28	FEB	0230	7	0.	.0	61.0	28	FEB	1045	40	4.	.0	62.6	28	FEB	1900	73	153.	1.3	69.0
28	FEB	0245	8	0.	.0	61.0	28	FEB	1100	41	6.	.0	62.7	28	FEB	1915	74	148.	1.2	68.6
28	FEB	0300	9	0.	.0	61.0	28	FEB	1115	42	8.	.0	62.7	28	FEB	1930	75	142.	1.0	68.1
28	FEB	0315	10	0.	.0	61.0	28	FEB	1130	43	10.	.0	62.7	28	FEB	1945	76	136.	.9	67.7
28	FEB	0330	11	0.	.0	61.0	28	FEB	1145	44	13.	.0	62.7	28	FEB	2000	77	130.	.8	67.2
28	FEB	0345	12	0.	.0	61.0	28	FEB	1200	45	16.	.0	62.8	28	FEB	2015	78	124.	.6	66.8
28	FEB	0400	13	0.	.0	61.0	28	FEB	1215	46	21.	.0	62.8	28	FEB	2030	79	118.	.5	66.4
28	FEB	0415	14	0.	.0	61.0	28	FEB	1230	47	25.	.0	62.9	28	FEB	2045	80	113.	.4	66.1
28	FEB	0430	15	0.	.0	61.0	28	FEB	1245	48	32.	.0	62.9	28	FEB	2100	81	107.	.4	65.7
28	FEB	0445	16	0.	.0	61.0	28	FEB	1300	49	43.	.0	63.1	28	FEB	2115	82	102.	.3	65.5
28	FEB	0500	17	0.	.0	61.2	28	FEB	1315	50	71.	.1	64.0	28	FEB	2130	83	98.	.2	65.2
28	FEB	0515	18	0.	.0	61.6	28	FEB	1330	51	89.	.2	64.8	28	FEB	2145	84	93.	.2	65.0
28	FEB	0530	19	0.	.0	62.4	28	FEB	1345	52	101.	.3	65.4	28	FEB	2200	85	89.	.2	64.8
28	FEB	0545	20	0.	.0	62.6	28	FEB	1400	53	110.	.4	65.9	28	FEB	2215	86	85.	.1	64.6
28	FEB	0600	21	0.	.0	62.6	28	FEB	1415	54	120.	.5	66.5	28	FEB	2230	87	82.	.1	64.4
28	FEB	0615	22	0.	.0	62.6	28	FEB	1430	55	128.	.7	67.1	28	FEB	2245	88	78.	.1	64.3
28	FEB	0630	23	0.	.0	62.6	28	FEB	1445	56	134.	.9	67.5	28	FEB	2300	89	76.	.1	64.2
28	FEB	0645	24	1.	.0	62.6	28	FEB	1500	57	141.	1.0	68.0	28	FEB	2315	90	73.	.1	64.1
28	FEB	0700	25	0.	.0	62.6	28	FEB	1515	58	146.	1.2	68.4	28	FEB	2330	91	70.	.1	63.9
28	FEB	0715	26	1.	.0	62.6	28	FEB	1530	59	152.	1.3	68.8	28	FEB	2345	92	67.	.1	63.9
28	FEB	0730	27	1.	.0	62.6	28	FEB	1545	60	156.	1.4	69.2	1	MAR	0000	93	65.	.0	63.8
28	FEB	0745	28	1.	.0	62.6	28	FEB	1600	61	160.	1.5	69.5	1	MAR	0015	94	63.	.0	63.7
28	FEB	0800	29	1.	.0	62.6	28	FEB	1615	62	164.	1.6	69.8	1	MAR	0030	95	61.	.0	63.7
28	FEB	0815	30	1.	.0	62.6	28	FEB	1630	63	167.	1.7	70.0	1	MAR	0045	96	59.	.0	63.6
28	FEB	0830	31	1.	.0	62.6	28	FEB	1645	64	169.	1.8	70.2	1	MAR	0100	97	57.	.0	63.6
28	FEB	0845	32	1.	.0	62.6	28	FEB	1700	65	171.	1.8	70.3							
	FEB	0900	33	1.	.0	62.6	28	FEB	1715	66	172.	1.8	70.4							

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PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	24.00-HR

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+   (CFS)       (HR)
                          (CFS)
+     173.     16.50                  154.         62.         62.         62.
                        (INCHES)     1.010       1.617       1.617       1.617
                         (AC-FT)       76.        122.        122.        122.

 PEAK STORAGE   TIME                          MAXIMUM AVERAGE STORAGE
                                      6-HR       24-HR       72-HR     24.00-HR
+  (AC-FT)      (HR)
        2.     16.50                    1.          0.          0.          0.

  PEAK STAGE    TIME                          MAXIMUM AVERAGE STAGE
                                      6-HR       24-HR       72-HR     24.00-HR
+   (FEET)      (HR)
     70.49     16.50                 69.06       64.48       64.48       64.48

                         CUMULATIVE AREA =    1.42 SQ MI


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            *            *
  157 KK    *       10P  *
            *            *
            **************

  158 KO          OUTPUT CONTROL VARIABLES
                        IPRNT           1  PRINT CONTROL
                        IPLOT           0  PLOT CONTROL
                        QSCAL          0.  HYDROGRAPH PLOT SCALE
                                 SCS RUNOFF CALCULATION

               SUBBASIN RUNOFF DATA

  160 BA          SUBBASIN CHARACTERISTICS
                        TAREA         .03  SUBBASIN AREA

                  PRECIPITATION DATA

  161 PH                                DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
                  ..... HYDRO-35 ......   ............... TP-40 ...............   ........... TP-49 ...........
                  5-MIN  15-MIN  60-MIN    2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                    .50    1.10    2.10    2.70    3.00    3.60    4.50    5.20     .00     .00     .00     .00

                                                   STORM AREA =     .03

  162 LS          SCS LOSS RATE
                        STRTL         .17  INITIAL ABSTRACTION
                       CRVNBR       92.00  CURVE NUMBER
                        RTIMP         .00  PERCENT IMPERVIOUS AREA

  163 UD          SCS DIMENSIONLESS UNITGRAPH
                         TLAG         .22  LAG

                                                          ***

WARNING *** TIME INTERVAL IS GREATER THAN .29*LAG

                                                      UNIT HYDROGRAPH
                                                   6 END-OF-PERIOD ORDINATES
                 30.       26.        8.        2.        1.        0.
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HYDROGRAPH AT STATION 10P

DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
28 FEB 0100	1	.00	.00	.00	0.	28 FEB 1315	50	1.10	.07	1.03	44.
28 FEB 0115	2	.01	.01	.00	0.	28 FEB 1330	51	.28	.01	.27	39.
28 FEB 0130	3	.01	.01	.00	0.	28 FEB 1345	52	.18	.01	.17	21.
28 FEB 0145	4	.01	.01	.00	0.	28 FEB 1400	53	.14	.01	.13	13.
28 FEB 0200	5	.01	.01	.00	0.	28 FEB 1415	54	.08	.00	.08	9.
28 FEB 0215	6	.01	.01	.00	0.	28 FEB 1430	55	.07	.00	.07	6.
28 FEB 0230	7	.01	.01	.00	0.	28 FEB 1445	56	.06	.00	.06	5.
28 FEB 0245	8	.01	.01	.00	0.	28 FEB 1500	57	.06	.00	.06	4.
28 FEB 0300	9	.01	.01	.00	0.	28 FEB 1515	58	.05	.00	.05	4.
28 FEB 0315	10	.01	.01	.00	0.	28 FEB 1530	59	.05	.00	.05	3.
28 FEB 0330	11	.01	.01	.00	0.	28 FEB 1545	60	.04	.00	.04	3.
28 FEB 0345	12	.01	.01	.00	0.	28 FEB 1600	61	.04	.00	.04	3.
28 FEB 0400	13	.01	.01	.00	0.	28 FEB 1615	62	.05	.00	.05	3.
28 FEB 0415	14	.01	.01	.00	0.	28 FEB 1630	63	.05	.00	.04	3.
28 FEB 0430	15	.01	.01	.00	0.	28 FEB 1645	64	.04	.00	.04	3.
28 FEB 0445	16	.01	.01	.00	0.	28 FEB 1700	65	.04	.00	.04	3.
28 FEB 0500	17	.02	.01	.00	0.	28 FEB 1715	66	.04	.00	.04	3.
28 FEB 0515	18	.02	.01	.00	0.	28 FEB 1730	67	.04	.00	.04	3.
28 FEB 0530	19	.02	.01	.00	0.	28 FEB 1745	68	.04	.00	.04	2.
28 FEB 0545	20	.02	.01	.00	0.	28 FEB 1800	69	.04	.00	.03	2.
28 FEB 0600	21	.02	.01	.00	0.	28 FEB 1815	70	.03	.00	.03	2.
28 FEB 0615	22	.02	.01	.00	0.	28 FEB 1830	71	.03	.00	.03	2.
28 FEB 0630	23	.02	.01	.00	0.	28 FEB 1845	72	.03	.00	.03	2.
28 FEB 0645	24	.02	.01	.00	0.	28 FEB 1900	73	.03	.00	.03	2.
28 FEB 0700	25	.02	.01	.01	0.	28 FEB 1915	74	.02	.00	.02	2.
28 FEB 0715	26	.03	.02	.01	0.	28 FEB 1930	75	.02	.00	.02	1.
28 FEB 0730	27	.03	.02	.01	1.	28 FEB 1945	76	.02	.00	.02	1.
28 FEB 0745	28	.03	.02	.01	1.	28 FEB 2000	77	.02	.00	.02	1.
28 FEB 0800	29	.03	.02	.01	1.	28 FEB 2015	78	.02	.00	.02	1.
28 FEB 0815	30	.03	.02	.02	1.	28 FEB 2030	79	.02	.00	.02	1.
28 FEB 0830	31	.04	.02	.02	1.	28 FEB 2045	80	.02	.00	.02	1.
28 FEB 0845	32	.04	.02	.02	1.	28 FEB 2100	81	.02	.00	.02	1.
28 FEB 0900	33	.04	.02	.02	1.	28 FEB 2115	82	.02	.00	.02	1.
28 FEB 0915	34	.04	.02	.02	1.	28 FEB 2130	83	.02	.00	.01	1.
28 FEB 0930	35	.04	.02	.03	2.	28 FEB 2145	84	.01	.00	.01	1.
28 FEB 0945	36	.04	.02	.03	2.	28 FEB 2200	85	.01	.00	.01	1.
28 FEB 1000	37	.05	.02	.03	2.	28 FEB 2215	86	.01	.00	.01	1.
28 FEB 1015	38	.04	.01	.03	2.	28 FEB 2230	87	.01	.00	.01	1.
28 FEB 1030	39	.04	.01	.03	2.	28 FEB 2245	88	.01	.00	.01	1.
28 FEB 1045	40	.05	.01	.03	2.	28 FEB 2300	89	.01	.00	.01	1.
28 FEB 1100	41	.05	.01	.04	2.	28 FEB 2315	90	.01	.00	.01	1.
28 FEB 1115	42	.05	.01	.04	2.	28 FEB 2330	91	.01	.00	.01	1.
28 FEB 1130	43	.06	.01	.05	3.	28 FEB 2345	92	.01	.00	.01	1.
28 FEB 1145	44	.07	.02	.05	3.	1 MAR 0000	93	.01	.00	.01	1.
28 FEB 1200	45	.08	.02	.06	4.	1 MAR 0015	94	.01	.00	.01	1.
28 FEB 1215	46	.13	.02	.10	5.	1 MAR 0030	95	.01	.00	.01	1.
28 FEB 1230	47	.16	.03	.13	7.	1 MAR 0045	96	.01	.00	.01	1.
28 FEB 1245	48	.23	.03	.20	10.	1 MAR 0100	97	.01	.00	.01	1.
28 FEB 1300	49	.49	.05	.44	20.						

TOTAL RAINFALL = 5.20, TOTAL LOSS = .92, TOTAL EXCESS = 4.28

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW (CFS) 6-HR	24-HR	72-HR	24.00-HR
+					

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+      44.     12.25                  9.          3.          3.          3.
                        (INCHES)    3.285       4.270       4.270       4.270
                         (AC-FT)      5.          6.          6.          6.

                         CUMULATIVE AREA =     .03 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***


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            *            *
 167 KK     *    10PCHL  *
            *            *
            **************

 168 KO          OUTPUT CONTROL VARIABLES
                       IPRNT           1  PRINT CONTROL
                       IPLOT           0  PLOT CONTROL
                       QSCAL          0.  HYDROGRAPH PLOT SCALE
                                STORAGE ROUTING THROUGH 10P CHANNEL

               HYDROGRAPH ROUTING DATA

 170 RS          STORAGE ROUTING
                       NSTPS           1  NUMBER OF SUBREACHES
                        ITYP        ELEV  TYPE OF INITIAL CONDITION
                      RSVRIC       59.90  INITIAL CONDITION
                           X         .00 WORKING R AND D COEFFICIENT

 171 SA               AREA          .0        .1        .1        .2        .2        .2

 172 SE          ELEVATION       59.90     61.00     63.00     65.00     67.00     67.70

 173 SL          LOW-LEVEL OUTLET
                       ELEVL       61.80  ELEVATION AT CENTER OF OUTLET
                       CAREA       12.57  CROSS-SECTIONAL AREA
                        COQL         .60  COEFFICIENT
                        EXPL         .50  EXPONENT OF HEAD

 174 SS          SPILLWAY
                        CREL       67.50  SPILLWAY CREST ELEVATION
                       SPWID       30.00  SPILLWAY WIDTH
                        COQW        3.00  WEIR COEFFICIENT
                        EXPW        1.50  EXPONENT OF HEAD

                                                        ***

                                          COMPUTED STORAGE-ELEVATION DATA

          STORAGE        .00       .03       .24       .54       .95      1.11
        ELEVATION      59.90     61.00     63.00     65.00     67.00     67.70

                                          COMPUTED OUTFLOW-ELEVATION DATA

          OUTFLOW        .00       .00     83.41     88.76     94.86    101.85    109.95    119.45    130.75    144.41
        ELEVATION      59.90     61.80     63.70     63.95     64.26     64.64     65.10     65.70     66.47     67.50

          OUTFLOW     144.82    145.15    145.63    146.28    147.12    148.17    149.45    151.00    152.83    154.97
        ELEVATION      67.52     67.53     67.54     67.56     67.57     67.59     67.62     67.64     67.67     67.70


                                      COMPUTED STORAGE-OUTFLOW-ELEVATION DATA
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STORAGE	.00	.03	.10	.24	.34	.37	.42	.48	.54	.56
OUTFLOW	.00	.00	.00	66.26	83.41	88.76	94.86	101.85	108.20	109.95
ELEVATION	59.90	61.00	61.80	63.00	63.70	63.95	64.26	64.64	65.00	65.10
STORAGE	.68	.83	.95	1.06	1.07	1.07	1.07	1.08	1.08	1.08
OUTFLOW	119.45	130.75	137.93	144.41	144.82	145.15	145.63	146.28	147.12	148.17
ELEVATION	65.70	66.47	67.00	67.50	67.52	67.53	67.54	67.56	67.57	67.59
STORAGE	1.09	1.10	1.10	1.11						
OUTFLOW	149.45	151.00	152.83	154.97						
ELEVATION	67.62	67.64	67.67	67.70						

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 0. TO 155.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

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HYDROGRAPH AT STATION 10PCHL

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DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE
28	FEB	0100	1	0.	.0	59.9	28	FEB	0915	34	3.	.1	61.9	28	FEB	1730	67	176.	1.2	68.0
28	FEB	0115	2	0.	.0	59.9	28	FEB	0930	35	4.	.1	61.9	28	FEB	1745	68	176.	1.2	68.0
28	FEB	0130	3	0.	.0	59.9	28	FEB	0945	36	4.	.1	61.9	28	FEB	1800	69	175.	1.2	68.0
28	FEB	0145	4	0.	.0	59.9	28	FEB	1000	37	4.	.1	61.9	28	FEB	1815	70	172.	1.2	67.9
28	FEB	0200	5	0.	.0	59.9	28	FEB	1015	38	4.	.1	61.9	28	FEB	1830	71	167.	1.2	67.9
28	FEB	0215	6	0.	.0	59.9	28	FEB	1030	39	5.	.1	61.9	28	FEB	1845	72	162.	1.1	67.8
28	FEB	0230	7	0.	.0	59.9	28	FEB	1045	40	6.	.1	61.9	28	FEB	1900	73	156.	1.1	67.7
28	FEB	0245	8	0.	.0	59.9	28	FEB	1100	41	8.	.1	61.9	28	FEB	1915	74	151.	1.1	67.6
	FEB	0300	9	0.	.0	59.9	28	FEB	1115	42	10.	.1	62.0	28	FEB	1930	75	145.	1.1	67.5
	FEB	0315	10	0.	.0	59.9	28	FEB	1130	43	12.	.1	62.0	28	FEB	1945	76	141.	1.0	67.3
28	FEB	0330	11	0.	.0	59.9	28	FEB	1145	44	16.	.1	62.1	28	FEB	2000	77	136.	.9	66.9
28	FEB	0345	12	0.	.0	59.9	28	FEB	1200	45	20.	.1	62.2	28	FEB	2015	78	130.	.8	66.4
28	FEB	0400	13	0.	.0	59.9	28	FEB	1215	46	26.	.2	62.3	28	FEB	2030	79	123.	.7	66.0
28	FEB	0415	14	0.	.0	59.9	28	FEB	1230	47	32.	.2	62.4	28	FEB	2045	80	117.	.7	65.6
28	FEB	0430	15	0.	.0	59.9	28	FEB	1245	48	41.	.2	62.5	28	FEB	2100	81	111.	.6	65.2
28	FEB	0445	16	0.	.0	59.9	28	FEB	1300	49	60.	.2	62.9	28	FEB	2115	82	106.	.5	64.9
28	FEB	0500	17	0.	.0	59.9	28	FEB	1315	50	97.	.4	64.4	28	FEB	2130	83	101.	.5	64.6
28	FEB	0515	18	0.	.0	60.0	28	FEB	1330	51	121.	.7	65.8	28	FEB	2145	84	96.	.4	64.3
28	FEB	0530	19	0.	.0	60.0	28	FEB	1345	52	125.	.7	66.1	28	FEB	2200	85	92.	.4	64.1
28	FEB	0545	20	0.	.0	60.2	28	FEB	1400	53	123.	.7	66.0	28	FEB	2215	86	88.	.4	63.9
28	FEB	0600	21	0.	.0	60.5	28	FEB	1415	54	126.	.8	66.1	28	FEB	2230	87	84.	.3	63.7
28	FEB	0615	22	0.	.0	60.9	28	FEB	1430	55	130.	.8	66.4	28	FEB	2245	88	80.	.3	63.6
28	FEB	0630	23	0.	.0	61.1	28	FEB	1445	56	135.	.9	66.8	28	FEB	2300	89	77.	.3	63.4
28	FEB	0645	24	0.	.1	61.3	28	FEB	1500	57	140.	1.0	67.2	28	FEB	2315	90	74.	.3	63.3
28	FEB	0700	25	0.	.1	61.5	28	FEB	1515	58	146.	1.1	67.6	28	FEB	2330	91	71.	.3	63.2
28	FEB	0715	26	0.	.1	61.7	28	FEB	1530	59	155.	1.1	67.7	28	FEB	2345	92	69.	.3	63.1
28	FEB	0730	27	1.	.1	61.8	28	FEB	1545	60	158.	1.1	67.7	1	MAR	0000	93	66.	.2	63.0
28	FEB	0745	28	1.	.1	61.8	28	FEB	1600	61	163.	1.1	67.8	1	MAR	0015	94	63.	.2	62.9
28	FEB	0800	29	2.	.1	61.8	28	FEB	1615	62	166.	1.1	67.9	1	MAR	0030	95	62.	.2	62.9
28	FEB	0815	30	2.	.1	61.8	28	FEB	1630	63	169.	1.2	67.9	1	MAR	0045	96	60.	.2	62.9
28	FEB	0830	31	2.	.1	61.8	28	FEB	1645	64	172.	1.2	67.9	1	MAR	0100	97	58.	.2	62.9
28	FEB	0845	32	3.	.1	61.8	28	FEB	1700	65	174.	1.2	68.0							
28	FEB	0900	33	3.	.1	61.9	28	FEB	1715	66	175.	1.2	68.0							

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AK FLOW (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	24.00-HR
		(CFS)				
176.	16.50		157.	65.	65.	65.
		(INCHES)	1.010	1.662	1.662	1.662

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                    (AC-FT)       78.        128.        128.        128.

 PEAK STORAGE   TIME                        MAXIMUM AVERAGE STORAGE
                                    6-HR       24-HR       72-HR     24.00-HR
+  (AC-FT)      (HR)
       1.     16.50                   1.          0.          0.          0.

  PEAK STAGE    TIME                        MAXIMUM AVERAGE STAGE
                                    6-HR       24-HR       72-HR     24.00-HR
+   (FEET)      (HR)
    67.99     16.50                67.57       63.48       63.48       63.48

                    CUMULATIVE AREA =    1.45 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***


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          *            *
 175 KK   *    16&17P  *
          *            *
          **************

 176 KO        OUTPUT CONTROL VARIABLES
                    IPRNT           1  PRINT CONTROL
                    IPLOT           0  PLOT CONTROL
                    QSCAL          0.  HYDROGRAPH PLOT SCALE
                            SCS RUNOFF CALCULATION - 16P & 17P

             SUBBASIN RUNOFF DATA

 178 BA        SUBBASIN CHARACTERISTICS
                    TAREA         .02  SUBBASIN AREA

               PRECIPITATION DATA

 179 PH                              DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
               ..... HYDRO-35 ......   ............... TP-40 ...............   ........... TP-49 ...........
               5-MIN  15-MIN  60-MIN    2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                 .50    1.10    2.10    2.70    3.00    3.60    4.50    5.20     .00     .00     .00     .00

                                                STORM AREA =     .02

 180 LS        SCS LOSS RATE
                    STRTL         .30  INITIAL ABSTRACTION
                   CRVNBR       87.00  CURVE NUMBER
                    RTIMP         .00  PERCENT IMPERVIOUS AREA

 181 UD        SCS DIMENSIONLESS UNITGRAPH
                     TLAG         .07  LAG

                                                          ***

WARNING *** TIME INTERVAL IS GREATER THAN .29*LAG

                                                     UNIT HYDROGRAPH
                                                  5 END-OF-PERIOD ORDINATES
             33.        9.        2.        0.        0.

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                                          HYDROGRAPH AT STATION   16&17P
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DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
28 FEB 0100	1	.00	.00	.00	0.	28 FEB 1315	50	1.10	.16	.94	35.
28 FEB 0115	2	.01	.01	.00	0.	28 FEB 1330	51	.28	.03	.25	18.
28 FEB 0130	3	.01	.01	.00	0.	28 FEB 1345	52	.18	.02	.16	9.
28 FEB 0145	4	.01	.01	.00	0.	28 FEB 1400	53	.14	.01	.13	6.
28 FEB 0200	5	.01	.01	.00	0.	28 FEB 1415	54	.08	.01	.08	4.
28 FEB 0215	6	.01	.01	.00	0.	28 FEB 1430	55	.07	.01	.07	3.
28 FEB 0230	7	.01	.01	.00	0.	28 FEB 1445	56	.06	.01	.06	3.
28 FEB 0245	8	.01	.01	.00	0.	28 FEB 1500	57	.06	.00	.05	2.
28 FEB 0300	9	.01	.01	.00	0.	28 FEB 1515	58	.05	.00	.05	2.
28 FEB 0315	10	.01	.01	.00	0.	28 FEB 1530	59	.05	.00	.04	2.
28 FEB 0330	11	.01	.01	.00	0.	28 FEB 1545	60	.04	.00	.04	2.
28 FEB 0345	12	.01	.01	.00	0.	28 FEB 1600	61	.04	.00	.04	2.
28 FEB 0400	13	.01	.01	.00	0.	28 FEB 1615	62	.05	.00	.04	2.
28 FEB 0415	14	.01	.01	.00	0.	28 FEB 1630	63	.05	.00	.04	2.
28 FEB 0430	15	.01	.01	.00	0.	28 FEB 1645	64	.04	.00	.04	2.
28 FEB 0445	16	.01	.01	.00	0.	28 FEB 1700	65	.04	.00	.04	2.
28 FEB 0500	17	.02	.02	.00	0.	28 FEB 1715	66	.04	.00	.04	2.
28 FEB 0515	18	.02	.02	.00	0.	28 FEB 1730	67	.04	.00	.04	2.
28 FEB 0530	19	.02	.02	.00	0.	28 FEB 1745	68	.04	.00	.03	2.
28 FEB 0545	20	.02	.02	.00	0.	28 FEB 1800	69	.04	.00	.03	1.
28 FEB 0600	21	.02	.02	.00	0.	28 FEB 1815	70	.03	.00	.03	1.
28 FEB 0615	22	.02	.02	.00	0.	28 FEB 1830	71	.03	.00	.03	1.
28 FEB 0630	23	.02	.02	.00	0.	28 FEB 1845	72	.03	.00	.03	1.
28 FEB 0645	24	.02	.02	.00	0.	28 FEB 1900	73	.03	.00	.03	1.
28 FEB 0700	25	.02	.02	.00	0.	28 FEB 1915	74	.02	.00	.02	1.
28 FEB 0715	26	.03	.03	.00	0.	28 FEB 1930	75	.02	.00	.02	1.
28 FEB 0730	27	.03	.03	.00	0.	28 FEB 1945	76	.02	.00	.02	1.
28 FEB 0745	28	.03	.03	.00	0.	28 FEB 2000	77	.02	.00	.02	1.
28 FEB 0800	29	.03	.03	.01	0.	28 FEB 2015	78	.02	.00	.02	1.
28 FEB 0815	30	.03	.03	.01	0.	28 FEB 2030	79	.02	.00	.02	1.
28 FEB 0830	31	.04	.03	.01	0.	28 FEB 2045	80	.02	.00	.02	1.
28 FEB 0845	32	.04	.03	.01	0.	28 FEB 2100	81	.02	.00	.01	1.
28 FEB 0900	33	.04	.03	.01	1.	28 FEB 2115	82	.02	.00	.01	1.
28 FEB 0915	34	.04	.03	.01	1.	28 FEB 2130	83	.02	.00	.01	1.
28 FEB 0930	35	.04	.03	.02	1.	28 FEB 2145	84	.01	.00	.01	1.
28 FEB 0945	36	.04	.03	.02	1.	28 FEB 2200	85	.01	.00	.01	1.
28 FEB 1000	37	.05	.03	.02	1.	28 FEB 2215	86	.01	.00	.01	1.
28 FEB 1015	38	.04	.02	.02	1.	28 FEB 2230	87	.01	.00	.01	1.
28 FEB 1030	39	.04	.02	.02	1.	28 FEB 2245	88	.01	.00	.01	1.
28 FEB 1045	40	.05	.02	.02	1.	28 FEB 2300	89	.01	.00	.01	1.
28 FEB 1100	41	.05	.02	.03	1.	28 FEB 2315	90	.01	.00	.01	1.
28 FEB 1115	42	.05	.03	.03	1.	28 FEB 2330	91	.01	.00	.01	1.
28 FEB 1130	43	.06	.03	.03	1.	28 FEB 2345	92	.01	.00	.01	1.
28 FEB 1145	44	.07	.03	.04	2.	1 MAR 0000	93	.01	.00	.01	1.
28 FEB 1200	45	.08	.03	.05	2.	1 MAR 0015	94	.01	.00	.01	1.
28 FEB 1215	46	.13	.05	.08	3.	1 MAR 0030	95	.01	.00	.01	0.
28 FEB 1230	47	.16	.05	.11	4.	1 MAR 0045	96	.01	.00	.01	0.
28 FEB 1245	48	.23	.06	.16	6.	1 MAR 0100	97	.01	.00	.01	0.
28 FEB 1300	49	.49	.11	.38	14.						

TOTAL RAINFALL = 5.20, TOTAL LOSS = 1.44, TOTAL EXCESS = 3.76

PEAK FLOW (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	24.00-HR
		(CFS)				
35.	12.25		5.	2.	2.	2.
		(INCHES)	2.962	3.747	3.747	3.747
		(AC-FT)	3.	3.	3.	3.

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                    CUMULATIVE AREA =     .02 SQ MI

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          *            *
182 KK    *    1617PD  *
          *            *
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183 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           1  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                               STORAGE ROUTING THROUGH 16P & 17P

             HYDROGRAPH ROUTING DATA

185 RS          STORAGE ROUTING
                      NSTPS           1  NUMBER OF SUBREACHES
                       ITYP        ELEV  TYPE OF INITIAL CONDITION
                     RSVRIC       59.10  INITIAL CONDITION
                          X         .00 WORKING R AND D COEFFICIENT

186 SA               AREA          .2        .5       1.7

187 SE          ELEVATION       63.50     65.70     66.00

188 SS          SPILLWAY
                       CREL       65.90  SPILLWAY CREST ELEVATION
                      SPWID       40.00  SPILLWAY WIDTH
                       COQW        3.00  WEIR COEFFICIENT
                       EXPW        1.50  EXPONENT OF HEAD

                                                    ***

                                          COMPUTED STORAGE-ELEVATION DATA

          STORAGE        .00       .77      1.08
        ELEVATION      63.50     65.70     66.00

                                          COMPUTED OUTFLOW-ELEVATION DATA

          OUTFLOW        .00       .00       .00       .01       .02       .04       .08       .14       .22       .33
        ELEVATION      63.50     65.90     65.90     65.90     65.90     65.90     65.91     65.91     65.92     65.92

          OUTFLOW        .47       .65       .87      1.12      1.43      1.79      2.20      2.67      3.20      3.79
        ELEVATION      65.93     65.93     65.94     65.94     65.95     65.96     65.97     65.98     65.99     66.00

                                        COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

          STORAGE        .00       .77       .93       .94       .96       .98      1.00      1.03      1.06      1.08
          OUTFLOW        .00       .00       .00       .14       .47       .87      1.43      2.20      3.20      3.79
        ELEVATION      63.50     65.70     65.90     65.91     65.93     65.94     65.95     65.97     65.99     66.00

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                                          HYDROGRAPH AT STATION   1617PD

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DA MON HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA MON HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA MON HRMN	ORD	OUTFLOW	STORAGE	STAGE
28 FEB 0100	1	0.	.0	63.5	28 FEB 0915	34	0.	.1	63.7	28 FEB 1730	67	2.	1.0	66.0
FEB 0115	2	0.	.0	63.5	28 FEB 0930	35	0.	.1	63.7	28 FEB 1745	68	2.	1.0	66.0
FEB 0130	3	0.	.0	63.5	28 FEB 0945	36	0.	.1	63.7	28 FEB 1800	69	2.	1.0	66.0
28 FEB 0145	4	0.	.0	63.5	28 FEB 1000	37	0.	.1	63.8	28 FEB 1815	70	1.	1.0	66.0
28 FEB 0200	5	0.	.0	63.5	28 FEB 1015	38	0.	.1	63.8	28 FEB 1830	71	1.	1.0	66.0
28 FEB 0215	6	0.	.0	63.5	28 FEB 1030	39	0.	.1	63.9	28 FEB 1845	72	1.	1.0	66.0
28 FEB 0230	7	0.	.0	63.5	28 FEB 1045	40	0.	.2	63.9	28 FEB 1900	73	1.	1.0	66.0
28 FEB 0245	8	0.	.0	63.5	28 FEB 1100	41	0.	.2	64.0	28 FEB 1915	74	1.	1.0	65.9
28 FEB 0300	9	0.	.0	63.5	28 FEB 1115	42	0.	.2	64.1	28 FEB 1930	75	1.	1.0	65.9
28 FEB 0315	10	0.	.0	63.5	28 FEB 1130	43	0.	.2	64.1	28 FEB 1945	76	1.	1.0	65.9
28 FEB 0330	11	0.	.0	63.5	28 FEB 1145	44	0.	.3	64.2	28 FEB 2000	77	1.	1.0	65.9
28 FEB 0345	12	0.	.0	63.5	28 FEB 1200	45	0.	.3	64.3	28 FEB 2015	78	1.	1.0	65.9
28 FEB 0400	13	0.	.0	63.5	28 FEB 1215	46	0.	.3	64.5	28 FEB 2030	79	1.	1.0	65.9
28 FEB 0415	14	0.	.0	63.5	28 FEB 1230	47	0.	.4	64.7	28 FEB 2045	80	1.	1.0	65.9
28 FEB 0430	15	0.	.0	63.5	28 FEB 1245	48	0.	.5	65.0	28 FEB 2100	81	1.	1.0	65.9
28 FEB 0445	16	0.	.0	63.5	28 FEB 1300	49	0.	.7	65.6	28 FEB 2115	82	1.	1.0	65.9
28 FEB 0500	17	0.	.0	63.5	28 FEB 1315	50	7.	1.2	66.1	28 FEB 2130	83	1.	1.0	65.9
28 FEB 0515	18	0.	.0	63.5	28 FEB 1330	51	17.	1.5	66.2	28 FEB 2145	84	1.	1.0	65.9
28 FEB 0530	19	0.	.0	63.5	28 FEB 1345	52	15.	1.4	66.2	28 FEB 2200	85	1.	1.0	65.9
28 FEB 0545	20	0.	.0	63.5	28 FEB 1400	53	11.	1.3	66.1	28 FEB 2215	86	1.	1.0	65.9
28 FEB 0600	21	0.	.0	63.5	28 FEB 1415	54	8.	1.2	66.1	28 FEB 2230	87	1.	1.0	65.9
28 FEB 0615	22	0.	.0	63.5	28 FEB 1430	55	6.	1.1	66.0	28 FEB 2245	88	1.	1.0	65.9
28 FEB 0630	23	0.	.0	63.5	28 FEB 1445	56	4.	1.1	66.0	28 FEB 2300	89	1.	1.0	65.9
28 FEB 0645	24	0.	.0	63.5	28 FEB 1500	57	3.	1.1	66.0	28 FEB 2315	90	1.	1.0	65.9
28 FEB 0700	25	0.	.0	63.5	28 FEB 1515	58	3.	1.0	66.0	28 FEB 2330	91	1.	1.0	65.9
28 FEB 0715	26	0.	.0	63.5	28 FEB 1530	59	2.	1.0	66.0	28 FEB 2345	92	1.	1.0	65.9
28 FEB 0730	27	0.	.0	63.5	28 FEB 1545	60	2.	1.0	66.0	1 MAR 0000	93	1.	1.0	65.9
28 FEB 0745	28	0.	.0	63.5	28 FEB 1600	61	2.	1.0	66.0	1 MAR 0015	94	1.	1.0	65.9
28 FEB 0800	29	0.	.0	63.5	28 FEB 1615	62	2.	1.0	66.0	1 MAR 0030	95	1.	1.0	65.9
FEB 0815	30	0.	.0	63.6	28 FEB 1630	63	2.	1.0	66.0	1 MAR 0045	96	1.	1.0	65.9
FEB 0830	31	0.	.0	63.6	28 FEB 1645	64	2.	1.0	66.0	1 MAR 0100	97	0.	1.0	65.9
28 FEB 0845	32	0.	.0	63.6	28 FEB 1700	65	2.	1.0	66.0					
28 FEB 0900	33	0.	.0	63.6	28 FEB 1715	66	2.	1.0	66.0					

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PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.00-HR
+ (CFS)	(HR)					
		(CFS)				
+ 17.	12.50		4.	1.	1.	1.
		(INCHES)	2.300	2.685	2.685	2.685
		(AC-FT)	2.	2.	2.	2.

PEAK STORAGE	TIME	MAXIMUM AVERAGE STORAGE			
		6-HR	24-HR	72-HR	24.00-HR
+ (AC-FT)	(HR)				
1.	12.50	1.	1.	1.	1.

PEAK STAGE	TIME	MAXIMUM AVERAGE STAGE			
		6-HR	24-HR	72-HR	24.00-HR
+ (FEET)	(HR)				
66.23	12.50	66.00	64.84	64.84	64.84

CUMULATIVE AREA = .02 SQ MI

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          *           *
192 KK    *   1617CH  *
          *           *
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193 KO        OUTPUT CONTROL VARIABLES
                    IPRNT          1  PRINT CONTROL
                    IPLOT          0  PLOT CONTROL
                    QSCAL         0.  HYDROGRAPH PLOT SCALE
                            STORAGE ROUTING THROUGH COMMERCE WAY at 16P & 17P

            HYDROGRAPH ROUTING DATA

195 RS        STORAGE ROUTING
                    NSTPS          1  NUMBER OF SUBREACHES
                     ITYP       ELEV  TYPE OF INITIAL CONDITION
                   RSVRIC      59.10  INITIAL CONDITION
                        X        .00 WORKING R AND D COEFFICIENT

196 SA            AREA          .0        .0        .1        .1        .1

197 SE        ELEVATION      59.10     60.00     62.00     64.00     66.00

198 SL        LOW-LEVEL OUTLET
                    ELEVL      61.40  ELEVATION AT CENTER OF OUTLET
                    CAREA      12.57  CROSS-SECTIONAL AREA
                     COQL        .60  COEFFICIENT
                     EXPL        .50  EXPONENT OF HEAD

199 SS        SPILLWAY
                     CREL      65.90  SPILLWAY CREST ELEVATION
                    SPWID        .00  SPILLWAY WIDTH
                     COQW        .00  WEIR COEFFICIENT
                     EXPW       1.50  EXPONENT OF HEAD

                                                    ***

                                        COMPUTED STORAGE-ELEVATION DATA

          STORAGE       .00       .01       .11       .26       .48
        ELEVATION     59.10     60.00     62.00     64.00     66.00

                                        COMPUTED OUTFLOW-ELEVATION DATA

          OUTFLOW       .00       .00     82.66     87.08     92.01     97.53    103.75    110.82    118.93    128.31
        ELEVATION     59.10     61.40     63.27     63.47     63.71     64.00     64.34     64.76     65.27     65.90


                                      COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

          STORAGE       .00       .01       .07       .11       .20       .22       .24       .26       .30       .34
          OUTFLOW       .00       .00       .00     46.85     82.66     87.08     92.01     97.53    103.75    110.82
        ELEVATION     59.10     60.00     61.40     62.00     63.27     63.47     63.71     64.00     64.34     64.76

          STORAGE       .39       .47       .48
          OUTFLOW    118.93    128.31    129.73
        ELEVATION     65.27     65.90     66.00

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN        0. TO      130.
               THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
               THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

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                                        HYDROGRAPH AT STATION   1617CH
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DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE
	FEB	0100	1	0.	.0	59.1	28	FEB	0915	34	4.	.1	61.4	28	FEB	1730	67	177.	.9	69.3
	FEB	0115	2	0.	.0	59.1	28	FEB	0930	35	3.	.1	61.4	28	FEB	1745	68	177.	.9	69.4
28	FEB	0130	3	0.	.0	59.1	28	FEB	0945	36	4.	.1	61.5	28	FEB	1800	69	177.	.9	69.3
28	FEB	0145	4	0.	.0	59.1	28	FEB	1000	37	4.	.1	61.4	28	FEB	1815	70	175.	.9	69.2
28	FEB	0200	5	0.	.0	59.1	28	FEB	1015	38	5.	.1	61.5	28	FEB	1830	71	171.	.8	68.9
28	FEB	0215	6	0.	.0	59.1	28	FEB	1030	39	5.	.1	61.5	28	FEB	1845	72	166.	.8	68.5
28	FEB	0230	7	0.	.0	59.1	28	FEB	1045	40	6.	.1	61.5	28	FEB	1900	73	160.	.7	68.2
28	FEB	0245	8	0.	.0	59.1	28	FEB	1100	41	8.	.1	61.5	28	FEB	1915	74	154.	.7	67.7
28	FEB	0300	9	0.	.0	59.1	28	FEB	1115	42	10.	.1	61.5	28	FEB	1930	75	148.	.6	67.3
28	FEB	0315	10	0.	.0	59.1	28	FEB	1130	43	12.	.1	61.6	28	FEB	1945	76	144.	.6	67.0
28	FEB	0330	11	0.	.0	59.1	28	FEB	1145	44	16.	.1	61.6	28	FEB	2000	77	139.	.6	66.7
28	FEB	0345	12	0.	.0	59.1	28	FEB	1200	45	19.	.1	61.6	28	FEB	2015	78	133.	.5	66.3
28	FEB	0400	13	0.	.0	59.1	28	FEB	1215	46	25.	.1	61.7	28	FEB	2030	79	127.	.5	65.8
28	FEB	0415	14	0.	.0	59.1	28	FEB	1230	47	32.	.1	61.8	28	FEB	2045	80	120.	.4	65.4
28	FEB	0430	15	0.	.0	59.1	28	FEB	1245	48	40.	.1	61.9	28	FEB	2100	81	114.	.4	65.0
28	FEB	0445	16	0.	.0	59.1	28	FEB	1300	49	57.	.1	62.4	28	FEB	2115	82	108.	.3	64.6
28	FEB	0500	17	0.	.0	59.1	28	FEB	1315	50	95.	.3	63.9	28	FEB	2130	83	103.	.3	64.3
28	FEB	0515	18	0.	.0	59.1	28	FEB	1330	51	127.	.5	65.8	28	FEB	2145	84	98.	.3	64.0
28	FEB	0530	19	0.	.0	59.1	28	FEB	1345	52	140.	.6	66.7	28	FEB	2200	85	93.	.2	63.8
28	FEB	0545	20	0.	.0	59.1	28	FEB	1400	53	137.	.5	66.5	28	FEB	2215	86	89.	.2	63.6
28	FEB	0600	21	0.	.0	59.1	28	FEB	1415	54	134.	.5	66.3	28	FEB	2230	87	85.	.2	63.4
28	FEB	0615	22	0.	.0	59.1	28	FEB	1430	55	135.	.5	66.4	28	FEB	2245	88	81.	.2	63.2
28	FEB	0630	23	0.	.0	59.1	28	FEB	1445	56	138.	.6	66.6	28	FEB	2300	89	78.	.2	63.1
28	FEB	0645	24	0.	.0	59.1	28	FEB	1500	57	142.	.6	66.9	28	FEB	2315	90	75.	.2	63.0
28	FEB	0700	25	0.	.0	59.1	28	FEB	1515	58	147.	.6	67.2	28	FEB	2330	91	72.	.2	62.9
28	FEB	0715	26	0.	.0	59.1	28	FEB	1530	59	154.	.7	67.7	28	FEB	2345	92	70.	.2	62.8
28	FEB	0730	27	0.	.0	60.1	28	FEB	1545	60	159.	.7	68.1	1	MAR	0000	93	67.	.2	62.7
28	FEB	0745	28	0.	.0	60.8	28	FEB	1600	61	163.	.8	68.3	1	MAR	0015	94	64.	.2	62.6
	FEB	0800	29	1.	.1	61.4	28	FEB	1615	62	167.	.8	68.6	1	MAR	0030	95	62.	.1	62.6
	FEB	0815	30	3.	.1	61.4	28	FEB	1630	63	170.	.8	68.8	1	MAR	0045	96	61.	.1	62.5
28	FEB	0830	31	2.	.1	61.4	28	FEB	1645	64	173.	.8	69.0	1	MAR	0100	97	59.	.1	62.4
28	FEB	0845	32	3.	.1	61.4	28	FEB	1700	65	175.	.9	69.2							
28	FEB	0900	33	2.	.1	61.4	28	FEB	1715	66	176.	.9	69.3							

PEAK FLOW (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	24.00-HR
		(CFS)				
177.	16.75		159.	66.	66.	66.
		(INCHES)	1.012	1.672	1.672	1.672
		(AC-FT)	79.	130.	130.	130.

PEAK STORAGE (AC-FT)	TIME (HR)	MAXIMUM AVERAGE STORAGE 6-HR	24-HR	72-HR	24.00-HR
1.	16.75	1.	0.	0.	0.

PEAK STAGE (FEET)	TIME (HR)	MAXIMUM AVERAGE STAGE 6-HR	24-HR	72-HR	24.00-HR
69.35	16.75	68.08	63.13	63.13	63.13

CUMULATIVE AREA = 1.46 SQ MI

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200 KK    *    11PCHL  *
          *            *
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201 KO        OUTPUT CONTROL VARIABLES
                    IPRNT           1  PRINT CONTROL
                    IPLOT           0  PLOT CONTROL
                    QSCAL          0.  HYDROGRAPH PLOT SCALE
                             STORAGE ROUTING THROUGH COMMERCE WAY AT 11P

            HYDROGRAPH ROUTING DATA

203 RS        STORAGE ROUTING
                    NSTPS           1  NUMBER OF SUBREACHES
                     ITYP        ELEV  TYPE OF INITIAL CONDITION
                   RSVRIC       57.80  INITIAL CONDITION
                        X         .00 WORKING R AND D COEFFICIENT

204 SA            AREA          .0        .0        .1        .1        .1        .1

205 SE        ELEVATION       57.80     59.00     61.00     63.00     65.00     66.80

206 SL        LOW-LEVEL OUTLET
                    ELEVL       59.00  ELEVATION AT CENTER OF OUTLET
                    CAREA       12.57  CROSS-SECTIONAL AREA
                     COQL         .60  COEFFICIENT
                     EXPL         .50  EXPONENT OF HEAD

207 SS        SPILLWAY
                     CREL       66.70  SPILLWAY CREST ELEVATION
                    SPWID         .00  SPILLWAY WIDTH
                     COQW         .00  WEIR COEFFICIENT
                     EXPW        1.50  EXPONENT OF HEAD

                                                    ***

                                        COMPUTED STORAGE-ELEVATION DATA

          STORAGE        .00       .02       .13       .29       .48       .70
        ELEVATION      57.80     59.00     61.00     63.00     65.00     66.80

                                        COMPUTED OUTFLOW-ELEVATION DATA

          OUTFLOW        .00       .00     84.26     90.71     98.23    107.12    117.77    130.78    147.01    167.84
        ELEVATION      57.80     59.00     60.94     61.25     61.64     62.14     62.79     63.67     64.91     66.70


                                      COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

          STORAGE        .00       .02       .13       .13       .15       .18       .21       .27       .29       .35
          OUTFLOW        .00       .00     84.26     85.54     90.71     98.23    107.12    117.77    120.97    130.78
        ELEVATION      57.80     59.00     60.94     61.00     61.25     61.64     62.14     62.79     63.00     63.67

          STORAGE        .47       .48       .69       .70
          OUTFLOW     147.01    148.16    167.84    168.93
        ELEVATION      64.91     65.00     66.70     66.80

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN        0. TO      168.
               THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
               THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

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                                        HYDROGRAPH AT STATION   11PCHL
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DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE
	FEB	0100	1	0.	.0	57.8	28	FEB	0915	34	3.	.0	59.1	28	FEB	1730	67	177.	.8	67.5
28	FEB	0115	2	0.	.0	57.8	28	FEB	0930	35	4.	.0	59.1	28	FEB	1745	68	177.	.8	67.6
28	FEB	0130	3	0.	.0	57.8	28	FEB	0945	36	4.	.0	59.1	28	FEB	1800	69	177.	.8	67.5
28	FEB	0145	4	0.	.0	57.8	28	FEB	1000	37	4.	.0	59.1	28	FEB	1815	70	176.	.8	67.4
28	FEB	0200	5	0.	.0	57.8	28	FEB	1015	38	4.	.0	59.1	28	FEB	1830	71	173.	.7	67.2
28	FEB	0215	6	0.	.0	57.8	28	FEB	1030	39	5.	.0	59.1	28	FEB	1845	72	169.	.7	66.8
28	FEB	0230	7	0.	.0	57.8	28	FEB	1045	40	6.	.0	59.1	28	FEB	1900	73	163.	.6	66.3
28	FEB	0245	8	0.	.0	57.8	28	FEB	1100	41	8.	.0	59.2	28	FEB	1915	74	157.	.6	65.8
28	FEB	0300	9	0.	.0	57.8	28	FEB	1115	42	10.	.0	59.2	28	FEB	1930	75	151.	.5	65.3
28	FEB	0315	10	0.	.0	57.8	28	FEB	1130	43	12.	.0	59.3	28	FEB	1945	76	146.	.5	64.8
28	FEB	0330	11	0.	.0	57.8	28	FEB	1145	44	15.	.0	59.4	28	FEB	2000	77	141.	.4	64.5
28	FEB	0345	12	0.	.0	57.8	28	FEB	1200	45	19.	.0	59.4	28	FEB	2015	78	136.	.4	64.1
28	FEB	0400	13	0.	.0	57.8	28	FEB	1215	46	25.	.1	59.6	28	FEB	2030	79	129.	.3	63.6
28	FEB	0415	14	0.	.0	57.8	28	FEB	1230	47	32.	.1	59.7	28	FEB	2045	80	122.	.3	63.1
28	FEB	0430	15	0.	.0	57.8	28	FEB	1245	48	40.	.1	59.9	28	FEB	2100	81	116.	.3	62.7
28	FEB	0445	16	0.	.0	57.8	28	FEB	1300	49	56.	.1	60.3	28	FEB	2115	82	110.	.2	62.3
28	FEB	0500	17	0.	.0	57.8	28	FEB	1315	50	91.	.1	61.3	28	FEB	2130	83	104.	.2	62.0
28	FEB	0515	18	0.	.0	57.8	28	FEB	1330	51	119.	.3	62.9	28	FEB	2145	84	99.	.2	61.7
28	FEB	0530	19	0.	.0	57.8	28	FEB	1345	52	136.	.4	64.1	28	FEB	2200	85	94.	.2	61.4
28	FEB	0545	20	0.	.0	57.8	28	FEB	1400	53	139.	.4	64.3	28	FEB	2215	86	90.	.1	61.2
28	FEB	0600	21	0.	.0	57.8	28	FEB	1415	54	135.	.4	64.0	28	FEB	2230	87	86.	.1	61.0
28	FEB	0615	22	0.	.0	57.8	28	FEB	1430	55	135.	.4	64.0	28	FEB	2245	88	82.	.1	60.9
28	FEB	0630	23	0.	.0	57.8	28	FEB	1445	56	137.	.4	64.1	28	FEB	2300	89	78.	.1	60.8
28	FEB	0645	24	0.	.0	57.8	28	FEB	1500	57	140.	.4	64.4	28	FEB	2315	90	75.	.1	60.7
28	FEB	0700	25	0.	.0	57.8	28	FEB	1515	58	145.	.5	64.8	28	FEB	2330	91	72.	.1	60.7
28	FEB	0715	26	0.	.0	57.8	28	FEB	1530	59	151.	.5	65.2	28	FEB	2345	92	70.	.1	60.6
28	FEB	0730	27	0.	.0	57.8	28	FEB	1545	60	157.	.6	65.7	1	MAR	0000	93	67.	.1	60.6
[illegible]	FEB	0745	28	0.	.0	57.8	28	FEB	1600	61	161.	.6	66.1	1	MAR	0015	94	65.	.1	60.5
	FEB	0800	29	0.	.0	58.3	28	FEB	1615	62	165.	.7	66.4	1	MAR	0030	95	63.	.1	60.4
28	FEB	0815	30	2.	.0	59.1	28	FEB	1630	63	168.	.7	66.7	1	MAR	0045	96	61.	.1	60.4
28	FEB	0830	31	2.	.0	59.0	28	FEB	1645	64	171.	.7	67.0	1	MAR	0100	97	59.	.1	60.4
28	FEB	0845	32	3.	.0	59.1	28	FEB	1700	65	173.	.8	67.2							
28	FEB	0900	33	3.	.0	59.1	28	FEB	1715	66	175.	.8	67.4							

PEAK FLOW (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	24.00-HR
		(CFS)				
177.	16.75		159.	66.	66.	66.
		(INCHES)	1.012	1.671	1.671	1.671
		(AC-FT)	79.	130.	130.	130.

PEAK STORAGE (AC-FT)	TIME (HR)	MAXIMUM AVERAGE STORAGE 6-HR	24-HR	72-HR	24.00-HR
1.	16.75	1.	0.	0.	0.

PEAK STAGE (FEET)	TIME (HR)	MAXIMUM AVERAGE STAGE 6-HR	24-HR	72-HR	24.00-HR
67.55	16.75	65.99	61.13	61.13	61.13

CUMULATIVE AREA = 1.46 SQ MI

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          **************
          *            *
208 KK    *       21P  *
          *            *
          **************

209 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           1  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                               SCS RUNOFF CALCULATION

              SUBBASIN RUNOFF DATA

211 BA          SUBBASIN CHARACTERISTICS
                      TAREA         .01  SUBBASIN AREA

                PRECIPITATION DATA

212 PH                                DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
                ..... HYDRO-35 .....   ............... TP-40 ...............   ........... TP-49 ...........
                5-MIN  15-MIN  60-MIN    2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                  .50    1.10    2.10    2.70    3.00    3.60    4.50    5.20     .00     .00     .00     .00

                                                STORM AREA =     .01

213 LS          SCS LOSS RATE
                      STRTL         .74  INITIAL ABSTRACTION
                     CRVNBR       73.00  CURVE NUMBER
                      RTIMP         .00  PERCENT IMPERVIOUS AREA

214 UD          SCS DIMENSIONLESS UNITGRAPH
                       TLAG         .25  LAG

                                                     ***

WARNING *** TIME INTERVAL IS GREATER THAN .29*LAG

                                                UNIT HYDROGRAPH
                                            7 END-OF-PERIOD ORDINATES
              14.       15.        5.        2.        1.        0.        0.
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HYDROGRAPH AT STATION 21P

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DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
28 FEB 0100	1	.00	.00	.00	0.	*	28 FEB 1315	50	1.10	.46	.64	12.
28 FEB 0115	2	.01	.01	.00	0.	*	28 FEB 1330	51	.28	.09	.19	13.
28 FEB 0130	3	.01	.01	.00	0.	*	28 FEB 1345	52	.18	.05	.12	8.
28 FEB 0145	4	.01	.01	.00	0.	*	28 FEB 1400	53	.14	.04	.10	5.
28 FEB 0200	5	.01	.01	.00	0.	*	28 FEB 1415	54	.08	.02	.06	4.
28 FEB 0215	6	.01	.01	.00	0.	*	28 FEB 1430	55	.07	.02	.05	3.
28 FEB 0230	7	.01	.01	.00	0.	*	28 FEB 1445	56	.06	.02	.05	2.
28 FEB 0245	8	.01	.01	.00	0.	*	28 FEB 1500	57	.06	.02	.04	2.
28 FEB 0300	9	.01	.01	.00	0.	*	28 FEB 1515	58	.05	.01	.04	2.
28 FEB 0315	10	.01	.01	.00	0.	*	28 FEB 1530	59	.05	.01	.04	1.
28 FEB 0330	11	.01	.01	.00	0.	*	28 FEB 1545	60	.04	.01	.03	1.
28 FEB 0345	12	.01	.01	.00	0.	*	28 FEB 1600	61	.04	.01	.03	1.
28 FEB 0400	13	.01	.01	.00	0.	*	28 FEB 1615	62	.05	.01	.04	1.
28 FEB 0415	14	.01	.01	.00	0.	*	28 FEB 1630	63	.05	.01	.03	1.
28 FEB 0430	15	.01	.01	.00	0.	*	28 FEB 1645	64	.04	.01	.03	1.

28 FEB 0445	16	.01	.01	.00	0.	*	28 FEB 1700	65	.04	.01	.03	1.
28 FEB 0500	17	.02	.02	.00	0.	*	28 FEB 1715	66	.04	.01	.03	1.
28 FEB 0515	18	.02	.02	.00	0.	*	28 FEB 1730	67	.04	.01	.03	1.
28 FEB 0530	19	.02	.02	.00	0.	*	28 FEB 1745	68	.04	.01	.03	1.
28 FEB 0545	20	.02	.02	.00	0.	*	28 FEB 1800	69	.04	.01	.03	1.
28 FEB 0600	21	.02	.02	.00	0.	*	28 FEB 1815	70	.03	.01	.03	1.
28 FEB 0615	22	.02	.02	.00	0.	*	28 FEB 1830	71	.03	.01	.03	1.
28 FEB 0630	23	.02	.02	.00	0.	*	28 FEB 1845	72	.03	.01	.02	1.
28 FEB 0645	24	.02	.02	.00	0.	*	28 FEB 1900	73	.03	.01	.02	1.
28 FEB 0700	25	.02	.02	.00	0.	*	28 FEB 1915	74	.02	.00	.02	1.
28 FEB 0715	26	.03	.03	.00	0.	*	28 FEB 1930	75	.02	.00	.01	1.
28 FEB 0730	27	.03	.03	.00	0.	*	28 FEB 1945	76	.02	.00	.01	1.
28 FEB 0745	28	.03	.03	.00	0.	*	28 FEB 2000	77	.02	.00	.01	1.
28 FEB 0800	29	.03	.03	.00	0.	*	28 FEB 2015	78	.02	.00	.01	0.
28 FEB 0815	30	.03	.03	.00	0.	*	28 FEB 2030	79	.02	.00	.01	0.
28 FEB 0830	31	.04	.04	.00	0.	*	28 FEB 2045	80	.02	.00	.01	0.
28 FEB 0845	32	.04	.04	.00	0.	*	28 FEB 2100	81	.02	.00	.01	0.
28 FEB 0900	33	.04	.04	.00	0.	*	28 FEB 2115	82	.02	.00	.01	0.
28 FEB 0915	34	.04	.04	.00	0.	*	28 FEB 2130	83	.02	.00	.01	0.
28 FEB 0930	35	.04	.04	.00	0.	*	28 FEB 2145	84	.01	.00	.01	0.
28 FEB 0945	36	.04	.04	.00	0.	*	28 FEB 2200	85	.01	.00	.01	0.
28 FEB 1000	37	.05	.05	.00	0.	*	28 FEB 2215	86	.01	.00	.01	0.
28 FEB 1015	38	.04	.04	.00	0.	*	28 FEB 2230	87	.01	.00	.01	0.
28 FEB 1030	39	.04	.04	.00	0.	*	28 FEB 2245	88	.01	.00	.01	0.
28 FEB 1045	40	.05	.04	.00	0.	*	28 FEB 2300	89	.01	.00	.01	0.
28 FEB 1100	41	.05	.04	.01	0.	*	28 FEB 2315	90	.01	.00	.01	0.
28 FEB 1115	42	.05	.05	.01	0.	*	28 FEB 2330	91	.01	.00	.01	0.
28 FEB 1130	43	.06	.05	.01	0.	*	28 FEB 2345	92	.01	.00	.01	0.
28 FEB 1145	44	.07	.06	.01	0.	*	1 MAR 0000	93	.01	.00	.01	0.
28 FEB 1200	45	.08	.06	.02	0.	*	1 MAR 0015	94	.01	.00	.01	0.
28 FEB 1215	46	.13	.10	.03	1.	*	1 MAR 0030	95	.01	.00	.01	0.
28 FEB 1230	47	.16	.11	.05	1.	*	1 MAR 0045	96	.01	.00	.01	0.
28 FEB 1245	48	.23	.15	.08	2.	*	1 MAR 0100	97	.01	.00	.01	0.
28 FEB 1300	49	.49	.27	.22	4.	*						
						*						

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TOTAL RAINFALL = 5.20, TOTAL LOSS = 2.76, TOTAL EXCESS = 2.44

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.00-HR
+ (CFS)	(HR)					
		(CFS)				
+ 13.	12.50		3.	1.	1.	1.
		(INCHES)	1.995	2.425	2.425	2.425
		(AC-FT)	1.	2.	2.	2.

CUMULATIVE AREA = .01 SQ MI

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              *            *
 215 KK       *       22P  *
              *            *
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5 KO OUTPUT CONTROL VARIABLES

IPRNT	1	PRINT CONTROL
IPLOT	0	PLOT CONTROL
QSCAL	0.	HYDROGRAPH PLOT SCALE

SCS RUNOFF CALCULATION

SUBBASIN RUNOFF DATA

218 BA SUBBASIN CHARACTERISTICS

TAREA .00 SUBBASIN AREA

PRECIPITATION DATA

219 PH DEPTHS FOR 0-PERCENT HYPOTHETICAL STORM

..... HYDRO-35			..... TP-40					..... TP-49			
5-MIN	15-MIN	60-MIN	2-HR	3-HR	6-HR	12-HR	24-HR	2-DAY	4-DAY	7-DAY	10-DAY
.50	1.10	2.10	2.70	3.00	3.60	4.50	5.20	.00	.00	.00	.00

STORM AREA = .00

220 LS SCS LOSS RATE

STRTL .74 INITIAL ABSTRACTION

CRVNBR 73.00 CURVE NUMBER

RTIMP .00 PERCENT IMPERVIOUS AREA

221 UD SCS DIMENSIONLESS UNITGRAPH

TLAG .21 LAG

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WARNING *** TIME INTERVAL IS GREATER THAN .29*LAG

UNIT HYDROGRAPH

6 END-OF-PERIOD ORDINATES

5. 4. 1. 0. 0. 0.

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HYDROGRAPH AT STATION 22P

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DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
28 FEB 0100	1	.00	.00	.00	0.	*	28 FEB 1315	50	1.10	.46	.64	4.
28 FEB 0115	2	.01	.01	.00	0.	*	28 FEB 1330	51	.28	.09	.19	4.
28 FEB 0130	3	.01	.01	.00	0.	*	28 FEB 1345	52	.18	.05	.12	2.
28 FEB 0145	4	.01	.01	.00	0.	*	28 FEB 1400	53	.14	.04	.10	1.
28 FEB 0200	5	.01	.01	.00	0.	*	28 FEB 1415	54	.08	.02	.06	1.
28 FEB 0215	6	.01	.01	.00	0.	*	28 FEB 1430	55	.07	.02	.05	1.
28 FEB 0230	7	.01	.01	.00	0.	*	28 FEB 1445	56	.06	.02	.05	1.
28 FEB 0245	8	.01	.01	.00	0.	*	28 FEB 1500	57	.06	.02	.04	0.
28 FEB 0300	9	.01	.01	.00	0.	*	28 FEB 1515	58	.05	.01	.04	0.
28 FEB 0315	10	.01	.01	.00	0.	*	28 FEB 1530	59	.05	.01	.04	0.
28 FEB 0330	11	.01	.01	.00	0.	*	28 FEB 1545	60	.04	.01	.03	0.
28 FEB 0345	12	.01	.01	.00	0.	*	28 FEB 1600	61	.04	.01	.03	0.
28 FEB 0400	13	.01	.01	.00	0.	*	28 FEB 1615	62	.05	.01	.04	0.
28 FEB 0415	14	.01	.01	.00	0.	*	28 FEB 1630	63	.05	.01	.03	0.
28 FEB 0430	15	.01	.01	.00	0.	*	28 FEB 1645	64	.04	.01	.03	0.
28 FEB 0445	16	.01	.01	.00	0.	*	28 FEB 1700	65	.04	.01	.03	0.
28 FEB 0500	17	.02	.02	.00	0.	*	28 FEB 1715	66	.04	.01	.03	0.
28 FEB 0515	18	.02	.02	.00	0.	*	28 FEB 1730	67	.04	.01	.03	0.
28 FEB 0530	19	.02	.02	.00	0.	*	28 FEB 1745	68	.04	.01	.03	0.
28 FEB 0545	20	.02	.02	.00	0.	*	28 FEB 1800	69	.04	.01	.03	0.
28 FEB 0600	21	.02	.02	.00	0.	*	28 FEB 1815	70	.03	.01	.03	0.
28 FEB 0615	22	.02	.02	.00	0.	*	28 FEB 1830	71	.03	.01	.03	0.
28 FEB 0630	23	.02	.02	.00	0.	*	28 FEB 1845	72	.03	.01	.02	0.
28 FEB 0645	24	.02	.02	.00	0.	*	28 FEB 1900	73	.03	.01	.02	0.
28 FEB 0700	25	.02	.02	.00	0.	*	28 FEB 1915	74	.02	.00	.02	0.
28 FEB 0715	26	.03	.03	.00	0.	*	28 FEB 1930	75	.02	.00	.01	0.
28 FEB 0730	27	.03	.03	.00	0.	*	28 FEB 1945	76	.02	.00	.01	0.

28 FEB 0745	28	.03	.03	.00	0.	*	28 FEB 2000	77	.02	.00	.01	0.
28 FEB 0800	29	.03	.03	.00	0.	*	28 FEB 2015	78	.02	.00	.01	0.
28 FEB 0815	30	.03	.03	.00	0.	*	28 FEB 2030	79	.02	.00	.01	0.
28 FEB 0830	31	.04	.04	.00	0.	*	28 FEB 2045	80	.02	.00	.01	0.
28 FEB 0845	32	.04	.04	.00	0.	*	28 FEB 2100	81	.02	.00	.01	0.
28 FEB 0900	33	.04	.04	.00	0.	*	28 FEB 2115	82	.02	.00	.01	0.
28 FEB 0915	34	.04	.04	.00	0.	*	28 FEB 2130	83	.02	.00	.01	0.
28 FEB 0930	35	.04	.04	.00	0.	*	28 FEB 2145	84	.01	.00	.01	0.
28 FEB 0945	36	.04	.04	.00	0.	*	28 FEB 2200	85	.01	.00	.01	0.
28 FEB 1000	37	.05	.05	.00	0.	*	28 FEB 2215	86	.01	.00	.01	0.
28 FEB 1015	38	.04	.04	.00	0.	*	28 FEB 2230	87	.01	.00	.01	0.
28 FEB 1030	39	.04	.04	.00	0.	*	28 FEB 2245	88	.01	.00	.01	0.
28 FEB 1045	40	.05	.04	.00	0.	*	28 FEB 2300	89	.01	.00	.01	0.
28 FEB 1100	41	.05	.04	.01	0.	*	28 FEB 2315	90	.01	.00	.01	0.
28 FEB 1115	42	.05	.05	.01	0.	*	28 FEB 2330	91	.01	.00	.01	0.
28 FEB 1130	43	.06	.05	.01	0.	*	28 FEB 2345	92	.01	.00	.01	0.
28 FEB 1145	44	.07	.06	.01	0.	*	1 MAR 0000	93	.01	.00	.01	0.
28 FEB 1200	45	.08	.06	.02	0.	*	1 MAR 0015	94	.01	.00	.01	0.
28 FEB 1215	46	.13	.10	.03	0.	*	1 MAR 0030	95	.01	.00	.01	0.
28 FEB 1230	47	.16	.11	.05	0.	*	1 MAR 0045	96	.01	.00	.01	0.
28 FEB 1245	48	.23	.15	.08	1.	*	1 MAR 0100	97	.01	.00	.01	0.
28 FEB 1300	49	.49	.27	.22	1.	*						
						*						

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TOTAL RAINFALL = 5.20, TOTAL LOSS = 2.76, TOTAL EXCESS = 2.44

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.00-HR
+ (CFS)	(HR)					
		(CFS)				
+ 4.	12.25		1.	0.	0.	0.
		(INCHES)	1.997	2.427	2.427	2.427
		(AC-FT)	0.	1.	1.	1.

CUMULATIVE AREA = .00 SQ MI

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          *            *
225 KK    *    21PCHL  *
          *            *
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226 KO        OUTPUT CONTROL VARIABLES
                    IPRNT          1  PRINT CONTROL
                    IPLOT          0  PLOT CONTROL
                    QSCAL         0.  HYDROGRAPH PLOT SCALE
                             STORAGE ROUTING THROUGH 21P CHANNEL

            HYDROGRAPH ROUTING DATA

228 RS        STORAGE ROUTING
                    NSTPS          1  NUMBER OF SUBREACHES
                     ITYP       STOR  TYPE OF INITIAL CONDITION
                   RSVRIC        .00  INITIAL CONDITION
                        X        .00 WORKING R AND D COEFFICIENT

229 RC        NORMAL DEPTH CHANNEL ROUTING
                      ANL       .080  LEFT OVERBANK N-VALUE
                     ANCH       .030  MAIN CHANNEL N-VALUE
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ANR	.080	RIGHT OVERBANK N-VALUE
RLNTH	900.	REACH LENGTH
SEL	.0020	ENERGY SLOPE
ELMAX	70.0	MAX. ELEV. FOR STORAGE/OUTFLOW CALCULATION

CROSS-SECTION DATA

		--- LEFT OVERBANK ---		+ ------ MAIN CHANNEL		------- +	--- RIGHT OVERBANK ---		
231 RY	ELEVATION	71.00	70.50	70.00	67.00	67.00	70.00	70.50	71.00
230 RX	DISTANCE	.00	5.00	10.00	13.00	18.00	21.00	26.00	31.00

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COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

STORAGE	.00	.02	.03	.05	.07	.09	.12	.14	.16	.19
OUTFLOW	.00	.51	1.61	3.17	5.14	7.48	10.18	13.24	16.66	20.43
ELEVATION	67.00	67.16	67.32	67.47	67.63	67.79	67.95	68.11	68.26	68.42
STORAGE	.21	.24	.27	.30	.33	.36	.39	.43	.46	.50
OUTFLOW	24.55	29.03	33.87	39.08	44.66	50.61	56.94	63.66	70.78	78.29
ELEVATION	68.58	68.74	68.89	69.05	69.21	69.37	69.53	69.68	69.84	70.00

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 3. TO 78.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

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HYDROGRAPH AT STATION 21PCHL

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DA MON HRMN	ORD	OUTFLOW	STORAGE	STAGE	*	DA MON HRMN	ORD	OUTFLOW	STORAGE	STAGE	*	DA MON HRMN	ORD	OUTFLOW	STORAGE	STA
28 FEB 0100	1	0.	.0	67.0	*	28 FEB 0915	34	0.	.0	67.0	*	28 FEB 1730	67	1.	.0	67.3
28 FEB 0115	2	0.	.0	67.0	*	28 FEB 0930	35	0.	.0	67.0	*	28 FEB 1745	68	1.	.0	67.3
28 FEB 0130	3	0.	.0	67.0	*	28 FEB 0945	36	0.	.0	67.0	*	28 FEB 1800	69	1.	.0	67.3
28 FEB 0145	4	0.	.0	67.0	*	28 FEB 1000	37	0.	.0	67.0	*	28 FEB 1815	70	1.	.0	67.3
28 FEB 0200	5	0.	.0	67.0	*	28 FEB 1015	38	0.	.0	67.0	*	28 FEB 1830	71	1.	.0	67.3
28 FEB 0215	6	0.	.0	67.0	*	28 FEB 1030	39	0.	.0	67.0	*	28 FEB 1845	72	1.	.0	67.3
28 FEB 0230	7	0.	.0	67.0	*	28 FEB 1045	40	0.	.0	67.0	*	28 FEB 1900	73	1.	.0	67.3
28 FEB 0245	8	0.	.0	67.0	*	28 FEB 1100	41	0.	.0	67.0	*	28 FEB 1915	74	1.	.0	67.2
28 FEB 0300	9	0.	.0	67.0	*	28 FEB 1115	42	0.	.0	67.1	*	28 FEB 1930	75	1.	.0	67.2
28 FEB 0315	10	0.	.0	67.0	*	28 FEB 1130	43	0.	.0	67.1	*	28 FEB 1945	76	1.	.0	67.2
28 FEB 0330	11	0.	.0	67.0	*	28 FEB 1145	44	0.	.0	67.1	*	28 FEB 2000	77	1.	.0	67.2
28 FEB 0345	12	0.	.0	67.0	*	28 FEB 1200	45	0.	.0	67.1	*	28 FEB 2015	78	1.	.0	67.2
28 FEB 0400	13	0.	.0	67.0	*	28 FEB 1215	46	1.	.0	67.2	*	28 FEB 2030	79	1.	.0	67.2
28 FEB 0415	14	0.	.0	67.0	*	28 FEB 1230	47	1.	.0	67.2	*	28 FEB 2045	80	1.	.0	67.2
28 FEB 0430	15	0.	.0	67.0	*	28 FEB 1245	48	2.	.0	67.3	*	28 FEB 2100	81	1.	.0	67.2
28 FEB 0445	16	0.	.0	67.0	*	28 FEB 1300	49	4.	.1	67.5	*	28 FEB 2115	82	1.	.0	67.2
28 FEB 0500	17	0.	.0	67.0	*	28 FEB 1315	50	12.	.1	68.0	*	28 FEB 2130	83	1.	.0	67.2
28 FEB 0515	18	0.	.0	67.0	*	28 FEB 1330	51	18.	.2	68.3	*	28 FEB 2145	84	1.	.0	67.2
28 FEB 0530	19	0.	.0	67.0	*	28 FEB 1345	52	13.	.1	68.1	*	28 FEB 2200	85	1.	.0	67.2
28 FEB 0545	20	0.	.0	67.0	*	28 FEB 1400	53	8.	.1	67.8	*	28 FEB 2215	86	1.	.0	67.2
28 FEB 0600	21	0.	.0	67.0	*	28 FEB 1415	54	5.	.1	67.7	*	28 FEB 2230	87	1.	.0	67.2
28 FEB 0615	22	0.	.0	67.0	*	28 FEB 1430	55	4.	.1	67.5	*	28 FEB 2245	88	1.	.0	67.2
28 FEB 0630	23	0.	.0	67.0	*	28 FEB 1445	56	3.	.1	67.4	*	28 FEB 2300	89	1.	.0	67.2
28 FEB 0645	24	0.	.0	67.0	*	28 FEB 1500	57	2.	.0	67.4	*	28 FEB 2315	90	0.	.0	67.2
28 FEB 0700	25	0.	.0	67.0	*	28 FEB 1515	58	2.	.0	67.4	*	28 FEB 2330	91	0.	.0	67.2
28 FEB 0715	26	0.	.0	67.0	*	28 FEB 1530	59	2.	.0	67.3	*	28 FEB 2345	92	0.	.0	67
28 FEB 0730	27	0.	.0	67.0	*	28 FEB 1545	60	2.	.0	67.3	*	1 MAR 0000	93	0.	.0	67
28 FEB 0745	28	0.	.0	67.0	*	28 FEB 1600	61	2.	.0	67.3	*	1 MAR 0015	94	0.	.0	67.1
28 FEB 0800	29	0.	.0	67.0	*	28 FEB 1615	62	2.	.0	67.3	*	1 MAR 0030	95	0.	.0	67.1
28 FEB 0815	30	0.	.0	67.0	*	28 FEB 1630	63	2.	.0	67.3	*	1 MAR 0045	96	0.	.0	67.1
28 FEB 0830	31	0.	.0	67.0	*	28 FEB 1645	64	2.	.0	67.3	*	1 MAR 0100	97	0.	.0	67.1

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 28 FEB 0845  32       0.       .0    67.0 * 28 FEB 1700  65       2.       .0    67.3 *
 28 FEB 0900  33       0.       .0    67.0 * 28 FEB 1715  66       1.       .0    67.3 *
                                           *                                           *
*****************************************************************************************************************************

  AK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     24.00-HR
+   (CFS)      (HR)
                          (CFS)
+      18.     12.50                  4.          1.          1.          1.
                        (INCHES)   1.993       2.410       2.410       2.410
                         (AC-FT)      2.          2.          2.          2.

 PEAK STORAGE   TIME                         MAXIMUM AVERAGE STORAGE
                                     6-HR       24-HR       72-HR     24.00-HR
+  (AC-FT)      (HR)
        0.     12.50                  0.          0.          0.          0.

  PEAK STAGE    TIME                          MAXIMUM AVERAGE STAGE
                                     6-HR       24-HR       72-HR     24.00-HR
+   (FEET)      (HR)
     68.31     12.50                67.48       67.17       67.17       67.17

                        CUMULATIVE AREA =     .02 SQ MI



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            *            *
   . KK     *       23P  *
            *            *
            **************

 233 KO          OUTPUT CONTROL VARIABLES
                       IPRNT           1  PRINT CONTROL
                       IPLOT           0  PLOT CONTROL
                       QSCAL          0.  HYDROGRAPH PLOT SCALE
                                SCS RUNOFF CALCULATION

               SUBBASIN RUNOFF DATA

 235 BA          SUBBASIN CHARACTERISTICS
                       TAREA         .03  SUBBASIN AREA

                 PRECIPITATION DATA

 236 PH                                DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
                 ..... HYDRO-35 ......   ............... TP-40 ...............   ........... TP-49 ...........
                 5-MIN  15-MIN  60-MIN    2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                   .50    1.10    2.10    2.70    3.00    3.60    4.50    5.20     .00     .00     .00     .00

                                                   STORM AREA =     .03

 237 LS          SCS LOSS RATE
                       STRTL         .27  INITIAL ABSTRACTION
                      CRVNBR       88.00  CURVE NUMBER
                       RTIMP         .00  PERCENT IMPERVIOUS AREA

 238 UD          SCS DIMENSIONLESS UNITGRAPH
                        TLAG         .15  LAG

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WARNING *** TIME INTERVAL IS GREATER THAN .29*LAG

UNIT HYDROGRAPH
5 END-OF-PERIOD ORDINATES

55. 21. 5. 1. 0.

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HYDROGRAPH AT STATION 23P

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DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
28 FEB 0100	1	.00	.00	.00	0.	28 FEB 1315	50	1.10	.14	.96	62.
28 FEB 0115	2	.01	.01	.00	0.	28 FEB 1330	51	.28	.03	.26	37.
28 FEB 0130	3	.01	.01	.00	0.	28 FEB 1345	52	.18	.01	.16	20.
28 FEB 0145	4	.01	.01	.00	0.	28 FEB 1400	53	.14	.01	.13	13.
28 FEB 0200	5	.01	.01	.00	0.	28 FEB 1415	54	.08	.01	.08	8.
28 FEB 0215	6	.01	.01	.00	0.	28 FEB 1430	55	.07	.01	.07	6.
28 FEB 0230	7	.01	.01	.00	0.	28 FEB 1445	56	.06	.00	.06	5.
28 FEB 0245	8	.01	.01	.00	0.	28 FEB 1500	57	.06	.00	.05	5.
28 FEB 0300	9	.01	.01	.00	0.	28 FEB 1515	58	.05	.00	.05	4.
28 FEB 0315	10	.01	.01	.00	0.	28 FEB 1530	59	.05	.00	.04	4.
28 FEB 0330	11	.01	.01	.00	0.	28 FEB 1545	60	.04	.00	.04	4.
28 FEB 0345	12	.01	.01	.00	0.	28 FEB 1600	61	.04	.00	.04	3.
28 FEB 0400	13	.01	.01	.00	0.	28 FEB 1615	62	.05	.00	.04	4.
28 FEB 0415	14	.01	.01	.00	0.	28 FEB 1630	63	.05	.00	.04	4.
28 FEB 0430	15	.01	.01	.00	0.	28 FEB 1645	64	.04	.00	.04	3.
28 FEB 0445	16	.01	.01	.00	0.	28 FEB 1700	65	.04	.00	.04	3.
28 FEB 0500	17	.02	.02	.00	0.	28 FEB 1715	66	.04	.00	.04	3.
28 FEB 0515	18	.02	.02	.00	0.	28 FEB 1730	67	.04	.00	.04	3.
28 FEB 0530	19	.02	.02	.00	0.	28 FEB 1745	68	.04	.00	.03	3.
28 FEB 0545	20	.02	.02	.00	0.	28 FEB 1800	69	.04	.00	.03	3.
28 FEB 0600	21	.02	.02	.00	0.	28 FEB 1815	70	.03	.00	.03	3.
28 FEB 0615	22	.02	.02	.00	0.	28 FEB 1830	71	.03	.00	.03	3.
28 FEB 0630	23	.02	.02	.00	0.	28 FEB 1845	72	.03	.00	.03	3.
28 FEB 0645	24	.02	.02	.00	0.	28 FEB 1900	73	.03	.00	.03	2.
28 FEB 0700	25	.02	.02	.00	0.	28 FEB 1915	74	.02	.00	.02	2.
28 FEB 0715	26	.03	.03	.00	0.	28 FEB 1930	75	.02	.00	.02	2.
28 FEB 0730	27	.03	.03	.00	0.	28 FEB 1945	76	.02	.00	.02	1.
28 FEB 0745	28	.03	.03	.01	0.	28 FEB 2000	77	.02	.00	.02	1.
28 FEB 0800	29	.03	.03	.01	1.	28 FEB 2015	78	.02	.00	.02	1.
28 FEB 0815	30	.03	.03	.01	1.	28 FEB 2030	79	.02	.00	.02	1.
28 FEB 0830	31	.04	.03	.01	1.	28 FEB 2045	80	.02	.00	.02	1.
28 FEB 0845	32	.04	.03	.01	1.	28 FEB 2100	81	.02	.00	.02	1.
28 FEB 0900	33	.04	.03	.01	1.	28 FEB 2115	82	.02	.00	.01	1.
28 FEB 0915	34	.04	.02	.02	1.	28 FEB 2130	83	.02	.00	.01	1.
28 FEB 0930	35	.04	.02	.02	1.	28 FEB 2145	84	.01	.00	.01	1.
28 FEB 0945	36	.04	.02	.02	2.	28 FEB 2200	85	.01	.00	.01	1.
28 FEB 1000	37	.05	.02	.02	2.	28 FEB 2215	86	.01	.00	.01	1.
28 FEB 1015	38	.04	.02	.02	2.	28 FEB 2230	87	.01	.00	.01	1.
28 FEB 1030	39	.04	.02	.02	2.	28 FEB 2245	88	.01	.00	.01	1.
28 FEB 1045	40	.05	.02	.02	2.	28 FEB 2300	89	.01	.00	.01	1.
28 FEB 1100	41	.05	.02	.03	2.	28 FEB 2315	90	.01	.00	.01	1.
28 FEB 1115	42	.05	.02	.03	2.	28 FEB 2330	91	.01	.00	.01	1.
28 FEB 1130	43	.06	.02	.04	3.	28 FEB 2345	92	.01	.00	.01	1.
28 FEB 1145	44	.07	.03	.04	3.	1 MAR 0000	93	.01	.00	.01	1.
28 FEB 1200	45	.08	.03	.05	4.	1 MAR 0015	94	.01	.00	.01	1.
28 FEB 1215	46	.13	.04	.09	6.	1 MAR 0030	95	.01	.00	.01	1.
28 FEB 1230	47	.16	.05	.11	8.	1 MAR 0045	96	.01	.00	.01	1.
28 FEB 1245	48	.23	.06	.17	12.	1 MAR 0100	97	.01	.00	.01	1.
28 FEB 1300	49	.49	.10	.39	26.						

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   TOTAL RAINFALL =    5.20, TOTAL LOSS =    1.34, TOTAL EXCESS =    3.86

 PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     24.00-HR
 (CFS)        (HR)
                          (CFS)
+      62.     12.25                  10.          3.          3.           3.
                        (INCHES)    3.029       3.849       3.849        3.849
                         (AC-FT)       5.          7.          7.           7.

                         CUMULATIVE AREA =     .03 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***


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            *            *
 239 KK     *       18P  *
            *            *
            **************

 240 KO          OUTPUT CONTROL VARIABLES
                       IPRNT           1  PRINT CONTROL
                       IPLOT           0  PLOT CONTROL
                       QSCAL          0.  HYDROGRAPH PLOT SCALE
                                SCS RUNOFF CALCULATION

               SUBBASIN RUNOFF DATA

 2 BA           SUBBASIN CHARACTERISTICS
                       TAREA         .01  SUBBASIN AREA

                PRECIPITATION DATA

 243 PH                                DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
                ..... HYDRO-35 ......   ............... TP-40 ...............   ........... TP-49 ...........
                5-MIN  15-MIN  60-MIN    2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                  .50    1.10    2.10    2.70    3.00    3.60    4.50    5.20     .00     .00     .00     .00

                                                  STORM AREA =     .01

 244 LS          SCS LOSS RATE
                       STRTL         .11  INITIAL ABSTRACTION
                      CRVNBR       95.00  CURVE NUMBER
                       RTIMP         .00  PERCENT IMPERVIOUS AREA

 245 UD          SCS DIMENSIONLESS UNITGRAPH
                        TLAG         .06  LAG

                                                          ***

WARNING *** TIME INTERVAL IS GREATER THAN .29*LAG

                                                      UNIT HYDROGRAPH
                                                   5 END-OF-PERIOD ORDINATES
               21.        6.        1.        0.        0.

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                                                HYDROGRAPH AT STATION      18P

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DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
28 FEB 0100	1	.00	.00	.00	0.
28 FEB 0115	2	.01	.01	.00	0.
28 FEB 0130	3	.01	.01	.00	0.
28 FEB 0145	4	.01	.01	.00	0.
28 FEB 0200	5	.01	.01	.00	0.
28 FEB 0215	6	.01	.01	.00	0.
28 FEB 0230	7	.01	.01	.00	0.
28 FEB 0245	8	.01	.01	.00	0.
28 FEB 0300	9	.01	.01	.00	0.
28 FEB 0315	10	.01	.01	.00	0.
28 FEB 0330	11	.01	.01	.00	0.
28 FEB 0345	12	.01	.01	.00	0.
28 FEB 0400	13	.01	.01	.00	0.
28 FEB 0415	14	.01	.01	.00	0.
28 FEB 0430	15	.01	.01	.00	0.
28 FEB 0445	16	.01	.01	.00	0.
28 FEB 0500	17	.02	.01	.00	0.
28 FEB 0515	18	.02	.01	.01	0.
28 FEB 0530	19	.02	.01	.01	0.
28 FEB 0545	20	.02	.01	.01	0.
28 FEB 0600	21	.02	.01	.01	0.
28 FEB 0615	22	.02	.01	.01	0.
28 FEB 0630	23	.02	.01	.01	0.
28 FEB 0645	24	.02	.01	.01	0.
28 FEB 0700	25	.02	.01	.01	0.
28 FEB 0715	26	.03	.01	.02	0.
28 FEB 0730	27	.03	.01	.02	0.
28 FEB 0745	28	.03	.01	.02	1.
28 FEB 0800	29	.03	.01	.02	1.
28 FEB 0815	30	.03	.01	.02	1.
28 FEB 0830	31	.04	.01	.02	1.
28 FEB 0845	32	.04	.01	.03	1.
28 FEB 0900	33	.04	.01	.03	1.
28 FEB 0915	34	.04	.01	.03	1.
28 FEB 0930	35	.04	.01	.03	1.
28 FEB 0945	36	.04	.01	.03	1.
28 FEB 1000	37	.05	.01	.04	1.
28 FEB 1015	38	.04	.01	.03	1.
28 FEB 1030	39	.04	.01	.04	1.
28 FEB 1045	40	.05	.01	.04	1.
28 FEB 1100	41	.05	.01	.04	1.
28 FEB 1115	42	.05	.01	.05	1.
28 FEB 1130	43	.06	.01	.05	1.
28 FEB 1145	44	.07	.01	.06	2.
28 FEB 1200	45	.08	.01	.07	2.
28 FEB 1215	46	.13	.01	.12	3.
28 FEB 1230	47	.16	.01	.14	4.
28 FEB 1245	48	.23	.02	.21	6.
28 FEB 1300	49	.49	.02	.47	11.
28 FEB 1315	50	1.10	.03	1.07	26.
28 FEB 1330	51	.28	.01	.28	13.
28 FEB 1345	52	.18	.00	.17	7.
28 FEB 1400	53	.14	.00	.14	5.
28 FEB 1415	54	.08	.00	.08	3.
28 FEB 1430	55	.07	.00	.07	2.
28 FEB 1445	56	.06	.00	.06	2.
28 FEB 1500	57	.06	.00	.06	2.
28 FEB 1515	58	.05	.00	.05	2.
28 FEB 1530	59	.05	.00	.05	1.
28 FEB 1545	60	.04	.00	.04	1.
28 FEB 1600	61	.04	.00	.04	1.
28 FEB 1615	62	.05	.00	.05	1.
28 FEB 1630	63	.05	.00	.04	1.
28 FEB 1645	64	.04	.00	.04	1.
28 FEB 1700	65	.04	.00	.04	1.
28 FEB 1715	66	.04	.00	.04	1.
28 FEB 1730	67	.04	.00	.04	1.
28 FEB 1745	68	.04	.00	.04	1.
28 FEB 1800	69	.04	.00	.03	1.
28 FEB 1815	70	.03	.00	.03	1.
28 FEB 1830	71	.03	.00	.03	1.
28 FEB 1845	72	.03	.00	.03	1.
28 FEB 1900	73	.03	.00	.03	1.
28 FEB 1915	74	.02	.00	.02	1.
28 FEB 1930	75	.02	.00	.02	1.
28 FEB 1945	76	.02	.00	.02	1.
28 FEB 2000	77	.02	.00	.02	1.
28 FEB 2015	78	.02	.00	.02	0.
28 FEB 2030	79	.02	.00	.02	0.
28 FEB 2045	80	.02	.00	.02	0.
28 FEB 2100	81	.02	.00	.02	0.
28 FEB 2115	82	.02	.00	.02	0.
28 FEB 2130	83	.02	.00	.01	0.
28 FEB 2145	84	.01	.00	.01	0.
28 FEB 2200	85	.01	.00	.01	0.
28 FEB 2215	86	.01	.00	.01	0.
28 FEB 2230	87	.01	.00	.01	0.
28 FEB 2245	88	.01	.00	.01	0.
28 FEB 2300	89	.01	.00	.01	0.
28 FEB 2315	90	.01	.00	.01	0.
28 FEB 2330	91	.01	.00	.01	0.
28 FEB 2345	92	.01	.00	.01	0.
1 MAR 0000	93	.01	.00	.01	0.
1 MAR 0015	94	.01	.00	.01	0.
1 MAR 0030	95	.01	.00	.01	0.
1 MAR 0045	96	.01	.00	.01	0.
1 MAR 0100	97	.01	.00	.01	0.

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TOTAL RAINFALL = 5.20, TOTAL LOSS = .58, TOTAL EXCESS = 4.62

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	24.00-HR
+ (CFS)	(HR)					
		(CFS)				
+ 26.	12.25		4.	1.	1.	1.
		(INCHES)	3.455	4.608	4.608	4.608
		(AC-FT)	2.	3.	3.	3.

CUMULATIVE AREA = .01 SQ MI

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          *            *
249 KK    *     8CSWP  *
          *            *
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250 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           1  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                               DIRECT INPUT HYDROGRAPH FROM READING, UNDER RTE 93

  6 IN          TIME DATA FOR INPUT TIME SERIES
                      JXMIN          15  TIME INTERVAL IN MINUTES
                     JXDATE     28FEB91  STARTING DATE
                     JXTIME         100  STARTING TIME

            SUBBASIN RUNOFF DATA

252 BA          SUBBASIN CHARACTERISTICS
                      TAREA        1.43  SUBBASIN AREA
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HYDROGRAPH AT STATION 8CSWP

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DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW
28 FEB 0100	1	0.	28 FEB 0715	26	11.	28 FEB 1330	51	342.	28 FEB 1945	76	138.
28 FEB 0115	2	0.	28 FEB 0730	27	11.	28 FEB 1345	52	429.	28 FEB 2000	77	124.
28 FEB 0130	3	0.	28 FEB 0745	28	11.	28 FEB 1400	53	445.	28 FEB 2015	78	112.
28 FEB 0145	4	0.	28 FEB 0800	29	11.	28 FEB 1415	54	422.	28 FEB 2030	79	101.
28 FEB 0200	5	0.	28 FEB 0815	30	11.	28 FEB 1430	55	383.	28 FEB 2045	80	93.
28 FEB 0215	6	0.	28 FEB 0830	31	11.	28 FEB 1445	56	346.	28 FEB 2100	81	86.
28 FEB 0230	7	0.	28 FEB 0845	32	11.	28 FEB 1500	57	314.	28 FEB 2115	82	81.
28 FEB 0245	8	0.	28 FEB 0900	33	11.	28 FEB 1515	58	291.	28 FEB 2130	83	77.
28 FEB 0300	9	1.	28 FEB 0915	34	11.	28 FEB [illegible]30	59	274.	28 FEB 2145	84	73.
28 FEB 0315	10	3.	28 FEB 0930	35	11.	28 FEB [illegible]45	60	262.	28 FEB 2200	85	71.
28 FEB 0330	11	4.	28 FEB 0945	36	11.	28 FEB [illegible]00	61	253.	28 FEB 2215	86	69.
28 FEB 0345	12	6.	28 FEB 1000	37	12.	28 FEB 1615	62	246.	28 FEB 2230	87	67.
28 FEB 0400	13	7.	28 FEB 1015	38	13.	28 FEB 1630	63	241.	28 FEB 2245	88	65.
28 FEB 0415	14	8.	28 FEB 1030	39	14.	28 FEB 1645	64	237.	28 FEB 2300	89	64.
28 FEB 0430	15	9.	28 FEB 1045	40	16.	28 FEB 1700	65	233.	28 FEB 2315	90	63.
28 FEB 0445	16	10.	28 FEB 1100	41	19.	28 FEB 1715	66	228.	28 FEB 2330	91	62.
28 FEB 0500	17	10.	28 FEB 1115	42	22.	28 FEB 1730	67	223.	28 FEB 2345	92	61.
28 FEB 0515	18	10.	28 FEB 1130	43	25.	28 FEB 1745	68	218.	1 MAR 0000	93	60.
28 FEB 0530	19	10.	28 FEB 1145	44	29.	28 FEB 1800	69	212.	1 MAR 0015	94	59.
28 FEB 0545	20	10.	28 FEB 1200	45	35.	28 FEB 1815	70	206.	1 MAR 0030	95	58.
28 FEB 0600	21	11.	28 FEB 1215	46	42.	28 FEB 1830	71	199.	1 MAR 0045	96	57.
28 FEB 0615	22	11.	28 FEB 1230	47	54.	28 FEB 1845	72	192.	1 MAR 0100	97	57.
8 FEB 0630	23	11.	28 FEB 1245	48	73.	28 FEB 1900	73	184.			
28 FEB 0645	24	11.	28 FEB 1300	49	112.	28 FEB 1915	74	172.			
28 FEB 0700	25	11.	28 FEB 1315	50	207.	28 FEB 1930	75	154.			

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 PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                    6-HR       24-HR       72-HR     24.00-HR
+   (CFS)       (HR)
                          (CFS)
+     445.     13.00                 274.         97.         97.          97.
                       (INCHES)     1.780       2.523       2.523        2.523
                        (AC-FT)      136.        192.        192.         192.

                        CUMULATIVE AREA =    1.43 SQ MI


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 266 KK     *     PHPND  *
            *            *
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 267 KO          OUTPUT CONTROL VARIABLES
                       IPRNT           1  PRINT CONTROL
                       IPLOT           0  PLOT CONTROL
                       QSCAL          0.  HYDROGRAPH PLOT SCALE
                                STORAGE ROUTING THROUGH PHILLIPS POND

               HYDROGRAPH ROUTING DATA

 269 RS          STORAGE ROUTING
                       NSTPS           1  NUMBER OF SUBREACHES
                        ITYP        ELEV  TYPE OF INITIAL CONDITION
                      RSVRIC       57.00  INITIAL CONDITION
                           X         .00 WORKING R AND D COEFFICIENT

 270 SA               AREA         3.9       4.8       5.5       7.5       8.8      11.9

 271 SE          ELEVATION       57.00     59.50     60.60     62.00     64.00     66.00

 272 SL          LOW-LEVEL OUTLET
                       ELEVL       57.50  ELEVATION AT CENTER OF OUTLET
                       CAREA       14.14  CROSS-SECTIONAL AREA
                        COQL         .60  COEFFICIENT
                        EXPL         .50  EXPONENT OF HEAD

 273 SS          SPILLWAY
                        CREL       65.90  SPILLWAY CREST ELEVATION
                       SPWID       40.00  SPILLWAY WIDTH
                        COQW        3.00  WEIR COEFFICIENT
                        EXPW        1.50  EXPONENT OF HEAD

                                                        ***

                                          COMPUTED STORAGE-ELEVATION DATA

           STORAGE        .00     10.91     16.59     25.69     42.01     62.64
         ELEVATION      57.00     59.50     60.60     62.00     64.00     66.00

                                          COMPUTED OUTFLOW-ELEVATION DATA

           OUTFLOW        .00       .00     97.70    105.29    114.15    124.65    137.28    152.75    172.15    197.20
         ELEVATION      57.00     57.50     59.56     59.89     60.31     60.86     61.57     62.54     63.90     65.90

           OUTFLOW     197.39    197.54    197.77    198.07    198.46    198.96    199.56    200.29    201.16    202.17
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ELEVATION	65.91	65.91	65.92	65.93	65.94	65.95	65.96	65.97	65.98	66.00

COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

STORAGE	.00	2.00	10.91	11.21	12.86	15.05	16.59	18.05	22.60	25.69
OUTFLOW	.00	.00	96.23	97.70	105.29	114.15	119.80	124.65	137.28	144.34
ELEVATION	57.00	57.50	59.50	59.56	59.89	60.31	60.60	60.86	61.57	62.00
STORAGE	29.84	41.15	42.01	61.45	61.61	61.78	62.00	62.14	62.29	62.45
OUTFLOW	152.75	172.15	173.47	197.20	197.54	198.07	198.96	199.56	200.29	201.16
ELEVATION	62.54	63.90	64.00	65.90	65.91	65.93	65.95	65.96	65.97	65.98
STORAGE	62.64									
OUTFLOW	202.17									
ELEVATION	66.00									

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HYDROGRAPH AT STATION PHPND

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DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE
28	FEB	0100	1	0.	.0	57.0	28	FEB	0915	34	13.	3.2	57.8	28	FEB	1730	67	359.	90.7	68.4
28	FEB	0115	2	0.	.0	57.0	28	FEB	0930	35	14.	3.3	57.8	28	FEB	1745	68	364.	91.5	68.4
28	FEB	0130	3	0.	.0	57.0	28	FEB	0945	36	15.	3.4	57.8	28	FEB	1800	69	367.	92.2	68.5
28	FEB	0145	4	0.	.0	57.0	28	FEB	1000	37	15.	3.4	57.8	28	FEB	1815	70	370.	92.6	68.5
28	FEB	0200	5	0.	.0	57.0	28	FEB	1015	38	16.	3.5	57.8	28	FEB	1830	71	371.	92.9	68.5
28	FEB	0215	6	0.	.0	57.0	28	FEB	1030	39	17.	3.6	57.9	28	FEB	1845	72	371.	92.9	68.5
28	FEB	0230	7	0.	.0	57.0	28	FEB	1045	40	18.	3.7	57.9	28	FEB	1900	73	370.	92.6	68.5
	FEB	0245	8	0.	.0	57.0	28	FEB	1100	41	20.	3.9	57.9	28	FEB	1915	74	367.	92.1	68.5
	FEB	0300	9	0.	.0	57.0	28	FEB	1115	42	23.	4.1	58.0	28	FEB	1930	75	362.	91.2	68.4
28	FEB	0315	10	0.	.1	57.0	28	FEB	1130	43	26.	4.4	58.0	28	FEB	1945	76	355.	89.9	68.3
28	FEB	0330	11	0.	.1	57.0	28	FEB	1145	44	30.	4.8	58.1	28	FEB	2000	77	346.	88.4	68.2
28	FEB	0345	12	0.	.2	57.1	28	FEB	1200	45	35.	5.2	58.2	28	FEB	2015	78	337.	86.7	68.0
28	FEB	0400	13	0.	.4	57.1	28	FEB	1215	46	42.	5.9	58.4	28	FEB	2030	79	326.	84.8	67.9
28	FEB	0415	14	0.	.5	57.1	28	FEB	1230	47	51.	6.7	58.6	28	FEB	2045	80	315.	82.9	67.7
28	FEB	0430	15	0.	.7	57.2	28	FEB	1245	48	64.	7.9	58.8	28	FEB	2100	81	304.	80.8	67.5
28	FEB	0445	16	0.	.9	57.2	28	FEB	1300	49	85.	9.9	59.3	28	FEB	2115	82	292.	78.8	67.4
28	FEB	0500	17	0.	1.1	57.3	28	FEB	1315	50	110.	14.1	60.1	28	FEB	2130	83	281.	76.7	67.2
28	FEB	0515	18	0.	1.3	57.3	28	FEB	1330	51	133.	21.2	61.3	28	FEB	2145	84	270.	74.7	67.0
28	FEB	0530	19	0.	1.5	57.4	28	FEB	1345	52	153.	29.9	62.6	28	FEB	2200	85	259.	72.8	66.9
28	FEB	0545	20	0.	1.7	57.4	28	FEB	1400	53	169.	39.1	63.7	28	FEB	2215	86	249.	70.9	66.7
28	FEB	0600	21	0.	2.0	57.5	28	FEB	1415	54	180.	47.8	64.6	28	FEB	2230	87	239.	69.2	66.6
28	FEB	0615	22	2.	2.2	57.5	28	FEB	1430	55	190.	55.3	65.3	28	FEB	2245	88	229.	67.5	66.4
28	FEB	0630	23	4.	2.3	57.6	28	FEB	1445	56	199.	61.9	65.9	28	FEB	2300	89	220.	65.9	66.3
28	FEB	0645	24	5.	2.5	57.6	28	FEB	1500	57	229.	67.4	66.4	28	FEB	2315	90	212.	64.3	66.1
28	FEB	0700	25	6.	2.6	57.6	28	FEB	1515	58	253.	71.7	66.8	28	FEB	2330	91	204.	62.9	66.0
28	FEB	0715	26	7.	2.7	57.7	28	FEB	1530	59	273.	75.4	67.1	28	FEB	2345	92	197.	61.5	65.9
28	FEB	0730	27	8.	2.8	57.7	28	FEB	1545	60	290.	78.4	67.3	1	MAR	0000	93	196.	60.2	65.8
28	FEB	0745	28	9.	2.8	57.7	28	FEB	1600	61	305.	81.0	67.5	1	MAR	0015	94	194.	58.8	65.6
28	FEB	0800	29	10.	2.9	57.7	28	FEB	1615	62	317.	83.2	67.7	1	MAR	0030	95	192.	57.4	65.5
28	FEB	0815	30	10.	3.0	57.7	28	FEB	1630	63	328.	85.2	67.9	1	MAR	0045	96	190.	55.9	65.4
28	FEB	0830	31	11.	3.0	57.7	28	FEB	1645	64	337.	86.9	68.0	1	MAR	0100	97	189.	54.4	65.2
28	FEB	0845	32	12.	3.1	57.7	28	FEB	1700	65	346.	88.3	68.2							
28	FEB	0900	33	13.	3.2	57.8	28	FEB	1715	66	353.	89.6	68.3							

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PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW (CFS) 6-HR	24-HR	72-HR	24.00-HR
371.	17.50	339.	141.	141.	141.

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                    (INCHES)     1.066       1.777       1.777       1.777
                     (AC-FT)      168.        280.        280.        280.

 PEAK STORAGE   TIME                        MAXIMUM AVERAGE STORAGE
                                     6-HR       24-HR       72-HR     24.00-HR
+  (AC-FT)      (HR)
      93.      17.50                  87.         37.         37.         37.

  PEAK STAGE    TIME                        MAXIMUM AVERAGE STAGE
                                     6-HR       24-HR       72-HR     24.00-HR
+   (FEET)      (HR)
    68.54      17.50                68.06       62.12       62.12       62.12

                     CUMULATIVE AREA =    2.95 SQ MI
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 274 KK     *       11P  *
            *            *
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 275 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           1  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                               SCS RUNOFF CALCULATION

              SUBBASIN RUNOFF DATA

 277 BA          SUBBASIN CHARACTERISTICS
                      TAREA         .07  SUBBASIN AREA

                 PRECIPITATION DATA

 278 PH                              DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
                 ..... HYDRO-35 ......   ............... TP-40 ...............   ........... TP-49 ...........
                 5-MIN  15-MIN  60-MIN    2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                   .50    1.10    2.10    2.70    3.00    3.60    4.50    5.20     .00     .00     .00     .00

                                                   STORM AREA =     .07

 279 LS          SCS LOSS RATE
                      STRTL         .20  INITIAL ABSTRACTION
                     CRVNBR       91.00  CURVE NUMBER
                      RTIMP         .00  PERCENT IMPERVIOUS AREA

 280 UD          SCS DIMENSIONLESS UNITGRAPH
                       TLAG         .32  LAG

                                                         ***

WARNING *** TIME INTERVAL IS GREATER THAN .29*LAG

                                                   UNIT HYDROGRAPH
                                              8 END-OF-PERIOD ORDINATES
              44.       73.       35.       14.        6.        2.        1.        0.
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                                          HYDROGRAPH AT STATION      11P
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DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
28 FEB 0100	1	.00	.00	.00	0.	28 FEB 1315	50	1.10	.09	1.01	85.
28 FEB 0115	2	.01	.01	.00	0.	28 FEB 1330	51	.28	.02	.27	104.
28 FEB 0130	3	.01	.01	.00	0.	28 FEB 1345	52	.18	.01	.17	70.
28 FEB 0145	4	.01	.01	.00	0.	28 FEB 1400	53	.14	.01	.13	45.
28 FEB 0200	5	.01	.01	.00	0.	28 FEB 1415	54	.08	.00	.08	30.
28 FEB 0215	6	.01	.01	.00	0.	28 FEB 1430	55	.07	.00	.07	20.
28 FEB 0230	7	.01	.01	.00	0.	28 FEB 1445	56	.06	.00	.06	15.
28 FEB 0245	8	.01	.01	.00	0.	28 FEB 1500	57	.06	.00	.05	12.
28 FEB 0300	9	.01	.01	.00	0.	28 FEB 1515	58	.05	.00	.05	10.
28 FEB 0315	10	.01	.01	.00	0.	28 FEB 1530	59	.05	.00	.05	9.
28 FEB 0330	11	.01	.01	.00	0.	28 FEB 1545	60	.04	.00	.04	8.
28 FEB 0345	12	.01	.01	.00	0.	28 FEB 1600	61	.04	.00	.04	8.
28 FEB 0400	13	.01	.01	.00	0.	28 FEB 1615	62	.05	.00	.05	8.
28 FEB 0415	14	.01	.01	.00	0.	28 FEB 1630	63	.05	.00	.04	8.
28 FEB 0430	15	.01	.01	.00	0.	28 FEB 1645	64	.04	.00	.04	8.
28 FEB 0445	16	.01	.01	.00	0.	28 FEB 1700	65	.04	.00	.04	7.
28 FEB 0500	17	.02	.02	.00	0.	28 FEB 1715	66	.04	.00	.04	7.
28 FEB 0515	18	.02	.02	.00	0.	28 FEB 1730	67	.04	.00	.04	7.
28 FEB 0530	19	.02	.01	.00	0.	28 FEB 1745	68	.04	.00	.04	7.
28 FEB 0545	20	.02	.01	.00	0.	28 FEB 1800	69	.04	.00	.03	6.
28 FEB 0600	21	.02	.01	.00	0.	28 FEB 1815	70	.03	.00	.03	6.
28 FEB 0615	22	.02	.01	.00	0.	28 FEB 1830	71	.03	.00	.03	6.
28 FEB 0630	23	.02	.01	.00	0.	28 FEB 1845	72	.03	.00	.03	6.
28 FEB 0645	24	.02	.01	.00	1.	28 FEB 1900	73	.03	.00	.03	5.
28 FEB 0700	25	.02	.01	.00	1.	28 FEB 1915	74	.02	.00	.02	5.
28 FEB 0715	26	.03	.02	.01	1.	28 FEB 1930	75	.02	.00	.02	4.
28 FEB 0730	27	.03	.02	.01	1.	28 FEB 1945	76	.02	.00	.02	3.
28 FEB 0745	28	.03	.02	.01	2.	28 FEB 2000	77	.02	.00	.02	3.
28 FEB 0800	29	.03	.02	.01	2.	28 FEB 2015	78	.02	.00	.02	3.
28 FEB 0815	30	.03	.02	.01	2.	28 FEB 2030	79	.02	.00	.02	3.
28 FEB 0830	31	.04	.02	.02	2.	28 FEB 2045	80	.02	.00	.02	3.
28 FEB 0845	32	.04	.02	.02	3.	28 FEB 2100	81	.02	.00	.02	3.
28 FEB 0900	33	.04	.02	.02	3.	28 FEB 2115	82	.02	.00	.02	3.
28 FEB 0915	34	.04	.02	.02	3.	28 FEB 2130	83	.02	.00	.01	3.
28 FEB 0930	35	.04	.02	.02	4.	28 FEB 2145	84	.01	.00	.01	3.
28 FEB 0945	36	.04	.02	.03	4.	28 FEB 2200	85	.01	.00	.01	3.
28 FEB 1000	37	.05	.02	.03	4.	28 FEB 2215	86	.01	.00	.01	2.
28 FEB 1015	38	.04	.02	.02	5.	28 FEB 2230	87	.01	.00	.01	2.
28 FEB 1030	39	.04	.02	.03	5.	28 FEB 2245	88	.01	.00	.01	2.
28 FEB 1045	40	.05	.02	.03	5.	28 FEB 2300	89	.01	.00	.01	2.
28 FEB 1100	41	.05	.02	.03	5.	28 FEB 2315	90	.01	.00	.01	2.
28 FEB 1115	42	.05	.02	.04	6.	28 FEB 2330	91	.01	.00	.01	2.
28 FEB 1130	43	.06	.02	.04	7.	28 FEB 2345	92	.01	.00	.01	2.
28 FEB 1145	44	.07	.02	.05	7.	1 MAR 0000	93	.01	.00	.01	2.
28 FEB 1200	45	.08	.02	.06	8.	1 MAR 0015	94	.01	.00	.01	2.
28 FEB 1215	46	.13	.03	.10	11.	1 MAR 0030	95	.01	.00	.01	2.
28 FEB 1230	47	.16	.03	.12	16.	1 MAR 0045	96	.01	.00	.01	2.
28 FEB 1245	48	.23	.04	.19	22.	1 MAR 0100	97	.01	.00	.01	2.
28 FEB 1300	49	.49	.06	.43	39.						

TOTAL RAINFALL = 5.20, TOTAL LOSS = 1.02, TOTAL EXCESS = 4.18

PEAK FLOW (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	24.00-HR
		(CFS)				
+ 104.	12.50		24.	8.	8.	8.
		(INCHES)	3.221	4.156	4.156	4.156
		(AC-FT)	12.	15.	15.	15.

CUMULATIVE AREA = .07 SQ MI

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          *            *
281 KK    *     MAWL   *
          *            *
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282 KO        OUTPUT CONTROL VARIABLES
                    IPRNT          1  PRINT CONTROL
                    IPLOT          0  PLOT CONTROL
                    QSCAL         0.  HYDROGRAPH PLOT SCALE
                            DIRECT INPUT HYDROGRAPH FROM MITIGATION AREA WETLAND
                            (SEE POND2: APPENDIX 10-G)

  6 IN        TIME DATA FOR INPUT TIME SERIES
                    JXMIN         15  TIME INTERVAL IN MINUTES
                   JXDATE    28FEB91  STARTING DATE
                   JXTIME        100  STARTING TIME

            SUBBASIN RUNOFF DATA

285 BA        SUBBASIN CHARACTERISTICS
                    TAREA        .01  SUBBASIN AREA
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HYDROGRAPH AT STATION MAWL

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DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW
28 FEB 0100	1	0.	28 FEB 0715	26	0.	28 FEB 1330	51	2.	28 FEB 1945	76	12.
28 FEB 0115	2	0.	28 FEB 0730	27	0.	28 FEB 1345	52	2.	28 FEB 2000	77	12.
28 FEB 0130	3	0.	28 FEB 0745	28	0.	28 FEB 1400	53	2.	28 FEB 2015	78	13.
28 FEB 0145	4	0.	28 FEB 0800	29	0.	28 FEB 1415	54	3.	28 FEB 2030	79	13.
28 FEB 0200	5	0.	28 FEB 0815	30	0.	28 FEB 1430	55	3.	28 FEB 2045	80	13.
28 FEB 0215	6	0.	28 FEB 0830	31	0.	28 FEB 1445	56	4.	28 FEB 2100	81	13.
28 FEB 0230	7	0.	28 FEB 0845	32	0.	28 FEB 1500	57	4.	28 FEB 2115	82	13.
28 FEB 0245	8	0.	28 FEB 0900	33	0.	28 FEB 1515	58	4.	28 FEB 2130	83	13.
28 FEB 0300	9	0.	28 FEB 0915	34	0.	28 FEB 1530	59	5.	28 FEB 2145	84	14.
28 FEB 0315	10	0.	28 FEB 0930	35	0.	28 FEB 1545	60	5.	28 FEB 2200	85	14.
28 FEB 0330	11	0.	28 FEB 0945	36	0.	28 FEB 1600	61	5.	28 FEB 2215	86	14.
28 FEB 0345	12	0.	28 FEB 1000	37	0.	28 FEB 1615	62	6.	28 FEB 2230	87	14.
28 FEB 0400	13	0.	28 FEB 1015	38	0.	28 FEB 1630	63	6.	28 FEB 2245	88	14.
28 FEB 0415	14	0.	28 FEB 1030	39	0.	28 FEB 1645	64	7.	28 FEB 2300	89	14.
28 FEB 0430	15	0.	28 FEB 1045	40	0.	28 FEB 1700	65	7.	28 FEB 2315	90	14.
28 FEB 0445	16	0.	28 FEB 1100	41	0.	28 FEB 1715	66	8.	28 FEB 2330	91	14.
28 FEB 0500	17	0.	28 FEB 1115	42	0.	28 FEB 1730	67	8.	28 FEB 2345	92	14.
28 FEB 0515	18	0.	28 FEB 1130	43	0.	28 FEB 1745	68	9.	1 MAR 0000	93	14.
28 FEB 0530	19	0.	28 FEB 1145	44	0.	28 FEB 1800	69	9.	1 MAR 0015	94	14.
28 FEB 0545	20	0.	28 FEB 1200	45	0.	28 FEB 1815	70	10.	1 MAR 0030	95	14.
28 FEB 0600	21	0.	28 FEB 1215	46	0.	28 FEB 1830	71	10.	1 MAR 0045	96	14.
28 FEB 0615	22	0.	28 FEB 1230	47	0.	28 FEB 1845	72	10.	1 MAR 0100	97	14.
28 FEB 0630	23	0.	28 FEB 1245	48	0.	28 FEB 1900	73	11.			
28 FEB 0645	24	0.	28 FEB 1300	49	1.	28 FEB 1915	74	11.			

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  28 FEB 0700   25        0.   *   28 FEB 1315   50        1.   *   28 FEB 1930   75        12.   *
                                *                                *                                *
*****************************************************************************************************************

 PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR        24-HR        72-HR      24.00-HR
+ (CFS)        (HR)
                          (CFS)
+      14.     23.25                  13.          5.           5.           5.
                       (INCHES)    12.547      17.884       17.884       17.884
                        (AC-FT)       7.         10.          10.          10.

                        CUMULATIVE AREA =     .01 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***


            **************
            *            *
 296 KK     *       9P   *
            *            *
            **************

 297 KO          OUTPUT CONTROL VARIABLES
                       IPRNT           1  PRINT CONTROL
                       IPLOT           0  PLOT CONTROL
                       QSCAL          0.  HYDROGRAPH PLOT SCALE
                                SCS RUNOFF CALCULATION

               SUBBASIN RUNOFF DATA

 299 BA          SUBBASIN CHARACTERISTICS
                       TAREA         .01  SUBBASIN AREA

                 PRECIPITATION DATA

 300 PH                                DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
                 ..... HYDRO-35 ......   ............... TP-40 ...............   ........... TP-49 ...........
                 5-MIN  15-MIN  60-MIN    2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                   .50    1.10    2.10    2.70    3.00    3.60    4.50    5.20     .00     .00     .00     .00

                                                  STORM AREA =     .01

 301 LS          SCS LOSS RATE
                       STRTL         .44  INITIAL ABSTRACTION
                      CRVNBR       82.00  CURVE NUMBER
                       RTIMP         .00  PERCENT IMPERVIOUS AREA

 302 UD          SCS DIMENSIONLESS UNITGRAPH
                        TLAG         .19  LAG

                                                          ***

WARNING *** TIME INTERVAL IS GREATER THAN .29*LAG

                                                     UNIT HYDROGRAPH
                                                  6 END-OF-PERIOD ORDINATES
                15.       10.        3.        1.        0.        0.

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                                              HYDROGRAPH AT STATION       9P
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DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
28 FEB 0100	1	.00	.00	.00	0.	28 FEB 1315	50	1.10	.26	.84	16.
28 FEB 0115	2	.01	.01	.00	0.	28 FEB 1330	51	.28	.05	.23	13.
28 FEB 0130	3	.01	.01	.00	0.	28 FEB 1345	52	.18	.03	.15	7.
28 FEB 0145	4	.01	.01	.00	0.	28 FEB 1400	53	.14	.02	.12	4.
28 FEB 0200	5	.01	.01	.00	0.	28 FEB 1415	54	.08	.01	.07	3.
28 FEB 0215	6	.01	.01	.00	0.	28 FEB 1430	55	.07	.01	.06	2.
28 FEB 0230	7	.01	.01	.00	0.	28 FEB 1445	56	.06	.01	.05	2.
28 FEB 0245	8	.01	.01	.00	0.	28 FEB 1500	57	.06	.01	.05	2.
28 FEB 0300	9	.01	.01	.00	0.	28 FEB 1515	58	.05	.01	.05	1.
28 FEB 0315	10	.01	.01	.00	0.	28 FEB 1530	59	.05	.01	.04	1.
28 FEB 0330	11	.01	.01	.00	0.	28 FEB 1545	60	.04	.01	.04	1.
28 FEB 0345	12	.01	.01	.00	0.	28 FEB 1600	61	.04	.01	.04	1.
28 FEB 0400	13	.01	.01	.00	0.	28 FEB 1615	62	.05	.01	.04	1.
28 FEB 0415	14	.01	.01	.00	0.	28 FEB 1630	63	.05	.01	.04	1.
28 FEB 0430	15	.01	.01	.00	0.	28 FEB 1645	64	.04	.01	.04	1.
28 FEB 0445	16	.01	.01	.00	0.	28 FEB 1700	65	.04	.00	.04	1.
28 FEB 0500	17	.02	.02	.00	0.	28 FEB 1715	66	.04	.00	.03	1.
28 FEB 0515	18	.02	.02	.00	0.	28 FEB 1730	67	.04	.00	.03	1.
28 FEB 0530	19	.02	.02	.00	0.	28 FEB 1745	68	.04	.00	.03	1.
28 FEB 0545	20	.02	.02	.00	0.	28 FEB 1800	69	.04	.00	.03	1.
28 FEB 0600	21	.02	.02	.00	0.	28 FEB 1815	70	.03	.00	.03	1.
28 FEB 0615	22	.02	.02	.00	0.	28 FEB 1830	71	.03	.00	.03	1.
28 FEB 0630	23	.02	.02	.00	0.	28 FEB 1845	72	.03	.00	.03	1.
28 FEB 0645	24	.02	.02	.00	0.	28 FEB 1900	73	.03	.00	.03	1.
28 FEB 0700	25	.02	.02	.00	0.	28 FEB 1915	74	.02	.00	.02	1.
28 FEB 0715	26	.03	.03	.00	0.	28 FEB 1930	75	.02	.00	.02	1.
28 FEB 0730	27	.03	.03	.00	0.	28 FEB 1945	76	.02	.00	.02	0.
28 FEB 0745	28	.03	.03	.00	0.	28 FEB 2000	77	.02	.00	.02	0.
28 FEB 0800	29	.03	.03	.00	0.	28 FEB 2015	78	.02	.00	.02	0.
28 FEB 0815	30	.03	.03	.00	0.	28 FEB 2030	79	.02	.00	.01	0.
28 FEB 0830	31	.04	.03	.00	0.	28 FEB 2045	80	.02	.00	.01	0.
28 FEB 0845	32	.04	.03	.00	0.	28 FEB 2100	81	.02	.00	.01	0.
28 FEB 0900	33	.04	.03	.01	0.	28 FEB 2115	82	.02	.00	.01	0.
28 FEB 0915	34	.04	.03	.01	0.	28 FEB 2130	83	.02	.00	.01	0.
28 FEB 0930	35	.04	.03	.01	0.	28 FEB 2145	84	.01	.00	.01	0.
28 FEB 0945	36	.04	.03	.01	0.	28 FEB 2200	85	.01	.00	.01	0.
28 FEB 1000	37	.05	.03	.01	0.	28 FEB 2215	86	.01	.00	.01	0.
28 FEB 1015	38	.04	.03	.01	0.	28 FEB 2230	87	.01	.00	.01	0.
28 FEB 1030	39	.04	.03	.01	0.	28 FEB 2245	88	.01	.00	.01	0.
28 FEB 1045	40	.05	.03	.01	0.	28 FEB 2300	89	.01	.00	.01	0.
28 FEB 1100	41	.05	.03	.02	0.	28 FEB 2315	90	.01	.00	.01	0.
28 FEB 1115	42	.05	.03	.02	1.	28 FEB 2330	91	.01	.00	.01	0.
28 FEB 1130	43	.06	.04	.02	1.	28 FEB 2345	92	.01	.00	.01	0.
28 FEB 1145	44	.07	.04	.03	1.	1 MAR 0000	93	.01	.00	.01	0.
28 FEB 1200	45	.08	.04	.03	1.	1 MAR 0015	94	.01	.00	.01	0.
28 FEB 1215	46	.13	.07	.06	1.	1 MAR 0030	95	.01	.00	.01	0.
28 FEB 1230	47	.16	.07	.08	2.	1 MAR 0045	96	.01	.00	.01	0.
28 FEB 1245	48	.23	.10	.13	3.	1 MAR 0100	97	.01	.00	.01	0.
28 FEB 1300	49	.49	.17	.32	6.						

TOTAL RAINFALL = 5.20, TOTAL LOSS = 1.94, TOTAL EXCESS = 3.26

PEAK FLOW (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	24.00-HR
		(CFS)				
+ 16.	12.25		3.	1.	1.	1.
		(INCHES)	2.619	3.247	3.247	3.247
		(AC-FT)	2.	2.	2.	2.

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                    CUMULATIVE AREA =     .01 SQ MI


   *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***


          **************
          *            *
303 KK    *      5PN   *
          *            *
          **************

304 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           1  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                               SCS RUNOFF CALCULATION

             SUBBASIN RUNOFF DATA

306 BA          SUBBASIN CHARACTERISTICS
                      TAREA         .01  SUBBASIN AREA

                PRECIPITATION DATA

307 PH                                DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
                ..... HYDRO-35 ......   ............... TP-40 ...............   ........... TP-49 ...........
                5-MIN  15-MIN  60-MIN    2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                  .50    1.10    2.10    2.70    3.00    3.60    4.50    5.20     .00     .00     .00     .00

                                                  STORM AREA =     .01

308 LS          SCS LOSS RATE
                      STRTL         .56  INITIAL ABSTRACTION
                     CRVNBR       78.00  CURVE NUMBER
                      RTIMP         .00  PERCENT IMPERVIOUS AREA

309 UD          SCS DIMENSIONLESS UNITGRAPH
                       TLAG         .43  LAG

                                                          ***

WARNING *** TIME INTERVAL IS GREATER THAN .29*LAG

                                                     UNIT HYDROGRAPH
                                                 11 END-OF-PERIOD ORDINATES
                3.       7.       6.       3.       1.       1.       0.       0.       0.       0.
                0.

*****************************************************************************************************************************

                                                HYDROGRAPH AT STATION      5PN

*****************************************************************************************************************************
                                                                                  *
      DA MON HRMN  ORD    RAIN    LOSS  EXCESS     COMP Q                        *      DA MON HRMN  ORD    RAIN    LOSS  EXCESS     COMP Q
                                                                                  *
      28 FEB 0100    1     .00     .00     .00         0.                        *      28 FEB 1315   50    1.10     .35     .75         5.
      28 FEB 0115    2     .01     .01     .00         0.                        *      28 FEB 1330   51     .28     .07     .21         8.
      28 FEB 0130    3     .01     .01     .00         0.                        *      28 FEB 1345   52     .18     .04     .14         7.
      28 FEB 0145    4     .01     .01     .00         0.                        *      28 FEB 1400   53     .14     .03     .11         5.
      28 FEB 0200    5     .01     .01     .00         0.                        *      28 FEB 1415   54     .08     .02     .07         4.
      28 FEB 0215    6     .01     .01     .00         0.                        *      28 FEB 1430   55     .07     .01     .06         2.
      28 FEB 0230    7     .01     .01     .00         0.                        *      28 FEB 1445   56     .06     .01     .05         2.
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28 FEB 0245	8	.01	.01	.00	0.
28 FEB 0300	9	.01	.01	.00	0.
28 FEB 0315	10	.01	.01	.00	0.
28 FEB 0330	11	.01	.01	.00	0.
28 FEB 0345	12	.01	.01	.00	0.
28 FEB 0400	13	.01	.01	.00	0.
28 FEB 0415	14	.01	.01	.00	0.
28 FEB 0430	15	.01	.01	.00	0.
28 FEB 0445	16	.01	.01	.00	0.
28 FEB 0500	17	.02	.02	.00	0.
28 FEB 0515	18	.02	.02	.00	0.
28 FEB 0530	19	.02	.02	.00	0.
28 FEB 0545	20	.02	.02	.00	0.
28 FEB 0600	21	.02	.02	.00	0.
28 FEB 0615	22	.02	.02	.00	0.
28 FEB 0630	23	.02	.02	.00	0.
28 FEB 0645	24	.02	.02	.00	0.
28 FEB 0700	25	.02	.02	.00	0.
28 FEB 0715	26	.03	.03	.00	0.
28 FEB 0730	27	.03	.03	.00	0.
28 FEB 0745	28	.03	.03	.00	0.
28 FEB 0800	29	.03	.03	.00	0.
28 FEB 0815	30	.03	.03	.00	0.
28 FEB 0830	31	.04	.04	.00	0.
28 FEB 0845	32	.04	.04	.00	0.
28 FEB 0900	33	.04	.04	.00	0.
28 FEB 0915	34	.04	.04	.00	0.
28 FEB 0930	35	.04	.04	.00	0.
28 FEB 0945	36	.04	.04	.00	0.
28 FEB 1000	37	.05	.04	.01	0.
28 FEB 1015	38	.04	.03	.01	0.
28 FEB 1030	39	.04	.04	.01	0.
28 FEB 1045	40	.05	.04	.01	0.
28 FEB 1100	41	.05	.04	.01	0.
28 FEB 1115	42	.05	.04	.01	0.
28 FEB 1130	43	.06	.04	.02	0.
28 FEB 1145	44	.07	.05	.02	0.
28 FEB 1200	45	.08	.05	.03	0.
28 FEB 1215	46	.13	.08	.05	0.
28 FEB 1230	47	.16	.09	.06	1.
28 FEB 1245	48	.23	.12	.11	1.
28 FEB 1300	49	.49	.22	.27	2.
28 FEB 1500	57	.06	.01	.05	1.
28 FEB 1515	58	.05	.01	.04	1.
28 FEB 1530	59	.05	.01	.04	1.
28 FEB 1545	60	.04	.01	.04	1.
28 FEB 1600	61	.04	.01	.03	1.
28 FEB 1615	62	.05	.01	.04	1.
28 FEB 1630	63	.05	.01	.04	1.
28 FEB 1645	64	.04	.01	.04	1.
28 FEB 1700	65	.04	.01	.03	1.
28 FEB 1715	66	.04	.01	.03	1.
28 FEB 1730	67	.04	.01	.03	1.
28 FEB 1745	68	.04	.01	.03	1.
28 FEB 1800	69	.04	.01	.03	1.
28 FEB 1815	70	.03	.01	.03	1.
28 FEB 1830	71	.03	.01	.03	1.
28 FEB 1845	72	.03	.01	.03	1.
28 FEB 1900	73	.03	.00	.03	1.
28 FEB 1915	74	.02	.00	.02	1.
28 FEB 1930	75	.02	.00	.02	0.
28 FEB 1945	76	.02	.00	.02	0.
28 FEB 2000	77	.02	.00	.01	0.
28 FEB 2015	78	.02	.00	.01	0.
28 FEB 2030	79	.02	.00	.01	0.
28 FEB 2045	80	.02	.00	.01	0.
28 FEB 2100	81	.02	.00	.01	0.
28 FEB 2115	82	.02	.00	.01	0.
28 FEB 2130	83	.02	.00	.01	0.
28 FEB 2145	84	.01	.00	.01	0.
28 FEB 2200	85	.01	.00	.01	0.
28 FEB 2215	86	.01	.00	.01	0.
28 FEB 2230	87	.01	.00	.01	0.
28 FEB 2245	88	.01	.00	.01	0.
28 FEB 2300	89	.01	.00	.01	0.
28 FEB 2315	90	.01	.00	.01	0.
28 FEB 2330	91	.01	.00	.01	0.
28 FEB 2345	92	.01	.00	.01	0.
1 MAR 0000	93	.01	.00	.01	0.
1 MAR 0015	94	.01	.00	.01	0.
1 MAR 0030	95	.01	.00	.01	0.
1 MAR 0045	96	.01	.00	.01	0.
1 MAR 0100	97	.01	.00	.01	0.

****

TOTAL RAINFALL = 5.20, TOTAL LOSS = 2.32, TOTAL EXCESS = 2.88

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.00-HR
+ (CFS)	(HR)					
		(CFS)				
+ 8.	12.50		2.	1.	1.	1.
		(INCHES)	2.333	2.858	2.858	2.858
		(AC-FT)	1.	1.	1.	1.

CUMULATIVE AREA = .01 SQ MI

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          ***************
          *             *
310 KK    *    MA5PN    *
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311 KO          OUTPUT CONTROL VARIABLES
                      IPRNT          1  PRINT CONTROL
                      IPLOT          0  PLOT CONTROL
                      QSCAL         0.  HYDROGRAPH PLOT SCALE
                               COMBINE HYDROGRAPHS FOR 9P, 5PN & MAWL

313 HC          HYDROGRAPH COMBINATION
                      ICOMP          3  NUMBER OF HYDROGRAPHS TO COMBINE

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HYDROGRAPH AT STATION MA5PN
SUM OF 3 HYDROGRAPHS

DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW
28	FEB	0100	1	0.	28	FEB	0715	26	0.	28	FEB	1330	51	22.	28	FEB	1945	76	13.
28	FEB	0115	2	0.	28	FEB	0730	27	0.	28	FEB	1345	52	16.	28	FEB	2000	77	13.
28	FEB	0130	3	0.	28	FEB	0745	28	0.	28	FEB	1400	53	12.	28	FEB	2015	78	13.
28	FEB	0145	4	0.	28	FEB	0800	29	0.	28	FEB	1415	54	9.	28	FEB	2030	79	14.
28	FEB	0200	5	0.	28	FEB	0815	30	0.	28	FEB	1430	55	8.	28	FEB	2045	80	14.
28	FEB	0215	6	0.	28	FEB	0830	31	0.	28	FEB	1445	56	7.	28	FEB	2100	81	14.
28	FEB	0230	7	0.	28	FEB	0845	32	0.	28	FEB	1500	57	7.	28	FEB	2115	82	14.
28	FEB	0245	8	0.	28	FEB	0900	33	0.	28	FEB	1515	58	7.	28	FEB	2130	83	14.
28	FEB	0300	9	0.	28	FEB	0915	34	0.	28	FEB	1530	59	7.	28	FEB	2145	84	14.
28	FEB	0315	10	0.	28	FEB	0930	35	0.	28	FEB	1545	60	7.	28	FEB	2200	85	14.
28	FEB	0330	11	0.	28	FEB	0945	36	0.	28	FEB	1600	61	7.	28	FEB	2215	86	15.
28	FEB	0345	12	0.	28	FEB	1000	37	0.	28	FEB	1615	62	7.	28	FEB	2230	87	15.
28	FEB	0400	13	0.	28	FEB	1015	38	0.	28	FEB	1630	63	8.	28	FEB	2245	88	15.
28	FEB	0415	14	0.	28	FEB	1030	39	1.	28	FEB	1645	64	8.	28	FEB	2300	89	15.
28	FEB	0430	15	0.	28	FEB	1045	40	1.	28	FEB	1700	65	9.	28	FEB	2315	90	15.
28	FEB	0445	16	0.	28	FEB	1100	41	1.	28	FEB	1715	66	9.	28	FEB	2330	91	15.
28	FEB	0500	17	0.	28	FEB	1115	42	1.	28	FEB	1730	67	10.	28	FEB	2345	92	15.
28	FEB	0515	18	0.	28	FEB	1130	43	1.	28	FEB	1745	68	10.	1	MAR	0000	93	15.
28	FEB	0530	19	0.	28	FEB	1145	44	1.	28	FEB	1800	69	11.	1	MAR	0015	94	15.
28	FEB	0545	20	0.	28	FEB	1200	45	1.	28	FEB	1815	70	11.	1	MAR	0030	95	15.
28	FEB	0600	21	0.	28	FEB	1215	46	2.	28	FEB	1830	71	11.	1	MAR	0045	96	15.
28	FEB	0615	22	0.	28	FEB	1230	47	3.	28	FEB	1845	72	12.	1	MAR	0100	97	15.
28	FEB	0630	23	0.	28	FEB	1245	48	5.	28	FEB	1900	73	12.					
28	FEB	0645	24	0.	28	FEB	1300	49	9.	28	FEB	1915	74	12.					
28	FEB	0700	25	0.	28	FEB	1315	50	22.	28	FEB	1930	75	13.					

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.00-HR
+ (CFS)	(HR)					
		(CFS)				
+ 22.	12.25		14.	6.	6.	6.
		(INCHES)	4.547	8.187	8.187	8.187
		(AC-FT)	7.	13.	13.	13.

CUMULATIVE AREA = .03 SQ MI

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          *            *
314 KK    *    AADWEX  *
          *            *
          **************

315 KO        OUTPUT CONTROL VARIABLES
                    IPRNT           1  PRINT CONTROL
                    IPLOT           0  PLOT CONTROL
                    QSCAL          0.  HYDROGRAPH PLOT SCALE
                              STORAGE ROUTING THROUGH ATLANTIC AVENUE DRAINWAY EXTENSION

            HYDROGRAPH ROUTING DATA

317 RS        STORAGE ROUTING
                    NSTPS           1  NUMBER OF SUBREACHES
                     ITYP        ELEV  TYPE OF INITIAL CONDITION
                   RSVRIC       60.00  INITIAL CONDITION
                        X         .00 WORKING R AND D COEFFICIENT

318 SA             AREA          .0        .0        .0        .1        .1        .1        .2        .2

319 SE        ELEVATION       60.00     62.50     63.50     64.50     65.50     66.50     67.50     68.00

320 SL        LOW-LEVEL OUTLET
                    ELEVL       61.90  ELEVATION AT CENTER OF OUTLET
                    CAREA       37.70  CROSS-SECTIONAL AREA
                     COQL         .60  COEFFICIENT
                     EXPL         .50  EXPONENT OF HEAD

321 SS        SPILLWAY
                     CREL       67.90  SPILLWAY CREST ELEVATION
                    SPWID         .00  SPILLWAY WIDTH
                     COQW         .00  WEIR COEFFICIENT
                     EXPW        1.50  EXPONENT OF HEAD

                                                    ***

                                        COMPUTED STORAGE-ELEVATION DATA

          STORAGE        .00       .02       .04       .08       .15       .27       .42       .52
        ELEVATION      60.00     62.50     63.50     64.50     65.50     66.50     67.50     68.00

                                        COMPUTED OUTFLOW-ELEVATION DATA

          OUTFLOW        .00       .00    322.62    335.76    350.02    365.54    382.50    401.12    421.64    444.37
        ELEVATION      60.00     61.90     65.06     65.33     65.62     65.96     66.35     66.79     67.30     67.90


                                      COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

          STORAGE        .00       .01       .02       .04       .08       .12       .14       .15       .17       .20
          OUTFLOW        .00       .00    140.52    229.47    292.52    322.62    335.76    344.21    350.02    365.54
        ELEVATION      60.00     61.90     62.50     63.50     64.50     65.06     65.33     65.50     65.62     65.96

          STORAGE        .25       .27       .31       .39       .42       .50       .52
          OUTFLOW     382.50    389.09    401.12    421.64    429.30    444.37    448.06
        ELEVATION      66.35     66.50     66.79     67.30     67.50     67.90     68.00

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN        0. TO      448.
               THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
               THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

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HYDROGRAPH AT STATION AADWEX

MON HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA MON HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA MON HRMN	ORD	OUTFLOW	STORAGE	STAGE
28 FEB 0100	1	0.	.0	60.0	28 FEB 0915	34	0.	.0	61.9	28 FEB 1730	67	10.	.0	61.9
28 FEB 0115	2	0.	.0	60.0	28 FEB 0930	35	0.	.0	61.9	28 FEB 1745	68	10.	.0	61.9
28 FEB 0130	3	0.	.0	60.0	28 FEB 0945	36	0.	.0	61.9	28 FEB 1800	69	11.	.0	61.9
28 FEB 0145	4	0.	.0	60.0	28 FEB 1000	37	0.	.0	61.9	28 FEB 1815	70	11.	.0	61.9
28 FEB 0200	5	0.	.0	60.0	28 FEB 1015	38	1.	.0	61.9	28 FEB 1830	71	11.	.0	61.9
28 FEB 0215	6	0.	.0	60.0	28 FEB 1030	39	1.	.0	61.9	28 FEB 1845	72	12.	.0	62.0
28 FEB 0230	7	0.	.0	60.0	28 FEB 1045	40	1.	.0	61.9	28 FEB 1900	73	12.	.0	62.0
28 FEB 0245	8	0.	.0	60.0	28 FEB 1100	41	1.	.0	61.9	28 FEB 1915	74	12.	.0	62.0
28 FEB 0300	9	0.	.0	60.0	28 FEB 1115	42	1.	.0	61.9	28 FEB 1930	75	13.	.0	62.0
28 FEB 0315	10	0.	.0	60.0	28 FEB 1130	43	1.	.0	61.9	28 FEB 1945	76	13.	.0	62.0
28 FEB 0330	11	0.	.0	60.0	28 FEB 1145	44	1.	.0	61.9	28 FEB 2000	77	13.	.0	62.0
28 FEB 0345	12	0.	.0	60.0	28 FEB 1200	45	1.	.0	61.9	28 FEB 2015	78	13.	.0	62.0
28 FEB 0400	13	0.	.0	60.0	28 FEB 1215	46	2.	.0	61.9	28 FEB 2030	79	14.	.0	62.0
28 FEB 0415	14	0.	.0	60.0	28 FEB 1230	47	3.	.0	61.9	28 FEB 2045	80	14.	.0	62.0
28 FEB 0430	15	0.	.0	60.0	28 FEB 1245	48	5.	.0	61.9	28 FEB 2100	81	14.	.0	62.0
28 FEB 0445	16	0.	.0	60.0	28 FEB 1300	49	9.	.0	61.9	28 FEB 2115	82	14.	.0	62.0
28 FEB 0500	17	0.	.0	60.0	28 FEB 1315	50	22.	.0	62.0	28 FEB 2130	83	14.	.0	62.0
28 FEB 0515	18	0.	.0	60.0	28 FEB 1330	51	22.	.0	62.0	28 FEB 2145	84	14.	.0	62.0
28 FEB 0530	19	0.	.0	60.0	28 FEB 1345	52	16.	.0	62.0	28 FEB 2200	85	14.	.0	62.0
28 FEB 0545	20	0.	.0	60.0	28 FEB 1400	53	12.	.0	62.0	28 FEB 2215	86	15.	.0	62.0
28 FEB 0600	21	0.	.0	60.0	28 FEB 1415	54	9.	.0	61.9	28 FEB 2230	87	15.	.0	62.0
28 FEB 0615	22	0.	.0	60.0	28 FEB 1430	55	8.	.0	61.9	28 FEB 2245	88	15.	.0	62.0
28 FEB 0630	23	0.	.0	60.0	28 FEB 1445	56	7.	.0	61.9	28 FEB 2300	89	15.	.0	62.0
28 FEB 0645	24	0.	.0	60.0	28 FEB 1500	57	7.	.0	61.9	28 FEB 2315	90	15.	.0	62.0
28 FEB 0700	25	0.	.0	60.1	28 FEB 1515	58	7.	.0	61.9	28 FEB 2330	91	15.	.0	62.0
28 FEB 0715	26	0.	.0	60.1	28 FEB 1530	59	7.	.0	61.9	28 FEB 2345	92	15.	.0	62.0
FEB 0730	27	0.	.0	60.1	28 FEB 1545	60	7.	.0	61.9	1 MAR 0000	93	15.	.0	62.0
FEB 0745	28	0.	.0	60.2	28 FEB 1600	61	7.	.0	61.9	1 MAR 0015	94	15.	.0	62.0
28 FEB 0800	29	0.	.0	60.3	28 FEB 1615	62	7.	.0	61.9	1 MAR 0030	95	15.	.0	62.0
28 FEB 0815	30	0.	.0	60.4	28 FEB 1630	63	8.	.0	61.9	1 MAR 0045	96	15.	.0	62.0
28 FEB 0830	31	0.	.0	60.7	28 FEB 1645	64	8.	.0	61.9	1 MAR 0100	97	15.	.0	62.0
28 FEB 0845	32	0.	.0	61.1	28 FEB 1700	65	9.	.0	61.9					
28 FEB 0900	33	0.	.0	61.6	28 FEB 1715	66	9.	.0	61.9					

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.00-HR
+ (CFS)	(HR)					
		(CFS)				
+ 22.	12.25		14.	6.	6.	6.
		(INCHES)	4.547	8.180	8.180	8.180
		(AC-FT)	7.	13.	13.	13.

PEAK STORAGE	TIME	MAXIMUM AVERAGE STORAGE			
		6-HR	24-HR	72-HR	24.00-HR
+ (AC-FT)	(HR)				
0.	8.25	0.	0.	0.	0.

PEAK STAGE	TIME	MAXIMUM AVERAGE STAGE			
		6-HR	24-HR	72-HR	24.00-HR
+ (FEET)	(HR)				
61.99	12.25	61.96	61.33	61.33	61.33

CUMULATIVE AREA = .03 SQ MI

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          **************
          *            *
322 KK    *      5PS   *
          *            *
          **************

323 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           1  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                               SCS RUNOFF CALCULATION

              SUBBASIN RUNOFF DATA

325 BA          SUBBASIN CHARACTERISTICS
                      TAREA         .05  SUBBASIN AREA

                PRECIPITATION DATA

326 PH                                DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
                ..... HYDRO-35 ......   ............... TP-40 ...............   ........... TP-49 ...........
                5-MIN  15-MIN  60-MIN    2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                  .50    1.10    2.10    2.70    3.00    3.60    4.50    5.20     .00     .00     .00     .00

                                                STORM AREA =     .05

327 LS          SCS LOSS RATE
                      STRTL         .41  INITIAL ABSTRACTION
                     CRVNBR       83.00  CURVE NUMBER
                      RTIMP         .00  PERCENT IMPERVIOUS AREA

328 UD          SCS DIMENSIONLESS UNITGRAPH
                       TLAG         .52  LAG

                                                        ***

WARNING *** TIME INTERVAL IS GREATER THAN .29*LAG

                                                UNIT HYDROGRAPH
                                          12 END-OF-PERIOD ORDINATES
              11.       35.       36.       24.       12.        6.        3.        2.        1.        1.
               0.        0.
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HYDROGRAPH AT STATION 5PS

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DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
28 FEB 0100	1	.00	.00	.00	0.	*	28 FEB 1315	50	1.10	.24	.86	30.
28 FEB 0115	2	.01	.01	.00	0.	*	28 FEB 1330	51	.28	.05	.24	50.
28 FEB 0130	3	.01	.01	.00	0.	*	28 FEB 1345	52	.18	.03	.15	52.
28 FEB 0145	4	.01	.01	.00	0.	*	28 FEB 1400	53	.14	.02	.12	41.
28 FEB 0200	5	.01	.01	.00	0.	*	28 FEB 1415	54	.08	.01	.07	29.
28 FEB 0215	6	.01	.01	.00	0.	*	28 FEB 1430	55	.07	.01	.06	21.
28 FEB 0230	7	.01	.01	.00	0.	*	28 FEB 1445	56	.06	.01	.06	15.
28 FEB 0245	8	.01	.01	.00	0.	*	28 FEB 1500	57	.06	.01	.05	12.
28 FEB 0300	9	.01	.01	.00	0.	*	28 FEB 1515	58	.05	.01	.05	9.
28 FEB 0315	10	.01	.01	.00	0.	*	28 FEB 1530	59	.05	.01	.04	8.
28 FEB 0330	11	.01	.01	.00	0.	*	28 FEB 1545	60	.04	.01	.04	7.
28 FEB 0345	12	.01	.01	.00	0.	*	28 FEB 1600	61	.04	.00	.04	6.
28 FEB 0400	13	.01	.01	.00	0.	*	28 FEB 1615	62	.05	.01	.04	6.

28 FEB 0415	14	.01	.01	.00	0.	*	28 FEB 1630	63	.05	.01	.04	5.
28 FEB 0430	15	.01	.01	.00	0.	*	28 FEB 1645	64	.04	.00	.04	5.
28 FEB 0445	16	.01	.01	.00	0.	*	28 FEB 1700	65	.04	.00	.04	5.
28 FEB 0500	17	.02	.02	.00	0.	*	28 FEB 1715	66	.04	.00	.04	5.
28 FEB 0515	18	.02	.02	.00	0.	*	28 FEB 1730	67	.04	.00	.03	5.
28 FEB 0530	19	.02	.02	.00	0.	*	28 FEB 1745	68	.04	.00	.03	5.
28 FEB 0545	20	.02	.02	.00	0.	*	28 FEB 1800	69	.04	.00	.03	5.
28 FEB 0600	21	.02	.02	.00	0.	*	28 FEB 1815	70	.03	.00	.03	4.
28 FEB 0615	22	.02	.02	.00	0.	*	28 FEB 1830	71	.03	.00	.03	4.
28 FEB 0630	23	.02	.02	.00	0.	*	28 FEB 1845	72	.03	.00	.03	4.
28 FEB 0645	24	.02	.02	.00	0.	*	28 FEB 1900	73	.03	.00	.03	4.
28 FEB 0700	25	.02	.02	.00	0.	*	28 FEB 1915	74	.02	.00	.02	4.
28 FEB 0715	26	.03	.03	.00	0.	*	28 FEB 1930	75	.02	.00	.02	3.
28 FEB 0730	27	.03	.03	.00	0.	*	28 FEB 1945	76	.02	.00	.02	3.
28 FEB 0745	28	.03	.03	.00	0.	*	28 FEB 2000	77	.02	.00	.02	3.
28 FEB 0800	29	.03	.03	.00	0.	*	28 FEB 2015	78	.02	.00	.02	2.
28 FEB 0815	30	.03	.03	.00	0.	*	28 FEB 2030	79	.02	.00	.02	2.
28 FEB 0830	31	.04	.03	.00	0.	*	28 FEB 2045	80	.02	.00	.01	2.
28 FEB 0845	32	.04	.03	.01	0.	*	28 FEB 2100	81	.02	.00	.01	2.
28 FEB 0900	33	.04	.03	.01	0.	*	28 FEB 2115	82	.02	.00	.01	2.
28 FEB 0915	34	.04	.03	.01	1.	*	28 FEB 2130	83	.02	.00	.01	2.
28 FEB 0930	35	.04	.03	.01	1.	*	28 FEB 2145	84	.01	.00	.01	2.
28 FEB 0945	36	.04	.03	.01	1.	*	28 FEB 2200	85	.01	.00	.01	2.
28 FEB 1000	37	.05	.03	.01	1.	*	28 FEB 2215	86	.01	.00	.01	2.
28 FEB 1015	38	.04	.03	.01	1.	*	28 FEB 2230	87	.01	.00	.01	2.
28 FEB 1030	39	.04	.03	.01	2.	*	28 FEB 2245	88	.01	.00	.01	2.
28 FEB 1045	40	.05	.03	.02	2.	*	28 FEB 2300	89	.01	.00	.01	2.
28 FEB 1100	41	.05	.03	.02	2.	*	28 FEB 2315	90	.01	.00	.01	2.
28 FEB 1115	42	.05	.03	.02	2.	*	28 FEB 2330	91	.01	.00	.01	2.
28 FEB 1130	43	.06	.03	.03	2.	*	28 FEB 2345	92	.01	.00	.01	2.
28 FEB 1145	44	.07	.04	.03	3.	*	1 MAR 0000	93	.01	.00	.01	2.
28 FEB 1200	45	.08	.04	.04	3.	*	1 MAR 0015	94	.01	.00	.01	2.
28 FEB 1215	46	.13	.06	.07	4.	*	1 MAR 0030	95	.01	.00	.01	1.
28 FEB 1230	47	.16	.07	.09	6.	*	1 MAR 0045	96	.01	.00	.01	1.
28 FEB 1245	48	.23	.09	.14	8.	*	1 MAR 0100	97	.01	.00	.01	1.
28 FEB 1300	49	.49	.16	.33	14.	*						
						*						

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TOTAL RAINFALL = 5.20, TOTAL LOSS = 1.84, TOTAL EXCESS = 3.36

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.00-HR
+ (CFS)	(HR)					
		(CFS)				
+ 52.	12.75		15.	5.	5.	5.
		(INCHES)	2.679	3.325	3.325	3.325
		(AC-FT)	7.	9.	9.	9.

CUMULATIVE AREA = .05 SQ MI

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            **************
            *            *
329 KK      *    RECHRG  *
            *            *
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330 KO OUTPUT CONTROL VARIABLES

IPRNT 1 PRINT CONTROL

IPLOT 0 PLOT CONTROL

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                QSCAL          0.  HYDROGRAPH PLOT SCALE
                          DIRECT INPUT OF HYDROGRAPH FROM RECHARGE BASIN

  6 IN        TIME DATA FOR INPUT TIME SERIES
                JXMIN          15  TIME INTERVAL IN MINUTES
               JXDATE     28FEB91  STARTING DATE
               JXTIME         100  STARTING TIME

            SUBBASIN RUNOFF DATA

332 BA        SUBBASIN CHARACTERISTICS
                TAREA         .00  SUBBASIN AREA

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HYDROGRAPH AT STATION RECHRG

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DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW	DA	MON	HRMN	ORD	FLOW
28	FEB	0100	1	1.	28	FEB	0715	26	1.	28	FEB	1330	51	1.	28	FEB	1945	76	1.
28	FEB	0115	2	1.	28	FEB	0730	27	1.	28	FEB	1345	52	1.	28	FEB	2000	77	1.
28	FEB	0130	3	1.	28	FEB	0745	28	1.	28	FEB	1400	53	1.	28	FEB	2015	78	1.
28	FEB	0145	4	1.	28	FEB	0800	29	1.	28	FEB	1415	54	1.	28	FEB	2030	79	1.
28	FEB	0200	5	1.	28	FEB	0815	30	1.	28	FEB	1430	55	1.	28	FEB	2045	80	1.
28	FEB	0215	6	1.	28	FEB	0830	31	1.	28	FEB	1445	56	1.	28	FEB	2100	81	1.
28	FEB	0230	7	1.	28	FEB	0845	32	1.	28	FEB	1500	57	1.	28	FEB	2115	82	1.
28	FEB	0245	8	1.	28	FEB	0900	33	1.	28	FEB	1515	58	1.	28	FEB	2130	83	1.
28	FEB	0300	9	1.	28	FEB	0915	34	1.	28	FEB	1530	59	1.	28	FEB	2145	84	1.
28	FEB	0315	10	1.	28	FEB	0930	35	1.	28	FEB	1545	60	1.	28	FEB	2200	85	1.
28	FEB	0330	11	1.	28	FEB	0945	36	1.	28	FEB	1600	61	1.	28	FEB	2215	86	1.
28	FEB	0345	12	1.	28	FEB	1000	37	1.	28	FEB	1615	62	1.	28	FEB	2230	87	1.
28	FEB	0400	13	1.	28	FEB	1015	38	1.	28	FEB	1630	63	1.	28	FEB	2245	88	1.
28	FEB	0415	14	1.	28	FEB	1030	39	1.	28	FEB	1645	64	1.	28	FEB	2300	89	1.
28	FEB	0430	15	1.	28	FEB	1045	40	1.	28	FEB	1700	65	1.	28	FEB	2315	90	1.
28	FEB	0445	16	1.	28	FEB	1100	41	1.	28	FEB	1715	66	1.	28	FEB	2330	91	1.
28	FEB	0500	17	1.	28	FEB	1115	42	1.	28	FEB	1730	67	1.	28	FEB	2345	92	1.
28	FEB	0515	18	1.	28	FEB	1130	43	1.	28	FEB	1745	68	1.	1	MAR	0000	93	1.
28	FEB	0530	19	1.	28	FEB	1145	44	1.	28	FEB	1800	69	1.	1	MAR	0015	94	1.
28	FEB	0545	20	1.	28	FEB	1200	45	1.	28	FEB	1815	70	1.	1	MAR	0030	95	1.
28	FEB	0600	21	1.	28	FEB	1215	46	1.	28	FEB	1830	71	1.	1	MAR	0045	96	1.
28	FEB	0615	22	1.	28	FEB	1230	47	1.	28	FEB	1845	72	1.	1	MAR	0100	97	1.
28	FEB	0630	23	1.	28	FEB	1245	48	1.	28	FEB	1900	73	1.					
28	FEB	0645	24	1.	28	FEB	1300	49	1.	28	FEB	1915	74	1.					
28	FEB	0700	25	1.	28	FEB	1315	50	1.	28	FEB	1930	75	1.					

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PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.00-HR
+ (CFS)	(HR)					
		(CFS)				
+ 1.	.25		1.	1.	1.	1.
		(INCHES)	5.579	22.314	22.314	22.314
		(AC-FT)	0.	1.	1.	1.

CUMULATIVE AREA = .00 SQ MI

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          **************
          *            *
346 KK    *    SHD10C  *
          *            *
          **************

347 KO        OUTPUT CONTROL VARIABLES
                    IPRNT          1  PRINT CONTROL
                    IPLOT          0  PLOT CONTROL
                    QSCAL         0.  HYDROGRAPH PLOT SCALE
                            STORAGE ROUTING THROUGH ATLANTIC AVENUE CHANNEL at RR TRACKS

            HYDROGRAPH ROUTING DATA

349 RS        STORAGE ROUTING
                    NSTPS          1  NUMBER OF SUBREACHES
                     ITYP       STOR  TYPE OF INITIAL CONDITION
                   RSVRIC        .00  INITIAL CONDITION
                        X        .00 WORKING R AND D COEFFICIENT

350 RC        NORMAL DEPTH CHANNEL ROUTING
                      ANL       .080  LEFT OVERBANK N-VALUE
                     ANCH       .030  MAIN CHANNEL N-VALUE
                      ANR       .080  RIGHT OVERBANK N-VALUE
                    RLNTH       800.  REACH LENGTH
                      SEL      .0070  ENERGY SLOPE
                    ELMAX       63.0  MAX. ELEV. FOR STORAGE/OUTFLOW CALCULATION

                                  CROSS-SECTION DATA
                      --- LEFT OVERBANK --- + ------ MAIN CHANNEL ------- + --- RIGHT OVERBANK ---
352 RY      ELEVATION    63.00     62.50     62.00     54.20     54.20     62.00     62.50     63.00
  1 RX      DISTANCE       .00     10.00     20.00     28.00     42.00     50.00     60.00     70.00

                                                    ***

                                  COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

          STORAGE       .00       .12       .25       .39       .54       .70       .86      1.03      1.21      1.40
          OUTFLOW       .00     16.05     50.89    100.12    162.22    236.42    322.34    419.79    528.71    649.14
        ELEVATION     54.20     54.66     55.13     55.59     56.05     56.52     56.98     57.44     57.91     58.37

          STORAGE      1.59      1.80      2.01      2.23      2.46      2.70      2.94      3.19      3.55      4.07
          OUTFLOW    781.14    924.85   1080.41   1247.98   1427.76   1619.93   1824.69   2050.08   2334.15   2644.58
        ELEVATION     58.83     59.29     59.76     60.22     60.68     61.15     61.61     62.07     62.54     63.00


*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN        0. TO     2645.
               THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
               THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

*****************************************************************************************************************************

                                          HYDROGRAPH AT STATION   SHD10C

*****************************************************************************************************************************
                                                *                                                *
DA MON HRMN ORD  OUTFLOW  STORAGE   STAGE * DA MON HRMN ORD  OUTFLOW  STORAGE   STAGE * DA MON HRMN ORD  OUTFLOW  STORAGE   STAGE
                                                *                                                *
28 FEB 0100   1       0.       .0    54.2 * 28 FEB 0915  34       1.       .0    54.2 * 28 FEB 1730  67      15.       .1    54.6
28 FEB 0115   2       1.       .0    54.2 * 28 FEB 0930  35       2.       .0    54.2 * 28 FEB 1745  68      15.       .1    54.6
   FEB 0130   3       1.       .0    54.2 * 28 FEB 0945  36       2.       .0    54.3 * 28 FEB 1800  69      16.       .1    54.7
28 FEB 0145   4       1.       .0    54.2 * 28 FEB 1000  37       2.       .0    54.3 * 28 FEB 1815  70      16.       .1    54.7
28 FEB 0200   5       1.       .0    54.2 * 28 FEB 1015  38       2.       .0    54.3 * 28 FEB 1830  71      16.       .1    54.7
28 FEB 0215   6       1.       .0    54.2 * 28 FEB 1030  39       3.       .0    54.3 * 28 FEB 1845  72      16.       .1    54.7
28 FEB 0230   7       1.       .0    54.2 * 28 FEB 1045  40       3.       .0    54.3 * 28 FEB 1900  73      17.       .1    54.7
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28 FEB 0245	8	1.	.0	54.2	*	28 FEB 1100	41	3.	.0	54.3	*	28 FEB 1915	74	17.	.1	54.7
28 FEB 0300	9	1.	.0	54.2	*	28 FEB 1115	42	3.	.0	54.3	*	28 FEB 1930	75	17.	.1	54.7
28 FEB 0315	10	1.	.0	54.2	*	28 FEB 1130	43	4.	.0	54.3	*	28 FEB 1945	76	16.	.1	54.7
28 FEB 0330	11	1.	.0	54.2	*	28 FEB 1145	44	4.	.0	54.3	*	28 FEB 2000	77	16.	.1	54.7
28 FEB 0345	12	1.	.0	54.2	*	28 FEB 1200	45	5.	.0	54.3	*	28 FEB 2015	78	16.	.1	54
28 FEB 0400	13	1.	.0	54.2	*	28 FEB 1215	46	6.	.0	54.4	*	28 FEB 2030	79	16.	.1	54
28 FEB 0415	14	1.	.0	54.2	*	28 FEB 1230	47	9.	.1	54.4	*	28 FEB 2045	80	16.	.1	54.7
28 FEB 0430	15	1.	.0	54.2	*	28 FEB 1245	48	12.	.1	54.5	*	28 FEB 2100	81	16.	.1	54.7
28 FEB 0445	16	1.	.0	54.2	*	28 FEB 1300	49	21.	.1	54.7	*	28 FEB 2115	82	17.	.1	54.7
28 FEB 0500	17	1.	.0	54.2	*	28 FEB 1315	50	46.	.2	55.1	*	28 FEB 2130	83	17.	.1	54.7
28 FEB 0515	18	1.	.0	54.2	*	28 FEB 1330	51	71.	.3	55.3	*	28 FEB 2145	84	17.	.1	54.7
28 FEB 0530	19	1.	.0	54.2	*	28 FEB 1345	52	70.	.3	55.3	*	28 FEB 2200	85	17.	.1	54.7
28 FEB 0545	20	1.	.0	54.2	*	28 FEB 1400	53	56.	.3	55.2	*	28 FEB 2215	86	17.	.1	54.7
28 FEB 0600	21	1.	.0	54.2	*	28 FEB 1415	54	41.	.2	55.0	*	28 FEB 2230	87	17.	.1	54.7
28 FEB 0615	22	1.	.0	54.2	*	28 FEB 1430	55	31.	.2	54.9	*	28 FEB 2245	88	17.	.1	54.7
28 FEB 0630	23	1.	.0	54.2	*	28 FEB 1445	56	24.	.2	54.8	*	28 FEB 2300	89	17.	.1	54.7
28 FEB 0645	24	1.	.0	54.2	*	28 FEB 1500	57	20.	.1	54.7	*	28 FEB 2315	90	17.	.1	54.7
28 FEB 0700	25	1.	.0	54.2	*	28 FEB 1515	58	17.	.1	54.7	*	28 FEB 2330	91	17.	.1	54.7
28 FEB 0715	26	1.	.0	54.2	*	28 FEB 1530	59	16.	.1	54.7	*	28 FEB 2345	92	17.	.1	54.7
28 FEB 0730	27	1.	.0	54.2	*	28 FEB 1545	60	15.	.1	54.6	*	1 MAR 0000	93	17.	.1	54.7
28 FEB 0745	28	1.	.0	54.2	*	28 FEB 1600	61	14.	.1	54.6	*	1 MAR 0015	94	17.	.1	54.7
28 FEB 0800	29	1.	.0	54.2	*	28 FEB 1615	62	14.	.1	54.6	*	1 MAR 0030	95	17.	.1	54.7
28 FEB 0815	30	1.	.0	54.2	*	28 FEB 1630	63	14.	.1	54.6	*	1 MAR 0045	96	17.	.1	54.7
28 FEB 0830	31	1.	.0	54.2	*	28 FEB 1645	64	14.	.1	54.6	*	1 MAR 0100	97	17.	.1	54.7
28 FEB 0845	32	1.	.0	54.2	*	28 FEB 1700	65	15.	.1	54.6	*					
28 FEB 0900	33	1.	.0	54.2	*	28 FEB 1715	66	15.	.1	54.6	*					
					*						*					

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PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.00-HR
+ (CFS)	(HR)					
		(CFS)				
+ 71.	12.50		25.	11.	11.	11.
		(INCHES)	2.898	5.268	5.268	5.268
		(AC-FT)	13.	23.	23.	23.

PEAK STORAGE	TIME	MAXIMUM AVERAGE STORAGE			
		6-HR	24-HR	72-HR	24.00-HR
+ (AC-FT)	(HR)				
0.	12.50	0.	0.	0.	0.

PEAK STAGE	TIME	MAXIMUM AVERAGE STAGE			
		6-HR	24-HR	72-HR	24.00-HR
+ (FEET)	(HR)				
55.32	12.50	54.77	54.49	54.49	54.49

CUMULATIVE AREA = .08 SQ MI

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              ***************
              *             *
 353 KK       *   4DCHAB    *
              *             *
              ***************

 354 KO          OUTPUT CONTROL VARIABLES
                          IPRNT            1  PRINT CONTROL
                          IPLOT            0  PLOT CONTROL
                          QSCAL           0.  HYDROGRAPH PLOT SCALE
                                  DIRECT INPUT OF HYDROGRAPH FROM NW WOBURN & WILMINGTON
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  6 IN          TIME DATA FOR INPUT TIME SERIES
                      JXMIN          15  TIME INTERVAL IN MINUTES
                     JXDATE     28FEB91  STARTING DATE
                     JXTIME         100  STARTING TIME

              SUBBASIN RUNOFF DATA

356 BA          SUBBASIN CHARACTERISTICS
                      TAREA         .26  SUBBASIN AREA

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HYDROGRAPH AT STATION 4DCHAB

DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW
28 FEB 0100	1	0.	28 FEB 0715	26	0.	28 FEB 1330	51	85.	28 FEB 1945	76	18.
28 FEB 0115	2	0.	28 FEB 0730	27	0.	28 FEB 1345	52	63.	28 FEB 2000	77	18.
28 FEB 0130	3	0.	28 FEB 0745	28	0.	28 FEB 1400	53	43.	28 FEB 2015	78	17.
28 FEB 0145	4	0.	28 FEB 0800	29	0.	28 FEB 1415	54	32.	28 FEB 2030	79	17.
28 FEB 0200	5	0.	28 FEB 0815	30	0.	28 FEB 1430	55	25.	28 FEB 2045	80	17.
28 FEB 0215	6	0.	28 FEB 0830	31	0.	28 FEB 1445	56	21.	28 FEB 2100	81	17.
28 FEB 0230	7	0.	28 FEB 0845	32	0.	28 FEB 1500	57	19.	28 FEB 2115	82	17.
28 FEB 0245	8	0.	28 FEB 0900	33	0.	28 FEB 1515	58	18.	28 FEB 2130	83	17.
28 FEB 0300	9	0.	28 FEB 0915	34	0.	28 FEB 1530	59	17.	28 FEB 2145	84	17.
28 FEB 0315	10	0.	28 FEB 0930	35	0.	28 FEB 1545	60	17.	28 FEB 2200	85	17.
28 FEB 0330	11	0.	28 FEB 0945	36	0.	28 FEB 1600	61	17.	28 FEB 2215	86	17.
28 FEB 0345	12	0.	28 FEB 1000	37	0.	28 FEB 1615	62	17.	28 FEB 2230	87	17.
8 FEB 0400	13	0.	28 FEB 1015	38	1.	28 FEB 1630	63	18.	28 FEB 2245	88	17.
28 FEB 0415	14	0.	28 FEB 1030	39	1.	28 FEB 1645	64	18.	28 FEB 2300	89	17.
28 FEB 0430	15	0.	28 FEB 1045	40	1.	28 FEB 1700	65	18.	28 FEB 2315	90	16.
28 FEB 0445	16	0.	28 FEB 1100	41	1.	28 FEB 1715	66	18.	28 FEB 2330	91	16.
28 FEB 0500	17	0.	28 FEB 1115	42	2.	28 FEB 1730	67	19.	28 FEB 2345	92	16.
28 FEB 0515	18	0.	28 FEB 1130	43	2.	28 FEB 1745	68	19.	1 MAR 0000	93	16.
28 FEB 0530	19	0.	28 FEB 1145	44	3.	28 FEB 1800	69	19.	1 MAR 0015	94	16.
28 FEB 0545	20	0.	28 FEB 1200	45	3.	28 FEB 1815	70	19.	1 MAR 0030	95	16.
28 FEB 0600	21	0.	28 FEB 1215	46	5.	28 FEB 1830	71	19.	1 MAR 0045	96	15.
28 FEB 0615	22	0.	28 FEB 1230	47	7.	28 FEB 1845	72	19.	1 MAR 0100	97	15.
28 FEB 0630	23	0.	28 FEB 1245	48	12.	28 FEB 1900	73	19.			
28 FEB 0645	24	0.	28 FEB 1300	49	24.	28 FEB 1915	74	19.			
28 FEB 0700	25	0.	28 FEB 1315	50	62.	28 FEB 1930	75	18.			

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.00-HR
+ (CFS)	(HR)					
		(CFS)				
+ 85.	12.50		27.	11.	11.	11.
		(INCHES)	.963	1.643	1.643	1.643
		(AC-FT)	13.	23.	23.	23.

CUMULATIVE AREA = .26 SQ MI

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          *           *
367 KK    *      2PN  *
          *           *
          **************

368 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           1  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                               SCS RUNOFF CALCULATION

              SUBBASIN RUNOFF DATA

370 BA          SUBBASIN CHARACTERISTICS
                      TAREA         .01  SUBBASIN AREA

                PRECIPITATION DATA

371 PH                                DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
                ..... HYDRO-35 ......   ............... TP-40 ...............   ........... TP-49 ...........
                5-MIN  15-MIN  60-MIN    2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                  .50    1.10    2.10    2.70    3.00    3.60    4.50    5.20     .00     .00     .00     .00

                                                  STORM AREA =      .01

372 LS          SCS LOSS RATE
                      STRTL         .35  INITIAL ABSTRACTION
                     CRVNBR       85.00  CURVE NUMBER
                      RTIMP         .00  PERCENT IMPERVIOUS AREA

373 UD          SCS DIMENSIONLESS UNITGRAPH
                       TLAG         .28  LAG

                                                          ***

WARNING *** TIME INTERVAL IS GREATER THAN .29*LAG

                                                     UNIT HYDROGRAPH
                                                  8 END-OF-PERIOD ORDINATES
                7.        9.        3.        1.        0.        0.        0.        0.

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                                                HYDROGRAPH AT STATION      2PN

*****************************************************************************************************************************
                                                                  *
      DA MON HRMN  ORD    RAIN    LOSS  EXCESS     COMP Q        *      DA MON HRMN  ORD    RAIN    LOSS  EXCESS     COMP Q
                                                                  *
      28 FEB 0100    1     .00     .00     .00         0.        *      28 FEB 1315   50    1.10     .20     .90        10.
      28 FEB 0115    2     .01     .01     .00         0.        *      28 FEB 1330   51     .28     .04     .24        11.
      28 FEB 0130    3     .01     .01     .00         0.        *      28 FEB 1345   52     .18     .02     .16         7.
      28 FEB 0145    4     .01     .01     .00         0.        *      28 FEB 1400   53     .14     .02     .12         4.
      28 FEB 0200    5     .01     .01     .00         0.        *      28 FEB 1415   54     .08     .01     .07         3.
      28 FEB 0215    6     .01     .01     .00         0.        *      28 FEB 1430   55     .07     .01     .06         2.
      28 FEB 0230    7     .01     .01     .00         0.        *      28 FEB 1445   56     .06     .01     .06         2.
      28 FEB 0245    8     .01     .01     .00         0.        *      28 FEB 1500   57     .06     .01     .05         1.
      28 FEB 0300    9     .01     .01     .00         0.        *      28 FEB 1515   58     .05     .01     .05         1.
      28 FEB 0315   10     .01     .01     .00         0.        *      28 FEB 1530   59     .05     .00     .04         1.
      28 FEB 0330   11     .01     .01     .00         0.        *      28 FEB 1545   60     .04     .00     .04         1.
      28 FEB 0345   12     .01     .01     .00         0.        *      28 FEB 1600   61     .04     .00     .04         1.
      28 FEB 0400   13     .01     .01     .00         0.        *      28 FEB 1615   62     .05     .00     .04         1.
      28 FEB 0415   14     .01     .01     .00         0.        *      28 FEB 1630   63     .05     .00     .04         1.
      28 FEB 0430   15     .01     .01     .00         0.        *      28 FEB 1645   64     .04     .00     .04         1.
      28 FEB 0445   16     .01     .01     .00         0.        *      28 FEB 1700   65     .04     .00     .04         1.
      28 FEB 0500   17     .02     .02     .00         0.        *      28 FEB 1715   66     .04     .00     .04         1.
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28 FEB 0515	18	.02	.02	.00	0.	*	28 FEB 1730	67	.04	.00	.03	1.
28 FEB 0530	19	.02	.02	.00	0.	*	28 FEB 1745	68	.04	.00	.03	1.
28 FEB 0545	20	.02	.02	.00	0.	*	28 FEB 1800	69	.04	.00	.03	1.
28 FEB 0600	21	.02	.02	.00	0.	*	28 FEB 1815	70	.03	.00	.03	1.
28 FEB 0615	22	.02	.02	.00	0.	*	28 FEB 1830	71	.03	.00	.03	1.
28 FEB 0630	23	.02	.02	.00	0.	*	28 FEB 1845	72	.03	.00	.03	1.
28 FEB 0645	24	.02	.02	.00	0.	*	28 FEB 1900	73	.03	.00	.03	1.
28 FEB 0700	25	.02	.02	.00	0.	*	28 FEB 1915	74	.02	.00	.02	1.
28 FEB 0715	26	.03	.03	.00	0.	*	28 FEB 1930	75	.02	.00	.02	0.
28 FEB 0730	27	.03	.03	.00	0.	*	28 FEB 1945	76	.02	.00	.02	0.
28 FEB 0745	28	.03	.03	.00	0.	*	28 FEB 2000	77	.02	.00	.02	0.
28 FEB 0800	29	.03	.03	.00	0.	*	28 FEB 2015	78	.02	.00	.02	0.
28 FEB 0815	30	.03	.03	.00	0.	*	28 FEB 2030	79	.02	.00	.02	0.
28 FEB 0830	31	.04	.03	.01	0.	*	28 FEB 2045	80	.02	.00	.02	0.
28 FEB 0845	32	.04	.03	.01	0.	*	28 FEB 2100	81	.02	.00	.01	0.
28 FEB 0900	33	.04	.03	.01	0.	*	28 FEB 2115	82	.02	.00	.01	0.
28 FEB 0915	34	.04	.03	.01	0.	*	28 FEB 2130	83	.02	.00	.01	0.
28 FEB 0930	35	.04	.03	.01	0.	*	28 FEB 2145	84	.01	.00	.01	0.
28 FEB 0945	36	.04	.03	.01	0.	*	28 FEB 2200	85	.01	.00	.01	0.
28 FEB 1000	37	.05	.03	.02	0.	*	28 FEB 2215	86	.01	.00	.01	0.
28 FEB 1015	38	.04	.03	.01	0.	*	28 FEB 2230	87	.01	.00	.01	0.
28 FEB 1030	39	.04	.03	.02	0.	*	28 FEB 2245	88	.01	.00	.01	0.
28 FEB 1045	40	.05	.03	.02	0.	*	28 FEB 2300	89	.01	.00	.01	0.
28 FEB 1100	41	.05	.03	.02	0.	*	28 FEB 2315	90	.01	.00	.01	0.
28 FEB 1115	42	.05	.03	.03	0.	*	28 FEB 2330	91	.01	.00	.01	0.
28 FEB 1130	43	.06	.03	.03	1.	*	28 FEB 2345	92	.01	.00	.01	0.
28 FEB 1145	44	.07	.03	.03	1.	*	1 MAR 0000	93	.01	.00	.01	0.
28 FEB 1200	45	.08	.04	.04	1.	*	1 MAR 0015	94	.01	.00	.01	0.
28 FEB 1215	46	.13	.05	.07	1.	*	1 MAR 0030	95	.01	.00	.01	0.
28 FEB 1230	47	.16	.06	.10	1.	*	1 MAR 0045	96	.01	.00	.01	0.
28 FEB 1245	48	.23	.08	.15	2.	*	1 MAR 0100	97	.01	.00	.01	0.
28 FEB 1300	49	.49	.13	.36	4.	*						
						*						

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TOTAL RAINFALL = 5.20, TOTAL LOSS = 1.65, TOTAL EXCESS = 3.55

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.00-HR
+ (CFS)	(HR)					
		(CFS)				
+ 11.	12.50		2.	1.	1.	1.
		(INCHES)	2.824	3.536	3.536	3.536
		(AC-FT)	1.	2.	2.	2.

CUMULATIVE AREA = .01 SQ MI

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            **************
            *            *
377 KK      *     PXDPR  *
            *            *
            **************
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378 KO OUTPUT CONTROL VARIABLES

IPRNT 1 PRINT CONTROL
IPLOT 0 PLOT CONTROL
QSCAL 0. HYDROGRAPH PLOT SCALE

ROUTING OF NW WOBURN & WILMINGTON THROUGH PX DEPRESSED AREA

HYDROGRAPH ROUTING DATA

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380 RS          STORAGE ROUTING
                     NSTPS          1  NUMBER OF SUBREACHES
                      ITYP       ELEV  TYPE OF INITIAL CONDITION
                    RSVRIC      68.90  INITIAL CONDITION
                         X        .00 WORKING R AND D COEFFICIENT

381 SA              AREA         .0       .3       .7       .9

382 SE          ELEVATION      68.00    69.00    70.00    71.00

383 SL          LOW-LEVEL OUTLET
                     ELEVL      69.65  ELEVATION AT CENTER OF OUTLET
                     CAREA       9.62  CROSS-SECTIONAL AREA
                      COQL        .60  COEFFICIENT
                      EXPL        .50  EXPONENT OF HEAD

384 SS          SPILLWAY
                      CREL      72.30  SPILLWAY CREST ELEVATION
                     SPWID        .00  SPILLWAY WIDTH
                      COQW        .00  WEIR COEFFICIENT
                      EXPW       1.50  EXPONENT OF HEAD
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COMPUTED STORAGE-ELEVATION DATA

STORAGE	.00	.10	.59	1.41
ELEVATION	68.00	69.00	70.00	71.00

COMPUTED OUTFLOW-ELEVATION DATA

OUTFLOW	.00	.00	58.14	60.10	62.20	64.45	66.87	69.48	72.30	75.36
ELEVATION	68.00	69.65	71.23	71.34	71.46	71.59	71.74	71.90	72.09	72.30

COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

STORAGE	.00	.10	.37	.59	1.41	1.63	1.74	1.86	2.00	2.17
OUTFLOW	.00	.00	.00	27.39	53.79	58.14	60.10	62.20	64.45	66.87
ELEVATION	68.00	69.00	69.65	70.00	71.00	71.23	71.34	71.46	71.59	71.74

STORAGE	2.35	2.57	2.83
OUTFLOW	69.48	72.30	75.36
ELEVATION	71.90	72.09	72.30

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 0. TO 27.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

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HYDROGRAPH AT STATION PXDPR

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DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	*	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	*	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE
28	FEB	0100	1	0.	.1	68.7	*	28	FEB	0915	34	0.	.1	68.9	*	28	FEB	1730	67	19.	.5	69.9
28	FEB	0115	2	0.	.1	68.7	*	28	FEB	0930	35	0.	.1	68.9	*	28	FEB	1745	68	20.	.5	69.9
28	FEB	0130	3	0.	.1	68.7	*	28	FEB	0945	36	0.	.1	69.0	*	28	FEB	1800	69	20.	.5	69
28	FEB	0145	4	0.	.1	68.7	*	28	FEB	1000	37	0.	.1	69.0	*	28	FEB	1815	70	20.	.5	69.
28	FEB	0200	5	0.	.1	68.7	*	28	FEB	1015	38	0.	.1	69.0	*	28	FEB	1830	71	20.	.5	69.9
28	FEB	0215	6	0.	.1	68.7	*	28	FEB	1030	39	0.	.1	69.1	*	28	FEB	1845	72	20.	.5	69.9
28	FEB	0230	7	0.	.1	68.7	*	28	FEB	1045	40	0.	.2	69.2	*	28	FEB	1900	73	20.	.5	69.9
28	FEB	0245	8	0.	.1	68.7	*	28	FEB	1100	41	0.	.2	69.2	*	28	FEB	1915	74	20.	.5	69.9

28 FEB 0300	9	0.	.1	68.7 *	28 FEB 1115	42	0.	.2	69.3 *	28 FEB 1930	75	19.	.5	69.9
28 FEB 0315	10	0.	.1	68.7 *	28 FEB 1130	43	0.	.3	69.5 *	28 FEB 1945	76	18.	.5	69.9
28 FEB 0330	11	0.	.1	68.7 *	28 FEB 1145	44	0.	.4	69.6 *	28 FEB 2000	77	18.	.5	69.9
28 FEB 0345	12	0.	.1	68.7 *	28 FEB 1200	45	3.	.4	69.7 *	28 FEB 2015	78	18.	.5	69.9
FEB 0400	13	0.	.1	68.7 *	28 FEB 1215	46	5.	.4	69.7 *	28 FEB 2030	79	17.	.5	69.9
FEB 0415	14	0.	.1	68.7 *	28 FEB 1230	47	8.	.4	69.7 *	28 FEB 2045	80	17.	.5	69.9
28 FEB 0430	15	0.	.1	68.7 *	28 FEB 1245	48	12.	.5	69.8 *	28 FEB 2100	81	17.	.5	69.9
28 FEB 0445	16	0.	.1	68.7 *	28 FEB 1300	49	22.	.5	69.9 *	28 FEB 2115	82	17.	.5	69.9
28 FEB 0500	17	0.	.1	68.7 *	28 FEB 1315	50	39.	.9	70.4 *	28 FEB 2130	83	17.	.5	69.9
28 FEB 0515	18	0.	.1	68.7 *	28 FEB 1330	51	59.	1.7	71.3 *	28 FEB 2145	84	17.	.5	69.9
28 FEB 0530	19	0.	.1	68.7 *	28 FEB 1345	52	66.	2.1	71.7 *	28 FEB 2200	85	17.	.5	69.9
28 FEB 0545	20	0.	.1	68.7 *	28 FEB 1400	53	64.	2.0	71.6 *	28 FEB 2215	86	17.	.5	69.9
28 FEB 0600	21	0.	.1	68.7 *	28 FEB 1415	54	57.	1.6	71.2 *	28 FEB 2230	87	17.	.5	69.9
28 FEB 0615	22	0.	.1	68.7 *	28 FEB 1430	55	45.	1.2	70.7 *	28 FEB 2245	88	17.	.5	69.9
28 FEB 0630	23	0.	.1	68.7 *	28 FEB 1445	56	35.	.8	70.3 *	28 FEB 2300	89	17.	.5	69.9
28 FEB 0645	24	0.	.1	68.7 *	28 FEB 1500	57	28.	.6	70.0 *	28 FEB 2315	90	17.	.5	69.9
28 FEB 0700	25	0.	.1	68.7 *	28 FEB 1515	58	20.	.5	69.9 *	28 FEB 2330	91	16.	.5	69.9
28 FEB 0715	26	0.	.1	68.7 *	28 FEB 1530	59	18.	.5	69.9 *	28 FEB 2345	92	16.	.5	69.9
28 FEB 0730	27	0.	.1	68.7 *	28 FEB 1545	60	18.	.5	69.9 *	1 MAR 0000	93	16.	.5	69.9
28 FEB 0745	28	0.	.1	68.7 *	28 FEB 1600	61	18.	.5	69.9 *	1 MAR 0015	94	16.	.5	69.9
28 FEB 0800	29	0.	.1	68.7 *	28 FEB 1615	62	18.	.5	69.9 *	1 MAR 0030	95	16.	.5	69.9
28 FEB 0815	30	0.	.1	68.8 *	28 FEB 1630	63	18.	.5	69.9 *	1 MAR 0045	96	16.	.5	69.9
28 FEB 0830	31	0.	.1	68.8 *	28 FEB 1645	64	19.	.5	69.9 *	1 MAR 0100	97	15.	.5	69.8
28 FEB 0845	32	0.	.1	68.8 *	28 FEB 1700	65	19.	.5	69.9 *					
28 FEB 0900	33	0.	.1	68.8 *	28 FEB 1715	66	19.	.5	69.9 *					

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  PEAK FLOW     TIME                                   MAXIMUM AVERAGE FLOW
                                               6-HR        24-HR        72-HR      24.00-HR
+   (CFS)       (HR)
                             (CFS)
       66.      12.75                           29.          12.          12.           12.
                           (INCHES)           1.013        1.670        1.670         1.670
                            (AC-FT)             14.          24.          24.           24.

 PEAK STORAGE   TIME                                 MAXIMUM AVERAGE STORAGE
                                               6-HR        24-HR        72-HR      24.00-HR
+  (AC-FT)      (HR)
        2.      12.75                            1.           0.           0.            0.

  PEAK STAGE    TIME                                   MAXIMUM AVERAGE STAGE
                                               6-HR        24-HR        72-HR      24.00-HR
+   (FEET)      (HR)
     71.67      12.75                         70.22        69.49        69.49         69.49

                             CUMULATIVE AREA =      .27 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***


              ***************
              *             *
 385 KK       *    4ECHL    *
              *             *
              ***************

     KO          OUTPUT CONTROL VARIABLES
                       IPRNT            1  PRINT CONTROL
                       IPLOT            0  PLOT CONTROL
                       QSCAL           0.  HYDROGRAPH PLOT SCALE
                                DIRECT INPUT OF HYDROGRAPH FROM NW WOBURN & WILMINGTON
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  6 IN          TIME DATA FOR INPUT TIME SERIES
                      JXMIN          15  TIME INTERVAL IN MINUTES
                     JXDATE     28FEB91  STARTING DATE
                     JXTIME         100  STARTING TIME

               SUBBASIN RUNOFF DATA

388 BA          SUBBASIN CHARACTERISTICS
                      TAREA         .30  SUBBASIN AREA

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HYDROGRAPH AT STATION 4ECHL

DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW
28 FEB 0100	1	0.	28 FEB 0715	26	0.	28 FEB 1330	51	75.	28 FEB 1945	76	13.
28 FEB 0115	2	0.	28 FEB 0730	27	0.	28 FEB 1345	52	75.	28 FEB 2000	77	12.
28 FEB 0130	3	0.	28 FEB 0745	28	0.	28 FEB 1400	53	75.	28 FEB 2015	78	11.
28 FEB 0145	4	0.	28 FEB 0800	29	0.	28 FEB 1415	54	75.	28 FEB 2030	79	11.
28 FEB 0200	5	0.	28 FEB 0815	30	0.	28 FEB 1430	55	75.	28 FEB 2045	80	11.
28 FEB 0215	6	0.	28 FEB 0830	31	0.	28 FEB 1445	56	75.	28 FEB 2100	81	10.
28 FEB 0230	7	0.	28 FEB 0845	32	0.	28 FEB 1500	57	75.	28 FEB 2115	82	10.
28 FEB 0245	8	0.	28 FEB 0900	33	0.	28 FEB 1515	58	75.	28 FEB 2130	83	10.
28 FEB 0300	9	0.	28 FEB 0915	34	0.	28 FEB 1530	59	75.	28 FEB 2145	84	10.
28 FEB 0315	10	0.	28 FEB 0930	35	0.	28 FEB 1545	60	75.	28 FEB 2200	85	9.
28 FEB 0330	11	0.	28 FEB 0945	36	0.	28 FEB 1600	61	64.	28 FEB 2215	86	9.
28 FEB 0345	12	0.	28 FEB 1000	37	1.	28 FEB 1615	62	48.	28 FEB 2230	87	9.
28 FEB 0400	13	0.	28 FEB 1015	38	3.	28 FEB 1630	63	32.	28 FEB 2245	88	9.
28 FEB 0415	14	0.	28 FEB 1030	39	3.	28 FEB 1645	64	27.	28 FEB 2300	89	9.
28 FEB 0430	15	0.	28 FEB 1045	40	4.	28 FEB 1700	65	27.	28 FEB 2315	90	9.
28 FEB 0445	16	0.	28 FEB 1100	41	5.	28 FEB 1715	66	26.	28 FEB 2330	91	8.
28 FEB 0500	17	0.	28 FEB 1115	42	6.	28 FEB 1730	67	25.	28 FEB 2345	92	8.
28 FEB 0515	18	0.	28 FEB 1130	43	8.	28 FEB 1745	68	24.	1 MAR 0000	93	8.
28 FEB 0530	19	0.	28 FEB 1145	44	10.	28 FEB 1800	69	23.	1 MAR 0015	94	8.
28 FEB 0545	20	0.	28 FEB 1200	45	12.	28 FEB 1815	70	22.	1 MAR 0030	95	8.
28 FEB 0600	21	0.	28 FEB 1215	46	18.	28 FEB 1830	71	21.	1 MAR 0045	96	8.
28 FEB 0615	22	0.	28 FEB 1230	47	27.	28 FEB 1845	72	21.	1 MAR 0100	97	8.
28 FEB 0630	23	0.	28 FEB 1245	48	42.	28 FEB 1900	73	20.			
28 FEB 0645	24	0.	28 FEB 1300	49	61.	28 FEB 1915	74	18.			
28 FEB 0700	25	0.	28 FEB 1315	50	75.	28 FEB 1930	75	15.			

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.00-HR
+ (CFS)	(HR)					
		(CFS)				
+ 75.	12.25		53.	17.	17.	17.
		(INCHES)	1.641	2.120	2.120	2.120
		(AC-FT)	26.	34.	34.	34.

CUMULATIVE AREA = .30 SQ MI

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399 KK     *        1P  *
           *            *
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 ^0 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           1  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                               SCS RUNOFF CALCULATION

              SUBBASIN RUNOFF DATA

402 BA          SUBBASIN CHARACTERISTICS
                      TAREA         .02  SUBBASIN AREA

                PRECIPITATION DATA

403 PH                                DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
                ..... HYDRO-35 ......   ............... TP-40 ...............   ........... TP-49 ...........
                5-MIN  15-MIN  60-MIN    2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                  .50    1.10    2.10    2.70    3.00    3.60    4.50    5.20     .00     .00     .00     .00

                                                  STORM AREA =     .02

404 LS          SCS LOSS RATE
                      STRTL         .30  INITIAL ABSTRACTION
                     CRVNBR       87.00  CURVE NUMBER
                      RTIMP         .00  PERCENT IMPERVIOUS AREA

405 UD          SCS DIMENSIONLESS UNITGRAPH
                       TLAG         .31  LAG

                                                        ***

WARNING *** TIME INTERVAL IS GREATER THAN .29*LAG

                                                     UNIT HYDROGRAPH
                                                  8 END-OF-PERIOD ORDINATES
              14.       23.       10.        4.        2.        1.        0.        0.

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                                                HYDROGRAPH AT STATION       1P

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                                                                  *
      DA MON HRMN  ORD    RAIN    LOSS  EXCESS     COMP Q        *      DA MON HRMN  ORD    RAIN    LOSS  EXCESS     COMP Q
                                                                  *
      28 FEB 0100    1     .00     .00     .00         0.        *      28 FEB 1315   50    1.10     .16     .94        25.
      28 FEB 0115    2     .01     .01     .00         0.        *      28 FEB 1330   51     .28     .03     .25        30.
      28 FEB 0130    3     .01     .01     .00         0.        *      28 FEB 1345   52     .18     .02     .16        20.
      28 FEB 0145    4     .01     .01     .00         0.        *      28 FEB 1400   53     .14     .01     .13        13.
      28 FEB 0200    5     .01     .01     .00         0.        *      28 FEB 1415   54     .08     .01     .08         9.
      28 FEB 0215    6     .01     .01     .00         0.        *      28 FEB 1430   55     .07     .01     .07         6.
      28 FEB 0230    7     .01     .01     .00         0.        *      28 FEB 1445   56     .06     .01     .06         4.
      28 FEB 0245    8     .01     .01     .00         0.        *      28 FEB 1500   57     .06     .00     .05         4.
      28 FEB 0300    9     .01     .01     .00         0.        *      28 FEB 1515   58     .05     .00     .05         3.
      28 FEB 0315   10     .01     .01     .00         0.        *      28 FEB 1530   59     .05     .00     .04         3.
      28 FEB 0330   11     .01     .01     .00         0.        *      28 FEB 1545   60     .04     .00     .04         2.
      28 FEB 0345   12     .01     .01     .00         0.        *      28 FEB 1600   61     .04     .00     .04         2.
      28 FEB 0400   13     .01     .01     .00         0.        *      28 FEB 1615   62     .05     .00     .04         2.
      28 FEB 0415   14     .01     .01     .00         0.        *      28 FEB 1630   63     .05     .00     .04         2.
      28 FEB 0430   15     .01     .01     .00         0.        *      28 FEB 1645   64     .04     .00     .04         2.
      28 FEB 0445   16     .01     .01     .00         0.        *      28 FEB 1700   65     .04     .00     .04         2.
      28 FEB 0500   17     .02     .02     .00         0.        *      28 FEB 1715   66     .04     .00     .04         2.
      28 FEB 0515   18     .02     .02     .00         0.        *      28 FEB 1730   67     .04     .00     .04         2.
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28 FEB 0530	19	.02	.02	.00	0.	*	28 FEB 1745	68	.04	.00	.03	2.
28 FEB 0545	20	.02	.02	.00	0.	*	28 FEB 1800	69	.04	.00	.03	2.
28 FEB 0600	21	.02	.02	.00	0.	*	28 FEB 1815	70	.03	.00	.03	2.
28 FEB 0615	22	.02	.02	.00	0.	*	28 FEB 1830	71	.03	.00	.03	2.
28 FEB 0630	23	.02	.02	.00	0.	*	28 FEB 1845	72	.03	.00	.03	2.
28 FEB 0645	24	.02	.02	.00	0.	*	28 FEB 1900	73	.03	.00	.03	2.
28 FEB 0700	25	.02	.02	.00	0.	*	28 FEB 1915	74	.02	.00	.02	1.
28 FEB 0715	26	.03	.03	.00	0.	*	28 FEB 1930	75	.02	.00	.02	1.
28 FEB 0730	27	.03	.03	.00	0.	*	28 FEB 1945	76	.02	.00	.02	1.
28 FEB 0745	28	.03	.03	.00	0.	*	28 FEB 2000	77	.02	.00	.02	1.
28 FEB 0800	29	.03	.03	.01	0.	*	28 FEB 2015	78	.02	.00	.02	1.
28 FEB 0815	30	.03	.03	.01	0.	*	28 FEB 2030	79	.02	.00	.02	1.
28 FEB 0830	31	.04	.03	.01	0.	*	28 FEB 2045	80	.02	.00	.02	1.
28 FEB 0845	32	.04	.03	.01	0.	*	28 FEB 2100	81	.02	.00	.01	1.
28 FEB 0900	33	.04	.03	.01	1.	*	28 FEB 2115	82	.02	.00	.01	1.
28 FEB 0915	34	.04	.03	.01	1.	*	28 FEB 2130	83	.02	.00	.01	1.
28 FEB 0930	35	.04	.03	.02	1.	*	28 FEB 2145	84	.01	.00	.01	1.
28 FEB 0945	36	.04	.03	.02	1.	*	28 FEB 2200	85	.01	.00	.01	1.
28 FEB 1000	37	.05	.03	.02	1.	*	28 FEB 2215	86	.01	.00	.01	1.
28 FEB 1015	38	.04	.02	.02	1.	*	28 FEB 2230	87	.01	.00	.01	1.
28 FEB 1030	39	.04	.02	.02	1.	*	28 FEB 2245	88	.01	.00	.01	1.
28 FEB 1045	40	.05	.02	.02	1.	*	28 FEB 2300	89	.01	.00	.01	1.
28 FEB 1100	41	.05	.02	.03	1.	*	28 FEB 2315	90	.01	.00	.01	1.
28 FEB 1115	42	.05	.03	.03	1.	*	28 FEB 2330	91	.01	.00	.01	1.
28 FEB 1130	43	.06	.03	.03	2.	*	28 FEB 2345	92	.01	.00	.01	1.
28 FEB 1145	44	.07	.03	.04	2.	*	1 MAR 0000	93	.01	.00	.01	1.
28 FEB 1200	45	.08	.03	.05	2.	*	1 MAR 0015	94	.01	.00	.01	1.
28 FEB 1215	46	.13	.05	.08	3.	*	1 MAR 0030	95	.01	.00	.01	1.
28 FEB 1230	47	.16	.05	.11	4.	*	1 MAR 0045	96	.01	.00	.01	1.
28 FEB 1245	48	.23	.06	.16	6.	*	1 MAR 0100	97	.01	.00	.01	1.
28 FEB 1300	49	.49	.11	.38	11.	*						
						*						

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TOTAL RAINFALL = 5.20, TOTAL LOSS = 1.44, TOTAL EXCESS = 3.76

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.00-HR
+ (CFS)	(HR)					
		(CFS)				
+ 30.	12.50		7.	2.	2.	2.
		(INCHES)	2.959	3.737	3.737	3.737
		(AC-FT)	3.	4.	4.	4.

CUMULATIVE AREA = .02 SQ MI

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          *            *
409 KK    *   EWCLPX   *
          *            *
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410 KO OUTPUT CONTROL VARIABLES

IPRNT	1	PRINT CONTROL
IPLOT	0	PLOT CONTROL
QSCAL	0.	HYDROGRAPH PLOT SCALE

CHANNEL ROUTING THROUGH E/W CHANNEL AT PX REALTY

HYDROGRAPH ROUTING DATA

412 RS STORAGE ROUTING

NSTPS	1	NUMBER OF SUBREACHES
ITYP	STOR	TYPE OF INITIAL CONDITION
RSVRIC	.00	INITIAL CONDITION
X	.00	WORKING R AND D COEFFICIENT

413 RC NORMAL DEPTH CHANNEL ROUTING

ANL	.080	LEFT OVERBANK N-VALUE
ANCH	.030	MAIN CHANNEL N-VALUE
ANR	.080	RIGHT OVERBANK N-VALUE
RLNTH	250.	REACH LENGTH
SEL	.0032	ENERGY SLOPE
ELMAX	70.5	MAX. ELEV. FOR STORAGE/OUTFLOW CALCULATION

CROSS-SECTION DATA

		--- LEFT OVERBANK ---		+ ------ MAIN CHANNEL		------- +	--- RIGHT OVERBANK ---		
415 RY	ELEVATION	72.00	71.00	70.00	64.40	64.40	70.00	70.20	70.50
414 RX	DISTANCE	.00	5.00	10.00	16.00	22.00	28.00	38.00	48.00

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COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

STORAGE	.00	.01	.02	.04	.05	.07	.09	.11	.13	.15
OUTFLOW	.00	2.53	8.05	15.95	26.08	38.39	52.88	69.60	88.60	109.93
ELEVATION	64.40	64.72	65.04	65.36	65.68	66.01	66.33	66.65	66.97	67.29
STORAGE	.17	.20	.22	.25	.28	.31	.34	.37	.41	.47
OUTFLOW	133.66	159.86	188.59	219.93	253.95	290.73	330.32	372.81	424.60	486.74
ELEVATION	67.61	67.93	68.25	68.57	68.89	69.22	69.54	69.86	70.18	70.50

WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 0. TO 487.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

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HYDROGRAPH AT STATION EWCLPX

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DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	*	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	*	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE
28	FEB	0100	1	0.	.0	64.4	*	28	FEB	0915	34	1.	.0	64.5	*	28	FEB	1730	67	27.	.1	65.7
28	FEB	0115	2	0.	.0	64.4	*	28	FEB	0930	35	1.	.0	64.5	*	28	FEB	1745	68	26.	.1	65.7
28	FEB	0130	3	0.	.0	64.4	*	28	FEB	0945	36	1.	.0	64.5	*	28	FEB	1800	69	25.	.1	65.7
28	FEB	0145	4	0.	.0	64.4	*	28	FEB	1000	37	2.	.0	64.6	*	28	FEB	1815	70	24.	.1	65.6
28	FEB	0200	5	0.	.0	64.4	*	28	FEB	1015	38	4.	.0	64.8	*	28	FEB	1830	71	23.	.0	65.6
28	FEB	0215	6	0.	.0	64.4	*	28	FEB	1030	39	4.	.0	64.8	*	28	FEB	1845	72	23.	.0	65.6
28	FEB	0230	7	0.	.0	64.4	*	28	FEB	1045	40	5.	.0	64.9	*	28	FEB	1900	73	22.	.0	65.5
28	FEB	0245	8	0.	.0	64.4	*	28	FEB	1100	41	6.	.0	64.9	*	28	FEB	1915	74	20.	.0	65.5
28	FEB	0300	9	0.	.0	64.4	*	28	FEB	1115	42	7.	.0	65.0	*	28	FEB	1930	75	16.	.0	65.4
28	FEB	0315	10	0.	.0	64.4	*	28	FEB	1130	43	9.	.0	65.1	*	28	FEB	1945	76	14.	.0	65.3
28	FEB	0330	11	0.	.0	64.4	*	28	FEB	1145	44	12.	.0	65.2	*	28	FEB	2000	77	13.	.0	65.2
28	FEB	0345	12	0.	.0	64.4	*	28	FEB	1200	45	14.	.0	65.3	*	28	FEB	2015	78	12.	.0	65.2
28	FEB	0400	13	0.	.0	64.4	*	28	FEB	1215	46	20.	.0	65.5	*	28	FEB	2030	79	12.	.0	65.2
28	FEB	0415	14	0.	.0	64.4	*	28	FEB	1230	47	30.	.1	65.8	*	28	FEB	2045	80	12.	.0	65.2
28	FEB	0430	15	0.	.0	64.4	*	28	FEB	1245	48	47.	.1	66.2	*	28	FEB	2100	81	11.	.0	65.2
28	FEB	0445	16	0.	.0	64.4	*	28	FEB	1300	49	70.	.1	66.7	*	28	FEB	2115	82	11.	.0	65.2
	FEB	0500	17	0.	.0	64.4	*	28	FEB	1315	50	98.	.1	67.1	*	28	FEB	2130	83	11.	.0	65.2
	FEB	0515	18	0.	.0	64.4	*	28	FEB	1330	51	106.	.1	67.2	*	28	FEB	2145	84	11.	.0	65.2
28	FEB	0530	19	0.	.0	64.4	*	28	FEB	1345	52	95.	.1	67.1	*	28	FEB	2200	85	10.	.0	65.1
28	FEB	0545	20	0.	.0	64.4	*	28	FEB	1400	53	88.	.1	67.0	*	28	FEB	2215	86	10.	.0	65.1
28	FEB	0600	21	0.	.0	64.4	*	28	FEB	1415	54	84.	.1	66.9	*	28	FEB	2230	87	10.	.0	65.1
28	FEB	0615	22	0.	.0	64.4	*	28	FEB	1430	55	81.	.1	66.8	*	28	FEB	2245	88	10.	.0	65.1

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28 FEB 0630  23      0.      .0    64.4 * 28 FEB 1445  56      79.      .1    66.8 * 28 FEB 2300  89      10.      .0    65.1
28 FEB 0645  24      0.      .0    64.4 * 28 FEB 1500  57      79.      .1    66.8 * 28 FEB 2315  90      10.      .0    65.1
28 FEB 0700  25      0.      .0    64.4 * 28 FEB 1515  58      78.      .1    66.8 * 28 FEB 2330  91       9.      .0    65.1
28 FEB 0715  26      0.      .0    64.4 * 28 FEB 1530  59      78.      .1    66.8 * 28 FEB 2345  92       9.      .0    65
28 FEB 0730  27      0.      .0    64.4 * 28 FEB 1545  60      77.      .1    66.8 *  1 MAR 0000  93       9.      .0    65
28 FEB 0745  28      0.      .0    64.4 * 28 FEB 1600  61      67.      .1    66.6 *  1 MAR 0015  94       9.      .0    65.1
28 FEB 0800  29      0.      .0    64.4 * 28 FEB 1615  62      51.      .1    66.3 *  1 MAR 0030  95       9.      .0    65.1
28 FEB 0815  30      0.      .0    64.4 * 28 FEB 1630  63      35.      .1    65.9 *  1 MAR 0045  96       9.      .0    65.1
28 FEB 0830  31      0.      .0    64.4 * 28 FEB 1645  64      29.      .1    65.8 *  1 MAR 0100  97       9.      .0    65.1
28 FEB 0845  32      0.      .0    64.5 * 28 FEB 1700  65      29.      .1    65.8 *
28 FEB 0900  33      1.      .0    64.5 * 28 FEB 1715  66      28.      .1    65.7 *
                                        *                                          *
*****************************************************************************************************************************

 PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                      6-HR       24-HR       72-HR     24.00-HR
+  (CFS)       (HR)
                          (CFS)
+    106.     12.50                   60.         19.         19.          19.
                        (INCHES)    1.726       2.225       2.225        2.225
                         (AC-FT)     30.         38.         38.          38.

PEAK STORAGE   TIME                          MAXIMUM AVERAGE STORAGE
                                      6-HR       24-HR       72-HR     24.00-HR
+ (AC-FT)      (HR)
       0.     12.50                    0.          0.          0.           0.

 PEAK STAGE    TIME                          MAXIMUM AVERAGE STAGE
                                      6-HR       24-HR       72-HR     24.00-HR
+  (FEET)      (HR)
    67.22     12.50                  66.39       65.19       65.19        65.19

                        CUMULATIVE AREA =     .32 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***


            **************
            *            *
 416 KK     *      2PS   *
            *            *
            **************

 417 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           1  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                               SCS RUNOFF CALCULATION

               SUBBASIN RUNOFF DATA

 419 BA          SUBBASIN CHARACTERISTICS
                      TAREA         .01  SUBBASIN AREA

                 PRECIPITATION DATA

 420 PH                                DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
                 ..... HYDRO-35 ......   ............... TP-40 ...............   ........... TP-49 ...........
                 5-MIN  15-MIN  60-MIN    2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                   .50    1.10    2.10    2.70    3.00    3.60    4.50    5.20     .00     .00     .00     .00

                                                  STORM AREA =     .01
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421 LS          SCS LOSS RATE
                     STRTL        .08  INITIAL ABSTRACTION
                    CRVNBR      96.00  CURVE NUMBER
                     RTIMP        .00  PERCENT IMPERVIOUS AREA

422 UD          SCS DIMENSIONLESS UNITGRAPH
                      TLAG        .02  LAG

                                                    ***

WARNING *** TIME INTERVAL IS GREATER THAN .29*LAG

                                                UNIT HYDROGRAPH
                                            5 END-OF-PERIOD ORDINATES
              12.        3.        1.        0.        0.
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HYDROGRAPH AT STATION 2PS

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DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
28 FEB 0100	1	.00	.00	.00	0.	*	28 FEB 1315	50	1.10	.02	1.08	14.
28 FEB 0115	2	.01	.01	.00	0.	*	28 FEB 1330	51	.28	.00	.28	7.
28 FEB 0130	3	.01	.01	.00	0.	*	28 FEB 1345	52	.18	.00	.18	4.
28 FEB 0145	4	.01	.01	.00	0.	*	28 FEB 1400	53	.14	.00	.14	2.
28 FEB 0200	5	.01	.01	.00	0.	*	28 FEB 1415	54	.08	.00	.08	2.
28 FEB 0215	6	.01	.01	.00	0.	*	28 FEB 1430	55	.07	.00	.07	1.
28 FEB 0230	7	.01	.01	.00	0.	*	28 FEB 1445	56	.06	.00	.06	1.
28 FEB 0245	8	.01	.01	.00	0.	*	28 FEB 1500	57	.06	.00	.06	1.
28 FEB 0300	9	.01	.01	.00	0.	*	28 FEB 1515	58	.05	.00	.05	1.
28 FEB 0315	10	.01	.01	.00	0.	*	28 FEB 1530	59	.05	.00	.05	1.
28 FEB 0330	11	.01	.01	.00	0.	*	28 FEB 1545	60	.04	.00	.04	1.
28 FEB 0345	12	.01	.01	.00	0.	*	28 FEB 1600	61	.04	.00	.04	1.
28 FEB 0400	13	.01	.01	.00	0.	*	28 FEB 1615	62	.05	.00	.05	1.
28 FEB 0415	14	.01	.01	.00	0.	*	28 FEB 1630	63	.05	.00	.04	1.
28 FEB 0430	15	.01	.01	.00	0.	*	28 FEB 1645	64	.04	.00	.04	1.
28 FEB 0445	16	.01	.01	.01	0.	*	28 FEB 1700	65	.04	.00	.04	1.
28 FEB 0500	17	.02	.01	.01	0.	*	28 FEB 1715	66	.04	.00	.04	1.
28 FEB 0515	18	.02	.01	.01	0.	*	28 FEB 1730	67	.04	.00	.04	1.
28 FEB 0530	19	.02	.01	.01	0.	*	28 FEB 1745	68	.04	.00	.04	1.
28 FEB 0545	20	.02	.01	.01	0.	*	28 FEB 1800	69	.04	.00	.03	1.
28 FEB 0600	21	.02	.01	.01	0.	*	28 FEB 1815	70	.03	.00	.03	1.
28 FEB 0615	22	.02	.01	.01	0.	*	28 FEB 1830	71	.03	.00	.03	1.
28 FEB 0630	23	.02	.01	.01	0.	*	28 FEB 1845	72	.03	.00	.03	0.
28 FEB 0645	24	.02	.01	.01	0.	*	28 FEB 1900	73	.03	.00	.03	0.
28 FEB 0700	25	.02	.01	.01	0.	*	28 FEB 1915	74	.02	.00	.02	0.
28 FEB 0715	26	.03	.01	.02	0.	*	28 FEB 1930	75	.02	.00	.02	0.
28 FEB 0730	27	.03	.01	.02	0.	*	28 FEB 1945	76	.02	.00	.02	0.
28 FEB 0745	28	.03	.01	.02	0.	*	28 FEB 2000	77	.02	.00	.02	0.
28 FEB 0800	29	.03	.01	.02	0.	*	28 FEB 2015	78	.02	.00	.02	0.
28 FEB 0815	30	.03	.01	.03	0.	*	28 FEB 2030	79	.02	.00	.02	0.
28 FEB 0830	31	.04	.01	.03	0.	*	28 FEB 2045	80	.02	.00	.02	0.
28 FEB 0845	32	.04	.01	.03	0.	*	28 FEB 2100	81	.02	.00	.02	0.
28 FEB 0900	33	.04	.01	.03	0.	*	28 FEB 2115	82	.02	.00	.02	0.
28 FEB 0915	34	.04	.01	.03	0.	*	28 FEB 2130	83	.02	.00	.02	0.
28 FEB 0930	35	.04	.01	.03	1.	*	28 FEB 2145	84	.01	.00	.01	0.
28 FEB 0945	36	.04	.01	.04	1.	*	28 FEB 2200	85	.01	.00	.01	0.
28 FEB 1000	37	.05	.01	.04	1.	*	28 FEB 2215	86	.01	.00	.01	0.
28 FEB 1015	38	.04	.01	.03	1.	*	28 FEB 2230	87	.01	.00	.01	0.
28 FEB 1030	39	.04	.01	.04	1.	*	28 FEB 2245	88	.01	.00	.01	0.
28 FEB 1045	40	.05	.01	.04	1.	*	28 FEB 2300	89	.01	.00	.01	0.
28 FEB 1100	41	.05	.01	.04	1.	*	28 FEB 2315	90	.01	.00	.01	0.
28 FEB 1115	42	.05	.01	.05	1.	*	28 FEB 2330	91	.01	.00	.01	0.

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28 FEB 1130   43    .06    .01    .05     1.     *    28 FEB 2345   92    .01    .00    .01     0.
28 FEB 1145   44    .07    .01    .06     1.     *     1 MAR 0000   93    .01    .00    .01     0.
28 FEB 1200   45    .08    .01    .07     1.     *     1 MAR 0015   94    .01    .00    .01     0.
28 FEB 1215   46    .13    .01    .12     2.     *     1 MAR 0030   95    .01    .00    .01     0.
28 FEB 1230   47    .16    .01    .15     2.     *     1 MAR 0045   96    .01    .00    .01     0.
28 FEB 1245   48    .23    .01    .22     3.     *     1 MAR 0100   97    .01    .00    .01     0.
28 FEB 1300   49    .49    .02    .47     6.     *
                                                *
*****************************************************************************************************************

   TOTAL RAINFALL =    5.20, TOTAL LOSS =     .47, TOTAL EXCESS =    4.73

 PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                    6-HR       24-HR       72-HR     24.00-HR
+  (CFS)       (HR)
                         (CFS)
+     14.     12.25                  2.          1.          1.          1.
                       (INCHES)   3.502       4.722       4.722       4.722
                        (AC-FT)     1.          2.          2.          2.

                        CUMULATIVE AREA =     .01 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***


          **************
          *            *
423 KK    *     2PSDB  *
          *            *
          **************

424 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           1  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                               ROUTING OF 2PS THROUGH DETENTION BASIN

              HYDROGRAPH ROUTING DATA

426 RS          STORAGE ROUTING
                      NSTPS           1  NUMBER OF SUBREACHES
                       ITYP        ELEV  TYPE OF INITIAL CONDITION
                     RSVRIC       66.00  INITIAL CONDITION
                          X         .00 WORKING R AND D COEFFICIENT

427 SA              AREA          .1        .1        .1        .1        .2

428 SE          ELEVATION      66.00     67.00     68.00     69.00     70.00

429 SL          LOW-LEVEL OUTLET
                      ELEVL       66.00  ELEVATION AT CENTER OF OUTLET
                      CAREA         .79  CROSS-SECTIONAL AREA
                       COQL         .60  COEFFICIENT
                       EXPL         .50  EXPONENT OF HEAD

430 SS          SPILLWAY
                       CREL       69.90  SPILLWAY CREST ELEVATION
                      SPWID         .00  SPILLWAY WIDTH
                       COQW         .00  WEIR COEFFICIENT
                       EXPW        1.50  EXPONENT OF HEAD

                                                          ***
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COMPUTED STORAGE-ELEVATION DATA

STORAGE	.00	.08	.18	.29	.44
ELEVATION	66.00	67.00	68.00	69.00	70.00

COMPUTED OUTFLOW-ELEVATION DATA

OUTFLOW	.00	2.67	2.91	3.19	3.53	3.94	4.47	5.17	6.12	7.51
ELEVATION	66.00	66.49	66.59	66.70	66.86	67.08	67.39	67.85	68.60	69.90

COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

STORAGE	.00	.04	.04	.05	.07	.08	.09	.11	.16	.18
OUTFLOW	.00	2.67	2.91	3.19	3.53	3.80	3.94	4.47	5.17	5.38
ELEVATION	66.00	66.49	66.59	66.70	66.86	67.00	67.08	67.39	67.85	68.00

STORAGE	.24	.29	.42	.44
OUTFLOW	6.12	6.58	7.51	7.60
ELEVATION	68.60	69.00	69.90	70.00

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HYDROGRAPH AT STATION 2PSDB

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DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE
28	FEB	0100	1	0.	.0	66.0	28	FEB	0915	34	0.	.0	66.1	28	FEB	1730	67	1.	.0	66.1
28	FEB	0115	2	0.	.0	66.0	28	FEB	0930	35	1.	.0	66.1	28	FEB	1745	68	1.	.0	66.1
28	FEB	0130	3	0.	.0	66.0	28	FEB	0945	36	1.	.0	66.1	28	FEB	1800	69	1.	.0	66.1
	FEB	0145	4	0.	.0	66.0	28	FEB	1000	37	1.	.0	66.1	28	FEB	1815	70	1.	.0	66.1
	FEB	0200	5	0.	.0	66.0	28	FEB	1015	38	1.	.0	66.1	28	FEB	1830	71	1.	.0	66.1
28	FEB	0215	6	0.	.0	66.0	28	FEB	1030	39	1.	.0	66.1	28	FEB	1845	72	1.	.0	66.1
28	FEB	0230	7	0.	.0	66.0	28	FEB	1045	40	1.	.0	66.1	28	FEB	1900	73	0.	.0	66.1
28	FEB	0245	8	0.	.0	66.0	28	FEB	1100	41	1.	.0	66.1	28	FEB	1915	74	0.	.0	66.1
28	FEB	0300	9	0.	.0	66.0	28	FEB	1115	42	1.	.0	66.1	28	FEB	1930	75	0.	.0	66.1
28	FEB	0315	10	0.	.0	66.0	28	FEB	1130	43	1.	.0	66.1	28	FEB	1945	76	0.	.0	66.1
28	FEB	0330	11	0.	.0	66.0	28	FEB	1145	44	1.	.0	66.2	28	FEB	2000	77	0.	.0	66.1
28	FEB	0345	12	0.	.0	66.0	28	FEB	1200	45	1.	.0	66.2	28	FEB	2015	78	0.	.0	66.1
28	FEB	0400	13	0.	.0	66.0	28	FEB	1215	46	1.	.0	66.2	28	FEB	2030	79	0.	.0	66.0
28	FEB	0415	14	0.	.0	66.0	28	FEB	1230	47	2.	.0	66.3	28	FEB	2045	80	0.	.0	66.0
28	FEB	0430	15	0.	.0	66.0	28	FEB	1245	48	2.	.0	66.5	28	FEB	2100	81	0.	.0	66.0
28	FEB	0445	16	0.	.0	66.0	28	FEB	1300	49	4.	.1	66.9	28	FEB	2115	82	0.	.0	66.0
28	FEB	0500	17	0.	.0	66.0	28	FEB	1315	50	5.	.2	68.1	28	FEB	2130	83	0.	.0	66.0
28	FEB	0515	18	0.	.0	66.0	28	FEB	1330	51	6.	.3	68.9	28	FEB	2145	84	0.	.0	66.0
28	FEB	0530	19	0.	.0	66.0	28	FEB	1345	52	6.	.3	68.7	28	FEB	2200	85	0.	.0	66.0
28	FEB	0545	20	0.	.0	66.0	28	FEB	1400	53	6.	.2	68.2	28	FEB	2215	86	0.	.0	66.0
28	FEB	0600	21	0.	.0	66.0	28	FEB	1415	54	5.	.1	67.6	28	FEB	2230	87	0.	.0	66.0
28	FEB	0615	22	0.	.0	66.0	28	FEB	1430	55	4.	.1	67.0	28	FEB	2245	88	0.	.0	66.0
28	FEB	0630	23	0.	.0	66.0	28	FEB	1445	56	2.	.0	66.5	28	FEB	2300	89	0.	.0	66.0
28	FEB	0645	24	0.	.0	66.0	28	FEB	1500	57	1.	.0	66.2	28	FEB	2315	90	0.	.0	66.0
28	FEB	0700	25	0.	.0	66.0	28	FEB	1515	58	1.	.0	66.2	28	FEB	2330	91	0.	.0	66.0
28	FEB	0715	26	0.	.0	66.0	28	FEB	1530	59	1.	.0	66.1	28	FEB	2345	92	0.	.0	66.0
28	FEB	0730	27	0.	.0	66.1	28	FEB	1545	60	1.	.0	66.1	1	MAR	0000	93	0.	.0	66.0
28	FEB	0745	28	0.	.0	66.1	28	FEB	1600	61	1.	.0	66.1	1	MAR	0015	94	0.	.0	66.0
28	FEB	0800	29	0.	.0	66.1	28	FEB	1615	62	1.	.0	66.1	1	MAR	0030	95	0.	.0	66.0
28	FEB	0815	30	0.	.0	66.1	28	FEB	1630	63	1.	.0	66.1	1	MAR	0045	96	0.	.0	66.0
28	FEB	0830	31	0.	.0	66.1	28	FEB	1645	64	1.	.0	66.1	1	MAR	0100	97	0.	.0	66.0
	FEB	0845	32	0.	.0	66.1	28	FEB	1700	65	1.	.0	66.1							
	FEB	0900	33	0.	.0	66.1	28	FEB	1715	66	1.	.0	66.1							

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PEAK FLOW TIME MAXIMUM AVERAGE FLOW

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                                        6-HR       24-HR       72-HR     24.00-HR
+   (CFS)       (HR)
                            (CFS)
+       6.     12.50                      2.          1.          1.          1.
                          (INCHES)     3.501       4.714       4.714       4.714
                           (AC-FT)        1.          2.          2.          2.

 PEAK STORAGE   TIME                          MAXIMUM AVERAGE STORAGE
                                        6-HR       24-HR       72-HR     24.00-HR
+  (AC-FT)      (HR)
       0.     12.50                      0.          0.          0.          0.

  PEAK STAGE    TIME                          MAXIMUM AVERAGE STAGE
                                        6-HR       24-HR       72-HR     24.00-HR
+   (FEET)      (HR)
    68.88     12.50                     66.70       66.21       66.21       66.21

                          CUMULATIVE AREA =     .01 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***


            **************
            *            *
 434 KK     *    2PSCHL  *
            *            *
            **************

 435 KO          OUTPUT CONTROL VARIABLES
                       IPRNT           1  PRINT CONTROL
                       IPLOT           0  PLOT CONTROL
                       QSCAL          0.  HYDROGRAPH PLOT SCALE
                                STORAGE ROUTING THROUGH N/S CHANNEL AT PX REALTY

              HYDROGRAPH ROUTING DATA

 437 RS          STORAGE ROUTING
                       NSTPS           1  NUMBER OF SUBREACHES
                        ITYP        ELEV  TYPE OF INITIAL CONDITION
                      RSVRIC       66.40  INITIAL CONDITION
                           X         .00 WORKING R AND D COEFFICIENT

 438 SA               AREA          .0        .0        .0        .0        .0        .1        .1

 439 SE          ELEVATION       66.40     66.50     67.00     67.50     68.00     69.00     69.40

 440 SL          LOW-LEVEL OUTLET
                       ELEVL       59.70  ELEVATION AT CENTER OF OUTLET
                       CAREA        7.07  CROSS-SECTIONAL AREA
                        COQL         .60  COEFFICIENT
                        EXPL         .50  EXPONENT OF HEAD

 441 SS          SPILLWAY
                        CREL       69.30  SPILLWAY CREST ELEVATION
                       SPWID         .00  SPILLWAY WIDTH
                        COQW         .00  WEIR COEFFICIENT
                        EXPW        1.50  EXPONENT OF HEAD

                                                   ***

                                          COMPUTED STORAGE-ELEVATION DATA

            STORAGE        .00       .00       .01       .02       .04       .09       .12
```

ELEVATION	66.40	66.50	67.00	67.50	68.00	69.00	69.40

COMPUTED OUTFLOW-ELEVATION DATA

OUTFLOW	.00	89.70	91.40	93.17	95.01	96.92	98.91	100.99	103.15	105.41
ELEVATION	66.40	66.65	66.92	67.20	67.50	67.82	68.15	68.51	68.89	69.30

COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

STORAGE	.00	.00	.00	.01	.01	.01	.02	.03	.04	.05
OUTFLOW	88.06	88.72	89.70	91.40	91.92	93.17	95.01	96.92	98.01	98.91
ELEVATION	66.40	66.50	66.65	66.92	67.00	67.20	67.50	67.82	68.00	68.15

STORAGE	.06	.09	.09	.11	.12
OUTFLOW	100.99	103.15	103.75	105.41	105.96
ELEVATION	68.51	68.89	69.00	69.30	69.40

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 88. TO 103.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

****

HYDROGRAPH AT STATION 2PSCHL

****

DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE
28	FEB	0100	1	88.	.0	66.4	28	FEB	0915	34	6.	-.1	66.4	28	FEB	1730	67	48.	.0	66.4
28	FEB	0115	2	6.	-.1	66.4	28	FEB	0930	35	6.	-.1	66.4	28	FEB	1745	68	46.	.0	66.4
[illegible]	FEB	0130	3	6.	-.1	66.4	28	FEB	0945	36	6.	-.1	66.4	28	FEB	1800	69	46.	.0	66.4
[illegible]	FEB	0145	4	6.	-.1	66.4	28	FEB	1000	37	6.	-.1	66.4	28	FEB	1815	70	44.	.0	66.4
28	FEB	0200	5	6.	-.1	66.4	28	FEB	1015	38	6.	-.1	66.4	28	FEB	1830	71	43.	.0	66.4
28	FEB	0215	6	6.	-.1	66.4	28	FEB	1030	39	6.	-.1	66.4	28	FEB	1845	72	42.	.0	66.4
28	FEB	0230	7	6.	-.1	66.4	28	FEB	1045	40	6.	-.1	66.4	28	FEB	1900	73	42.	.0	66.4
28	FEB	0245	8	6.	-.1	66.4	28	FEB	1100	41	6.	-.1	66.4	28	FEB	1915	74	39.	.0	66.4
28	FEB	0300	9	6.	-.1	66.4	28	FEB	1115	42	8.	-.1	66.4	28	FEB	1930	75	36.	.0	66.4
28	FEB	0315	10	6.	-.1	66.4	28	FEB	1130	43	10.	-.1	66.4	28	FEB	1945	76	33.	.0	66.4
28	FEB	0330	11	6.	-.1	66.4	28	FEB	1145	44	13.	-.1	66.4	28	FEB	2000	77	32.	.0	66.4
28	FEB	0345	12	6.	-.1	66.4	28	FEB	1200	45	18.	-.1	66.4	28	FEB	2015	78	30.	.0	66.4
28	FEB	0400	13	6.	-.1	66.4	28	FEB	1215	46	26.	-.1	66.4	28	FEB	2030	79	29.	.0	66.4
28	FEB	0415	14	6.	-.1	66.4	28	FEB	1230	47	39.	.0	66.4	28	FEB	2045	80	29.	.0	66.4
28	FEB	0430	15	6.	-.1	66.4	28	FEB	1245	48	60.	.0	66.4	28	FEB	2100	81	29.	.0	66.4
28	FEB	0445	16	6.	-.1	66.4	28	FEB	1300	49	93.	.0	67.2	28	FEB	2115	82	28.	.0	66.4
28	FEB	0500	17	6.	-.1	66.4	28	FEB	1315	50	119.	.3	71.7	28	FEB	2130	83	28.	.0	66.4
28	FEB	0515	18	6.	-.1	66.4	28	FEB	1330	51	152.	.7	77.8	28	FEB	2145	84	28.	.0	66.4
28	FEB	0530	19	6.	-.1	66.4	28	FEB	1345	52	167.	.9	80.5	28	FEB	2200	85	28.	.0	66.4
28	FEB	0545	20	6.	-.1	66.4	28	FEB	1400	53	163.	.9	79.8	28	FEB	2215	86	27.	.0	66.4
28	FEB	0600	21	6.	-.1	66.4	28	FEB	1415	54	153.	.7	78.0	28	FEB	2230	87	27.	.0	66.4
28	FEB	0615	22	6.	-.1	66.4	28	FEB	1430	55	140.	.6	75.5	28	FEB	2245	88	27.	.0	66.4
28	FEB	0630	23	6.	-.1	66.4	28	FEB	1445	56	126.	.4	73.0	28	FEB	2300	89	27.	.0	66.4
28	FEB	0645	24	6.	-.1	66.4	28	FEB	1500	57	114.	.2	70.9	28	FEB	2315	90	27.	-.1	66.4
28	FEB	0700	25	6.	-.1	66.4	28	FEB	1515	58	105.	.1	69.2	28	FEB	2330	91	25.	-.1	66.4
28	FEB	0715	26	6.	-.1	66.4	28	FEB	1530	59	98.	.0	67.9	28	FEB	2345	92	25.	-.1	66.4
28	FEB	0730	27	6.	-.1	66.4	28	FEB	1545	60	96.	.0	67.7	1	MAR	0000	93	25.	-.1	66.4
28	FEB	0745	28	6.	-.1	66.4	28	FEB	1600	61	89.	.0	66.5	1	MAR	0015	94	25.	-.1	66.4
28	FEB	0800	29	6.	-.1	66.4	28	FEB	1615	62	68.	.0	66.4	1	MAR	0030	95	25.	-.1	66.4
28	FEB	0815	30	6.	-.1	66.4	28	FEB	1630	63	57.	.0	66.4	1	MAR	0045	96	24.	-.1	66.4
[illegible]	FEB	0830	31	6.	-.1	66.4	28	FEB	1645	64	47.	.0	66.4	1	MAR	0100	97	24.	-.1	66.4
[illegible]	FEB	0845	32	6.	-.1	66.4	28	FEB	1700	65	50.	.0	66.4							
28	FEB	0900	33	6.	-.1	66.4	28	FEB	1715	66	47.	.0	66.4							

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 PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                    6-HR       24-HR       72-HR     24.00-HR
+   (CFS)       (HR)
                          (CFS)
+     167.     12.75                 90.         35.         35.          35.
                        (INCHES)   1.413       2.175       2.175        2.175
                         (AC-FT)     45.         69.         69.          69.

 PEAK STORAGE   TIME                          MAXIMUM AVERAGE STORAGE
                                    6-HR       24-HR       72-HR     24.00-HR
+  (AC-FT)      (HR)
        1.     12.75                  0.          0.          0.           0.

 PEAK STAGE    TIME                          MAXIMUM AVERAGE STAGE
                                    6-HR       24-HR       72-HR     24.00-HR
+   (FEET)      (HR)
    80.51     12.75                69.84       67.26       67.26        67.26

                        CUMULATIVE AREA =     .59 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***


            **************
            *            *
 442 KK     *    DI2PSC  *
            *            *
            **************

 443 KO          OUTPUT CONTROL VARIABLES
                       IPRNT           1  PRINT CONTROL
                       IPLOT           0  PLOT CONTROL
                       QSCAL          0.  HYDROGRAPH PLOT SCALE
                                DIRECT INPUT HYDROGRAPH FOR FLOW FROM 2PSCHL (MODIFIED PEAK)

   6 IN          TIME DATA FOR INPUT TIME SERIES
                       JXMIN          15  TIME INTERVAL IN MINUTES
                      JXDATE     28FEB91  STARTING DATE
                      JXTIME         100  STARTING TIME

              SUBBASIN RUNOFF DATA

 445 BA          SUBBASIN CHARACTERISTICS
                       TAREA         .59  SUBBASIN AREA

                                                                  ***

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                                                  HYDROGRAPH AT STATION   DI2PSC

*****************************************************************************************************************************
                                  *                                  *                                  *
   DA MON HRMN  ORD      FLOW     *  DA MON HRMN  ORD      FLOW     *  DA MON HRMN  ORD      FLOW     *  DA MON HRMN  ORD      FLOW
                                  *                                  *                                  *
   28 FEB 0100    1        0.     *  28 FEB 0715   26        6.     *  28 FEB 1330   51      110.     *  28 FEB 1945   76       33.
   28 FEB 0115    2        6.     *  28 FEB 0730   27        6.     *  28 FEB 1345   52      110.     *  28 FEB 2000   77       32.
   28 FEB 0130    3        6.     *  28 FEB 0745   28        6.     *  28 FEB 1400   53      110.     *  28 FEB 2015   78       30.
   28 FEB 0145    4        6.     *  28 FEB 0800   29        6.     *  28 FEB 1415   54      110.     *  28 FEB 2030   79       29.
   28 FEB 0200    5        6.     *  28 FEB 0815   30        6.     *  28 FEB 1430   55      110.     *  28 FEB 2045   80       29.
   28 FEB 0215    6        6.     *  28 FEB 0830   31        6.     *  28 FEB 1445   56      110.     *  28 FEB 2100   81       29.
   28 FEB 0230    7        6.     *  28 FEB 0845   32        6.     *  28 FEB 1500   57      110.     *  28 FEB 2115   82       28.
   28 FEB 0245    8        6.     *  28 FEB 0900   33        6.     *  28 FEB 1515   58      105.     *  28 FEB 2130   83       28.
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28 FEB 0300	9	6.	*	28 FEB 0915	34	6.	*	28 FEB 1530	59	98.	*	28 FEB 2145	84	28.
28 FEB 0315	10	6.	*	28 FEB 0930	35	6.	*	28 FEB 1545	60	96.	*	28 FEB 2200	85	28.
28 FEB 0330	11	6.	*	28 FEB 0945	36	6.	*	28 FEB 1600	61	89.	*	28 FEB 2215	86	27.
28 FEB 0345	12	6.	*	28 FEB 1000	37	6.	*	28 FEB 1615	62	68.	*	28 FEB 2230	87	27.
28 FEB 0400	13	6.	*	28 FEB 1015	38	6.	*	28 FEB 1630	63	57.	*	28 FEB 2245	88	27.
28 FEB 0415	14	6.	*	28 FEB 1030	39	6.	*	28 FEB 1645	64	47.	*	28 FEB 2300	89	27.
28 FEB 0430	15	6.	*	28 FEB 1045	40	6.	*	28 FEB 1700	65	50.	*	28 FEB 2315	90	27.
28 FEB 0445	16	6.	*	28 FEB 1100	41	6.	*	28 FEB 1715	66	47.	*	28 FEB 2330	91	25.
28 FEB 0500	17	6.	*	28 FEB 1115	42	8.	*	28 FEB 1730	67	48.	*	28 FEB 2345	92	25.
28 FEB 0515	18	6.	*	28 FEB 1130	43	10.	*	28 FEB 1745	68	46.	*	1 MAR 0000	93	25.
28 FEB 0530	19	6.	*	28 FEB 1145	44	13.	*	28 FEB 1800	69	46.	*	1 MAR 0015	94	25.
28 FEB 0545	20	6.	*	28 FEB 1200	45	18.	*	28 FEB 1815	70	44.	*	1 MAR 0030	95	25.
28 FEB 0600	21	6.	*	28 FEB 1215	46	26.	*	28 FEB 1830	71	43.	*	1 MAR 0045	96	24.
28 FEB 0615	22	6.	*	28 FEB 1230	47	39.	*	28 FEB 1845	72	42.	*	1 MAR 0100	97	24.
28 FEB 0630	23	6.	*	28 FEB 1245	48	60.	*	28 FEB 1900	73	42.	*			
28 FEB 0645	24	6.	*	28 FEB 1300	49	93.	*	28 FEB 1915	74	39.	*			
28 FEB 0700	25	6.	*	28 FEB 1315	50	110.	*	28 FEB 1930	75	36.	*			
			*				*				*			

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PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.00-HR
+ (CFS)	(HR)					
		(CFS)				
+ 110.	12.25		80.	31.	31.	31.
		(INCHES)	1.257	1.983	1.983	1.983
		(AC-FT)	40.	62.	62.	62.

CUMULATIVE AREA = .59 SQ MI

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          **************
          *            *
456 KK    *       4PS  *
          *            *
          **************

457 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           1  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                               SCS RUNOFF CALCULATION

                SUBBASIN RUNOFF DATA

459 BA          SUBBASIN CHARACTERISTICS
                      TAREA         .00  SUBBASIN AREA

                PRECIPITATION DATA

460 PH                                 DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
                ..... HYDRO-35 .....   ............... TP-40 ...............   ........... TP-49 ...........
                5-MIN  15-MIN  60-MIN    2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                  .50    1.10    2.10    2.70    3.00    3.60    4.50    5.20     .00     .00     .00     .00

                                                   STORM AREA =     .00

461 LS          SCS LOSS RATE
                      STRTL         .06  INITIAL ABSTRACTION
                     CRVNBR       97.00  CURVE NUMBER
                      RTIMP         .00  PERCENT IMPERVIOUS AREA
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462 UD SCS DIMENSIONLESS UNITGRAPH
TLAG .08 LAG

***

WARNING *** TIME INTERVAL IS GREATER THAN .29*LAG

UNIT HYDROGRAPH
5 END-OF-PERIOD ORDINATES
6. 2. 0. 0. 0.

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HYDROGRAPH AT STATION 4PS

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DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
28 FEB 0100	1	.00	.00	.00	0.	*	28 FEB 1315	50	1.10	.01	1.09	7.
28 FEB 0115	2	.01	.01	.00	0.	*	28 FEB 1330	51	.28	.00	.28	4.
28 FEB 0130	3	.01	.01	.00	0.	*	28 FEB 1345	52	.18	.00	.18	2.
28 FEB 0145	4	.01	.01	.00	0.	*	28 FEB 1400	53	.14	.00	.14	1.
28 FEB 0200	5	.01	.01	.00	0.	*	28 FEB 1415	54	.08	.00	.08	1.
28 FEB 0215	6	.01	.01	.00	0.	*	28 FEB 1430	55	.07	.00	.07	1.
28 FEB 0230	7	.01	.01	.00	0.	*	28 FEB 1445	56	.06	.00	.06	1.
28 FEB 0245	8	.01	.01	.00	0.	*	28 FEB 1500	57	.06	.00	.06	0.
28 FEB 0300	9	.01	.01	.00	0.	*	28 FEB 1515	58	.05	.00	.05	0.
28 FEB 0315	10	.01	.01	.00	0.	*	28 FEB 1530	59	.05	.00	.05	0.
28 FEB 0330	11	.01	.01	.00	0.	*	28 FEB 1545	60	.04	.00	.04	0.
28 FEB 0345	12	.01	.01	.00	0.	*	28 FEB 1600	61	.04	.00	.04	0.
28 FEB 0400	13	.01	.01	.01	0.	*	28 FEB 1615	62	.05	.00	.05	0.
28 FEB 0415	14	.01	.01	.01	0.	*	28 FEB 1630	63	.05	.00	.04	0.
28 FEB 0430	15	.01	.01	.01	0.	*	28 FEB 1645	64	.04	.00	.04	0.
28 FEB 0445	16	.01	.01	.01	0.	*	28 FEB 1700	65	.04	.00	.04	0.
28 FEB 0500	17	.02	.01	.01	0.	*	28 FEB 1715	66	.04	.00	.04	0.
28 FEB 0515	18	.02	.01	.01	0.	*	28 FEB 1730	67	.04	.00	.04	0.
28 FEB 0530	19	.02	.01	.01	0.	*	28 FEB 1745	68	.04	.00	.04	0.
28 FEB 0545	20	.02	.01	.01	0.	*	28 FEB 1800	69	.04	.00	.03	0.
28 FEB 0600	21	.02	.01	.01	0.	*	28 FEB 1815	70	.03	.00	.03	0.
28 FEB 0615	22	.02	.01	.01	0.	*	28 FEB 1830	71	.03	.00	.03	0.
28 FEB 0630	23	.02	.01	.01	0.	*	28 FEB 1845	72	.03	.00	.03	0.
28 FEB 0645	24	.02	.01	.01	0.	*	28 FEB 1900	73	.03	.00	.03	0.
28 FEB 0700	25	.02	.01	.01	0.	*	28 FEB 1915	74	.02	.00	.02	0.
28 FEB 0715	26	.03	.01	.02	0.	*	28 FEB 1930	75	.02	.00	.02	0.
28 FEB 0730	27	.03	.01	.02	0.	*	28 FEB 1945	76	.02	.00	.02	0.
28 FEB 0745	28	.03	.01	.03	0.	*	28 FEB 2000	77	.02	.00	.02	0.
28 FEB 0800	29	.03	.01	.03	0.	*	28 FEB 2015	78	.02	.00	.02	0.
28 FEB 0815	30	.03	.01	.03	0.	*	28 FEB 2030	79	.02	.00	.02	0.
28 FEB 0830	31	.04	.01	.03	0.	*	28 FEB 2045	80	.02	.00	.02	0.
28 FEB 0845	32	.04	.01	.03	0.	*	28 FEB 2100	81	.02	.00	.02	0.
28 FEB 0900	33	.04	.01	.03	0.	*	28 FEB 2115	82	.02	.00	.02	0.
28 FEB 0915	34	.04	.00	.04	0.	*	28 FEB 2130	83	.02	.00	.02	0.
28 FEB 0930	35	.04	.00	.04	0.	*	28 FEB 2145	84	.01	.00	.01	0.
28 FEB 0945	36	.04	.00	.04	0.	*	28 FEB 2200	85	.01	.00	.01	0.
28 FEB 1000	37	.05	.00	.04	0.	*	28 FEB 2215	86	.01	.00	.01	0.
28 FEB 1015	38	.04	.00	.04	0.	*	28 FEB 2230	87	.01	.00	.01	0.
28 FEB 1030	39	.04	.00	.04	0.	*	28 FEB 2245	88	.01	.00	.01	0.
28 FEB 1045	40	.05	.00	.04	0.	*	28 FEB 2300	89	.01	.00	.01	0.
28 FEB 1100	41	.05	.00	.05	0.	*	28 FEB 2315	90	.01	.00	.01	0.
28 FEB 1115	42	.05	.00	.05	0.	*	28 FEB 2330	91	.01	.00	.01	0.
28 FEB 1130	43	.06	.00	.06	0.	*	28 FEB 2345	92	.01	.00	.01	0.
28 FEB 1145	44	.07	.00	.06	0.	*	1 MAR 0000	93	.01	.00	.01	0.
28 FEB 1200	45	.08	.00	.07	1.	*	1 MAR 0015	94	.01	.00	.01	0.
28 FEB 1215	46	.13	.01	.12	1.	*	1 MAR 0030	95	.01	.00	.01	0.

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     28 FEB 1230   47     .16     .01     .15        1.      *       1 MAR 0045   96     .01     .00     .01        0.
     28 FEB 1245   48     .23     .01     .22        2.      *       1 MAR 0100   97     .01     .00     .01        0.
     28 FEB 1300   49     .49     .01     .48        3.      *
                                                              *
*****************************************************************************************************************************

   TOTAL RAINFALL =    5.20, TOTAL LOSS =     .35, TOTAL EXCESS =    4.85

 PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     24.00-HR
+  (CFS)       (HR)
                          (CFS)
+      7.     12.25                   1.          0.          0.          0.
                        (INCHES)    3.544       4.837       4.837       4.837
                         (AC-FT)      1.          1.          1.          1.

                         CUMULATIVE AREA =     .00 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***


           **************
           *            *
 463 KK    *     4PSDB  *
           *            *
           **************

 464 KO          OUTPUT CONTROL VARIABLES
                       IPRNT           1  PRINT CONTROL
                       IPLOT           0  PLOT CONTROL
                       QSCAL          0.  HYDROGRAPH PLOT SCALE
                                STORAGE ROUTING THROUGH DETENSION BASIN AT DAGATA

              HYDROGRAPH ROUTING DATA

 466 RS          STORAGE ROUTING
                       NSTPS           1  NUMBER OF SUBREACHES
                        ITYP        V 59  TYPE OF INITIAL CONDITION
                      RSVRIC         .00  INITIAL CONDITION
                           X         .00 WORKING R AND D COEFFICIENT

 467 SA               AREA          .0        .1        .1        .1

 468 SE          ELEVATION       59.00     60.00     61.00     62.00

 469 SL          LOW-LEVEL OUTLET
                       ELEVL       59.00  ELEVATION AT CENTER OF OUTLET
                       CAREA         .44  CROSS-SECTIONAL AREA
                        COQL         .60  COEFFICIENT
                        EXPL         .50  EXPONENT OF HEAD

 470 SS          SPILLWAY
                        CREL       61.90  SPILLWAY CREST ELEVATION
                       SPWID         .00  SPILLWAY WIDTH
                        COQW         .00  WEIR COEFFICIENT
                        EXPW        1.50  EXPONENT OF HEAD

                                                          ***

                                                COMPUTED STORAGE-ELEVATION DATA

           STORAGE        .00       .06       .13       .21
         ELEVATION      59.00     60.00     61.00     62.00
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COMPUTED OUTFLOW-ELEVATION DATA

OUTFLOW	.00	1.29	1.40	1.53	1.70	1.90	2.15	2.49	2.94	3.61
ELEVATION	59.00	59.37	59.44	59.52	59.64	59.80	60.03	60.38	60.93	61.90

COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

STORAGE	.00	.02	.02	.03	.03	.04	.06	.06	.08	.12
OUTFLOW	.00	1.29	1.40	1.53	1.70	1.90	2.12	2.15	2.49	2.94
ELEVATION	59.00	59.37	59.44	59.52	59.64	59.80	60.00	60.03	60.38	60.93
STORAGE	.13	.20	.21							
OUTFLOW	2.99	3.61	3.67							
ELEVATION	61.00	61.90	62.00							

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HYDROGRAPH AT STATION 4PSDB

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DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE
28	FEB	0100	1	0.	.0	59.0	28	FEB	0915	34	0.	.0	59.1	28	FEB	1730	67	0.	.0	59.1
28	FEB	0115	2	0.	.0	59.0	28	FEB	0930	35	0.	.0	59.1	28	FEB	1745	68	0.	.0	59.1
28	FEB	0130	3	0.	.0	59.0	28	FEB	0945	36	0.	.0	59.1	28	FEB	1800	69	0.	.0	59.1
28	FEB	0145	4	0.	.0	59.0	28	FEB	1000	37	0.	.0	59.1	28	FEB	1815	70	0.	.0	59.1
28	FEB	0200	5	0.	.0	59.0	28	FEB	1015	38	0.	.0	59.1	28	FEB	1830	71	0.	.0	59.1
28	FEB	0215	6	0.	.0	59.0	28	FEB	1030	39	0.	.0	59.1	28	FEB	1845	72	0.	.0	59.1
28	FEB	0230	7	0.	.0	59.0	28	FEB	1045	40	0.	.0	59.1	28	FEB	1900	73	0.	.0	59
28	FEB	0245	8	0.	.0	59.0	28	FEB	1100	41	0.	.0	59.1	28	FEB	1915	74	0.	.0	59
28	FEB	0300	9	0.	.0	59.0	28	FEB	1115	42	0.	.0	59.1	28	FEB	1930	75	0.	.0	59.0
28	FEB	0315	10	0.	.0	59.0	28	FEB	1130	43	0.	.0	59.1	28	FEB	1945	76	0.	.0	59.0
28	FEB	0330	11	0.	.0	59.0	28	FEB	1145	44	0.	.0	59.1	28	FEB	2000	77	0.	.0	59.0
28	FEB	0345	12	0.	.0	59.0	28	FEB	1200	45	1.	.0	59.1	28	FEB	2015	78	0.	.0	59.0
28	FEB	0400	13	0.	.0	59.0	28	FEB	1215	46	1.	.0	59.2	28	FEB	2030	79	0.	.0	59.0
28	FEB	0415	14	0.	.0	59.0	28	FEB	1230	47	1.	.0	59.3	28	FEB	2045	80	0.	.0	59.0
28	FEB	0430	15	0.	.0	59.0	28	FEB	1245	48	1.	.0	59.4	28	FEB	2100	81	0.	.0	59.0
28	FEB	0445	16	0.	.0	59.0	28	FEB	1300	49	2.	.0	59.7	28	FEB	2115	82	0.	.0	59.0
28	FEB	0500	17	0.	.0	59.0	28	FEB	1315	50	3.	.1	60.6	28	FEB	2130	83	0.	.0	59.0
28	FEB	0515	18	0.	.0	59.0	28	FEB	1330	51	3.	.1	61.2	28	FEB	2145	84	0.	.0	59.0
28	FEB	0530	19	0.	.0	59.0	28	FEB	1345	52	3.	.1	61.1	28	FEB	2200	85	0.	.0	59.0
28	FEB	0545	20	0.	.0	59.0	28	FEB	1400	53	3.	.1	60.8	28	FEB	2215	86	0.	.0	59.0
28	FEB	0600	21	0.	.0	59.0	28	FEB	1415	54	2.	.1	60.3	28	FEB	2230	87	0.	.0	59.0
28	FEB	0615	22	0.	.0	59.0	28	FEB	1430	55	2.	.0	59.8	28	FEB	2245	88	0.	.0	59.0
28	FEB	0630	23	0.	.0	59.0	28	FEB	1445	56	1.	.0	59.4	28	FEB	2300	89	0.	.0	59.0
28	FEB	0645	24	0.	.0	59.0	28	FEB	1500	57	1.	.0	59.2	28	FEB	2315	90	0.	.0	59.0
28	FEB	0700	25	0.	.0	59.0	28	FEB	1515	58	0.	.0	59.1	28	FEB	2330	91	0.	.0	59.0
28	FEB	0715	26	0.	.0	59.0	28	FEB	1530	59	0.	.0	59.1	28	FEB	2345	92	0.	.0	59.0
28	FEB	0730	27	0.	.0	59.0	28	FEB	1545	60	0.	.0	59.1	1	MAR	0000	93	0.	.0	59.0
28	FEB	0745	28	0.	.0	59.1	28	FEB	1600	61	0.	.0	59.1	1	MAR	0015	94	0.	.0	59.0
28	FEB	0800	29	0.	.0	59.1	28	FEB	1615	62	0.	.0	59.1	1	MAR	0030	95	0.	.0	59.0
28	FEB	0815	30	0.	.0	59.1	28	FEB	1630	63	0.	.0	59.1	1	MAR	0045	96	0.	.0	59.0
28	FEB	0830	31	0.	.0	59.1	28	FEB	1645	64	0.	.0	59.1	1	MAR	0100	97	0.	.0	59.0
28	FEB	0845	32	0.	.0	59.1	28	FEB	1700	65	0.	.0	59.1							
28	FEB	0900	33	0.	.0	59.1	28	FEB	1715	66	0.	.0	59.1							

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PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW (CFS) 6-HR	24-HR	72-HR	24.00-HR
+ 3.	12.50	1.	0.	0.	0.

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                    (INCHES)     3.543       4.829       4.829       4.829
                     (AC-FT)        1.          1.          1.          1.

PEAK STORAGE   TIME                        MAXIMUM AVERAGE STORAGE
                                   6-HR       24-HR       72-HR     24.00-HR
   AC-FT)      (HR)
      0.      12.50                  0.          0.          0.          0.

 PEAK STAGE    TIME                         MAXIMUM AVERAGE STAGE
                                   6-HR       24-HR       72-HR     24.00-HR
+  (FEET)      (HR)
    61.24     12.50               59.56       59.17       59.17       59.17

                     CUMULATIVE AREA =     .00 SQ MI


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          *            *
 471 KK   *      4P    *
          *            *
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 472 KO        OUTPUT CONTROL VARIABLES
                    IPRNT           1  PRINT CONTROL
                    IPLOT           0  PLOT CONTROL
                    QSCAL          0.  HYDROGRAPH PLOT SCALE
                             SCS RUNOFF CALCULATION

            SUBBASIN RUNOFF DATA

 474 BA        SUBBASIN CHARACTERISTICS
                    TAREA         .02  SUBBASIN AREA

               PRECIPITATION DATA

 475 PH                              DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
               ..... HYDRO-35 ......   ............... TP-40 ...............   ........... TP-49 ...........
               5-MIN  15-MIN  60-MIN    2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                 .50    1.10    2.10    2.70    3.00    3.60    4.50    5.20     .00     .00     .00     .00

                                                  STORM AREA =     .02

 476 LS        SCS LOSS RATE
                    STRTL         .20  INITIAL ABSTRACTION
                   CRVNBR       91.00  CURVE NUMBER
                    RTIMP         .00  PERCENT IMPERVIOUS AREA

 477 UD        SCS DIMENSIONLESS UNITGRAPH
                     TLAG         .41  LAG

                                                        ***

WARNING *** TIME INTERVAL IS GREATER THAN .29*LAG

                                                   UNIT HYDROGRAPH
                                              10 END-OF-PERIOD ORDINATES
               6.       15.       12.        5.        3.        1.        1.        0.        0.        0.

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                                          HYDROGRAPH AT STATION      4P
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DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
28 FEB 0100	1	.00	.00	.00	0.	28 FEB 1315	50	1.10	.09	1.01	16.
28 FEB 0115	2	.01	.01	.00	0.	28 FEB 1330	51	.28	.02	.27	24.
28 FEB 0130	3	.01	.01	.00	0.	28 FEB 1345	52	.18	.01	.17	20.
28 FEB 0145	4	.01	.01	.00	0.	28 FEB 1400	53	.14	.01	.13	14.
28 FEB 0200	5	.01	.01	.00	0.	28 FEB 1415	54	.08	.00	.08	9.
28 FEB 0215	6	.01	.01	.00	0.	28 FEB 1430	55	.07	.00	.07	6.
28 FEB 0230	7	.01	.01	.00	0.	28 FEB 1445	56	.06	.00	.06	5.
28 FEB 0245	8	.01	.01	.00	0.	28 FEB 1500	57	.06	.00	.05	4.
28 FEB 0300	9	.01	.01	.00	0.	28 FEB 1515	58	.05	.00	.05	3.
28 FEB 0315	10	.01	.01	.00	0.	28 FEB 1530	59	.05	.00	.05	3.
28 FEB 0330	11	.01	.01	.00	0.	28 FEB 1545	60	.04	.00	.04	2.
28 FEB 0345	12	.01	.01	.00	0.	28 FEB 1600	61	.04	.00	.04	2.
28 FEB 0400	13	.01	.01	.00	0.	28 FEB 1615	62	.05	.00	.05	2.
28 FEB 0415	14	.01	.01	.00	0.	28 FEB 1630	63	.05	.00	.04	2.
28 FEB 0430	15	.01	.01	.00	0.	28 FEB 1645	64	.04	.00	.04	2.
28 FEB 0445	16	.01	.01	.00	0.	28 FEB 1700	65	.04	.00	.04	2.
28 FEB 0500	17	.02	.02	.00	0.	28 FEB 1715	66	.04	.00	.04	2.
28 FEB 0515	18	.02	.02	.00	0.	28 FEB 1730	67	.04	.00	.04	2.
28 FEB 0530	19	.02	.01	.00	0.	28 FEB 1745	68	.04	.00	.04	2.
28 FEB 0545	20	.02	.01	.00	0.	28 FEB 1800	69	.04	.00	.03	2.
28 FEB 0600	21	.02	.01	.00	0.	28 FEB 1815	70	.03	.00	.03	2.
28 FEB 0615	22	.02	.01	.00	0.	28 FEB 1830	71	.03	.00	.03	1.
28 FEB 0630	23	.02	.01	.00	0.	28 FEB 1845	72	.03	.00	.03	1.
28 FEB 0645	24	.02	.01	.00	0.	28 FEB 1900	73	.03	.00	.03	1.
28 FEB 0700	25	.02	.01	.00	0.	28 FEB 1915	74	.02	.00	.02	1.
28 FEB 0715	26	.03	.02	.01	0.	28 FEB 1930	75	.02	.00	.02	1.
28 FEB 0730	27	.03	.02	.01	0.	28 FEB 1945	76	.02	.00	.02	1.
28 FEB 0745	28	.03	.02	.01	0.	28 FEB 2000	77	.02	.00	.02	1.
28 FEB 0800	29	.03	.02	.01	0.	28 FEB 2015	78	.02	.00	.02	1.
28 FEB 0815	30	.03	.02	.01	0.	28 FEB 2030	79	.02	.00	.02	1.
28 FEB 0830	31	.04	.02	.02	1.	28 FEB 2045	80	.02	.00	.02	1.
28 FEB 0845	32	.04	.02	.02	1.	28 FEB 2100	81	.02	.00	.02	1.
28 FEB 0900	33	.04	.02	.02	1.	28 FEB 2115	82	.02	.00	.02	1.
28 FEB 0915	34	.04	.02	.02	1.	28 FEB 2130	83	.02	.00	.01	1.
28 FEB 0930	35	.04	.02	.02	1.	28 FEB 2145	84	.01	.00	.01	1.
28 FEB 0945	36	.04	.02	.03	1.	28 FEB 2200	85	.01	.00	.01	1.
28 FEB 1000	37	.05	.02	.03	1.	28 FEB 2215	86	.01	.00	.01	1.
28 FEB 1015	38	.04	.02	.02	1.	28 FEB 2230	87	.01	.00	.01	1.
28 FEB 1030	39	.04	.02	.03	1.	28 FEB 2245	88	.01	.00	.01	1.
28 FEB 1045	40	.05	.02	.03	1.	28 FEB 2300	89	.01	.00	.01	1.
28 FEB 1100	41	.05	.02	.03	1.	28 FEB 2315	90	.01	.00	.01	1.
28 FEB 1115	42	.05	.02	.04	1.	28 FEB 2330	91	.01	.00	.01	1.
28 FEB 1130	43	.06	.02	.04	2.	28 FEB 2345	92	.01	.00	.01	1.
28 FEB 1145	44	.07	.02	.05	2.	1 MAR 0000	93	.01	.00	.01	1.
28 FEB 1200	45	.08	.02	.06	2.	1 MAR 0015	94	.01	.00	.01	1.
28 FEB 1215	46	.13	.03	.10	3.	1 MAR 0030	95	.01	.00	.01	1.
28 FEB 1230	47	.16	.03	.12	3.	1 MAR 0045	96	.01	.00	.01	1.
28 FEB 1245	48	.23	.04	.19	5.	1 MAR 0100	97	.01	.00	.01	1.
28 FEB 1300	49	.49	.06	.43	8.						

TOTAL RAINFALL = 5.20, TOTAL LOSS = 1.02, TOTAL EXCESS = 4.18

PEAK FLOW (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	24.00-HR
		(CFS)				
+ 24.	12.50		6.	2.	2.	2.
		(INCHES)	3.220	4.150	4.150	4.150
		(AC-FT)	3.	4.	4.	4.

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                    CUMULATIVE AREA =     .02 SQ MI

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          *            *
481 KK    *     4PSWP  *
          *            *
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482 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           1  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                               STORAGE ROUTING THROUGH WET AREA IN B.E. ROW

             HYDROGRAPH ROUTING DATA

484 RS          STORAGE ROUTING
                      NSTPS           1  NUMBER OF SUBREACHES
                       ITYP        ELEV  TYPE OF INITIAL CONDITION
                      RSVRIC       60.60  INITIAL CONDITION
                          X         .00 WORKING R AND D COEFFICIENT

485 SA              AREA          .8       1.2       1.4       1.9

486 SE          ELEVATION       60.60     61.30     62.00     63.30

487 SS          SPILLWAY
                       CREL       60.60  SPILLWAY CREST ELEVATION
                      SPWID       10.00  SPILLWAY WIDTH
                       COQW        3.00  WEIR COEFFICIENT
                       EXPW        1.50  EXPONENT OF HEAD

                                                    ***

                                          COMPUTED STORAGE-ELEVATION DATA

          STORAGE        .00       .69      1.60      3.78
        ELEVATION      60.60     61.30     62.00     63.30

                                          COMPUTED OUTFLOW-ELEVATION DATA

          OUTFLOW        .00       .00       .02       .18       .62      1.46      2.85      4.93      7.83     11.68
        ELEVATION      60.60     60.60     60.61     60.63     60.67     60.73     60.81     60.90     61.01     61.13

          OUTFLOW      16.64     22.82     30.38     39.44     50.14     62.62     77.02     93.48    112.12    133.10
        ELEVATION      61.27     61.43     61.61     61.80     62.01     62.23     62.47     62.73     63.01     63.30

                                        COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

          STORAGE        .00       .03       .06       .11       .18       .26       .37       .50       .66       .69
          OUTFLOW        .00       .18       .62      1.46      2.85      4.93      7.83     11.68     16.64     17.57
        ELEVATION      60.60     60.63     60.67     60.73     60.81     60.90     61.01     61.13     61.27     61.30

          STORAGE        .85      1.07      1.32      1.60      1.94      2.32      2.75      3.23      3.78
          OUTFLOW      22.82     30.38     39.44     49.70     62.62     77.02     93.48    112.12    133.10
        ELEVATION      61.43     61.61     61.80     62.00     62.23     62.47     62.73     63.01     63.30

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HYDROGRAPH AT STATION 4PSWP

DA MON HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA MON HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA MON HRMN	ORD	OUTFLOW	STORAGE	STAGE
28 FEB 0100	1	0.	.0	60.6	28 FEB 0915	34	7.	.3	61.0	28 FEB 1730	67	51.	1.6	62.0
28 FEB 0115	2	1.	.1	60.7	28 FEB 0930	35	7.	.3	61.0	28 FEB 1745	68	50.	1.6	62.0
28 FEB 0130	3	2.	.2	60.8	28 FEB 0945	36	7.	.3	61.0	28 FEB 1800	69	49.	1.6	62.0
28 FEB 0145	4	4.	.2	60.8	28 FEB 1000	37	7.	.3	61.0	28 FEB 1815	70	48.	1.5	62.0
28 FEB 0200	5	5.	.3	60.9	28 FEB 1015	38	7.	.3	61.0	28 FEB 1830	71	46.	1.5	61.9
28 FEB 0215	6	5.	.3	60.9	28 FEB 1030	39	7.	.4	61.0	28 FEB 1845	72	45.	1.5	61.9
28 FEB 0230	7	6.	.3	60.9	28 FEB 1045	40	7.	.4	61.0	28 FEB 1900	73	44.	1.5	61.9
28 FEB 0245	8	6.	.3	60.9	28 FEB 1100	41	7.	.4	61.0	28 FEB 1915	74	43.	1.4	61.9
28 FEB 0300	9	6.	.3	60.9	28 FEB 1115	42	8.	.4	61.0	28 FEB 1930	75	41.	1.4	61.8
28 FEB 0315	10	6.	.3	60.9	28 FEB 1130	43	9.	.4	61.1	28 FEB 1945	76	38.	1.3	61.8
28 FEB 0330	11	6.	.3	60.9	28 FEB 1145	44	11.	.5	61.1	28 FEB 2000	77	36.	1.2	61.7
28 FEB 0345	12	6.	.3	60.9	28 FEB 1200	45	14.	.6	61.2	28 FEB 2015	78	34.	1.2	61.7
28 FEB 0400	13	6.	.3	60.9	28 FEB 1215	46	20.	.8	61.4	28 FEB 2030	79	32.	1.1	61.6
28 FEB 0415	14	6.	.3	60.9	28 FEB 1230	47	28.	1.0	61.6	28 FEB 2045	80	31.	1.1	61.6
28 FEB 0430	15	6.	.3	60.9	28 FEB 1245	48	43.	1.4	61.9	28 FEB 2100	81	30.	1.1	61.6
28 FEB 0445	16	6.	.3	60.9	28 FEB 1300	49	66.	2.0	62.3	28 FEB 2115	82	30.	1.1	61.6
28 FEB 0500	17	6.	.3	60.9	28 FEB 1315	50	94.	2.8	62.7	28 FEB 2130	83	29.	1.0	61.6
28 FEB 0515	18	6.	.3	60.9	28 FEB 1330	51	116.	3.3	63.1	28 FEB 2145	84	29.	1.0	61.6
28 FEB 0530	19	6.	.3	60.9	28 FEB 1345	52	127.	3.6	63.2	28 FEB 2200	85	29.	1.0	61.6
28 FEB 0545	20	6.	.3	60.9	28 FEB 1400	53	129.	3.7	63.2	28 FEB 2215	86	29.	1.0	61.6
28 FEB 0600	21	6.	.3	60.9	28 FEB 1415	54	126.	3.6	63.2	28 FEB 2230	87	28.	1.0	61.6
28 FEB 0615	22	6.	.3	60.9	28 FEB 1430	55	123.	3.5	63.2	28 FEB 2245	88	28.	1.0	61.6
28 FEB 0630	23	6.	.3	60.9	28 FEB 1445	56	119.	3.4	63.1	28 FEB 2300	89	28.	1.0	61.5
28 FEB 0645	24	6.	.3	60.9	28 FEB 1500	57	117.	3.4	63.1	28 FEB 2315	90	28.	1.0	61.5
28 FEB 0700	25	6.	.3	60.9	28 FEB 1515	58	114.	3.3	63.0	28 FEB 2330	91	27.	1.0	61.5
28 FEB 0715	26	6.	.3	60.9	28 FEB 1530	59	109.	3.1	63.0	28 FEB 2345	92	26.	1.0	61
28 FEB 0730	27	6.	.3	61.0	28 FEB 1545	60	104.	3.0	62.9	1 MAR 0000	93	26.	.9	61.
28 FEB 0745	28	6.	.3	61.0	28 FEB 1600	61	99.	2.9	62.8	1 MAR 0015	94	26.	.9	61.5
28 FEB 0800	29	6.	.3	61.0	28 FEB 1615	62	89.	2.6	62.7	1 MAR 0030	95	26.	.9	61.5
28 FEB 0815	30	7.	.3	61.0	28 FEB 1630	63	75.	2.3	62.4	1 MAR 0045	96	25.	.9	61.5
28 FEB 0830	31	7.	.3	61.0	28 FEB 1645	64	63.	2.0	62.2	1 MAR 0100	97	25.	.9	61.5
28 FEB 0845	32	7.	.3	61.0	28 FEB 1700	65	56.	1.8	62.1					
28 FEB 0900	33	7.	.3	61.0	28 FEB 1715	66	53.	1.7	62.1					

PEAK FLOW (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	24.00-HR
		(CFS)				
129.	13.00		86.	33.	33.	33.
		(INCHES)	1.312	2.029	2.029	2.029
		(AC-FT)	43.	66.	66.	66.

PEAK STORAGE (AC-FT)	TIME (HR)	MAXIMUM AVERAGE STORAGE 6-HR	24-HR	72-HR	24.00-HR
4.	13.00	3.	1.	1.	1.

PEAK STAGE (FEET)	TIME (HR)	MAXIMUM AVERAGE STAGE 6-HR	24-HR	72-HR	24.00-HR
63.24	13.00	62.59	61.55	61.55	61.55

CUMULATIVE AREA = .61 SQ MI

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          *            *
  3 KK    *      3PE   *
          *            *
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489 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           1  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                               SCS RUNOFF CALCULATION

              SUBBASIN RUNOFF DATA

491 BA          SUBBASIN CHARACTERISTICS
                      TAREA         .00  SUBBASIN AREA

                PRECIPITATION DATA

492 PH                                DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
                ..... HYDRO-35 .....   ............... TP-40 ...............   ........... TP-49 ...........
                5-MIN  15-MIN  60-MIN    2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                  .50    1.10    2.10    2.70    3.00    3.60    4.50    5.20     .00     .00     .00     .00

                                                   STORM AREA =     .00

493 LS          SCS LOSS RATE
                      STRTL         .04  INITIAL ABSTRACTION
                     CRVNBR       98.00  CURVE NUMBER
                      RTIMP         .00  PERCENT IMPERVIOUS AREA

494 UD          SCS DIMENSIONLESS UNITGRAPH
                       TLAG         .02  LAG

                                                          ***

WARNING *** TIME INTERVAL IS GREATER THAN .29*LAG

                                                     UNIT HYDROGRAPH
                                                 5 END-OF-PERIOD ORDINATES
                4.        1.        0.        0.        0.

*****************************************************************************************************************************

                                                HYDROGRAPH AT STATION      3PE

*****************************************************************************************************************************
                                                                  *
      DA MON HRMN  ORD    RAIN    LOSS  EXCESS     COMP Q        *      DA MON HRMN  ORD    RAIN    LOSS  EXCESS     COMP Q
                                                                  *
      28 FEB 0100    1     .00     .00     .00         0.        *      28 FEB 1315   50    1.10     .01    1.09         5.
      28 FEB 0115    2     .01     .01     .00         0.        *      28 FEB 1330   51     .28     .00     .28         2.
      28 FEB 0130    3     .01     .01     .00         0.        *      28 FEB 1345   52     .18     .00     .18         1.
      28 FEB 0145    4     .01     .01     .00         0.        *      28 FEB 1400   53     .14     .00     .14         1.
      28 FEB 0200    5     .01     .01     .00         0.        *      28 FEB 1415   54     .08     .00     .08         1.
      28 FEB 0215    6     .01     .01     .00         0.        *      28 FEB 1430   55     .07     .00     .07         0.
      28 FEB 0230    7     .01     .01     .00         0.        *      28 FEB 1445   56     .06     .00     .06         0.
      28 FEB 0245    8     .01     .01     .00         0.        *      28 FEB 1500   57     .06     .00     .06         0.
      28 FEB 0300    9     .01     .01     .00         0.        *      28 FEB 1515   58     .05     .00     .05         0.
      28 FEB 0315   10     .01     .01     .01         0.        *      28 FEB 1530   59     .05     .00     .05         0.
      28 FEB 0330   11     .01     .01     .01         0.        *      28 FEB 1545   60     .04     .00     .04         0.
      28 FEB 0345   12     .01     .01     .01         0.        *      28 FEB 1600   61     .04     .00     .04         0.
      28 FEB 0400   13     .01     .01     .01         0.        *      28 FEB 1615   62     .05     .00     .05         0.
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28 FEB 0415	14	.01	.01	.01	0.	*	28 FEB 1630	63	.05	.00	.05	0.
28 FEB 0430	15	.01	.01	.01	0.	*	28 FEB 1645	64	.04	.00	.04	0.
28 FEB 0445	16	.01	.01	.01	0.	*	28 FEB 1700	65	.04	.00	.04	0.
28 FEB 0500	17	.02	.00	.01	0.	*	28 FEB 1715	66	.04	.00	.04	0.
28 FEB 0515	18	.02	.00	.01	0.	*	28 FEB 1730	67	.04	.00	.04	0.
28 FEB 0530	19	.02	.00	.01	0.	*	28 FEB 1745	68	.04	.00	.04	0.
28 FEB 0545	20	.02	.00	.01	0.	*	28 FEB 1800	69	.04	.00	.03	0.
28 FEB 0600	21	.02	.00	.01	0.	*	28 FEB 1815	70	.03	.00	.03	0.
28 FEB 0615	22	.02	.00	.01	0.	*	28 FEB 1830	71	.03	.00	.03	0.
28 FEB 0630	23	.02	.00	.01	0.	*	28 FEB 1845	72	.03	.00	.03	0.
28 FEB 0645	24	.02	.00	.02	0.	*	28 FEB 1900	73	.03	.00	.03	0.
28 FEB 0700	25	.02	.00	.02	0.	*	28 FEB 1915	74	.02	.00	.02	0.
28 FEB 0715	26	.03	.00	.03	0.	*	28 FEB 1930	75	.02	.00	.02	0.
28 FEB 0730	27	.03	.00	.03	0.	*	28 FEB 1945	76	.02	.00	.02	0.
28 FEB 0745	28	.03	.00	.03	0.	*	28 FEB 2000	77	.02	.00	.02	0.
28 FEB 0800	29	.03	.00	.03	0.	*	28 FEB 2015	78	.02	.00	.02	0.
28 FEB 0815	30	.03	.00	.03	0.	*	28 FEB 2030	79	.02	.00	.02	0.
28 FEB 0830	31	.04	.00	.03	0.	*	28 FEB 2045	80	.02	.00	.02	0.
28 FEB 0845	32	.04	.00	.03	0.	*	28 FEB 2100	81	.02	.00	.02	0.
28 FEB 0900	33	.04	.00	.04	0.	*	28 FEB 2115	82	.02	.00	.02	0.
28 FEB 0915	34	.04	.00	.04	0.	*	28 FEB 2130	83	.02	.00	.02	0.
28 FEB 0930	35	.04	.00	.04	0.	*	28 FEB 2145	84	.01	.00	.01	0.
28 FEB 0945	36	.04	.00	.04	0.	*	28 FEB 2200	85	.01	.00	.01	0.
28 FEB 1000	37	.05	.00	.04	0.	*	28 FEB 2215	86	.01	.00	.01	0.
28 FEB 1015	38	.04	.00	.04	0.	*	28 FEB 2230	87	.01	.00	.01	0.
28 FEB 1030	39	.04	.00	.04	0.	*	28 FEB 2245	88	.01	.00	.01	0.
28 FEB 1045	40	.05	.00	.04	0.	*	28 FEB 2300	89	.01	.00	.01	0.
28 FEB 1100	41	.05	.00	.05	0.	*	28 FEB 2315	90	.01	.00	.01	0.
28 FEB 1115	42	.05	.00	.05	0.	*	28 FEB 2330	91	.01	.00	.01	0.
28 FEB 1130	43	.06	.00	.06	0.	*	28 FEB 2345	92	.01	.00	.01	0.
28 FEB 1145	44	.07	.00	.07	0.	*	1 MAR 0000	93	.01	.00	.01	0.
28 FEB 1200	45	.08	.00	.08	0.	*	1 MAR 0015	94	.01	.00	.01	0.
28 FEB 1215	46	.13	.00	.13	1.	*	1 MAR 0030	95	.01	.00	.01	0.
28 FEB 1230	47	.16	.00	.15	1.	*	1 MAR 0045	96	.01	.00	.01	0.
28 FEB 1245	48	.23	.00	.23	1.	*	1 MAR 0100	97	.01	.00	.01	0.
28 FEB 1300	49	.49	.00	.49	2.	*						
						*						

****

TOTAL RAINFALL = 5.20, TOTAL LOSS = .24, TOTAL EXCESS = 4.96

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	24.00-HR
+ (CFS)	(HR)					
		(CFS)				
+ 5.	12.25		1.	0.	0.	0.
		(INCHES)	3.577	4.954	4.954	4.954
		(AC-FT)	0.	1.	1.	1.

CUMULATIVE AREA = .00 SQ MI

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              **************
              *            *
495 KK        *     3PEDB  *
              *            *
              **************

496 KO            OUTPUT CONTROL VARIABLES
                        IPRNT          1  PRINT CONTROL
                        IPLOT          0  PLOT CONTROL
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                QSCAL          0.  HYDROGRAPH PLOT SCALE
                          STORAGE ROUTING DETENTION BASIN AT PEBCO

          HYDROGRAPH ROUTING DATA

  3 RS        STORAGE ROUTING
                   NSTPS          1  NUMBER OF SUBREACHES
                    ITYP       ELEV  TYPE OF INITIAL CONDITION
                  RSVRIC      63.00  INITIAL CONDITION
                       X        .00 WORKING R AND D COEFFICIENT

 499 SA           AREA          .0        .0        .1        .1

 500 SE        ELEVATION      63.00     64.00     65.00     66.00

 501 SL        LOW-LEVEL OUTLET
                   ELEVL      63.50  ELEVATION AT CENTER OF OUTLET
                   CAREA        .79  CROSS-SECTIONAL AREA
                    COQL        .60  COEFFICIENT
                    EXPL        .50  EXPONENT OF HEAD

 502 SS        SPILLWAY
                    CREL      66.90  SPILLWAY CREST ELEVATION
                   SPWID        .00  SPILLWAY WIDTH
                    COQW        .00  WEIR COEFFICIENT
                    EXPW       1.50  EXPONENT OF HEAD

                                                  ***

                                  COMPUTED STORAGE-ELEVATION DATA

        STORAGE        .00       .04       .09       .16
      ELEVATION      63.00     64.00     65.00     66.00

                                  COMPUTED OUTFLOW-ELEVATION DATA

        OUTFLOW        .00       .00      2.69      2.95      3.27      3.66      4.16      4.81      5.70      7.01
      ELEVATION      63.00     63.50     64.00     64.10     64.24     64.43     64.69     65.10     65.75     66.90


                                COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

        STORAGE        .00       .02       .04       .05       .05       .06       .08       .09       .10       .14
        OUTFLOW        .00       .00      2.69      2.95      3.27      3.66      4.16      4.66      4.81      5.70
      ELEVATION      63.00     63.50     64.00     64.10     64.24     64.43     64.69     65.00     65.10     65.75

        STORAGE        .16       .23
        OUTFLOW       6.01      7.01
      ELEVATION      66.00     66.90

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN        0. TO        3.
               THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
               THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

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                                  HYDROGRAPH AT STATION    3PEDB

*****************************************************************************************************************************
                                          *                                                  *
 DA MON HRMN ORD  OUTFLOW  STORAGE   STAGE * DA MON HRMN ORD  OUTFLOW  STORAGE   STAGE * DA MON HRMN ORD  OUTFLOW  STORAGE   STAGE
                                          *                                                  *
 28 FEB 0100   1       0.       .0    63.0 * 28 FEB 0915  34       0.       .0    63.5 * 28 FEB 1730  67       0.       .0    63.5
 28 FEB 0115   2       0.       .0    63.0 * 28 FEB 0930  35       0.       .0    63.5 * 28 FEB 1745  68       0.       .0    63.5
 28 FEB 0130   3       0.       .0    63.0 * 28 FEB 0945  36       0.       .0    63.5 * 28 FEB 1800  69       0.       .0    63.5
 28 FEB 0145   4       0.       .0    63.0 * 28 FEB 1000  37       0.       .0    63.5 * 28 FEB 1815  70       0.       .0    63.5
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28 FEB 0200	5	0.	.0	63.0	*	28 FEB 1015	38	0.	.0	63.5	*	28 FEB 1830	71	0.	.0	63.5
28 FEB 0215	6	0.	.0	63.0	*	28 FEB 1030	39	0.	.0	63.5	*	28 FEB 1845	72	0.	.0	63.5
28 FEB 0230	7	0.	.0	63.0	*	28 FEB 1045	40	0.	.0	63.5	*	28 FEB 1900	73	0.	.0	63.5
28 FEB 0245	8	0.	.0	63.0	*	28 FEB 1100	41	0.	.0	63.5	*	28 FEB 1915	74	0.	.0	63
28 FEB 0300	9	0.	.0	63.0	*	28 FEB 1115	42	0.	.0	63.5	*	28 FEB 1930	75	0.	.0	6
28 FEB 0315	10	0.	.0	63.0	*	28 FEB 1130	43	0.	.0	63.6	*	28 FEB 1945	76	0.	.0	63.
28 FEB 0330	11	0.	.0	63.1	*	28 FEB 1145	44	0.	.0	63.6	*	28 FEB 2000	77	0.	.0	63.5
28 FEB 0345	12	0.	.0	63.1	*	28 FEB 1200	45	0.	.0	63.6	*	28 FEB 2015	78	0.	.0	63.5
28 FEB 0400	13	0.	.0	63.1	*	28 FEB 1215	46	0.	.0	63.6	*	28 FEB 2030	79	0.	.0	63.5
28 FEB 0415	14	0.	.0	63.1	*	28 FEB 1230	47	1.	.0	63.6	*	28 FEB 2045	80	0.	.0	63.5
28 FEB 0430	15	0.	.0	63.1	*	28 FEB 1245	48	1.	.0	63.7	*	28 FEB 2100	81	0.	.0	63.5
28 FEB 0445	16	0.	.0	63.2	*	28 FEB 1300	49	2.	.0	63.8	*	28 FEB 2115	82	0.	.0	63.5
28 FEB 0500	17	0.	.0	63.2	*	28 FEB 1315	50	3.	.1	64.3	*	28 FEB 2130	83	0.	.0	63.5
28 FEB 0515	18	0.	.0	63.2	*	28 FEB 1330	51	3.	.1	64.3	*	28 FEB 2145	84	0.	.0	63.5
28 FEB 0530	19	0.	.0	63.3	*	28 FEB 1345	52	2.	.0	63.9	*	28 FEB 2200	85	0.	.0	63.5
28 FEB 0545	20	0.	.0	63.3	*	28 FEB 1400	53	1.	.0	63.7	*	28 FEB 2215	86	0.	.0	63.5
28 FEB 0600	21	0.	.0	63.3	*	28 FEB 1415	54	1.	.0	63.6	*	28 FEB 2230	87	0.	.0	63.5
28 FEB 0615	22	0.	.0	63.4	*	28 FEB 1430	55	0.	.0	63.6	*	28 FEB 2245	88	0.	.0	63.5
28 FEB 0630	23	0.	.0	63.4	*	28 FEB 1445	56	0.	.0	63.6	*	28 FEB 2300	89	0.	.0	63.5
28 FEB 0645	24	0.	.0	63.4	*	28 FEB 1500	57	0.	.0	63.6	*	28 FEB 2315	90	0.	.0	63.5
28 FEB 0700	25	0.	.0	63.5	*	28 FEB 1515	58	0.	.0	63.6	*	28 FEB 2330	91	0.	.0	63.5
28 FEB 0715	26	0.	.0	63.5	*	28 FEB 1530	59	0.	.0	63.5	*	28 FEB 2345	92	0.	.0	63.5
28 FEB 0730	27	0.	.0	63.5	*	28 FEB 1545	60	0.	.0	63.5	*	1 MAR 0000	93	0.	.0	63.5
28 FEB 0745	28	0.	.0	63.5	*	28 FEB 1600	61	0.	.0	63.5	*	1 MAR 0015	94	0.	.0	63.5
28 FEB 0800	29	0.	.0	63.5	*	28 FEB 1615	62	0.	.0	63.5	*	1 MAR 0030	95	0.	.0	63.5
28 FEB 0815	30	0.	.0	63.5	*	28 FEB 1630	63	0.	.0	63.5	*	1 MAR 0045	96	0.	.0	63.5
28 FEB 0830	31	0.	.0	63.5	*	28 FEB 1645	64	0.	.0	63.5	*	1 MAR 0100	97	0.	.0	63.5
28 FEB 0845	32	0.	.0	63.5	*	28 FEB 1700	65	0.	.0	63.5	*					
28 FEB 0900	33	0.	.0	63.5	*	28 FEB 1715	66	0.	.0	63.5	*					
					*						*					

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PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.00-HR
+ (CFS)	(HR)					
		(CFS)				
+ 3.	12.50		1.	0.	0.	0.
		(INCHES)	3.577	4.773	4.773	4.773
		(AC-FT)	0.	1.	1.	1.

PEAK STORAGE	TIME	MAXIMUM AVERAGE STORAGE			
		6-HR	24-HR	72-HR	24.00-HR
+ (AC-FT)	(HR)				
0.	12.50	0.	0.	0.	0.

PEAK STAGE	TIME	MAXIMUM AVERAGE STAGE			
		6-HR	24-HR	72-HR	24.00-HR
+ (FEET)	(HR)				
64.33	12.50	63.66	63.46	63.46	63.46

CUMULATIVE AREA = .00 SQ MI

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              **************
              *            *
503 KK        *       3PW  *
              *            *
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504 KO OUTPUT CONTROL VARIABLES

IPRNT 1 PRINT CONTROL

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                IPLOT          0  PLOT CONTROL
                QSCAL         0.  HYDROGRAPH PLOT SCALE
                        SCS RUNOFF CALCULATION

            SUBBASIN RUNOFF DATA

506 BA        SUBBASIN CHARACTERISTICS
                TAREA        .01  SUBBASIN AREA

              PRECIPITATION DATA

507 PH                          DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
              ..... HYDRO-35 .....   ............... TP-40 ...............   ........... TP-49 ...........
              5-MIN  15-MIN  60-MIN    2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                .50    1.10    2.10    2.70    3.00    3.60    4.50    5.20     .00     .00     .00     .00

                                                STORM AREA =     .01

508 LS        SCS LOSS RATE
                STRTL        .56  INITIAL ABSTRACTION
               CRVNBR      78.00  CURVE NUMBER
                RTIMP        .00  PERCENT IMPERVIOUS AREA

509 UD        SCS DIMENSIONLESS UNITGRAPH
                 TLAG        .24  LAG

                                                  ***

WARNING *** TIME INTERVAL IS GREATER THAN .29*LAG

                                                UNIT HYDROGRAPH
                                            7 END-OF-PERIOD ORDINATES
            10.       10.       3.       1.       0.       0.       0.
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HYDROGRAPH AT STATION 3PW

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DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
28	FEB	0100	1	.00	.00	.00	0.	*	28	FEB	1315	50	1.10	.35	.75	11.
28	FEB	0115	2	.01	.01	.00	0.	*	28	FEB	1330	51	.28	.07	.21	11.
28	FEB	0130	3	.01	.01	.00	0.	*	28	FEB	1345	52	.18	.04	.14	7.
28	FEB	0145	4	.01	.01	.00	0.	*	28	FEB	1400	53	.14	.03	.11	4.
28	FEB	0200	5	.01	.01	.00	0.	*	28	FEB	1415	54	.08	.02	.07	3.
28	FEB	0215	6	.01	.01	.00	0.	*	28	FEB	1430	55	.07	.01	.06	2.
28	FEB	0230	7	.01	.01	.00	0.	*	28	FEB	1445	56	.06	.01	.05	2.
28	FEB	0245	8	.01	.01	.00	0.	*	28	FEB	1500	57	.06	.01	.05	1.
28	FEB	0300	9	.01	.01	.00	0.	*	28	FEB	1515	58	.05	.01	.04	1.
28	FEB	0315	10	.01	.01	.00	0.	*	28	FEB	1530	59	.05	.01	.04	1.
28	FEB	0330	11	.01	.01	.00	0.	*	28	FEB	1545	60	.04	.01	.04	1.
28	FEB	0345	12	.01	.01	.00	0.	*	28	FEB	1600	61	.04	.01	.03	1.
28	FEB	0400	13	.01	.01	.00	0.	*	28	FEB	1615	62	.05	.01	.04	1.
28	FEB	0415	14	.01	.01	.00	0.	*	28	FEB	1630	63	.05	.01	.04	1.
28	FEB	0430	15	.01	.01	.00	0.	*	28	FEB	1645	64	.04	.01	.04	1.
28	FEB	0445	16	.01	.01	.00	0.	*	28	FEB	1700	65	.04	.01	.03	1.
28	FEB	0500	17	.02	.02	.00	0.	*	28	FEB	1715	66	.04	.01	.03	1.
28	FEB	0515	18	.02	.02	.00	0.	*	28	FEB	1730	67	.04	.01	.03	1.
28	FEB	0530	19	.02	.02	.00	0.	*	28	FEB	1745	68	.04	.01	.03	1.
28	FEB	0545	20	.02	.02	.00	0.	*	28	FEB	1800	69	.04	.01	.03	1.
28	FEB	0600	21	.02	.02	.00	0.	*	28	FEB	1815	70	.03	.01	.03	1.
28	FEB	0615	22	.02	.02	.00	0.	*	28	FEB	1830	71	.03	.01	.03	1.
28	FEB	0630	23	.02	.02	.00	0.	*	28	FEB	1845	72	.03	.01	.03	1.
28	FEB	0645	24	.02	.02	.00	0.	*	28	FEB	1900	73	.03	.00	.03	1.

28 FEB 0700	25	.02	.02	.00	0.	*	28 FEB 1915	74	.02	.00	.02	1.
28 FEB 0715	26	.03	.03	.00	0.	*	28 FEB 1930	75	.02	.00	.02	0.
28 FEB 0730	27	.03	.03	.00	0.	*	28 FEB 1945	76	.02	.00	.02	0.
28 FEB 0745	28	.03	.03	.00	0.	*	28 FEB 2000	77	.02	.00	.01	0.
28 FEB 0800	29	.03	.03	.00	0.	*	28 FEB 2015	78	.02	.00	.01	0.
28 FEB 0815	30	.03	.03	.00	0.	*	28 FEB 2030	79	.02	.00	.01	0.
28 FEB 0830	31	.04	.04	.00	0.	*	28 FEB 2045	80	.02	.00	.01	0.
28 FEB 0845	32	.04	.04	.00	0.	*	28 FEB 2100	81	.02	.00	.01	0.
28 FEB 0900	33	.04	.04	.00	0.	*	28 FEB 2115	82	.02	.00	.01	0.
28 FEB 0915	34	.04	.04	.00	0.	*	28 FEB 2130	83	.02	.00	.01	0.
28 FEB 0930	35	.04	.04	.00	0.	*	28 FEB 2145	84	.01	.00	.01	0.
28 FEB 0945	36	.04	.04	.00	0.	*	28 FEB 2200	85	.01	.00	.01	0.
28 FEB 1000	37	.05	.04	.01	0.	*	28 FEB 2215	86	.01	.00	.01	0.
28 FEB 1015	38	.04	.03	.01	0.	*	28 FEB 2230	87	.01	.00	.01	0.
28 FEB 1030	39	.04	.04	.01	0.	*	28 FEB 2245	88	.01	.00	.01	0.
28 FEB 1045	40	.05	.04	.01	0.	*	28 FEB 2300	89	.01	.00	.01	0.
28 FEB 1100	41	.05	.04	.01	0.	*	28 FEB 2315	90	.01	.00	.01	0.
28 FEB 1115	42	.05	.04	.01	0.	*	28 FEB 2330	91	.01	.00	.01	0.
28 FEB 1130	43	.06	.04	.02	0.	*	28 FEB 2345	92	.01	.00	.01	0.
28 FEB 1145	44	.07	.05	.02	0.	*	1 MAR 0000	93	.01	.00	.01	0.
28 FEB 1200	45	.08	.05	.03	1.	*	1 MAR 0015	94	.01	.00	.01	0.
28 FEB 1215	46	.13	.08	.05	1.	*	1 MAR 0030	95	.01	.00	.01	0.
28 FEB 1230	47	.16	.09	.06	1.	*	1 MAR 0045	96	.01	.00	.01	0.
28 FEB 1245	48	.23	.12	.11	2.	*	1 MAR 0100	97	.01	.00	.01	0.
28 FEB 1300	49	.49	.22	.27	4.	*						
						*						

****

TOTAL RAINFALL = 5.20, TOTAL LOSS = 2.32, TOTAL EXCESS = 2.88

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.00-HR
+ (CFS)	(HR)					
		(CFS)				
+ 11.	12.50		3.	1.	1.	1.
		(INCHES)	2.339	2.869	2.869	2.869
		(AC-FT)	1.	2.	2.	2.

CUMULATIVE AREA = .01 SQ MI

*** ***

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          **************
          *            *
510 KK    *     3PEW   *
          *            *
          **************
```

511 KO OUTPUT CONTROL VARIABLES

IPRNT	1	PRINT CONTROL
IPLOT	0	PLOT CONTROL
QSCAL	0.	HYDROGRAPH PLOT SCALE

COMBINE HYDROGRAPHS FROM 3PEDB & 3PW

513 HC HYDROGRAPH COMBINATION

ICOMP	2	NUMBER OF HYDROGRAPHS TO COMBINE

***

****

HYDROGRAPH AT STATION 3PEW

SUM OF 2 HYDROGRAPHS

DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW
28 FEB 0100	1	0.	28 FEB 0715	26	0.	28 FEB 1330	51	15.	28 FEB 1945	76	1.
28 FEB 0115	2	0.	28 FEB 0730	27	0.	28 FEB 1345	52	9.	28 FEB 2000	77	0.
28 FEB 0130	3	0.	28 FEB 0745	28	0.	28 FEB 1400	53	5.	28 FEB 2015	78	0.
28 FEB 0145	4	0.	28 FEB 0800	29	0.	28 FEB 1415	54	4.	28 FEB 2030	79	0.
28 FEB 0200	5	0.	28 FEB 0815	30	0.	28 FEB 1430	55	2.	28 FEB 2045	80	0.
28 FEB 0215	6	0.	28 FEB 0830	31	0.	28 FEB 1445	56	2.	28 FEB 2100	81	0.
28 FEB 0230	7	0.	28 FEB 0845	32	0.	28 FEB 1500	57	2.	28 FEB 2115	82	0.
28 FEB 0245	8	0.	28 FEB 0900	33	0.	28 FEB 1515	58	1.	28 FEB 2130	83	0.
28 FEB 0300	9	0.	28 FEB 0915	34	0.	28 FEB 1530	59	1.	28 FEB 2145	84	0.
28 FEB 0315	10	0.	28 FEB 0930	35	0.	28 FEB 1545	60	1.	28 FEB 2200	85	0.
28 FEB 0330	11	0.	28 FEB 0945	36	0.	28 FEB 1600	61	1.	28 FEB 2215	86	0.
28 FEB 0345	12	0.	28 FEB 1000	37	0.	28 FEB 1615	62	1.	28 FEB 2230	87	0.
28 FEB 0400	13	0.	28 FEB 1015	38	0.	28 FEB 1630	63	1.	28 FEB 2245	88	0.
28 FEB 0415	14	0.	28 FEB 1030	39	0.	28 FEB 1645	64	1.	28 FEB 2300	89	0.
28 FEB 0430	15	0.	28 FEB 1045	40	0.	28 FEB 1700	65	1.	28 FEB 2315	90	0.
28 FEB 0445	16	0.	28 FEB 1100	41	0.	28 FEB 1715	66	1.	28 FEB 2330	91	0.
28 FEB 0500	17	0.	28 FEB 1115	42	1.	28 FEB 1730	67	1.	28 FEB 2345	92	0.
28 FEB 0515	18	0.	28 FEB 1130	43	1.	28 FEB 1745	68	1.	1 MAR 0000	93	0.
28 FEB 0530	19	0.	28 FEB 1145	44	1.	28 FEB 1800	69	1.	1 MAR 0015	94	0.
28 FEB 0545	20	0.	28 FEB 1200	45	1.	28 FEB 1815	70	1.	1 MAR 0030	95	0.
28 FEB 0600	21	0.	28 FEB 1215	46	1.	28 FEB 1830	71	1.	1 MAR 0045	96	0.
28 FEB 0615	22	0.	28 FEB 1230	47	2.	28 FEB 1845	72	1.	1 MAR 0100	97	0.
28 FEB 0630	23	0.	28 FEB 1245	48	3.	28 FEB 1900	73	1.			
28 FEB 0645	24	0.	28 FEB 1300	49	6.	28 FEB 1915	74	1.			
28 FEB 0700	25	0.	28 FEB 1315	50	14.	28 FEB 1930	75	1.			

PEAK FLOW (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	24.00-HR
		(CFS)				
15.	12.50		3.	1.	1.	1.
		(INCHES)	2.532	3.186	3.186	3.186
		(AC-FT)	2.	2.	2.	2.

CUMULATIVE AREA = .01 SQ MI

1

RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
HYDROGRAPH AT	5E	61.	12.50	15.	5.	5.	.07		
HYDROGRAPH AT	6CSWP	166.	13.50	133.	41.	41.	.93		
HYDROGRAPH AT	12P	14.	12.50	4.	1.	1.	.01		
3 COMBINED AT	6C24P	222.	12.75	152.	47.	47.	1.01		
ROUTED TO									

+	12PCHL	223.	12.75	152.	47.	47.	1.01		
+								72.42	12.75
HYDROGRAPH AT									
+	13P	6.	12.75	2.	1.	1.	.01		
HYDROGRAPH AT									
+	19P	3.	12.50	1.	0.	0.	.00		
ROUTED TO									
+	19PCHL	3.	12.50	1.	0.	0.	.00		
+								66.44	12.50
3 COMBINED AT									
+	121319	231.	12.75	154.	48.	48.	1.03		
HYDROGRAPH AT									
+	20P	20.	12.50	4.	1.	1.	.02		
ROUTED TO									
+	20PSWP	0.	.25	0.	0.	0.	.02		
+								67.91	24.00
HYDROGRAPH AT									
+	14P	34.	12.50	9.	3.	3.	.04		
3 COMBINED AT									
+	NBAR	264.	12.50	163.	50.	50.	1.08		
ROUTED TO									
+	14PCHL	145.	16.50	126.	48.	48.	1.08		
+								92.33	16.50
HYDROGRAPH AT									
+	6PWBAR	23.	15.25	23.	11.	11.	.30		
HYDROGRAPH AT									
+	8P	27.	12.50	6.	2.	2.	.02		
HYDROGRAPH AT									
+	15P	21.	12.50	5.	1.	1.	.01		
ROUTED TO									
+	15PSWP	5.	13.25	4.	1.	1.	.01		
+								63.11	13.25
4 COMBINED AT									
+	6815P	174.	16.25	154.	62.	62.	1.42		
ROUTED TO									
+	8PCHL	173.	16.50	154.	62.	62.	1.42		
+								70.49	16.50
HYDROGRAPH AT									
+	10P	44.	12.25	9.	3.	3.	.03		
2 COMBINED AT									
+	810P	176.	16.50	157.	65.	65.	1.45		
ROUTED TO									
+	10PCHL	176.	16.50	157.	65.	65.	1.45		
+								67.99	16.50
HYDROGRAPH AT									
+	16&17P	35.	12.25	5.	2.	2.	.02		

	ROUTED TO								
+		1617PD	17.	12.50	4.	1.	1.	.02	
+								66.23	12.50
	2 COMBINED AT								
		1017PD	177.	16.50	159.	66.	66.	1.46	
	ROUTED TO								
+		1617CH	177.	16.75	159.	66.	66.	1.46	
+								69.35	16.75
	ROUTED TO								
+		11PCHL	177.	16.75	159.	66.	66.	1.46	
+								67.55	16.75
	HYDROGRAPH AT								
+		21P	13.	12.50	3.	1.	1.	.01	
	HYDROGRAPH AT								
+		22P	4.	12.25	1.	0.	0.	.00	
	2 COMBINED AT								
+		21&22P	17.	12.50	4.	1.	1.	.02	
	ROUTED TO								
+		21PCHL	18.	12.50	4.	1.	1.	.02	
+								68.31	12.50
	HYDROGRAPH AT								
+		23P	62.	12.25	10.	3.	3.	.03	
	HYDROGRAPH AT								
		18P	26.	12.25	4.	1.	1.	.01	
	4 COMBINED AT								
+		PHCOMB	191.	12.25	169.	72.	72.	1.52	
	HYDROGRAPH AT								
+		BCSWP	445.	13.00	274.	97.	97.	1.43	
	2 COMBINED AT								
+		CW&PP	609.	13.00	443.	169.	169.	2.95	
	ROUTED TO								
+		PHPND	371.	17.50	339.	141.	141.	2.95	
+								68.54	17.50
	HYDROGRAPH AT								
+		11P	104.	12.50	24.	8.	8.	.07	
	HYDROGRAPH AT								
+		MAWL	14.	23.25	13.	5.	5.	.01	
	HYDROGRAPH AT								
+		9P	16.	12.25	3.	1.	1.	.01	
	HYDROGRAPH AT								
+		5PN	8.	12.50	2.	1.	1.	.01	
	3 COMBINED AT								
		MA5PN	22.	12.25	14.	6.	6.	.03	
	ROUTED TO								
+		AADWEX	22.	12.25	14.	6.	6.	.03	
+								61.99	12.25

	HYDROGRAPH AT								
+	5PS	52.	12.75	15.	5.	5.	.05		
	HYDROGRAPH AT								
+	RECHRG	1.	.25	1.	1.	1.	.00		
	3 COMBINED AT								
+	5PSAAD	72.	12.50	25.	12.	12.	.08		
	ROUTED TO								
+	SHD10C	71.	12.50	25.	11.	11.	.08		
+								55.32	12.50
	HYDROGRAPH AT								
+	4DCHAB	85.	12.50	27.	11.	11.	.26		
	HYDROGRAPH AT								
+	2PN	11.	12.50	2.	1.	1.	.01		
	2 COMBINED AT								
+	4D2PN	96.	12.50	29.	12.	12.	.27		
	ROUTED TO								
+	PXDPR	66.	12.75	29.	12.	12.	.27		
+								71.67	12.75
	HYDROGRAPH AT								
+	4ECHL	75.	12.25	53.	17.	17.	.30		
	HYDROGRAPH AT								
+	1P	30.	12.50	7.	2.	2.	.02		
	2 COMBINED AT								
+	4E1P	105.	12.50	60.	19.	19.	.32		
	ROUTED TO								
+	EWCLPX	106.	12.50	60.	19.	19.	.32		
+								67.22	12.50
	HYDROGRAPH AT								
+	2PS	14.	12.25	2.	1.	1.	.01		
	ROUTED TO								
+	2PSDB	6.	12.50	2.	1.	1.	.01		
+								68.88	12.50
	3 COMBINED AT								
+	1&2P	171.	12.50	90.	32.	32.	.59		
	ROUTED TO								
+	2PSCHL	167.	12.75	90.	35.	35.	.59		
+								80.51	12.75
	HYDROGRAPH AT								
+	DI2PSC	110.	12.25	80.	31.	31.	.59		
	HYDROGRAPH AT								
+	4PS	7.	12.25	1.	0.	0.	.00		
	ROUTED TO								
+	4PSDB	3.	12.50	1.	0.	0.	.00		
+								61.24	12.50
	HYDROGRAPH AT								
+	4P	24.	12.50	6.	2.	2.	.02		

	3 COMBINED AT								
+		124P	137.	12.50	87.	34.	34.	.61	
	ROUTED TO								
		4PSWP	129.	13.00	86.	33.	33.	.61	
								63.24	13.00
	HYDROGRAPH AT								
+		3PE	5.	12.25	1.	0.	0.	.00	
	ROUTED TO								
+		3PEDB	3.	12.50	1.	0.	0.	.00	
+								64.33	12.50
	HYDROGRAPH AT								
+		3PW	11.	12.50	3.	1.	1.	.01	
	2 COMBINED AT								
+		3PEW	15.	12.50	3.	1.	1.	.01	

*** NORMAL END OF HEC-1 ***

1

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FLOOD HYDROGRAPH PACKAGE HEC-1 (IBM XT 512K VERSION) -FEB 1,1985
U.S. ARMY CORPS OF ENGINEERS, THE HYDROLOGIC ENGINEERING CENTER, 609 SECOND STREET, DAVIS, CA. 95616

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THIS HEC-1 VERSION CONTAINS ALL OPTIONS EXCEPT ECONOMICS, AND THE NUMBER OF PLANS ARE REDUCED TO 3

1 HEC-1 INPUT PAGE 1

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LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

  1           ID        ISRT, WOBURN, MASSACHUSETTS
  2           ID        ON-SITE SUBWATERSHEDS
  3           ID        DETAILED STORAGE AND STREAM NETWORK
  4           ID        PROPOSED CONDITIONS - 50 YR, 24 HR STORM
              *DIAGRAM
  5           IT      15 28FEB91     100      97
  6           IN      15 28FEB91     100
  7           IO       5

  8           KK      5E
  9           KO       1
 10           KM        DIRECT INPUT HYDROGRAPH FOR FLOW FROM 5E
 11           BA    0.07
 12           QI       0       0       0       0       0       0       0       0       0       0
 13           QI       0       0       0       0       0       0       0       0       0       0
 14           QI       0       0       0       0       0       0       0       0       0       0
 15           QI       0       0       0       0       0       0       1       1       1       2
 16           QI       2       3       3       4       4       5       7      10      20      50
 17           QI      77      65      42      28      19      15      13      12      11      10
 18           QI      10       9       8       8       7       7       6       6       6       6
 19           QI       5       5       5       5       4       3       3       3       3       3
 20           QI       3       3       3       3       2       2       2       2       2       2
 21           QI       2       2       2       2       2       2       2

 22           KK   6CSWP
 23           KO       1
 24           KM        DIRECT INPUT HYDROGRAPH FOR FLOW FROM READING, UNDER RTE 93
 25           BA    0.93
 26           QI       0       0       0       0       0       0       0       0       0       0
 27           QI       0       0       0       0       0       0       0       0       0       0
 28           QI       0       0       0       0       0       0       0       0       0       0
 29           QI       0       0       0       0       0       0       0       1       2       4
 30           QI       6       9      12      16      20      27      36      52      89     130
 31           QI     155     167     172     175     176     177     177     177     177     176
 32           QI     176     175     174     172     170     168     166     164     160     156
 33           QI     151     144     132     121      85      54      50      46      44      41
 34           QI      40      38      37      36      36      35      34      34      33      33
 35           QI      32      32      31      31      31      30      30

 36           KK     12P
 37           KO       1
 38           KM        SCS RUNOFF CALCULATION
 39           BA   0.015
 40           PH               0     0.6     1.3     2.4     3.0     3.4     4.2     5.2     6.0
 41           LS              78
 42           UD    0.44
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```
 43          KK   6C12P
 44          KM        COMBINE HYDROGRAPHS FOR 5E, 6CSWP AND 12P
 45          HC       3
1                                          HEC-1 INPUT                                                  PAGE  2

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


 46          KK  12PCHL
 47          KO       1
 48          KM        STORAGE ROUTING THROUGH NORTH BRANCH CHANNEL
 49          RS       1    STOR       0
 50          RC    0.08    0.03    0.08     400  0.0063    69.5
 51          RX       0       5      10      11      17      18      23      28
 52          RY    70.5      70    69.5    67.5    67.5    69.5      70    70.5

 53          KK     13P
 54          KO       1
 55          KM        SCS RUNOFF CALCULATION
 56          BA   0.009
 57          PH              0     0.6     1.3     2.4     3.0     3.4     4.2     5.2     6.0
 58          LS             70
 59          UD    0.49

 60          KK     19P
 61          KO       1
 62          KM        SCS RUNOFF CALCULATION
 63          BA   0.004
 64          PH              0     0.6     1.3     2.4     3.0     3.4     4.2     5.2     6.0
 65          LS             70
 66          UD    0.34

 67          KK  19PCHL
 68          KO       1
 69          KM        STORAGE ROUTING THROUGH RTE 93 E/W CHANNEL
 70          RS       1    STOR       0
 71          RC   0.080   0.030   0.080     430   0.007      67
 72          RX       0       5      10      11      14      15      20      25
 73          RY      68    67.5      67      66      66      67    67.5      68

 74          KK  121319
 75          KM        COMBINE HYDROGRAPHS FOR 12PCHL, 13P & 19PCHL
 76          HC       3

 77          KK     20P
 78          KO       1
 79          KM        SCS RUNOFF CALCULATION
 80          BA   0.017
 81          PH              0     0.6     1.3     2.4     3.0     3.4     4.2     5.2     6.0
 82          LS             79
 83          UD    0.32

 84          KK  20PSWP
 85          KO       1
 86          KM        ROUTING THROUGH WETLAND 3B
 87          RS       1    ELEV    66.5
 88          SA   1.084   1.586   3.737
 89          SE    66.5    67.2    68.2
 90          SS    68.1      30     3.0     1.5
1                                          HEC-1 INPUT                                                  PAGE  3

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


 91          KK     14P
 92          KO       1
```

```
 93          KM        SCS RUNOFF CALCULATION
 94          BA   0.036
 95          PH              0     0.6     1.3     2.4     3.0     3.4     4.2     5.2     6.0
 96          LS             78
 97          UD    0.45

 98          KK    NBAR
 99          KM        COMBINE HYDROGRAPHS FOR 121319, 20PSWP & 14P
100          HC       3

101          KK  14PCHL
102          KO       1
103          KM        STORAGE ROUTING THROUGH NORTH BRANCH TO COMMERCE WAY
104          RS       1    ELEV    61.6
105          SA       0   0.514   0.743   0.912   1.300
106          SE    61.6      64    64.5      65      66
107          SL    62.6    3.14     0.6     0.5
108          SS    64.9       0     3.0     1.5

109          KK  6PWBAR
110          KO       1
111          KM        DIRECT INPUT OF HYDROGRAPH FROM WETLAND 1C (6PN) TO WBAR
112          KM        (SEE POND2: APPENDIX 10-G)
113          BA   0.302
114          QI       0       0       0       0       0       0       0       0       0       0
115          QI       0       0       0       0       0    0.01    0.03    0.09    0.14    0.21
116          QI    0.27    0.35    0.43    0.50    0.56    0.65    0.75    0.81    0.95    1.08
117          QI    1.19    1.26    1.41    1.48    1.61    1.75    1.86    1.98    2.10    2.28
118          QI    2.48    2.70    2.84    3.05    3.31    3.68    3.98    5.45    7.91   13.02
119          QI   18.85   22.16   23.93   24.75   25.46   26.17   26.46   26.91   27.13   27.26
120          QI   27.63   27.52   27.70   27.67   27.47   27.63   27.49   27.29   27.37   27.16
121          QI   26.81   26.67   26.62   26.46   26.21   25.64   25.42   25.29   25.15   24.99
122          QI   24.53   24.36   24.19   24.01   23.53   23.34   23.07   22.72   22.40   22.10
123          QI   21.82   21.54   21.27   21.01   20.75   20.42   19.94

124          KK      8P
125          KO       1
126          KM        SCS RUNOFF CALCULATION
127          BA   0.022
128          PH              0     0.6     1.3     2.4     3.0     3.4     4.2     5.2     6.0
129          LS             81
130          UD    0.25

131          KK     15P
132          KO       1
133          KM        SCS RUNOFF CALCULATION
134          BA   0.015
135          PH              0     0.6     1.3     2.4     3.0     3.4     4.2     5.2     6.0
136          LS             86
137          UD    0.26
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LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

138          KK  15PSWP
139          KO       1
140          KM        STORAGE ROUTING THROUGH WETLAND 3C
141          RS       1    ELEV    62.4
142          SA   1.020   2.247   3.131   3.834
143          SE      62      63      64    65.0
144          SL    62.4    1.23     0.6     0.5
145          SS    64.9      30     3.0     1.5

146          KK   6815P
147          KM        COMBINE HYDROGRAPHS FOR 6PCHL, 8P, 14PCHL & 15PSWP
```

```
148          HC       4

149          KK   8PCHL
150          KO       1
151          KM        STORAGE ROUTING THROUGH 8P CHANNEL
152          RS       1    ELEV      61
153          SA       0   0.014   0.101   0.187   0.241   0.294   0.349
154          SE      61      63      64      65      66      67      68
155          SL    62.6   12.57     0.6     0.5
156          SS    67.9       0     3.0     1.5

157          KK     10P
158          KO       1
159          KM        SCS RUNOFF CALCULATION
160          BA   0.026
161          PH               0     0.6     1.3     2.4     3.0     3.4     4.2     5.2     6.0
162          LS              92
163          UD    0.22

164          KK    810P
165          KM        COMBINE HYDROGRAPHS FOR 8PCHL & 10P RUNOFF
166          HC       2

167          KK  10PCHL
168          KO       1
169          KM        STORAGE ROUTING THROUGH 10P CHANNEL
170          RS       1    ELEV    59.9
171          SA       0   0.082   0.129   0.178   0.225   0.241
172          SE    59.9      61      63      65      67    67.7
173          SL    61.8   12.57     0.6     0.5
174          SS    67.5      30     3.0     1.5

175          KK  16&17P
176          KO       1
177          KM        SCS RUNOFF CALCULATION - 16P & 17P
178          BA   0.017
179          PH               0     0.6     1.3     2.4     3.0     3.4     4.2     5.2     6.0
180          LS              87
181          UD    0.07
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


182          KK  1617PD
183          KO       1
184          KM        STORAGE ROUTING THROUGH 16P & 17P
185          RS       1    ELEV    59.1
186          SA   0.228   0.484   1.708
187          SE    63.5    65.7      66
188          SS    65.9      40     3.0     1.5

189          KK  1017PD
190          KM        COMBINE HYDROGRAPHS FOR 10CHL & 1617PD
191          HC       2

192          KK  1617CH
193          KO       1
194          KM        STORAGE ROUTING THROUGH COMMERCE WAY at 16P & 17P
195          RS       1    ELEV    59.1
196          SA       0   0.033   0.064   0.095   0.123
197          SE    59.1      60      62      64      66
198          SL    61.4   12.57     0.6     0.5
199          SS    65.9       0     3.0     1.5

200          KK  11PCHL
```

```
KO       1
KM        STORAGE ROUTING THROUGH COMMERCE WAY AT 11P
RS       1    ELEV    57.8
SA       0   0.047   0.067   0.088   0.110   0.128
SE    57.8      59      61      63      65    66.8
SL      59   12.57     0.6     0.5
SS    66.7       0     3.0     1.5

KK     21P
KO       1
KM        SCS RUNOFF CALCULATION
BA   0.014
PH              0     0.6     1.3     2.4     3.0     3.4     4.2     5.2     6.0
LS             73
UD    0.25

KK     22P
KO       1
KM        SCS RUNOFF CALCULATION
BA   0.004
PH              0     0.6     1.3     2.4     3.0     3.4     4.2     5.2     6.0
LS             73
UD    0.21

KK  21&22P
KM        COMBINE HYDROGRAPHS FOR 21P & 22P
HC       2
```



```
LINE          ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

KK  21PCHL
KO       1
KM        STORAGE ROUTING THROUGH 21P CHANNEL
RS       1    STOR       0
RC    0.08    0.03    0.08     900   0.002      70
RX       0       5      10      13      18      21      26      31
RY      71    70.5      70      67      67      70    70.5      71

KK     23P
KO       1
KM        SCS RUNOFF CALCULATION
BA   0.032
PH              0     0.6     1.3     2.4     3.0     3.4     4.2     5.2     6.0
LS             88
UD    0.15

KK     18P
KO       1
KM        SCS RUNOFF CALCULATION
BA   0.011
PH              0     0.6     1.3     2.4     3.0     3.4     4.2     5.2     6.0
LS             95
UD    0.06

KK  PHCOMB
KM        COMBINE HYDROGRAPHS FOR 23P, 18P, 21PCHL, & 11PCHL
HC       4

KK   8CSWP
KO       1
KM        DIRECT INPUT HYDROGRAPH FROM READING, UNDER RTE 93
BA    1.43
QI       0       0       0       0       0       0       0       0       1       3
QI       4       6       7       8       9      10      10      10      10      10
```

```
255          QI      11      11      11      11      11      11      11      11      11      11
256          QI      11      11      11      11      12      13      14      17      20      24
257          QI      28      34      40      47      56      67      81     103     146     255
258          QI     406     506     525     493     450     407     372     346     326     312
259          QI     302     295     289     283     278     273     267     260     253     246
260          QI     239     232     225     217     208     198     187     175     158     139
261          QI     123     111     101      93      87      82      79      76      74      72
262          QI      71      69      68      67      66      65      65

263          KK  CW&PP
264          KM        COMBINE HYDROGRAPHS FOR PHILLIPS POND
265          HC       2

266          KK   PHPND
267          KO       1
268          KM        STORAGE ROUTING THROUGH PHILLIPS POND
269          RS       1    ELEV      57
270          SA   3.914   4.830   5.514   7.530   8.809  11.892
271          SE      57    59.5    60.6      62      64      66
272          SL    57.5   14.14     0.6     0.5
1                                          HEC-1 INPUT                                          PAGE  7

LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

273          SS    65.9      40     3.0     1.5

274          KK     11P
275          KO       1
276          KM        SCS RUNOFF CALCULATION
277          BA   0.068
278          PH              0     0.6     1.3     2.4     3.0     3.4     4.2     5.2     6.0
279          LS             91
280          UD    0.32

281          KK    MAWL
282          KO       1
283          KM        DIRECT INPUT FROM MITIGATION AREA WETLAND
284          KM        (SEE POND2: APPENDIX 10-G)
285          BA    0.01
286          QI       0       0       0       0       0       0       0       0       0       0
287          QI       0       0       0       0       0       0       0       0       0       0
288          QI       0       0       0    0.01    0.01    0.01    0.01    0.02    0.02    0.02
289          QI    0.03    0.04    0.04    0.05    0.06    0.07    0.08    0.09    0.11    0.14
290          QI    0.17    0.20    0.24    0.29    0.34    0.41    0.50    0.67    0.94    1.47
291          QI    2.26    2.66    3.26    3.81    4.20    4.56    4.93    5.34    5.86    6.46
292          QI    7.09    7.79    8.56    9.24    9.89   10.60   11.25   11.85   12.42   12.83
293          QI   13.09   13.34   13.76   14.21   14.62   15.05   15.49   15.89   16.26   16.79
294          QI   17.72   18.50   19.12   19.61   20.00   20.32   20.54   20.69   20.77   20.80
295          QI   20.78   20.64   20.41   20.18   19.94   19.69   19.43

296          KK      9P
297          KO       1
298          KM        SCS RUNOFF CALCULATION
299          BA   0.011
300          PH              0     0.6     1.3     2.4     3.0     3.4     4.2     5.2     6.0
301          LS             82
302          UD    0.19

303          KK     5PN
304          KO       1
305          KM        SCS RUNOFF CALCULATION
306          BA    .008
307          PH              0     0.6     1.3     2.4     3.0     3.4     4.2     5.2     6.0
308          LS             78
309          UD     .43
```

```
KK   MA5PN
KO       1
KM        COMBINE HYDROGRAPHS FOR 5PN, 9P & MAWL
HC       3

KK  AADWEX
KO       1
KM        STORAGE ROUTING THROUGH ATLANTIC AVENUE DRAINWAY EXTENSION
RS       1    ELEV    60.0
SA   0.003   0.011   0.028   0.058   0.096   0.136   0.176   0.196
SE      60    62.5    63.5    64.5    65.5    66.5    67.5    68.0
SL    61.9   37.70     0.6     0.5
SS    67.9       0     3.0     1.5
```



```
LINE      ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


KK     5PS
KO       1
KM        SCS RUNOFF CALCULATION
BA   0.051
PH              0     0.6     1.3     2.4     3.0     3.4     4.2     5.2     6.0
LS             83
UD    0.52

KK  RECHRG
KO       1
KM         DIRECT INPUT OF HYDROGRAPH FROM RECHARGE BASIN
BA    .001
QI      .6      .6      .6      .6      .6      .6      .6      .6      .6      .6
QI      .6      .6      .6      .6      .6      .6      .6      .6      .6      .6
QI      .6      .6      .6      .6      .6      .6      .6      .6      .6      .6
QI      .6      .6      .6      .6      .6      .6      .6      .6      .6      .6
QI      .6      .6      .6      .6      .6      .6      .6      .6      .6      .6
QI      .6      .6      .6      .6      .6      .6      .6      .6      .6      .6
QI      .6      .6      .6      .6      .6      .6      .6      .6      .6      .6
QI      .6      .6      .6      .6      .6      .6      .6      .6      .6      .6
QI      .6      .6      .6      .6      .6      .6      .6      .6      .6      .6
QI      .6      .6      .6      .6      .6      .6      .6

KK  5PSAAD
KM        COMBINE HYDROGRAPHS FOR 5PS, RECHARGE BASIN & AADWEX
HC       3

KK  SHD10C
KO       1
KM        STORAGE ROUTING THROUGH ATLANTIC AVENUE CHANNEL at RR TRACKS
RS       1    STOR       0
RC    0.08    0.03    0.08     800   0.007      63
RX       0      10      20      28      42      50      60      70
RY      63    62.5      62    54.2    54.2      62    62.5      63

KK  4DCHAB
KO       1
KM        DIRECT INPUT OF HYDROGRAPH FROM NW WOBURN & WILMINGTON
BA   0.259
QI       0       0       0       0       0       0       0       0       0       0
QI       0       0       0       0       0       0       0       0       0       0
QI       0       0       0       0       0       0       0       0       0       0
QI       0       0       0       0       0       1       1       1       2       2
QI       2       3       4       5       6       8      10      15      30      78
QI     107      78      51      38      31      28      26      24      24      23
QI      23      23      23      23      23      23      23      23      23      23
QI      23      23      23      23      22      22      22      22      21      21
QI      21      21      21      21      21      21      21      21      21      21
```

```
 366        QI      20      20      20      20      20      20      19
1                                        HEC-1 INPUT

LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10


 367        KK     2PN
 368        KO       1
 369        KM        SCS RUNOFF CALCULATION
 370        BA   0.008
 371        PH              0     0.6     1.3     2.4     3.0     3.4     4.2     5.2     6.0
 372        LS             85
 373        UD    0.28

 374        KK   4D2PN
 375        KM        COMBINE HYDROGRAPHS FROM 4DCHAB & 2PN
 376        HC       2

 377        KK   PXDPR
 378        KO       1
 379        KM        ROUTING OF NW WOBURN & WILMINGTON THROUGH PX DEPRESSED AREA
 380        RS       1    ELEV    68.9
 381        SA       0    .291    .721    .936
 382        SE    68.0      69      70      71
 383        SL   69.65    9.62     0.6     0.5
 384        SS    72.3       0     3.0     1.5

 385        KK   4ECHL
 386        KO       1
 387        KM        DIRECT INPUT OF HYDROGRAPH FROM NW WOBURN & WILMINGTON
 388        BA    0.30
 389        QI       0       0       0       0       0       0       0       0       0       0
 390        QI       0       0       0       0       0       0       0       0       0       0
 391        QI       0       0       0       0       0       0       0       0       0       0
 392        QI       0       0       0       0       1       3       4       5       6       8
 393        QI      10      12      14      18      22      28      37      48      69      75
 394        QI      75      75      75      75      75      75      75      75      75      75
 395        QI      75      75      70      57      44      31      29      28      27      26
 396        QI      25      24      23      21      18      15      14      14      13      13
 397        QI      12      12      12      11      11      11      11      11      10      10
 398        QI      10      10      10       9       9       9       9

 399        KK      1P
 400        KO       1
 401        KM        SCS RUNOFF CALCULATION
 402        BA   0.021
 403        PH              0     0.6     1.3     2.4     3.0     3.4     4.2     5.2     6.0
 404        LS             87
 405        UD    0.31

 406        KK    4E1P
 407        KM        COMBINE HYDROGRAPHS FROM 4ECHL & 1P
 408        HC       2

 409        KK  EWCLPX
 410        KO       1
 411        KM        CHANNEL ROUTING THROUGH E/W CHANNEL AT PX REALTY
 412        RS       1    STOR       0
 413        RC   0.080   0.030   0.080     250  0.0032    70.5
 414        RX       0       5      10      16      22      28      38      48
1                                        HEC-1 INPUT                                    PAGE 10

LINE        ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

 415        RY      72      71      70    64.4    64.4      70    70.2    70.5
```

```
416        KK     2PS
417        KO       1
418        KM        SCS RUNOFF CALCULATION
419        BA   0.006
420        PH              0     0.6     1.3     2.4     3.0     3.4     4.2     5.2     6.0
421        LS             96
422        UD    0.02

423        KK   2PSDB
424        KO       1
425        KM        ROUTING OF 2PS THROUGH DETENTION BASIN
426        RS       1    ELEV    66.0
427        SA   0.069   0.088   0.108   0.130   0.154
428        SE      66      67      68      69      70
429        SL      66    0.79     0.6     0.5
430        SS    69.9       0     3.0     1.5

431        KK    1&2P
432        KM        COMBINE HYDROGRAPHS FROM PX DEPRESSED AREA, 1P & 2P RUNOFF
433        HC       3

434        KK  2PSCHL
435        KO       1
436        KM        STORAGE ROUTING THROUGH N/S CHANNEL AT PX REALTY
437        RS       1    ELEV    66.4
438        SA       0   0.016   0.019   0.033   0.041   0.066   0.074
439        SE    66.4    66.5      67    67.5    68.0      69    69.4
440        SL   59.70    7.07     0.6     0.5
441        SS    69.3       0     3.0     1.5

442        KK  DI2PSC
443        KO       1
444        KM        DIRECT INPUT HYDROGRAPH FOR FLOW FROM 2PSCHL (MODIFIED PEAK)
445        BA     .59
446        QI       6       6       6       6       6       6       6       6       6       6
447        QI       6       6       6       6       6       6       6       6       6       6
448        QI       6       6       6       6       6       6       6       6       6       6
449        QI       6       6       6       6       6       6       6       6       8      10
450        QI      15      22      27      33      41      53      71     102     110     110
451        QI     110     110     110     110     110     110     110     110     110     108
452        QI     105     103     100      89      70      61      53      57      52      54
453        QI      50      51      48      48      43      40      38      38      36      36
454        QI      35      35      35      34      33      34      33      33      32      32
455        QI      32      31      31      30      30      30      30

456        KK     4PS
457        KO       1
458        KM        SCS RUNOFF CALCULATION
459        BA   0.003
460        PH              0     0.6     1.3     2.4     3.0     3.4     4.2     5.2     6.0
461        LS             97
462        UD    0.08
```



```
LINE       ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

463        KK   4PSDB
464        KO       1
465        KM        STORAGE ROUTING THROUGH DETENSION BASIN AT DAGATA
466        RS       1    ELEV      59
467        SA   0.048   0.063   0.079   0.097
468        SE      59      60      61      62
469        SL      59    0.44     0.6     0.5
470        SS    61.9       0     3.0     1.5
```

```
471          KK      4P
472          KO       1
473          KM        SCS RUNOFF CALCULATION
474          BA   0.017
475          PH              0     0.6     1.3     2.4     3.0     3.4     4.2     5.2     6.0
476          LS             91
477          UD    0.41

478          KK    124P
479          KM        COMBINE HYDROGRAPHS FROM  2SPCHL, 4P, & 4PSDB
480          HC       3

481          KK   4PSWP
482          KO       1
483          KM        STORAGE ROUTING THROUGH WET AREA IN B.E. ROW
484          RS       1    ELEV    60.6
485          SA   0.801   1.178   1.430   1.939
486          SE    60.6    61.3    62.0    63.3
487          SS    60.6      10     3.0     1.5

488          KK     3PE
489          KO       1
490          KM        SCS RUNOFF CALCULATION
491          BA   0.002
492          PH              0     0.6     1.3     2.4     3.0     3.4     4.2     5.2     6.0
493          LS             98
494          UD    0.02

495          KK   3PEDB
496          KO       1
497          KM        STORAGE ROUTING DETENTION BASIN AT PEBCO
498          RS       1    ELEV      63
499          SA   0.035   0.046   0.060   0.075
500          SE      63      64      65      66
501          SL    63.5    0.79     0.6     0.5
502          SS    66.9       0     3.0     1.5

503          KK     3PW
504          KO       1
505          KM        SCS RUNOFF CALCULATION
506          BA   0.010
507          PH              0     0.6     1.3     2.4     3.0     3.4     4.2     5.2     6.0
508          LS             78
509          UD    0.24
```



```
LINE         ID.......1.......2.......3.......4.......5.......6.......7.......8.......9......10

510          KK    3PEW
511          KO       1
512          KM        COMBINE HYDROGRAPHS FROM 3PEDB & 3PW
513          HC       2
514          ZZ
```

1

SCHEMATIC DIAGRAM OF STREAM NETWORK

```
INPUT
 LINE     (V) ROUTING          (--->) DIVERSION OR PUMP FLOW

  NO.     (.) CONNECTOR        (<---) RETURN OF DIVERTED OR PUMPED FLOW

    8        5E
              .
              .
   22         .       6CSWP
              .           .
```

```
          .          .
36        .          .        12P
          .          .          .
          .          .          .
43     6C12P.......................
          V
          V
46     12PCHL
          .
          .
53        .        13P
          .          .
          .          .
60        .          .        19P
          .          .          V
          .          .          V
67        .          .     19PCHL
          .          .          .
          .          .          .
74     121319.......................
          .
          .
77        .        20P
          .          V
          .          V
84        .     20PSWP
          .          .
          .          .
91        .          .        14P
          .          .          .
          .          .          .
98      NBAR.......................
          V
          V
101    14PCHL
          .
          .
109       .     6PWBAR
          .          .
          .          .
124       .          .         8P
          .          .          .
          .          .          .
131       .          .          .        15P
          .          .          .          V
          .          .          .          V
138       .          .          .     15PSWP
          .          .          .          .
          .          .          .          .
146     6815P.................................
          V
          V
149     8PCHL
          .
          .
157       .        10P
          .          .
          .          .
164      810P...........
          V
          V
[illegible]7   10PCHL
          .
          .
175       .     16&17P
          .          V
```

```
          .          V
182       .     1617PD
          .          .
          .          .
189   1017PD............
          V
          V
192   1617CH
          V
          V
200   11PCHL
          .
          .
208       .        21P
          .          .
          .          .
215       .          .        22P
          .          .          .
          .          .          .
222       .     21&22P............
          .          V
          .          V
225       .     21PCHL
          .          .
          .          .
232       .          .        23P
          .          .          .
          .          .          .
239       .          .          .        18P
          .          .          .          .
          .          .          .          .
246   PHCOMB.................................
          .
          .
249       .      8CSWP
          .          .
          .          .
263   CW&PP ............
          V
          V
266    PHPND
          .
          .
274       .        11P
          .          .
          .          .
281       .          .       MAWL
          .          .          .
          .          .          .
296       .          .          .         9P
          .          .          .          .
          .          .          .          .
303       .          .          .          .        5PN
          .          .          .          .          .
          .          .          .          .          .
310       .          .      MA5PN.......................
          .          .          V
          .          .          V
314       .          .     AADWEX
          .          .          .
          .          .          .
322       .          .          .        5PS
          .          .          .          .
          .          .          .          .
329       .          .          .          .     RECHRG
          .          .          .          .          .
```

```
        .         .         .         .         .
343     .         .     5PSAAD.......................
        .         .         V
        .         .         V
346     .         .     SHD10C
        .         .         .
        .         .         .
353     .         .         .     4DCHAB
        .         .         .         .
        .         .         .         .
367     .         .         .         .        2PN
        .         .         .         .         .
        .         .         .         .         .
374     .         .         .      4D2PN............
        .         .         .         V
        .         .         .         V
377     .         .         .      PXDPR
        .         .         .         .
        .         .         .         .
385     .         .         .         .      4ECHL
        .         .         .         .         .
        .         .         .         .         .
399     .         .         .         .         .         1P
        .         .         .         .         .         .
        .         .         .         .         .         .
406     .         .         .         .       4E1P............
        .         .         .         .          V
        .         .         .         .          V
409     .         .         .         .     EWCLPX
        .         .         .         .         .
        .         .         .         .         .
416     .         .         .         .         .        2PS
        .         .         .         .         .          V
        .         .         .         .         .          V
423     .         .         .         .         .      2PSDB
        .         .         .         .         .         .
        .         .         .         .         .         .
431     .         .         .       1&2P.......................
        .         .         .         V
        .         .         .         V
434     .         .         .     2PSCHL
        .         .         .         .
        .         .         .         .
442     .         .         .         .     DI2PSC
        .         .         .         .         .
        .         .         .         .         .
456     .         .         .         .         .        4PS
        .         .         .         .         .          V
        .         .         .         .         .          V
463     .         .         .         .         .      4PSDB
        .         .         .         .         .         .
        .         .         .         .         .         .
471     .         .         .         .         .         .         4P
        .         .         .         .         .         .         .
        .         .         .         .         .         .         .
478     .         .         .         .       124P.......................
        .         .         .         .          V
        .         .         .         .          V
481     .         .         .         .      4PSWP
        .         .         .         .         .
        .         .         .         .         .
        .         .         .         .         .        3PE
        .         .         .         .         .          V
        .         .         .         .         .          V
495     .         .         .         .         .      3PEDB
        .         .         .         .         .         .
```

```
                .         .         .         .         .         .
  503           .         .         .         .         .         .        3PW
                .         .         .         .         .         .          .
                .         .         .         .         .         .          .
  510           .         .         .         .         .       3PEW............

(***) RUNOFF ALSO COMPUTED AT THIS LOCATION
1                                                          ****
                          FLOOD HYDROGRAPH PACKAGE HEC-1 (IBM XT 512K VERSION) -FEB 1,1985
              U.S. ARMY CORPS OF ENGINEERS, THE HYDROLOGIC ENGINEERING CENTER, 609 SECOND STREET, DAVIS, CA. 95616
                                                           ****



                            ISRT, WOBURN, MASSACHUSETTS
                            ON-SITE SUBWATERSHEDS
                            DETAILED STORAGE AND STREAM NETWORK
                            PROPOSED CONDITIONS - 50 YR, 24 HR STORM

   7 IO          OUTPUT CONTROL VARIABLES
                       IPRNT           5  PRINT CONTROL
                       IPLOT           0  PLOT CONTROL
                       QSCAL          0.  HYDROGRAPH PLOT SCALE

     IT          HYDROGRAPH TIME DATA
                        NMIN          15  MINUTES IN COMPUTATION INTERVAL
                       IDATE     28FEB91  STARTING DATE
                       ITIME        0100  STARTING TIME
                          NQ          97  NUMBER OF HYDROGRAPH ORDINATES
                      NDDATE      1MAR91  ENDING DATE
                      NDTIME        0100  ENDING TIME

                 COMPUTATION INTERVAL     .25 HOURS
                      TOTAL TIME BASE   24.00 HOURS

         ENGLISH UNITS


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***


           **************
           *            *
   8 KK    *        5E  *
           *            *
           **************

   9 KO          OUTPUT CONTROL VARIABLES
                       IPRNT           1  PRINT CONTROL
                       IPLOT           0  PLOT CONTROL
                       QSCAL          0.  HYDROGRAPH PLOT SCALE
                            DIRECT INPUT HYDROGRAPH FOR FLOW FROM 5E

   6 IN          TIME DATA FOR INPUT TIME SERIES
                       JXMIN          15  TIME INTERVAL IN MINUTES
                      JXDATE     28FEB91  STARTING DATE
                      JXTIME         100  STARTING TIME

              SUBBASIN RUNOFF DATA

  11 BA          SUBBASIN CHARACTERISTICS
                       TAREA         .07  SUBBASIN AREA

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HYDROGRAPH AT STATION 5E

DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW
28 FEB 0100	1	0.	28 FEB 0715	26	0.	28 FEB 1330	51	77.	28 FEB 1945	76	3.
28 FEB 0115	2	0.	28 FEB 0730	27	0.	28 FEB 1345	52	65.	28 FEB 2000	77	3.
28 FEB 0130	3	0.	28 FEB 0745	28	0.	28 FEB 1400	53	42.	28 FEB 2015	78	3.
28 FEB 0145	4	0.	28 FEB 0800	29	0.	28 FEB 1415	54	28.	28 FEB 2030	79	3.
28 FEB 0200	5	0.	28 FEB 0815	30	0.	28 FEB 1430	55	19.	28 FEB 2045	80	3.
28 FEB 0215	6	0.	28 FEB 0830	31	0.	28 FEB 1445	56	15.	28 FEB 2100	81	3.
28 FEB 0230	7	0.	28 FEB 0845	32	0.	28 FEB 1500	57	13.	28 FEB 2115	82	3.
28 FEB 0245	8	0.	28 FEB 0900	33	0.	28 FEB 1515	58	12.	28 FEB 2130	83	3.
28 FEB 0300	9	0.	28 FEB 0915	34	0.	28 FEB 1530	59	11.	28 FEB 2145	84	3.
28 FEB 0315	10	0.	28 FEB 0930	35	0.	28 FEB 1545	60	10.	28 FEB 2200	85	2.
28 FEB 0330	11	0.	28 FEB 0945	36	0.	28 FEB 1600	61	10.	28 FEB 2215	86	2.
28 FEB 0345	12	0.	28 FEB 1000	37	1.	28 FEB 1615	62	9.	28 FEB 2230	87	2.
28 FEB 0400	13	0.	28 FEB 1015	38	1.	28 FEB 1630	63	8.	28 FEB 2245	88	2.
28 FEB 0415	14	0.	28 FEB 1030	39	1.	28 FEB 1645	64	8.	28 FEB 2300	89	2.
28 FEB 0430	15	0.	28 FEB 1045	40	2.	28 FEB 1700	65	7.	28 FEB 2315	90	2.
28 FEB 0445	16	0.	28 FEB 1100	41	2.	28 FEB 1715	66	7.	28 FEB 2330	91	2.
28 FEB 0500	17	0.	28 FEB 1115	42	3.	28 FEB 1730	67	6.	28 FEB 2345	92	2.
28 FEB 0515	18	0.	28 FEB 1130	43	3.	28 FEB 1745	68	6.	1 MAR 0000	93	2.
28 FEB 0530	19	0.	28 FEB 1145	44	4.	28 FEB 1800	69	6.	1 MAR 0015	94	2.
28 FEB 0545	20	0.	28 FEB 1200	45	4.	28 FEB 1815	70	6.	1 MAR 0030	95	2.
28 FEB 0600	21	0.	28 FEB 1215	46	5.	28 FEB 1830	71	5.	1 MAR 0045	96	2.
28 FEB 0615	22	0.	28 FEB 1230	47	7.	28 FEB 1845	72	5.	1 MAR 0100	97	2.
28 FEB 0630	23	0.	28 FEB 1245	48	10.	28 FEB 1900	73	5.			
28 FEB 0645	24	0.	28 FEB 1300	49	20.	28 FEB 1915	74	5.			
28 FEB 0700	25	0.	28 FEB 1315	50	50.	28 FEB 1930	75	4.			

PEAK FLOW (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	24.00-HR
		(CFS)				
77.	12.50		19.	6.	6.	6.
		(INCHES)	2.499	3.066	3.066	3.066
		(AC-FT)	9.	11.	11.	11.

CUMULATIVE AREA = .07 SQ MI

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*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

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          *            *
 22 KK    *    6CSWP   *
          *            *
          **************

 23 KO        OUTPUT CONTROL VARIABLES
                   IPRNT          1  PRINT CONTROL
                   IPLOT          0  PLOT CONTROL
                   QSCAL         0.  HYDROGRAPH PLOT SCALE
                          DIRECT INPUT HYDROGRAPH FOR FLOW FROM READING, UNDER RTE 93

  6 IN        TIME DATA FOR INPUT TIME SERIES
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                JXMIN          15  TIME INTERVAL IN MINUTES
               JXDATE     28FEB91  STARTING DATE
               JXTIME         100  STARTING TIME

          SUBBASIN RUNOFF DATA

 25 BA        SUBBASIN CHARACTERISTICS
                TAREA         .93  SUBBASIN AREA

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HYDROGRAPH AT STATION 6CSWP

DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW
28 FEB 0100	1	0.	28 FEB 0715	26	0.	28 FEB 1330	51	155.	28 FEB 1945	76	54.
28 FEB 0115	2	0.	28 FEB 0730	27	0.	28 FEB 1345	52	167.	28 FEB 2000	77	50.
28 FEB 0130	3	0.	28 FEB 0745	28	0.	28 FEB 1400	53	172.	28 FEB 2015	78	46.
28 FEB 0145	4	0.	28 FEB 0800	29	0.	28 FEB 1415	54	175.	28 FEB 2030	79	44.
28 FEB 0200	5	0.	28 FEB 0815	30	0.	28 FEB 1430	55	176.	28 FEB 2045	80	41.
28 FEB 0215	6	0.	28 FEB 0830	31	0.	28 FEB 1445	56	177.	28 FEB 2100	81	40.
28 FEB 0230	7	0.	28 FEB 0845	32	0.	28 FEB 1500	57	177.	28 FEB 2115	82	38.
28 FEB 0245	8	0.	28 FEB 0900	33	0.	28 FEB 1515	58	177.	28 FEB 2130	83	37.
28 FEB 0300	9	0.	28 FEB 0915	34	0.	28 FEB 1530	59	177.	28 FEB 2145	84	36.
28 FEB 0315	10	0.	28 FEB 0930	35	0.	28 FEB 1545	60	176.	28 FEB 2200	85	36.
28 FEB 0330	11	0.	28 FEB 0945	36	0.	28 FEB 1600	61	176.	28 FEB 2215	86	35.
28 FEB 0345	12	0.	28 FEB 1000	37	0.	28 FEB 1615	62	175.	28 FEB 2230	87	34.
28 FEB 0400	13	0.	28 FEB 1015	38	1.	28 FEB 1630	63	174.	28 FEB 2245	88	34.
28 FEB 0415	14	0.	28 FEB 1030	39	2.	28 FEB 1645	64	172.	28 FEB 2300	89	33.
28 FEB 0430	15	0.	28 FEB 1045	40	4.	28 FEB 1700	65	170.	28 FEB 2315	90	33.
28 FEB 0445	16	0.	28 FEB 1100	41	6.	28 FEB 1715	66	168.	28 FEB 2330	91	32.
28 FEB 0500	17	0.	28 FEB 1115	42	9.	28 FEB 1730	67	166.	28 FEB 2345	92	32.
28 FEB 0515	18	0.	28 FEB 1130	43	12.	28 FEB 1745	68	164.	1 MAR 0000	93	31.
28 FEB 0530	19	0.	28 FEB 1145	44	16.	28 FEB 1800	69	160.	1 MAR 0015	94	31.
28 FEB 0545	20	0.	28 FEB 1200	45	20.	28 FEB 1815	70	156.	1 MAR 0030	95	31.
28 FEB 0600	21	0.	28 FEB 1215	46	27.	28 FEB 1830	71	151.	1 MAR 0045	96	30.
28 FEB 0615	22	0.	28 FEB 1230	47	36.	28 FEB 1845	72	144.	1 MAR 0100	97	30.
28 FEB 0630	23	0.	28 FEB 1245	48	52.	28 FEB 1900	73	132.			
28 FEB 0645	24	0.	28 FEB 1300	49	89.	28 FEB 1915	74	121.			
28 FEB 0700	25	0.	28 FEB 1315	50	130.	28 FEB 1930	75	85.			

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.00-HR
+ (CFS)	(HR)					
		(CFS)				
+ 177.	13.75		165.	55.	55.	55.
		(INCHES)	1.651	2.183	2.183	2.183
		(AC-FT)	82.	108.	108.	108.

CUMULATIVE AREA = .93 SQ MI

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*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *

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          *            *
 36 KK    *       12P  *
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        *          *
        **************

 37 KO        OUTPUT CONTROL VARIABLES
                    IPRNT          1  PRINT CONTROL
                    IPLOT          0  PLOT CONTROL
                    QSCAL         0.  HYDROGRAPH PLOT SCALE
                             SCS RUNOFF CALCULATION

            SUBBASIN RUNOFF DATA

 39 BA        SUBBASIN CHARACTERISTICS
                    TAREA        .01  SUBBASIN AREA

              PRECIPITATION DATA

 40 PH                              DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
              ..... HYDRO-35 ......   ............... TP-40 ...............   ........... TP-49 ...........
              5-MIN  15-MIN  60-MIN    2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                .60    1.30    2.40    3.00    3.40    4.20    5.20    6.00     .00     .00     .00     .00

                                                  STORM AREA =      .01

 41 LS        SCS LOSS RATE
                    STRTL        .56  INITIAL ABSTRACTION
                   CRVNBR      78.00  CURVE NUMBER
                    RTIMP        .00  PERCENT IMPERVIOUS AREA

 42 UD        SCS DIMENSIONLESS UNITGRAPH
                     TLAG        .44  LAG

                                                          ***

 WING *** TIME INTERVAL IS GREATER THAN .29*LAG

                                                     UNIT HYDROGRAPH
                                                 11 END-OF-PERIOD ORDINATES
              5.       13.       11.        5.        3.        1.        1.        0.        0.        0.
              0.

*****************************************************************************************************************

                                                HYDROGRAPH AT STATION      12P

*****************************************************************************************************************
                                                                  *
     DA MON HRMN  ORD    RAIN    LOSS  EXCESS     COMP Q         *      DA MON HRMN  ORD    RAIN    LOSS  EXCESS     COMP Q
                                                                  *
     28 FEB 0100    1     .00     .00     .00         0.         *      28 FEB 1315   50    1.30     .35     .95        11.
     28 FEB 0115    2     .01     .01     .00         0.         *      28 FEB 1330   51     .31     .06     .25        18.
     28 FEB 0130    3     .01     .01     .00         0.         *      28 FEB 1345   52     .18     .03     .15        16.
     28 FEB 0145    4     .01     .01     .00         0.         *      28 FEB 1400   53     .14     .02     .11        11.
     28 FEB 0200    5     .01     .01     .00         0.         *      28 FEB 1415   54     .11     .02     .09         8.
     28 FEB 0215    6     .01     .01     .00         0.         *      28 FEB 1430   55     .10     .02     .08         6.
     28 FEB 0230    7     .01     .01     .00         0.         *      28 FEB 1445   56     .08     .01     .07         4.
     28 FEB 0245    8     .01     .01     .00         0.         *      28 FEB 1500   57     .08     .01     .06         4.
     28 FEB 0300    9     .01     .01     .00         0.         *      28 FEB 1515   58     .07     .01     .06         3.
     28 FEB 0315   10     .01     .01     .00         0.         *      28 FEB 1530   59     .06     .01     .05         3.
     28 FEB 0330   11     .02     .02     .00         0.         *      28 FEB 1545   60     .06     .01     .05         2.
     28 FEB 0345   12     .02     .02     .00         0.         *      28 FEB 1600   61     .06     .01     .05         2.
     28 FEB 0400   13     .02     .02     .00         0.         *      28 FEB 1615   62     .05     .01     .05         2.
     28 FEB 0415   14     .02     .02     .00         0.         *      28 FEB 1630   63     .05     .01     .04         2.
     28 FEB 0430   15     .02     .02     .00         0.         *      28 FEB 1645   64     .05     .01     .04         2.
     28 FEB 0445   16     .02     .02     .00         0.         *      28 FEB 1700   65     .05     .01     .04         2.
     28 FEB 0500   17     .02     .02     .00         0.         *      28 FEB 1715   66     .04     .01     .04         2.
     28 FEB 0515   18     .02     .02     .00         0.         *      28 FEB 1730   67     .04     .01     .04         2.
```

28 FEB 0530	19	.02	.02	.00	0.	*	28 FEB 1745	68	.04	.01	.03	1.
28 FEB 0545	20	.02	.02	.00	0.	*	28 FEB 1800	69	.04	.01	.03	1.
28 FEB 0600	21	.02	.02	.00	0.	*	28 FEB 1815	70	.04	.00	.03	1.
28 FEB 0615	22	.02	.02	.00	0.	*	28 FEB 1830	71	.04	.00	.03	1.
28 FEB 0630	23	.02	.02	.00	0.	*	28 FEB 1845	72	.04	.00	.03	1.
28 FEB 0645	24	.02	.02	.00	0.	*	28 FEB 1900	73	.03	.00	.03	1.
28 FEB 0700	25	.02	.02	.00	0.	*	28 FEB 1915	74	.02	.00	.02	1.
28 FEB 0715	26	.03	.03	.00	0.	*	28 FEB 1930	75	.02	.00	.02	1.
28 FEB 0730	27	.03	.03	.00	0.	*	28 FEB 1945	76	.02	.00	.02	1.
28 FEB 0745	28	.04	.04	.00	0.	*	28 FEB 2000	77	.02	.00	.02	1.
28 FEB 0800	29	.04	.04	.00	0.	*	28 FEB 2015	78	.02	.00	.02	1.
28 FEB 0815	30	.04	.04	.00	0.	*	28 FEB 2030	79	.02	.00	.02	1.
28 FEB 0830	31	.04	.04	.00	0.	*	28 FEB 2045	80	.02	.00	.02	1.
28 FEB 0845	32	.04	.04	.00	0.	*	28 FEB 2100	81	.02	.00	.02	1.
28 FEB 0900	33	.04	.04	.00	0.	*	28 FEB 2115	82	.02	.00	.02	1.
28 FEB 0915	34	.04	.04	.00	0.	*	28 FEB 2130	83	.02	.00	.02	1.
28 FEB 0930	35	.05	.04	.01	0.	*	28 FEB 2145	84	.02	.00	.01	1.
28 FEB 0945	36	.05	.04	.01	0.	*	28 FEB 2200	85	.02	.00	.01	1.
28 FEB 1000	37	.05	.04	.01	0.	*	28 FEB 2215	86	.02	.00	.01	1.
28 FEB 1015	38	.05	.04	.01	0.	*	28 FEB 2230	87	.02	.00	.01	1.
28 FEB 1030	39	.06	.04	.01	0.	*	28 FEB 2245	88	.02	.00	.01	1.
28 FEB 1045	40	.06	.05	.02	0.	*	28 FEB 2300	89	.02	.00	.01	1.
28 FEB 1100	41	.07	.05	.02	1.	*	28 FEB 2315	90	.01	.00	.01	1.
28 FEB 1115	42	.07	.05	.02	1.	*	28 FEB 2330	91	.01	.00	.01	1.
28 FEB 1130	43	.08	.05	.03	1.	*	28 FEB 2345	92	.01	.00	.01	1.
28 FEB 1145	44	.09	.06	.03	1.	*	1 MAR 0000	93	.01	.00	.01	0.
28 FEB 1200	45	.10	.06	.04	1.	*	1 MAR 0015	94	.01	.00	.01	0.
28 FEB 1215	46	.13	.07	.06	1.	*	1 MAR 0030	95	.01	.00	.01	0.
28 FEB 1230	47	.16	.08	.08	2.	*	1 MAR 0045	96	.01	.00	.01	0.
28 FEB 1245	48	.25	.12	.13	3.	*	1 MAR 0100	97	.01	.00	.01	0.
28 FEB 1300	49	.54	.21	.33	5.	*						
						*						

****

TOTAL RAINFALL = 6.00, TOTAL LOSS = 2.42, TOTAL EXCESS = 3.58

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.00-HR
+ (CFS)	(HR)					
		(CFS)				
+ 18.	12.50		5.	1.	1.	1.
		(INCHES)	2.878	3.550	3.550	3.550
		(AC-FT)	2.	3.	3.	3.

CUMULATIVE AREA = .01 SQ MI

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          **************
          *            *
  46 KK   *    12PCHL  *
          *            *
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47 KO OUTPUT CONTROL VARIABLES

IPRNT	1	PRINT CONTROL
IPLOT	0	PLOT CONTROL
QSCAL	0.	HYDROGRAPH PLOT SCALE

STORAGE ROUTING THROUGH NORTH BRANCH CHANNEL

HYDROGRAPH ROUTING DATA

```
 49 RS          STORAGE ROUTING
                      NSTPS          1  NUMBER OF SUBREACHES
                       ITYP       STOR  TYPE OF INITIAL CONDITION
                     RSVRIC        .00  INITIAL CONDITION
                          X        .00 WORKING R AND D COEFFICIENT

 50 RC          NORMAL DEPTH CHANNEL ROUTING
                        ANL       .080  LEFT OVERBANK N-VALUE
                       ANCH       .030  MAIN CHANNEL N-VALUE
                        ANR       .080  RIGHT OVERBANK N-VALUE
                      RLNTH       400.  REACH LENGTH
                        SEL      .0063  ENERGY SLOPE
                      ELMAX       69.5  MAX. ELEV. FOR STORAGE/OUTFLOW CALCULATION
```

CROSS-SECTION DATA

		--- LEFT OVERBANK ---		+ ------ MAIN CHANNEL		------- +	--- RIGHT OVERBANK ---		
52 RY	ELEVATION	70.50	70.00	69.50	67.50	67.50	69.50	70.00	70.50
51 RX	DISTANCE	.00	5.00	10.00	11.00	17.00	18.00	23.00	28.00

***

COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

STORAGE	.00	.01	.01	.02	.02	.03	.04	.04	.05	.06
OUTFLOW	.00	.55	1.72	3.36	5.38	7.74	10.40	13.36	16.58	20.05
ELEVATION	67.50	67.61	67.71	67.82	67.92	68.03	68.13	68.24	68.34	68.45
STORAGE	.06	.07	.08	.08	.09	.10	.11	.11	.12	.13
OUTFLOW	23.77	27.72	31.90	36.29	40.89	45.71	50.73	55.95	61.36	66.98
ELEVATION	68.55	68.66	68.76	68.87	68.97	69.08	69.18	69.29	69.39	69.50

```
*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN        1. TO       67.
                THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
                THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)
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HYDROGRAPH AT STATION 12PCHL

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DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	*	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	*	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE
28	FEB	0100	1	0.	.0	67.5	*	28	FEB	0915	34	0.	.0	67.5	*	28	FEB	1730	67	174.	.3	71.5
28	FEB	0115	2	0.	.0	67.5	*	28	FEB	0930	35	0.	.0	67.5	*	28	FEB	1745	68	171.	.3	71.5
28	FEB	0130	3	0.	.0	67.5	*	28	FEB	0945	36	0.	.0	67.5	*	28	FEB	1800	69	168.	.3	71.4
28	FEB	0145	4	0.	.0	67.5	*	28	FEB	1000	37	1.	.0	67.6	*	28	FEB	1815	70	163.	.3	71.3
28	FEB	0200	5	0.	.0	67.5	*	28	FEB	1015	38	2.	.0	67.7	*	28	FEB	1830	71	158.	.3	71.2
28	FEB	0215	6	0.	.0	67.5	*	28	FEB	1030	39	3.	.0	67.8	*	28	FEB	1845	72	151.	.2	71.1
28	FEB	0230	7	0.	.0	67.5	*	28	FEB	1045	40	6.	.0	67.9	*	28	FEB	1900	73	139.	.2	70.9
28	FEB	0245	8	0.	.0	67.5	*	28	FEB	1100	41	8.	.0	68.1	*	28	FEB	1915	74	128.	.2	70.6
28	FEB	0300	9	0.	.0	67.5	*	28	FEB	1115	42	12.	.0	68.2	*	28	FEB	1930	75	94.	.2	70.0
28	FEB	0315	10	0.	.0	67.5	*	28	FEB	1130	43	16.	.0	68.3	*	28	FEB	1945	76	59.	.1	69.3
28	FEB	0330	11	0.	.0	67.5	*	28	FEB	1145	44	20.	.1	68.5	*	28	FEB	2000	77	54.	.1	69.2
28	FEB	0345	12	0.	.0	67.5	*	28	FEB	1200	45	25.	.1	68.6	*	28	FEB	2015	78	50.	.1	69.2
28	FEB	0400	13	0.	.0	67.5	*	28	FEB	1215	46	32.	.1	68.8	*	28	FEB	2030	79	48.	.1	69.1
28	FEB	0415	14	0.	.0	67.5	*	28	FEB	1230	47	44.	.1	69.0	*	28	FEB	2045	80	45.	.1	69.1
28	FEB	0430	15	0.	.0	67.5	*	28	FEB	1245	48	63.	.1	69.4	*	28	FEB	2100	81	43.	.1	69.0
28	FEB	0445	16	0.	.0	67.5	*	28	FEB	1300	49	109.	.2	70.3	*	28	FEB	2115	82	42.	.1	69.0
28	FEB	0500	17	0.	.0	67.5	*	28	FEB	1315	50	185.	.3	71.7	*	28	FEB	2130	83	40.	.1	69.0
	FEB	0515	18	0.	.0	67.5	*	28	FEB	1330	51	247.	.4	72.9	*	28	FEB	2145	84	40.	.1	69.0
28	FEB	0530	19	0.	.0	67.5	*	28	FEB	1345	52	250.	.4	72.9	*	28	FEB	2200	85	39.	.1	68.9
28	FEB	0545	20	0.	.0	67.5	*	28	FEB	1400	53	226.	.3	72.5	*	28	FEB	2215	86	38.	.1	68.9
28	FEB	0600	21	0.	.0	67.5	*	28	FEB	1415	54	212.	.3	72.2	*	28	FEB	2230	87	37.	.1	68.9
28	FEB	0615	22	0.	.0	67.5	*	28	FEB	1430	55	201.	.3	72.0	*	28	FEB	2245	88	37.	.1	68.9

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28 FEB 0630  23      0.      .0   67.5 * 28 FEB 1445  56    196.      .3   71.9 * 28 FEB 2300  89     36.      .1   68.9
28 FEB 0645  24      0.      .0   67.5 * 28 FEB 1500  57    194.      .3   71.9 * 28 FEB 2315  90     35.      .1   68.8
28 FEB 0700  25      0.      .0   67.5 * 28 FEB 1515  58    192.      .3   71.8 * 28 FEB 2330  91     35.      .1   68.8
28 FEB 0715  26      0.      .0   67.5 * 28 FEB 1530  59    191.      .3   71.8 * 28 FEB 2345  92     34.      .1   68.8
28 FEB 0730  27      0.      .0   67.5 * 28 FEB 1545  60    188.      .3   71.8 *  1 MAR 0000  93     34.      .1   68
28 FEB 0745  28      0.      .0   67.5 * 28 FEB 1600  61    188.      .3   71.8 *  1 MAR 0015  94     33.      .1   68.
28 FEB 0800  29      0.      .0   67.5 * 28 FEB 1615  62    186.      .3   71.7 *  1 MAR 0030  95     34.      .1   68.8
28 FEB 0815  30      0.      .0   67.5 * 28 FEB 1630  63    184.      .3   71.7 *  1 MAR 0045  96     33.      .1   68.8
28 FEB 0830  31      0.      .0   67.5 * 28 FEB 1645  64    182.      .3   71.7 *  1 MAR 0100  97     32.      .1   68.8
28 FEB 0845  32      0.      .0   67.5 * 28 FEB 1700  65    179.      .3   71.6 *
28 FEB 0900  33      0.      .0   67.5 * 28 FEB 1715  66    177.      .3   71.6 *
                                      *                                      *
*****************************************************************************************************************************

 PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                    6-HR       24-HR       72-HR     24.00-HR
+  (CFS)       (HR)
                          (CFS)
+    250.     12.75                 187.         62.         62.         62.
                       (INCHES)    1.713       2.262       2.262       2.262
                        (AC-FT)     93.        122.        122.        122.

 PEAK STORAGE   TIME                         MAXIMUM AVERAGE STORAGE
                                    6-HR       24-HR       72-HR     24.00-HR
+  (AC-FT)      (HR)
       0.     12.75                   0.          0.          0.          0.

 PEAK STAGE    TIME                          MAXIMUM AVERAGE STAGE
                                    6-HR       24-HR       72-HR     24.00-HR
+  (FEET)      (HR)
    72.94     12.75                71.75       69.08       69.08       69.08

                       CUMULATIVE AREA =    1.01 SQ MI



*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***


           **************
           *            *
  53 KK    *      13P   *
           *            *
           **************

  54 KO        OUTPUT CONTROL VARIABLES
                     IPRNT          1  PRINT CONTROL
                     IPLOT          0  PLOT CONTROL
                     QSCAL         0.  HYDROGRAPH PLOT SCALE
                              SCS RUNOFF CALCULATION

             SUBBASIN RUNOFF DATA

  56 BA        SUBBASIN CHARACTERISTICS
                     TAREA        .01  SUBBASIN AREA

               PRECIPITATION DATA

  57 PH                              DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
               ..... HYDRO-35 ......   ............... TP-40 ...............   ........... TP-49 ...........
               5-MIN  15-MIN  60-MIN    2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                 .60    1.30    2.40    3.00    3.40    4.20    5.20    6.00     .00     .00     .00     .00

                                                  STORM AREA =     .01
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 58 LS          SCS LOSS RATE
                      STRTL         .86  INITIAL ABSTRACTION
                     CRVNBR       70.00  CURVE NUMBER
                      RTIMP         .00  PERCENT IMPERVIOUS AREA

  ' UD          SCS DIMENSIONLESS UNITGRAPH
                       TLAG         .49  LAG

                                                    ***

WARNING *** TIME INTERVAL IS GREATER THAN .29*LAG

                                              UNIT HYDROGRAPH
                                         12 END-OF-PERIOD ORDINATES
              2.       7.       7.       4.       2.       1.       1.       0.       0.       0.
              0.       0.
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HYDROGRAPH AT STATION 13P

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DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
28 FEB 0100	1	.00	.00	.00	0.	*	28 FEB 1315	50	1.30	.55	.75	4.
28 FEB 0115	2	.01	.01	.00	0.	*	28 FEB 1330	51	.31	.10	.21	7.
28 FEB 0130	3	.01	.01	.00	0.	*	28 FEB 1345	52	.18	.06	.12	8.
28 FEB 0145	4	.01	.01	.00	0.	*	28 FEB 1400	53	.14	.04	.10	6.
28 FEB 0200	5	.01	.01	.00	0.	*	28 FEB 1415	54	.11	.03	.08	4.
28 FEB 0215	6	.01	.01	.00	0.	*	28 FEB 1430	55	.10	.03	.07	3.
28 FEB 0230	7	.01	.01	.00	0.	*	28 FEB 1445	56	.08	.02	.06	2.
28 FEB 0245	8	.01	.01	.00	0.	*	28 FEB 1500	57	.08	.02	.06	2.
28 FEB 0300	9	.01	.01	.00	0.	*	28 FEB 1515	58	.07	.02	.05	2.
28 FEB 0315	10	.01	.01	.00	0.	*	28 FEB 1530	59	.06	.02	.05	1.
28 FEB 0330	11	.02	.02	.00	0.	*	28 FEB 1545	60	.06	.02	.04	1.
28 FEB 0345	12	.02	.02	.00	0.	*	28 FEB 1600	61	.06	.01	.04	1.
28 FEB 0400	13	.02	.02	.00	0.	*	28 FEB 1615	62	.05	.01	.04	1.
28 FEB 0415	14	.02	.02	.00	0.	*	28 FEB 1630	63	.05	.01	.04	1.
28 FEB 0430	15	.02	.02	.00	0.	*	28 FEB 1645	64	.05	.01	.04	1.
28 FEB 0445	16	.02	.02	.00	0.	*	28 FEB 1700	65	.05	.01	.03	1.
28 FEB 0500	17	.02	.02	.00	0.	*	28 FEB 1715	66	.04	.01	.03	1.
28 FEB 0515	18	.02	.02	.00	0.	*	28 FEB 1730	67	.04	.01	.03	1.
28 FEB 0530	19	.02	.02	.00	0.	*	28 FEB 1745	68	.04	.01	.03	1.
28 FEB 0545	20	.02	.02	.00	0.	*	28 FEB 1800	69	.04	.01	.03	1.
28 FEB 0600	21	.02	.02	.00	0.	*	28 FEB 1815	70	.04	.01	.03	1.
28 FEB 0615	22	.02	.02	.00	0.	*	28 FEB 1830	71	.04	.01	.03	1.
28 FEB 0630	23	.02	.02	.00	0.	*	28 FEB 1845	72	.04	.01	.03	1.
28 FEB 0645	24	.02	.02	.00	0.	*	28 FEB 1900	73	.03	.01	.03	1.
28 FEB 0700	25	.02	.02	.00	0.	*	28 FEB 1915	74	.02	.00	.02	1.
28 FEB 0715	26	.03	.03	.00	0.	*	28 FEB 1930	75	.02	.00	.02	1.
28 FEB 0730	27	.03	.03	.00	0.	*	28 FEB 1945	76	.02	.00	.02	0.
28 FEB 0745	28	.04	.04	.00	0.	*	28 FEB 2000	77	.02	.00	.02	0.
28 FEB 0800	29	.04	.04	.00	0.	*	28 FEB 2015	78	.02	.00	.02	0.
28 FEB 0815	30	.04	.04	.00	0.	*	28 FEB 2030	79	.02	.00	.01	0.
28 FEB 0830	31	.04	.04	.00	0.	*	28 FEB 2045	80	.02	.00	.01	0.
28 FEB 0845	32	.04	.04	.00	0.	*	28 FEB 2100	81	.02	.00	.01	0.
28 FEB 0900	33	.04	.04	.00	0.	*	28 FEB 2115	82	.02	.00	.01	0.
28 FEB 0915	34	.04	.04	.00	0.	*	28 FEB 2130	83	.02	.00	.01	0.
28 FEB 0930	35	.05	.05	.00	0.	*	28 FEB 2145	84	.02	.00	.01	0.
28 FEB 0945	36	.05	.05	.00	0.	*	28 FEB 2200	85	.02	.00	.01	0.
28 FEB 1000	37	.05	.05	.00	0.	*	28 FEB 2215	86	.02	.00	.01	0.
28 FEB 1015	38	.05	.05	.00	0.	*	28 FEB 2230	87	.02	.00	.01	0.
28 FEB 1030	39	.06	.05	.00	0.	*	28 FEB 2245	88	.02	.00	.01	0.
28 FEB 1045	40	.06	.06	.00	0.	*	28 FEB 2300	89	.02	.00	.01	0.
28 FEB 1100	41	.07	.06	.01	0.	*	28 FEB 2315	90	.01	.00	.01	0.

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28 FEB 1115   42    .07    .06    .01        0.      *    28 FEB 2330   91    .01    .00    .01        0.
28 FEB 1130   43    .08    .07    .01        0.      *    28 FEB 2345   92    .01    .00    .01        0.
28 FEB 1145   44    .09    .07    .02        0.      *     1 MAR 0000   93    .01    .00    .01        0.
28 FEB 1200   45    .10    .08    .02        0.      *     1 MAR 0015   94    .01    .00    .01        0.
28 FEB 1215   46    .13    .09    .03        0.      *     1 MAR 0030   95    .01    .00    .01        0.
28 FEB 1230   47    .16    .11    .05        1.      *     1 MAR 0045   96    .01    .00    .01        0.
28 FEB 1245   48    .25    .16    .09        1.      *     1 MAR 0100   97    .01    .00    .01        0.
28 FEB 1300   49    .54    .30    .23        2.      *
                                                      *
*****************************************************************************************************************

   TOTAL RAINFALL =    6.00, TOTAL LOSS =    3.19, TOTAL EXCESS =    2.81

 PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     24.00-HR
+  (CFS)       (HR)
                         (CFS)
+      8.     12.75                   2.          1.          1.          1.
                       (INCHES)    2.286       2.777       2.777       2.777
                        (AC-FT)       1.          1.          1.          1.

                        CUMULATIVE AREA =     .01 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***


          **************
          *            *
  60 KK   *       19P  *
          *            *
          **************

  61 KO        OUTPUT CONTROL VARIABLES
                     IPRNT           1  PRINT CONTROL
                     IPLOT           0  PLOT CONTROL
                     QSCAL          0.  HYDROGRAPH PLOT SCALE
                              SCS RUNOFF CALCULATION

             SUBBASIN RUNOFF DATA

  63 BA        SUBBASIN CHARACTERISTICS
                     TAREA         .00  SUBBASIN AREA

               PRECIPITATION DATA

  64 PH                              DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
               ..... HYDRO-35 ......   ............... TP-40 ...............   ........... TP-49 ...........
               5-MIN  15-MIN  60-MIN    2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                 .60    1.30    2.40    3.00    3.40    4.20    5.20    6.00     .00     .00     .00     .00

                                                  STORM AREA =     .00

  65 LS        SCS LOSS RATE
                     STRTL         .86  INITIAL ABSTRACTION
                    CRVNBR       70.00  CURVE NUMBER
                     RTIMP         .00  PERCENT IMPERVIOUS AREA

  66 UD        SCS DIMENSIONLESS UNITGRAPH
                      TLAG         .34  LAG

                                                          ***

WARNING *** TIME INTERVAL IS GREATER THAN .29*LAG
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UNIT HYDROGRAPH
9 END-OF-PERIOD ORDINATES

2. 4. 2. 1. 0. 0. 0. 0. 0.

HYDROGRAPH AT STATION 19P

DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
28 FEB 0100	1	.00	.00	.00	0.	28 FEB 1315	50	1.30	.55	.75	3.
28 FEB 0115	2	.01	.01	.00	0.	28 FEB 1330	51	.31	.10	.21	4.
28 FEB 0130	3	.01	.01	.00	0.	28 FEB 1345	52	.18	.06	.12	3.
28 FEB 0145	4	.01	.01	.00	0.	28 FEB 1400	53	.14	.04	.10	2.
28 FEB 0200	5	.01	.01	.00	0.	28 FEB 1415	54	.11	.03	.08	1.
28 FEB 0215	6	.01	.01	.00	0.	28 FEB 1430	55	.10	.03	.07	1.
28 FEB 0230	7	.01	.01	.00	0.	28 FEB 1445	56	.08	.02	.06	1.
28 FEB 0245	8	.01	.01	.00	0.	28 FEB 1500	57	.08	.02	.06	1.
28 FEB 0300	9	.01	.01	.00	0.	28 FEB 1515	58	.07	.02	.05	1.
28 FEB 0315	10	.01	.01	.00	0.	28 FEB 1530	59	.06	.02	.05	1.
28 FEB 0330	11	.02	.02	.00	0.	28 FEB 1545	60	.06	.02	.04	1.
28 FEB 0345	12	.02	.02	.00	0.	28 FEB 1600	61	.06	.01	.04	0.
28 FEB 0400	13	.02	.02	.00	0.	28 FEB 1615	62	.05	.01	.04	0.
28 FEB 0415	14	.02	.02	.00	0.	28 FEB 1630	63	.05	.01	.04	0.
28 FEB 0430	15	.02	.02	.00	0.	28 FEB 1645	64	.05	.01	.04	0.
28 FEB 0445	16	.02	.02	.00	0.	28 FEB 1700	65	.05	.01	.03	0.
28 FEB 0500	17	.02	.02	.00	0.	28 FEB 1715	66	.04	.01	.03	0.
28 FEB 0515	18	.02	.02	.00	0.	28 FEB 1730	67	.04	.01	.03	0.
28 FEB 0530	19	.02	.02	.00	0.	28 FEB 1745	68	.04	.01	.03	0.
28 FEB 0545	20	.02	.02	.00	0.	28 FEB 1800	69	.04	.01	.03	0.
28 FEB 0600	21	.02	.02	.00	0.	28 FEB 1815	70	.04	.01	.03	0.
28 FEB 0615	22	.02	.02	.00	0.	28 FEB 1830	71	.04	.01	.03	0.
28 FEB 0630	23	.02	.02	.00	0.	28 FEB 1845	72	.04	.01	.03	0.
28 FEB 0645	24	.02	.02	.00	0.	28 FEB 1900	73	.03	.01	.03	0.
28 FEB 0700	25	.02	.02	.00	0.	28 FEB 1915	74	.02	.00	.02	0.
28 FEB 0715	26	.03	.03	.00	0.	28 FEB 1930	75	.02	.00	.02	0.
28 FEB 0730	27	.03	.03	.00	0.	28 FEB 1945	76	.02	.00	.02	0.
28 FEB 0745	28	.04	.04	.00	0.	28 FEB 2000	77	.02	.00	.02	0.
28 FEB 0800	29	.04	.04	.00	0.	28 FEB 2015	78	.02	.00	.02	0.
28 FEB 0815	30	.04	.04	.00	0.	28 FEB 2030	79	.02	.00	.01	0.
28 FEB 0830	31	.04	.04	.00	0.	28 FEB 2045	80	.02	.00	.01	0.
28 FEB 0845	32	.04	.04	.00	0.	28 FEB 2100	81	.02	.00	.01	0.
28 FEB 0900	33	.04	.04	.00	0.	28 FEB 2115	82	.02	.00	.01	0.
28 FEB 0915	34	.04	.04	.00	0.	28 FEB 2130	83	.02	.00	.01	0.
28 FEB 0930	35	.05	.05	.00	0.	28 FEB 2145	84	.02	.00	.01	0.
28 FEB 0945	36	.05	.05	.00	0.	28 FEB 2200	85	.02	.00	.01	0.
28 FEB 1000	37	.05	.05	.00	0.	28 FEB 2215	86	.02	.00	.01	0.
28 FEB 1015	38	.05	.05	.00	0.	28 FEB 2230	87	.02	.00	.01	0.
28 FEB 1030	39	.06	.05	.00	0.	28 FEB 2245	88	.02	.00	.01	0.
28 FEB 1045	40	.06	.06	.00	0.	28 FEB 2300	89	.02	.00	.01	0.
28 FEB 1100	41	.07	.06	.01	0.	28 FEB 2315	90	.01	.00	.01	0.
28 FEB 1115	42	.07	.06	.01	0.	28 FEB 2330	91	.01	.00	.01	0.
28 FEB 1130	43	.08	.07	.01	0.	28 FEB 2345	92	.01	.00	.01	0.
28 FEB 1145	44	.09	.07	.02	0.	1 MAR 0000	93	.01	.00	.01	0.
28 FEB 1200	45	.10	.08	.02	0.	1 MAR 0015	94	.01	.00	.01	0.
28 FEB 1215	46	.13	.09	.03	0.	1 MAR 0030	95	.01	.00	.01	0.
28 FEB 1230	47	.16	.11	.05	0.	1 MAR 0045	96	.01	.00	.01	0.
28 FEB 1245	48	.25	.16	.09	0.	1 MAR 0100	97	.01	.00	.01	0.
28 FEB 1300	49	.54	.30	.23	1.						

TOTAL RAINFALL = 6.00, TOTAL LOSS = 3.19, TOTAL EXCESS = 2.81

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 PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                    6-HR       24-HR       72-HR     24.00-HR
+  (CFS)       (HR)
                          (CFS)
+       4.     12.50                  1.          0.          0.          0.
                        (INCHES)   2.292       2.785       2.785       2.785
                         (AC-FT)      0.          1.          1.          1.

                         CUMULATIVE AREA =     .00 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***


            **************
            *            *
  67 KK     *    19PCHL  *
            *            *
            **************

  68 KO          OUTPUT CONTROL VARIABLES
                       IPRNT           1  PRINT CONTROL
                       IPLOT           0  PLOT CONTROL
                       QSCAL          0.  HYDROGRAPH PLOT SCALE
                                STORAGE ROUTING THROUGH RTE 93 E/W CHANNEL

               HYDROGRAPH ROUTING DATA

  70 RS          STORAGE ROUTING
                       NSTPS           1  NUMBER OF SUBREACHES
                        ITYP        STOR  TYPE OF INITIAL CONDITION
                      RSVRIC         .00  INITIAL CONDITION
                           X         .00 WORKING R AND D COEFFICIENT

  71 RC          NORMAL DEPTH CHANNEL ROUTING
                         ANL        .080  LEFT OVERBANK N-VALUE
                        ANCH        .030  MAIN CHANNEL N-VALUE
                         ANR        .080  RIGHT OVERBANK N-VALUE
                       RLNTH        430.  REACH LENGTH
                         SEL       .0070  ENERGY SLOPE
                       ELMAX        67.0  MAX. ELEV. FOR STORAGE/OUTFLOW CALCULATION

                                        CROSS-SECTION DATA
                          --- LEFT OVERBANK --- + ------ MAIN CHANNEL ------- + --- RIGHT OVERBANK ---
  73 RY        ELEVATION    68.00     67.50     67.00     66.00     66.00     67.00     67.50     68.00
  72 RX        DISTANCE       .00      5.00     10.00     11.00     14.00     15.00     20.00     25.00

                                                          ***

                                        COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

            STORAGE        .00       .00       .00       .00       .01       .01       .01       .01       .01       .02
            OUTFLOW        .00       .09       .29       .57       .92      1.34      1.81      2.35      2.94      3.58
          ELEVATION      66.00     66.05     66.11     66.16     66.21     66.26     66.32     66.37     66.42     66.47

            STORAGE        .02       .02       .02       .02       .03       .03       .03       .03       .04       .04
            OUTFLOW       4.28      5.03      5.84      6.69      7.60      8.56      9.58     10.64     11.76     12.93
          ELEVATION      66.53     66.58     66.63     66.68     66.74     66.79     66.84     66.89     66.95     67.00


*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN        0. TO       13.
                THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
                THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)
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HYDROGRAPH AT STATION 19PCHL

DA MON HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA MON HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA MON HRMN	ORD	OUTFLOW	STORAGE	STAGE
28 FEB 0100	1	0.	.0	66.0	28 FEB 0915	34	0.	.0	66.0	28 FEB 1730	67	0.	.0	66.1
28 FEB 0115	2	0.	.0	66.0	28 FEB 0930	35	0.	.0	66.0	28 FEB 1745	68	0.	.0	66.1
28 FEB 0130	3	0.	.0	66.0	28 FEB 0945	36	0.	.0	66.0	28 FEB 1800	69	0.	.0	66.1
28 FEB 0145	4	0.	.0	66.0	28 FEB 1000	37	0.	.0	66.0	28 FEB 1815	70	0.	.0	66.1
28 FEB 0200	5	0.	.0	66.0	28 FEB 1015	38	0.	.0	66.0	28 FEB 1830	71	0.	.0	66.1
28 FEB 0215	6	0.	.0	66.0	28 FEB 1030	39	0.	.0	66.0	28 FEB 1845	72	0.	.0	66.1
28 FEB 0230	7	0.	.0	66.0	28 FEB 1045	40	0.	.0	66.0	28 FEB 1900	73	0.	.0	66.1
28 FEB 0245	8	0.	.0	66.0	28 FEB 1100	41	0.	.0	66.0	28 FEB 1915	74	0.	.0	66.1
28 FEB 0300	9	0.	.0	66.0	28 FEB 1115	42	0.	.0	66.0	28 FEB 1930	75	0.	.0	66.1
28 FEB 0315	10	0.	.0	66.0	28 FEB 1130	43	0.	.0	66.0	28 FEB 1945	76	0.	.0	66.1
28 FEB 0330	11	0.	.0	66.0	28 FEB 1145	44	0.	.0	66.1	28 FEB 2000	77	0.	.0	66.1
28 FEB 0345	12	0.	.0	66.0	28 FEB 1200	45	0.	.0	66.1	28 FEB 2015	78	0.	.0	66.1
28 FEB 0400	13	0.	.0	66.0	28 FEB 1215	46	0.	.0	66.1	28 FEB 2030	79	0.	.0	66.1
28 FEB 0415	14	0.	.0	66.0	28 FEB 1230	47	0.	.0	66.1	28 FEB 2045	80	0.	.0	66.1
28 FEB 0430	15	0.	.0	66.0	28 FEB 1245	48	0.	.0	66.1	28 FEB 2100	81	0.	.0	66.1
28 FEB 0445	16	0.	.0	66.0	28 FEB 1300	49	1.	.0	66.2	28 FEB 2115	82	0.	.0	66.1
28 FEB 0500	17	0.	.0	66.0	28 FEB 1315	50	3.	.0	66.4	28 FEB 2130	83	0.	.0	66.1
28 FEB 0515	18	0.	.0	66.0	28 FEB 1330	51	4.	.0	66.5	28 FEB 2145	84	0.	.0	66.1
28 FEB 0530	19	0.	.0	66.0	28 FEB 1345	52	3.	.0	66.5	28 FEB 2200	85	0.	.0	66.1
28 FEB 0545	20	0.	.0	66.0	28 FEB 1400	53	2.	.0	66.3	28 FEB 2215	86	0.	.0	66.1
28 FEB 0600	21	0.	.0	66.0	28 FEB 1415	54	2.	.0	66.3	28 FEB 2230	87	0.	.0	66.1
28 FEB 0615	22	0.	.0	66.0	28 FEB 1430	55	1.	.0	66.2	28 FEB 2245	88	0.	.0	66.1
28 FEB 0630	23	0.	.0	66.0	28 FEB 1445	56	1.	.0	66.2	28 FEB 2300	89	0.	.0	66.1
28 FEB 0645	24	0.	.0	66.0	28 FEB 1500	57	1.	.0	66.2	28 FEB 2315	90	0.	.0	66.1
FEB 0700	25	0.	.0	66.0	28 FEB 1515	58	1.	.0	66.2	28 FEB 2330	91	0.	.0	66.1
28 FEB 0715	26	0.	.0	66.0	28 FEB 1530	59	1.	.0	66.2	28 FEB 2345	92	0.	.0	66.1
28 FEB 0730	27	0.	.0	66.0	28 FEB 1545	60	1.	.0	66.1	1 MAR 0000	93	0.	.0	66.1
28 FEB 0745	28	0.	.0	66.0	28 FEB 1600	61	0.	.0	66.1	1 MAR 0015	94	0.	.0	66.1
28 FEB 0800	29	0.	.0	66.0	28 FEB 1615	62	0.	.0	66.1	1 MAR 0030	95	0.	.0	66.1
28 FEB 0815	30	0.	.0	66.0	28 FEB 1630	63	0.	.0	66.1	1 MAR 0045	96	0.	.0	66.1
28 FEB 0830	31	0.	.0	66.0	28 FEB 1645	64	0.	.0	66.1	1 MAR 0100	97	0.	.0	66.1
28 FEB 0845	32	0.	.0	66.0	28 FEB 1700	65	0.	.0	66.1					
28 FEB 0900	33	0.	.0	66.0	28 FEB 1715	66	0.	.0	66.1					

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.00-HR
+ (CFS)	(HR)					
		(CFS)				
+ 4.	12.50		1.	0.	0.	0.
		(INCHES)	2.292	2.777	2.777	2.777
		(AC-FT)	0.	1.	1.	1.

PEAK STORAGE	TIME	MAXIMUM AVERAGE STORAGE			
		6-HR	24-HR	72-HR	24.00-HR
+ (AC-FT)	(HR)				
0.	12.50	0.	0.	0.	0.

PEAK STAGE	TIME	MAXIMUM AVERAGE STAGE			
		6-HR	24-HR	72-HR	24.00-HR
+ (FEET)	(HR)				
66.52	12.50	66.20	66.07	66.07	66.07

CUMULATIVE AREA = .00 SQ MI

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*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

          **************
          *            *
 77 KK    *      20P   *
          *            *
          **************

 78 KO          OUTPUT CONTROL VARIABLES
                     IPRNT           1  PRINT CONTROL
                     IPLOT           0  PLOT CONTROL
                     QSCAL          0.  HYDROGRAPH PLOT SCALE
                              SCS RUNOFF CALCULATION

             SUBBASIN RUNOFF DATA

 80 BA          SUBBASIN CHARACTERISTICS
                     TAREA         .02  SUBBASIN AREA

                PRECIPITATION DATA

 81 PH                                DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
                ..... HYDRO-35 ......   ............... TP-40 ...............   ........... TP-49 ...........
                5-MIN  15-MIN  60-MIN    2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                  .60    1.30    2.40    3.00    3.40    4.20    5.20    6.00     .00     .00     .00     .00

                                                  STORM AREA =     .02

 82 LS          SCS LOSS RATE
                     STRTL         .53  INITIAL ABSTRACTION
                    CRVNBR       79.00  CURVE NUMBER
                     RTIMP         .00  PERCENT IMPERVIOUS AREA

 83 UD          SCS DIMENSIONLESS UNITGRAPH
                      TLAG         .32  LAG

                                                          ***

WARNING *** TIME INTERVAL IS GREATER THAN .29*LAG

                                                      UNIT HYDROGRAPH
                                                   8 END-OF-PERIOD ORDINATES
              11.       18.        9.        4.        1.        1.        0.        0.

*****************************************************************************************************************************

                                                HYDROGRAPH AT STATION      20P

*****************************************************************************************************************************
                                                                  *
      DA MON HRMN  ORD    RAIN    LOSS  EXCESS     COMP Q        *      DA MON HRMN  ORD    RAIN    LOSS  EXCESS     COMP Q
                                                                  *
      28 FEB 0100    1     .00     .00     .00         0.        *      28 FEB 1315   50    1.30     .33     .97        19.
      28 FEB 0115    2     .01     .01     .00         0.        *      28 FEB 1330   51     .31     .06     .25        24.
      28 FEB 0130    3     .01     .01     .00         0.        *      28 FEB 1345   52     .18     .03     .15        16.
      28 FEB 0145    4     .01     .01     .00         0.        *      28 FEB 1400   53     .14     .02     .12        10.
      28 FEB 0200    5     .01     .01     .00         0.        *      28 FEB 1415   54     .11     .02     .09         7.
      28 FEB 0215    6     .01     .01     .00         0.        *      28 FEB 1430   55     .10     .01     .08         5.
      28 FEB 0230    7     .01     .01     .00         0.        *      28 FEB 1445   56     .08     .01     .07         4.
      28 FEB 0245    8     .01     .01     .00         0.        *      28 FEB 1500   57     .08     .01     .06         3.
      28 FEB 0300    9     .01     .01     .00         0.        *      28 FEB 1515   58     .07     .01     .06         3.
      28 FEB 0315   10     .01     .01     .00         0.        *      28 FEB 1530   59     .06     .01     .05         3.
      28 FEB 0330   11     .02     .02     .00         0.        *      28 FEB 1545   60     .06     .01     .05         2.
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28 FEB 0345	12	.02	.02	.00	0.	*	28 FEB 1600	61	.06	.01	.05	2.
28 FEB 0400	13	.02	.02	.00	0.	*	28 FEB 1615	62	.05	.01	.05	2.
28 FEB 0415	14	.02	.02	.00	0.	*	28 FEB 1630	63	.05	.01	.04	2.
28 FEB 0430	15	.02	.02	.00	0.	*	28 FEB 1645	64	.05	.01	.04	2.
28 FEB 0445	16	.02	.02	.00	0.	*	28 FEB 1700	65	.05	.01	.04	2.
28 FEB 0500	17	.02	.02	.00	0.	*	28 FEB 1715	66	.04	.01	.04	2.
28 FEB 0515	18	.02	.02	.00	0.	*	28 FEB 1730	67	.04	.01	.04	2.
28 FEB 0530	19	.02	.02	.00	0.	*	28 FEB 1745	68	.04	.01	.04	2.
28 FEB 0545	20	.02	.02	.00	0.	*	28 FEB 1800	69	.04	.00	.03	2.
28 FEB 0600	21	.02	.02	.00	0.	*	28 FEB 1815	70	.04	.00	.03	2.
28 FEB 0615	22	.02	.02	.00	0.	*	28 FEB 1830	71	.04	.00	.03	1.
28 FEB 0630	23	.02	.02	.00	0.	*	28 FEB 1845	72	.04	.00	.03	1.
28 FEB 0645	24	.02	.02	.00	0.	*	28 FEB 1900	73	.03	.00	.03	1.
28 FEB 0700	25	.02	.02	.00	0.	*	28 FEB 1915	74	.02	.00	.02	1.
28 FEB 0715	26	.03	.03	.00	0.	*	28 FEB 1930	75	.02	.00	.02	1.
28 FEB 0730	27	.03	.03	.00	0.	*	28 FEB 1945	76	.02	.00	.02	1.
28 FEB 0745	28	.04	.04	.00	0.	*	28 FEB 2000	77	.02	.00	.02	1.
28 FEB 0800	29	.04	.04	.00	0.	*	28 FEB 2015	78	.02	.00	.02	1.
28 FEB 0815	30	.04	.04	.00	0.	*	28 FEB 2030	79	.02	.00	.02	1.
28 FEB 0830	31	.04	.04	.00	0.	*	28 FEB 2045	80	.02	.00	.02	1.
28 FEB 0845	32	.04	.04	.00	0.	*	28 FEB 2100	81	.02	.00	.02	1.
28 FEB 0900	33	.04	.04	.00	0.	*	28 FEB 2115	82	.02	.00	.02	1.
28 FEB 0915	34	.04	.04	.01	0.	*	28 FEB 2130	83	.02	.00	.02	1.
28 FEB 0930	35	.05	.04	.01	0.	*	28 FEB 2145	84	.02	.00	.01	1.
28 FEB 0945	36	.05	.04	.01	0.	*	28 FEB 2200	85	.02	.00	.01	1.
28 FEB 1000	37	.05	.04	.01	0.	*	28 FEB 2215	86	.02	.00	.01	1.
28 FEB 1015	38	.05	.04	.01	0.	*	28 FEB 2230	87	.02	.00	.01	1.
28 FEB 1030	39	.06	.04	.02	1.	*	28 FEB 2245	88	.02	.00	.01	1.
28 FEB 1045	40	.06	.04	.02	1.	*	28 FEB 2300	89	.02	.00	.01	1.
28 FEB 1100	41	.07	.05	.02	1.	*	28 FEB 2315	90	.01	.00	.01	1.
28 FEB 1115	42	.07	.05	.03	1.	*	28 FEB 2330	91	.01	.00	.01	1.
28 FEB 1130	43	.08	.05	.03	1.	*	28 FEB 2345	92	.01	.00	.01	1.
28 FEB 1145	44	.09	.05	.04	1.	*	1 MAR 0000	93	.01	.00	.01	1.
28 FEB 1200	45	.10	.06	.05	2.	*	1 MAR 0015	94	.01	.00	.01	1.
28 FEB 1215	46	.13	.07	.06	2.	*	1 MAR 0030	95	.01	.00	.01	1.
28 FEB 1230	47	.16	.08	.08	3.	*	1 MAR 0045	96	.01	.00	.01	1.
28 FEB 1245	48	.25	.11	.14	4.	*	1 MAR 0100	97	.01	.00	.01	1.
28 FEB 1300	49	.54	.20	.34	7.	*						
						*						

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TOTAL RAINFALL = 6.00, TOTAL LOSS = 2.32, TOTAL EXCESS = 3.68

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.00-HR
+ (CFS)	(HR)					
		(CFS)				
+ 24.	12.50		5.	2.	2.	2.
		(INCHES)	2.955	3.658	3.658	3.658
		(AC-FT)	3.	3.	3.	3.

CUMULATIVE AREA = .02 SQ MI

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              *            *
  + KK        *    20PSWP  *
              *            *
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85 KO OUTPUT CONTROL VARIABLES

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                IPRNT          1  PRINT CONTROL
                IPLOT          0  PLOT CONTROL
                QSCAL         0.  HYDROGRAPH PLOT SCALE
                        ROUTING THROUGH WETLAND 3B

          HYDROGRAPH ROUTING DATA

87 RS        STORAGE ROUTING
                NSTPS          1  NUMBER OF SUBREACHES
                 ITYP       ELEV  TYPE OF INITIAL CONDITION
                RSVRIC      66.50  INITIAL CONDITION
                     X        .00 WORKING R AND D COEFFICIENT

88 SA           AREA        1.1       1.6       3.7

89 SE       ELEVATION      66.50     67.20     68.20

90 SS        SPILLWAY
                 CREL      68.10  SPILLWAY CREST ELEVATION
                SPWID      30.00  SPILLWAY WIDTH
                 COQW       3.00  WEIR COEFFICIENT
                 EXPW       1.50  EXPONENT OF HEAD
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COMPUTED STORAGE-ELEVATION DATA

STORAGE	.00	.93	3.51
ELEVATION	66.50	67.20	68.20

COMPUTED OUTFLOW-ELEVATION DATA

OUTFLOW	.00	.00	.00	.00	.01	.03	.06	.11	.17	.25
ELEVATION	66.50	68.10	68.10	68.10	68.10	68.10	68.11	68.11	68.12	68.12
OUTFLOW	.36	.49	.65	.84	1.07	1.34	1.65	2.00	2.40	2.85
ELEVATION	68.13	68.13	68.14	68.14	68.15	68.16	68.17	68.18	68.19	68.20

COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

STORAGE	.00	.93	3.15	3.19	3.24	3.29	3.34	3.40	3.47	3.51
OUTFLOW	.00	.00	.00	.11	.36	.65	1.07	1.65	2.40	2.85
ELEVATION	66.50	67.20	68.10	68.11	68.13	68.14	68.15	68.17	68.19	68.20

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HYDROGRAPH AT STATION 20PSWP

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DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE
28	FEB	0100	1	0.	.0	66.5	28	FEB	0915	34	0.	.0	66.5	28	FEB	1730	67	0.	2.8	67.9
28	FEB	0115	2	0.	.0	66.5	28	FEB	0930	35	0.	.0	66.5	28	FEB	1745	68	0.	2.8	68.0
28	FEB	0130	3	0.	.0	66.5	28	FEB	0945	36	0.	.0	66.5	28	FEB	1800	69	0.	2.8	68.0
28	FEB	0145	4	0.	.0	66.5	28	FEB	1000	37	0.	.0	66.5	28	FEB	1815	70	0.	2.9	68.0
28	FEB	0200	5	0.	.0	66.5	28	FEB	1015	38	0.	.0	66.5	28	FEB	1830	71	0.	2.9	68.0
28	FEB	0215	6	0.	.0	66.5	28	FEB	1030	39	0.	.0	66.5	28	FEB	1845	72	0.	2.9	68.0
28	FEB	0230	7	0.	.0	66.5	28	FEB	1045	40	0.	.1	66.5	28	FEB	1900	73	0.	3.0	68.0
28	FEB	0245	8	0.	.0	66.5	28	FEB	1100	41	0.	.1	66.6	28	FEB	1915	74	0.	3.0	68
28	FEB	0300	9	0.	.0	66.5	28	FEB	1115	42	0.	.1	66.6	28	FEB	1930	75	0.	3.0	68.[illegible]
28	FEB	0315	10	0.	.0	66.5	28	FEB	1130	43	0.	.1	66.6	28	FEB	1945	76	0.	3.0	68.1
28	FEB	0330	11	0.	.0	66.5	28	FEB	1145	44	0.	.1	66.6	28	FEB	2000	77	0.	3.0	68.1
28	FEB	0345	12	0.	.0	66.5	28	FEB	1200	45	0.	.2	66.6	28	FEB	2015	78	0.	3.1	68.1

28 FEB 0400	13	0.	.0	66.5 *	28 FEB 1215	46	0.	.2	66.6 *	28 FEB 2030	79	0.	3.1	68.1
28 FEB 0415	14	0.	.0	66.5 *	28 FEB 1230	47	0.	.2	66.7 *	28 FEB 2045	80	0.	3.1	68.1
28 FEB 0430	15	0.	.0	66.5 *	28 FEB 1245	48	0.	.3	66.7 *	28 FEB 2100	81	0.	3.1	68.1
28 FEB 0445	16	0.	.0	66.5 *	28 FEB 1300	49	0.	.4	66.8 *	28 FEB 2115	82	0.	3.1	68.1
FEB 0500	17	0.	.0	66.5 *	28 FEB 1315	50	0.	.7	67.0 *	28 FEB 2130	83	0.	3.1	68.1
FEB 0515	18	0.	.0	66.5 *	28 FEB 1330	51	0.	1.1	67.3 *	28 FEB 2145	84	0.	3.2	68.1
28 FEB 0530	19	0.	.0	66.5 *	28 FEB 1345	52	0.	1.5	67.5 *	28 FEB 2200	85	0.	3.2	68.1
28 FEB 0545	20	0.	.0	66.5 *	28 FEB 1400	53	0.	1.8	67.6 *	28 FEB 2215	86	0.	3.2	68.1
28 FEB 0600	21	0.	.0	66.5 *	28 FEB 1415	54	0.	2.0	67.6 *	28 FEB 2230	87	0.	3.2	68.1
28 FEB 0615	22	0.	.0	66.5 *	28 FEB 1430	55	0.	2.1	67.7 *	28 FEB 2245	88	0.	3.2	68.1
28 FEB 0630	23	0.	.0	66.5 *	28 FEB 1445	56	0.	2.2	67.7 *	28 FEB 2300	89	0.	3.2	68.1
28 FEB 0645	24	0.	.0	66.5 *	28 FEB 1500	57	0.	2.3	67.8 *	28 FEB 2315	90	0.	3.2	68.1
28 FEB 0700	25	0.	.0	66.5 *	28 FEB 1515	58	0.	2.4	67.8 *	28 FEB 2330	91	0.	3.2	68.1
28 FEB 0715	26	0.	.0	66.5 *	28 FEB 1530	59	0.	2.4	67.8 *	28 FEB 2345	92	0.	3.2	68.1
28 FEB 0730	27	0.	.0	66.5 *	28 FEB 1545	60	0.	2.5	67.8 *	1 MAR 0000	93	0.	3.2	68.1
28 FEB 0745	28	0.	.0	66.5 *	28 FEB 1600	61	0.	2.5	67.8 *	1 MAR 0015	94	0.	3.2	68.1
28 FEB 0800	29	0.	.0	66.5 *	28 FEB 1615	62	0.	2.6	67.9 *	1 MAR 0030	95	0.	3.2	68.1
28 FEB 0815	30	0.	.0	66.5 *	28 FEB 1630	63	0.	2.6	67.9 *	1 MAR 0045	96	0.	3.2	68.1
28 FEB 0830	31	0.	.0	66.5 *	28 FEB 1645	64	0.	2.7	67.9 *	1 MAR 0100	97	0.	3.3	68.1
28 FEB 0845	32	0.	.0	66.5 *	28 FEB 1700	65	0.	2.7	67.9 *					
28 FEB 0900	33	0.	.0	66.5 *	28 FEB 1715	66	0.	2.7	67.9 *					
				*					*					

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PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.00-HR
+ (CFS)	(HR)					
		(CFS)				
+ 0.	24.00		0.	0.	0.	0.
		(INCHES)	.072	.072	.072	.072
		(AC-FT)	0.	0.	0.	0.

STORAGE	TIME	MAXIMUM AVERAGE STORAGE			
		6-HR	24-HR	72-HR	24.00-HR
+ (AC-FT)	(HR)				
3.	24.00	3.	1.	1.	1.

PEAK STAGE	TIME	MAXIMUM AVERAGE STAGE			
		6-HR	24-HR	72-HR	24.00-HR
+ (FEET)	(HR)				
68.13	24.00	68.09	67.23	67.23	67.23

CUMULATIVE AREA = .02 SQ MI

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            **************
            *            *
  91 KK     *       14P  *
            *            *
            **************

  92 KO          OUTPUT CONTROL VARIABLES
                       IPRNT           1  PRINT CONTROL
                       IPLOT           0  PLOT CONTROL
                       QSCAL          0.  HYDROGRAPH PLOT SCALE
                                SCS RUNOFF CALCULATION

              SUBBASIN RUNOFF DATA

  94 BA          SUBBASIN CHARACTERISTICS
                       TAREA         .04  SUBBASIN AREA
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PRECIPITATION DATA

95 PH DEPTHS FOR 0-PERCENT HYPOTHETICAL STORM

..... HYDRO-35			..... TP-40					..... TP-49			
5-MIN	15-MIN	60-MIN	2-HR	3-HR	6-HR	12-HR	24-HR	2-DAY	4-DAY	7-DAY	10-DAY
.60	1.30	2.40	3.00	3.40	4.20	5.20	6.00	.00	.00	.00	.00

STORM AREA = .04

96 LS SCS LOSS RATE

STRTL	.56	INITIAL ABSTRACTION
CRVNBR	78.00	CURVE NUMBER
RTIMP	.00	PERCENT IMPERVIOUS AREA

97 UD SCS DIMENSIONLESS UNITGRAPH

TLAG	.45	LAG

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WARNING *** TIME INTERVAL IS GREATER THAN .29*LAG

UNIT HYDROGRAPH
11 END-OF-PERIOD ORDINATES

11.	30.	26.	13.	7.	3.	2.	1.	0.	0.
0.									

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HYDROGRAPH AT STATION 14P

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DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
28 FEB 0100	1	.00	.00	.00	0.	*	28 FEB 1315	50	1.30	.35	.95	25.
28 FEB 0115	2	.01	.01	.00	0.	*	28 FEB 1330	51	.31	.06	.25	42.
28 FEB 0130	3	.01	.01	.00	0.	*	28 FEB 1345	52	.18	.03	.15	39.
28 FEB 0145	4	.01	.01	.00	0.	*	28 FEB 1400	53	.14	.02	.11	27.
28 FEB 0200	5	.01	.01	.00	0.	*	28 FEB 1415	54	.11	.02	.09	19.
28 FEB 0215	6	.01	.01	.00	0.	*	28 FEB 1430	55	.10	.02	.08	14.
28 FEB 0230	7	.01	.01	.00	0.	*	28 FEB 1445	56	.08	.01	.07	11.
28 FEB 0245	8	.01	.01	.00	0.	*	28 FEB 1500	57	.08	.01	.06	9.
28 FEB 0300	9	.01	.01	.00	0.	*	28 FEB 1515	58	.07	.01	.06	7.
28 FEB 0315	10	.01	.01	.00	0.	*	28 FEB 1530	59	.06	.01	.05	6.
28 FEB 0330	11	.02	.02	.00	0.	*	28 FEB 1545	60	.06	.01	.05	6.
28 FEB 0345	12	.02	.02	.00	0.	*	28 FEB 1600	61	.06	.01	.05	5.
28 FEB 0400	13	.02	.02	.00	0.	*	28 FEB 1615	62	.05	.01	.05	5.
28 FEB 0415	14	.02	.02	.00	0.	*	28 FEB 1630	63	.05	.01	.04	4.
28 FEB 0430	15	.02	.02	.00	0.	*	28 FEB 1645	64	.05	.01	.04	4.
28 FEB 0445	16	.02	.02	.00	0.	*	28 FEB 1700	65	.05	.01	.04	4.
28 FEB 0500	17	.02	.02	.00	0.	*	28 FEB 1715	66	.04	.01	.04	4.
28 FEB 0515	18	.02	.02	.00	0.	*	28 FEB 1730	67	.04	.01	.04	4.
28 FEB 0530	19	.02	.02	.00	0.	*	28 FEB 1745	68	.04	.01	.03	4.
28 FEB 0545	20	.02	.02	.00	0.	*	28 FEB 1800	69	.04	.01	.03	3.
28 FEB 0600	21	.02	.02	.00	0.	*	28 FEB 1815	70	.04	.00	.03	3.
28 FEB 0615	22	.02	.02	.00	0.	*	28 FEB 1830	71	.04	.00	.03	3.
28 FEB 0630	23	.02	.02	.00	0.	*	28 FEB 1845	72	.04	.00	.03	3.
28 FEB 0645	24	.02	.02	.00	0.	*	28 FEB 1900	73	.03	.00	.03	3.
28 FEB 0700	25	.02	.02	.00	0.	*	28 FEB 1915	74	.02	.00	.02	3.
28 FEB 0715	26	.03	.03	.00	0.	*	28 FEB 1930	75	.02	.00	.02	2.
28 FEB 0730	27	.03	.03	.00	0.	*	28 FEB 1945	76	.02	.00	.02	2.
28 FEB 0745	28	.04	.04	.00	0.	*	28 FEB 2000	77	.02	.00	.02	2.
28 FEB 0800	29	.04	.04	.00	0.	*	28 FEB 2015	78	.02	.00	.02	2.
28 FEB 0815	30	.04	.04	.00	0.	*	28 FEB 2030	79	.02	.00	.02	2.
28 FEB 0830	31	.04	.04	.00	0.	*	28 FEB 2045	80	.02	.00	.02	2.

28 FEB 0845	32	.04	.04	.00	0.	*	28 FEB 2100	81	.02	.00	.02	2.
28 FEB 0900	33	.04	.04	.00	0.	*	28 FEB 2115	82	.02	.00	.02	2.
28 FEB 0915	34	.04	.04	.00	0.	*	28 FEB 2130	83	.02	.00	.02	1.
28 FEB 0930	35	.05	.04	.01	0.	*	28 FEB 2145	84	.02	.00	.01	1.
28 FEB 0945	36	.05	.04	.01	0.	*	28 FEB 2200	85	.02	.00	.01	1.
28 FEB 1000	37	.05	.04	.01	1.	*	28 FEB 2215	86	.02	.00	.01	1.
28 FEB 1015	38	.05	.04	.01	1.	*	28 FEB 2230	87	.02	.00	.01	1.
28 FEB 1030	39	.06	.04	.01	1.	*	28 FEB 2245	88	.02	.00	.01	1.
28 FEB 1045	40	.06	.05	.02	1.	*	28 FEB 2300	89	.02	.00	.01	1.
28 FEB 1100	41	.07	.05	.02	1.	*	28 FEB 2315	90	.01	.00	.01	1.
28 FEB 1115	42	.07	.05	.02	2.	*	28 FEB 2330	91	.01	.00	.01	1.
28 FEB 1130	43	.08	.05	.03	2.	*	28 FEB 2345	92	.01	.00	.01	1.
28 FEB 1145	44	.09	.06	.03	2.	*	1 MAR 0000	93	.01	.00	.01	1.
28 FEB 1200	45	.10	.06	.04	3.	*	1 MAR 0015	94	.01	.00	.01	1.
28 FEB 1215	46	.13	.07	.06	3.	*	1 MAR 0030	95	.01	.00	.01	1.
28 FEB 1230	47	.16	.08	.08	4.	*	1 MAR 0045	96	.01	.00	.01	1.
28 FEB 1245	48	.25	.12	.13	6.	*	1 MAR 0100	97	.01	.00	.01	1.
28 FEB 1300	49	.54	.21	.33	11.	*						
						*						

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TOTAL RAINFALL = 6.00, TOTAL LOSS = 2.42, TOTAL EXCESS = 3.58

PEAK FLOW (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	24.00-HR
+		(CFS)				
+ 42.	12.50		11.	3.	3.	3.
		(INCHES)	2.877	3.549	3.549	3.549
		(AC-FT)	6.	7.	7.	7.

CUMULATIVE AREA = .04 SQ MI

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            **************
            *            *
101 KK      *    14PCHL  *
            *            *
            **************

102 KO          OUTPUT CONTROL VARIABLES
                      IPRNT          1  PRINT CONTROL
                      IPLOT          0  PLOT CONTROL
                      QSCAL         0.  HYDROGRAPH PLOT SCALE
                               STORAGE ROUTING THROUGH NORTH BRANCH TO COMMERCE WAY

              HYDROGRAPH ROUTING DATA

104 RS          STORAGE ROUTING
                      NSTPS          1  NUMBER OF SUBREACHES
                       ITYP       ELEV  TYPE OF INITIAL CONDITION
                     RSVRIC      61.60  INITIAL CONDITION
                          X        .00 WORKING R AND D COEFFICIENT

105 SA                AREA         .0       .5       .7       .9      1.3

    SE          ELEVATION      61.60    64.00    64.50    65.00    66.00

107 SL          LOW-LEVEL OUTLET
                      ELEVL      62.60  ELEVATION AT CENTER OF OUTLET
                      CAREA       3.14  CROSS-SECTIONAL AREA
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                    COQL        .60  COEFFICIENT
                    EXPL        .50  EXPONENT OF HEAD

108 SS        SPILLWAY
                    CREL      64.90  SPILLWAY CREST ELEVATION
                   SPWID        .00  SPILLWAY WIDTH
                    COQW        .00  WEIR COEFFICIENT
                    EXPW       1.50  EXPONENT OF HEAD

                                          ***

                                COMPUTED STORAGE-ELEVATION DATA

        STORAGE       .00       .41       .72      1.14      2.24
      ELEVATION     61.60     64.00     64.50     65.00     66.00

                                COMPUTED OUTFLOW-ELEVATION DATA

        OUTFLOW       .00       .00     14.61     15.41     16.30     17.30     18.43     19.71     21.19     22.91
      ELEVATION     61.60     62.60     63.54     63.64     63.76     63.91     64.09     64.30     64.57     64.90

                              COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

        STORAGE       .00       .03       .22       .25       .30       .37       .41       .46       .59       .72
        OUTFLOW       .00       .00     14.61     15.41     16.30     17.30     17.88     18.43     19.71     20.83
      ELEVATION     61.60     62.60     63.54     63.64     63.76     63.91     64.00     64.09     64.30     64.50

        STORAGE       .77      1.05      1.14      2.24
        OUTFLOW     21.19     22.91     23.41     27.86
      ELEVATION     64.57     64.90     65.00     66.00
*****************************************************************************************************************************

                                HYDROGRAPH AT STATION   14PCHL

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                                          *                                          *
DA MON HRMN ORD  OUTFLOW  STORAGE   STAGE * DA MON HRMN ORD  OUTFLOW  STORAGE   STAGE * DA MON HRMN ORD  OUTFLOW  STORAGE   STAGE
                                          *                                          *
28 FEB 0100  1       0.       .0    61.6 * 28 FEB 0915  34       0.       .0    61.9 * 28 FEB 1730  67     165.     36.1    96.8
28 FEB 0115  2       0.       .0    61.6 * 28 FEB 0930  35       0.       .0    62.1 * 28 FEB 1745  68     166.     36.4    97.0
28 FEB 0130  3       0.       .0    61.6 * 28 FEB 0945  36       0.       .0    62.5 * 28 FEB 1800  69     167.     36.5    97.2
28 FEB 0145  4       0.       .0    61.6 * 28 FEB 1000  37       1.       .0    62.6 * 28 FEB 1815  70     167.     36.6    97.2
28 FEB 0200  5       0.       .0    61.6 * 28 FEB 1015  38       2.       .1    62.7 * 28 FEB 1830  71     167.     36.6    97.2
28 FEB 0215  6       0.       .0    61.6 * 28 FEB 1030  39       3.       .1    62.8 * 28 FEB 1845  72     166.     36.4    97.1
28 FEB 0230  7       0.       .0    61.6 * 28 FEB 1045  40       5.       .1    62.9 * 28 FEB 1900  73     165.     36.1    96.7
28 FEB 0245  8       0.       .0    61.6 * 28 FEB 1100  41       8.       .1    63.1 * 28 FEB 1915  74     163.     35.5    96.2
28 FEB 0300  9       0.       .0    61.6 * 28 FEB 1115  42      11.       .2    63.3 * 28 FEB 1930  75     159.     34.6    95.4
28 FEB 0315 10       0.       .0    61.6 * 28 FEB 1130  43      15.       .2    63.6 * 28 FEB 1945  76     152.     33.0    93.9
28 FEB 0330 11       0.       .0    61.6 * 28 FEB 1145  44      17.       .3    63.8 * 28 FEB 2000  77     145.     31.1    92.3
28 FEB 0345 12       0.       .0    61.6 * 28 FEB 1200  45      19.       .5    64.1 * 28 FEB 2015  78     138.     29.3    90.6
28 FEB 0400 13       0.       .0    61.6 * 28 FEB 1215  46      21.       .7    64.5 * 28 FEB 2030  79     131.     27.6    89.1
28 FEB 0415 14       0.       .0    61.6 * 28 FEB 1230  47      24.      1.2    65.0 * 28 FEB 2045  80     124.     26.0    87.6
28 FEB 0430 15       0.       .0    61.6 * 28 FEB 1245  48      26.      1.9    65.7 * 28 FEB 2100  81     118.     24.5    86.2
28 FEB 0445 16       0.       .0    61.6 * 28 FEB 1300  49      32.      3.3    66.9 * 28 FEB 2115  82     112.     23.0    84.9
28 FEB 0500 17       0.       .0    61.6 * 28 FEB 1315  50      43.      6.0    69.4 * 28 FEB 2130  83     106.     21.6    83.6
28 FEB 0515 18       0.       .0    61.6 * 28 FEB 1330  51      60.     10.3    73.3 * 28 FEB 2145  84     101.     20.4    82.5
28 FEB 0530 19       0.       .0    61.6 * 28 FEB 1345  52      80.     15.1    77.7 * 28 FEB 2200  85      96.     19.2    81.4
28 FEB 0545 20       0.       .0    61.6 * 28 FEB 1400  53      96.     19.1    81.3 * 28 FEB 2215  86      92.     18.1    80.4
28 FEB 0600 21       0.       .0    61.6 * 28 FEB 1415  54     108.     22.1    84.0 * 28 FEB 2230  87      88.     17.0    79
28 FEB 0615 22       0.       .0    61.6 * 28 FEB 1430  55     118.     24.5    86.2 * 28 FEB 2245  88      84.     16.0    78
28 FEB 0630 23       0.       .0    61.6 * 28 FEB 1445  56     126.     26.4    87.9 * 28 FEB 2300  89      80.     15.1    77.7
28 FEB 0645 24       0.       .0    61.6 * 28 FEB 1500  57     132.     28.0    89.4 * 28 FEB 2315  90      77.     14.3    76.9
28 FEB 0700 25       0.       .0    61.6 * 28 FEB 1515  58     138.     29.4    90.7 * 28 FEB 2330  91      73.     13.5    76.2
28 FEB 0715 26       0.       .0    61.6 * 28 FEB 1530  59     143.     30.7    91.8 * 28 FEB 2345  92      70.     12.8    75.6
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28 FEB 0730  27      0.      .0    61.6 * 28 FEB 1545  60     147.     31.7    92.8 *  1 MAR 0000  93      68.     12.1    74.9
28 FEB 0745  28      0.      .0    61.6 * 28 FEB 1600  61     151.     32.7    93.7 *  1 MAR 0015  94      65.     11.4    74.4
28 FEB 0800  29      0.      .0    61.6 * 28 FEB 1615  62     155.     33.5    94.5 *  1 MAR 0030  95      63.     10.9    73.8
28 FEB 0815  30      0.      .0    61.6 * 28 FEB 1630  63     158.     34.3    95.1 *  1 MAR 0045  96      60.     10.3    73.3
28 FEB 0830  31      0.      .0    61.6 * 28 FEB 1645  64     160.     34.9    95.7 *  1 MAR 0100  97      58.      9.8    72.9
   FEB 0845  32      0.      .0    61.6 * 28 FEB 1700  65     162.     35.4    96.1 *
28 FEB 0900  33      0.      .0    61.7 * 28 FEB 1715  66     164.     35.8    96.5 *
                                        *                                          *
*****************************************************************************************************************************

 PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     24.00-HR
+   (CFS)       (HR)
                          (CFS)
+     167.     17.25                 153.         61.         61.          61.
                        (INCHES)    1.320       2.107       2.107        2.107
                         (AC-FT)     76.        121.        121.         121.

PEAK STORAGE   TIME                          MAXIMUM AVERAGE STORAGE
                                     6-HR       24-HR       72-HR     24.00-HR
+  (AC-FT)      (HR)
      37.     17.25                  33.         12.         12.          12.

 PEAK STAGE    TIME                          MAXIMUM AVERAGE STAGE
                                     6-HR       24-HR       72-HR     24.00-HR
+   (FEET)      (HR)
    97.24     17.25                94.21       74.34       74.34        74.34

                        CUMULATIVE AREA =    1.08 SQ MI


   *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

          **************
          *            *
109 KK    *    6PWBAR  *
          *            *
          **************

110 KO         OUTPUT CONTROL VARIABLES
                     IPRNT           1  PRINT CONTROL
                     IPLOT           0  PLOT CONTROL
                     QSCAL          0.  HYDROGRAPH PLOT SCALE
                              DIRECT INPUT OF HYDROGRAPH FROM WETLAND 1C (6PN) TO WBAR
                              (SEE POND2: APPENDIX 10-G)

  6 IN         TIME DATA FOR INPUT TIME SERIES
                     JXMIN          15  TIME INTERVAL IN MINUTES
                    JXDATE     28FEB91  STARTING DATE
                    JXTIME         100  STARTING TIME

             SUBBASIN RUNOFF DATA

113 BA         SUBBASIN CHARACTERISTICS
                     TAREA         .30  SUBBASIN AREA

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                                                HYDROGRAPH AT STATION   6PWBAR

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DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW
28 FEB 0100	1	0.	28 FEB 0715	26	1.	28 FEB 1330	51	19.	28 FEB 1945	76	26.
28 FEB 0115	2	0.	28 FEB 0730	27	1.	28 FEB 1345	52	22.	28 FEB 2000	77	25.
28 FEB 0130	3	0.	28 FEB 0745	28	1.	28 FEB 1400	53	24.	28 FEB 2015	78	25.
28 FEB 0145	4	0.	28 FEB 0800	29	1.	28 FEB 1415	54	25.	28 FEB 2030	79	25.
28 FEB 0200	5	0.	28 FEB 0815	30	1.	28 FEB 1430	55	25.	28 FEB 2045	80	25.
28 FEB 0215	6	0.	28 FEB 0830	31	1.	28 FEB 1445	56	26.	28 FEB 2100	81	25.
28 FEB 0230	7	0.	28 FEB 0845	32	1.	28 FEB 1500	57	26.	28 FEB 2115	82	24.
28 FEB 0245	8	0.	28 FEB 0900	33	1.	28 FEB 1515	58	27.	28 FEB 2130	83	24.
28 FEB 0300	9	0.	28 FEB 0915	34	1.	28 FEB 1530	59	27.	28 FEB 2145	84	24.
28 FEB 0315	10	0.	28 FEB 0930	35	2.	28 FEB 1545	60	27.	28 FEB 2200	85	24.
28 FEB 0330	11	0.	28 FEB 0945	36	2.	28 FEB 1600	61	28.	28 FEB 2215	86	23.
28 FEB 0345	12	0.	28 FEB 1000	37	2.	28 FEB 1615	62	28.	28 FEB 2230	87	23.
28 FEB 0400	13	0.	28 FEB 1015	38	2.	28 FEB 1630	63	28.	28 FEB 2245	88	23.
28 FEB 0415	14	0.	28 FEB 1030	39	2.	28 FEB 1645	64	28.	28 FEB 2300	89	22.
28 FEB 0430	15	0.	28 FEB 1045	40	2.	28 FEB 1700	65	27.	28 FEB 2315	90	22.
28 FEB 0445	16	0.	28 FEB 1100	41	2.	28 FEB 1715	66	28.	28 FEB 2330	91	22.
28 FEB 0500	17	0.	28 FEB 1115	42	3.	28 FEB 1730	67	27.	28 FEB 2345	92	22.
28 FEB 0515	18	0.	28 FEB 1130	43	3.	28 FEB 1745	68	27.	1 MAR 0000	93	21.
28 FEB 0530	19	0.	28 FEB 1145	44	3.	28 FEB 1800	69	27.	1 MAR 0015	94	21.
28 FEB 0545	20	0.	28 FEB 1200	45	3.	28 FEB 1815	70	27.	1 MAR 0030	95	21.
28 FEB 0600	21	0.	28 FEB 1215	46	4.	28 FEB 1830	71	27.	1 MAR 0045	96	20.
28 FEB 0615	22	0.	28 FEB 1230	47	4.	28 FEB 1845	72	27.	1 MAR 0100	97	20.
28 FEB 0630	23	0.	28 FEB 1245	48	5.	28 FEB 1900	73	27.			
28 FEB 0645	24	1.	28 FEB 1300	49	8.	28 FEB 1915	74	26.			
28 FEB 0700	25	1.	28 FEB 1315	50	13.	28 FEB 1930	75	26.			

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PEAK FLOW (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	24.00-HR
		(CFS)				
+ 28.	15.50		27.	13.	13.	13.
		(INCHES)	.825	1.573	1.573	1.573
		(AC-FT)	13.	25.	25.	25.

CUMULATIVE AREA = .30 SQ MI

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            **************
            *            *
124 KK      *        8P  *
            *            *
            **************

125 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           1  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                               SCS RUNOFF CALCULATION

                SUBBASIN RUNOFF DATA

127 BA          SUBBASIN CHARACTERISTICS
                      TAREA         .02  SUBBASIN AREA

                PRECIPITATION DATA
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128 PH DEPTHS FOR 0-PERCENT HYPOTHETICAL STORM

..... HYDRO-35			..... TP-40					..... TP-49			
5-MIN	15-MIN	60-MIN	2-HR	3-HR	6-HR	12-HR	24-HR	2-DAY	4-DAY	7-DAY	10-DAY
.60	1.30	2.40	3.00	3.40	4.20	5.20	6.00	.00	.00	.00	.00

STORM AREA = .02

129 LS SCS LOSS RATE

STRTL	.47	INITIAL ABSTRACTION
CRVNBR	81.00	CURVE NUMBER
RTIMP	.00	PERCENT IMPERVIOUS AREA

130 UD SCS DIMENSIONLESS UNITGRAPH

TLAG	.25	LAG

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WARNING *** TIME INTERVAL IS GREATER THAN .29*LAG

UNIT HYDROGRAPH
7 END-OF-PERIOD ORDINATES

22. 23. 8. 3. 1. 0. 0.

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HYDROGRAPH AT STATION 8P

****

DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
28	FEB	0100	1	.00	.00	.00	0.	*	28	FEB	1315	50	1.30	.28	1.02	32.
28	FEB	0115	2	.01	.01	.00	0.	*	28	FEB	1330	51	.31	.05	.26	33.
28	FEB	0130	3	.01	.01	.00	0.	*	28	FEB	1345	52	.18	.03	.15	19.
28	FEB	0145	4	.01	.01	.00	0.	*	28	FEB	1400	53	.14	.02	.12	11.
28	FEB	0200	5	.01	.01	.00	0.	*	28	FEB	1415	54	.11	.01	.10	8.
28	FEB	0215	6	.01	.01	.00	0.	*	28	FEB	1430	55	.10	.01	.08	6.
28	FEB	0230	7	.01	.01	.00	0.	*	28	FEB	1445	56	.08	.01	.07	5.
28	FEB	0245	8	.01	.01	.00	0.	*	28	FEB	1500	57	.08	.01	.07	4.
28	FEB	0300	9	.01	.01	.00	0.	*	28	FEB	1515	58	.07	.01	.06	4.
28	FEB	0315	10	.01	.01	.00	0.	*	28	FEB	1530	59	.06	.01	.06	3.
28	FEB	0330	11	.02	.02	.00	0.	*	28	FEB	1545	60	.06	.01	.05	3.
28	FEB	0345	12	.02	.02	.00	0.	*	28	FEB	1600	61	.06	.01	.05	3.
28	FEB	0400	13	.02	.02	.00	0.	*	28	FEB	1615	62	.05	.01	.05	3.
28	FEB	0415	14	.02	.02	.00	0.	*	28	FEB	1630	63	.05	.01	.04	3.
28	FEB	0430	15	.02	.02	.00	0.	*	28	FEB	1645	64	.05	.01	.04	3.
28	FEB	0445	16	.02	.02	.00	0.	*	28	FEB	1700	65	.05	.00	.04	2.
28	FEB	0500	17	.02	.02	.00	0.	*	28	FEB	1715	66	.04	.00	.04	2.
28	FEB	0515	18	.02	.02	.00	0.	*	28	FEB	1730	67	.04	.00	.04	2.
28	FEB	0530	19	.02	.02	.00	0.	*	28	FEB	1745	68	.04	.00	.04	2.
28	FEB	0545	20	.02	.02	.00	0.	*	28	FEB	1800	69	.04	.00	.03	2.
28	FEB	0600	21	.02	.02	.00	0.	*	28	FEB	1815	70	.04	.00	.03	2.
28	FEB	0615	22	.02	.02	.00	0.	*	28	FEB	1830	71	.04	.00	.03	2.
28	FEB	0630	23	.02	.02	.00	0.	*	28	FEB	1845	72	.04	.00	.03	2.
28	FEB	0645	24	.02	.02	.00	0.	*	28	FEB	1900	73	.03	.00	.03	2.
28	FEB	0700	25	.02	.02	.00	0.	*	28	FEB	1915	74	.02	.00	.02	2.
28	FEB	0715	26	.03	.03	.00	0.	*	28	FEB	1930	75	.02	.00	.02	1.
28	FEB	0730	27	.03	.03	.00	0.	*	28	FEB	1945	76	.02	.00	.02	1.
28	FEB	0745	28	.04	.04	.00	0.	*	28	FEB	2000	77	.02	.00	.02	1.
28	FEB	0800	29	.04	.04	.00	0.	*	28	FEB	2015	78	.02	.00	.02	1.
28	FEB	0815	30	.04	.04	.00	0.	*	28	FEB	2030	79	.02	.00	.02	1.
28	FEB	0830	31	.04	.04	.00	0.	*	28	FEB	2045	80	.02	.00	.02	1.
28	FEB	0845	32	.04	.04	.01	0.	*	28	FEB	2100	81	.02	.00	.02	1.
28	FEB	0900	33	.04	.04	.01	0.	*	28	FEB	2115	82	.02	.00	.02	1.
28	FEB	0915	34	.04	.04	.01	0.	*	28	FEB	2130	83	.02	.00	.02	1.
28	FEB	0930	35	.05	.04	.01	0.	*	28	FEB	2145	84	.02	.00	.02	1.

28 FEB 0945	36	.05	.04	.01	1.	*	28 FEB 2200	85	.02	.00	.01	1.
28 FEB 1000	37	.05	.04	.01	1.	*	28 FEB 2215	86	.02	.00	.01	1.
28 FEB 1015	38	.05	.04	.02	1.	*	28 FEB 2230	87	.02	.00	.01	1.
28 FEB 1030	39	.06	.04	.02	1.	*	28 FEB 2245	88	.02	.00	.01	1.
28 FEB 1045	40	.06	.04	.02	1.	*	28 FEB 2300	89	.02	.00	.01	1.
28 FEB 1100	41	.07	.04	.03	1.	*	28 FEB 2315	90	.01	.00	.01	1.
28 FEB 1115	42	.07	.04	.03	1.	*	28 FEB 2330	91	.01	.00	.01	1.
28 FEB 1130	43	.08	.04	.03	2.	*	28 FEB 2345	92	.01	.00	.01	1.
28 FEB 1145	44	.09	.05	.04	2.	*	1 MAR 0000	93	.01	.00	.01	1.
28 FEB 1200	45	.10	.05	.05	2.	*	1 MAR 0015	94	.01	.00	.01	1.
28 FEB 1215	46	.13	.06	.07	3.	*	1 MAR 0030	95	.01	.00	.01	1.
28 FEB 1230	47	.16	.07	.09	4.	*	1 MAR 0045	96	.01	.00	.01	1.
28 FEB 1245	48	.25	.10	.15	6.	*	1 MAR 0100	97	.01	.00	.01	1.
28 FEB 1300	49	.54	.17	.37	12.	*						
						*						

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TOTAL RAINFALL = 6.00, TOTAL LOSS = 2.12, TOTAL EXCESS = 3.88

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	24.00-HR
+ (CFS)	(HR)					
		(CFS)				
+ 33.	12.50		7.	2.	2.	2.
		(INCHES)	3.104	3.866	3.866	3.866
		(AC-FT)	4.	5.	5.	5.

CUMULATIVE AREA = .02 SQ MI

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            *            *
131 KK      *       15P  *
            *            *
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132 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           1  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                               SCS RUNOFF CALCULATION

               SUBBASIN RUNOFF DATA

134 BA          SUBBASIN CHARACTERISTICS
                      TAREA         .01  SUBBASIN AREA

                PRECIPITATION DATA

135 PH                                DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
                ..... HYDRO-35 ......   ............... TP-40 ...............   ........... TP-49 ...........
                5-MIN  15-MIN  60-MIN    2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                  .60    1.30    2.40    3.00    3.40    4.20    5.20    6.00     .00     .00     .00     .00

                                                     STORM AREA =     .01

136 LS          SCS LOSS RATE
                      STRTL         .33  INITIAL ABSTRACTION
                     CRVNBR       86.00  CURVE NUMBER
                      RTIMP         .00  PERCENT IMPERVIOUS AREA
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137 UD SCS DIMENSIONLESS UNITGRAPH
TLAG .26 LAG

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ING *** TIME INTERVAL IS GREATER THAN .29*LAG

UNIT HYDROGRAPH
7 END-OF-PERIOD ORDINATES
14. 16. 6. 2. 1. 0. 0.

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HYDROGRAPH AT STATION 15P

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DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
28 FEB 0100	1	.00	.00	.00	0.	28 FEB 1315	50	1.30	.17	1.13	24.
28 FEB 0115	2	.01	.01	.00	0.	28 FEB 1330	51	.31	.03	.28	25.
28 FEB 0130	3	.01	.01	.00	0.	28 FEB 1345	52	.18	.02	.16	14.
28 FEB 0145	4	.01	.01	.00	0.	28 FEB 1400	53	.14	.01	.13	9.
28 FEB 0200	5	.01	.01	.00	0.	28 FEB 1415	54	.11	.01	.10	6.
28 FEB 0215	6	.01	.01	.00	0.	28 FEB 1430	55	.10	.01	.09	4.
28 FEB 0230	7	.01	.01	.00	0.	28 FEB 1445	56	.08	.01	.08	4.
28 FEB 0245	8	.01	.01	.00	0.	28 FEB 1500	57	.08	.01	.07	3.
28 FEB 0300	9	.01	.01	.00	0.	28 FEB 1515	58	.07	.00	.06	3.
28 FEB 0315	10	.01	.01	.00	0.	28 FEB 1530	59	.06	.00	.06	3.
28 FEB 0330	11	.02	.02	.00	0.	28 FEB 1545	60	.06	.00	.06	2.
28 FEB 0345	12	.02	.02	.00	0.	28 FEB 1600	61	.06	.00	.05	2.
28 FEB 0400	13	.02	.02	.00	0.	28 FEB 1615	62	.05	.00	.05	2.
28 FEB 0415	14	.02	.02	.00	0.	28 FEB 1630	63	.05	.00	.05	2.
28 FEB 0430	15	.02	.02	.00	0.	28 FEB 1645	64	.05	.00	.04	2.
28 FEB 0445	16	.02	.02	.00	0.	28 FEB 1700	65	.05	.00	.04	2.
28 FEB 0500	17	.02	.02	.00	0.	28 FEB 1715	66	.04	.00	.04	2.
28 FEB 0515	18	.02	.02	.00	0.	28 FEB 1730	67	.04	.00	.04	2.
28 FEB 0530	19	.02	.02	.00	0.	28 FEB 1745	68	.04	.00	.04	2.
28 FEB 0545	20	.02	.02	.00	0.	28 FEB 1800	69	.04	.00	.04	1.
28 FEB 0600	21	.02	.02	.00	0.	28 FEB 1815	70	.04	.00	.04	1.
28 FEB 0615	22	.02	.02	.00	0.	28 FEB 1830	71	.04	.00	.03	1.
28 FEB 0630	23	.02	.02	.00	0.	28 FEB 1845	72	.04	.00	.03	1.
28 FEB 0645	24	.02	.02	.00	0.	28 FEB 1900	73	.03	.00	.03	1.
28 FEB 0700	25	.02	.02	.00	0.	28 FEB 1915	74	.02	.00	.02	1.
28 FEB 0715	26	.03	.03	.00	0.	28 FEB 1930	75	.02	.00	.02	1.
28 FEB 0730	27	.03	.03	.00	0.	28 FEB 1945	76	.02	.00	.02	1.
28 FEB 0745	28	.04	.03	.01	0.	28 FEB 2000	77	.02	.00	.02	1.
28 FEB 0800	29	.04	.03	.01	0.	28 FEB 2015	78	.02	.00	.02	1.
28 FEB 0815	30	.04	.03	.01	0.	28 FEB 2030	79	.02	.00	.02	1.
28 FEB 0830	31	.04	.03	.01	0.	28 FEB 2045	80	.02	.00	.02	1.
28 FEB 0845	32	.04	.03	.01	0.	28 FEB 2100	81	.02	.00	.02	1.
28 FEB 0900	33	.04	.03	.01	0.	28 FEB 2115	82	.02	.00	.02	1.
28 FEB 0915	34	.04	.03	.02	1.	28 FEB 2130	83	.02	.00	.02	1.
28 FEB 0930	35	.05	.03	.02	1.	28 FEB 2145	84	.02	.00	.02	1.
28 FEB 0945	36	.05	.03	.02	1.	28 FEB 2200	85	.02	.00	.02	1.
28 FEB 1000	37	.05	.03	.02	1.	28 FEB 2215	86	.02	.00	.02	1.
28 FEB 1015	38	.05	.03	.03	1.	28 FEB 2230	87	.02	.00	.01	1.
28 FEB 1030	39	.06	.03	.03	1.	28 FEB 2245	88	.02	.00	.01	1.
28 FEB 1045	40	.06	.03	.03	1.	28 FEB 2300	89	.02	.00	.01	1.
28 FEB 1100	41	.07	.03	.04	1.	28 FEB 2315	90	.01	.00	.01	1.
28 FEB 1115	42	.07	.03	.04	1.	28 FEB 2330	91	.01	.00	.01	1.
28 FEB 1130	43	.08	.03	.05	2.	28 FEB 2345	92	.01	.00	.01	1.
28 FEB 1145	44	.09	.03	.06	2.	1 MAR 0000	93	.01	.00	.01	1.
28 FEB 1200	45	.10	.04	.07	2.	1 MAR 0015	94	.01	.00	.01	1.
28 FEB 1215	46	.13	.04	.08	3.	1 MAR 0030	95	.01	.00	.01	1.
28 FEB 1230	47	.16	.05	.11	3.	1 MAR 0045	96	.01	.00	.01	0.

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      28 FEB 1245   48     .25     .07     .19        5.      *       1 MAR 0100   97     .01     .00     .01        0.
      28 FEB 1300   49     .54     .11     .43       10.      *
                                                              *
*****************************************************************************************************************************

   TOTAL RAINFALL =    6.00, TOTAL LOSS =    1.59, TOTAL EXCESS =    4.41

 PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     24.00-HR
+  (CFS)       (HR)
                         (CFS)
+     25.     12.50                    6.          2.          2.          2.
                       (INCHES)     3.467       4.391       4.391       4.391
                        (AC-FT)       3.          4.          4.          4.

                        CUMULATIVE AREA =     .01 SQ MI



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           *            *
 138 KK    *    15PSWP  *
           *            *
           **************

 139 KO          OUTPUT CONTROL VARIABLES
                       IPRNT           1  PRINT CONTROL
                       IPLOT           0  PLOT CONTROL
                       QSCAL          0.  HYDROGRAPH PLOT SCALE
                                STORAGE ROUTING THROUGH WETLAND 3C

              HYDROGRAPH ROUTING DATA

 141 RS          STORAGE ROUTING
                       NSTPS           1  NUMBER OF SUBREACHES
                        ITYP        ELEV  TYPE OF INITIAL CONDITION
                      RSVRIC       62.40  INITIAL CONDITION
                           X         .00 WORKING R AND D COEFFICIENT

 142 SA               AREA         1.0       2.2       3.1       3.8

 143 SE          ELEVATION       62.00     63.00     64.00     65.00

 144 SL          LOW-LEVEL OUTLET
                       ELEVL       62.40  ELEVATION AT CENTER OF OUTLET
                       CAREA        1.23  CROSS-SECTIONAL AREA
                        COQL         .60  COEFFICIENT
                        EXPL         .50  EXPONENT OF HEAD

 145 SS          SPILLWAY
                        CREL       64.90  SPILLWAY CREST ELEVATION
                       SPWID       30.00  SPILLWAY WIDTH
                        COQW        3.00  WEIR COEFFICIENT
                        EXPW        1.50  EXPONENT OF HEAD

                                                          ***

                                          COMPUTED STORAGE-ELEVATION DATA

           STORAGE        .00      1.59      4.27      7.75
         ELEVATION      62.00     63.00     64.00     65.00
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COMPUTED OUTFLOW-ELEVATION DATA

OUTFLOW	.00	.00	4.62	4.98	5.40	5.90	6.50	7.24	8.16	9.36
ELEVATION	62.00	62.40	63.01	63.11	63.23	63.39	63.61	63.89	64.30	64.90
OUTFLOW	9.37	9.41	9.48	9.61	9.81	10.10	10.49	10.99	11.62	12.39
ELEVATION	64.90	64.91	64.91	64.92	64.93	64.94	64.95	64.97	64.98	65.00

COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

STORAGE	.00	.49	1.59	1.84	2.14	2.54	3.11	3.94	4.27	5.24
OUTFLOW	.00	.00	4.58	4.98	5.40	5.90	6.50	7.24	7.49	8.16
ELEVATION	62.00	62.40	63.00	63.11	63.23	63.39	63.61	63.89	64.00	64.30
STORAGE	7.37	7.41	7.47	7.51	7.56	7.61	7.68	7.75		
OUTFLOW	9.36	9.48	9.81	10.10	10.49	10.99	11.62	12.39		
ELEVATION	64.90	64.91	64.93	64.94	64.95	64.97	64.98	65.00		

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HYDROGRAPH AT STATION 15PSWP

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DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE
28	FEB	0100	1	0.	.5	62.4	28	FEB	0915	34	0.	.5	62.4	28	FEB	1730	67	4.	1.5	62.9
28	FEB	0115	2	0.	.5	62.4	28	FEB	0930	35	0.	.5	62.4	28	FEB	1745	68	4.	1.4	62.9
28	FEB	0130	3	0.	.5	62.4	28	FEB	0945	36	0.	.5	62.4	28	FEB	1800	69	4.	1.4	62.9
28	FEB	0145	4	0.	.5	62.4	28	FEB	1000	37	0.	.6	62.4	28	FEB	1815	70	4.	1.4	62.9
28	FEB	0200	5	0.	.5	62.4	28	FEB	1015	38	0.	.6	62.4	28	FEB	1830	71	3.	1.3	62.8
28	FEB	0215	6	0.	.5	62.4	28	FEB	1030	39	0.	.6	62.4	28	FEB	1845	72	3.	1.3	62.8
	FEB	0230	7	0.	.5	62.4	28	FEB	1045	40	0.	.6	62.5	28	FEB	1900	73	3.	1.2	62.8
	FEB	0245	8	0.	.5	62.4	28	FEB	1100	41	0.	.6	62.5	28	FEB	1915	74	3.	1.2	62.8
28	FEB	0300	9	0.	.5	62.4	28	FEB	1115	42	1.	.6	62.5	28	FEB	1930	75	3.	1.2	62.8
28	FEB	0315	10	0.	.5	62.4	28	FEB	1130	43	1.	.6	62.5	28	FEB	1945	76	3.	1.1	62.7
28	FEB	0330	11	0.	.5	62.4	28	FEB	1145	44	1.	.7	62.5	28	FEB	2000	77	2.	1.1	62.7
28	FEB	0345	12	0.	.5	62.4	28	FEB	1200	45	1.	.7	62.5	28	FEB	2015	78	2.	1.0	62.7
28	FEB	0400	13	0.	.5	62.4	28	FEB	1215	46	1.	.7	62.5	28	FEB	2030	79	2.	1.0	62.7
28	FEB	0415	14	0.	.5	62.4	28	FEB	1230	47	1.	.8	62.5	28	FEB	2045	80	2.	1.0	62.7
28	FEB	0430	15	0.	.5	62.4	28	FEB	1245	48	1.	.8	62.6	28	FEB	2100	81	2.	1.0	62.7
28	FEB	0445	16	0.	.5	62.4	28	FEB	1300	49	2.	.9	62.6	28	FEB	2115	82	2.	.9	62.6
28	FEB	0500	17	0.	.5	62.4	28	FEB	1315	50	3.	1.2	62.8	28	FEB	2130	83	2.	.9	62.6
28	FEB	0515	18	0.	.5	62.4	28	FEB	1330	51	5.	1.7	63.0	28	FEB	2145	84	2.	.9	62.6
28	FEB	0530	19	0.	.5	62.4	28	FEB	1345	52	5.	2.0	63.2	28	FEB	2200	85	2.	.9	62.6
28	FEB	0545	20	0.	.5	62.4	28	FEB	1400	53	5.	2.1	63.2	28	FEB	2215	86	1.	.9	62.6
28	FEB	0600	21	0.	.5	62.4	28	FEB	1415	54	5.	2.1	63.2	28	FEB	2230	87	1.	.8	62.6
28	FEB	0615	22	0.	.5	62.4	28	FEB	1430	55	5.	2.1	63.2	28	FEB	2245	88	1.	.8	62.6
28	FEB	0630	23	0.	.5	62.4	28	FEB	1445	56	5.	2.1	63.2	28	FEB	2300	89	1.	.8	62.6
28	FEB	0645	24	0.	.5	62.4	28	FEB	1500	57	5.	2.1	63.2	28	FEB	2315	90	1.	.8	62.6
28	FEB	0700	25	0.	.5	62.4	28	FEB	1515	58	5.	2.0	63.2	28	FEB	2330	91	1.	.8	62.6
28	FEB	0715	26	0.	.5	62.4	28	FEB	1530	59	5.	2.0	63.2	28	FEB	2345	92	1.	.8	62.5
28	FEB	0730	27	0.	.5	62.4	28	FEB	1545	60	5.	1.9	63.1	1	MAR	0000	93	1.	.7	62.5
28	FEB	0745	28	0.	.5	62.4	28	FEB	1600	61	5.	1.8	63.1	1	MAR	0015	94	1.	.7	62.5
28	FEB	0800	29	0.	.5	62.4	28	FEB	1615	62	5.	1.8	63.1	1	MAR	0030	95	1.	.7	62.5
28	FEB	0815	30	0.	.5	62.4	28	FEB	1630	63	5.	1.7	63.1	1	MAR	0045	96	1.	.7	62.5
28	FEB	0830	31	0.	.5	62.4	28	FEB	1645	64	5.	1.7	63.0	1	MAR	0100	97	1.	.7	62.5
28	FEB	0845	32	0.	.5	62.4	28	FEB	1700	65	5.	1.6	63.0							
28	FEB	0900	33	0.	.5	62.4	28	FEB	1715	66	4.	1.6	63.0							

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PEAK FLOW	TIME	MAXIMUM AVERAGE FLOW			
		6-HR	24-HR	72-HR	24.00-HR
(CFS)	(HR)				

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                          (CFS)
+       5.     13.25                  5.         2.         2.         2.
                        (INCHES)   2.807      4.119      4.119      4.119
                         (AC-FT)      2.         3.         3.         3.

 PEAK STORAGE   TIME                        MAXIMUM AVERAGE STORAGE
                                     6-HR       24-HR       72-HR     24.00-HR
+  (AC-FT)      (HR)
        2.     13.25                  2.         1.         1.         1.

  PEAK STAGE    TIME                        MAXIMUM AVERAGE STAGE
                                     6-HR       24-HR       72-HR     24.00-HR
+   (FEET)      (HR)
     63.23     13.25                63.04      62.63      62.63      62.63

                        CUMULATIVE AREA =     .01 SQ MI


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            *            *
  149 KK    *     8PCHL  *
            *            *
            **************

  150 KO          OUTPUT CONTROL VARIABLES
                        IPRNT           1  PRINT CONTROL
                        IPLOT           0  PLOT CONTROL
                        QSCAL          0.  HYDROGRAPH PLOT SCALE
                                 STORAGE ROUTING THROUGH 8P CHANNEL

               HYDROGRAPH ROUTING DATA

  152 RS          STORAGE ROUTING
                        NSTPS           1  NUMBER OF SUBREACHES
                         ITYP        ELEV  TYPE OF INITIAL CONDITION
                       RSVRIC       61.00  INITIAL CONDITION
                            X         .00 WORKING R AND D COEFFICIENT

  153 SA               AREA          .0        .0        .1        .2        .2        .3        .3

  154 SE          ELEVATION       61.00     63.00     64.00     65.00     66.00     67.00     68.00

  155 SL          LOW-LEVEL OUTLET
                        ELEVL       62.60  ELEVATION AT CENTER OF OUTLET
                        CAREA       12.57  CROSS-SECTIONAL AREA
                         COQL         .60  COEFFICIENT
                         EXPL         .50  EXPONENT OF HEAD

  156 SS          SPILLWAY
                         CREL       67.90  SPILLWAY CREST ELEVATION
                        SPWID         .00  SPILLWAY WIDTH
                         COQW         .00  WEIR COEFFICIENT
                         EXPW        1.50  EXPONENT OF HEAD

                                                          ***

                                                COMPUTED STORAGE-ELEVATION DATA

            STORAGE        .00       .01       .06       .20       .42       .68      1.00
          ELEVATION      61.00     63.00     64.00     65.00     66.00     67.00     68.00
```

COMPUTED OUTFLOW-ELEVATION DATA

OUTFLOW	.00	.00	83.18	88.26	94.00	100.53	108.04	116.77	127.02	139.25
ELEVATION	61.00	62.60	64.49	64.73	65.01	65.36	65.79	66.33	67.01	67.90

COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

STORAGE	.00	.00	.01	.06	.12	.15	.20	.20	.27	.37
OUTFLOW	.00	.00	38.26	71.57	83.18	88.26	93.71	94.00	100.53	108.04
ELEVATION	61.00	62.60	63.00	64.00	64.49	64.73	65.00	65.01	65.36	65.79

STORAGE	.42	.50	.68	.97	1.00
OUTFLOW	111.53	116.77	126.88	139.25	140.56
ELEVATION	66.00	66.33	67.00	67.90	68.00

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 0. TO 94.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

****

HYDROGRAPH AT STATION 8PCHL

DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE
28	FEB	0100	1	0.	.0	61.0	28	FEB	0915	34	2.	.0	62.6	28	FEB	1730	67	197.	2.5	72.3
28	FEB	0115	2	0.	.0	61.0	28	FEB	0930	35	2.	.0	62.6	28	FEB	1745	68	198.	2.5	72.4
28	FEB	0130	3	0.	.0	61.0	28	FEB	0945	36	3.	.0	62.6	28	FEB	1800	69	199.	2.6	72.5
28	FEB	0145	4	0.	.0	61.0	28	FEB	1000	37	3.	.0	62.6	28	FEB	1815	70	200.	2.6	72.5
28	FEB	0200	5	0.	.0	61.0	28	FEB	1015	38	5.	.0	62.7	28	FEB	1830	71	199.	2.6	72.5
	FEB	0215	6	0.	.0	61.0	28	FEB	1030	39	7.	.0	62.7	28	FEB	1845	72	199.	2.5	72.5
28	FEB	0230	7	0.	.0	61.0	28	FEB	1045	40	9.	.0	62.7	28	FEB	1900	73	198.	2.5	72.4
28	FEB	0245	8	0.	.0	61.0	28	FEB	1100	41	12.	.0	62.7	28	FEB	1915	74	196.	2.5	72.3
28	FEB	0300	9	0.	.0	61.0	28	FEB	1115	42	16.	.0	62.8	28	FEB	1930	75	193.	2.4	72.0
28	FEB	0315	10	0.	.0	61.0	28	FEB	1130	43	20.	.0	62.8	28	FEB	1945	76	189.	2.3	71.7
28	FEB	0330	11	0.	.0	61.0	28	FEB	1145	44	22.	.0	62.8	28	FEB	2000	77	183.	2.1	71.2
28	FEB	0345	12	0.	.0	61.0	28	FEB	1200	45	25.	.0	62.9	28	FEB	2015	78	175.	1.9	70.7
28	FEB	0400	13	0.	.0	61.0	28	FEB	1215	46	29.	.0	62.9	28	FEB	2030	79	168.	1.7	70.1
28	FEB	0415	14	0.	.0	61.0	28	FEB	1230	47	33.	.0	62.9	28	FEB	2045	80	161.	1.5	69.6
28	FEB	0430	15	0.	.0	61.0	28	FEB	1245	48	39.	.0	63.0	28	FEB	2100	81	154.	1.4	69.0
28	FEB	0445	16	0.	.0	61.0	28	FEB	1300	49	52.	.0	63.4	28	FEB	2115	82	147.	1.2	68.5
28	FEB	0500	17	0.	.0	61.2	28	FEB	1315	50	84.	.1	64.5	28	FEB	2130	83	141.	1.0	68.0
28	FEB	0515	18	0.	.0	61.6	28	FEB	1330	51	105.	.3	65.6	28	FEB	2145	84	135.	.9	67.6
28	FEB	0530	19	0.	.0	62.4	28	FEB	1345	52	118.	.5	66.4	28	FEB	2200	85	129.	.7	67.1
28	FEB	0545	20	0.	.0	62.6	28	FEB	1400	53	127.	.7	67.0	28	FEB	2215	86	123.	.6	66.7
28	FEB	0600	21	0.	.0	62.6	28	FEB	1415	54	136.	.9	67.7	28	FEB	2230	87	117.	.5	66.4
28	FEB	0615	22	0.	.0	62.6	28	FEB	1430	55	144.	1.1	68.3	28	FEB	2245	88	112.	.4	66.0
28	FEB	0630	23	0.	.0	62.6	28	FEB	1445	56	152.	1.3	68.9	28	FEB	2300	89	107.	.4	65.8
28	FEB	0645	24	1.	.0	62.6	28	FEB	1500	57	159.	1.5	69.4	28	FEB	2315	90	103.	.3	65.5
28	FEB	0700	25	0.	.0	62.6	28	FEB	1515	58	166.	1.7	69.9	28	FEB	2330	91	99.	.3	65.3
28	FEB	0715	26	1.	.0	62.6	28	FEB	1530	59	172.	1.8	70.4	28	FEB	2345	92	96.	.2	65.1
28	FEB	0730	27	1.	.0	62.6	28	FEB	1545	60	177.	2.0	70.8	1	MAR	0000	93	92.	.2	64.9
28	FEB	0745	28	1.	.0	62.6	28	FEB	1600	61	181.	2.1	71.1	1	MAR	0015	94	89.	.2	64.8
28	FEB	0800	29	1.	.0	62.6	28	FEB	1615	62	185.	2.2	71.4	1	MAR	0030	95	86.	.1	64.6
28	FEB	0815	30	1.	.0	62.6	28	FEB	1630	63	189.	2.3	71.7	1	MAR	0045	96	83.	.1	64.5
28	FEB	0830	31	1.	.0	62.6	28	FEB	1645	64	192.	2.4	71.9	1	MAR	0100	97	81.	.1	64.4
28	FEB	0845	32	2.	.0	62.6	28	FEB	1700	65	194.	2.4	72.1							
28	FEB	0900	33	2.	.0	62.6	28	FEB	1715	66	196.	2.5	72.2							

PEAK FLOW TIME MAXIMUM AVERAGE FLOW

6-HR 24-HR 72-HR 24.00-HR

```
+   (CFS)       (HR)
                          (CFS)
+     200.     17.25                  186.         78.         78.         78.
                        (INCHES)     1.218       2.041       2.041       2.041
                         (AC-FT)       92.        155.        155.        155.

 PEAK STORAGE   TIME                          MAXIMUM AVERAGE STORAGE
                                      6-HR       24-HR       72-HR     24.00-HR
+  (AC-FT)      (HR)
        3.     17.25                    2.          1.          1.          1.

  PEAK STAGE    TIME                          MAXIMUM AVERAGE STAGE
                                      6-HR       24-HR       72-HR     24.00-HR
+   (FEET)      (HR)
     72.51     17.25                 71.48       65.50       65.50       65.50

                         CUMULATIVE AREA =    1.42 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***


            **************
            *            *
 157 KK     *       10P  *
            *            *
            **************

 158 KO          OUTPUT CONTROL VARIABLES
                       IPRNT           1  PRINT CONTROL
                       IPLOT           0  PLOT CONTROL
                       QSCAL          0.  HYDROGRAPH PLOT SCALE
                                SCS RUNOFF CALCULATION

               SUBBASIN RUNOFF DATA

 160 BA          SUBBASIN CHARACTERISTICS
                       TAREA         .03  SUBBASIN AREA

                 PRECIPITATION DATA

 161 PH                                DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
                 ..... HYDRO-35 ......   ............... TP-40 ...............   ........... TP-49 ...........
                 5-MIN  15-MIN  60-MIN    2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                   .60    1.30    2.40    3.00    3.40    4.20    5.20    6.00     .00     .00     .00     .00

                                                   STORM AREA =     .03

 162 LS          SCS LOSS RATE
                       STRTL         .17  INITIAL ABSTRACTION
                      CRVNBR       92.00  CURVE NUMBER
                       RTIMP         .00  PERCENT IMPERVIOUS AREA

 163 UD          SCS DIMENSIONLESS UNITGRAPH
                        TLAG         .22  LAG

                                                          ***

WARNING *** TIME INTERVAL IS GREATER THAN .29*LAG

                                                     UNIT HYDROGRAPH
                                                  6 END-OF-PERIOD ORDINATES
                30.       26.        8.        2.        1.        0.
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HYDROGRAPH AT STATION 10P

DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
28 FEB 0100	1	.00	.00	.00	0.	28 FEB 1315	50	1.30	.07	1.23	52.
28 FEB 0115	2	.01	.01	.00	0.	28 FEB 1330	51	.31	.01	.30	45.
28 FEB 0130	3	.01	.01	.00	0.	28 FEB 1345	52	.18	.01	.17	24.
28 FEB 0145	4	.01	.01	.00	0.	28 FEB 1400	53	.14	.00	.14	14.
28 FEB 0200	5	.01	.01	.00	0.	28 FEB 1415	54	.11	.00	.11	10.
28 FEB 0215	6	.01	.01	.00	0.	28 FEB 1430	55	.10	.00	.09	8.
28 FEB 0230	7	.01	.01	.00	0.	28 FEB 1445	56	.08	.00	.08	6.
28 FEB 0245	8	.01	.01	.00	0.	28 FEB 1500	57	.08	.00	.07	5.
28 FEB 0300	9	.01	.01	.00	0.	28 FEB 1515	58	.07	.00	.07	5.
28 FEB 0315	10	.01	.01	.00	0.	28 FEB 1530	59	.06	.00	.06	4.
28 FEB 0330	11	.02	.02	.00	0.	28 FEB 1545	60	.06	.00	.06	4.
28 FEB 0345	12	.02	.02	.00	0.	28 FEB 1600	61	.06	.00	.05	4.
28 FEB 0400	13	.02	.02	.00	0.	28 FEB 1615	62	.05	.00	.05	4.
28 FEB 0415	14	.02	.02	.00	0.	28 FEB 1630	63	.05	.00	.05	3.
28 FEB 0430	15	.02	.02	.00	0.	28 FEB 1645	64	.05	.00	.05	3.
28 FEB 0445	16	.02	.02	.00	0.	28 FEB 1700	65	.05	.00	.04	3.
28 FEB 0500	17	.02	.02	.00	0.	28 FEB 1715	66	.04	.00	.04	3.
28 FEB 0515	18	.02	.02	.00	0.	28 FEB 1730	67	.04	.00	.04	3.
28 FEB 0530	19	.02	.01	.00	0.	28 FEB 1745	68	.04	.00	.04	3.
28 FEB 0545	20	.02	.01	.00	0.	28 FEB 1800	69	.04	.00	.04	3.
28 FEB 0600	21	.02	.01	.00	0.	28 FEB 1815	70	.04	.00	.04	3.
28 FEB 0615	22	.02	.01	.01	0.	28 FEB 1830	71	.04	.00	.04	2.
28 FEB 0630	23	.02	.01	.01	0.	28 FEB 1845	72	.04	.00	.03	2.
28 FEB 0645	24	.02	.01	.01	0.	28 FEB 1900	73	.03	.00	.03	2.
28 FEB 0700	25	.02	.01	.01	0.	28 FEB 1915	74	.02	.00	.02	2.
28 FEB 0715	26	.03	.02	.01	1.	28 FEB 1930	75	.02	.00	.02	2.
28 FEB 0730	27	.03	.02	.01	1.	28 FEB 1945	76	.02	.00	.02	1.
28 FEB 0745	28	.04	.02	.02	1.	28 FEB 2000	77	.02	.00	.02	1.
28 FEB 0800	29	.04	.02	.02	1.	28 FEB 2015	78	.02	.00	.02	1.
28 FEB 0815	30	.04	.02	.02	1.	28 FEB 2030	79	.02	.00	.02	1.
28 FEB 0830	31	.04	.02	.02	1.	28 FEB 2045	80	.02	.00	.02	1.
28 FEB 0845	32	.04	.02	.02	1.	28 FEB 2100	81	.02	.00	.02	1.
28 FEB 0900	33	.04	.02	.03	2.	28 FEB 2115	82	.02	.00	.02	1.
28 FEB 0915	34	.04	.02	.03	2.	28 FEB 2130	83	.02	.00	.02	1.
28 FEB 0930	35	.05	.02	.03	2.	28 FEB 2145	84	.02	.00	.02	1.
28 FEB 0945	36	.05	.02	.03	2.	28 FEB 2200	85	.02	.00	.02	1.
28 FEB 1000	37	.05	.02	.04	2.	28 FEB 2215	86	.02	.00	.02	1.
28 FEB 1015	38	.05	.02	.04	2.	28 FEB 2230	87	.02	.00	.02	1.
28 FEB 1030	39	.06	.02	.04	3.	28 FEB 2245	88	.02	.00	.02	1.
28 FEB 1045	40	.06	.02	.05	3.	28 FEB 2300	89	.02	.00	.01	1.
28 FEB 1100	41	.07	.02	.05	3.	28 FEB 2315	90	.01	.00	.01	1.
28 FEB 1115	42	.07	.02	.06	4.	28 FEB 2330	91	.01	.00	.01	1.
28 FEB 1130	43	.08	.02	.06	4.	28 FEB 2345	92	.01	.00	.01	1.
28 FEB 1145	44	.09	.02	.07	4.	1 MAR 0000	93	.01	.00	.01	1.
28 FEB 1200	45	.10	.02	.09	5.	1 MAR 0015	94	.01	.00	.01	1.
28 FEB 1215	46	.13	.02	.11	6.	1 MAR 0030	95	.01	.00	.01	1.
28 FEB 1230	47	.16	.02	.14	8.	1 MAR 0045	96	.01	.00	.01	1.
28 FEB 1245	48	.25	.03	.22	11.	1 MAR 0100	97	.01	.00	.01	1.
28 FEB 1300	49	.54	.05	.49	22.						

TOTAL RAINFALL = 6.00, TOTAL LOSS = .93, TOTAL EXCESS = 5.07

PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW 6-HR (CFS)	24-HR	72-HR	24.00-HR
+					

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+     52.     12.25                  11.          4.          4.          4.
                        (INCHES)    3.873       5.053       5.053       5.053
                         (AC-FT)       5.          7.          7.          7.

                         CUMULATIVE AREA =     .03 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***


            **************
            *            *
 167 KK     *    10PCHL  *
            *            *
            **************

 168 KO          OUTPUT CONTROL VARIABLES
                       IPRNT           1  PRINT CONTROL
                       IPLOT           0  PLOT CONTROL
                       QSCAL          0.  HYDROGRAPH PLOT SCALE
                                STORAGE ROUTING THROUGH 10P CHANNEL

               HYDROGRAPH ROUTING DATA

 170 RS          STORAGE ROUTING
                       NSTPS           1  NUMBER OF SUBREACHES
                        ITYP        ELEV  TYPE OF INITIAL CONDITION
                      RSVRIC       59.90  INITIAL CONDITION
                           X         .00 WORKING R AND D COEFFICIENT

 171 SA               AREA          .0        .1        .1        .2        .2        .2

 172 SE          ELEVATION       59.90     61.00     63.00     65.00     67.00     67.70

 173 SL          LOW-LEVEL OUTLET
                       ELEVL       61.80  ELEVATION AT CENTER OF OUTLET
                       CAREA       12.57  CROSS-SECTIONAL AREA
                        COQL         .60  COEFFICIENT
                        EXPL         .50  EXPONENT OF HEAD

 174 SS          SPILLWAY
                        CREL       67.50  SPILLWAY CREST ELEVATION
                       SPWID       30.00  SPILLWAY WIDTH
                        COQW        3.00  WEIR COEFFICIENT
                        EXPW        1.50  EXPONENT OF HEAD

                                                        ***

                                          COMPUTED STORAGE-ELEVATION DATA

           STORAGE        .00       .03       .24       .54       .95      1.11
         ELEVATION      59.90     61.00     63.00     65.00     67.00     67.70

                                          COMPUTED OUTFLOW-ELEVATION DATA

           OUTFLOW        .00       .00     83.41     88.76     94.86    101.85    109.95    119.45    130.75    144.41
         ELEVATION      59.90     61.80     63.70     63.95     64.26     64.64     65.10     65.70     66.47     67.50

           OUTFLOW     144.82    145.15    145.63    146.28    147.12    148.17    149.45    151.00    152.83    154.97
         ELEVATION      67.52     67.53     67.54     67.56     67.57     67.59     67.62     67.64     67.67     67.70


                                    COMPUTED STORAGE-OUTFLOW-ELEVATION DATA
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STORAGE	.00	.03	.10	.24	.34	.37	.42	.48	.54	.56
OUTFLOW	.00	.00	.00	66.26	83.41	88.76	94.86	101.85	108.20	109.95
ELEVATION	59.90	61.00	61.80	63.00	63.70	63.95	64.26	64.64	65.00	65.10
STORAGE	.68	.83	.95	1.06	1.07	1.07	1.07	1.08	1.08	1.08
OUTFLOW	119.45	130.75	137.93	144.41	144.82	145.15	145.63	146.28	147.12	148.17
ELEVATION	65.70	66.47	67.00	67.50	67.52	67.53	67.54	67.56	67.57	67.59
STORAGE	1.09	1.10	1.10	1.11						
OUTFLOW	149.45	151.00	152.83	154.97						
ELEVATION	67.62	67.64	67.67	67.70						

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 0. TO 155.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

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HYDROGRAPH AT STATION 10PCHL

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DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE
28	FEB	0100	1	0.	.0	59.9	28	FEB	0915	34	4.	.1	61.9	28	FEB	1730	67	200.	1.3	68.3
28	FEB	0115	2	0.	.0	59.9	28	FEB	0930	35	4.	.1	61.9	28	FEB	1745	68	201.	1.3	68.4
28	FEB	0130	3	0.	.0	59.9	28	FEB	0945	36	5.	.1	61.9	28	FEB	1800	69	202.	1.3	68.4
28	FEB	0145	4	0.	.0	59.9	28	FEB	1000	37	6.	.1	61.9	28	FEB	1815	70	202.	1.3	68.4
28	FEB	0200	5	0.	.0	59.9	28	FEB	1015	38	7.	.1	61.9	28	FEB	1830	71	202.	1.3	68.4
28	FEB	0215	6	0.	.0	59.9	28	FEB	1030	39	9.	.1	62.0	28	FEB	1845	72	201.	1.3	68.4
28	FEB	0230	7	0.	.0	59.9	28	FEB	1045	40	12.	.1	62.0	28	FEB	1900	73	200.	1.3	68.3
28	FEB	0245	8	0.	.0	59.9	28	FEB	1100	41	15.	.1	62.1	28	FEB	1915	74	198.	1.3	68.3
[illegible]	FEB	0300	9	0.	.0	59.9	28	FEB	1115	42	19.	.1	62.1	28	FEB	1930	75	196.	1.2	68.3
[illegible]	FEB	0315	10	0.	.0	59.9	28	FEB	1130	43	24.	.2	62.2	28	FEB	1945	76	191.	1.2	68.2
28	FEB	0330	11	0.	.0	59.9	28	FEB	1145	44	27.	.2	62.3	28	FEB	2000	77	185.	1.2	68.1
28	FEB	0345	12	0.	.0	59.9	28	FEB	1200	45	30.	.2	62.3	28	FEB	2015	78	178.	1.2	68.0
28	FEB	0400	13	0.	.0	59.9	28	FEB	1215	46	34.	.2	62.4	28	FEB	2030	79	171.	1.2	67.9
28	FEB	0415	14	0.	.0	59.9	28	FEB	1230	47	40.	.2	62.5	28	FEB	2045	80	164.	1.1	67.8
28	FEB	0430	15	0.	.0	59.9	28	FEB	1245	48	49.	.2	62.7	28	FEB	2100	81	156.	1.1	67.7
28	FEB	0445	16	0.	.0	60.0	28	FEB	1300	49	70.	.3	63.2	28	FEB	2115	82	150.	1.1	67.6
28	FEB	0500	17	0.	.0	60.0	28	FEB	1315	50	110.	.6	65.1	28	FEB	2130	83	144.	1.1	67.5
28	FEB	0515	18	0.	.0	60.1	28	FEB	1330	51	138.	1.0	67.0	28	FEB	2145	84	140.	1.0	67.2
28	FEB	0530	19	0.	.0	60.2	28	FEB	1345	52	144.	1.1	67.5	28	FEB	2200	85	135.	.9	66.8
28	FEB	0545	20	0.	.0	60.5	28	FEB	1400	53	142.	1.0	67.4	28	FEB	2215	86	128.	.8	66.3
28	FEB	0600	21	0.	.0	60.9	28	FEB	1415	54	143.	1.0	67.4	28	FEB	2230	87	122.	.7	65.9
28	FEB	0615	22	0.	.0	61.1	28	FEB	1430	55	150.	1.1	67.6	28	FEB	2245	88	116.	.6	65.5
28	FEB	0630	23	0.	.1	61.3	28	FEB	1445	56	158.	1.1	67.7	28	FEB	2300	89	111.	.6	65.2
28	FEB	0645	24	0.	.1	61.5	28	FEB	1500	57	164.	1.1	67.8	28	FEB	2315	90	106.	.5	64.9
28	FEB	0700	25	0.	.1	61.7	28	FEB	1515	58	170.	1.2	67.9	28	FEB	2330	91	102.	.5	64.6
28	FEB	0715	26	1.	.1	61.8	28	FEB	1530	59	175.	1.2	68.0	28	FEB	2345	92	98.	.4	64.4
28	FEB	0730	27	2.	.1	61.8	28	FEB	1545	60	180.	1.2	68.1	1	MAR	0000	93	95.	.4	64.2
28	FEB	0745	28	2.	.1	61.8	28	FEB	1600	61	184.	1.2	68.1	1	MAR	0015	94	91.	.4	64.1
28	FEB	0800	29	2.	.1	61.8	28	FEB	1615	62	188.	1.2	68.2	1	MAR	0030	95	88.	.4	63.9
28	FEB	0815	30	2.	.1	61.8	28	FEB	1630	63	192.	1.2	68.2	1	MAR	0045	96	85.	.3	63.8
28	FEB	0830	31	3.	.1	61.9	28	FEB	1645	64	194.	1.2	68.3	1	MAR	0100	97	82.	.3	63.7
28	FEB	0845	32	3.	.1	61.9	28	FEB	1700	65	197.	1.3	68.3							
28	FEB	0900	33	3.	.1	61.9	28	FEB	1715	66	199.	1.3	68.3							

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PEAK FLOW (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	24.00-HR
		(CFS)				
202.	17.25		189.	81.	81.	81.
		(INCHES)	1.214	2.091	2.091	2.091

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                    (AC-FT)       94.        161.        161.        161.

 PEAK STORAGE   TIME                        MAXIMUM AVERAGE STORAGE
                                    6-HR       24-HR       72-HR     24.00-HR
+  (AC-FT)      (HR)
       1.     17.25                   1.          1.          1.          1.

  PEAK STAGE    TIME                        MAXIMUM AVERAGE STAGE
                                    6-HR       24-HR       72-HR     24.00-HR
+   (FEET)      (HR)
    68.37     17.25                68.18       64.10       64.10       64.10

                    CUMULATIVE AREA =    1.45 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***


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          *            *
 175 KK   *    16&17P  *
          *            *
          **************

 176 KO         OUTPUT CONTROL VARIABLES
                     IPRNT           1  PRINT CONTROL
                     IPLOT           0  PLOT CONTROL
                     QSCAL          0.  HYDROGRAPH PLOT SCALE
                              SCS RUNOFF CALCULATION - 16P & 17P

             SUBBASIN RUNOFF DATA

 178 BA         SUBBASIN CHARACTERISTICS
                     TAREA         .02  SUBBASIN AREA

                PRECIPITATION DATA

 179 PH                              DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
                ..... HYDRO-35 ......   ............... TP-40 ...............   ........... TP-49 ...........
                5-MIN  15-MIN  60-MIN    2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                  .60    1.30    2.40    3.00    3.40    4.20    5.20    6.00     .00     .00     .00     .00

                                                  STORM AREA =     .02

 180 LS         SCS LOSS RATE
                     STRTL         .30  INITIAL ABSTRACTION
                    CRVNBR       87.00  CURVE NUMBER
                     RTIMP         .00  PERCENT IMPERVIOUS AREA

 181 UD         SCS DIMENSIONLESS UNITGRAPH
                      TLAG         .07  LAG

                                                          ***

WARNING *** TIME INTERVAL IS GREATER THAN .29*LAG

                                                     UNIT HYDROGRAPH
                                                  5 END-OF-PERIOD ORDINATES
              33.        9.        2.        0.        0.

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                                              HYDROGRAPH AT STATION   16&17P
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DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
28 FEB 0100	1	.00	.00	.00	0.	28 FEB 1315	50	1.30	.15	1.15	42.
28 FEB 0115	2	.01	.01	.00	0.	28 FEB 1330	51	.31	.03	.28	21.
28 FEB 0130	3	.01	.01	.00	0.	28 FEB 1345	52	.18	.01	.17	10.
28 FEB 0145	4	.01	.01	.00	0.	28 FEB 1400	53	.14	.01	.13	7.
28 FEB 0200	5	.01	.01	.00	0.	28 FEB 1415	54	.11	.01	.10	5.
28 FEB 0215	6	.01	.01	.00	0.	28 FEB 1430	55	.10	.01	.09	4.
28 FEB 0230	7	.01	.01	.00	0.	28 FEB 1445	56	.08	.01	.08	4.
28 FEB 0245	8	.01	.01	.00	0.	28 FEB 1500	57	.08	.00	.07	3.
28 FEB 0300	9	.01	.01	.00	0.	28 FEB 1515	58	.07	.00	.07	3.
28 FEB 0315	10	.01	.01	.00	0.	28 FEB 1530	59	.06	.00	.06	3.
28 FEB 0330	11	.02	.02	.00	0.	28 FEB 1545	60	.06	.00	.06	3.
28 FEB 0345	12	.02	.02	.00	0.	28 FEB 1600	61	.06	.00	.05	2.
28 FEB 0400	13	.02	.02	.00	0.	28 FEB 1615	62	.05	.00	.05	2.
28 FEB 0415	14	.02	.02	.00	0.	28 FEB 1630	63	.05	.00	.05	2.
28 FEB 0430	15	.02	.02	.00	0.	28 FEB 1645	64	.05	.00	.05	2.
28 FEB 0445	16	.02	.02	.00	0.	28 FEB 1700	65	.05	.00	.04	2.
28 FEB 0500	17	.02	.02	.00	0.	28 FEB 1715	66	.04	.00	.04	2.
28 FEB 0515	18	.02	.02	.00	0.	28 FEB 1730	67	.04	.00	.04	2.
28 FEB 0530	19	.02	.02	.00	0.	28 FEB 1745	68	.04	.00	.04	2.
28 FEB 0545	20	.02	.02	.00	0.	28 FEB 1800	69	.04	.00	.04	2.
28 FEB 0600	21	.02	.02	.00	0.	28 FEB 1815	70	.04	.00	.04	2.
28 FEB 0615	22	.02	.02	.00	0.	28 FEB 1830	71	.04	.00	.03	2.
28 FEB 0630	23	.02	.02	.00	0.	28 FEB 1845	72	.04	.00	.03	1.
28 FEB 0645	24	.02	.02	.00	0.	28 FEB 1900	73	.03	.00	.03	1.
28 FEB 0700	25	.02	.02	.00	0.	28 FEB 1915	74	.02	.00	.02	1.
28 FEB 0715	26	.03	.03	.00	0.	28 FEB 1930	75	.02	.00	.02	1.
28 FEB 0730	27	.03	.03	.01	0.	28 FEB 1945	76	.02	.00	.02	1.
28 FEB 0745	28	.04	.03	.01	0.	28 FEB 2000	77	.02	.00	.02	1.
28 FEB 0800	29	.04	.03	.01	0.	28 FEB 2015	78	.02	.00	.02	1.
28 FEB 0815	30	.04	.03	.01	0.	28 FEB 2030	79	.02	.00	.02	1.
28 FEB 0830	31	.04	.03	.01	1.	28 FEB 2045	80	.02	.00	.02	1.
28 FEB 0845	32	.04	.03	.01	1.	28 FEB 2100	81	.02	.00	.02	1.
28 FEB 0900	33	.04	.03	.02	1.	28 FEB 2115	82	.02	.00	.02	1.
28 FEB 0915	34	.04	.03	.02	1.	28 FEB 2130	83	.02	.00	.02	1.
28 FEB 0930	35	.05	.03	.02	1.	28 FEB 2145	84	.02	.00	.02	1.
28 FEB 0945	36	.05	.03	.02	1.	28 FEB 2200	85	.02	.00	.02	1.
28 FEB 1000	37	.05	.03	.02	1.	28 FEB 2215	86	.02	.00	.02	1.
28 FEB 1015	38	.05	.03	.03	1.	28 FEB 2230	87	.02	.00	.02	1.
28 FEB 1030	39	.06	.03	.03	1.	28 FEB 2245	88	.02	.00	.01	1.
28 FEB 1045	40	.06	.03	.03	1.	28 FEB 2300	89	.02	.00	.01	1.
28 FEB 1100	41	.07	.03	.04	2.	28 FEB 2315	90	.01	.00	.01	1.
28 FEB 1115	42	.07	.03	.04	2.	28 FEB 2330	91	.01	.00	.01	1.
28 FEB 1130	43	.08	.03	.05	2.	28 FEB 2345	92	.01	.00	.01	1.
28 FEB 1145	44	.09	.03	.06	2.	1 MAR 0000	93	.01	.00	.01	1.
28 FEB 1200	45	.10	.03	.07	3.	1 MAR 0015	94	.01	.00	.01	1.
28 FEB 1215	46	.13	.04	.09	4.	1 MAR 0030	95	.01	.00	.01	1.
28 FEB 1230	47	.16	.04	.11	5.	1 MAR 0045	96	.01	.00	.01	1.
28 FEB 1245	48	.25	.06	.19	7.	1 MAR 0100	97	.01	.00	.01	1.
28 FEB 1300	49	.54	.10	.44	16.						

TOTAL RAINFALL = 6.00, TOTAL LOSS = 1.48, TOTAL EXCESS = 4.52

PEAK FLOW (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	24.00-HR
		(CFS)				
42.	12.25		6.	2.	2.	2.
		(INCHES)	3.540	4.507	4.507	4.507
		(AC-FT)	3.	4.	4.	4.

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                    CUMULATIVE AREA =     .02 SQ MI


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          *            *
182 KK    *    1617PD  *
          *            *
          **************

183 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           1  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                               STORAGE ROUTING THROUGH 16P & 17P

             HYDROGRAPH ROUTING DATA

185 RS          STORAGE ROUTING
                      NSTPS           1  NUMBER OF SUBREACHES
                       ITYP        ELEV  TYPE OF INITIAL CONDITION
                     RSVRIC       59.10  INITIAL CONDITION
                          X         .00 WORKING R AND D COEFFICIENT

186 SA               AREA          .2        .5       1.7

187 SE          ELEVATION       63.50     65.70     66.00

188 SS          SPILLWAY
                       CREL       65.90  SPILLWAY CREST ELEVATION
                      SPWID       40.00  SPILLWAY WIDTH
                       COQW        3.00  WEIR COEFFICIENT
                       EXPW        1.50  EXPONENT OF HEAD

                                                          ***

                                          COMPUTED STORAGE-ELEVATION DATA

          STORAGE        .00       .77      1.08
        ELEVATION      63.50     65.70     66.00

                                          COMPUTED OUTFLOW-ELEVATION DATA

          OUTFLOW        .00       .00       .00       .01       .02       .04       .08       .14       .22       .33
        ELEVATION      63.50     65.90     65.90     65.90     65.90     65.90     65.91     65.91     65.92     65.92

          OUTFLOW        .47       .65       .87      1.12      1.43      1.79      2.20      2.67      3.20      3.79
        ELEVATION      65.93     65.93     65.94     65.94     65.95     65.96     65.97     65.98     65.99     66.00


                                       COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

          STORAGE        .00       .77       .93       .94       .96       .98      1.00      1.03      1.06      1.08
          OUTFLOW        .00       .00       .00       .14       .47       .87      1.43      2.20      3.20      3.79
        ELEVATION      63.50     65.70     65.90     65.91     65.93     65.94     65.95     65.97     65.99     66.00

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                                          HYDROGRAPH AT STATION   1617PD

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DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE
28	FEB	0100	1	0.	.0	63.5	28	FEB	0915	34	0.	.1	63.7	28	FEB	1730	67	2.	1.0	66.0
[illegible]	FEB	0115	2	0.	.0	63.5	28	FEB	0930	35	0.	.1	63.8	28	FEB	1745	68	2.	1.0	66.0
	FEB	0130	3	0.	.0	63.5	28	FEB	0945	36	0.	.1	63.8	28	FEB	1800	69	2.	1.0	66.0
28	FEB	0145	4	0.	.0	63.5	28	FEB	1000	37	0.	.1	63.9	28	FEB	1815	70	2.	1.0	66.0
28	FEB	0200	5	0.	.0	63.5	28	FEB	1015	38	0.	.2	64.0	28	FEB	1830	71	2.	1.0	66.0
28	FEB	0215	6	0.	.0	63.5	28	FEB	1030	39	0.	.2	64.0	28	FEB	1845	72	2.	1.0	66.0
28	FEB	0230	7	0.	.0	63.5	28	FEB	1045	40	0.	.2	64.1	28	FEB	1900	73	2.	1.0	66.0
28	FEB	0245	8	0.	.0	63.5	28	FEB	1100	41	0.	.2	64.2	28	FEB	1915	74	1.	1.0	66.0
28	FEB	0300	9	0.	.0	63.5	28	FEB	1115	42	0.	.3	64.3	28	FEB	1930	75	1.	1.0	65.9
28	FEB	0315	10	0.	.0	63.5	28	FEB	1130	43	0.	.3	64.4	28	FEB	1945	76	1.	1.0	65.9
28	FEB	0330	11	0.	.0	63.5	28	FEB	1145	44	0.	.4	64.6	28	FEB	2000	77	1.	1.0	65.9
28	FEB	0345	12	0.	.0	63.5	28	FEB	1200	45	0.	.4	64.7	28	FEB	2015	78	1.	1.0	65.9
28	FEB	0400	13	0.	.0	63.5	28	FEB	1215	46	0.	.5	64.9	28	FEB	2030	79	1.	1.0	65.9
28	FEB	0415	14	0.	.0	63.5	28	FEB	1230	47	0.	.6	65.2	28	FEB	2045	80	1.	1.0	65.9
28	FEB	0430	15	0.	.0	63.5	28	FEB	1245	48	0.	.7	65.5	28	FEB	2100	81	1.	1.0	65.9
28	FEB	0445	16	0.	.0	63.5	28	FEB	1300	49	0.	.9	65.9	28	FEB	2115	82	1.	1.0	65.9
28	FEB	0500	17	0.	.0	63.5	28	FEB	1315	50	14.	1.4	66.2	28	FEB	2130	83	1.	1.0	65.9
28	FEB	0515	18	0.	.0	63.5	28	FEB	1330	51	23.	1.7	66.3	28	FEB	2145	84	1.	1.0	65.9
28	FEB	0530	19	0.	.0	63.5	28	FEB	1345	52	19.	1.5	66.3	28	FEB	2200	85	1.	1.0	65.9
28	FEB	0545	20	0.	.0	63.5	28	FEB	1400	53	14.	1.4	66.2	28	FEB	2215	86	1.	1.0	65.9
28	FEB	0600	21	0.	.0	63.5	28	FEB	1415	54	10.	1.3	66.1	28	FEB	2230	87	1.	1.0	65.9
28	FEB	0615	22	0.	.0	63.5	28	FEB	1430	55	7.	1.2	66.1	28	FEB	2245	88	1.	1.0	65.9
28	FEB	0630	23	0.	.0	63.5	28	FEB	1445	56	5.	1.1	66.0	28	FEB	2300	89	1.	1.0	65.9
28	FEB	0645	24	0.	.0	63.5	28	FEB	1500	57	4.	1.1	66.0	28	FEB	2315	90	1.	1.0	65.9
28	FEB	0700	25	0.	.0	63.5	28	FEB	1515	58	4.	1.1	66.0	28	FEB	2330	91	1.	1.0	65.9
28	FEB	0715	26	0.	.0	63.5	28	FEB	1530	59	3.	1.1	66.0	28	FEB	2345	92	1.	1.0	65.9
28	FEB	0730	27	0.	.0	63.5	28	FEB	1545	60	3.	1.0	66.0	1	MAR	0000	93	1.	1.0	65.9
28	FEB	0745	28	0.	.0	63.5	28	FEB	1600	61	3.	1.0	66.0	1	MAR	0015	94	1.	1.0	65.9
28	FEB	0800	29	0.	.0	63.6	28	FEB	1615	62	3.	1.0	66.0	1	MAR	0030	95	1.	1.0	65.9
[illegible]	FEB	0815	30	0.	.0	63.6	28	FEB	1630	63	2.	1.0	66.0	1	MAR	0045	96	1.	1.0	65.9
	FEB	0830	31	0.	.0	63.6	28	FEB	1645	64	2.	1.0	66.0	1	MAR	0100	97	1.	1.0	65.9
28	FEB	0845	32	0.	.1	63.7	28	FEB	1700	65	2.	1.0	66.0							
28	FEB	0900	33	0.	.1	63.7	28	FEB	1715	66	2.	1.0	66.0							

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PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.00-HR
+ (CFS)	(HR)					
		(CFS)				
+ 23.	12.50		5.	2.	2.	2.
		(INCHES)	2.998	3.441	3.441	3.441
		(AC-FT)	3.	3.	3.	3.

PEAK STORAGE	TIME	MAXIMUM AVERAGE STORAGE			
		6-HR	24-HR	72-HR	24.00-HR
+ (AC-FT)	(HR)				
2.	12.50	1.	1.	1.	1.

PEAK STAGE	TIME	MAXIMUM AVERAGE STAGE			
		6-HR	24-HR	72-HR	24.00-HR
+ (FEET)	(HR)				
66.34	12.50	66.03	64.89	64.89	64.89

CUMULATIVE AREA = .02 SQ MI

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          *           *
192 KK    *   1617CH  *
          *           *
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193 KO        OUTPUT CONTROL VARIABLES
                    IPRNT          1  PRINT CONTROL
                    IPLOT          0  PLOT CONTROL
                    QSCAL         0.  HYDROGRAPH PLOT SCALE
                            STORAGE ROUTING THROUGH COMMERCE WAY at 16P & 17P

            HYDROGRAPH ROUTING DATA

195 RS        STORAGE ROUTING
                    NSTPS          1  NUMBER OF SUBREACHES
                     ITYP       ELEV  TYPE OF INITIAL CONDITION
                   RSVRIC      59.10  INITIAL CONDITION
                        X        .00 WORKING R AND D COEFFICIENT

196 SA            AREA          .0        .0        .1        .1        .1

197 SE        ELEVATION      59.10     60.00     62.00     64.00     66.00

198 SL        LOW-LEVEL OUTLET
                    ELEVL      61.40  ELEVATION AT CENTER OF OUTLET
                    CAREA      12.57  CROSS-SECTIONAL AREA
                     COQL        .60  COEFFICIENT
                     EXPL        .50  EXPONENT OF HEAD

199 SS        SPILLWAY
                     CREL      65.90  SPILLWAY CREST ELEVATION
                    SPWID        .00  SPILLWAY WIDTH
                     COQW        .00  WEIR COEFFICIENT
                     EXPW       1.50  EXPONENT OF HEAD

                                                    ***

                                        COMPUTED STORAGE-ELEVATION DATA

          STORAGE        .00       .01       .11       .26       .48
        ELEVATION      59.10     60.00     62.00     64.00     66.00

                                        COMPUTED OUTFLOW-ELEVATION DATA

          OUTFLOW        .00       .00     82.66     87.08     92.01     97.53    103.75    110.82    118.93    128.31
        ELEVATION      59.10     61.40     63.27     63.47     63.71     64.00     64.34     64.76     65.27     65.90


                                      COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

          STORAGE        .00       .01       .07       .11       .20       .22       .24       .26       .30       .34
          OUTFLOW        .00       .00       .00     46.85     82.66     87.08     92.01     97.53    103.75    110.82
        ELEVATION      59.10     60.00     61.40     62.00     63.27     63.47     63.71     64.00     64.34     64.76

          STORAGE        .39       .47       .48
          OUTFLOW     118.93    128.31    129.73
        ELEVATION      65.27     65.90     66.00

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN        0. TO      130.
               THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
               THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

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                                        HYDROGRAPH AT STATION   1617CH
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DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE
[illegible]	FEB	0100	1	0.	.0	59.1	28	FEB	[illegible]	34	3.	.1	61.4	28	FEB	1730	67	201.	1.1	71.1
	FEB	0115	2	0.	.0	59.1	28	FEB	[illegible]	35	5.	.1	61.5	28	FEB	1745	68	202.	1.1	71.1
28	FEB	0130	3	0.	.0	59.1	28	FEB	0945	36	4.	.1	61.5	28	FEB	1800	69	203.	1.1	71.2
28	FEB	0145	4	0.	.0	59.1	28	FEB	1000	37	6.	.1	61.5	28	FEB	1815	70	204.	1.1	71.2
28	FEB	0200	5	0.	.0	59.1	28	FEB	1015	38	7.	.1	61.5	28	FEB	1830	71	204.	1.1	71.2
28	FEB	0215	6	0.	.0	59.1	28	FEB	1030	39	9.	.1	61.5	28	FEB	1845	72	203.	1.1	71.2
28	FEB	0230	7	0.	.0	59.1	28	FEB	1045	40	11.	.1	61.5	28	FEB	1900	73	202.	1.1	71.1
28	FEB	0245	8	0.	.0	59.1	28	FEB	1100	41	15.	.1	61.6	28	FEB	1915	74	201.	1.1	71.0
28	FEB	0300	9	0.	.0	59.1	28	FEB	1115	42	19.	.1	61.6	28	FEB	1930	75	198.	1.1	70.8
28	FEB	0315	10	0.	.0	59.1	28	FEB	1130	43	24.	.1	61.7	28	FEB	1945	76	194.	1.0	70.5
28	FEB	0330	11	0.	.0	59.1	28	FEB	1145	44	27.	.1	61.7	28	FEB	2000	77	189.	1.0	70.2
28	FEB	0345	12	0.	.0	59.1	28	FEB	1200	45	30.	.1	61.8	28	FEB	2015	78	182.	.9	69.7
28	FEB	0400	13	0.	.0	59.1	28	FEB	1215	46	34.	.1	61.8	28	FEB	2030	79	175.	.9	69.2
28	FEB	0415	14	0.	.0	59.1	28	FEB	1230	47	40.	.1	61.9	28	FEB	2045	80	167.	.8	68.7
28	FEB	0430	15	0.	.0	59.1	28	FEB	1245	48	48.	.1	62.1	28	FEB	2100	81	160.	.7	68.2
28	FEB	0445	16	0.	.0	59.1	28	FEB	1300	49	67.	.2	62.7	28	FEB	2115	82	153.	.7	67.7
28	FEB	0500	17	0.	.0	59.1	28	FEB	1315	50	111.	.3	64.8	28	FEB	2130	83	147.	.6	67.2
28	FEB	0515	18	0.	.0	59.1	28	FEB	1330	51	147.	.6	67.2	28	FEB	2145	84	143.	.6	66.9
28	FEB	0530	19	0.	.0	59.1	28	FEB	1345	52	164.	.8	68.4	28	FEB	2200	85	138.	.6	66.6
28	FEB	0545	20	0.	.0	59.1	28	FEB	1400	53	159.	.7	68.1	28	FEB	2215	86	132.	.5	66.1
28	FEB	0600	21	0.	.0	59.1	28	FEB	1415	54	154.	.7	67.7	28	FEB	2230	87	125.	.4	65.7
28	FEB	0615	22	0.	.0	59.1	28	FEB	1430	55	155.	.7	67.8	28	FEB	2245	88	119.	.4	65.3
28	FEB	0630	23	0.	.0	59.1	28	FEB	1445	56	161.	.7	68.2	28	FEB	2300	89	114.	.4	64.9
28	FEB	0645	24	0.	.0	59.1	28	FEB	1500	57	166.	.8	68.6	28	FEB	2315	90	108.	.3	64.6
28	FEB	0700	25	0.	.0	59.1	28	FEB	1515	58	171.	.8	68.9	28	FEB	2330	91	104.	.3	64.3
28	FEB	0715	26	0.	.0	60.1	28	FEB	1530	59	177.	.9	69.3	28	FEB	2345	92	100.	.3	64.1
28	FEB	0730	27	0.	.0	60.8	28	FEB	1545	60	181.	.9	69.6	1	MAR	0000	93	96.	.3	63.9
28	FEB	0745	28	1.	.1	61.4	28	FEB	1600	61	186.	1.0	69.9	1	MAR	0015	94	93.	.2	63.7
[illegible]	FEB	0800	29	3.	.1	61.4	28	FEB	1615	62	189.	1.0	70.2	1	MAR	0030	95	89.	.2	63.6
	FEB	0815	30	2.	.1	61.4	28	FEB	1630	63	193.	1.0	70.4	1	MAR	0045	96	86.	.2	63.4
28	FEB	0830	31	3.	.1	61.4	28	FEB	1645	64	195.	1.0	70.6	1	MAR	0100	97	83.	.2	63.3
28	FEB	0845	32	2.	.1	61.4	28	FEB	1700	65	198.	1.1	70.8							
28	FEB	0900	33	4.	.1	61.5	28	FEB	1715	66	200.	1.1	70.9							

PEAK FLOW (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	24.00-HR
		(CFS)				
204.	17.50		191.	83.	83.	83.
		(INCHES)	1.212	2.104	2.104	2.104
		(AC-FT)	95.	164.	164.	164.

PEAK STORAGE (AC-FT)	TIME (HR)	MAXIMUM AVERAGE STORAGE 6-HR	24-HR	72-HR	24.00-HR
1.	17.25	1.	0.	0.	0.

PEAK STAGE (FEET)	TIME (HR)	MAXIMUM AVERAGE STAGE 6-HR	24-HR	72-HR	24.00-HR
71.21	17.50	70.31	64.19	64.19	64.19

CUMULATIVE AREA = 1.46 SQ MI

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          **************
          *            *
200 KK    *    11PCHL  *
          *            *
          **************

201 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           1  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                               STORAGE ROUTING THROUGH COMMERCE WAY AT 11P

             HYDROGRAPH ROUTING DATA

203 RS          STORAGE ROUTING
                      NSTPS           1  NUMBER OF SUBREACHES
                       ITYP        ELEV  TYPE OF INITIAL CONDITION
                     RSVRIC       57.80  INITIAL CONDITION
                          X         .00 WORKING R AND D COEFFICIENT

204 SA               AREA          .0        .0        .1        .1        .1        .1

205 SE          ELEVATION       57.80     59.00     61.00     63.00     65.00     66.80

206 SL          LOW-LEVEL OUTLET
                      ELEVL       59.00  ELEVATION AT CENTER OF OUTLET
                      CAREA       12.57  CROSS-SECTIONAL AREA
                       COQL         .60  COEFFICIENT
                       EXPL         .50  EXPONENT OF HEAD

207 SS          SPILLWAY
                       CREL       66.70  SPILLWAY CREST ELEVATION
                      SPWID         .00  SPILLWAY WIDTH
                       COQW         .00  WEIR COEFFICIENT
                       EXPW        1.50  EXPONENT OF HEAD

                                                    ***

                                          COMPUTED STORAGE-ELEVATION DATA

          STORAGE        .00       .02       .13       .29       .48       .70
        ELEVATION      57.80     59.00     61.00     63.00     65.00     66.80

                                          COMPUTED OUTFLOW-ELEVATION DATA

          OUTFLOW        .00       .00     84.26     90.71     98.23    107.12    117.77    130.78    147.01    167.84
        ELEVATION      57.80     59.00     60.94     61.25     61.64     62.14     62.79     63.67     64.91     66.70


                                        COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

          STORAGE        .00       .02       .13       .13       .15       .18       .21       .27       .29       .35
          OUTFLOW        .00       .00     84.26     85.54     90.71     98.23    107.12    117.77    120.97    130.78
        ELEVATION      57.80     59.00     60.94     61.00     61.25     61.64     62.14     62.79     63.00     63.67

          STORAGE        .47       .48       .69       .70
          OUTFLOW     147.01    148.16    167.84    168.93
        ELEVATION      64.91     65.00     66.70     66.80

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN        0. TO      168.
               THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
               THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

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                                          HYDROGRAPH AT STATION   11PCHL
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DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE
	FEB	0100	1	0.	.0	57.8	28	FEB	0915	34	4.	.0	59.1	28	FEB	1730	67	200.	1.1	69.7
28	FEB	0115	2	0.	.0	57.8	28	FEB	0930	35	4.	.0	59.1	28	FEB	1745	68	202.	1.1	69.8
28	FEB	0130	3	0.	.0	57.8	28	FEB	0945	36	5.	.0	59.1	28	FEB	1800	69	203.	1.1	69.9
28	FEB	0145	4	0.	.0	57.8	28	FEB	1000	37	5.	.0	59.1	28	FEB	1815	70	203.	1.1	70.0
28	FEB	0200	5	0.	.0	57.8	28	FEB	1015	38	7.	.0	59.2	28	FEB	1830	71	204.	1.1	70.0
28	FEB	0215	6	0.	.0	57.8	28	FEB	1030	39	9.	.0	59.2	28	FEB	1845	72	203.	1.1	70.0
28	FEB	0230	7	0.	.0	57.8	28	FEB	1045	40	12.	.0	59.3	28	FEB	1900	73	203.	1.1	69.9
28	FEB	0245	8	0.	.0	57.8	28	FEB	1100	41	15.	.0	59.3	28	FEB	1915	74	202.	1.1	69.8
28	FEB	0300	9	0.	.0	57.8	28	FEB	1115	42	19.	.0	59.4	28	FEB	1930	75	200.	1.1	69.6
28	FEB	0315	10	0.	.0	57.8	28	FEB	1130	43	23.	.0	59.5	28	FEB	1945	76	196.	1.0	69.3
28	FEB	0330	11	0.	.0	57.8	28	FEB	1145	44	27.	.1	59.6	28	FEB	2000	77	192.	1.0	68.9
28	FEB	0345	12	0.	.0	57.8	28	FEB	1200	45	29.	.1	59.7	28	FEB	2015	78	186.	.9	68.3
28	FEB	0400	13	0.	.0	57.8	28	FEB	1215	46	34.	.1	59.8	28	FEB	2030	79	179.	.8	67.7
28	FEB	0415	14	0.	.0	57.8	28	FEB	1230	47	39.	.1	59.9	28	FEB	2045	80	172.	.7	67.0
28	FEB	0430	15	0.	.0	57.8	28	FEB	1245	48	48.	.1	60.1	28	FEB	2100	81	164.	.6	66.4
28	FEB	0445	16	0.	.0	57.8	28	FEB	1300	49	65.	.1	60.5	28	FEB	2115	82	157.	.6	65.7
28	FEB	0500	17	0.	.0	57.8	28	FEB	1315	50	103.	.2	61.9	28	FEB	2130	83	150.	.5	65.2
28	FEB	0515	18	0.	.0	57.8	28	FEB	1330	51	136.	.4	64.1	28	FEB	2145	84	145.	.5	64.7
28	FEB	0530	19	0.	.0	57.8	28	FEB	1345	52	157.	.6	65.7	28	FEB	2200	85	140.	.4	64.4
28	FEB	0545	20	0.	.0	57.8	28	FEB	1400	53	161.	.6	66.2	28	FEB	2215	86	134.	.4	63.9
28	FEB	0600	21	0.	.0	57.8	28	FEB	1415	54	157.	.6	65.7	28	FEB	2230	87	127.	.3	63.4
28	FEB	0615	22	0.	.0	57.8	28	FEB	1430	55	155.	.6	65.6	28	FEB	2245	88	121.	.3	63.0
28	FEB	0630	23	0.	.0	57.8	28	FEB	1445	56	158.	.6	65.8	28	FEB	2300	89	115.	.3	62.6
28	FEB	0645	24	0.	.0	57.8	28	FEB	1500	57	163.	.6	66.3	28	FEB	2315	90	110.	.2	62.3
28	FEB	0700	25	0.	.0	57.8	28	FEB	1515	58	169.	.7	66.8	28	FEB	2330	91	105.	.2	62.0
28	FEB	0715	26	0.	.0	57.8	28	FEB	1530	59	174.	.8	67.2	28	FEB	2345	92	101.	.2	61.8
28	FEB	0730	27	0.	.0	57.8	28	FEB	1545	60	179.	.8	67.7	1	MAR	0000	93	97.	.2	61.6
28	FEB	0745	28	0.	.0	58.3	28	FEB	1600	61	183.	.9	68.1	1	MAR	0015	94	93.	.2	61.4
	FEB	0800	29	2.	.0	59.1	28	FEB	1615	62	187.	.9	68.5	1	MAR	0030	95	90.	.1	61.2
28	FEB	0815	30	2.	.0	59.1	28	FEB	1630	63	191.	1.0	68.8	1	MAR	0045	96	87.	.1	61.1
28	FEB	0830	31	3.	.0	59.1	28	FEB	1645	64	194.	1.0	69.1	1	MAR	0100	97	84.	.1	60.9
28	FEB	0845	32	3.	.0	59.1	28	FEB	1700	65	196.	1.0	69.3							
28	FEB	0900	33	3.	.0	59.1	28	FEB	1715	66	199.	1.0	69.5							

PEAK FLOW (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	24.00-HR
		(CFS)				
204.	17.50		191.	83.	83.	83.
		(INCHES)	1.212	2.102	2.102	2.102
		(AC-FT)	95.	164.	164.	164.

PEAK STORAGE (AC-FT)	TIME (HR)	MAXIMUM AVERAGE STORAGE 6-HR	24-HR	72-HR	24.00-HR
1.	17.50	1.	0.	0.	0.

PEAK STAGE (FEET)	TIME (HR)	MAXIMUM AVERAGE STAGE 6-HR	24-HR	72-HR	24.00-HR
69.99	17.50	68.81	62.34	62.34	62.34

CUMULATIVE AREA = 1.46 SQ MI

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          **************
          *            *
208 KK    *      21P   *
          *            *
          **************

209 KO          OUTPUT CONTROL VARIABLES
                     IPRNT           1  PRINT CONTROL
                     IPLOT           0  PLOT CONTROL
                     QSCAL          0.  HYDROGRAPH PLOT SCALE
                              SCS RUNOFF CALCULATION

              SUBBASIN RUNOFF DATA

211 BA          SUBBASIN CHARACTERISTICS
                     TAREA         .01  SUBBASIN AREA

                PRECIPITATION DATA

212 PH                                DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
                ..... HYDRO-35 ......   ............... TP-40 ...............   ........... TP-49 ...........
                5-MIN  15-MIN  60-MIN    2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                  .60    1.30    2.40    3.00    3.40    4.20    5.20    6.00     .00     .00     .00     .00

                                                  STORM AREA =     .01

213 LS          SCS LOSS RATE
                     STRTL         .74  INITIAL ABSTRACTION
                    CRVNBR       73.00  CURVE NUMBER
                     RTIMP         .00  PERCENT IMPERVIOUS AREA

214 UD          SCS DIMENSIONLESS UNITGRAPH
                      TLAG         .25  LAG

                                                          ***

WARNING *** TIME INTERVAL IS GREATER THAN .29*LAG

                                                     UNIT HYDROGRAPH
                                                  7 END-OF-PERIOD ORDINATES
              14.       15.        5.        2.        1.        0.        0.

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                                              HYDROGRAPH AT STATION      21P

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                                                                  *
      DA MON HRMN  ORD    RAIN    LOSS  EXCESS     COMP Q        *      DA MON HRMN  ORD    RAIN    LOSS  EXCESS     COMP Q
                                                                  *
      28 FEB 0100    1     .00     .00     .00         0.        *      28 FEB 1315   50    1.30     .47     .83        16.
      28 FEB 0115    2     .01     .01     .00         0.        *      28 FEB 1330   51     .31     .09     .22        17.
      28 FEB 0130    3     .01     .01     .00         0.        *      28 FEB 1345   52     .18     .05     .13        10.
      28 FEB 0145    4     .01     .01     .00         0.        *      28 FEB 1400   53     .14     .04     .10         6.
      28 FEB 0200    5     .01     .01     .00         0.        *      28 FEB 1415   54     .11     .03     .08         4.
      28 FEB 0215    6     .01     .01     .00         0.        *      28 FEB 1430   55     .10     .02     .07         3.
      28 FEB 0230    7     .01     .01     .00         0.        *      28 FEB 1445   56     .08     .02     .06         3.
      28 FEB 0245    8     .01     .01     .00         0.        *      28 FEB 1500   57     .08     .02     .06         2.
      28 FEB 0300    9     .01     .01     .00         0.        *      28 FEB 1515   58     .07     .02     .05         2.
      28 FEB 0315   10     .01     .01     .00         0.        *      28 FEB 1530   59     .06     .01     .05         2.
      28 FEB 0330   11     .02     .02     .00         0.        *      28 FEB 1545   60     .06     .01     .05         2.
      28 FEB 0345   12     .02     .02     .00         0.        *      28 FEB 1600   61     .06     .01     .04         2.
      28 FEB 0400   13     .02     .02     .00         0.        *      28 FEB 1615   62     .05     .01     .04         2.
      28 FEB 0415   14     .02     .02     .00         0.        *      28 FEB 1630   63     .05     .01     .04         2.
      28 FEB 0430   15     .02     .02     .00         0.        *      28 FEB 1645   64     .05     .01     .04         1.
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28 FEB 0445	16	.02	.02	.00	0.	*	28 FEB 1700	65	.05	.01	.04	1.
28 FEB 0500	17	.02	.02	.00	0.	*	28 FEB 1715	66	.04	.01	.03	1.
28 FEB 0515	18	.02	.02	.00	0.	*	28 FEB 1730	67	.04	.01	.03	1.
28 FEB 0530	19	.02	.02	.00	0.	*	28 FEB 1745	68	.04	.01	.03	1.
28 FEB 0545	20	.02	.02	.00	0.	*	28 FEB 1800	69	.04	.01	.03	1.
28 FEB 0600	21	.02	.02	.00	0.	*	28 FEB 1815	70	.04	.01	.03	1.
28 FEB 0615	22	.02	.02	.00	0.	*	28 FEB 1830	71	.04	.01	.03	1.
28 FEB 0630	23	.02	.02	.00	0.	*	28 FEB 1845	72	.04	.01	.03	1.
28 FEB 0645	24	.02	.02	.00	0.	*	28 FEB 1900	73	.03	.01	.03	1.
28 FEB 0700	25	.02	.02	.00	0.	*	28 FEB 1915	74	.02	.00	.02	1.
28 FEB 0715	26	.03	.03	.00	0.	*	28 FEB 1930	75	.02	.00	.02	1.
28 FEB 0730	27	.03	.03	.00	0.	*	28 FEB 1945	76	.02	.00	.02	1.
28 FEB 0745	28	.04	.04	.00	0.	*	28 FEB 2000	77	.02	.00	.02	1.
28 FEB 0800	29	.04	.04	.00	0.	*	28 FEB 2015	78	.02	.00	.02	1.
28 FEB 0815	30	.04	.04	.00	0.	*	28 FEB 2030	79	.02	.00	.02	1.
28 FEB 0830	31	.04	.04	.00	0.	*	28 FEB 2045	80	.02	.00	.02	1.
28 FEB 0845	32	.04	.04	.00	0.	*	28 FEB 2100	81	.02	.00	.01	1.
28 FEB 0900	33	.04	.04	.00	0.	*	28 FEB 2115	82	.02	.00	.01	1.
28 FEB 0915	34	.04	.04	.00	0.	*	28 FEB 2130	83	.02	.00	.01	1.
28 FEB 0930	35	.05	.05	.00	0.	*	28 FEB 2145	84	.02	.00	.01	1.
28 FEB 0945	36	.05	.05	.00	0.	*	28 FEB 2200	85	.02	.00	.01	1.
28 FEB 1000	37	.05	.05	.00	0.	*	28 FEB 2215	86	.02	.00	.01	0.
28 FEB 1015	38	.05	.05	.00	0.	*	28 FEB 2230	87	.02	.00	.01	0.
28 FEB 1030	39	.06	.05	.01	0.	*	28 FEB 2245	88	.02	.00	.01	0.
28 FEB 1045	40	.06	.05	.01	0.	*	28 FEB 2300	89	.02	.00	.01	0.
28 FEB 1100	41	.07	.06	.01	0.	*	28 FEB 2315	90	.01	.00	.01	0.
28 FEB 1115	42	.07	.06	.01	0.	*	28 FEB 2330	91	.01	.00	.01	0.
28 FEB 1130	43	.08	.06	.02	1.	*	28 FEB 2345	92	.01	.00	.01	0.
28 FEB 1145	44	.09	.07	.02	1.	*	1 MAR 0000	93	.01	.00	.01	0.
28 FEB 1200	45	.10	.07	.03	1.	*	1 MAR 0015	94	.01	.00	.01	0.
28 FEB 1215	46	.13	.09	.04	1.	*	1 MAR 0030	95	.01	.00	.01	0.
28 FEB 1230	47	.16	.10	.06	2.	*	1 MAR 0045	96	.01	.00	.01	0.
28 FEB 1245	48	.25	.15	.10	3.	*	1 MAR 0100	97	.01	.00	.01	0.
28 FEB 1300	49	.54	.27	.27	6.	*						
						*						

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TOTAL RAINFALL = 6.00, TOTAL LOSS = 2.91, TOTAL EXCESS = 3.09

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.00-HR
+ (CFS)	(HR)					
		(CFS)				
+ 17.	12.50		4.	1.	1.	1.
		(INCHES)	2.514	3.073	3.073	3.073
		(AC-FT)	2.	2.	2.	2.

CUMULATIVE AREA = .01 SQ MI

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          *            *
215 KK    *       22P  *
          *            *
          **************
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KO OUTPUT CONTROL VARIABLES

IPRNT	1	PRINT CONTROL
IPLOT	0	PLOT CONTROL
QSCAL	0.	HYDROGRAPH PLOT SCALE

SCS RUNOFF CALCULATION

SUBBASIN RUNOFF DATA

218 BA SUBBASIN CHARACTERISTICS

TAREA .00 SUBBASIN AREA

PRECIPITATION DATA

219 PH DEPTHS FOR 0-PERCENT HYPOTHETICAL STORM

..... HYDRO-35			..... TP-40					..... TP-49			
5-MIN	15-MIN	60-MIN	2-HR	3-HR	6-HR	12-HR	24-HR	2-DAY	4-DAY	7-DAY	10-DAY
.60	1.30	2.40	3.00	3.40	4.20	5.20	6.00	.00	.00	.00	.00

STORM AREA = .00

220 LS SCS LOSS RATE

STRTL .74 INITIAL ABSTRACTION

CRVNBR 73.00 CURVE NUMBER

RTIMP .00 PERCENT IMPERVIOUS AREA

221 UD SCS DIMENSIONLESS UNITGRAPH

TLAG .21 LAG

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WARNING *** TIME INTERVAL IS GREATER THAN .29*LAG

UNIT HYDROGRAPH

6 END-OF-PERIOD ORDINATES

5. 4. 1. 0. 0. 0.

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HYDROGRAPH AT STATION 22P

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DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
28	FEB	0100	1	.00	.00	.00	0.	*	28	FEB	1315	50	1.30	.47	.83	5.
28	FEB	0115	2	.01	.01	.00	0.	*	28	FEB	1330	51	.31	.09	.22	5.
28	FEB	0130	3	.01	.01	.00	0.	*	28	FEB	1345	52	.18	.05	.13	3.
28	FEB	0145	4	.01	.01	.00	0.	*	28	FEB	1400	53	.14	.04	.10	2.
28	FEB	0200	5	.01	.01	.00	0.	*	28	FEB	1415	54	.11	.03	.08	1.
28	FEB	0215	6	.01	.01	.00	0.	*	28	FEB	1430	55	.10	.02	.07	1.
28	FEB	0230	7	.01	.01	.00	0.	*	28	FEB	1445	56	.08	.02	.06	1.
28	FEB	0245	8	.01	.01	.00	0.	*	28	FEB	1500	57	.08	.02	.06	1.
28	FEB	0300	9	.01	.01	.00	0.	*	28	FEB	1515	58	.07	.02	.05	1.
28	FEB	0315	10	.01	.01	.00	0.	*	28	FEB	1530	59	.06	.01	.05	1.
28	FEB	0330	11	.02	.02	.00	0.	*	28	FEB	1545	60	.06	.01	.05	1.
28	FEB	0345	12	.02	.02	.00	0.	*	28	FEB	1600	61	.06	.01	.04	0.
28	FEB	0400	13	.02	.02	.00	0.	*	28	FEB	1615	62	.05	.01	.04	0.
28	FEB	0415	14	.02	.02	.00	0.	*	28	FEB	1630	63	.05	.01	.04	0.
28	FEB	0430	15	.02	.02	.00	0.	*	28	FEB	1645	64	.05	.01	.04	0.
28	FEB	0445	16	.02	.02	.00	0.	*	28	FEB	1700	65	.05	.01	.04	0.
28	FEB	0500	17	.02	.02	.00	0.	*	28	FEB	1715	66	.04	.01	.03	0.
28	FEB	0515	18	.02	.02	.00	0.	*	28	FEB	1730	67	.04	.01	.03	0.
28	FEB	0530	19	.02	.02	.00	0.	*	28	FEB	1745	68	.04	.01	.03	0.
28	FEB	0545	20	.02	.02	.00	0.	*	28	FEB	1800	69	.04	.01	.03	0.
28	FEB	0600	21	.02	.02	.00	0.	*	28	FEB	1815	70	.04	.01	.03	0.
28	FEB	0615	22	.02	.02	.00	0.	*	28	FEB	1830	71	.04	.01	.03	0.
28	FEB	0630	23	.02	.02	.00	0.	*	28	FEB	1845	72	.04	.01	.03	0.
28	FEB	0645	24	.02	.02	.00	0.	*	28	FEB	1900	73	.03	.01	.03	0.
28	FEB	0700	25	.02	.02	.00	0.	*	28	FEB	1915	74	.02	.00	.02	0.
28	FEB	0715	26	.03	.03	.00	0.	*	28	FEB	1930	75	.02	.00	.02	0.
28	FEB	0730	27	.03	.03	.00	0.	*	28	FEB	1945	76	.02	.00	.02	0.

28 FEB 0745	28	.04	.04	.00	0.	*	28 FEB 2000	77	.02	.00	.02	0.
28 FEB 0800	29	.04	.04	.00	0.	*	28 FEB 20[illegible]	78	.02	.00	.02	0.
28 FEB 0815	30	.04	.04	.00	0.	*	28 FEB 20[illegible]	79	.02	.00	.02	0.
28 FEB 0830	31	.04	.04	.00	0.	*	28 FEB 204[illegible]	80	.02	.00	.02	0.
28 FEB 0845	32	.04	.04	.00	0.	*	28 FEB 2100	81	.02	.00	.01	0.
28 FEB 0900	33	.04	.04	.00	0.	*	28 FEB 2115	82	.02	.00	.01	0.
28 FEB 0915	34	.04	.04	.00	0.	*	28 FEB 2130	83	.02	.00	.01	0.
28 FEB 0930	35	.05	.05	.00	0.	*	28 FEB 2145	84	.02	.00	.01	0.
28 FEB 0945	36	.05	.05	.00	0.	*	28 FEB 2200	85	.02	.00	.01	0.
28 FEB 1000	37	.05	.05	.00	0.	*	28 FEB 2215	86	.02	.00	.01	0.
28 FEB 1015	38	.05	.05	.00	0.	*	28 FEB 2230	87	.02	.00	.01	0.
28 FEB 1030	39	.06	.05	.01	0.	*	28 FEB 2245	88	.02	.00	.01	0.
28 FEB 1045	40	.06	.05	.01	0.	*	28 FEB 2300	89	.02	.00	.01	0.
28 FEB 1100	41	.07	.06	.01	0.	*	28 FEB 2315	90	.01	.00	.01	0.
28 FEB 1115	42	.07	.06	.01	0.	*	28 FEB 2330	91	.01	.00	.01	0.
28 FEB 1130	43	.08	.06	.02	0.	*	28 FEB 2345	92	.01	.00	.01	0.
28 FEB 1145	44	.09	.07	.02	0.	*	1 MAR 0000	93	.01	.00	.01	0.
28 FEB 1200	45	.10	.07	.03	0.	*	1 MAR 0015	94	.01	.00	.01	0.
28 FEB 1215	46	.13	.09	.04	0.	*	1 MAR 0030	95	.01	.00	.01	0.
28 FEB 1230	47	.16	.10	.06	0.	*	1 MAR 0045	96	.01	.00	.01	0.
28 FEB 1245	48	.25	.15	.10	1.	*	1 MAR 0100	97	.01	.00	.01	0.
28 FEB 1300	49	.54	.27	.27	2.	*						
						*						

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TOTAL RAINFALL = 6.00, TOTAL LOSS = 2.91, TOTAL EXCESS = 3.09

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.00-HR
+ (CFS)	(HR)					
		(CFS)				
+ 5.	12.25		1.	0.	0.	0.
		(INCHES)	2.515	3.075	3.075	3.075
		(AC-FT)	1.	1.	1.	1.

CUMULATIVE AREA = .00 SQ MI

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          *            *
225 KK    *   21PCHL   *
          *            *
          **************

226 KO        OUTPUT CONTROL VARIABLES
                    IPRNT          1  PRINT CONTROL
                    IPLOT          0  PLOT CONTROL
                    QSCAL         0.  HYDROGRAPH PLOT SCALE
                             STORAGE ROUTING THROUGH 21P CHANNEL

             HYDROGRAPH ROUTING DATA

228 RS        STORAGE ROUTING
                    NSTPS          1  NUMBER OF SUBREACHES
                     ITYP       STOR  TYPE OF INITIAL CONDITION
                   RSVRIC        .00  INITIAL CONDITION
                        X        .00 WORKING R AND D COEFFICIENT

229 RC        NORMAL DEPTH CHANNEL ROUTING
                     ANL       .080  LEFT OVERBANK N-VALUE
                    ANCH       .030  MAIN CHANNEL N-VALUE
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ANR	.080	RIGHT OVERBANK N-VALUE
RLNTH	900.	REACH LENGTH
SEL	.0020	ENERGY SLOPE
ELMAX	70.0	MAX. ELEV. FOR STORAGE/OUTFLOW CALCULATION

CROSS-SECTION DATA

		--- LEFT OVERBANK ---			+ ------ MAIN CHANNEL			------- + --- RIGHT OVERBANK ---	
231 RY	ELEVATION	71.00	70.50	70.00	67.00	67.00	70.00	70.50	71.00
230 RX	DISTANCE	.00	5.00	10.00	13.00	18.00	21.00	26.00	31.00

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COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

STORAGE	.00	.02	.03	.05	.07	.09	.12	.14	.16	.19
OUTFLOW	.00	.51	1.61	3.17	5.14	7.48	10.18	13.24	16.66	20.43
ELEVATION	67.00	67.16	67.32	67.47	67.63	67.79	67.95	68.11	68.26	68.42
STORAGE	.21	.24	.27	.30	.33	.36	.39	.43	.46	.50
OUTFLOW	24.55	29.03	33.87	39.08	44.66	50.61	56.94	63.66	70.78	78.29
ELEVATION	68.58	68.74	68.89	69.05	69.21	69.37	69.53	69.68	69.84	70.00

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 3. TO 78.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

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HYDROGRAPH AT STATION 21PCHL

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DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	*	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	*	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAG
28	FEB	0100	1	0.	.0	67.0	*	28	FEB	0915	34	0.	.0	67.0	*	28	FEB	1730	67	2.	.0	67.3
28	FEB	0115	2	0.	.0	67.0	*	28	FEB	0930	35	0.	.0	67.0	*	28	FEB	1745	68	2.	.0	67.3
28	FEB	0130	3	0.	.0	67.0	*	28	FEB	0945	36	0.	.0	67.0	*	28	FEB	1800	69	2.	.0	67.3
28	FEB	0145	4	0.	.0	67.0	*	28	FEB	1000	37	0.	.0	67.0	*	28	FEB	1815	70	1.	.0	67.3
28	FEB	0200	5	0.	.0	67.0	*	28	FEB	1015	38	0.	.0	67.0	*	28	FEB	1830	71	1.	.0	67.3
28	FEB	0215	6	0.	.0	67.0	*	28	FEB	1030	39	0.	.0	67.0	*	28	FEB	1845	72	1.	.0	67.3
28	FEB	0230	7	0.	.0	67.0	*	28	FEB	1045	40	0.	.0	67.1	*	28	FEB	1900	73	1.	.0	67.3
28	FEB	0245	8	0.	.0	67.0	*	28	FEB	1100	41	0.	.0	67.1	*	28	FEB	1915	74	1.	.0	67.3
28	FEB	0300	9	0.	.0	67.0	*	28	FEB	1115	42	0.	.0	67.1	*	28	FEB	1930	75	1.	.0	67.2
28	FEB	0315	10	0.	.0	67.0	*	28	FEB	1130	43	0.	.0	67.2	*	28	FEB	1945	76	1.	.0	67.2
28	FEB	0330	11	0.	.0	67.0	*	28	FEB	1145	44	1.	.0	67.2	*	28	FEB	2000	77	1.	.0	67.2
28	FEB	0345	12	0.	.0	67.0	*	28	FEB	1200	45	1.	.0	67.2	*	28	FEB	2015	78	1.	.0	67.2
28	FEB	0400	13	0.	.0	67.0	*	28	FEB	1215	46	1.	.0	67.3	*	28	FEB	2030	79	1.	.0	67.2
28	FEB	0415	14	0.	.0	67.0	*	28	FEB	1230	47	2.	.0	67.3	*	28	FEB	2045	80	1.	.0	67.2
28	FEB	0430	15	0.	.0	67.0	*	28	FEB	1245	48	3.	.0	67.4	*	28	FEB	2100	81	1.	.0	67.2
28	FEB	0445	16	0.	.0	67.0	*	28	FEB	1300	49	5.	.1	67.6	*	28	FEB	2115	82	1.	.0	67.2
28	FEB	0500	17	0.	.0	67.0	*	28	FEB	1315	50	16.	.2	68.2	*	28	FEB	2130	83	1.	.0	67.2
28	FEB	0515	18	0.	.0	67.0	*	28	FEB	1330	51	23.	.2	68.5	*	28	FEB	2145	84	1.	.0	67.2
28	FEB	0530	19	0.	.0	67.0	*	28	FEB	1345	52	16.	.2	68.2	*	28	FEB	2200	85	1.	.0	67.2
28	FEB	0545	20	0.	.0	67.0	*	28	FEB	1400	53	9.	.1	67.9	*	28	FEB	2215	86	1.	.0	67.2
28	FEB	0600	21	0.	.0	67.0	*	28	FEB	1415	54	6.	.1	67.7	*	28	FEB	2230	87	1.	.0	67.2
28	FEB	0615	22	0.	.0	67.0	*	28	FEB	1430	55	5.	.1	67.6	*	28	FEB	2245	88	1.	.0	67.2
28	FEB	0630	23	0.	.0	67.0	*	28	FEB	1445	56	4.	.1	67.5	*	28	FEB	2300	89	1.	.0	67.2
28	FEB	0645	24	0.	.0	67.0	*	28	FEB	1500	57	3.	.1	67.5	*	28	FEB	2315	90	1.	.0	67.2
28	FEB	0700	25	0.	.0	67.0	*	28	FEB	1515	58	3.	.1	67.4	*	28	FEB	2330	91	1.	.0	67.2
28	FEB	0715	26	0.	.0	67.0	*	28	FEB	1530	59	3.	.0	67.4	*	28	FEB	2345	92	1.	.0	67
28	FEB	0730	27	0.	.0	67.0	*	28	FEB	1545	60	2.	.0	67.4	*	1	MAR	0000	93	1.	.0	67..
28	FEB	0745	28	0.	.0	67.0	*	28	FEB	1600	61	2.	.0	67.4	*	1	MAR	0015	94	1.	.0	67.2
28	FEB	0800	29	0.	.0	67.0	*	28	FEB	1615	62	2.	.0	67.4	*	1	MAR	0030	95	1.	.0	67.2
28	FEB	0815	30	0.	.0	67.0	*	28	FEB	1630	63	2.	.0	67.4	*	1	MAR	0045	96	1.	.0	67.2
28	FEB	0830	31	0.	.0	67.0	*	28	FEB	1645	64	2.	.0	67.3	*	1	MAR	0100	97	1.	.0	67.2

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 28 FEB 0845  32       0.       .0    67.0 * 28 FEB 1700  65       2.       .0    67.3 *
 28 FEB 0900  33       0.       .0    67.0 * 28 FEB 1715  66       2.       .0    67.3 *
                                           *                                           *
*****************************************************************************************************************

  AK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     24.00-HR
+   (CFS)      (HR)
                          (CFS)
+      23.     12.50                  5.          1.          1.          1.
                        (INCHES)    2.510       3.056       3.056       3.056
                         (AC-FT)       2.          3.          3.          3.

 PEAK STORAGE   TIME                        MAXIMUM AVERAGE STORAGE
                                     6-HR       24-HR       72-HR     24.00-HR
+  (AC-FT)      (HR)
       0.      12.50                  0.          0.          0.          0.

  PEAK STAGE    TIME                          MAXIMUM AVERAGE STAGE
                                     6-HR       24-HR       72-HR     24.00-HR
+   (FEET)      (HR)
    68.51      12.50                 67.55       67.20       67.20       67.20

                        CUMULATIVE AREA =     .02 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***


            **************
            *            *
  2 KK      *       23P  *
            *            *
            **************

 233 KO          OUTPUT CONTROL VARIABLES
                       IPRNT           1  PRINT CONTROL
                       IPLOT           0  PLOT CONTROL
                       QSCAL          0.  HYDROGRAPH PLOT SCALE
                                SCS RUNOFF CALCULATION

              SUBBASIN RUNOFF DATA

 235 BA          SUBBASIN CHARACTERISTICS
                       TAREA         .03  SUBBASIN AREA

                 PRECIPITATION DATA

 236 PH                                DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
                 ..... HYDRO-35 ......   ............... TP-40 ...............   ........... TP-49 ...........
                 5-MIN  15-MIN  60-MIN    2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                   .60    1.30    2.40    3.00    3.40    4.20    5.20    6.00     .00     .00     .00     .00

                                                   STORM AREA =     .03

 237 LS          SCS LOSS RATE
                       STRTL         .27  INITIAL ABSTRACTION
                      CRVNBR       88.00  CURVE NUMBER
                       RTIMP         .00  PERCENT IMPERVIOUS AREA

 238 UD          SCS DIMENSIONLESS UNITGRAPH
                        TLAG         .15  LAG

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WARNING *** TIME INTERVAL IS GREATER THAN .29*LAG

UNIT HYDROGRAPH
5 END-OF-PERIOD ORDINATES

55. 21. 5. 1. 0.

HYDROGRAPH AT STATION 23P

DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
28 FEB 0100	1	.00	.00	.00	0.	28 FEB 1315	50	1.30	.13	1.17	75.
28 FEB 0115	2	.01	.01	.00	0.	28 FEB 1330	51	.31	.02	.29	43.
28 FEB 0130	3	.01	.01	.00	0.	28 FEB 1345	52	.18	.01	.17	22.
28 FEB 0145	4	.01	.01	.00	0.	28 FEB 1400	53	.14	.01	.13	14.
28 FEB 0200	5	.01	.01	.00	0.	28 FEB 1415	54	.11	.01	.10	10.
28 FEB 0215	6	.01	.01	.00	0.	28 FEB 1430	55	.10	.01	.09	8.
28 FEB 0230	7	.01	.01	.00	0.	28 FEB 1445	56	.08	.00	.08	7.
28 FEB 0245	8	.01	.01	.00	0.	28 FEB 1500	57	.08	.00	.07	6.
28 FEB 0300	9	.01	.01	.00	0.	28 FEB 1515	58	.07	.00	.07	6.
28 FEB 0315	10	.01	.01	.00	0.	28 FEB 1530	59	.06	.00	.06	5.
28 FEB 0330	11	.02	.02	.00	0.	28 FEB 1545	60	.06	.00	.06	5.
28 FEB 0345	12	.02	.02	.00	0.	28 FEB 1600	61	.06	.00	.05	5.
28 FEB 0400	13	.02	.02	.00	0.	28 FEB 1615	62	.05	.00	.05	4.
28 FEB 0415	14	.02	.02	.00	0.	28 FEB 1630	63	.05	.00	.05	4.
28 FEB 0430	15	.02	.02	.00	0.	28 FEB 1645	64	.05	.00	.05	4.
28 FEB 0445	16	.02	.02	.00	0.	28 FEB 1700	65	.05	.00	.04	4.
28 FEB 0500	17	.02	.02	.00	0.	28 FEB 1715	66	.04	.00	.04	4.
28 FEB 0515	18	.02	.02	.00	0.	28 FEB 1730	67	.04	.00	.04	3.
28 FEB 0530	19	.02	.02	.00	0.	28 FEB 1745	68	.04	.00	.04	3.
28 FEB 0545	20	.02	.02	.00	0.	28 FEB 1800	69	.04	.00	.04	3.
28 FEB 0600	21	.02	.02	.00	0.	28 FEB 1815	70	.04	.00	.04	3.
28 FEB 0615	22	.02	.02	.00	0.	28 FEB 1830	71	.04	.00	.03	3.
28 FEB 0630	23	.02	.02	.00	0.	28 FEB 1845	72	.04	.00	.03	3.
28 FEB 0645	24	.02	.02	.00	0.	28 FEB 1900	73	.03	.00	.03	3.
28 FEB 0700	25	.02	.02	.00	0.	28 FEB 1915	74	.02	.00	.02	2.
28 FEB 0715	26	.03	.03	.01	0.	28 FEB 1930	75	.02	.00	.02	2.
28 FEB 0730	27	.03	.03	.01	1.	28 FEB 1945	76	.02	.00	.02	2.
28 FEB 0745	28	.04	.03	.01	1.	28 FEB 2000	77	.02	.00	.02	2.
28 FEB 0800	29	.04	.03	.01	1.	28 FEB 2015	78	.02	.00	.02	2.
28 FEB 0815	30	.04	.03	.01	1.	28 FEB 2030	79	.02	.00	.02	2.
28 FEB 0830	31	.04	.03	.01	1.	28 FEB 2045	80	.02	.00	.02	1.
28 FEB 0845	32	.04	.03	.02	1.	28 FEB 2100	81	.02	.00	.02	1.
28 FEB 0900	33	.04	.03	.02	1.	28 FEB 2115	82	.02	.00	.02	1.
28 FEB 0915	34	.04	.03	.02	2.	28 FEB 2130	83	.02	.00	.02	1.
28 FEB 0930	35	.05	.03	.02	2.	28 FEB 2145	84	.02	.00	.02	1.
28 FEB 0945	36	.05	.03	.02	2.	28 FEB 2200	85	.02	.00	.02	1.
28 FEB 1000	37	.05	.03	.03	2.	28 FEB 2215	86	.02	.00	.02	1.
28 FEB 1015	38	.05	.02	.03	2.	28 FEB 2230	87	.02	.00	.02	1.
28 FEB 1030	39	.06	.03	.03	3.	28 FEB 2245	88	.02	.00	.01	1.
28 FEB 1045	40	.06	.03	.04	3.	28 FEB 2300	89	.02	.00	.01	1.
28 FEB 1100	41	.07	.03	.04	3.	28 FEB 2315	90	.01	.00	.01	1.
28 FEB 1115	42	.07	.03	.05	4.	28 FEB 2330	91	.01	.00	.01	1.
28 FEB 1130	43	.08	.03	.05	4.	28 FEB 2345	92	.01	.00	.01	1.
28 FEB 1145	44	.09	.03	.06	5.	1 MAR 0000	93	.01	.00	.01	1.
28 FEB 1200	45	.10	.03	.07	6.	1 MAR 0015	94	.01	.00	.01	1.
28 FEB 1215	46	.13	.03	.09	7.	1 MAR 0030	95	.01	.00	.01	1.
28 FEB 1230	47	.16	.04	.12	9.	1 MAR 0045	96	.01	.00	.01	1.
28 FEB 1245	48	.25	.05	.20	14.	1 MAR 0100	97	.01	.00	.01	1.
28 FEB 1300	49	.54	.09	.45	30.						

```
   TOTAL RAINFALL =    6.00, TOTAL LOSS =    1.37, TOTAL EXCESS =    4.63

 PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                    6-HR       24-HR       72-HR     24.00-HR
   (CFS)       (HR)
                          (CFS)
+     75.     12.25                  12.          4.          4.          4.
                        (INCHES)   3.609       4.614       4.614       4.614
                         (AC-FT)      6.          8.          8.          8.

                         CUMULATIVE AREA =     .03 SQ MI


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           *            *
 239 KK    *       18P  *
           *            *
           **************

 240 KO          OUTPUT CONTROL VARIABLES
                       IPRNT           1  PRINT CONTROL
                       IPLOT           0  PLOT CONTROL
                       QSCAL          0.  HYDROGRAPH PLOT SCALE
                                SCS RUNOFF CALCULATION

               SUBBASIN RUNOFF DATA

   : BA          SUBBASIN CHARACTERISTICS
                       TAREA         .01  SUBBASIN AREA

                 PRECIPITATION DATA

 243 PH                                DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
                 ..... HYDRO-35 ......   ............... TP-40 ...............   ........... TP-49 ...........
                 5-MIN  15-MIN  60-MIN    2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                   .60    1.30    2.40    3.00    3.40    4.20    5.20    6.00     .00     .00     .00     .00

                                                  STORM AREA =     .01

 244 LS          SCS LOSS RATE
                       STRTL         .11  INITIAL ABSTRACTION
                      CRVNBR       95.00  CURVE NUMBER
                       RTIMP         .00  PERCENT IMPERVIOUS AREA

 245 UD          SCS DIMENSIONLESS UNITGRAPH
                        TLAG         .06  LAG

                                                          ***

WARNING *** TIME INTERVAL IS GREATER THAN .29*LAG

                                                      UNIT HYDROGRAPH
                                                  5 END-OF-PERIOD ORDINATES
               21.        6.        1.        0.        0.

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                                                HYDROGRAPH AT STATION      18P

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DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
28 FEB 0100	1	.00	.00	.00	0.	28 FEB 1315	50	1.30	.03	1.27	30.
28 FEB 0115	2	.01	.01	.00	0.	28 FEB 1330	51	.31	.00	.31	15.
28 FEB 0130	3	.01	.01	.00	0.	28 FEB 1345	52	.18	.00	.18	7.
28 FEB 0145	4	.01	.01	.00	0.	28 FEB 1400	53	.14	.00	.14	5.
28 FEB 0200	5	.01	.01	.00	0.	28 FEB 1415	54	.11	.00	.11	3.
28 FEB 0215	6	.01	.01	.00	0.	28 FEB 1430	55	.10	.00	.09	3.
28 FEB 0230	7	.01	.01	.00	0.	28 FEB 1445	56	.08	.00	.08	2.
28 FEB 0245	8	.01	.01	.00	0.	28 FEB 1500	57	.08	.00	.07	2.
28 FEB 0300	9	.01	.01	.00	0.	28 FEB 1515	58	.07	.00	.07	2.
28 FEB 0315	10	.01	.01	.00	0.	28 FEB 1530	59	.06	.00	.06	2.
28 FEB 0330	11	.02	.01	.00	0.	28 FEB 1545	60	.06	.00	.06	2.
28 FEB 0345	12	.02	.01	.00	0.	28 FEB 1600	61	.06	.00	.06	2.
28 FEB 0400	13	.02	.01	.00	0.	28 FEB 1615	62	.05	.00	.05	2.
28 FEB 0415	14	.02	.01	.00	0.	28 FEB 1630	63	.05	.00	.05	1.
28 FEB 0430	15	.02	.01	.00	0.	28 FEB 1645	64	.05	.00	.05	1.
28 FEB 0445	16	.02	.01	.01	0.	28 FEB 1700	65	.05	.00	.05	1.
28 FEB 0500	17	.02	.01	.01	0.	28 FEB 1715	66	.04	.00	.04	1.
28 FEB 0515	18	.02	.01	.01	0.	28 FEB 1730	67	.04	.00	.04	1.
28 FEB 0530	19	.02	.01	.01	0.	28 FEB 1745	68	.04	.00	.04	1.
28 FEB 0545	20	.02	.01	.01	0.	28 FEB 1800	69	.04	.00	.04	1.
28 FEB 0600	21	.02	.01	.01	0.	28 FEB 1815	70	.04	.00	.04	1.
28 FEB 0615	22	.02	.01	.01	0.	28 FEB 1830	71	.04	.00	.04	1.
28 FEB 0630	23	.02	.01	.01	0.	28 FEB 1845	72	.04	.00	.03	1.
28 FEB 0645	24	.02	.01	.01	0.	28 FEB 1900	73	.03	.00	.03	1.
28 FEB 0700	25	.02	.01	.01	0.	28 FEB 1915	74	.02	.00	.02	1.
28 FEB 0715	26	.03	.01	.02	1.	28 FEB 1930	75	.02	.00	.02	1.
28 FEB 0730	27	.03	.01	.02	1.	28 FEB 1945	76	.02	.00	.02	1.
28 FEB 0745	28	.04	.01	.02	1.	28 FEB 2000	77	.02	.00	.02	1.
28 FEB 0800	29	.04	.01	.03	1.	28 FEB 2015	78	.02	.00	.02	1.
28 FEB 0815	30	.04	.01	.03	1.	28 FEB 2030	79	.02	.00	.02	1.
28 FEB 0830	31	.04	.01	.03	1.	28 FEB 2045	80	.02	.00	.02	1.
28 FEB 0845	32	.04	.01	.03	1.	28 FEB 2100	81	.02	.00	.02	1.
28 FEB 0900	33	.04	.01	.03	1.	28 FEB 2115	82	.02	.00	.02	1.
28 FEB 0915	34	.04	.01	.04	1.	28 FEB 2130	83	.02	.00	.02	0.
28 FEB 0930	35	.05	.01	.04	1.	28 FEB 2145	84	.02	.00	.02	0.
28 FEB 0945	36	.05	.01	.04	1.	28 FEB 2200	85	.02	.00	.02	0.
28 FEB 1000	37	.05	.01	.04	1.	28 FEB 2215	86	.02	.00	.02	0.
28 FEB 1015	38	.05	.01	.05	1.	28 FEB 2230	87	.02	.00	.02	0.
28 FEB 1030	39	.06	.01	.05	1.	28 FEB 2245	88	.02	.00	.02	0.
28 FEB 1045	40	.06	.01	.05	1.	28 FEB 2300	89	.02	.00	.02	0.
28 FEB 1100	41	.07	.01	.06	2.	28 FEB 2315	90	.01	.00	.01	0.
28 FEB 1115	42	.07	.01	.06	2.	28 FEB 2330	91	.01	.00	.01	0.
28 FEB 1130	43	.08	.01	.07	2.	28 FEB 2345	92	.01	.00	.01	0.
28 FEB 1145	44	.09	.01	.08	2.	1 MAR 0000	93	.01	.00	.01	0.
28 FEB 1200	45	.10	.01	.09	3.	1 MAR 0015	94	.01	.00	.01	0.
28 FEB 1215	46	.13	.01	.12	3.	1 MAR 0030	95	.01	.00	.01	0.
28 FEB 1230	47	.16	.01	.15	4.	1 MAR 0045	96	.01	.00	.01	0.
28 FEB 1245	48	.25	.01	.24	6.	1 MAR 0100	97	.01	.00	.01	0.
28 FEB 1300	49	.54	.02	.52	13.						

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TOTAL RAINFALL = 6.00, TOTAL LOSS = .59, TOTAL EXCESS = 5.41

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	24.00-HR
+ (CFS)	(HR)					
		(CFS)				
+ 30.	12.25		5.	2.	2.	2.
		(INCHES)	4.045	5.401	5.401	5.401
		(AC-FT)	2.	3.	3.	3.

CUMULATIVE AREA = .01 SQ MI

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              *            *
249 KK        *     8CSWP  *
              *            *
              **************

250 KO            OUTPUT CONTROL VARIABLES
                        IPRNT           1  PRINT CONTROL
                        IPLOT           0  PLOT CONTROL
                        QSCAL          0.  HYDROGRAPH PLOT SCALE
                                 DIRECT INPUT HYDROGRAPH FROM READING, UNDER RTE 93

  6 IN            TIME DATA FOR INPUT TIME SERIES
                        JXMIN          15  TIME INTERVAL IN MINUTES
                       JXDATE     28FEB91  STARTING DATE
                       JXTIME         100  STARTING TIME

                SUBBASIN RUNOFF DATA

252 BA            SUBBASIN CHARACTERISTICS
                        TAREA        1.43  SUBBASIN AREA

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                                                HYDROGRAPH AT STATION    8CSWP

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DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW
28 FEB 0100	1	0.	28 FEB 0715	26	11.	28 FEB 1330	51	406.	28 FEB 1945	76	198.
28 FEB 0115	2	0.	28 FEB 0730	27	11.	28 FEB 1345	52	506.	28 FEB 2000	77	187.
28 FEB 0130	3	0.	28 FEB 0745	28	11.	28 FEB 1400	53	525.	28 FEB 2015	78	175.
28 FEB 0145	4	0.	28 FEB 0800	29	11.	28 FEB 1415	54	493.	28 FEB 2030	79	158.
28 FEB 0200	5	0.	28 FEB 0815	30	11.	28 FEB 1430	55	450.	28 FEB 2045	80	139.
28 FEB 0215	6	0.	28 FEB 0830	31	11.	28 FEB 1445	56	407.	28 FEB 2100	81	123.
28 FEB 0230	7	0.	28 FEB 0845	32	11.	28 FEB 1500	57	372.	28 FEB 2115	82	111.
28 FEB 0245	8	0.	28 FEB 0900	33	11.	28 FEB 1515	58	346.	28 FEB 2130	83	101.
28 FEB 0300	9	1.	28 FEB 0915	34	11.	28 FEB 1530	59	326.	28 FEB 2145	84	93.
28 FEB 0315	10	3.	28 FEB 0930	35	12.	28 FEB 1545	60	312.	28 FEB 2200	85	87.
28 FEB 0330	11	4.	28 FEB 0945	36	13.	28 FEB 1600	61	302.	28 FEB 2215	86	82.
28 FEB 0345	12	6.	28 FEB 1000	37	14.	28 FEB 1615	62	295.	28 FEB 2230	87	79.
28 FEB 0400	13	7.	28 FEB 1015	38	17.	28 FEB 1630	63	289.	28 FEB 2245	88	76.
28 FEB 0415	14	8.	28 FEB 1030	39	20.	28 FEB 1645	64	283.	28 FEB 2300	89	74.
28 FEB 0430	15	9.	28 FEB 1045	40	24.	28 FEB 1700	65	278.	28 FEB 2315	90	72.
28 FEB 0445	16	10.	28 FEB 1100	41	28.	28 FEB 1715	66	273.	28 FEB 2330	91	71.
28 FEB 0500	17	10.	28 FEB 1115	42	34.	28 FEB 1730	67	267.	28 FEB 2345	92	69.
28 FEB 0515	18	10.	28 FEB 1130	43	40.	28 FEB 1745	68	260.	1 MAR 0000	93	68.
28 FEB 0530	19	10.	28 FEB 1145	44	47.	28 FEB 1800	69	253.	1 MAR 0015	94	67.
28 FEB 0545	20	10.	28 FEB 1200	45	56.	28 FEB 1815	70	246.	1 MAR 0030	95	66.
28 FEB 0600	21	11.	28 FEB 1215	46	67.	28 FEB 1830	71	239.	1 MAR 0045	96	65.
28 FEB 0615	22	11.	28 FEB 1230	47	81.	28 FEB 1845	72	232.	1 MAR 0100	97	65.
28 FEB 0630	23	11.	28 FEB 1245	48	103.	28 FEB 1900	73	225.			
28 FEB 0645	24	11.	28 FEB 1300	49	146.	28 FEB 1915	74	217.			
28 FEB 0700	25	11.	28 FEB 1315	50	255.	28 FEB 1930	75	208.			

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 PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                    6-HR       24-HR       72-HR     24.00-HR
+  (CFS)       (HR)
                          (CFS)
+    525.     13.00                  326.        119.        119.         119.
                       (INCHES)     2.119       3.089       3.089        3.089
                        (AC-FT)      162.        236.        236.         236.

                        CUMULATIVE AREA =    1.43 SQ MI


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           *            *
 266 KK    *     PHPND  *
           *            *
           **************

 267 KO          OUTPUT CONTROL VARIABLES
                       IPRNT           1  PRINT CONTROL
                       IPLOT           0  PLOT CONTROL
                       QSCAL          0.  HYDROGRAPH PLOT SCALE
                                STORAGE ROUTING THROUGH PHILLIPS POND

              HYDROGRAPH ROUTING DATA

 269 RS          STORAGE ROUTING
                       NSTPS           1  NUMBER OF SUBREACHES
                        ITYP        ELEV  TYPE OF INITIAL CONDITION
                      RSVRIC       57.00  INITIAL CONDITION
                           X         .00 WORKING R AND D COEFFICIENT

 270 SA               AREA         3.9       4.8       5.5       7.5       8.8      11.9

 271 SE          ELEVATION       57.00     59.50     60.60     62.00     64.00     66.00

 272 SL          LOW-LEVEL OUTLET
                       ELEVL       57.50  ELEVATION AT CENTER OF OUTLET
                       CAREA       14.14  CROSS-SECTIONAL AREA
                        COQL         .60  COEFFICIENT
                        EXPL         .50  EXPONENT OF HEAD

 273 SS          SPILLWAY
                        CREL       65.90  SPILLWAY CREST ELEVATION
                       SPWID       40.00  SPILLWAY WIDTH
                        COQW        3.00  WEIR COEFFICIENT
                        EXPW        1.50  EXPONENT OF HEAD

                                                        ***

                                          COMPUTED STORAGE-ELEVATION DATA

           STORAGE        .00     10.91     16.59     25.69     42.01     62.64
         ELEVATION      57.00     59.50     60.60     62.00     64.00     66.00

                                          COMPUTED OUTFLOW-ELEVATION DATA

           OUTFLOW        .00       .00     97.70    105.29    114.15    124.65    137.28    152.75    172.15    197.20
         ELEVATION      57.00     57.50     59.56     59.89     60.31     60.86     61.57     62.54     63.90     65.90

           OUTFLOW     197.39    197.54    197.77    198.07    198.46    198.96    199.56    200.29    201.16    202.17
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ELEVATION	65.91	65.91	65.92	65.93	65.94	65.95	65.96	65.97	65.98	66.00

COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

STORAGE	.00	2.00	10.91	11.21	12.86	15.05	16.59	18.05	22.60	25.69
OUTFLOW	.00	.00	96.23	97.70	105.29	114.15	119.80	124.65	137.28	144.34
ELEVATION	57.00	57.50	59.50	59.56	59.89	60.31	60.60	60.86	61.57	62.00
STORAGE	29.84	41.15	42.01	61.45	61.61	61.78	62.00	62.14	62.29	62.45
OUTFLOW	152.75	172.15	173.47	197.20	197.54	198.07	198.96	199.56	200.29	201.16
ELEVATION	62.54	63.90	64.00	65.90	65.91	65.93	65.95	65.96	65.97	65.98
STORAGE	62.64									
OUTFLOW	202.17									
ELEVATION	66.00									

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HYDROGRAPH AT STATION PHPND

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DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE
28	FEB	0100	1	0.	.0	57.0	28	FEB	0915	34	14.	3.3	57.8	28	FEB	1730	67	432.	103.7	69.5
28	FEB	0115	2	0.	.0	57.0	28	FEB	0930	35	15.	3.4	57.8	28	FEB	1745	68	436.	104.5	69.5
28	FEB	0130	3	0.	.0	57.0	28	FEB	0945	36	16.	3.5	57.8	28	FEB	1800	69	439.	105.0	69.6
28	FEB	0145	4	0.	.0	57.0	28	FEB	1000	37	17.	3.6	57.9	28	FEB	1815	70	441.	105.4	69.6
28	FEB	0200	5	0.	.0	57.0	28	FEB	1015	38	19.	3.7	57.9	28	FEB	1830	71	442.	105.6	69.6
28	FEB	0215	6	0.	.0	57.0	28	FEB	1030	39	21.	4.0	57.9	28	FEB	1845	72	442.	105.6	69.6
28	FEB	0230	7	0.	.0	57.0	28	FEB	1045	40	24.	4.2	58.0	28	FEB	1900	73	442.	105.5	69.6
28	FEB	0245	8	0.	.0	57.0	28	FEB	1100	41	28.	4.6	58.1	28	FEB	1915	74	440.	105.3	69.6
	FEB	0300	9	0.	.0	57.0	28	FEB	1115	42	33.	5.1	58.2	28	FEB	1930	75	438.	104.8	69.5
28	FEB	0315	10	0.	.1	57.0	28	FEB	1130	43	39.	5.6	58.3	28	FEB	1945	76	434.	104.1	69.5
28	FEB	0330	11	0.	.1	57.0	28	FEB	1145	44	47.	6.3	58.5	28	FEB	2000	77	429.	103.3	69.4
28	FEB	0345	12	0.	.2	57.1	28	FEB	1200	45	55.	7.1	58.6	28	FEB	2015	78	423.	102.2	69.3
28	FEB	0400	13	0.	.4	57.1	28	FEB	1215	46	65.	8.0	58.8	28	FEB	2030	79	415.	100.8	69.2
28	FEB	0415	14	0.	.5	57.1	28	FEB	1230	47	77.	9.1	59.1	28	FEB	2045	80	406.	99.0	69.1
28	FEB	0430	15	0.	.7	57.2	28	FEB	1245	48	92.	10.5	59.4	28	FEB	2100	81	394.	97.0	68.9
28	FEB	0445	16	0.	.9	57.2	28	FEB	1300	49	106.	12.9	59.9	28	FEB	2115	82	382.	94.8	68.7
28	FEB	0500	17	0.	1.1	57.3	28	FEB	1315	50	125.	18.2	60.9	28	FEB	2130	83	369.	92.4	68.5
28	FEB	0515	18	0.	1.3	57.3	28	FEB	1330	51	146.	26.8	62.1	28	FEB	2145	84	355.	90.1	68.3
28	FEB	0530	19	0.	1.5	57.4	28	FEB	1345	52	165.	37.3	63.4	28	FEB	2200	85	342.	87.7	68.1
28	FEB	0545	20	0.	1.7	57.4	28	FEB	1400	53	181.	48.4	64.6	28	FEB	2215	86	329.	85.4	67.9
28	FEB	0600	21	0.	2.0	57.5	28	FEB	1415	54	194.	58.8	65.6	28	FEB	2230	87	317.	83.1	67.7
28	FEB	0615	22	2.	2.2	57.5	28	FEB	1430	55	231.	67.7	66.4	28	FEB	2245	88	304.	80.9	67.5
28	FEB	0630	23	4.	2.4	57.6	28	FEB	1445	56	271.	74.9	67.0	28	FEB	2300	89	292.	78.8	67.4
28	FEB	0645	24	5.	2.5	57.6	28	FEB	1500	57	303.	80.6	67.5	28	FEB	2315	90	281.	76.8	67.2
28	FEB	0700	25	7.	2.6	57.6	28	FEB	1515	58	328.	85.2	67.9	28	FEB	2330	91	270.	74.8	67.0
28	FEB	0715	26	8.	2.7	57.7	28	FEB	1530	59	349.	88.9	68.2	28	FEB	2345	92	260.	72.9	66.9
28	FEB	0730	27	9.	2.8	57.7	28	FEB	1545	60	366.	91.9	68.5	1	MAR	0000	93	250.	71.2	66.7
28	FEB	0745	28	9.	2.9	57.7	28	FEB	1600	61	380.	94.5	68.7	1	MAR	0015	94	241.	69.5	66.6
28	FEB	0800	29	10.	2.9	57.7	28	FEB	1615	62	392.	96.7	68.9	1	MAR	0030	95	232.	67.9	66.4
28	FEB	0815	30	11.	3.0	57.7	28	FEB	1630	63	403.	98.5	69.0	1	MAR	0045	96	223.	66.4	66.3
28	FEB	0830	31	12.	3.1	57.7	28	FEB	1645	64	412.	100.2	69.2	1	MAR	0100	97	216.	65.1	66.2
28	FEB	0845	32	13.	3.2	57.8	28	FEB	1700	65	420.	101.5	69.3							
28	FEB	0900	33	13.	3.2	57.8	28	FEB	1715	66	426.	102.7	69.4							

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K FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW (CFS) 6-HR	24-HR	72-HR	24.00-HR
442.	17.75	417.	176.	176.	176.

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                    (INCHES)     1.311       2.212       2.212       2.212
                     (AC-FT)     207.         349.        349.        349.

 PEAK STORAGE   TIME                        MAXIMUM AVERAGE STORAGE
                                   6-HR       24-HR       72-HR     24.00-HR
+  (AC-FT)      (HR)
     106.     17.75                101.         44.         44.         44.

  PEAK STAGE    TIME                        MAXIMUM AVERAGE STAGE
                                   6-HR       24-HR       72-HR     24.00-HR
+   (FEET)      (HR)
    69.62     17.75               69.23       62.71       62.71       62.71

                     CUMULATIVE AREA =    2.95 SQ MI
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          **************
          *            *
 274 KK   *       11P  *
          *            *
          **************

 275 KO         OUTPUT CONTROL VARIABLES
                      IPRNT           1  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                               SCS RUNOFF CALCULATION

             SUBBASIN RUNOFF DATA

 277 BA         SUBBASIN CHARACTERISTICS
                      TAREA         .07  SUBBASIN AREA

                PRECIPITATION DATA

 278 PH                                DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
                ..... HYDRO-35 .....   ............... TP-40 ...............   ........... TP-49 ...........
                5-MIN  15-MIN  60-MIN    2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                  .60    1.30    2.40    3.00    3.40    4.20    5.20    6.00     .00     .00     .00     .00

                                                   STORM AREA =     .07

 279 LS         SCS LOSS RATE
                      STRTL         .20  INITIAL ABSTRACTION
                     CRVNBR       91.00  CURVE NUMBER
                      RTIMP         .00  PERCENT IMPERVIOUS AREA

 280 UD         SCS DIMENSIONLESS UNITGRAPH
                       TLAG         .32  LAG

                                                        ***

WARNING *** TIME INTERVAL IS GREATER THAN .29*LAG

                                                   UNIT HYDROGRAPH
                                              8 END-OF-PERIOD ORDINATES
             44.       73.       35.       14.        6.        2.        1.        0.
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                                          HYDROGRAPH AT STATION      11P
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DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
28 FEB 0100	1	.00	.00	.00	0.	28 FEB 1315	50	1.30	.08	1.22	99.
28 FEB 0115	2	.01	.01	.00	0.	28 FEB 1330	51	.31	.01	.30	123.
28 FEB 0130	3	.01	.01	.00	0.	28 FEB 1345	52	.18	.01	.17	81.
28 FEB 0145	4	.01	.01	.00	0.	28 FEB 1400	53	.14	.01	.13	50.
28 FEB 0200	5	.01	.01	.00	0.	28 FEB 1415	54	.11	.00	.11	33.
28 FEB 0215	6	.01	.01	.00	0.	28 FEB 1430	55	.10	.00	.09	24.
28 FEB 0230	7	.01	.01	.00	0.	28 FEB 1445	56	.08	.00	.08	19.
28 FEB 0245	8	.01	.01	.00	0.	28 FEB 1500	57	.08	.00	.07	16.
28 FEB 0300	9	.01	.01	.00	0.	28 FEB 1515	58	.07	.00	.07	14.
28 FEB 0315	10	.01	.01	.00	0.	28 FEB 1530	59	.06	.00	.06	12.
28 FEB 0330	11	.02	.02	.00	0.	28 FEB 1545	60	.06	.00	.06	11.
28 FEB 0345	12	.02	.02	.00	0.	28 FEB 1600	61	.06	.00	.05	10.
28 FEB 0400	13	.02	.02	.00	0.	28 FEB 1615	62	.05	.00	.05	10.
28 FEB 0415	14	.02	.02	.00	0.	28 FEB 1630	63	.05	.00	.05	9.
28 FEB 0430	15	.02	.02	.00	0.	28 FEB 1645	64	.05	.00	.05	9.
28 FEB 0445	16	.02	.02	.00	0.	28 FEB 1700	65	.05	.00	.04	8.
28 FEB 0500	17	.02	.02	.00	0.	28 FEB 1715	66	.04	.00	.04	8.
28 FEB 0515	18	.02	.02	.00	0.	28 FEB 1730	67	.04	.00	.04	8.
28 FEB 0530	19	.02	.02	.00	0.	28 FEB 1745	68	.04	.00	.04	7.
28 FEB 0545	20	.02	.02	.00	0.	28 FEB 1800	69	.04	.00	.04	7.
28 FEB 0600	21	.02	.02	.00	0.	28 FEB 1815	70	.04	.00	.04	7.
28 FEB 0615	22	.02	.02	.00	1.	28 FEB 1830	71	.04	.00	.04	7.
28 FEB 0630	23	.02	.02	.00	1.	28 FEB 1845	72	.04	.00	.03	6.
28 FEB 0645	24	.02	.02	.01	1.	28 FEB 1900	73	.03	.00	.03	6.
28 FEB 0700	25	.02	.02	.01	1.	28 FEB 1915	74	.02	.00	.02	5.
28 FEB 0715	26	.03	.02	.01	1.	28 FEB 1930	75	.02	.00	.02	4.
28 FEB 0730	27	.03	.02	.01	2.	28 FEB 1945	76	.02	.00	.02	4.
28 FEB 0745	28	.04	.02	.01	2.	28 FEB 2000	77	.02	.00	.02	4.
28 FEB 0800	29	.04	.02	.02	2.	28 FEB 2015	78	.02	.00	.02	4.
28 FEB 0815	30	.04	.02	.02	3.	28 FEB 2030	79	.02	.00	.02	3.
28 FEB 0830	31	.04	.02	.02	3.	28 FEB 2045	80	.02	.00	.02	3.
28 FEB 0845	32	.04	.02	.02	3.	28 FEB 2100	81	.02	.00	.02	3.
28 FEB 0900	33	.04	.02	.02	4.	28 FEB 2115	82	.02	.00	.02	3.
28 FEB 0915	34	.04	.02	.03	4.	28 FEB 2130	83	.02	.00	.02	3.
28 FEB 0930	35	.05	.02	.03	4.	28 FEB 2145	84	.02	.00	.02	3.
28 FEB 0945	36	.05	.02	.03	5.	28 FEB 2200	85	.02	.00	.02	3.
28 FEB 1000	37	.05	.02	.03	5.	28 FEB 2215	86	.02	.00	.02	3.
28 FEB 1015	38	.05	.02	.04	6.	28 FEB 2230	87	.02	.00	.02	3.
28 FEB 1030	39	.06	.02	.04	6.	28 FEB 2245	88	.02	.00	.02	3.
28 FEB 1045	40	.06	.02	.04	7.	28 FEB 2300	89	.02	.00	.01	3.
28 FEB 1100	41	.07	.02	.05	7.	28 FEB 2315	90	.01	.00	.01	3.
28 FEB 1115	42	.07	.02	.05	8.	28 FEB 2330	91	.01	.00	.01	3.
28 FEB 1130	43	.08	.02	.06	9.	28 FEB 2345	92	.01	.00	.01	3.
28 FEB 1145	44	.09	.02	.07	10.	1 MAR 0000	93	.01	.00	.01	2.
28 FEB 1200	45	.10	.02	.08	12.	1 MAR 0015	94	.01	.00	.01	2.
28 FEB 1215	46	.13	.02	.10	14.	1 MAR 0030	95	.01	.00	.01	2.
28 FEB 1230	47	.16	.02	.13	18.	1 MAR 0045	96	.01	.00	.01	2.
28 FEB 1245	48	.25	.03	.22	24.	1 MAR 0100	97	.01	.00	.01	2.
28 FEB 1300	49	.54	.06	.48	44.						

TOTAL RAINFALL = 6.00, TOTAL LOSS = 1.04, TOTAL EXCESS = 4.96

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.00-HR
(CFS)	(HR)					
		(CFS)				
+ 123.	12.50		28.	9.	9.	9.
		(INCHES)	3.807	4.933	4.933	4.933
		(AC-FT)	14.	18.	18.	18.

CUMULATIVE AREA = .07 SQ MI

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          **************
          *            *
281 KK    *      MAWL  *
          *            *
          **************

282 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           1  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                               DIRECT INPUT FROM MITIGATION AREA WETLAND
                               (SEE POND2: APPENDIX 10-G)

  6 IN          TIME DATA FOR INPUT TIME SERIES
                      JXMIN          15  TIME INTERVAL IN MINUTES
                     JXDATE     28FEB91  STARTING DATE
                     JXTIME         100  STARTING TIME

             SUBBASIN RUNOFF DATA

285 BA          SUBBASIN CHARACTERISTICS
                      TAREA         .01  SUBBASIN AREA
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HYDROGRAPH AT STATION MAWL

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DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW
28 FEB 0100	1	0.	28 FEB 0715	26	0.	28 FEB 1330	51	2.	28 FEB 1945	76	15.
28 FEB 0115	2	0.	28 FEB 0730	27	0.	28 FEB 1345	52	3.	28 FEB 2000	77	15.
28 FEB 0130	3	0.	28 FEB 0745	28	0.	28 FEB 1400	53	3.	28 FEB 2015	78	16.
28 FEB 0145	4	0.	28 FEB 0800	29	0.	28 FEB 1415	54	4.	28 FEB 2030	79	16.
28 FEB 0200	5	0.	28 FEB 0815	30	0.	28 FEB 1430	55	4.	28 FEB 2045	80	17.
28 FEB 0215	6	0.	28 FEB 0830	31	0.	28 FEB 1445	56	5.	28 FEB 2100	81	18.
28 FEB 0230	7	0.	28 FEB 0845	32	0.	28 FEB 1500	57	5.	28 FEB 2115	82	19.
28 FEB 0245	8	0.	28 FEB 0900	33	0.	28 FEB 1515	58	5.	28 FEB 2130	83	19.
28 FEB 0300	9	0.	28 FEB 0915	34	0.	28 FEB 1530	59	6.	28 FEB 2145	84	20.
28 FEB 0315	10	0.	28 FEB 0930	35	0.	28 FEB 1545	60	6.	28 FEB 2200	85	20.
28 FEB 0330	11	0.	28 FEB 0945	36	0.	28 FEB 1600	61	7.	28 FEB 2215	86	20.
28 FEB 0345	12	0.	28 FEB 1000	37	0.	28 FEB 1615	62	8.	28 FEB 2230	87	21.
28 FEB 0400	13	0.	28 FEB 1015	38	0.	28 FEB 1630	63	9.	28 FEB 2245	88	21.
28 FEB 0415	14	0.	28 FEB 1030	39	0.	28 FEB 1645	64	9.	28 FEB 2300	89	21.
28 FEB 0430	15	0.	28 FEB 1045	40	0.	28 FEB 1700	65	10.	28 FEB 2315	90	21.
28 FEB 0445	16	0.	28 FEB 1100	41	0.	28 FEB 1715	66	11.	28 FEB 2330	91	21.
28 FEB 0500	17	0.	28 FEB 1115	42	0.	28 FEB 1730	67	11.	28 FEB 2345	92	21.
28 FEB 0515	18	0.	28 FEB 1130	43	0.	28 FEB 1745	68	12.	1 MAR 0000	93	20.
28 FEB 0530	19	0.	28 FEB 1145	44	0.	28 FEB 1800	69	12.	1 MAR 0015	94	20.
28 FEB 0545	20	0.	28 FEB 1200	45	0.	28 FEB 1815	70	13.	1 MAR 0030	95	20.
28 FEB 0600	21	0.	28 FEB 1215	46	0.	28 FEB 1830	71	13.	1 MAR 0045	96	20.
28 FEB 0615	22	0.	28 FEB 1230	47	1.	28 FEB 1845	72	13.	1 MAR 0100	97	19.
28 FEB 0630	23	0.	28 FEB 1245	48	1.	28 FEB 1900	73	14.			
28 FEB 0645	24	0.	28 FEB 1300	49	1.	28 FEB 1915	74	14.			

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  28 FEB 0700   25        0.   *   28 FEB 1315   50        1.   *   28 FEB 1930   75        15.   *
                               *                                *                                *
*****************************************************************************************************************

 PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                    6-HR        24-HR        72-HR      24.00-HR
+ (CFS)       (HR)
                         (CFS)
+      21.     22.25                 19.           7.           7.           7.
                       (INCHES)   17.224       24.360       24.360       24.360
                        (AC-FT)       9.          13.          13.          13.

                        CUMULATIVE AREA =     .01 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***


            **************
            *            *
 296 KK     *        9P  *
            *            *
            **************

 297 KO          OUTPUT CONTROL VARIABLES
                       IPRNT           1  PRINT CONTROL
                       IPLOT           0  PLOT CONTROL
                       QSCAL          0.  HYDROGRAPH PLOT SCALE
                                SCS RUNOFF CALCULATION

               SUBBASIN RUNOFF DATA

 299 BA          SUBBASIN CHARACTERISTICS
                       TAREA         .01  SUBBASIN AREA

                 PRECIPITATION DATA

 300 PH                                DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
                 ..... HYDRO-35 ......   ............... TP-40 ...............   ........... TP-49 ...........
                 5-MIN  15-MIN  60-MIN    2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                   .60    1.30    2.40    3.00    3.40    4.20    5.20    6.00     .00     .00     .00     .00

                                                  STORM AREA =     .01

 301 LS          SCS LOSS RATE
                       STRTL         .44  INITIAL ABSTRACTION
                      CRVNBR       82.00  CURVE NUMBER
                       RTIMP         .00  PERCENT IMPERVIOUS AREA

 302 UD          SCS DIMENSIONLESS UNITGRAPH
                        TLAG         .19  LAG

                                                          ***

WARNING *** TIME INTERVAL IS GREATER THAN .29*LAG

                                                     UNIT HYDROGRAPH
                                                  6 END-OF-PERIOD ORDINATES
                15.       10.        3.        1.        0.        0.

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                                              HYDROGRAPH AT STATION       9P
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DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
28 FEB 0100	1	.00	.00	.00	0.	28 FEB 1315	50	1.30	.26	1.04	20.
28 FEB 0115	2	.01	.01	.00	0.	28 FEB 1330	51	.31	.05	.26	15.
28 FEB 0130	3	.01	.01	.00	0.	28 FEB 1345	52	.18	.02	.15	8.
28 FEB 0145	4	.01	.01	.00	0.	28 FEB 1400	53	.14	.02	.12	5.
28 FEB 0200	5	.01	.01	.00	0.	28 FEB 1415	54	.11	.01	.10	3.
28 FEB 0215	6	.01	.01	.00	0.	28 FEB 1430	55	.10	.01	.08	3.
28 FEB 0230	7	.01	.01	.00	0.	28 FEB 1445	56	.08	.01	.07	2.
28 FEB 0245	8	.01	.01	.00	0.	28 FEB 1500	57	.08	.01	.07	2.
28 FEB 0300	9	.01	.01	.00	0.	28 FEB 1515	58	.07	.01	.06	2.
28 FEB 0315	10	.01	.01	.00	0.	28 FEB 1530	59	.06	.01	.06	2.
28 FEB 0330	11	.02	.02	.00	0.	28 FEB 1545	60	.06	.01	.05	2.
28 FEB 0345	12	.02	.02	.00	0.	28 FEB 1600	61	.06	.01	.05	1.
28 FEB 0400	13	.02	.02	.00	0.	28 FEB 1615	62	.05	.01	.05	1.
28 FEB 0415	14	.02	.02	.00	0.	28 FEB 1630	63	.05	.01	.05	1.
28 FEB 0430	15	.02	.02	.00	0.	28 FEB 1645	64	.05	.00	.04	1.
28 FEB 0445	16	.02	.02	.00	0.	28 FEB 1700	65	.05	.00	.04	1.
28 FEB 0500	17	.02	.02	.00	0.	28 FEB 1715	66	.04	.00	.04	1.
28 FEB 0515	18	.02	.02	.00	0.	28 FEB 1730	67	.04	.00	.04	1.
28 FEB 0530	19	.02	.02	.00	0.	28 FEB 1745	68	.04	.00	.04	1.
28 FEB 0545	20	.02	.02	.00	0.	28 FEB 1800	69	.04	.00	.04	1.
28 FEB 0600	21	.02	.02	.00	0.	28 FEB 1815	70	.04	.00	.03	1.
28 FEB 0615	22	.02	.02	.00	0.	28 FEB 1830	71	.04	.00	.03	1.
28 FEB 0630	23	.02	.02	.00	0.	28 FEB 1845	72	.04	.00	.03	1.
28 FEB 0645	24	.02	.02	.00	0.	28 FEB 1900	73	.03	.00	.03	1.
28 FEB 0700	25	.02	.02	.00	0.	28 FEB 1915	74	.02	.00	.02	1.
28 FEB 0715	26	.03	.03	.00	0.	28 FEB 1930	75	.02	.00	.02	1.
28 FEB 0730	27	.03	.03	.00	0.	28 FEB 1945	76	.02	.00	.02	1.
28 FEB 0745	28	.04	.03	.00	0.	28 FEB 2000	77	.02	.00	.02	1.
28 FEB 0800	29	.04	.03	.00	0.	28 FEB 2015	78	.02	.00	.02	1.
28 FEB 0815	30	.04	.03	.00	0.	28 FEB 2030	79	.02	.00	.02	1.
28 FEB 0830	31	.04	.03	.01	0.	28 FEB 2045	80	.02	.00	.02	0.
28 FEB 0845	32	.04	.03	.01	0.	28 FEB 2100	81	.02	.00	.02	0.
28 FEB 0900	33	.04	.03	.01	0.	28 FEB 2115	82	.02	.00	.02	0.
28 FEB 0915	34	.04	.04	.01	0.	28 FEB 2130	83	.02	.00	.02	0.
28 FEB 0930	35	.05	.04	.01	0.	28 FEB 2145	84	.02	.00	.02	0.
28 FEB 0945	36	.05	.04	.01	0.	28 FEB 2200	85	.02	.00	.02	0.
28 FEB 1000	37	.05	.04	.02	0.	28 FEB 2215	86	.02	.00	.01	0.
28 FEB 1015	38	.05	.04	.02	0.	28 FEB 2230	87	.02	.00	.01	0.
28 FEB 1030	39	.06	.04	.02	1.	28 FEB 2245	88	.02	.00	.01	0.
28 FEB 1045	40	.06	.04	.02	1.	28 FEB 2300	89	.02	.00	.01	0.
28 FEB 1100	41	.07	.04	.03	1.	28 FEB 2315	90	.01	.00	.01	0.
28 FEB 1115	42	.07	.04	.03	1.	28 FEB 2330	91	.01	.00	.01	0.
28 FEB 1130	43	.08	.04	.04	1.	28 FEB 2345	92	.01	.00	.01	0.
28 FEB 1145	44	.09	.05	.04	1.	1 MAR 0000	93	.01	.00	.01	0.
28 FEB 1200	45	.10	.05	.05	1.	1 MAR 0015	94	.01	.00	.01	0.
28 FEB 1215	46	.13	.06	.07	2.	1 MAR 0030	95	.01	.00	.01	0.
28 FEB 1230	47	.16	.06	.09	2.	1 MAR 0045	96	.01	.00	.01	0.
28 FEB 1245	48	.25	.09	.16	4.	1 MAR 0100	97	.01	.00	.01	0.
28 FEB 1300	49	.54	.16	.38	8.						

TOTAL RAINFALL = 6.00, TOTAL LOSS = 2.01, TOTAL EXCESS = 3.99

PEAK FLOW (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	24.00-HR
		(CFS)				
+ 20.	12.25		4.	1.	1.	1.
		(INCHES)	3.178	3.973	3.973	3.973
		(AC-FT)	2.	2.	2.	2.

CUMULATIVE AREA = .01 SQ MI

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          **************
          *            *
303 KK    *      5PN   *
          *            *
          **************

304 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           1  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                               SCS RUNOFF CALCULATION

             SUBBASIN RUNOFF DATA

306 BA          SUBBASIN CHARACTERISTICS
                      TAREA         .01  SUBBASIN AREA

                PRECIPITATION DATA

307 PH                                DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
                ..... HYDRO-35 ......   ............... TP-40 ...............   ........... TP-49 ...........
                5-MIN  15-MIN  60-MIN    2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                  .60    1.30    2.40    3.00    3.40    4.20    5.20    6.00     .00     .00     .00     .00

                                                  STORM AREA =     .01

308 LS          SCS LOSS RATE
                      STRTL         .56  INITIAL ABSTRACTION
                     CRVNBR       78.00  CURVE NUMBER
                      RTIMP         .00  PERCENT IMPERVIOUS AREA

309 UD          SCS DIMENSIONLESS UNITGRAPH
                       TLAG         .43  LAG

                                                          ***

WARNING *** TIME INTERVAL IS GREATER THAN .29*LAG

                                                     UNIT HYDROGRAPH
                                                 11 END-OF-PERIOD ORDINATES
                3.       7.       6.       3.       1.       1.       0.       0.       0.       0.
                0.
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HYDROGRAPH AT STATION 5PN

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DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
28 FEB 0100	1	.00	.00	.00	0.	*	28 FEB 1315	50	1.30	.35	.95	6.
28 FEB 0115	2	.01	.01	.00	0.	*	28 FEB 1330	51	.31	.06	.25	10.
28 FEB 0130	3	.01	.01	.00	0.	*	28 FEB 1345	52	.18	.03	.15	9.
28 FEB 0145	4	.01	.01	.00	0.	*	28 FEB 1400	53	.14	.02	.11	6.
28 FEB 0200	5	.01	.01	.00	0.	*	28 FEB 1415	54	.11	.02	.09	4.
28 FEB 0215	6	.01	.01	.00	0.	*	28 FEB 1430	55	.10	.02	.08	3.
28 FEB 0230	7	.01	.01	.00	0.	*	28 FEB 1445	56	.08	.01	.07	2.

28 FEB 0245	8	.01	.01	.00	0.	*	28 FEB 1500	57	.08	.01	.06	2.
28 FEB 0300	9	.01	.01	.00	0.	*	28 FEB 1515	58	.07	.01	.06	2.
28 FEB 0315	10	.01	.01	.00	0.	*	28 FEB 1530	59	.06	.01	.05	1.
28 FEB 0330	11	.02	.02	.00	0.	*	28 FEB 1545	60	.06	.01	.05	1.
28 FEB 0345	12	.02	.02	.00	0.	*	28 FEB 1600	61	.06	.01	.05	1.
28 FEB 0400	13	.02	.02	.00	0.	*	28 FEB 1615	62	.05	.01	.05	1.
28 FEB 0415	14	.02	.02	.00	0.	*	28 FEB 1630	63	.05	.01	.04	1.
28 FEB 0430	15	.02	.02	.00	0.	*	28 FEB 1645	64	.05	.01	.04	1.
28 FEB 0445	16	.02	.02	.00	0.	*	28 FEB 1700	65	.05	.01	.04	1.
28 FEB 0500	17	.02	.02	.00	0.	*	28 FEB 1715	66	.04	.01	.04	1.
28 FEB 0515	18	.02	.02	.00	0.	*	28 FEB 1730	67	.04	.01	.04	1.
28 FEB 0530	19	.02	.02	.00	0.	*	28 FEB 1745	68	.04	.01	.03	1.
28 FEB 0545	20	.02	.02	.00	0.	*	28 FEB 1800	69	.04	.01	.03	1.
28 FEB 0600	21	.02	.02	.00	0.	*	28 FEB 1815	70	.04	.00	.03	1.
28 FEB 0615	22	.02	.02	.00	0.	*	28 FEB 1830	71	.04	.00	.03	1.
28 FEB 0630	23	.02	.02	.00	0.	*	28 FEB 1845	72	.04	.00	.03	1.
28 FEB 0645	24	.02	.02	.00	0.	*	28 FEB 1900	73	.03	.00	.03	1.
28 FEB 0700	25	.02	.02	.00	0.	*	28 FEB 1915	74	.02	.00	.02	1.
28 FEB 0715	26	.03	.03	.00	0.	*	28 FEB 1930	75	.02	.00	.02	1.
28 FEB 0730	27	.03	.03	.00	0.	*	28 FEB 1945	76	.02	.00	.02	0.
28 FEB 0745	28	.04	.04	.00	0.	*	28 FEB 2000	77	.02	.00	.02	0.
28 FEB 0800	29	.04	.04	.00	0.	*	28 FEB 2015	78	.02	.00	.02	0.
28 FEB 0815	30	.04	.04	.00	0.	*	28 FEB 2030	79	.02	.00	.02	0.
28 FEB 0830	31	.04	.04	.00	0.	*	28 FEB 2045	80	.02	.00	.02	0.
28 FEB 0845	32	.04	.04	.00	0.	*	28 FEB 2100	81	.02	.00	.02	0.
28 FEB 0900	33	.04	.04	.00	0.	*	28 FEB 2115	82	.02	.00	.02	0.
28 FEB 0915	34	.04	.04	.00	0.	*	28 FEB 2130	83	.02	.00	.02	0.
28 FEB 0930	35	.05	.04	.01	0.	*	28 FEB 2145	84	.02	.00	.01	0.
28 FEB 0945	36	.05	.04	.01	0.	*	28 FEB 2200	85	.02	.00	.01	0.
28 FEB 1000	37	.05	.04	.01	0.	*	28 FEB 2215	86	.02	.00	.01	0.
28 FEB 1015	38	.05	.04	.01	0.	*	28 FEB 2230	87	.02	.00	.01	0.
28 FEB 1030	39	.06	.04	.01	0.	*	28 FEB 2245	88	.02	.00	.01	0.
28 FEB 1045	40	.06	.05	.02	0.	*	28 FEB 2300	89	.02	.00	.01	0.
28 FEB 1100	41	.07	.05	.02	0.	*	28 FEB 2315	90	.01	.00	.01	0.
28 FEB 1115	42	.07	.05	.02	0.	*	28 FEB 2330	91	.01	.00	.01	0.
28 FEB 1130	43	.08	.05	.03	0.	*	28 FEB 2345	92	.01	.00	.01	0.
28 FEB 1145	44	.09	.06	.03	1.	*	1 MAR 0000	93	.01	.00	.01	0.
28 FEB 1200	45	.10	.06	.04	1.	*	1 MAR 0015	94	.01	.00	.01	0.
28 FEB 1215	46	.13	.07	.06	1.	*	1 MAR 0030	95	.01	.00	.01	0.
28 FEB 1230	47	.16	.08	.08	1.	*	1 MAR 0045	96	.01	.00	.01	0.
28 FEB 1245	48	.25	.12	.13	1.	*	1 MAR 0100	97	.01	.00	.01	0.
28 FEB 1300	49	.54	.21	.33	3.	*						
						*						

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TOTAL RAINFALL = 6.00, TOTAL LOSS = 2.42, TOTAL EXCESS = 3.58

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.00-HR
+ (CFS)	(HR)					
		(CFS)				
+ 10.	12.50		2.	1.	1.	1.
		(INCHES)	2.878	3.551	3.551	3.551
		(AC-FT)	1.	2.	2.	2.

CUMULATIVE AREA = .01 SQ MI

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310 KK    *     MA5PN  *
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311 KO          OUTPUT CONTROL VARIABLES
                      IPRNT          1  PRINT CONTROL
                      IPLOT          0  PLOT CONTROL
                      QSCAL         0.  HYDROGRAPH PLOT SCALE
                               COMBINE HYDROGRAPHS FOR 5PN, 9P & MAWL

313 HC          HYDROGRAPH COMBINATION
                      ICOMP          3  NUMBER OF HYDROGRAPHS TO COMBINE

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HYDROGRAPH AT STATION MA5PN
SUM OF 3 HYDROGRAPHS

DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW
28 FEB 0100	1	0.	28 FEB 0715	26	0.	28 FEB 1330	51	27.	28 FEB 1945	76	16.
28 FEB 0115	2	0.	28 FEB 0730	27	0.	28 FEB 1345	52	19.	28 FEB 2000	77	16.
28 FEB 0130	3	0.	28 FEB 0745	28	0.	28 FEB 1400	53	14.	28 FEB 2015	78	17.
28 FEB 0145	4	0.	28 FEB 0800	29	0.	28 FEB 1415	54	11.	28 FEB 2030	79	17.
28 FEB 0200	5	0.	28 FEB 0815	30	0.	28 FEB 1430	55	10.	28 FEB 2045	80	18.
28 FEB 0215	6	0.	28 FEB 0830	31	0.	28 FEB 1445	56	9.	28 FEB 2100	81	19.
28 FEB 0230	7	0.	28 FEB 0845	32	0.	28 FEB 1500	57	9.	28 FEB 2115	82	19.
28 FEB 0245	8	0.	28 FEB 0900	33	0.	28 FEB 1515	58	9.	28 FEB 2130	83	20.
28 FEB 0300	9	0.	28 FEB 0915	34	0.	28 FEB 1530	59	9.	28 FEB 2145	84	20.
28 FEB 0315	10	0.	28 FEB 0930	35	0.	28 FEB 1545	60	9.	28 FEB 2200	85	21.
8 FEB 0330	11	0.	28 FEB 0945	36	1.	28 FEB 1600	61	10.	28 FEB 2215	86	21.
28 FEB 0345	12	0.	28 FEB 1000	37	1.	28 FEB 1615	62	10.	28 FEB 2230	87	21.
28 FEB 0400	13	0.	28 FEB 1015	38	1.	28 FEB 1630	63	11.	28 FEB 2245	88	21.
28 FEB 0415	14	0.	28 FEB 1030	39	1.	28 FEB 1645	64	11.	28 FEB 2300	89	21.
28 FEB 0430	15	0.	28 FEB 1045	40	1.	28 FEB 1700	65	12.	28 FEB 2315	90	21.
28 FEB 0445	16	0.	28 FEB 1100	41	1.	28 FEB 1715	66	13.	28 FEB 2330	91	21.
28 FEB 0500	17	0.	28 FEB 1115	42	1.	28 FEB 1730	67	13.	28 FEB 2345	92	21.
28 FEB 0515	18	0.	28 FEB 1130	43	2.	28 FEB 1745	68	14.	1 MAR 0000	93	21.
28 FEB 0530	19	0.	28 FEB 1145	44	2.	28 FEB 1800	69	14.	1 MAR 0015	94	21.
28 FEB 0545	20	0.	28 FEB 1200	45	2.	28 FEB 1815	70	15.	1 MAR 0030	95	21.
28 FEB 0600	21	0.	28 FEB 1215	46	3.	28 FEB 1830	71	15.	1 MAR 0045	96	20.
28 FEB 0615	22	0.	28 FEB 1230	47	4.	28 FEB 1845	72	15.	1 MAR 0100	97	20.
28 FEB 0630	23	0.	28 FEB 1245	48	6.	28 FEB 1900	73	15.			
28 FEB 0645	24	0.	28 FEB 1300	49	11.	28 FEB 1915	74	16.			
28 FEB 0700	25	0.	28 FEB 1315	50	28.	28 FEB 1930	75	16.			

PEAK FLOW (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	24.00-HR
		(CFS)				
28.	12.25		19.	8.	8.	8.
		(INCHES)	6.197	10.887	10.887	10.887
		(AC-FT)	10.	17.	17.	17.

CUMULATIVE AREA = .03 SQ MI

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          *            *
314 KK    *    AADWEX  *
          *            *
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315 KO        OUTPUT CONTROL VARIABLES
                    IPRNT          1  PRINT CONTROL
                    IPLOT          0  PLOT CONTROL
                    QSCAL         0.  HYDROGRAPH PLOT SCALE
                            STORAGE ROUTING THROUGH ATLANTIC AVENUE DRAINWAY EXTENSION

            HYDROGRAPH ROUTING DATA

317 RS        STORAGE ROUTING
                    NSTPS          1  NUMBER OF SUBREACHES
                     ITYP       ELEV  TYPE OF INITIAL CONDITION
                   RSVRIC      60.00  INITIAL CONDITION
                        X        .00 WORKING R AND D COEFFICIENT

318 SA             AREA         .0        .0        .0        .1        .1        .1        .2        .2

319 SE        ELEVATION      60.00     62.50     63.50     64.50     65.50     66.50     67.50     68.00

320 SL        LOW-LEVEL OUTLET
                    ELEVL      61.90  ELEVATION AT CENTER OF OUTLET
                    CAREA      37.70  CROSS-SECTIONAL AREA
                     COQL        .60  COEFFICIENT
                     EXPL        .50  EXPONENT OF HEAD

321 SS        SPILLWAY
                     CREL      67.90  SPILLWAY CREST ELEVATION
                    SPWID        .00  SPILLWAY WIDTH
                     COQW        .00  WEIR COEFFICIENT
                     EXPW       1.50  EXPONENT OF HEAD

                                                    ***

                                        COMPUTED STORAGE-ELEVATION DATA

          STORAGE        .00       .02       .04       .08       .15       .27       .42       .52
        ELEVATION      60.00     62.50     63.50     64.50     65.50     66.50     67.50     68.00

                                        COMPUTED OUTFLOW-ELEVATION DATA

          OUTFLOW        .00       .00    322.62    335.76    350.02    365.54    382.50    401.12    421.64    444.37
        ELEVATION      60.00     61.90     65.06     65.33     65.62     65.96     66.35     66.79     67.30     67.90


                                      COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

          STORAGE        .00       .01       .02       .04       .08       .12       .14       .15       .17       .20
          OUTFLOW        .00       .00    140.52    229.47    292.52    322.62    335.76    344.21    350.02    365.54
        ELEVATION      60.00     61.90     62.50     63.50     64.50     65.06     65.33     65.50     65.62     65.96

          STORAGE        .25       .27       .31       .39       .42       .50       .52
          OUTFLOW     382.50    389.09    401.12    421.64    429.30    444.37    448.06
        ELEVATION      66.35     66.50     66.79     67.30     67.50     67.90     68.00

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN        0. TO      448.
               THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
               THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

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HYDROGRAPH AT STATION AADWEX

DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE
28	FEB	0100	1	0.	.0	60.0	28	FEB	0915	34	0.	.0	61.9	28	FEB	1730	67	13.	.0	62.0
28	FEB	0115	2	0.	.0	60.0	28	FEB	0930	35	1.	.0	61.9	28	FEB	1745	68	14.	.0	62.0
28	FEB	0130	3	0.	.0	60.0	28	FEB	0945	36	0.	.0	61.9	28	FEB	1800	69	14.	.0	62.0
28	FEB	0145	4	0.	.0	60.0	28	FEB	1000	37	1.	.0	61.9	28	FEB	1815	70	14.	.0	62.0
28	FEB	0200	5	0.	.0	60.0	28	FEB	1015	38	1.	.0	61.9	28	FEB	1830	71	15.	.0	62.0
28	FEB	0215	6	0.	.0	60.0	28	FEB	1030	39	1.	.0	61.9	28	FEB	1845	72	15.	.0	62.0
28	FEB	0230	7	0.	.0	60.0	28	FEB	1045	40	1.	.0	61.9	28	FEB	1900	73	15.	.0	62.0
28	FEB	0245	8	0.	.0	60.0	28	FEB	1100	41	1.	.0	61.9	28	FEB	1915	74	15.	.0	62.0
28	FEB	0300	9	0.	.0	60.0	28	FEB	1115	42	1.	.0	61.9	28	FEB	1930	75	16.	.0	62.0
28	FEB	0315	10	0.	.0	60.0	28	FEB	1130	43	2.	.0	61.9	28	FEB	1945	76	16.	.0	62.0
28	FEB	0330	11	0.	.0	60.0	28	FEB	1145	44	2.	.0	61.9	28	FEB	2000	77	17.	.0	62.0
28	FEB	0345	12	0.	.0	60.0	28	FEB	1200	45	2.	.0	61.9	28	FEB	2015	78	17.	.0	62.0
28	FEB	0400	13	0.	.0	60.0	28	FEB	1215	46	3.	.0	61.9	28	FEB	2030	79	17.	.0	62.0
28	FEB	0415	14	0.	.0	60.0	28	FEB	1230	47	4.	.0	61.9	28	FEB	2045	80	17.	.0	62.0
28	FEB	0430	15	0.	.0	60.0	28	FEB	1245	48	5.	.0	61.9	28	FEB	2100	81	19.	.0	62.0
28	FEB	0445	16	0.	.0	60.0	28	FEB	1300	49	11.	.0	61.9	28	FEB	2115	82	19.	.0	62.0
28	FEB	0500	17	0.	.0	60.0	28	FEB	1315	50	27.	.0	62.0	28	FEB	2130	83	20.	.0	62.0
28	FEB	0515	18	0.	.0	60.0	28	FEB	1330	51	27.	.0	62.0	28	FEB	2145	84	20.	.0	62.0
28	FEB	0530	19	0.	.0	60.0	28	FEB	1345	52	19.	.0	62.0	28	FEB	2200	85	21.	.0	62.0
28	FEB	0545	20	0.	.0	60.0	28	FEB	1400	53	14.	.0	62.0	28	FEB	2215	86	21.	.0	62.0
28	FEB	0600	21	0.	.0	60.0	28	FEB	1415	54	11.	.0	61.9	28	FEB	2230	87	21.	.0	62.0
28	FEB	0615	22	0.	.0	60.0	28	FEB	1430	55	10.	.0	61.9	28	FEB	2245	88	21.	.0	62.0
28	FEB	0630	23	0.	.0	60.0	28	FEB	1445	56	9.	.0	61.9	28	FEB	2300	89	22.	.0	62.0
28	FEB	0645	24	0.	.0	60.0	28	FEB	1500	57	9.	.0	61.9	28	FEB	2315	90	21.	.0	62.0
28	FEB	0700	25	0.	.0	60.1	28	FEB	1515	58	9.	.0	61.9	28	FEB	2330	91	22.	.0	62.0
28	FEB	0715	26	0.	.0	60.1	28	FEB	1530	59	9.	.0	61.9	28	FEB	2345	92	21.	.0	62.0
28	FEB	0730	27	0.	.0	60.1	28	FEB	1545	60	9.	.0	61.9	1	MAR	0000	93	21.	.0	62.0
	FEB	0745	28	0.	.0	60.2	28	FEB	1600	61	10.	.0	61.9	1	MAR	0015	94	21.	.0	62.0
28	FEB	0800	29	0.	.0	60.5	28	FEB	1615	62	10.	.0	61.9	1	MAR	0030	95	21.	.0	62.0
28	FEB	0815	30	0.	.0	60.8	28	FEB	1630	63	11.	.0	61.9	1	MAR	0045	96	20.	.0	62.0
28	FEB	0830	31	0.	.0	61.3	28	FEB	1645	64	11.	.0	61.9	1	MAR	0100	97	20.	.0	62.0
28	FEB	0845	32	0.	.0	61.9	28	FEB	1700	65	12.	.0	62.0							
28	FEB	0900	33	0.	.0	61.9	28	FEB	1715	66	12.	.0	62.0							

PEAK FLOW (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	24.00-HR
		(CFS)				
27.	12.25		19.	8.	8.	8.
		(INCHES)	6.197	10.879	10.879	10.879
		(AC-FT)	10.	17.	17.	17.

PEAK STORAGE (AC-FT)	TIME (HR)	MAXIMUM AVERAGE STORAGE 6-HR	24-HR	72-HR	24.00-HR
0.	12.25	0.	0.	0.	0.

PEAK STAGE (FEET)	TIME (HR)	MAXIMUM AVERAGE STAGE 6-HR	24-HR	72-HR	24.00-HR
62.02	12.25	61.98	61.37	61.37	61.37

CUMULATIVE AREA = .03 SQ MI

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          *            *
322 KK    *      5PS   *
          *            *
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323 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           1  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                               SCS RUNOFF CALCULATION

               SUBBASIN RUNOFF DATA

325 BA          SUBBASIN CHARACTERISTICS
                      TAREA         .05  SUBBASIN AREA

                PRECIPITATION DATA

326 PH                                DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
                ..... HYDRO-35 ......   ............... TP-40 ...............   ........... TP-49 ...........
                5-MIN  15-MIN  60-MIN    2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                  .60    1.30    2.40    3.00    3.40    4.20    5.20    6.00     .00     .00     .00     .00

                                                STORM AREA =     .05

327 LS          SCS LOSS RATE
                      STRTL         .41  INITIAL ABSTRACTION
                     CRVNBR       83.00  CURVE NUMBER
                      RTIMP         .00  PERCENT IMPERVIOUS AREA

328 UD          SCS DIMENSIONLESS UNITGRAPH
                       TLAG         .52  LAG

                                                  ***

WARNING *** TIME INTERVAL IS GREATER THAN .29*LAG

                                                UNIT HYDROGRAPH
                                           12 END-OF-PERIOD ORDINATES
              11.       35.       36.       24.       12.        6.        3.        2.        1.        1.
               0.        0.
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HYDROGRAPH AT STATION 5PS

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DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA	MON	HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
28	FEB	0100	1	.00	.00	.00	0.	*	28	FEB	1315	50	1.30	.24	1.06	35.
28	FEB	0115	2	.01	.01	.00	0.	*	28	FEB	1330	51	.31	.04	.27	60.
28	FEB	0130	3	.01	.01	.00	0.	*	28	FEB	1345	52	.18	.02	.16	62.
28	FEB	0145	4	.01	.01	.00	0.	*	28	FEB	1400	53	.14	.02	.12	48.
28	FEB	0200	5	.01	.01	.00	0.	*	28	FEB	1415	54	.11	.01	.10	34.
28	FEB	0215	6	.01	.01	.00	0.	*	28	FEB	1430	55	.10	.01	.09	25.
28	FEB	0230	7	.01	.01	.00	0.	*	28	FEB	1445	56	.08	.01	.08	19.
28	FEB	0245	8	.01	.01	.00	0.	*	28	FEB	1500	57	.08	.01	.07	15.
28	FEB	0300	9	.01	.01	.00	0.	*	28	FEB	1515	58	.07	.01	.06	12.
28	FEB	0315	10	.01	.01	.00	0.	*	28	FEB	1530	59	.06	.01	.06	10.
28	FEB	0330	11	.02	.02	.00	0.	*	28	FEB	1545	60	.06	.01	.05	9.
28	FEB	0345	12	.02	.02	.00	0.	*	28	FEB	1600	61	.06	.01	.05	8.
28	FEB	0400	13	.02	.02	.00	0.	*	28	FEB	1615	62	.05	.00	.05	7.

28 FEB 0415	14	.02	.02	.00	0.	*	28 FEB 1630	63	.05	.00	.05	7.
28 FEB 0430	15	.02	.02	.00	0.	*	28 FEB 1645	64	.05	.00	.04	7.
28 FEB 0445	16	.02	.02	.00	0.	*	28 FEB 1700	65	.05	.00	.04	6.
28 FEB 0500	17	.02	.02	.00	0.	*	28 FEB 1715	66	.04	.00	.04	6.
28 FEB 0515	18	.02	.02	.00	0.	*	28 FEB 1730	67	.04	.00	.04	6.
28 FEB 0530	19	.02	.02	.00	0.	*	28 FEB 1745	68	.04	.00	.04	5.
28 FEB 0545	20	.02	.02	.00	0.	*	28 FEB 1800	69	.04	.00	.04	5.
28 FEB 0600	21	.02	.02	.00	0.	*	28 FEB 1815	70	.04	.00	.03	5.
28 FEB 0615	22	.02	.02	.00	0.	*	28 FEB 1830	71	.04	.00	.03	5.
28 FEB 0630	23	.02	.02	.00	0.	*	28 FEB 1845	72	.04	.00	.03	5.
28 FEB 0645	24	.02	.02	.00	0.	*	28 FEB 1900	73	.03	.00	.03	4.
28 FEB 0700	25	.02	.02	.00	0.	*	28 FEB 1915	74	.02	.00	.02	4.
28 FEB 0715	26	.03	.03	.00	0.	*	28 FEB 1930	75	.02	.00	.02	4.
28 FEB 0730	27	.03	.03	.00	0.	*	28 FEB 1945	76	.02	.00	.02	3.
28 FEB 0745	28	.04	.03	.00	0.	*	28 FEB 2000	77	.02	.00	.02	3.
28 FEB 0800	29	.04	.03	.00	0.	*	28 FEB 2015	78	.02	.00	.02	3.
28 FEB 0815	30	.04	.03	.00	0.	*	28 FEB 2030	79	.02	.00	.02	3.
28 FEB 0830	31	.04	.03	.01	0.	*	28 FEB 2045	80	.02	.00	.02	2.
28 FEB 0845	32	.04	.03	.01	1.	*	28 FEB 2100	81	.02	.00	.02	2.
28 FEB 0900	33	.04	.03	.01	1.	*	28 FEB 2115	82	.02	.00	.02	2.
28 FEB 0915	34	.04	.03	.01	1.	*	28 FEB 2130	83	.02	.00	.02	2.
28 FEB 0930	35	.05	.03	.01	1.	*	28 FEB 2145	84	.02	.00	.02	2.
28 FEB 0945	36	.05	.03	.01	1.	*	28 FEB 2200	85	.02	.00	.02	2.
28 FEB 1000	37	.05	.03	.02	2.	*	28 FEB 2215	86	.02	.00	.01	2.
28 FEB 1015	38	.05	.03	.02	2.	*	28 FEB 2230	87	.02	.00	.01	2.
28 FEB 1030	39	.06	.04	.02	2.	*	28 FEB 2245	88	.02	.00	.01	2.
28 FEB 1045	40	.06	.04	.03	3.	*	28 FEB 2300	89	.02	.00	.01	2.
28 FEB 1100	41	.07	.04	.03	3.	*	28 FEB 2315	90	.01	.00	.01	2.
28 FEB 1115	42	.07	.04	.03	3.	*	28 FEB 2330	91	.01	.00	.01	2.
28 FEB 1130	43	.08	.04	.04	4.	*	28 FEB 2345	92	.01	.00	.01	2.
28 FEB 1145	44	.09	.04	.05	4.	*	1 MAR 0000	93	.01	.00	.01	2.
28 FEB 1200	45	.10	.05	.06	5.	*	1 MAR 0015	94	.01	.00	.01	2.
28 FEB 1215	46	.13	.05	.07	6.	*	1 MAR 0030	95	.01	.00	.01	2.
28 FEB 1230	47	.16	.06	.10	8.	*	1 MAR 0045	96	.01	.00	.01	2.
28 FEB 1245	48	.25	.08	.17	10.	*	1 MAR 0100	97	.01	.00	.01	2.
28 FEB 1300	49	.54	.15	.39	17.	*						
						*						

****

TOTAL RAINFALL = 6.00, TOTAL LOSS = 1.91, TOTAL EXCESS = 4.09

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.00-HR
+ (CFS)	(HR)					
		(CFS)				
+ 62.	12.75		18.	6.	6.	6.
		(INCHES)	3.243	4.056	4.056	4.056
		(AC-FT)	9.	11.	11.	11.

CUMULATIVE AREA = .05 SQ MI

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          *            *
329 KK    *    RECHRG  *
          *            *
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330 KO OUTPUT CONTROL VARIABLES

IPRNT 1 PRINT CONTROL

IPLOT 0 PLOT CONTROL

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                    QSCAL          0.  HYDROGRAPH PLOT SCALE
                                 DIRECT INPUT OF HYDROGRAPH FROM RECHARGE BASIN

  6 IN          TIME DATA FOR INPUT TIME SERIES
                      JXMIN          15  TIME INTERVAL IN MINUTES
                     JXDATE     28FEB91  STARTING DATE
                     JXTIME         100  STARTING TIME

             SUBBASIN RUNOFF DATA

332 BA          SUBBASIN CHARACTERISTICS
                      TAREA         .00  SUBBASIN AREA

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HYDROGRAPH AT STATION RECHRG

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DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW
28 FEB 0100	1	1.	28 FEB 0715	26	1.	28 FEB 1330	51	1.	28 FEB 1945	76	1.
28 FEB 0115	2	1.	28 FEB 0730	27	1.	28 FEB 1345	52	1.	28 FEB 2000	77	1.
28 FEB 0130	3	1.	28 FEB 0745	28	1.	28 FEB 1400	53	1.	28 FEB 2015	78	1.
28 FEB 0145	4	1.	28 FEB 0800	29	1.	28 FEB 1415	54	1.	28 FEB 2030	79	1.
28 FEB 0200	5	1.	28 FEB 0815	30	1.	28 FEB 1430	55	1.	28 FEB 2045	80	1.
28 FEB 0215	6	1.	28 FEB 0830	31	1.	28 FEB 1445	56	1.	28 FEB 2100	81	1.
28 FEB 0230	7	1.	28 FEB 0845	32	1.	28 FEB 1500	57	1.	28 FEB 2115	82	1.
28 FEB 0245	8	1.	28 FEB 0900	33	1.	28 FEB 1515	58	1.	28 FEB 2130	83	1.
28 FEB 0300	9	1.	28 FEB 0915	34	1.	28 FEB 1530	59	1.	28 FEB 2145	84	1.
28 FEB 0315	10	1.	28 FEB 0930	35	1.	28 FEB 1545	60	1.	28 FEB 2200	85	1.
28 FEB 0330	11	1.	28 FEB 0945	36	1.	28 FEB 1600	61	1.	28 FEB 2215	86	1.
28 FEB 0345	12	1.	28 FEB 1000	37	1.	28 FEB 1615	62	1.	28 FEB 2230	87	1.
28 FEB 0400	13	1.	28 FEB 1015	38	1.	28 FEB 1630	63	1.	28 FEB 2245	88	1.
28 FEB 0415	14	1.	28 FEB 1030	39	1.	28 FEB 1645	64	1.	28 FEB 2300	89	1.
28 FEB 0430	15	1.	28 FEB 1045	40	1.	28 FEB 1700	65	1.	28 FEB 2315	90	1.
28 FEB 0445	16	1.	28 FEB 1100	41	1.	28 FEB 1715	66	1.	28 FEB 2330	91	1.
28 FEB 0500	17	1.	28 FEB 1115	42	1.	28 FEB 1730	67	1.	28 FEB 2345	92	1.
28 FEB 0515	18	1.	28 FEB 1130	43	1.	28 FEB 1745	68	1.	1 MAR 0000	93	1.
28 FEB 0530	19	1.	28 FEB 1145	44	1.	28 FEB 1800	69	1.	1 MAR 0015	94	1.
28 FEB 0545	20	1.	28 FEB 1200	45	1.	28 FEB 1815	70	1.	1 MAR 0030	95	1.
28 FEB 0600	21	1.	28 FEB 1215	46	1.	28 FEB 1830	71	1.	1 MAR 0045	96	1.
28 FEB 0615	22	1.	28 FEB 1230	47	1.	28 FEB 1845	72	1.	1 MAR 0100	97	1.
28 FEB 0630	23	1.	28 FEB 1245	48	1.	28 FEB 1900	73	1.			
28 FEB 0645	24	1.	28 FEB 1300	49	1.	28 FEB 1915	74	1.			
28 FEB 0700	25	1.	28 FEB 1315	50	1.	28 FEB 1930	75	1.			

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 PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                    6-HR        24-HR        72-HR      24.00-HR
+   (CFS)      (HR)
                            (CFS)
+      1.       .25                 1.           1.           1.           1.
                          (INCHES)   5.579       22.314       22.314       22.314
                           (AC-FT)     0.           1.           1.           1.

                          CUMULATIVE AREA =      .00 SQ MI
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          *            *
346 KK    *    SHD10C  *
          *            *
          **************

347 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           1  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                              STORAGE ROUTING THROUGH ATLANTIC AVENUE CHANNEL at RR TRACKS

              HYDROGRAPH ROUTING DATA

349 RS          STORAGE ROUTING
                      NSTPS           1  NUMBER OF SUBREACHES
                       ITYP        STOR  TYPE OF INITIAL CONDITION
                     RSVRIC         .00  INITIAL CONDITION
                          X         .00 WORKING R AND D COEFFICIENT

350 RC          NORMAL DEPTH CHANNEL ROUTING
                        ANL        .080  LEFT OVERBANK N-VALUE
                       ANCH        .030  MAIN CHANNEL N-VALUE
                        ANR        .080  RIGHT OVERBANK N-VALUE
                      RLNTH        800.  REACH LENGTH
                        SEL       .0070  ENERGY SLOPE
                      ELMAX        63.0  MAX. ELEV. FOR STORAGE/OUTFLOW CALCULATION

                                        CROSS-SECTION DATA
                        --- LEFT OVERBANK --- + ------ MAIN CHANNEL ------- + --- RIGHT OVERBANK ---
352 RY        ELEVATION    63.00     62.50     62.00     54.20     54.20     62.00     62.50     63.00
351 RX        DISTANCE       .00     10.00     20.00     28.00     42.00     50.00     60.00     70.00

                                                          ***

                                        COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

          STORAGE        .00       .12       .25       .39       .54       .70       .86      1.03      1.21      1.40
          OUTFLOW        .00     16.05     50.89    100.12    162.22    236.42    322.34    419.79    528.71    649.14
        ELEVATION      54.20     54.66     55.13     55.59     56.05     56.52     56.98     57.44     57.91     58.37

          STORAGE       1.59      1.80      2.01      2.23      2.46      2.70      2.94      3.19      3.55      4.07
          OUTFLOW     781.14    924.85   1080.41   1247.98   1427.76   1619.93   1824.69   2050.08   2334.15   2644.58
        ELEVATION      58.83     59.29     59.76     60.22     60.68     61.15     61.61     62.07     62.54     63.00

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN        0. TO     2645.
               THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
               THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

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                                                HYDROGRAPH AT STATION   SHD10C

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                                                *                                                *
 DA MON HRMN ORD  OUTFLOW  STORAGE   STAGE * DA MON HRMN ORD  OUTFLOW  STORAGE   STAGE * DA MON HRMN ORD  OUTFLOW  STORAGE   STAGE
                                                *                                                *
 28 FEB 0100   1       0.       .0    54.2 * 28 FEB 0915  34       2.       .0    54.3 * 28 FEB 1730  67      19.       .1    54.7
 28 FEB 0115   2       1.       .0    54.2 * 28 FEB 0930  35       2.       .0    54.3 * 28 FEB 1745  68      20.       .1    54.7
    FEB 0130   3       1.       .0    54.2 * 28 FEB 0945  36       2.       .0    54.3 * 28 FEB 1800  69      20.       .1    54.7
    FEB 0145   4       1.       .0    54.2 * 28 FEB 1000  37       3.       .0    54.3 * 28 FEB 1815  70      20.       .1    54.7
 28 FEB 0200   5       1.       .0    54.2 * 28 FEB 1015  38       3.       .0    54.3 * 28 FEB 1830  71      20.       .1    54.7
 28 FEB 0215   6       1.       .0    54.2 * 28 FEB 1030  39       3.       .0    54.3 * 28 FEB 1845  72      20.       .1    54.7
 28 FEB 0230   7       1.       .0    54.2 * 28 FEB 1045  40       4.       .0    54.3 * 28 FEB 1900  73      20.       .1    54.7
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28 FEB	0245	8	1.	.0	54.2	*	28 FEB	1100	41	4.	.0	54.3	*	28 FEB	1915	74	20.	.1	54.7
28 FEB	0300	9	1.	.0	54.2	*	28 FEB	1115	42	5.	.0	54.3	*	28 FEB	1930	75	20.	.1	54.7
28 FEB	0315	10	1.	.0	54.2	*	28 FEB	1130	43	6.	.0	54.4	*	28 FEB	1945	76	20.	.1	54.7
28 FEB	0330	11	1.	.0	54.2	*	28 FEB	1145	44	7.	.1	54.4	*	28 FEB	2000	77	20.	.1	54
28 FEB	0345	12	1.	.0	54.2	*	28 FEB	1200	45	8.	.1	54.4	*	28 FEB	2015	78	20.	.1	5
28 FEB	0400	13	1.	.0	54.2	*	28 FEB	1215	46	9.	.1	54.5	*	28 FEB	2030	79	20.	.1	54.
28 FEB	0415	14	1.	.0	54.2	*	28 FEB	1230	47	11.	.1	54.5	*	28 FEB	2045	80	21.	.1	54.7
28 FEB	0430	15	1.	.0	54.2	*	28 FEB	1245	48	15.	.1	54.6	*	28 FEB	2100	81	21.	.1	54.7
28 FEB	0445	16	1.	.0	54.2	*	28 FEB	1300	49	26.	.2	54.8	*	28 FEB	2115	82	22.	.1	54.7
28 FEB	0500	17	1.	.0	54.2	*	28 FEB	1315	50	56.	.3	55.2	*	28 FEB	2130	83	23.	.1	54.8
28 FEB	0515	18	1.	.0	54.2	*	28 FEB	1330	51	87.	.4	55.5	*	28 FEB	2145	84	23.	.1	54.8
28 FEB	0530	19	1.	.0	54.2	*	28 FEB	1345	52	84.	.3	55.4	*	28 FEB	2200	85	23.	.2	54.8
28 FEB	0545	20	1.	.0	54.2	*	28 FEB	1400	53	66.	.3	55.3	*	28 FEB	2215	86	24.	.2	54.8
28 FEB	0600	21	1.	.0	54.2	*	28 FEB	1415	54	48.	.2	55.1	*	28 FEB	2230	87	24.	.2	54.8
28 FEB	0615	22	1.	.0	54.2	*	28 FEB	1430	55	37.	.2	54.9	*	28 FEB	2245	88	24.	.2	54.8
28 FEB	0630	23	1.	.0	54.2	*	28 FEB	1445	56	29.	.2	54.8	*	28 FEB	2300	89	24.	.2	54.8
28 FEB	0645	24	1.	.0	54.2	*	28 FEB	1500	57	25.	.2	54.8	*	28 FEB	2315	90	24.	.2	54.8
28 FEB	0700	25	1.	.0	54.2	*	28 FEB	1515	58	22.	.1	54.7	*	28 FEB	2330	91	24.	.2	54.8
28 FEB	0715	26	1.	.0	54.2	*	28 FEB	1530	59	20.	.1	54.7	*	28 FEB	2345	92	24.	.2	54.8
28 FEB	0730	27	1.	.0	54.2	*	28 FEB	1545	60	19.	.1	54.7	*	1 MAR	0000	93	23.	.2	54.8
28 FEB	0745	28	1.	.0	54.2	*	28 FEB	1600	61	19.	.1	54.7	*	1 MAR	0015	94	23.	.2	54.8
28 FEB	0800	29	1.	.0	54.2	*	28 FEB	1615	62	18.	.1	54.7	*	1 MAR	0030	95	23.	.1	54.8
28 FEB	0815	30	1.	.0	54.2	*	28 FEB	1630	63	18.	.1	54.7	*	1 MAR	0045	96	23.	.1	54.8
28 FEB	0830	31	1.	.0	54.2	*	28 FEB	1645	64	19.	.1	54.7	*	1 MAR	0100	97	22.	.1	54.7
28 FEB	0845	32	1.	.0	54.2	*	28 FEB	1700	65	19.	.1	54.7	*						
28 FEB	0900	33	2.	.0	54.2	*	28 FEB	1715	66	19.	.1	54.7	*						
						*							*						

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PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.00-HR
+ (CFS)	(HR)					
		(CFS)				
+ 87.	12.50		31.	15.	15.	15.
		(INCHES)	3.566	6.690	6.690	6.690
		(AC-FT)	15.	29.	29.	29.

PEAK STORAGE	TIME	MAXIMUM AVERAGE STORAGE			
		6-HR	24-HR	72-HR	24.00-HR
+ (AC-FT)	(HR)				
0.	12.50	0.	0.	0.	0.

PEAK STAGE	TIME	MAXIMUM AVERAGE STAGE			
		6-HR	24-HR	72-HR	24.00-HR
+ (FEET)	(HR)				
55.46	12.50	54.85	54.53	54.53	54.53

CUMULATIVE AREA = .08 SQ MI

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              *            *
353 KK        *   4DCHAB   *
              *            *
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354 KO OUTPUT CONTROL VARIABLES

IPRNT	1	PRINT CONTROL
IPLOT	0	PLOT CONTROL
QSCAL	0.	HYDROGRAPH PLOT SCALE

DIRECT INPUT OF HYDROGRAPH FROM NW WOBURN & WILMINGTON

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  6 IN          TIME DATA FOR INPUT TIME SERIES
                      JXMIN          15  TIME INTERVAL IN MINUTES
                     JXDATE     28FEB91  STARTING DATE
                     JXTIME         100  STARTING TIME

              SUBBASIN RUNOFF DATA

 356 BA         SUBBASIN CHARACTERISTICS
                      TAREA         .26  SUBBASIN AREA

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HYDROGRAPH AT STATION 4DCHAB

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DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW
28 FEB 0100	1	0.	28 FEB 0715	26	0.	28 FEB 1330	51	107.	28 FEB 1945	76	22.
28 FEB 0115	2	0.	28 FEB 0730	27	0.	28 FEB 1345	52	78.	28 FEB 2000	77	22.
28 FEB 0130	3	0.	28 FEB 0745	28	0.	28 FEB 1400	53	51.	28 FEB 2015	78	22.
28 FEB 0145	4	0.	28 FEB 0800	29	0.	28 FEB 1415	54	38.	28 FEB 2030	79	21.
28 FEB 0200	5	0.	28 FEB 0815	30	0.	28 FEB 1430	55	31.	28 FEB 2045	80	21.
28 FEB 0215	6	0.	28 FEB 0830	31	0.	28 FEB 1445	56	28.	28 FEB 2100	81	21.
28 FEB 0230	7	0.	28 FEB 0845	32	0.	28 FEB 1500	57	26.	28 FEB 2115	82	21.
28 FEB 0245	8	0.	28 FEB 0900	33	0.	28 FEB 1515	58	24.	28 FEB 2130	83	21.
28 FEB 0300	9	0.	28 FEB 0915	34	0.	28 FEB 1530	59	24.	28 FEB 2145	84	21.
28 FEB 0315	10	0.	28 FEB 0930	35	0.	28 FEB 1545	60	23.	28 FEB 2200	85	21.
28 FEB 0330	11	0.	28 FEB 0945	36	1.	28 FEB 1600	61	23.	28 FEB 2215	86	21.
28 FEB 0345	12	0.	28 FEB 1000	37	1.	28 FEB 1615	62	23.	28 FEB 2230	87	21.
28 FEB 0400	13	0.	28 FEB 1015	38	1.	28 FEB 1630	63	23.	28 FEB 2245	88	21.
28 FEB 0415	14	0.	28 FEB 1030	39	2.	28 FEB 1645	64	23.	28 FEB 2300	89	21.
28 FEB 0430	15	0.	28 FEB 1045	40	2.	28 FEB 1700	65	23.	28 FEB 2315	90	21.
28 FEB 0445	16	0.	28 FEB 1100	41	2.	28 FEB 1715	66	23.	28 FEB 2330	91	20.
28 FEB 0500	17	0.	28 FEB 1115	42	3.	28 FEB 1730	67	23.	28 FEB 2345	92	20.
28 FEB 0515	18	0.	28 FEB 1130	43	4.	28 FEB 1745	68	23.	1 MAR 0000	93	20.
28 FEB 0530	19	0.	28 FEB 1145	44	5.	28 FEB 1800	69	23.	1 MAR 0015	94	20.
28 FEB 0545	20	0.	28 FEB 1200	45	6.	28 FEB 1815	70	23.	1 MAR 0030	95	20.
28 FEB 0600	21	0.	28 FEB 1215	46	8.	28 FEB 1830	71	23.	1 MAR 0045	96	20.
28 FEB 0615	22	0.	28 FEB 1230	47	10.	28 FEB 1845	72	23.	1 MAR 0100	97	19.
28 FEB 0630	23	0.	28 FEB 1245	48	15.	28 FEB 1900	73	23.			
28 FEB 0645	24	0.	28 FEB 1300	49	30.	28 FEB 1915	74	23.			
28 FEB 0700	25	0.	28 FEB 1315	50	78.	28 FEB 1930	75	22.			

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PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.00-HR
+ (CFS)	(HR)					
		(CFS)				
+ 107.	12.50		34.	14.	14.	14.
		(INCHES)	1.212	2.078	2.078	2.078
		(AC-FT)	17.	29.	29.	29.

CUMULATIVE AREA = .26 SQ MI

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          *          *
367 KK    *     2PN  *
          *          *
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368 KO        OUTPUT CONTROL VARIABLES
                    IPRNT          1  PRINT CONTROL
                    IPLOT          0  PLOT CONTROL
                    QSCAL         0.  HYDROGRAPH PLOT SCALE
                             SCS RUNOFF CALCULATION

            SUBBASIN RUNOFF DATA

370 BA        SUBBASIN CHARACTERISTICS
                    TAREA        .01  SUBBASIN AREA

              PRECIPITATION DATA

371 PH                              DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
              ..... HYDRO-35 ......   ............... TP-40 ...............   ........... TP-49 ...........
              5-MIN  15-MIN  60-MIN    2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                .60    1.30    2.40    3.00    3.40    4.20    5.20    6.00     .00     .00     .00     .00

                                                  STORM AREA =     .01

372 LS        SCS LOSS RATE
                    STRTL        .35  INITIAL ABSTRACTION
                   CRVNBR      85.00  CURVE NUMBER
                    RTIMP        .00  PERCENT IMPERVIOUS AREA

373 UD        SCS DIMENSIONLESS UNITGRAPH
                     TLAG        .28  LAG

                                                        ***

WARNING *** TIME INTERVAL IS GREATER THAN .29*LAG

                                                    UNIT HYDROGRAPH
                                                 8 END-OF-PERIOD ORDINATES
              7.        9.        3.        1.        0.        0.        0.        0.

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                                                HYDROGRAPH AT STATION      2PN

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                                                                  *
      DA MON HRMN  ORD    RAIN    LOSS  EXCESS     COMP Q        *      DA MON HRMN  ORD    RAIN    LOSS  EXCESS     COMP Q
                                                                  *
      28 FEB 0100    1     .00     .00     .00         0.        *      28 FEB 1315   50    1.30     .19    1.11        12.
      28 FEB 0115    2     .01     .01     .00         0.        *      28 FEB 1330   51     .31     .03     .28        13.
      28 FEB 0130    3     .01     .01     .00         0.        *      28 FEB 1345   52     .18     .02     .16         8.
      28 FEB 0145    4     .01     .01     .00         0.        *      28 FEB 1400   53     .14     .01     .13         5.
      28 FEB 0200    5     .01     .01     .00         0.        *      28 FEB 1415   54     .11     .01     .10         3.
      28 FEB 0215    6     .01     .01     .00         0.        *      28 FEB 1430   55     .10     .01     .09         2.
      28 FEB 0230    7     .01     .01     .00         0.        *      28 FEB 1445   56     .08     .01     .08         2.
      28 FEB 0245    8     .01     .01     .00         0.        *      28 FEB 1500   57     .08     .01     .07         2.
      28 FEB 0300    9     .01     .01     .00         0.        *      28 FEB 1515   58     .07     .01     .06         1.
      28 FEB 0315   10     .01     .01     .00         0.        *      28 FEB 1530   59     .06     .00     .06         1.
      28 FEB 0330   11     .02     .02     .00         0.        *      28 FEB 1545   60     .06     .00     .06         1.
      28 FEB 0345   12     .02     .02     .00         0.        *      28 FEB 1600   61     .06     .00     .05         1.
      28 FEB 0400   13     .02     .02     .00         0.        *      28 FEB 1615   62     .05     .00     .05         1.
      28 FEB 0415   14     .02     .02     .00         0.        *      28 FEB 1630   63     .05     .00     .05         1.
      28 FEB 0430   15     .02     .02     .00         0.        *      28 FEB 1645   64     .05     .00     .04         1.
      28 FEB 0445   16     .02     .02     .00         0.        *      28 FEB 1700   65     .05     .00     .04         1.
      28 FEB 0500   17     .02     .02     .00         0.        *      28 FEB 1715   66     .04     .00     .04         1.
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28 FEB 0515	18	.02	.02	.00	0.	*	28 FEB 1730	67	.04	.00	.04	1.
28 FEB 0530	19	.02	.02	.00	0.	*	28 FEB 1745	68	.04	.00	.04	1.
28 FEB 0545	20	.02	.02	.00	0.	*	28 FEB 1800	69	.04	.00	.04	1.
28 FEB 0600	21	.02	.02	.00	0.	*	28 FEB 1815	70	.04	.00	.04	1.
28 FEB 0615	22	.02	.02	.00	0.	*	28 FEB 1830	71	.04	.00	.03	1.
28 FEB 0630	23	.02	.02	.00	0.	*	28 FEB 1845	72	.04	.00	.03	1.
28 FEB 0645	24	.02	.02	.00	0.	*	28 FEB 1900	73	.03	.00	.03	1.
28 FEB 0700	25	.02	.02	.00	0.	*	28 FEB 1915	74	.02	.00	.02	1.
28 FEB 0715	26	.03	.03	.00	0.	*	28 FEB 1930	75	.02	.00	.02	0.
28 FEB 0730	27	.03	.03	.00	0.	*	28 FEB 1945	76	.02	.00	.02	0.
28 FEB 0745	28	.04	.03	.00	0.	*	28 FEB 2000	77	.02	.00	.02	0.
28 FEB 0800	29	.04	.03	.01	0.	*	28 FEB 2015	78	.02	.00	.02	0.
28 FEB 0815	30	.04	.03	.01	0.	*	28 FEB 2030	79	.02	.00	.02	0.
28 FEB 0830	31	.04	.03	.01	0.	*	28 FEB 2045	80	.02	.00	.02	0.
28 FEB 0845	32	.04	.03	.01	0.	*	28 FEB 2100	81	.02	.00	.02	0.
28 FEB 0900	33	.04	.03	.01	0.	*	28 FEB 2115	82	.02	.00	.02	0.
28 FEB 0915	34	.04	.03	.01	0.	*	FEB 2130	83	.02	.00	.02	0.
28 FEB 0930	35	.05	.03	.02	0.	*	FEB 2145	84	.02	.00	.02	0.
28 FEB 0945	36	.05	.03	.02	0.	*	28 FEB 2200	85	.02	.00	.02	0.
28 FEB 1000	37	.05	.03	.02	0.	*	28 FEB 2215	86	.02	.00	.02	0.
28 FEB 1015	38	.05	.03	.02	0.	*	28 FEB 2230	87	.02	.00	.01	0.
28 FEB 1030	39	.06	.03	.03	0.	*	28 FEB 2245	88	.02	.00	.01	0.
28 FEB 1045	40	.06	.03	.03	1.	*	28 FEB 2300	89	.02	.00	.01	0.
28 FEB 1100	41	.07	.03	.03	1.	*	28 FEB 2315	90	.01	.00	.01	0.
28 FEB 1115	42	.07	.03	.04	1.	*	28 FEB 2330	91	.01	.00	.01	0.
28 FEB 1130	43	.08	.04	.04	1.	*	28 FEB 2345	92	.01	.00	.01	0.
28 FEB 1145	44	.09	.04	.05	1.	*	1 MAR 0000	93	.01	.00	.01	0.
28 FEB 1200	45	.10	.04	.06	1.	*	1 MAR 0015	94	.01	.00	.01	0.
28 FEB 1215	46	.13	.05	.08	1.	*	1 MAR 0030	95	.01	.00	.01	0.
28 FEB 1230	47	.16	.05	.11	2.	*	1 MAR 0045	96	.01	.00	.01	0.
28 FEB 1245	48	.25	.07	.18	2.	*	1 MAR 0100	97	.01	.00	.01	0.
28 FEB 1300	49	.54	.12	.42	5.	*						
						*						

****

TOTAL RAINFALL = 6.00, TOTAL LOSS = 1.70, TOTAL EXCESS = 4.30

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.00-HR
+ (CFS)	(HR)					
		(CFS)				
+ 13.	12.50		3.	1.	1.	1.
		(INCHES)	3.395	4.283	4.283	4.283
		(AC-FT)	1.	2.	2.	2.

CUMULATIVE AREA = .01 SQ MI

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            **************
            *            *
377 KK      *     PXDPR  *
            *            *
            **************

378 KO          OUTPUT CONTROL VARIABLES
                      IPRNT          1  PRINT CONTROL
                      IPLOT          0  PLOT CONTROL
                      QSCAL         0.  HYDROGRAPH PLOT SCALE
                               ROUTING OF NW WOBURN & WILMINGTON THROUGH PX DEPRESSED AREA

                HYDROGRAPH ROUTING DATA
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380 RS          STORAGE ROUTING
                     NSTPS          1  NUMBER OF SUBREACHES
                      ITYP       ELEV  TYPE OF INITIAL CONDITION
                    RSVRIC      68.90  INITIAL CONDITION
                         X        .00 WORKING R AND D COEFFICIENT

381 SA              AREA          .0        .3        .7        .9

382 SE          ELEVATION      68.00     69.00     70.00     71.00

383 SL          LOW-LEVEL OUTLET
                     ELEVL      69.65  ELEVATION AT CENTER OF OUTLET
                     CAREA       9.62  CROSS-SECTIONAL AREA
                      COQL        .60  COEFFICIENT
                      EXPL        .50  EXPONENT OF HEAD

384 SS          SPILLWAY
                      CREL      72.30  SPILLWAY CREST ELEVATION
                     SPWID        .00  SPILLWAY WIDTH
                      COQW        .00  WEIR COEFFICIENT
                      EXPW       1.50  EXPONENT OF HEAD

                                                    ***

                                        COMPUTED STORAGE-ELEVATION DATA

          STORAGE        .00       .10       .59      1.41
        ELEVATION      68.00     69.00     70.00     71.00

                                        COMPUTED OUTFLOW-ELEVATION DATA

          OUTFLOW        .00       .00     58.14     60.10     62.20     64.45     66.87     69.48     72.30     75.36
        ELEVATION      68.00     69.65     71.23     71.34     71.46     71.59     71.74     71.90     72.09     72.30


                                      COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

          STORAGE        .00       .10       .37       .59      1.41      1.63      1.74      1.86      2.00      2.17
          OUTFLOW        .00       .00       .00     27.39     53.79     58.14     60.10     62.20     64.45     66.87
        ELEVATION      68.00     69.00     69.65     70.00     71.00     71.23     71.34     71.46     71.59     71.74

          STORAGE       2.35      2.57      2.83
          OUTFLOW      69.48     72.30     75.36
        ELEVATION      71.90     72.09     72.30

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN        0. TO       27.
               THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
               THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

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                                        HYDROGRAPH AT STATION    PXDPR

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                                                *                                                *
 DA MON HRMN ORD  OUTFLOW  STORAGE   STAGE * DA MON HRMN ORD  OUTFLOW  STORAGE   STAGE * DA MON HRMN ORD  OUTFLOW  STORAGE   STAGE
                                                *                                                *
 28 FEB 0100   1       0.       .1    68.7 * 28 FEB 0915  34       0.       .1    69.0 * 28 FEB 1730  67      24.       .6    70.0
 28 FEB 0115   2       0.       .1    68.7 * 28 FEB 0930  35       0.       .1    69.0 * 28 FEB 1745  68      24.       .6    70.0
 28 FEB 0130   3       0.       .1    68.7 * 28 FEB 0945  36       0.       .1    69.0 * 28 FEB 1800  69      24.       .6    70
 28 FEB 0145   4       0.       .1    68.7 * 28 FEB 1000  37       0.       .1    69.1 * 28 FEB 1815  70      24.       .6    70.
 28 FEB 0200   5       0.       .1    68.7 * 28 FEB 1015  38       0.       .2    69.2 * 28 FEB 1830  71      24.       .6    70.0
 28 FEB 0215   6       0.       .1    68.7 * 28 FEB 1030  39       0.       .2    69.3 * 28 FEB 1845  72      24.       .6    70.0
 28 FEB 0230   7       0.       .1    68.7 * 28 FEB 1045  40       0.       .3    69.4 * 28 FEB 1900  73      24.       .6    70.0
 28 FEB 0245   8       0.       .1    68.7 * 28 FEB 1100  41       0.       .3    69.5 * 28 FEB 1915  74      24.       .6    70.0
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28	FEB	0300	9	0.	.1	68.7	*	28	FEB	1115	42	1.	.4	69.7	*	28	FEB	1930	75	23.	.6	69.9
28	FEB	0315	10	0.	.1	68.7	*	28	FEB	1130	43	5.	.4	69.7	*	28	FEB	1945	76	22.	.5	69.9
28	FEB	0330	11	0.	.1	68.7	*	28	FEB	1145	44	5.	.4	69.7	*	28	FEB	2000	77	22.	.5	69.9
28	FEB	0345	12	0.	.1	68.7	*	28	FEB	1200	45	7.	.4	69.7	*	28	FEB	2015	78	22.	.5	69.9
	FEB	0400	13	0.	.1	68.7	*	28	FEB	1215	46	8.	.4	69.8	*	28	FEB	2030	79	22.	.5	69.9
	FEB	0415	14	0.	.1	68.7	*	28	FEB	1230	47	11.	.5	69.8	*	28	FEB	2045	80	21.	.5	69.9
28	FEB	0430	15	0.	.1	68.7	*	28	FEB	1245	48	15.	.5	69.8	*	28	FEB	2100	81	21.	.5	69.9
28	FEB	0445	16	0.	.1	68.7	*	28	FEB	1300	49	27.	.6	70.0	*	28	FEB	2115	82	21.	.5	69.9
28	FEB	0500	17	0.	.1	68.7	*	28	FEB	1315	50	45.	1.1	70.7	*	28	FEB	2130	83	21.	.5	69.9
28	FEB	0515	18	0.	.1	68.7	*	28	FEB	1330	51	67.	2.1	71.7	*	28	FEB	2145	84	21.	.5	69.9
28	FEB	0530	19	0.	.1	68.7	*	28	FEB	1345	52	75.	2.8	72.3	*	28	FEB	2200	85	21.	.5	69.9
28	FEB	0545	20	0.	.1	68.7	*	28	FEB	1400	53	74.	2.7	72.2	*	28	FEB	2215	86	21.	.5	69.9
28	FEB	0600	21	0.	.1	68.7	*	28	FEB	1415	54	68.	2.3	71.8	*	28	FEB	2230	87	21.	.5	69.9
28	FEB	0615	22	0.	.1	68.7	*	28	FEB	1430	55	60.	1.7	71.3	*	28	FEB	2245	88	21.	.5	69.9
28	FEB	0630	23	0.	.1	68.7	*	28	FEB	1445	56	49.	1.3	70.8	*	28	FEB	2300	89	21.	.5	69.9
28	FEB	0645	24	0.	.1	68.7	*	28	FEB	1500	57	39.	.9	70.4	*	28	FEB	2315	90	21.	.5	69.9
28	FEB	0700	25	0.	.1	68.7	*	28	FEB	1515	58	33.	.8	70.2	*	28	FEB	2330	91	21.	.5	69.9
28	FEB	0715	26	0.	.1	68.7	*	28	FEB	1530	59	29.	.6	70.1	*	28	FEB	2345	92	20.	.5	69.9
28	FEB	0730	27	0.	.1	68.7	*	28	FEB	1545	60	26.	.6	70.0	*	1	MAR	0000	93	20.	.5	69.9
28	FEB	0745	28	0.	.1	68.8	*	28	FEB	1600	61	24.	.6	70.0	*	1	MAR	0015	94	20.	.5	69.9
28	FEB	0800	29	0.	.1	68.8	*	28	FEB	1615	62	24.	.6	70.0	*	1	MAR	0030	95	20.	.5	69.9
28	FEB	0815	30	0.	.1	68.8	*	28	FEB	1630	63	24.	.6	70.0	*	1	MAR	0045	96	20.	.5	69.9
28	FEB	0830	31	0.	.1	68.8	*	28	FEB	1645	64	24.	.6	70.0	*	1	MAR	0100	97	20.	.5	69.9
28	FEB	0845	32	0.	.1	68.9	*	28	FEB	1700	65	24.	.6	70.0	*							
28	FEB	0900	33	0.	.1	68.9	*	28	FEB	1715	66	24.	.6	70.0	*							
							*								*							

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PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.00-HR
+ (CFS)	(HR)					
		(CFS)				
75.	12.75		37.	15.	15.	15.
		(INCHES)	1.271	2.112	2.112	2.112
		(AC-FT)	18.	30.	30.	30.

PEAK STORAGE	TIME	MAXIMUM AVERAGE STORAGE			
		6-HR	24-HR	72-HR	24.00-HR
+ (AC-FT)	(HR)				
3.	12.75	1.	0.	0.	0.

PEAK STAGE	TIME	MAXIMUM AVERAGE STAGE			
		6-HR	24-HR	72-HR	24.00-HR
+ (FEET)	(HR)				
72.28	12.75	70.46	69.58	69.58	69.58

CUMULATIVE AREA = .27 SQ MI

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              *            *
385 KK        *     4ECHL  *
              *            *
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KO OUTPUT CONTROL VARIABLES

IPRNT	1	PRINT CONTROL
IPLOT	0	PLOT CONTROL
QSCAL	0.	HYDROGRAPH PLOT SCALE

DIRECT INPUT OF HYDROGRAPH FROM NW WOBURN & WILMINGTON

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  6 IN          TIME DATA FOR INPUT TIME SERIES
                      JXMIN          15  TIME INTERVAL IN MINUTES
                     JXDATE     28FEB91  STARTING DATE
                     JXTIME         100  STARTING TIME

              SUBBASIN RUNOFF DATA

388 BA          SUBBASIN CHARACTERISTICS
                      TAREA         .30  SUBBASIN AREA

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HYDROGRAPH AT STATION 4ECHL

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DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW
28 FEB 0100	1	0.	28 FEB 0715	26	0.	28 FEB 1330	51	75.	28 FEB 1945	76	15.
28 FEB 0115	2	0.	28 FEB 0730	27	0.	28 FEB 1345	52	75.	28 FEB 2000	77	14.
28 FEB 0130	3	0.	28 FEB 0745	28	0.	28 FEB 1400	53	75.	28 FEB 2015	78	14.
28 FEB 0145	4	0.	28 FEB 0800	29	0.	28 FEB 1415	54	75.	28 FEB 2030	79	13.
28 FEB 0200	5	0.	28 FEB 0815	30	0.	28 FEB 1430	55	75.	28 FEB 2045	80	13.
28 FEB 0215	6	0.	28 FEB 0830	31	0.	28 FEB 1445	56	75.	28 FEB 2100	81	12.
28 FEB 0230	7	0.	28 FEB 0845	32	0.	28 FEB 1500	57	75.	28 FEB 2115	82	12.
28 FEB 0245	8	0.	28 FEB 0900	33	0.	28 FEB 1515	58	75.	28 FEB 2130	83	12.
28 FEB 0300	9	0.	28 FEB 0915	34	0.	28 FEB 1530	59	75.	28 FEB 2145	84	11.
28 FEB 0315	10	0.	28 FEB 0930	35	1.	28 FEB 1545	60	75.	28 FEB 2200	85	11.
28 FEB 0330	11	0.	28 FEB 0945	36	3.	28 FEB 1600	61	75.	28 FEB 2215	86	11.
28 FEB 0345	12	0.	28 FEB 1000	37	4.	28 FEB 1615	62	75.	28 FEB 2230	87	11.
28 FEB 0400	13	0.	28 FEB 1015	38	5.	28 FEB 1630	63	70.	28 FEB 2245	88	11.
28 FEB 0415	14	0.	28 FEB 1030	39	6.	28 FEB 1645	64	57.	28 FEB 2300	89	10.
28 FEB 0430	15	0.	28 FEB 1045	40	8.	28 FEB 1700	65	44.	28 FEB 2315	90	10.
28 FEB 0445	16	0.	28 FEB 1100	41	10.	28 FEB 1715	66	31.	28 FEB 2330	91	10.
28 FEB 0500	17	0.	28 FEB 1115	42	12.	28 FEB 1730	67	29.	28 FEB 2345	92	10.
28 FEB 0515	18	0.	28 FEB 1130	43	14.	28 FEB 1745	68	28.	1 MAR 0000	93	10.
28 FEB 0530	19	0.	28 FEB 1145	44	18.	28 FEB 1800	69	27.	1 MAR 0015	94	9.
28 FEB 0545	20	0.	28 FEB 1200	45	22.	28 FEB 1815	70	26.	1 MAR 0030	95	9.
28 FEB 0600	21	0.	28 FEB 1215	46	28.	28 FEB 1830	71	25.	1 MAR 0045	96	9.
28 FEB 0615	22	0.	28 FEB 1230	47	37.	28 FEB 1845	72	24.	1 MAR 0100	97	9.
28 FEB 0630	23	0.	28 FEB 1245	48	48.	28 FEB 1900	73	23.			
28 FEB 0645	24	0.	28 FEB 1300	49	69.	28 FEB 1915	74	21.			
28 FEB 0700	25	0.	28 FEB 1315	50	75.	28 FEB 1930	75	18.			

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 PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR        24-HR        72-HR      24.00-HR
+  (CFS)       (HR)
                          (CFS)
+     75.     12.25                   60.          20.          20.          20.
                        (INCHES)    1.862        2.485        2.485        2.485
                         (AC-FT)     30.          40.          40.          40.

                        CUMULATIVE AREA =     .30 SQ MI
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399 KK     *        1P  *
           *            *
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400 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           1  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                               SCS RUNOFF CALCULATION

              SUBBASIN RUNOFF DATA

402 BA          SUBBASIN CHARACTERISTICS
                      TAREA         .02  SUBBASIN AREA

                PRECIPITATION DATA

403 PH                                DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
                ..... HYDRO-35 .....   ............... TP-40 ...............   ........... TP-49 ...........
                5-MIN  15-MIN  60-MIN    2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                  .60    1.30    2.40    3.00    3.40    4.20    5.20    6.00     .00     .00     .00     .00

                                                STORM AREA =     .02

404 LS          SCS LOSS RATE
                      STRTL         .30  INITIAL ABSTRACTION
                     CRVNBR       87.00  CURVE NUMBER
                      RTIMP         .00  PERCENT IMPERVIOUS AREA

405 UD          SCS DIMENSIONLESS UNITGRAPH
                       TLAG         .31  LAG

                                                  ***

WARNING *** TIME INTERVAL IS GREATER THAN .29*LAG

                                                UNIT HYDROGRAPH
                                            8 END-OF-PERIOD ORDINATES
              14.       23.       10.        4.        2.        1.        0.        0.
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HYDROGRAPH AT STATION 1P

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DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
28 FEB 0100	1	.00	.00	.00	0.	*	28 FEB 1315	50	1.30	.15	1.15	29.
28 FEB 0115	2	.01	.01	.00	0.	*	28 FEB 1330	51	.31	.03	.28	36.
28 FEB 0130	3	.01	.01	.00	0.	*	28 FEB 1345	52	.18	.01	.17	23.
28 FEB 0145	4	.01	.01	.00	0.	*	28 FEB 1400	53	.14	.01	.13	14.
28 FEB 0200	5	.01	.01	.00	0.	*	28 FEB 1415	54	.11	.01	.10	10.
28 FEB 0215	6	.01	.01	.00	0.	*	28 FEB 1430	55	.10	.01	.09	7.
28 FEB 0230	7	.01	.01	.00	0.	*	28 FEB 1445	56	.08	.01	.08	6.
28 FEB 0245	8	.01	.01	.00	0.	*	28 FEB 1500	57	.08	.00	.07	5.
28 FEB 0300	9	.01	.01	.00	0.	*	28 FEB 1515	58	.07	.00	.07	4.
28 FEB 0315	10	.01	.01	.00	0.	*	28 FEB 1530	59	.06	.00	.06	4.
28 FEB 0330	11	.02	.02	.00	0.	*	28 FEB 1545	60	.06	.00	.06	3.
28 FEB 0345	12	.02	.02	.00	0.	*	28 FEB 1600	61	.06	.00	.05	3.
28 FEB 0400	13	.02	.02	.00	0.	*	28 FEB 1615	62	.05	.00	.05	3.
28 FEB 0415	14	.02	.02	.00	0.	*	28 FEB 1630	63	.05	.00	.05	3.
28 FEB 0430	15	.02	.02	.00	0.	*	28 FEB 1645	64	.05	.00	.05	3.
28 FEB 0445	16	.02	.02	.00	0.	*	28 FEB 1700	65	.05	.00	.04	2.
28 FEB 0500	17	.02	.02	.00	0.	*	28 FEB 1715	66	.04	.00	.04	2.
28 FEB 0515	18	.02	.02	.00	0.	*	28 FEB 1730	67	.04	.00	.04	2.

28 FEB 0530	19	.02	.02	.00	0.	*	28 FEB 1745	68	.04	.00	.04	2.
28 FEB 0545	20	.02	.02	.00	0.	*	28 FEB 1800	69	.04	.00	.04	2.
28 FEB 0600	21	.02	.02	.00	0.	*	28 FEB 1815	70	.04	.00	.04	2.
28 FEB 0615	22	.02	.02	.00	0.	*	28 FEB 1830	71	.04	.00	.03	2.
28 FEB 0630	23	.02	.02	.00	0.	*	28 FEB 1845	72	.04	.00	.03	2.
28 FEB 0645	24	.02	.02	.00	0.	*	28 FEB 1900	73	.03	.00	.03	2.
28 FEB 0700	25	.02	.02	.00	0.	*	28 FEB 1915	74	.02	.00	.02	2.
28 FEB 0715	26	.03	.03	.00	0.	*	28 FEB 1930	75	.02	.00	.02	1.
28 FEB 0730	27	.03	.03	.01	0.	*	28 FEB 1945	76	.02	.00	.02	1.
28 FEB 0745	28	.04	.03	.01	0.	*	28 FEB 2000	77	.02	.00	.02	1.
28 FEB 0800	29	.04	.03	.01	0.	*	28 FEB 2015	78	.02	.00	.02	1.
28 FEB 0815	30	.04	.03	.01	0.	*	28 FEB 2030	79	.02	.00	.02	1.
28 FEB 0830	31	.04	.03	.01	1.	*	28 FEB 2045	80	.02	.00	.02	1.
28 FEB 0845	32	.04	.03	.01	1.	*	28 FEB 2100	81	.02	.00	.02	1.
28 FEB 0900	33	.04	.03	.02	1.	*	28 FEB 2115	82	.02	.00	.02	1.
28 FEB 0915	34	.04	.03	.02	1.	*	28 FEB 2130	83	.02	.00	.02	1.
28 FEB 0930	35	.05	.03	.02	1.	*	28 FEB 2145	84	.02	.00	.02	1.
28 FEB 0945	36	.05	.03	.02	1.	*	28 FEB 2200	85	.02	.00	.02	1.
28 FEB 1000	37	.05	.03	.02	1.	*	28 FEB 2215	86	.02	.00	.02	1.
28 FEB 1015	38	.05	.03	.03	1.	*	28 FEB 2230	87	.02	.00	.02	1.
28 FEB 1030	39	.06	.03	.03	1.	*	28 FEB 2245	88	.02	.00	.01	1.
28 FEB 1045	40	.06	.03	.03	2.	*	28 FEB 2300	89	.02	.00	.01	1.
28 FEB 1100	41	.07	.03	.04	2.	*	28 FEB 2315	90	.01	.00	.01	1.
28 FEB 1115	42	.07	.03	.04	2.	*	28 FEB 2330	91	.01	.00	.01	1.
28 FEB 1130	43	.08	.03	.05	2.	*	28 FEB 2345	92	.01	.00	.01	1.
28 FEB 1145	44	.09	.03	.06	3.	*	1 MAR 0000	93	.01	.00	.01	1.
28 FEB 1200	45	.10	.03	.07	3.	*	1 MAR 0015	94	.01	.00	.01	1.
28 FEB 1215	46	.13	.04	.09	4.	*	1 MAR 0030	95	.01	.00	.01	1.
28 FEB 1230	47	.16	.04	.11	5.	*	1 MAR 0045	96	.01	.00	.01	1.
28 FEB 1245	48	.25	.06	.19	7.	*	1 MAR 0100	97	.01	.00	.01	1.
28 FEB 1300	49	.54	.10	.44	12.	*						
						*						

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TOTAL RAINFALL = 6.00, TOTAL LOSS = 1.48, TOTAL EXCESS = 4.52

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.00-HR
+ (CFS)	(HR)					
		(CFS)				
+ 36.	12.50		8.	3.	3.	3.
		(INCHES)	3.537	4.495	4.495	4.495
		(AC-FT)	4.	5.	5.	5.

CUMULATIVE AREA = .02 SQ MI

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              *            *
409 KK        *    EWCLPX  *
              *            *
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410 KO OUTPUT CONTROL VARIABLES

IPRNT	1	PRINT CONTROL
IPLOT	0	PLOT CONTROL
QSCAL	0.	HYDROGRAPH PLOT SCALE

CHANNEL ROUTING THROUGH E/W CHANNEL AT PX REALTY

HYDROGRAPH ROUTING DATA

```
412 RS          STORAGE ROUTING
                      NSTPS          1  NUMBER OF SUBREACHES
                       ITYP       STOR  TYPE OF INITIAL CONDITION
                     RSVRIC        .00  INITIAL CONDITION
                          X        .00 WORKING R AND D COEFFICIENT

413 RC          NORMAL DEPTH CHANNEL ROUTING
                        ANL       .080  LEFT OVERBANK N-VALUE
                       ANCH       .030  MAIN CHANNEL N-VALUE
                        ANR       .080  RIGHT OVERBANK N-VALUE
                      RLNTH       250.  REACH LENGTH
                        SEL      .0032  ENERGY SLOPE
                      ELMAX       70.5  MAX. ELEV. FOR STORAGE/OUTFLOW CALCULATION

                                   CROSS-SECTION DATA
                        --- LEFT OVERBANK --- + ------ MAIN CHANNEL ------- + --- RIGHT OVERBANK ---
415 RY        ELEVATION    72.00    71.00    70.00    64.40    64.40    70.00    70.20    70.50
414 RX        DISTANCE       .00     5.00    10.00    16.00    22.00    28.00    38.00    48.00

                                                  ***

                                   COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

          STORAGE       .00      .01      .02      .04      .05      .07      .09      .11      .13      .15
          OUTFLOW       .00     2.53     8.05    15.95    26.08    38.39    52.88    69.60    88.60   109.93
        ELEVATION     64.40    64.72    65.04    65.36    65.68    66.01    66.33    66.65    66.97    67.29

          STORAGE       .17      .20      .22      .25      .28      .31      .34      .37      .41      .47
          OUTFLOW    133.66   159.86   188.59   219.93   253.95   290.73   330.32   372.81   424.60   486.74
        ELEVATION     67.61    67.93    68.25    68.57    68.89    69.22    69.54    69.86    70.18    70.50

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN        0. TO      487.
                THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
                THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

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                                   HYDROGRAPH AT STATION   EWCLPX

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                                        *                                        *
 DA MON HRMN ORD  OUTFLOW  STORAGE  STAGE * DA MON HRMN ORD  OUTFLOW  STORAGE  STAGE * DA MON HRMN ORD  OUTFLOW  STORAGE  STAGE
                                        *                                        *
 28 FEB 0100  1      0.       .0   64.4 * 28 FEB 0915  34      1.       .0   64.5 * 28 FEB 1730  67     31.       .1   65.8
 28 FEB 0115  2      0.       .0   64.4 * 28 FEB 0930  35      2.       .0   64.6 * 28 FEB 1745  68     31.       .1   65.8
 28 FEB 0130  3      0.       .0   64.4 * 28 FEB 0945  36      4.       .0   64.8 * 28 FEB 1800  69     29.       .1   65.8
 28 FEB 0145  4      0.       .0   64.4 * 28 FEB 1000  37      5.       .0   64.9 * 28 FEB 1815  70     28.       .1   65.7
 28 FEB 0200  5      0.       .0   64.4 * 28 FEB 1015  38      6.       .0   64.9 * 28 FEB 1830  71     27.       .1   65.7
 28 FEB 0215  6      0.       .0   64.4 * 28 FEB 1030  39      7.       .0   65.0 * 28 FEB 1845  72     26.       .1   65.7
 28 FEB 0230  7      0.       .0   64.4 * 28 FEB 1045  40      9.       .0   65.1 * 28 FEB 1900  73     25.       .1   65.6
 28 FEB 0245  8      0.       .0   64.4 * 28 FEB 1100  41     12.       .0   65.2 * 28 FEB 1915  74     23.       .0   65.6
 28 FEB 0300  9      0.       .0   64.4 * 28 FEB 1115  42     14.       .0   65.3 * 28 FEB 1930  75     20.       .0   65.5
 28 FEB 0315 10      0.       .0   64.4 * 28 FEB 1130  43     16.       .0   65.4 * 28 FEB 1945  76     16.       .0   65.4
 28 FEB 0330 11      0.       .0   64.4 * 28 FEB 1145  44     20.       .0   65.5 * 28 FEB 2000  77     15.       .0   65.3
 28 FEB 0345 12      0.       .0   64.4 * 28 FEB 1200  45     25.       .1   65.6 * 28 FEB 2015  78     15.       .0   65.3
 28 FEB 0400 13      0.       .0   64.4 * 28 FEB 1215  46     31.       .1   65.8 * 28 FEB 2030  79     14.       .0   65.3
 28 FEB 0415 14      0.       .0   64.4 * 28 FEB 1230  47     41.       .1   66.1 * 28 FEB 2045  80     14.       .0   65.3
 28 FEB 0430 15      0.       .0   64.4 * 28 FEB 1245  48     54.       .1   66.3 * 28 FEB 2100  81     13.       .0   65.3
 28 FEB 0445 16      0.       .0   64.4 * 28 FEB 1300  49     79.       .1   66.8 * 28 FEB 2115  82     13.       .0   65.2
 28 FEB 0500 17      0.       .0   64.4 * 28 FEB 1315  50    104.       .1   67.2 * 28 FEB 2130  83     13.       .0   65.2
    FEB 0515 18      0.       .0   64.4 * 28 FEB 1330  51    110.       .2   67.3 * 28 FEB 2145  84     12.       .0   65.2
 28 FEB 0530 19      0.       .0   64.4 * 28 FEB 1345  52     99.       .1   67.1 * 28 FEB 2200  85     12.       .0   65.2
 28 FEB 0545 20      0.       .0   64.4 * 28 FEB 1400  53     89.       .1   67.0 * 28 FEB 2215  86     12.       .0   65.2
 28 FEB 0600 21      0.       .0   64.4 * 28 FEB 1415  54     85.       .1   66.9 * 28 FEB 2230  87     12.       .0   65.2
 28 FEB 0615 22      0.       .0   64.4 * 28 FEB 1430  55     82.       .1   66.9 * 28 FEB 2245  88     12.       .0   65.2
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28 FEB 0630	23	0.	.0	64.4	*	28 FEB 1445	56	81.	.1	66.8	*	28 FEB 2300	89	11.	.0	65.2
28 FEB 0645	24	0.	.0	64.4	*	28 FEB 1500	57	79.	.1	66.8	*	28 FEB 2315	90	11.	.0	65.1
28 FEB 0700	25	0.	.0	64.4	*	28 FEB 1515	58	79.	.1	66.8	*	28 FEB 2330	91	11.	.0	65.2
28 FEB 0715	26	0.	.0	64.4	*	28 FEB 1530	59	79.	.1	66.8	*	28 FEB 2345	92	11.	.0	65[illegible]
28 FEB 0730	27	0.	.0	64.4	*	28 FEB 1545	60	79.	.1	66.8	*	1 MAR 0000	93	11.	.0	6[illegible]
28 FEB 0745	28	0.	.0	64.4	*	28 FEB 1600	61	78.	.1	66.8	*	1 MAR 0015	94	10.	.0	65.1
28 FEB 0800	29	0.	.0	64.4	*	28 FEB 1615	62	78.	.1	66.8	*	1 MAR 0030	95	10.	.0	65.1
28 FEB 0815	30	0.	.0	64.5	*	28 FEB 1630	63	73.	.1	66.7	*	1 MAR 0045	96	10.	.0	65.1
28 FEB 0830	31	1.	.0	64.5	*	28 FEB 1645	64	61.	.1	66.5	*	1 MAR 0100	97	10.	.0	65.1
28 FEB 0845	32	1.	.0	64.5	*	28 FEB 1700	65	47.	.1	66.2	*					
28 FEB 0900	33	1.	.0	64.5	*	28 FEB 1715	66	34.	.1	65.9	*					
					*						*					

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PEAK FLOW	TIME			MAXIMUM AVERAGE FLOW		
			6-HR	24-HR	72-HR	24.00-HR
+ (CFS)	(HR)					
		(CFS)				
+ 110.	12.50		68.	23.	23.	23.
		(INCHES)	1.969	2.615	2.615	2.615
		(AC-FT)	34.	45.	45.	45.

PEAK STORAGE	TIME	MAXIMUM AVERAGE STORAGE			
		6-HR	24-HR	72-HR	24.00-HR
+ (AC-FT)	(HR)				
0.	12.50	0.	0.	0.	0.

PEAK STAGE	TIME	MAXIMUM AVERAGE STAGE			
		6-HR	24-HR	72-HR	24.00-HR
+ (FEET)	(HR)				
67.30	12.50	66.57	65.29	65.29	65.29

CUMULATIVE AREA = .32 SQ MI

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          *            *
416 KK    *      2PS   *
          *            *
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417 KO OUTPUT CONTROL VARIABLES

IPRNT	1	PRINT CONTROL
IPLOT	0	PLOT CONTROL
QSCAL	0.	HYDROGRAPH PLOT SCALE

SCS RUNOFF CALCULATION

SUBBASIN RUNOFF DATA

419 BA SUBBASIN CHARACTERISTICS

TAREA .01 SUBBASIN AREA

PRECIPITATION DATA

420 PH DEPTHS FOR 0-PERCENT HYPOTHETICAL STORM

..... HYDRO-35			.... TP-40					.... TP-49			
5-MIN	15-MIN	60-MIN	2-HR	3-HR	6-HR	12-HR	24-HR	2-DAY	4-DAY	7-DAY	10-DAY
.60	1.30	2.40	3.00	3.40	4.20	5.20	6.00	.00	.00	.00	.00

STORM AREA = .01

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421 LS          SCS LOSS RATE
                     STRTL        .08  INITIAL ABSTRACTION
                    CRVNBR      96.00  CURVE NUMBER
                     RTIMP        .00  PERCENT IMPERVIOUS AREA

  2 UD          SCS DIMENSIONLESS UNITGRAPH
                      TLAG        .02  LAG

                                                    ***

WARNING *** TIME INTERVAL IS GREATER THAN .29*LAG

                                                UNIT HYDROGRAPH
                                            5 END-OF-PERIOD ORDINATES
              12.        3.        1.        0.        0.
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HYDROGRAPH AT STATION 2PS

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DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
28 FEB 0100	1	.00	.00	.00	0.	28 FEB 1315	50	1.30	.02	1.28	17.
28 FEB 0115	2	.01	.01	.00	0.	28 FEB 1330	51	.31	.00	.31	8.
28 FEB 0130	3	.01	.01	.00	0.	28 FEB 1345	52	.18	.00	.18	4.
28 FEB 0145	4	.01	.01	.00	0.	28 FEB 1400	53	.14	.00	.14	3.
28 FEB 0200	5	.01	.01	.00	0.	28 FEB 1415	54	.11	.00	.11	2.
28 FEB 0215	6	.01	.01	.00	0.	28 FEB 1430	55	.10	.00	.10	2.
28 FEB 0230	7	.01	.01	.00	0.	28 FEB 1445	56	.08	.00	.08	1.
28 FEB 0245	8	.01	.01	.00	0.	28 FEB 1500	57	.08	.00	.08	1.
28 FEB 0300	9	.01	.01	.00	0.	28 FEB 1515	58	.07	.00	.07	1.
28 FEB 0315	10	.01	.01	.00	0.	28 FEB 1530	59	.06	.00	.06	1.
28 FEB 0330	11	.02	.01	.00	0.	28 FEB 1545	60	.06	.00	.06	1.
28 FEB 0345	12	.02	.01	.00	0.	28 FEB 1600	61	.06	.00	.06	1.
28 FEB 0400	13	.02	.01	.00	0.	28 FEB 1615	62	.05	.00	.05	1.
28 FEB 0415	14	.02	.01	.01	0.	28 FEB 1630	63	.05	.00	.05	1.
28 FEB 0430	15	.02	.01	.01	0.	28 FEB 1645	64	.05	.00	.05	1.
28 FEB 0445	16	.02	.01	.01	0.	28 FEB 1700	65	.05	.00	.05	1.
28 FEB 0500	17	.02	.01	.01	0.	28 FEB 1715	66	.04	.00	.04	1.
28 FEB 0515	18	.02	.01	.01	0.	28 FEB 1730	67	.04	.00	.04	1.
28 FEB 0530	19	.02	.01	.01	0.	28 FEB 1745	68	.04	.00	.04	1.
28 FEB 0545	20	.02	.01	.01	0.	28 FEB 1800	69	.04	.00	.04	1.
28 FEB 0600	21	.02	.01	.01	0.	28 FEB 1815	70	.04	.00	.04	1.
28 FEB 0615	22	.02	.01	.01	0.	28 FEB 1830	71	.04	.00	.04	1.
28 FEB 0630	23	.02	.01	.01	0.	28 FEB 1845	72	.04	.00	.03	1.
28 FEB 0645	24	.02	.01	.01	0.	28 FEB 1900	73	.03	.00	.03	1.
28 FEB 0700	25	.02	.01	.01	0.	28 FEB 1915	74	.02	.00	.02	0.
28 FEB 0715	26	.03	.01	.02	0.	28 FEB 1930	75	.02	.00	.02	0.
28 FEB 0730	27	.03	.01	.02	0.	28 FEB 1945	76	.02	.00	.02	0.
28 FEB 0745	28	.04	.01	.03	0.	28 FEB 2000	77	.02	.00	.02	0.
28 FEB 0800	29	.04	.01	.03	0.	28 FEB 2015	78	.02	.00	.02	0.
28 FEB 0815	30	.04	.01	.03	0.	28 FEB 2030	79	.02	.00	.02	0.
28 FEB 0830	31	.04	.01	.03	0.	28 FEB 2045	80	.02	.00	.02	0.
28 FEB 0845	32	.04	.01	.03	1.	28 FEB 2100	81	.02	.00	.02	0.
28 FEB 0900	33	.04	.01	.04	1.	28 FEB 2115	82	.02	.00	.02	0.
28 FEB 0915	34	.04	.01	.04	1.	28 FEB 2130	83	.02	.00	.02	0.
28 FEB 0930	35	.05	.01	.04	1.	28 FEB 2145	84	.02	.00	.02	0.
28 FEB 0945	36	.05	.01	.04	1.	28 FEB 2200	85	.02	.00	.02	0.
28 FEB 1000	37	.05	.01	.05	1.	28 FEB 2215	86	.02	.00	.02	0.
28 FEB 1015	38	.05	.01	.05	1.	28 FEB 2230	87	.02	.00	.02	0.
28 FEB 1030	39	.06	.01	.05	1.	28 FEB 2245	88	.02	.00	.02	0.
28 FEB 1045	40	.06	.01	.06	1.	28 FEB 2300	89	.02	.00	.02	0.
28 FEB 1100	41	.07	.01	.06	1.	28 FEB 2315	90	.01	.00	.01	0.
28 FEB 1115	42	.07	.01	.07	1.	28 FEB 2330	91	.01	.00	.01	0.

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28 FEB 1130   43    .08    .01    .07        1.      *     28 FEB 2345   92    .01    .00    .01        0.
28 FEB 1145   44    .09    .01    .08        1.      *      1 MAR 0000   93    .01    .00    .01        0.
28 FEB 1200   45    .10    .01    .10        1.      *      1 MAR 0015   94    .01    .00    .01        0.
28 FEB 1215   46    .13    .01    .12        2.      *      1 MAR 0030   95    .01    .00    .01        0.
28 FEB 1230   47    .16    .01    .15        2.      *      1 MAR 0045   96    .01    .00    .01        0.
28 FEB 1245   48    .25    .01    .24        3.      *      1 MAR 0100   97    .01    .00    .01        0.
28 FEB 1300   49    .54    .01    .53        7.      *
                                                     *
*****************************************************************************************************************

   TOTAL RAINFALL =    6.00, TOTAL LOSS =     .47, TOTAL EXCESS =    5.53

 PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     24.00-HR
+  (CFS)       (HR)
                          (CFS)
+     17.     12.25                   3.          1.          1.          1.
                        (INCHES)    4.093       5.517       5.517       5.517
                         (AC-FT)      1.          2.          2.          2.

                         CUMULATIVE AREA =     .01 SQ MI



*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***


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           *            *
 423 KK    *     2PSDB  *
           *            *
           **************

 424 KO          OUTPUT CONTROL VARIABLES
                       IPRNT           1  PRINT CONTROL
                       IPLOT           0  PLOT CONTROL
                       QSCAL          0.  HYDROGRAPH PLOT SCALE
                                ROUTING OF 2PS THROUGH DETENTION BASIN

              HYDROGRAPH ROUTING DATA

 426 RS          STORAGE ROUTING
                       NSTPS           1  NUMBER OF SUBREACHES
                        ITYP        ELEV  TYPE OF INITIAL CONDITION
                      RSVRIC       66.00  INITIAL CONDITION
                           X         .00 WORKING R AND D COEFFICIENT

 427 SA               AREA          .1        .1        .1        .1        .2

 428 SE          ELEVATION       66.00     67.00     68.00     69.00     70.00

 429 SL          LOW-LEVEL OUTLET
                       ELEVL       66.00  ELEVATION AT CENTER OF OUTLET
                       CAREA         .79  CROSS-SECTIONAL AREA
                        COQL         .60  COEFFICIENT
                        EXPL         .50  EXPONENT OF HEAD

 430 SS          SPILLWAY
                        CREL       69.90  SPILLWAY CREST ELEVATION
                       SPWID         .00  SPILLWAY WIDTH
                        COQW         .00  WEIR COEFFICIENT
                        EXPW        1.50  EXPONENT OF HEAD

                                                                  ***
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COMPUTED STORAGE-ELEVATION DATA

STORAGE	.00	.08	.18	.29	.44
ELEVATION	66.00	67.00	68.00	69.00	70.00

COMPUTED OUTFLOW-ELEVATION DATA

OUTFLOW	.00	2.67	2.91	3.19	3.53	3.94	4.47	5.17	6.12	7.51
ELEVATION	66.00	66.49	66.59	66.70	66.86	67.08	67.39	67.85	68.60	69.90

COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

STORAGE	.00	.04	.04	.05	.07	.08	.09	.11	.16	.18
OUTFLOW	.00	2.67	2.91	3.19	3.53	3.80	3.94	4.47	5.17	5.38
ELEVATION	66.00	66.49	66.59	66.70	66.86	67.00	67.08	67.39	67.85	68.00

STORAGE	.24	.29	.42	.44
OUTFLOW	6.12	6.58	7.51	7.60
ELEVATION	68.60	69.00	69.90	70.00

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HYDROGRAPH AT STATION 2PSDB

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DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE
28	FEB	0100	1	0.	.0	66.0	28	FEB	0915	34	1.	.0	66.1	28	FEB	1730	67	1.	.0	66.1
28	FEB	0115	2	0.	.0	66.0	28	FEB	0930	35	1.	.0	66.1	28	FEB	1745	68	1.	.0	66.1
28	FEB	0130	3	0.	.0	66.0	28	FEB	0945	36	1.	.0	66.1	28	FEB	1800	69	1.	.0	66.1
28	FEB	0145	4	0.	.0	66.0	28	FEB	1000	37	1.	.0	66.1	28	FEB	1815	70	1.	.0	66.1
	FEB	0200	5	0.	.0	66.0	28	FEB	1015	38	1.	.0	66.1	28	FEB	1830	71	1.	.0	66.1
28	FEB	0215	6	0.	.0	66.0	28	FEB	1030	39	1.	.0	66.1	28	FEB	1845	72	1.	.0	66.1
28	FEB	0230	7	0.	.0	66.0	28	FEB	1045	40	1.	.0	66.1	28	FEB	1900	73	1.	.0	66.1
28	FEB	0245	8	0.	.0	66.0	28	FEB	1100	41	1.	.0	66.2	28	FEB	1915	74	0.	.0	66.1
28	FEB	0300	9	0.	.0	66.0	28	FEB	1115	42	1.	.0	66.2	28	FEB	1930	75	0.	.0	66.1
28	FEB	0315	10	0.	.0	66.0	28	FEB	1130	43	1.	.0	66.2	28	FEB	1945	76	0.	.0	66.1
28	FEB	0330	11	0.	.0	66.0	28	FEB	1145	44	1.	.0	66.2	28	FEB	2000	77	0.	.0	66.1
28	FEB	0345	12	0.	.0	66.0	28	FEB	1200	45	1.	.0	66.2	28	FEB	2015	78	0.	.0	66.1
28	FEB	0400	13	0.	.0	66.0	28	FEB	1215	46	2.	.0	66.3	28	FEB	2030	79	0.	.0	66.1
28	FEB	0415	14	0.	.0	66.0	28	FEB	1230	47	2.	.0	66.4	28	FEB	2045	80	0.	.0	66.1
28	FEB	0430	15	0.	.0	66.0	28	FEB	1245	48	3.	.0	66.5	28	FEB	2100	81	0.	.0	66.1
28	FEB	0445	16	0.	.0	66.0	28	FEB	1300	49	4.	.1	67.0	28	FEB	2115	82	0.	.0	66.1
28	FEB	0500	17	0.	.0	66.0	28	FEB	1315	50	6.	.2	68.4	28	FEB	2130	83	0.	.0	66.1
28	FEB	0515	18	0.	.0	66.0	28	FEB	1330	51	7.	.3	69.3	28	FEB	2145	84	0.	.0	66.0
28	FEB	0530	19	0.	.0	66.0	28	FEB	1345	52	7.	.3	69.2	28	FEB	2200	85	0.	.0	66.0
28	FEB	0545	20	0.	.0	66.0	28	FEB	1400	53	6.	.3	68.7	28	FEB	2215	86	0.	.0	66.0
28	FEB	0600	21	0.	.0	66.0	28	FEB	1415	54	5.	.2	68.0	28	FEB	2230	87	0.	.0	66.0
28	FEB	0615	22	0.	.0	66.0	28	FEB	1430	55	4.	.1	67.4	28	FEB	2245	88	0.	.0	66.0
28	FEB	0630	23	0.	.0	66.0	28	FEB	1445	56	3.	.1	66.8	28	FEB	2300	89	0.	.0	66.0
28	FEB	0645	24	0.	.0	66.0	28	FEB	1500	57	2.	.0	66.4	28	FEB	2315	90	0.	.0	66.0
28	FEB	0700	25	0.	.0	66.0	28	FEB	1515	58	1.	.0	66.2	28	FEB	2330	91	0.	.0	66.0
28	FEB	0715	26	0.	.0	66.0	28	FEB	1530	59	1.	.0	66.2	28	FEB	2345	92	0.	.0	66.0
28	FEB	0730	27	0.	.0	66.1	28	FEB	1545	60	1.	.0	66.2	1	MAR	0000	93	0.	.0	66.0
28	FEB	0745	28	0.	.0	66.1	28	FEB	1600	61	1.	.0	66.2	1	MAR	0015	94	0.	.0	66.0
28	FEB	0800	29	0.	.0	66.1	28	FEB	1615	62	1.	.0	66.2	1	MAR	0030	95	0.	.0	66.0
28	FEB	0815	30	0.	.0	66.1	28	FEB	1630	63	1.	.0	66.2	1	MAR	0045	96	0.	.0	66.0
28	FEB	0830	31	0.	.0	66.1	28	FEB	1645	64	1.	.0	66.1	1	MAR	0100	97	0.	.0	66.0
28	FEB	0845	32	0.	.0	66.1	28	FEB	1700	65	1.	.0	66.1							
	FEB	0900	33	1.	.0	66.1	28	FEB	1715	66	1.	.0	66.1							

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PEAK FLOW TIME MAXIMUM AVERAGE FLOW

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                                        6-HR       24-HR       72-HR     24.00-HR
+   (CFS)       (HR)
                          (CFS)
+       7.     12.50                     3.          1.          1.           1.
                        (INCHES)      4.092       5.508       5.508        5.508
                         (AC-FT)         1.          2.          2.           2.

 PEAK STORAGE   TIME                          MAXIMUM AVERAGE STORAGE
                                        6-HR       24-HR       72-HR     24.00-HR
+  (AC-FT)      (HR)
        0.     12.50                     0.          0.          0.           0.

  PEAK STAGE    TIME                          MAXIMUM AVERAGE STAGE
                                        6-HR       24-HR       72-HR     24.00-HR
+   (FEET)      (HR)
     69.34     12.50                   66.86       66.26       66.26        66.26

                         CUMULATIVE AREA =     .01 SQ MI


*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***


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            *            *
 434 KK     *    2PSCHL  *
            *            *
            **************

 435 KO          OUTPUT CONTROL VARIABLES
                       IPRNT           1  PRINT CONTROL
                       IPLOT           0  PLOT CONTROL
                       QSCAL          0.  HYDROGRAPH PLOT SCALE
                                STORAGE ROUTING THROUGH N/S CHANNEL AT PX REALTY

               HYDROGRAPH ROUTING DATA

 437 RS          STORAGE ROUTING
                       NSTPS           1  NUMBER OF SUBREACHES
                        ITYP        ELEV  TYPE OF INITIAL CONDITION
                      RSVRIC       66.40  INITIAL CONDITION
                           X         .00 WORKING R AND D COEFFICIENT

 438 SA               AREA          .0        .0        .0        .0        .0        .1        .1

 439 SE          ELEVATION       66.40     66.50     67.00     67.50     68.00     69.00     69.40

 440 SL          LOW-LEVEL OUTLET
                       ELEVL       59.70  ELEVATION AT CENTER OF OUTLET
                       CAREA        7.07  CROSS-SECTIONAL AREA
                        COQL         .60  COEFFICIENT
                        EXPL         .50  EXPONENT OF HEAD

 441 SS          SPILLWAY
                        CREL       69.30  SPILLWAY CREST ELEVATION
                       SPWID         .00  SPILLWAY WIDTH
                        COQW         .00  WEIR COEFFICIENT
                        EXPW        1.50  EXPONENT OF HEAD

                                                          ***

                                                COMPUTED STORAGE-ELEVATION DATA

            STORAGE        .00       .00       .01       .02       .04       .09       .12
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ELEVATION	66.40	66.50	67.00	67.50	68.00	69.00	69.40

COMPUTED OUTFLOW-ELEVATION DATA

OUTFLOW	.00	89.70	91.40	93.17	95.01	96.92	98.91	100.99	103.15	105.41
ELEVATION	66.40	66.65	66.92	67.20	67.50	67.82	68.15	68.51	68.89	69.30

COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

STORAGE	.00	.00	.00	.01	.01	.01	.02	.03	.04	.05
OUTFLOW	88.06	88.72	89.70	91.40	91.92	93.17	95.01	96.92	98.01	98.91
ELEVATION	66.40	66.50	66.65	66.92	67.00	67.20	67.50	67.82	68.00	68.15

STORAGE	.06	.09	.09	.11	.12
OUTFLOW	100.99	103.15	103.75	105.41	105.96
ELEVATION	68.51	68.89	69.00	69.30	69.40

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN 88. TO 103.
THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

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HYDROGRAPH AT STATION 2PSCHL

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DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE
28	FEB	0100	1	88.	.0	66.4	28	FEB	0915	34	6.	-.1	66.4	28	FEB	1730	67	53.	.0	66.4
28	FEB	0115	2	6.	-.1	66.4	28	FEB	0930	35	6.	-.1	66.4	28	FEB	1745	68	57.	.0	66.4
	FEB	0130	3	6.	-.1	66.4	28	FEB	0945	36	6.	-.1	66.4	28	FEB	1800	69	52.	.0	66.4
	FEB	0145	4	6.	-.1	66.4	28	FEB	1000	37	6.	-.1	66.4	28	FEB	1815	70	54.	.0	66.4
28	FEB	0200	5	6.	-.1	66.4	28	FEB	1015	38	6.	-.1	66.4	28	FEB	1830	71	50.	.0	66.4
28	FEB	0215	6	6.	-.1	66.4	28	FEB	1030	39	8.	-.1	66.4	28	FEB	1845	72	51.	.0	66.4
28	FEB	0230	7	6.	-.1	66.4	28	FEB	1045	40	10.	-.1	66.4	28	FEB	1900	73	48.	.0	66.4
28	FEB	0245	8	6.	-.1	66.4	28	FEB	1100	41	13.	-.1	66.4	28	FEB	1915	74	48.	.0	66.4
28	FEB	0300	9	6.	-.1	66.4	28	FEB	1115	42	15.	-.1	66.4	28	FEB	1930	75	43.	.0	66.4
28	FEB	0315	10	6.	-.1	66.4	28	FEB	1130	43	22.	-.1	66.4	28	FEB	1945	76	40.	.0	66.4
28	FEB	0330	11	6.	-.1	66.4	28	FEB	1145	44	27.	-.1	66.4	28	FEB	2000	77	38.	.0	66.4
28	FEB	0345	12	6.	-.1	66.4	28	FEB	1200	45	33.	.0	66.4	28	FEB	2015	78	38.	.0	66.4
28	FEB	0400	13	6.	-.1	66.4	28	FEB	1215	46	41.	.0	66.4	28	FEB	2030	79	36.	.0	66.4
28	FEB	0415	14	6.	-.1	66.4	28	FEB	1230	47	53.	.0	66.4	28	FEB	2045	80	36.	.0	66.4
28	FEB	0430	15	6.	-.1	66.4	28	FEB	1245	48	71.	.0	66.4	28	FEB	2100	81	35.	.0	66.4
28	FEB	0445	16	6.	-.1	66.4	28	FEB	1300	49	102.	.1	68.8	28	FEB	2115	82	35.	.0	66.4
28	FEB	0500	17	6.	-.1	66.4	28	FEB	1315	50	129.	.4	73.6	28	FEB	2130	83	35.	.0	66.4
28	FEB	0515	18	6.	-.1	66.4	28	FEB	1330	51	164.	.9	80.0	28	FEB	2145	84	34.	.0	66.4
28	FEB	0530	19	6.	-.1	66.4	28	FEB	1345	52	180.	1.1	83.0	28	FEB	2200	85	33.	.0	66.4
28	FEB	0545	20	6.	-.1	66.4	28	FEB	1400	53	176.	1.1	82.2	28	FEB	2215	86	34.	.0	66.4
28	FEB	0600	21	6.	-.1	66.4	28	FEB	1415	54	166.	.9	80.3	28	FEB	2230	87	33.	.0	66.4
28	FEB	0615	22	6.	-.1	66.4	28	FEB	1430	55	154.	.8	78.2	28	FEB	2245	88	33.	.0	66.4
28	FEB	0630	23	6.	-.1	66.4	28	FEB	1445	56	141.	.6	75.8	28	FEB	2300	89	32.	.0	66.4
28	FEB	0645	24	6.	-.1	66.4	28	FEB	1500	57	129.	.4	73.5	28	FEB	2315	90	32.	.0	66.4
28	FEB	0700	25	6.	-.1	66.4	28	FEB	1515	58	118.	.3	71.7	28	FEB	2330	91	32.	.0	66.4
28	FEB	0715	26	6.	-.1	66.4	28	FEB	1530	59	112.	.2	70.5	28	FEB	2345	92	31.	.0	66.4
28	FEB	0730	27	6.	-.1	66.4	28	FEB	1545	60	108.	.1	69.8	1	MAR	0000	93	31.	.0	66.4
28	FEB	0745	28	6.	-.1	66.4	28	FEB	1600	61	105.	.1	69.2	1	MAR	0015	94	30.	.0	66.4
28	FEB	0800	29	6.	-.1	66.4	28	FEB	1615	62	103.	.1	68.9	1	MAR	0030	95	30.	.0	66.4
28	FEB	0815	30	6.	-.1	66.4	28	FEB	1630	63	100.	.1	68.4	1	MAR	0045	96	30.	.0	66.4
	FEB	0830	31	6.	-.1	66.4	28	FEB	1645	64	89.	.0	66.5	1	MAR	0100	97	30.	.0	66.4
	FEB	0845	32	6.	-.1	66.4	28	FEB	1700	65	70.	.0	66.4							
28	FEB	0900	33	6.	-.1	66.4	28	FEB	1715	66	61.	.0	66.4							

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 PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     24.00-HR
+   (CFS)      (HR)
                            (CFS)
+     180.     12.75                106.         41.         41.         41.
                         (INCHES)  1.660       2.583       2.583       2.583
                          (AC-FT)   53.         82.         82.         82.

 PEAK STORAGE   TIME                         MAXIMUM AVERAGE STORAGE
                                     6-HR       24-HR       72-HR     24.00-HR
+  (AC-FT)     (HR)
       1.     12.75                  0.          0.          0.          0.

  PEAK STAGE    TIME                          MAXIMUM AVERAGE STAGE
                                     6-HR       24-HR       72-HR     24.00-HR
+   (FEET)     (HR)
    82.96     12.75                71.31       67.63       67.63       67.63

                         CUMULATIVE AREA =     .59 SQ MI
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            *            *
 442 KK     *   DI2PSC   *
            *            *
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 443 KO          OUTPUT CONTROL VARIABLES
                       IPRNT          1  PRINT CONTROL
                       IPLOT          0  PLOT CONTROL
                       QSCAL         0.  HYDROGRAPH PLOT SCALE
                               DIRECT INPUT HYDROGRAPH FOR FLOW FROM 2PSCHL (MODIFIED PEAK)

   6 IN          TIME DATA FOR INPUT TIME SERIES
                       JXMIN         15  TIME INTERVAL IN MINUTES
                      JXDATE    28FEB91  STARTING DATE
                      JXTIME        100  STARTING TIME

              SUBBASIN RUNOFF DATA

 445 BA          SUBBASIN CHARACTERISTICS
                       TAREA        .59  SUBBASIN AREA
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HYDROGRAPH AT STATION DI2PSC

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DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW
28 FEB 0100	1	6.	28 FEB 0715	26	6.	28 FEB 1330	51	110.	28 FEB 1945	76	40.
28 FEB 0115	2	6.	28 FEB 0730	27	6.	28 FEB 1345	52	110.	28 FEB 2000	77	38.
28 FEB 0130	3	6.	28 FEB 0745	28	6.	28 FEB 1400	53	110.	28 FEB 2015	78	38.
28 FEB 0145	4	6.	28 FEB 0800	29	6.	28 FEB 1415	54	110.	28 FEB 2030	79	36.
28 FEB 0200	5	6.	28 FEB 0815	30	6.	28 FEB 1430	55	110.	28 FEB 2045	80	36.
28 FEB 0215	6	6.	28 FEB 0830	31	6.	28 FEB 1445	56	110.	28 FEB 2100	81	35.
28 FEB 0230	7	6.	28 FEB 0845	32	6.	28 FEB 1500	57	110.	28 FEB 2115	82	35.
28 FEB 0245	8	6.	28 FEB 0900	33	6.	28 FEB 1515	58	110.	28 FEB 2130	83	35.

28 FEB 0300	9	6.	*	28 FEB 0915	34	6.	*	28 FEB 1530	59	110.	*	28 FEB 2145	84	34.
28 FEB 0315	10	6.	*	28 FEB 0930	35	6.	*	28 FEB 1545	60	108.	*	28 FEB 2200	85	33.
28 FEB 0330	11	6.	*	28 FEB 0945	36	6.	*	28 FEB 1600	61	105.	*	28 FEB 2215	86	34.
28 FEB 0345	12	6.	*	28 FEB 1000	37	6.	*	28 FEB 1615	62	103.	*	28 FEB 2230	87	33.
28 FEB 0400	13	6.	*	28 FEB 1015	38	6.	*	28 FEB 1630	63	100.	*	28 FEB 2245	88	33.
28 FEB 0415	14	6.	*	28 FEB 1030	39	8.	*	28 FEB 1645	64	89.	*	28 FEB 2300	89	32.
28 FEB 0430	15	6.	*	28 FEB 1045	40	10.	*	28 FEB 1700	65	70.	*	28 FEB 2315	90	32.
28 FEB 0445	16	6.	*	28 FEB 1100	41	15.	*	28 FEB 1715	66	61.	*	28 FEB 2330	91	32.
28 FEB 0500	17	6.	*	28 FEB 1115	42	22.	*	28 FEB 1730	67	53.	*	28 FEB 2345	92	31.
28 FEB 0515	18	6.	*	28 FEB 1130	43	27.	*	28 FEB 1745	68	57.	*	1 MAR 0000	93	31.
28 FEB 0530	19	6.	*	28 FEB 1145	44	33.	*	28 FEB 1800	69	52.	*	1 MAR 0015	94	30.
28 FEB 0545	20	6.	*	28 FEB 1200	45	41.	*	28 FEB 1815	70	54.	*	1 MAR 0030	95	30.
28 FEB 0600	21	6.	*	28 FEB 1215	46	53.	*	28 FEB 1830	71	50.	*	1 MAR 0045	96	30.
28 FEB 0615	22	6.	*	28 FEB 1230	47	71.	*	28 FEB 1845	72	51.	*	1 MAR 0100	97	30.
28 FEB 0630	23	6.	*	28 FEB 1245	48	102.	*	28 FEB 1900	73	48.	*			
28 FEB 0645	24	6.	*	28 FEB 1300	49	110.	*	28 FEB 1915	74	48.	*			
28 FEB 0700	25	6.	*	28 FEB 1315	50	110.	*	28 FEB 1930	75	43.	*			
			*				*				*			

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PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.00-HR
+ (CFS)	(HR)					
		(CFS)				
+ 110.	12.00		93.	38.	38.	38.
		(INCHES)	1.467	2.385	2.385	2.385
		(AC-FT)	46.	75.	75.	75.

CUMULATIVE AREA = .59 SQ MI

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          *            *
456 KK    *       4PS  *
          *            *
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457 KO        OUTPUT CONTROL VARIABLES
                    IPRNT          1  PRINT CONTROL
                    IPLOT          0  PLOT CONTROL
                    QSCAL         0.  HYDROGRAPH PLOT SCALE
                             SCS RUNOFF CALCULATION

            SUBBASIN RUNOFF DATA

459 BA        SUBBASIN CHARACTERISTICS
                    TAREA        .00  SUBBASIN AREA

              PRECIPITATION DATA

460 PH                            DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
              ..... HYDRO-35 .....   ............... TP-40 ...............   ........... TP-49 ...........
              5-MIN  15-MIN  60-MIN    2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                .60    1.30    2.40    3.00    3.40    4.20    5.20    6.00     .00     .00     .00     .00

                                                  STORM AREA =     .00

461 LS        SCS LOSS RATE
                    STRTL        .06  INITIAL ABSTRACTION
                   CRVNBR      97.00  CURVE NUMBER
                    RTIMP        .00  PERCENT IMPERVIOUS AREA
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462 UD SCS DIMENSIONLESS UNITGRAPH
TLAG .08 LAG

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WARNING *** TIME INTERVAL IS GREATER THAN .29*LAG

UNIT HYDROGRAPH
5 END-OF-PERIOD ORDINATES
6. 2. 0. 0. 0.

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HYDROGRAPH AT STATION 4PS

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DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	*	DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
28 FEB 0100	1	.00	.00	.00	0.	*	28 FEB 1315	50	1.30	.01	1.29	8.
28 FEB 0115	2	.01	.01	.00	0.	*	28 FEB 1330	51	.31	.00	.31	4.
28 FEB 0130	3	.01	.01	.00	0.	*	28 FEB 1345	52	.18	.00	.18	2.
28 FEB 0145	4	.01	.01	.00	0.	*	28 FEB 1400	53	.14	.00	.14	1.
28 FEB 0200	5	.01	.01	.00	0.	*	28 FEB 1415	54	.11	.00	.11	1.
28 FEB 0215	6	.01	.01	.00	0.	*	28 FEB 1430	55	.10	.00	.10	1.
28 FEB 0230	7	.01	.01	.00	0.	*	28 FEB 1445	56	.08	.00	.08	1.
28 FEB 0245	8	.01	.01	.00	0.	*	28 FEB 1500	57	.08	.00	.08	1.
28 FEB 0300	9	.01	.01	.00	0.	*	28 FEB 1515	58	.07	.00	.07	1.
28 FEB 0315	10	.01	.01	.00	0.	*	28 FEB 1530	59	.06	.00	.06	1.
28 FEB 0330	11	.02	.01	.01	0.	*	28 FEB 1545	60	.06	.00	.06	0.
28 FEB 0345	12	.02	.01	.01	0.	*	28 FEB 1600	61	.06	.00	.06	0.
28 FEB 0400	13	.02	.01	.01	0.	*	28 FEB 1615	62	.05	.00	.05	0.
28 FEB 0415	14	.02	.01	.01	0.	*	28 FEB 1630	63	.05	.00	.05	0.
28 FEB 0430	15	.02	.01	.01	0.	*	28 FEB 1645	64	.05	.00	.05	0.
28 FEB 0445	16	.02	.01	.01	0.	*	28 FEB 1700	65	.05	.00	.05	0.
28 FEB 0500	17	.02	.01	.01	0.	*	28 FEB 1715	66	.04	.00	.04	0.
28 FEB 0515	18	.02	.01	.01	0.	*	28 FEB 1730	67	.04	.00	.04	0.
28 FEB 0530	19	.02	.01	.01	0.	*	28 FEB 1745	68	.04	.00	.04	0.
28 FEB 0545	20	.02	.01	.01	0.	*	28 FEB 1800	69	.04	.00	.04	0.
28 FEB 0600	21	.02	.01	.01	0.	*	28 FEB 1815	70	.04	.00	.04	0.
28 FEB 0615	22	.02	.01	.01	0.	*	28 FEB 1830	71	.04	.00	.04	0.
28 FEB 0630	23	.02	.01	.01	0.	*	28 FEB 1845	72	.04	.00	.04	0.
28 FEB 0645	24	.02	.01	.02	0.	*	28 FEB 1900	73	.03	.00	.03	0.
28 FEB 0700	25	.02	.01	.02	0.	*	28 FEB 1915	74	.02	.00	.02	0.
28 FEB 0715	26	.03	.01	.03	0.	*	28 FEB 1930	75	.02	.00	.02	0.
28 FEB 0730	27	.03	.01	.03	0.	*	28 FEB 1945	76	.02	.00	.02	0.
28 FEB 0745	28	.04	.01	.03	0.	*	28 FEB 2000	77	.02	.00	.02	0.
28 FEB 0800	29	.04	.01	.03	0.	*	28 FEB 2015	78	.02	.00	.02	0.
28 FEB 0815	30	.04	.01	.03	0.	*	28 FEB 2030	79	.02	.00	.02	0.
28 FEB 0830	31	.04	.01	.03	0.	*	28 FEB 2045	80	.02	.00	.02	0.
28 FEB 0845	32	.04	.01	.04	0.	*	28 FEB 2100	81	.02	.00	.02	0.
28 FEB 0900	33	.04	.00	.04	0.	*	28 FEB 2115	82	.02	.00	.02	0.
28 FEB 0915	34	.04	.00	.04	0.	*	28 FEB 2130	83	.02	.00	.02	0.
28 FEB 0930	35	.05	.00	.04	0.	*	28 FEB 2145	84	.02	.00	.02	0.
28 FEB 0945	36	.05	.00	.04	0.	*	28 FEB 2200	85	.02	.00	.02	0.
28 FEB 1000	37	.05	.00	.05	0.	*	28 FEB 2215	86	.02	.00	.02	0.
28 FEB 1015	38	.05	.00	.05	0.	*	28 FEB 2230	87	.02	.00	.02	0.
28 FEB 1030	39	.06	.00	.05	0.	*	28 FEB 2245	88	.02	.00	.02	0.
28 FEB 1045	40	.06	.00	.06	0.	*	28 FEB 2300	89	.02	.00	.02	0.
28 FEB 1100	41	.07	.00	.06	0.	*	28 FEB 2315	90	.01	.00	.01	0.
28 FEB 1115	42	.07	.00	.07	1.	*	28 FEB 2330	91	.01	.00	.01	0.
28 FEB 1130	43	.08	.00	.08	1.	*	28 FEB 2345	92	.01	.00	.01	0.
28 FEB 1145	44	.09	.00	.09	1.	*	1 MAR 0000	93	.01	.00	.01	0.
28 FEB 1200	45	.10	.00	.10	1.	*	1 MAR 0015	94	.01	.00	.01	0.
28 FEB 1215	46	.13	.00	.12	1.	*	1 MAR 0030	95	.01	.00	.01	0.

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28 FEB 1230   47     .16     .00     .15        1.      *      1 MAR 0045   96     .01     .00     .01        0.
28 FEB 1245   48     .25     .01     .25        2.      *      1 MAR 0100   97     .01     .00     .01        0.
28 FEB 1300   49     .54     .01     .53        4.      *
                                                          *
*****************************************************************************************************************************

  TOTAL RAINFALL =    6.00, TOTAL LOSS =     .36, TOTAL EXCESS =   5.64

 PEAK FLOW     TIME                          MAXIMUM AVERAGE FLOW
                                     6-HR       24-HR       72-HR     24.00-HR
+  (CFS)       (HR)
                          (CFS)
+      8.     12.25                   1.          0.          0.          0.
                       (INCHES)    4.135       5.633       5.633       5.633
                        (AC-FT)       1.          1.          1.          1.

                        CUMULATIVE AREA =     .00 SQ MI



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          *            *
463 KK    *     4PSDB  *
          *            *
          **************

464 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           1  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                               STORAGE ROUTING THROUGH DETENSION BASIN AT DAGATA

              HYDROGRAPH ROUTING DATA

466 RS          STORAGE ROUTING
                      NSTPS           1  NUMBER OF SUBREACHES
                       ITYP        ELEV  TYPE OF INITIAL CONDITION
                     RSVRIC       59.00  INITIAL CONDITION
                          X         .00 WORKING R AND D COEFFICIENT

467 SA              AREA          .0        .1        .1        .1

468 SE          ELEVATION       59.00     60.00     61.00     62.00

469 SL          LOW-LEVEL OUTLET
                      ELEVL       59.00  ELEVATION AT CENTER OF OUTLET
                      CAREA         .44  CROSS-SECTIONAL AREA
                       COQL         .60  COEFFICIENT
                       EXPL         .50  EXPONENT OF HEAD

470 SS          SPILLWAY
                       CREL       61.90  SPILLWAY CREST ELEVATION
                      SPWID         .00  SPILLWAY WIDTH
                       COQW         .00  WEIR COEFFICIENT
                       EXPW        1.50  EXPONENT OF HEAD

                                                          ***

                                                COMPUTED STORAGE-ELEVATION DATA

          STORAGE        .00       .06       .13       .21
        ELEVATION      59.00     60.00     61.00     62.00
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COMPUTED OUTFLOW-ELEVATION DATA

OUTFLOW	.00	1.29	1.40	1.53	1.70	1.90	2.15	2.49	2.94	3.61
ELEVATION	59.00	59.37	59.44	59.52	59.64	59.80	60.03	60.38	60.93	61.90

COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

STORAGE	.00	.02	.02	.03	.03	.04	.06	.06	.08	.12
OUTFLOW	.00	1.29	1.40	1.53	1.70	1.90	2.12	2.15	2.49	2.94
ELEVATION	59.00	59.37	59.44	59.52	59.64	59.80	60.00	60.03	60.38	60.93
STORAGE	.13	.20	.21							
OUTFLOW	2.99	3.61	3.67							
ELEVATION	61.00	61.90	62.00							

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HYDROGRAPH AT STATION 4PSDB

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DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE
28	FEB	0100	1	0.	.0	59.0	28	FEB	0915	34	0.	.0	59.1	28	FEB	1730	67	0.	.0	59.1
28	FEB	0115	2	0.	.0	59.0	28	FEB	0930	35	0.	.0	59.1	28	FEB	1745	68	0.	.0	59.1
28	FEB	0130	3	0.	.0	59.0	28	FEB	0945	36	0.	.0	59.1	28	FEB	1800	69	0.	.0	59.1
28	FEB	0145	4	0.	.0	59.0	28	FEB	1000	37	0.	.0	59.1	28	FEB	1815	70	0.	.0	59.1
28	FEB	0200	5	0.	.0	59.0	28	FEB	1015	38	0.	.0	59.1	28	FEB	1830	71	0.	.0	59.1
28	FEB	0215	6	0.	.0	59.0	28	FEB	1030	39	0.	.0	59.1	28	FEB	1845	72	0.	.0	59.1
28	FEB	0230	7	0.	.0	59.0	28	FEB	1045	40	0.	.0	59.1	28	FEB	1900	73	0.	.0	59.1
28	FEB	0245	8	0.	.0	59.0	28	FEB	1100	41	0.	.0	59.1	28	FEB	1915	74	0.	.0	59
28	FEB	0300	9	0.	.0	59.0	28	FEB	1115	42	0.	.0	59.1	28	FEB	1930	75	0.	.0	59..
28	FEB	0315	10	0.	.0	59.0	28	FEB	1130	43	1.	.0	59.2	28	FEB	1945	76	0.	.0	59.0
28	FEB	0330	11	0.	.0	59.0	28	FEB	1145	44	1.	.0	59.2	28	FEB	2000	77	0.	.0	59.0
28	FEB	0345	12	0.	.0	59.0	28	FEB	1200	45	1.	.0	59.2	28	FEB	2015	78	0.	.0	59.0
28	FEB	0400	13	0.	.0	59.0	28	FEB	1215	46	1.	.0	59.2	28	FEB	2030	79	0.	.0	59.0
28	FEB	0415	14	0.	.0	59.0	28	FEB	1230	47	1.	.0	59.3	28	FEB	2045	80	0.	.0	59.0
28	FEB	0430	15	0.	.0	59.0	28	FEB	1245	48	1.	.0	59.4	28	FEB	2100	81	0.	.0	59.0
28	FEB	0445	16	0.	.0	59.0	28	FEB	1300	49	2.	.0	59.8	28	FEB	2115	82	0.	.0	59.0
28	FEB	0500	17	0.	.0	59.0	28	FEB	1315	50	3.	.1	60.8	28	FEB	2130	83	0.	.0	59.0
28	FEB	0515	18	0.	.0	59.0	28	FEB	1330	51	3.	.2	61.6	28	FEB	2145	84	0.	.0	59.0
28	FEB	0530	19	0.	.0	59.0	28	FEB	1345	52	3.	.2	61.5	28	FEB	2200	85	0.	.0	59.0
28	FEB	0545	20	0.	.0	59.0	28	FEB	1400	53	3.	.1	61.1	28	FEB	2215	86	0.	.0	59.0
28	FEB	0600	21	0.	.0	59.0	28	FEB	1415	54	3.	.1	60.6	28	FEB	2230	87	0.	.0	59.0
28	FEB	0615	22	0.	.0	59.0	28	FEB	1430	55	2.	.1	60.2	28	FEB	2245	88	0.	.0	59.0
28	FEB	0630	23	0.	.0	59.0	28	FEB	1445	56	2.	.0	59.7	28	FEB	2300	89	0.	.0	59.0
28	FEB	0645	24	0.	.0	59.0	28	FEB	1500	57	1.	.0	59.4	28	FEB	2315	90	0.	.0	59.0
28	FEB	0700	25	0.	.0	59.0	28	FEB	1515	58	1.	.0	59.2	28	FEB	2330	91	0.	.0	59.0
28	FEB	0715	26	0.	.0	59.0	28	FEB	1530	59	1.	.0	59.2	28	FEB	2345	92	0.	.0	59.0
28	FEB	0730	27	0.	.0	59.1	28	FEB	1545	60	1.	.0	59.1	1	MAR	0000	93	0.	.0	59.0
28	FEB	0745	28	0.	.0	59.1	28	FEB	1600	61	0.	.0	59.1	1	MAR	0015	94	0.	.0	59.0
28	FEB	0800	29	0.	.0	59.1	28	FEB	1615	62	0.	.0	59.1	1	MAR	0030	95	0.	.0	59.0
28	FEB	0815	30	0.	.0	59.1	28	FEB	1630	63	0.	.0	59.1	1	MAR	0045	96	0.	.0	59.0
28	FEB	0830	31	0.	.0	59.1	28	FEB	1645	64	0.	.0	59.1	1	MAR	0100	97	0.	.0	59.0
28	FEB	0845	32	0.	.0	59.1	28	FEB	1700	65	0.	.0	59.1							
28	FEB	0900	33	0.	.0	59.1	28	FEB	1715	66	0.	.0	59.1							

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PEAK FLOW (CFS)	TIME (HR)	MAXIMUM AVERAGE FLOW (CFS) 6-HR	24-HR	72-HR	24.00-HR
+ 3.	12.50	1.	0.	0.	0.

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                    (INCHES)     4.133       5.624       5.624       5.624
                     (AC-FT)       1.          1.          1.          1.

PEAK STORAGE   TIME                        MAXIMUM AVERAGE STORAGE
                                   6-HR       24-HR       72-HR     24.00-HR
  AC-FT)      (HR)
     0.     12.50                   0.          0.          0.          0.

 PEAK STAGE    TIME                        MAXIMUM AVERAGE STAGE
                                   6-HR       24-HR       72-HR     24.00-HR
+  (FEET)      (HR)
   61.59     12.50                59.69       59.21       59.21       59.21

                     CUMULATIVE AREA =     .00 SQ MI
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          *            *
 471 KK   *        4P  *
          *            *
          **************

 472 KO         OUTPUT CONTROL VARIABLES
                      IPRNT           1  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                               SCS RUNOFF CALCULATION

             SUBBASIN RUNOFF DATA

 474 BA         SUBBASIN CHARACTERISTICS
                      TAREA         .02  SUBBASIN AREA

                PRECIPITATION DATA

 475 PH                                DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
                ..... HYDRO-35 ......   ............... TP-40 ...............   ........... TP-49 ...........
                5-MIN  15-MIN  60-MIN    2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                  .60    1.30    2.40    3.00    3.40    4.20    5.20    6.00     .00     .00     .00     .00

                                                   STORM AREA =     .02

 476 LS         SCS LOSS RATE
                      STRTL         .20  INITIAL ABSTRACTION
                     CRVNBR       91.00  CURVE NUMBER
                      RTIMP         .00  PERCENT IMPERVIOUS AREA

 477 UD         SCS DIMENSIONLESS UNITGRAPH
                       TLAG         .41  LAG

                                                         ***

WARNING *** TIME INTERVAL IS GREATER THAN .29*LAG

                                                   UNIT HYDROGRAPH
                                             10 END-OF-PERIOD ORDINATES
                6.       15.       12.        5.        3.        1.        1.        0.        0.        0.
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HYDROGRAPH AT STATION 4P

DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q	DA MON HRMN	ORD	RAIN	LOSS	EXCESS	COMP Q
28 FEB 0100	1	.00	.00	.00	0.	28 FEB 1315	50	1.30	.08	1.22	19.
28 FEB 0115	2	.01	.01	.00	0.	28 FEB 1330	51	.31	.01	.30	28.
28 FEB 0130	3	.01	.01	.00	0.	28 FEB 1345	52	.18	.01	.17	24.
28 FEB 0145	4	.01	.01	.00	0.	28 FEB 1400	53	.14	.01	.13	15.
28 FEB 0200	5	.01	.01	.00	0.	28 FEB 1415	54	.11	.00	.11	10.
28 FEB 0215	6	.01	.01	.00	0.	28 FEB 1430	55	.10	.00	.09	7.
28 FEB 0230	7	.01	.01	.00	0.	28 FEB 1445	56	.08	.00	.08	6.
28 FEB 0245	8	.01	.01	.00	0.	28 FEB 1500	57	.08	.00	.07	5.
28 FEB 0300	9	.01	.01	.00	0.	28 FEB 1515	58	.07	.00	.07	4.
28 FEB 0315	10	.01	.01	.00	0.	28 FEB 1530	59	.06	.00	.06	3.
28 FEB 0330	11	.02	.02	.00	0.	28 FEB 1545	60	.06	.00	.06	3.
28 FEB 0345	12	.02	.02	.00	0.	28 FEB 1600	61	.06	.00	.05	3.
28 FEB 0400	13	.02	.02	.00	0.	28 FEB 1615	62	.05	.00	.05	3.
28 FEB 0415	14	.02	.02	.00	0.	28 FEB 1630	63	.05	.00	.05	2.
28 FEB 0430	15	.02	.02	.00	0.	28 FEB 1645	64	.05	.00	.05	2.
28 FEB 0445	16	.02	.02	.00	0.	28 FEB 1700	65	.05	.00	.04	2.
28 FEB 0500	17	.02	.02	.00	0.	28 FEB 1715	66	.04	.00	.04	2.
28 FEB 0515	18	.02	.02	.00	0.	28 FEB 1730	67	.04	.00	.04	2.
28 FEB 0530	19	.02	.02	.00	0.	28 FEB 1745	68	.04	.00	.04	2.
28 FEB 0545	20	.02	.02	.00	0.	28 FEB 1800	69	.04	.00	.04	2.
28 FEB 0600	21	.02	.02	.00	0.	28 FEB 1815	70	.04	.00	.04	2.
28 FEB 0615	22	.02	.02	.00	0.	28 FEB 1830	71	.04	.00	.04	2.
28 FEB 0630	23	.02	.02	.00	0.	28 FEB 1845	72	.04	.00	.03	2.
28 FEB 0645	24	.02	.02	.01	0.	28 FEB 1900	73	.03	.00	.03	2.
28 FEB 0700	25	.02	.02	.01	0.	28 FEB 1915	74	.02	.00	.02	1.
28 FEB 0715	26	.03	.02	.01	0.	28 FEB 1930	75	.02	.00	.02	1.
28 FEB 0730	27	.03	.02	.01	0.	28 FEB 1945	76	.02	.00	.02	1.
28 FEB 0745	28	.04	.02	.01	0.	28 FEB 2000	77	.02	.00	.02	1.
28 FEB 0800	29	.04	.02	.02	1.	28 FEB 2015	78	.02	.00	.02	1.
28 FEB 0815	30	.04	.02	.02	1.	28 FEB 2030	79	.02	.00	.02	1.
28 FEB 0830	31	.04	.02	.02	1.	28 FEB 2045	80	.02	.00	.02	1.
28 FEB 0845	32	.04	.02	.02	1.	28 FEB 2100	81	.02	.00	.02	1.
28 FEB 0900	33	.04	.02	.02	1.	28 FEB 2115	82	.02	.00	.02	1.
28 FEB 0915	34	.04	.02	.03	1.	28 FEB 2130	83	.02	.00	.02	1.
28 FEB 0930	35	.05	.02	.03	1.	28 FEB 2145	84	.02	.00	.02	1.
28 FEB 0945	36	.05	.02	.03	1.	28 FEB 2200	85	.02	.00	.02	1.
28 FEB 1000	37	.05	.02	.03	1.	28 FEB 2215	86	.02	.00	.02	1.
28 FEB 1015	38	.05	.02	.04	1.	28 FEB 2230	87	.02	.00	.02	1.
28 FEB 1030	39	.06	.02	.04	1.	28 FEB 2245	88	.02	.00	.02	1.
28 FEB 1045	40	.06	.02	.04	2.	28 FEB 2300	89	.02	.00	.01	1.
28 FEB 1100	41	.07	.02	.05	2.	28 FEB 2315	90	.01	.00	.01	1.
28 FEB 1115	42	.07	.02	.05	2.	28 FEB 2330	91	.01	.00	.01	1.
28 FEB 1130	43	.08	.02	.06	2.	28 FEB 2345	92	.01	.00	.01	1.
28 FEB 1145	44	.09	.02	.07	2.	1 MAR 0000	93	.01	.00	.01	1.
28 FEB 1200	45	.10	.02	.08	3.	1 MAR 0015	94	.01	.00	.01	1.
28 FEB 1215	46	.13	.02	.10	3.	1 MAR 0030	95	.01	.00	.01	1.
28 FEB 1230	47	.16	.02	.13	4.	1 MAR 0045	96	.01	.00	.01	1.
28 FEB 1245	48	.25	.03	.22	5.	1 MAR 0100	97	.01	.00	.01	1.
28 FEB 1300	49	.54	.06	.48	9.						

TOTAL RAINFALL = 6.00, TOTAL LOSS = 1.04, TOTAL EXCESS = 4.96

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	24.00-HR
+ (CFS)	(HR)					
		(CFS)				
+ 28.	12.50		7.	2.	2.	2.
		(INCHES)	3.806	4.927	4.927	4.927
		(AC-FT)	3.	4.	4.	4.

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                    CUMULATIVE AREA =     .02 SQ MI


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          *            *
481 KK    *     4PSWP  *
          *            *
          **************

482 KO          OUTPUT CONTROL VARIABLES
                      IPRNT           1  PRINT CONTROL
                      IPLOT           0  PLOT CONTROL
                      QSCAL          0.  HYDROGRAPH PLOT SCALE
                               STORAGE ROUTING THROUGH WET AREA IN B.E. ROW

             HYDROGRAPH ROUTING DATA

484 RS          STORAGE ROUTING
                      NSTPS           1  NUMBER OF SUBREACHES
                       ITYP        ELEV  TYPE OF INITIAL CONDITION
                     RSVRIC       60.60  INITIAL CONDITION
                          X         .00 WORKING R AND D COEFFICIENT

485 SA               AREA          .8       1.2       1.4       1.9

486 SE          ELEVATION       60.60     61.30     62.00     63.30

 ' SS           SPILLWAY
                       CREL       60.60  SPILLWAY CREST ELEVATION
                      SPWID       10.00  SPILLWAY WIDTH
                       COQW        3.00  WEIR COEFFICIENT
                       EXPW        1.50  EXPONENT OF HEAD

                                                          ***

                                          COMPUTED STORAGE-ELEVATION DATA

          STORAGE        .00       .69      1.60      3.78
        ELEVATION      60.60     61.30     62.00     63.30

                                          COMPUTED OUTFLOW-ELEVATION DATA

          OUTFLOW        .00       .00       .02       .18       .62      1.46      2.85      4.93      7.83     11.68
        ELEVATION      60.60     60.60     60.61     60.63     60.67     60.73     60.81     60.90     61.01     61.13

          OUTFLOW      16.64     22.82     30.38     39.44     50.14     62.62     77.02     93.48    112.12    133.10
        ELEVATION      61.27     61.43     61.61     61.80     62.01     62.23     62.47     62.73     63.01     63.30


                                        COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

          STORAGE        .00       .03       .06       .11       .18       .26       .37       .50       .66       .69
          OUTFLOW        .00       .18       .62      1.46      2.85      4.93      7.83     11.68     16.64     17.57
        ELEVATION      60.60     60.63     60.67     60.73     60.81     60.90     61.01     61.13     61.27     61.30

          STORAGE        .85      1.07      1.32      1.60      1.94      2.32      2.75      3.23      3.78
          OUTFLOW      22.82     30.38     39.44     49.70     62.62     77.02     93.48    112.12    133.10
        ELEVATION      61.43     61.61     61.80     62.00     62.23     62.47     62.73     63.01     63.30

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HYDROGRAPH AT STATION 4PSWP

DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE	DA	MON	HRMN	ORD	OUTFLOW	STORAGE	STAGE
28	FEB	0100	1	0.	.0	60.6	28	FEB	0915	34	7.	.3	61.0	28	FEB	1730	67	67.	2.1	62.3
28	FEB	0115	2	1.	.1	60.7	28	FEB	0930	35	7.	.3	61.0	28	FEB	1745	68	62.	1.9	62.2
28	FEB	0130	3	3.	.2	60.8	28	FEB	0945	36	7.	.3	61.0	28	FEB	1800	69	59.	1.8	62.2
28	FEB	0145	4	4.	.2	60.9	28	FEB	1000	37	7.	.4	61.0	28	FEB	1815	70	57.	1.8	62.1
28	FEB	0200	5	5.	.3	60.9	28	FEB	1015	38	8.	.4	61.0	28	FEB	1830	71	55.	1.7	62.1
28	FEB	0215	6	5.	.3	60.9	28	FEB	1030	39	8.	.4	61.0	28	FEB	1845	72	54.	1.7	62.1
28	FEB	0230	7	6.	.3	60.9	28	FEB	1045	40	9.	.4	61.1	28	FEB	1900	73	52.	1.7	62.0
28	FEB	0245	8	6.	.3	60.9	28	FEB	1100	41	12.	.5	61.1	28	FEB	1915	74	51.	1.6	62.0
28	FEB	0300	9	6.	.3	60.9	28	FEB	1115	42	16.	.6	61.3	28	FEB	1930	75	49.	1.6	62.0
28	FEB	0315	10	6.	.3	60.9	28	FEB	1130	43	22.	.8	61.4	28	FEB	1945	76	45.	1.5	61.9
28	FEB	0330	11	6.	.3	60.9	28	FEB	1145	44	28.	1.0	61.5	28	FEB	2000	77	43.	1.4	61.9
28	FEB	0345	12	6.	.3	60.9	28	FEB	1200	45	34.	1.2	61.7	28	FEB	2015	78	41.	1.4	61.8
28	FEB	0400	13	6.	.3	60.9	28	FEB	1215	46	43.	1.4	61.9	28	FEB	2030	79	39.	1.3	61.8
28	FEB	0415	14	6.	.3	60.9	28	FEB	1230	47	56.	1.8	62.1	28	FEB	2045	80	38.	1.3	61.8
28	FEB	0430	15	6.	.3	60.9	28	FEB	1245	48	77.	2.3	62.5	28	FEB	2100	81	37.	1.3	61.8
28	FEB	0445	16	6.	.3	60.9	28	FEB	1300	49	98.	2.9	62.8	28	FEB	2115	82	37.	1.2	61.7
28	FEB	0500	17	6.	.3	60.9	28	FEB	1315	50	114.	3.3	63.0	28	FEB	2130	83	36.	1.2	61.7
28	FEB	0515	18	6.	.3	60.9	28	FEB	1330	51	127.	3.6	63.2	28	FEB	2145	84	36.	1.2	61.7
28	FEB	0530	19	6.	.3	60.9	28	FEB	1345	52	134.	3.8	63.3	28	FEB	2200	85	35.	1.2	61.7
28	FEB	0545	20	6.	.3	60.9	28	FEB	1400	53	133.	3.8	63.3	28	FEB	2215	86	35.	1.2	61.7
28	FEB	0600	21	6.	.3	60.9	28	FEB	1415	54	129.	3.7	63.2	28	FEB	2230	87	34.	1.2	61.7
28	FEB	0615	22	6.	.3	60.9	28	FEB	1430	55	125.	3.6	63.2	28	FEB	2245	88	34.	1.2	61.7
28	FEB	0630	23	6.	.3	60.9	28	FEB	1445	56	121.	3.5	63.1	28	FEB	2300	89	34.	1.2	61.7
28	FEB	0645	24	6.	.3	60.9	28	FEB	1500	57	119.	3.4	63.1	28	FEB	2315	90	33.	1.1	61.7
28	FEB	0700	25	6.	.3	61.0	28	FEB	1515	58	117.	3.4	63.1	28	FEB	2330	91	33.	1.1	61.7
28	FEB	0715	26	6.	.3	61.0	28	FEB	1530	59	115.	3.3	63.1	28	FEB	2345	92	33.	1.1	61
28	FEB	0730	27	6.	.3	61.0	28	FEB	1545	60	114.	3.3	63.0	1	MAR	0000	93	32.	1.1	61.[illegible]
28	FEB	0745	28	7.	.3	61.0	28	FEB	1600	61	112.	3.2	63.0	1	MAR	0015	94	32.	1.1	61.6
28	FEB	0800	29	7.	.3	61.0	28	FEB	1615	62	109.	3.2	63.0	1	MAR	0030	95	31.	1.1	61.6
28	FEB	0815	30	7.	.3	61.0	28	FEB	1630	63	106.	3.1	62.9	1	MAR	0045	96	31.	1.1	61.6
28	FEB	0830	31	7.	.3	61.0	28	FEB	1645	64	101.	2.9	62.8	1	MAR	0100	97	31.	1.1	61.6
28	FEB	0845	32	7.	.3	61.0	28	FEB	1700	65	90.	2.7	62.7							
28	FEB	0900	33	7.	.3	61.0	28	FEB	1715	66	78.	2.3	62.5							

PEAK FLOW (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	24.00-HR
		(CFS)				
134.	12.75		101.	40.	40.	40.
		(INCHES)	1.536	2.438	2.438	2.438
		(AC-FT)	50.	79.	79.	79.

PEAK STORAGE (AC-FT)	TIME (HR)	MAXIMUM AVERAGE STORAGE 6-HR	24-HR	72-HR	24.00-HR
4.	12.75	3.	1.	1.	1.

PEAK STAGE (FEET)	TIME (HR)	MAXIMUM AVERAGE STAGE 6-HR	24-HR	72-HR	24.00-HR
63.31	12.75	62.82	61.68	61.68	61.68

CUMULATIVE AREA = .61 SQ MI

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*** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** *** ***

          **************
          *            *
   3 KK   *      3PE   *
          *            *
          **************

 489 KO        OUTPUT CONTROL VARIABLES
                    IPRNT           1  PRINT CONTROL
                    IPLOT           0  PLOT CONTROL
                    QSCAL          0.  HYDROGRAPH PLOT SCALE
                             SCS RUNOFF CALCULATION

             SUBBASIN RUNOFF DATA

 491 BA        SUBBASIN CHARACTERISTICS
                    TAREA         .00  SUBBASIN AREA

               PRECIPITATION DATA

 492 PH                              DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
               ..... HYDRO-35 ......   ............... TP-40 ...............   ........... TP-49 ...........
               5-MIN  15-MIN  60-MIN    2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                 .60    1.30    2.40    3.00    3.40    4.20    5.20    6.00     .00     .00     .00     .00

                                                  STORM AREA =      .00

 493 LS        SCS LOSS RATE
                    STRTL         .04  INITIAL ABSTRACTION
                   CRVNBR       98.00  CURVE NUMBER
                    RTIMP         .00  PERCENT IMPERVIOUS AREA

 494 UD        SCS DIMENSIONLESS UNITGRAPH
                     TLAG         .02  LAG

                                                          ***

WARNING *** TIME INTERVAL IS GREATER THAN .29*LAG

                                                     UNIT HYDROGRAPH
                                                 5 END-OF-PERIOD ORDINATES
               4.        1.        0.        0.        0.

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                                              HYDROGRAPH AT STATION      3PE

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                                                                  *
      DA MON HRMN  ORD    RAIN    LOSS  EXCESS     COMP Q        *      DA MON HRMN  ORD    RAIN    LOSS  EXCESS     COMP Q
                                                                  *
      28 FEB 0100    1     .00     .00     .00         0.        *      28 FEB 1315   50    1.30     .00    1.30         6.
      28 FEB 0115    2     .01     .01     .00         0.        *      28 FEB 1330   51     .31     .00     .31         3.
      28 FEB 0130    3     .01     .01     .00         0.        *      28 FEB 1345   52     .18     .00     .18         1.
      28 FEB 0145    4     .01     .01     .00         0.        *      28 FEB 1400   53     .14     .00     .14         1.
      28 FEB 0200    5     .01     .01     .00         0.        *      28 FEB 1415   54     .11     .00     .11         1.
      28 FEB 0215    6     .01     .01     .00         0.        *      28 FEB 1430   55     .10     .00     .10         1.
      28 FEB 0230    7     .01     .01     .00         0.        *      28 FEB 1445   56     .08     .00     .08         0.
      28 FEB 0245    8     .01     .01     .00         0.        *      28 FEB 1500   57     .08     .00     .08         0.
      28 FEB 0300    9     .01     .01     .01         0.        *      28 FEB 1515   58     .07     .00     .07         0.
      28 FEB 0315   10     .01     .01     .01         0.        *      28 FEB 1530   59     .06     .00     .06         0.
      28 FEB 0330   11     .02     .01     .01         0.        *      28 FEB 1545   60     .06     .00     .06         0.
      28 FEB 0345   12     .02     .01     .01         0.        *      28 FEB 1600   61     .06     .00     .06         0.
      28 FEB 0400   13     .02     .01     .01         0.        *      28 FEB 1615   62     .05     .00     .05         0.
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28 FEB 0415	14	.02	.01	.01	0.	*	28 FEB 1630	63	.05	.00	.05	0.
28 FEB 0430	15	.02	.01	.01	0.	*	28 FEB 1645	64	.05	.00	.05	0.
28 FEB 0445	16	.02	.01	.01	0.	*	28 FEB 1700	65	.05	.00	.05	0.
28 FEB 0500	17	.02	.00	.01	0.	*	28 FEB 1715	66	.04	.00	.04	0.
28 FEB 0515	18	.02	.00	.01	0.	*	28 FEB 1730	67	.04	.00	.04	0.
28 FEB 0530	19	.02	.00	.01	0.	*	28 FEB 1745	68	.04	.00	.04	0.
28 FEB 0545	20	.02	.00	.01	0.	*	28 FEB 1800	69	.04	.00	.04	0.
28 FEB 0600	21	.02	.00	.02	0.	*	28 FEB 1815	70	.04	.00	.04	0.
28 FEB 0615	22	.02	.00	.02	0.	*	28 FEB 1830	71	.04	.00	.04	0.
28 FEB 0630	23	.02	.00	.02	0.	*	28 FEB 1845	72	.04	.00	.04	0.
28 FEB 0645	24	.02	.00	.02	0.	*	28 FEB 1900	73	.03	.00	.03	0.
28 FEB 0700	25	.02	.00	.02	0.	*	28 FEB 1915	74	.02	.00	.02	0.
28 FEB 0715	26	.03	.00	.03	0.	*	28 FEB 1930	75	.02	.00	.02	0.
28 FEB 0730	27	.03	.00	.03	0.	*	28 FEB 1945	76	.02	.00	.02	0.
28 FEB 0745	28	.04	.00	.03	0.	*	28 FEB 2000	77	.02	.00	.02	0.
28 FEB 0800	29	.04	.00	.03	0.	*	28 FEB 2015	78	.02	.00	.02	0.
28 FEB 0815	30	.04	.00	.04	0.	*	28 FEB 2030	79	.02	.00	.02	0.
28 FEB 0830	31	.04	.00	.04	0.	*	28 FEB 2045	80	.02	.00	.02	0.
28 FEB 0845	32	.04	.00	.04	0.	*	28 FEB 2100	81	.02	.00	.02	0.
28 FEB 0900	33	.04	.00	.04	0.	*	28 FEB 2115	82	.02	.00	.02	0.
28 FEB 0915	34	.04	.00	.04	0.	*	28 FEB 2130	83	.02	.00	.02	0.
28 FEB 0930	35	.05	.00	.04	0.	*	28 FEB 2145	84	.02	.00	.02	0.
28 FEB 0945	36	.05	.00	.05	0.	*	28 FEB 2200	85	.02	.00	.02	0.
28 FEB 1000	37	.05	.00	.05	0.	*	28 FEB 2215	86	.02	.00	.02	0.
28 FEB 1015	38	.05	.00	.05	0.	*	28 FEB 2230	87	.02	.00	.02	0.
28 FEB 1030	39	.06	.00	.06	0.	*	28 FEB 2245	88	.02	.00	.02	0.
28 FEB 1045	40	.06	.00	.06	0.	*	28 FEB 2300	89	.02	.00	.02	0.
28 FEB 1100	41	.07	.00	.06	0.	*	28 FEB 2315	90	.01	.00	.01	0.
28 FEB 1115	42	.07	.00	.07	0.	*	28 FEB 2330	91	.01	.00	.01	0.
28 FEB 1130	43	.08	.00	.08	0.	*	28 FEB 2345	92	.01	.00	.01	0.
28 FEB 1145	44	.09	.00	.09	0.	*	1 MAR 0000	93	.01	.00	.01	0.
28 FEB 1200	45	.10	.00	.10	1.	*	1 MAR 0015	94	.01	.00	.01	0.
28 FEB 1215	46	.13	.00	.12	1.	*	1 MAR 0030	95	.01	.00	.01	0.
28 FEB 1230	47	.16	.00	.15	1.	*	1 MAR 0045	96	.01	.00	.01	0.
28 FEB 1245	48	.25	.00	.25	1.	*	1 MAR 0100	97	.01	.00	.01	0.
28 FEB 1300	49	.54	.00	.54	2.	*						
						*						

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TOTAL RAINFALL = 6.00, TOTAL LOSS = .24, TOTAL EXCESS = 5.76

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.00-HR
+ (CFS)	(HR)					
		(CFS)				
+ 6.	12.25		1.	0.	0.	0.
		(INCHES)	4.167	5.751	5.751	5.751
		(AC-FT)	0.	1.	1.	1.

CUMULATIVE AREA = .00 SQ MI

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          **************
          *            *
495 KK    *     3PEDB  *
          *            *
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496 KO          OUTPUT CONTROL VARIABLES
                     IPRNT          1  PRINT CONTROL
                     IPLOT          0  PLOT CONTROL
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                QSCAL          0.  HYDROGRAPH PLOT SCALE
                         STORAGE ROUTING DETENTION BASIN AT PEBCO

          HYDROGRAPH ROUTING DATA

  1 RS        STORAGE ROUTING
                   NSTPS          1  NUMBER OF SUBREACHES
                    ITYP       ELEV  TYPE OF INITIAL CONDITION
                  RSVRIC      63.00  INITIAL CONDITION
                       X        .00 WORKING R AND D COEFFICIENT

499 SA            AREA          .0        .0        .1        .1

500 SE        ELEVATION      63.00     64.00     65.00     66.00

501 SL        LOW-LEVEL OUTLET
                   ELEVL      63.50  ELEVATION AT CENTER OF OUTLET
                   CAREA        .79  CROSS-SECTIONAL AREA
                    COQL        .60  COEFFICIENT
                    EXPL        .50  EXPONENT OF HEAD

502 SS        SPILLWAY
                    CREL      66.90  SPILLWAY CREST ELEVATION
                   SPWID        .00  SPILLWAY WIDTH
                    COQW        .00  WEIR COEFFICIENT
                    EXPW       1.50  EXPONENT OF HEAD

                                                  ***

                                  COMPUTED STORAGE-ELEVATION DATA

        STORAGE       .00       .04       .09       .16
      ELEVATION     63.00     64.00     65.00     66.00

                                  COMPUTED OUTFLOW-ELEVATION DATA

        OUTFLOW       .00       .00      2.69      2.95      3.27      3.66      4.16      4.81      5.70      7.01
      ELEVATION     63.00     63.50     64.00     64.10     64.24     64.43     64.69     65.10     65.75     66.90


                                COMPUTED STORAGE-OUTFLOW-ELEVATION DATA

        STORAGE       .00       .02       .04       .05       .05       .06       .08       .09       .10       .14
        OUTFLOW       .00       .00      2.69      2.95      3.27      3.66      4.16      4.66      4.81      5.70
      ELEVATION     63.00     63.50     64.00     64.10     64.24     64.43     64.69     65.00     65.10     65.75

        STORAGE       .16       .23
        OUTFLOW      6.01      7.01
      ELEVATION     66.00     66.90

*** WARNING *** MODIFIED PULS ROUTING MAY BE NUMERICALLY UNSTABLE FOR OUTFLOWS BETWEEN        0. TO        3.
               THE ROUTED HYDROGRAPH SHOULD BE EXAMINED FOR OSCILLATIONS OR OUTFLOWS GREATER THAN PEAK INFLOWS.
               THIS CAN BE CORRECTED BY DECREASING THE TIME INTERVAL OR INCREASING STORAGE (USE A LONGER REACH.)

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                                  HYDROGRAPH AT STATION    3PEDB

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                                                *                                                *
 DA MON HRMN ORD  OUTFLOW  STORAGE   STAGE * DA MON HRMN ORD  OUTFLOW  STORAGE   STAGE * DA MON HRMN ORD  OUTFLOW  STORAGE   STAGE
                                                *                                                *
28 FEB 0100   1       0.       .0    63.0 * 28 FEB 0915  34       0.       .0    63.5 * 28 FEB 1730  67       0.       .0    63.5
28 FEB 0115   2       0.       .0    63.0 * 28 FEB 0930  35       0.       .0    63.5 * 28 FEB 1745  68       0.       .0    63.5
28 FEB 0130   3       0.       .0    63.0 * 28 FEB 0945  36       0.       .0    63.5 * 28 FEB 1800  69       0.       .0    63.5
28 FEB 0145   4       0.       .0    63.0 * 28 FEB 1000  37       0.       .0    63.5 * 28 FEB 1815  70       0.       .0    63.5
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28 FEB 0200	5	0.	.0	63.0	*	28 FEB 1015	38	0.	.0	63.5	*	28 FEB 1830	71	0.	.0	63.5
28 FEB 0215	6	0.	.0	63.0	*	28 FEB 1030	39	0.	.0	63.6	*	28 FEB 1845	72	0.	.0	63.5
28 FEB 0230	7	0.	.0	63.0	*	28 FEB 1045	40	0.	.0	63.6	*	28 FEB 1900	73	0.	.0	63.5
28 FEB 0245	8	0.	.0	63.0	*	28 FEB 1100	41	0.	.0	63.6	*	28 FEB 1915	74	0.	.0	63.5
28 FEB 0300	9	0.	.0	63.0	*	28 FEB 1115	42	0.	.0	63.6	*	28 FEB 1930	75	0.	.0	63[illegible]
28 FEB 0315	10	0.	.0	63.1	*	28 FEB 1130	43	0.	.0	63.6	*	28 FEB 1945	76	0.	.0	63.[illegible]
28 FEB 0330	11	0.	.0	63.1	*	28 FEB 1145	44	0.	.0	63.6	*	28 FEB 2000	77	0.	.0	63.5
28 FEB 0345	12	0.	.0	63.1	*	28 FEB 1200	45	0.	.0	63.6	*	28 FEB 2015	78	0.	.0	63.5
28 FEB 0400	13	0.	.0	63.1	*	28 FEB 1215	46	1.	.0	63.6	*	28 FEB 2030	79	0.	.0	63.5
28 FEB 0415	14	0.	.0	63.2	*	28 FEB 1230	47	1.	.0	63.6	*	28 FEB 2045	80	0.	.0	63.5
28 FEB 0430	15	0.	.0	63.2	*	28 FEB 1245	48	1.	.0	63.7	*	28 FEB 2100	81	0.	.0	63.5
28 FEB 0445	16	0.	.0	63.2	*	28 FEB 1300	49	2.	.0	63.8	*	28 FEB 2115	82	0.	.0	63.5
28 FEB 0500	17	0.	.0	63.2	*	28 FEB 1315	50	4.	.1	64.4	*	28 FEB 2130	83	0.	.0	63.5
28 FEB 0515	18	0.	.0	63.3	*	28 FEB 1330	51	4.	.1	64.6	*	28 FEB 2145	84	0.	.0	63.5
28 FEB 0530	19	0.	.0	63.3	*	28 FEB 1345	52	3.	.0	64.0	*	28 FEB 2200	85	0.	.0	63.5
28 FEB 0545	20	0.	.0	63.4	*	28 FEB 1400	53	1.	.0	63.7	*	28 FEB 2215	86	0.	.0	63.5
28 FEB 0600	21	0.	.0	63.4	*	28 FEB 1415	54	1.	.0	63.6	*	28 FEB 2230	87	0.	.0	63.5
28 FEB 0615	22	0.	.0	63.5	*	28 FEB 1430	55	1.	.0	63.6	*	28 FEB 2245	88	0.	.0	63.5
28 FEB 0630	23	0.	.0	63.5	*	28 FEB 1445	56	0.	.0	63.6	*	28 FEB 2300	89	0.	.0	63.5
28 FEB 0645	24	0.	.0	63.5	*	28 FEB 1500	57	0.	.0	63.6	*	28 FEB 2315	90	0.	.0	63.5
28 FEB 0700	25	0.	.0	63.5	*	28 FEB 1515	58	0.	.0	63.6	*	28 FEB 2330	91	0.	.0	63.5
28 FEB 0715	26	0.	.0	63.5	*	28 FEB 1530	59	0.	.0	63.6	*	28 FEB 2345	92	0.	.0	63.5
28 FEB 0730	27	0.	.0	63.5	*	28 FEB 1545	60	0.	.0	63.6	*	1 MAR 0000	93	0.	.0	63.5
28 FEB 0745	28	0.	.0	63.5	*	28 FEB 1600	61	0.	.0	63.6	*	1 MAR 0015	94	0.	.0	63.5
28 FEB 0800	29	0.	.0	63.5	*	28 FEB 1615	62	0.	.0	63.6	*	1 MAR 0030	95	0.	.0	63.5
28 FEB 0815	30	0.	.0	63.5	*	28 FEB 1630	63	0.	.0	63.6	*	1 MAR 0045	96	0.	.0	63.5
28 FEB 0830	31	0.	.0	63.5	*	28 FEB 1645	64	0.	.0	63.5	*	1 MAR 0100	97	0.	.0	63.5
28 FEB 0845	32	0.	.0	63.5	*	28 FEB 1700	65	0.	.0	63.5	*					
28 FEB 0900	33	0.	.0	63.5	*	28 FEB 1715	66	0.	.0	63.5	*					
					*						*					

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PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.00-HR
+ (CFS)	(HR)					
		(CFS)				
+ 4.	12.50		1.	0.	0.	0.
		(INCHES)	4.167	5.570	5.570	5.570
		(AC-FT)	0.	1.	1.	1.

PEAK STORAGE	TIME	MAXIMUM AVERAGE STORAGE			
		6-HR	24-HR	72-HR	24.00-HR
+ (AC-FT)	(HR)				
0.	12.50	0.	0.	0.	0.

PEAK STAGE	TIME	MAXIMUM AVERAGE STAGE			
		6-HR	24-HR	72-HR	24.00-HR
+ (FEET)	(HR)				
64.55	12.50	63.69	63.48	63.48	63.48

CUMULATIVE AREA = .00 SQ MI

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          *            *
503 KK    *      3PW   *
          *            *
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504 KO        OUTPUT CONTROL VARIABLES
                    IPRNT          1  PRINT CONTROL
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                IPLOT          0  PLOT CONTROL
                QSCAL         0.  HYDROGRAPH PLOT SCALE
                        SCS RUNOFF CALCULATION

          SUBBASIN RUNOFF DATA

506 BA        SUBBASIN CHARACTERISTICS
                TAREA        .01  SUBBASIN AREA

              PRECIPITATION DATA

507 PH                          DEPTHS FOR   0-PERCENT HYPOTHETICAL STORM
              ..... HYDRO-35 ......  ............... TP-40 ...............  ........... TP-49 ...........
              5-MIN  15-MIN  60-MIN   2-HR    3-HR    6-HR   12-HR   24-HR   2-DAY   4-DAY   7-DAY  10-DAY
                .60    1.30    2.40   3.00    3.40    4.20    5.20    6.00     .00     .00     .00     .00

                                          STORM AREA =     .01

508 LS        SCS LOSS RATE
                STRTL        .56  INITIAL ABSTRACTION
               CRVNBR      78.00  CURVE NUMBER
                RTIMP        .00  PERCENT IMPERVIOUS AREA

509 UD        SCS DIMENSIONLESS UNITGRAPH
                 TLAG        .24  LAG

                                                  ***

WARNING *** TIME INTERVAL IS GREATER THAN .29*LAG

                                                UNIT HYDROGRAPH
                                            7 END-OF-PERIOD ORDINATES
            10.       10.        3.        1.        0.        0.        0.

*****************************************************************************************************************************

                                        HYDROGRAPH AT STATION      3PW

*****************************************************************************************************************************
                                                                  *
     DA MON HRMN  ORD    RAIN    LOSS  EXCESS     COMP Q          *     DA MON HRMN  ORD    RAIN    LOSS  EXCESS     COMP Q
                                                                  *
     28 FEB 0100    1     .00     .00     .00         0.          *     28 FEB 1315   50    1.30     .35     .95        14.
     28 FEB 0115    2     .01     .01     .00         0.          *     28 FEB 1330   51     .31     .06     .25        14.
     28 FEB 0130    3     .01     .01     .00         0.          *     28 FEB 1345   52     .18     .03     .15         8.
     28 FEB 0145    4     .01     .01     .00         0.          *     28 FEB 1400   53     .14     .02     .11         5.
     28 FEB 0200    5     .01     .01     .00         0.          *     28 FEB 1415   54     .11     .02     .09         3.
     28 FEB 0215    6     .01     .01     .00         0.          *     28 FEB 1430   55     .10     .02     .08         3.
     28 FEB 0230    7     .01     .01     .00         0.          *     28 FEB 1445   56     .08     .01     .07         2.
     28 FEB 0245    8     .01     .01     .00         0.          *     28 FEB 1500   57     .08     .01     .06         2.
     28 FEB 0300    9     .01     .01     .00         0.          *     28 FEB 1515   58     .07     .01     .06         2.
     28 FEB 0315   10     .01     .01     .00         0.          *     28 FEB 1530   59     .06     .01     .05         2.
     28 FEB 0330   11     .02     .02     .00         0.          *     28 FEB 1545   60     .06     .01     .05         1.
     28 FEB 0345   12     .02     .02     .00         0.          *     28 FEB 1600   61     .06     .01     .05         1.
     28 FEB 0400   13     .02     .02     .00         0.          *     28 FEB 1615   62     .05     .01     .05         1.
     28 FEB 0415   14     .02     .02     .00         0.          *     28 FEB 1630   63     .05     .01     .04         1.
     28 FEB 0430   15     .02     .02     .00         0.          *     28 FEB 1645   64     .05     .01     .04         1.
     28 FEB 0445   16     .02     .02     .00         0.          *     28 FEB 1700   65     .05     .01     .04         1.
     28 FEB 0500   17     .02     .02     .00         0.          *     28 FEB 1715   66     .04     .01     .04         1.
     28 FEB 0515   18     .02     .02     .00         0.          *     28 FEB 1730   67     .04     .01     .04         1.
     28 FEB 0530   19     .02     .02     .00         0.          *     28 FEB 1745   68     .04     .01     .03         1.
     28 FEB 0545   20     .02     .02     .00         0.          *     28 FEB 1800   69     .04     .01     .03         1.
     28 FEB 0600   21     .02     .02     .00         0.          *     28 FEB 1815   70     .04     .00     .03         1.
     28 FEB 0615   22     .02     .02     .00         0.          *     28 FEB 1830   71     .04     .00     .03         1.
     28 FEB 0630   23     .02     .02     .00         0.          *     28 FEB 1845   72     .04     .00     .03         1.
     28 FEB 0645   24     .02     .02     .00         0.          *     28 FEB 1900   73     .03     .00     .03         1.
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28 FEB 0700	25	.02	.02	.00	0.	*	28 FEB 1915	74	.02	.00	.02	1.
28 FEB 0715	26	.03	.03	.00	0.	*	28 FEB 1930	75	.02	.00	.02	1.
28 FEB 0730	27	.03	.03	.00	0.	*	28 FEB 1945	76	.02	.00	.02	0.
28 FEB 0745	28	.04	.04	.00	0.	*	28 FEB 2000	77	.02	.00	.02	0.
28 FEB 0800	29	.04	.04	.00	0.	*	28 FEB 2015	78	.02	.00	.02	0.
28 FEB 0815	30	.04	.04	.00	0.	*	28 FEB 2030	79	.02	.00	.02	0.
28 FEB 0830	31	.04	.04	.00	0.	*	28 FEB 2045	80	.02	.00	.02	0.
28 FEB 0845	32	.04	.04	.00	0.	*	28 FEB 2100	81	.02	.00	.02	0.
28 FEB 0900	33	.04	.04	.00	0.	*	28 FEB 2115	82	.02	.00	.02	0.
28 FEB 0915	34	.04	.04	.00	0.	*	28 FEB 2130	83	.02	.00	.02	0.
28 FEB 0930	35	.05	.04	.01	0.	*	28 FEB 2145	84	.02	.00	.01	0.
28 FEB 0945	36	.05	.04	.01	0.	*	28 FEB 2200	85	.02	.00	.01	0.
28 FEB 1000	37	.05	.04	.01	0.	*	28 FEB 2215	86	.02	.00	.01	0.
28 FEB 1015	38	.05	.04	.01	0.	*	28 FEB 2230	87	.02	.00	.01	0.
28 FEB 1030	39	.06	.04	.01	0.	*	28 FEB 2245	88	.02	.00	.01	0.
28 FEB 1045	40	.06	.05	.02	0.	*	28 FEB 2300	89	.02	.00	.01	0.
28 FEB 1100	41	.07	.05	.02	0.	*	28 FEB 2315	90	.01	.00	.01	0.
28 FEB 1115	42	.07	.05	.02	1.	*	28 FEB 2330	91	.01	.00	.01	0.
28 FEB 1130	43	.08	.05	.03	1.	*	28 FEB 2345	92	.01	.00	.01	0.
28 FEB 1145	44	.09	.06	.03	1.	*	1 MAR 0000	93	.01	.00	.01	0.
28 FEB 1200	45	.10	.06	.04	1.	*	1 MAR 0015	94	.01	.00	.01	0.
28 FEB 1215	46	.13	.07	.06	1.	*	1 MAR 0030	95	.01	.00	.01	0.
28 FEB 1230	47	.16	.08	.08	2.	*	1 MAR 0045	96	.01	.00	.01	0.
28 FEB 1245	48	.25	.12	.13	2.	*	1 MAR 0100	97	.01	.00	.01	0.
28 FEB 1300	49	.54	.21	.33	5.	*						
						*						

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TOTAL RAINFALL = 6.00, TOTAL LOSS = 2.42, TOTAL EXCESS = 3.58

PEAK FLOW	TIME		MAXIMUM AVERAGE FLOW			
			6-HR	24-HR	72-HR	24.00-HR
+ (CFS)	(HR)					
		(CFS)				
+ 14.	12.25		3.	1.	1.	1.
		(INCHES)	2.883	3.563	3.563	3.563
		(AC-FT)	2.	2.	2.	2.

CUMULATIVE AREA = .01 SQ MI

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          *            *
510 KK    *     3PEW   *
          *            *
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511 KO OUTPUT CONTROL VARIABLES

IPRNT	1	PRINT CONTROL
IPLOT	0	PLOT CONTROL
QSCAL	0.	HYDROGRAPH PLOT SCALE

COMBINE HYDROGRAPHS FROM 3PEDB & 3PW

513 HC HYDROGRAPH COMBINATION

ICOMP	2	NUMBER OF HYDROGRAPHS TO COMBINE

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HYDROGRAPH AT STATION 3PEW

SUM OF 2 HYDROGRAPHS

DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW	DA MON HRMN	ORD	FLOW
28 FEB 0100	1	0.	28 FEB 0715	26	0.	28 FEB 1330	51	18.	28 FEB 1945	76	1.
28 FEB 0115	2	0.	28 FEB 0730	27	0.	28 FEB 1345	52	10.	28 FEB 2000	77	1.
28 FEB 0130	3	0.	28 FEB 0745	28	0.	28 FEB 1400	53	6.	28 FEB 2015	78	1.
28 FEB 0145	4	0.	28 FEB 0800	29	0.	28 FEB 1415	54	4.	28 FEB 2030	79	1.
28 FEB 0200	5	0.	28 FEB 0815	30	0.	28 FEB 1430	55	3.	28 FEB 2045	80	1.
28 FEB 0215	6	0.	28 FEB 0830	31	0.	28 FEB 1445	56	3.	28 FEB 2100	81	1.
28 FEB 0230	7	0.	28 FEB 0845	32	0.	28 FEB 1500	57	2.	28 FEB 2115	82	1.
28 FEB 0245	8	0.	28 FEB 0900	33	0.	28 FEB 1515	58	2.	28 FEB 2130	83	0.
28 FEB 0300	9	0.	28 FEB 0915	34	0.	28 FEB 1530	59	2.	28 FEB 2145	84	0.
28 FEB 0315	10	0.	28 FEB 0930	35	0.	28 FEB 1545	60	2.	28 FEB 2200	85	0.
28 FEB 0330	11	0.	28 FEB 0945	36	0.	28 FEB 1600	61	2.	28 FEB 2215	86	0.
28 FEB 0345	12	0.	28 FEB 1000	37	0.	28 FEB 1615	62	2.	28 FEB 2230	87	0.
28 FEB 0400	13	0.	28 FEB 1015	38	1.	28 FEB 1630	63	1.	28 FEB 2245	88	0.
28 FEB 0415	14	0.	28 FEB 1030	39	1.	28 FEB 1645	64	1.	28 FEB 2300	89	0.
28 FEB 0430	15	0.	28 FEB 1045	40	1.	28 FEB 1700	65	1.	28 FEB 2315	90	0.
28 FEB 0445	16	0.	28 FEB 1100	41	1.	28 FEB 1715	66	1.	28 FEB 2330	91	0.
28 FEB 0500	17	0.	28 FEB 1115	42	1.	28 FEB 1730	67	1.	28 FEB 2345	92	0.
28 FEB 0515	18	0.	28 FEB 1130	43	1.	28 FEB 1745	68	1.	1 MAR 0000	93	0.
28 FEB 0530	19	0.	28 FEB 1145	44	1.	28 FEB 1800	69	1.	1 MAR 0015	94	0.
28 FEB 0545	20	0.	28 FEB 1200	45	1.	28 FEB 1815	70	1.	1 MAR 0030	95	0.
28 FEB 0600	21	0.	28 FEB 1215	46	2.	28 FEB 1830	71	1.	1 MAR 0045	96	0.
28 FEB 0615	22	0.	28 FEB 1230	47	2.	28 FEB 1845	72	1.	1 MAR 0100	97	0.
28 FEB 0630	23	0.	28 FEB 1245	48	3.	28 FEB 1900	73	1.			
28 FEB 0645	24	0.	28 FEB 1300	49	7.	28 FEB 1915	74	1.			
28 FEB 0700	25	0.	28 FEB 1315	50	17.	28 FEB 1930	75	1.			

PEAK FLOW (CFS)	TIME (HR)		MAXIMUM AVERAGE FLOW 6-HR	24-HR	72-HR	24.00-HR
		(CFS)				
18.	12.50		4.	1.	1.	1.
		(INCHES)	3.079	3.897	3.897	3.897
		(AC-FT)	2.	2.	2.	2.

CUMULATIVE AREA = .01 SQ MI

1

RUNOFF SUMMARY
FLOW IN CUBIC FEET PER SECOND
TIME IN HOURS, AREA IN SQUARE MILES

OPERATION	STATION	PEAK FLOW	TIME OF PEAK	AVERAGE FLOW FOR MAXIMUM PERIOD 6-HOUR	24-HOUR	72-HOUR	BASIN AREA	MAXIMUM STAGE	TIME OF MAX STAGE
HYDROGRAPH AT	5E	77.	12.50	19.	6.	6.	.07		
HYDROGRAPH AT	6CSWP	177.	13.75	165.	55.	55.	.93		
HYDROGRAPH AT	12P	18.	12.50	5.	1.	1.	.01		
3 COMBINED AT	6C12P	250.	12.50	187.	62.	62.	1.01		
ROUTED TO									

+	12PCHL	250.	12.75	187.	62.	62.	1.01		
+								72.94	12.75
HYDROGRAPH AT									
+	13P	8.	12.75	2.	1.	1.	.01		
HYDROGRAPH AT									
+	19P	4.	12.50	1.	0.	0.	.00		
ROUTED TO									
+	19PCHL	4.	12.50	1.	0.	0.	.00		
+								66.52	12.50
3 COMBINED AT									
+	121319	262.	12.75	190.	63.	63.	1.03		
HYDROGRAPH AT									
+	20P	24.	12.50	5.	2.	2.	.02		
ROUTED TO									
+	20PSWP	0.	24.00	0.	0.	0.	.02		
+								68.13	24.00
HYDROGRAPH AT									
+	14P	42.	12.50	11.	3.	3.	.04		
3 COMBINED AT									
+	NBAR	301.	12.50	201.	66.	66.	1.08		
ROUTED TO									
+	14PCHL	167.	17.25	153.	61.	61.	1.08		
+								97.24	17.25
HYDROGRAPH AT									
+	6PWBAR	28.	15.50	27.	13.	13.	.30		
HYDROGRAPH AT									
+	8P	33.	12.50	7.	2.	2.	.02		
HYDROGRAPH AT									
+	15P	25.	12.50	6.	2.	2.	.01		
ROUTED TO									
+	15PSWP	5.	13.25	5.	2.	2.	.01		
+								63.23	13.25
4 COMBINED AT									
+	6815P	200.	17.00	187.	78.	78.	1.42		
ROUTED TO									
+	8PCHL	200.	17.25	186.	78.	78.	1.42		
+								72.51	17.25
HYDROGRAPH AT									
+	10P	52.	12.25	11.	4.	4.	.03		
2 COMBINED AT									
+	810P	202.	17.25	189.	81.	81.	1.45		
ROUTED TO									
+	10PCHL	202.	17.25	189.	81.	81.	1.45		
+								68.37	17.25
HYDROGRAPH AT									
+	16&17P	42.	12.25	6.	2.	2.	.02		

ROUTED TO									
+	1617PD	23.	12.50	5.	2.	2.	.02		
+								66.34	12.50
2 COMBINED AT									
	1017PD	204.	17.25	191.	83.	83.	1.46		
ROUTED TO									
+	1617CH	204.	17.50	191.	83.	83.	1.46		
+								71.21	17.50
ROUTED TO									
+	11PCHL	204.	17.50	191.	83.	83.	1.46		
+								69.99	17.50
HYDROGRAPH AT									
+	21P	17.	12.50	4.	1.	1.	.01		
HYDROGRAPH AT									
+	22P	5.	12.25	1.	0.	0.	.00		
2 COMBINED AT									
+	21&22P	22.	12.50	5.	1.	1.	.02		
ROUTED TO									
+	21PCHL	23.	12.50	5.	1.	1.	.02		
+								68.51	12.50
HYDROGRAPH AT									
+	23P	75.	12.25	12.	4.	4.	.03		
HYDROGRAPH AT									
	18P	30.	12.25	5.	2.	2.	.01		
4 COMBINED AT									
+	PHCOMB	224.	12.25	197.	90.	90.	1.52		
HYDROGRAPH AT									
+	8CSWP	525.	13.00	326.	119.	119.	1.43		
2 COMBINED AT									
+	CW&PP	714.	13.00	522.	209.	209.	2.95		
ROUTED TO									
+	PHPND	442.	17.75	417.	176.	176.	2.95		
+								69.62	17.75
HYDROGRAPH AT									
+	11P	123.	12.50	28.	9.	9.	.07		
HYDROGRAPH AT									
+	MAWL	21.	22.25	19.	7.	7.	.01		
HYDROGRAPH AT									
+	9P	20.	12.25	4.	1.	1.	.01		
HYDROGRAPH AT									
+	5PN	10.	12.50	2.	1.	1.	.01		
3 COMBINED AT									
+	MA5PN	28.	12.25	19.	8.	8.	.03		
ROUTED TO									
+	AADWEX	27.	12.25	19.	8.	8.	.03		
+								62.02	12.25

	HYDROGRAPH AT								
+	5PS	62.	12.75	18.	6.	6.	.05		
	HYDROGRAPH AT								
+	RECHRG	1.	.25	1.	1.	1.	.00		
	3 COMBINED AT								
+	5PSAAD	88.	12.50	31.	15.	15.	.08		
	ROUTED TO								
+	SHD10C	87.	12.50	31.	15.	15.	.08		
+								55.46	12.50
	HYDROGRAPH AT								
+	4DCHAB	107.	12.50	34.	14.	14.	.26		
	HYDROGRAPH AT								
+	2PN	13.	12.50	3.	1.	1.	.01		
	2 COMBINED AT								
+	4D2PN	120.	12.50	37.	15.	15.	.27		
	ROUTED TO								
+	PXDPR	75.	12.75	37.	15.	15.	.27		
+								72.28	12.75
	HYDROGRAPH AT								
+	4ECHL	75.	12.25	60.	20.	20.	.30		
	HYDROGRAPH AT								
+	1P	36.	12.50	8.	3.	3.	.02		
	2 COMBINED AT								
+	4E1P	111.	12.50	68.	23.	23.	.32		
	ROUTED TO								
+	EWCLPX	110.	12.50	68.	23.	23.	.32		
+								67.30	12.50
	HYDROGRAPH AT								
+	2PS	17.	12.25	3.	1.	1.	.01		
	ROUTED TO								
+	2PSDB	7.	12.50	3.	1.	1.	.01		
+								69.34	12.50
	3 COMBINED AT								
+	1&2P	184.	12.50	106.	39.	39.	.59		
	ROUTED TO								
+	2PSCHL	180.	12.75	106.	41.	41.	.59		
+								82.96	12.75
	HYDROGRAPH AT								
+	DI2PSC	110.	12.00	93.	38.	38.	.59		
	HYDROGRAPH AT								
+	4PS	8.	12.25	1.	0.	0.	.00		
	ROUTED TO								
+	4PSDB	3.	12.50	1.	0.	0.	.00		
+								61.59	12.50
	HYDROGRAPH AT								
+	4P	28.	12.50	7.	2.	2.	.02		

3 COMBINED AT									
+	124P	141.	12.50	101.	41.	41.	.61		
ROUTED TO									
	4PSWP	134.	12.75	101.	40.	40.	.61		
								63.31	12.75
HYDROGRAPH AT									
+	3PE	6.	12.25	1.	0.	0.	.00		
ROUTED TO									
+	3PEDB	4.	12.50	1.	0.	0.	.00		
+								64.55	12.50
HYDROGRAPH AT									
+	3PW	14.	12.25	3.	1.	1.	.01		
2 COMBINED AT									
+	3PEW	18.	12.50	4.	1.	1.	.01		

*** NORMAL END OF HEC-1 ***