WRI 78-57

FLOOD PROFILES FOR PEACE RIVER, SOUTH-CENTRAL FLORIDA

U.S. GEOLOGICAL SURVEY

Water-Resources Investigations 78-57

Prepared in cooperation with the
SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT

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16. Abstracts

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Flood-peak discharges used in the step-backwater analyses were determined by weighting stream gaging station data with data from a regional analysis. Land-surface elevation data for 183 cross sections - including values of Manning's roughness coefficient - were also used in the backwater analysis.

Flood height data are judged to be generally accurate to $\pm$0.5 foot. They indicate that most roads and two bridges in the study reach will be inundated by some of the floods evaluated.

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1978

UNITED STATES DEPARTMENT OF THE INTERIOR

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CONVERSION FACTORS

For use of those readers who may prefer to use metric units rather than U.S. Customary units, the conversion factors for the terms used in this report are listed below:

U.S. Customary	Multiply by	Metric
ft^3/s (cubic foot per second)	2.832×10^{-2}	m^3/s (cubic meter per second)
ft (foot)	3.048×10^{-1}	m (meter)
mi (mile)	1.609	km (kilometer)
mi^2 (square mile)	2.590	km^2 (square kilometer)
ft/mi (foot per mile)	1.894×10^{-1}	m/km (meter per kilometer)
in (inch)	2.540×10^{1}	mm (millimeter)

GLOSSARY

Some of the technical terms used in this report are defined here for convenience. See Dalrymple (1960) and Langbein and Iseri (1960) for additional information regarding flood-frequency analysis and associated terminology.

Flood-frequency distribution is a distribution, conveniently shown by a graph, showing the relation between the magnitude of floods and their return period or probability of being exceeded. The U.S. Geological Survey uses the log-Pearson Type III method as a basis for determining flood-frequency distributions. The method is described by the Water Resources Council (1976).

Flood height is the elevation of a water surface above a selected datum plane. Mean sea level datum plane of 1929 is used in this study.

Flood profiles, as provided in this report, are graphed flood heights versus distance, measured in the upstream direction. Profiles show flood crests (heights) along the study reach for flood-peak discharges of specified recurrence intervals.

Manning's roughness coefficients, n, are factors used with open-channel flow equations and indicate channel boundary roughness. Typical values of roughness are tabulated for various boundary conditions in most hydraulic texts. In studies such as this one, roughness coefficients are estimated using aerial photographs, available streamflow records and field site surveys.

Recurrence interval as applied to flood events, such as flood-peak discharge, is the average interval of time within which a flood of specified magnitude is expected to be exceeded once (Riggs, 1968).

FLOOD PROFILES FOR PEACE RIVER, SOUTH-CENTRAL FLORIDA

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ABSTRACT

This report presents flood heights and profiles for a 70-mile reach of Peace River from Bartow to Arcadia. The flood heights were calculated using the U.S. Geological Survey step-backwater model. Profiles were prepared for floods having expected recurrence intervals of 2, 2.33, 5, 10, 25, 50, 100, 200, and 500 years.

Flood-peak discharges used in the step-backwater analyses were determined by weighting stream gaging station data with data from a regional analysis. Land-surface elevation data for 183 cross sections (including values of Manning's roughness coefficient) were also used in the backwater analyses.

Flood-height data are judged to be generally accurate to $\pm$0.5 foot. They indicate that most roads and two bridges in the study reach will be inundated by some of the floods evaluated.

INTRODUCTION

Low-lying areas along the Peace River are flood prone. That is, they are subject to severe flooding, such as occurred in the basin in 1912, when a flood height of 26.6 ft above mean sea level was observed at Arcadia and again in September 1933 when a flood height of 55.2 ft above mean sea level was observed at Zolfo Springs (fig. 1). Flood heights of these magnitudes are expected to occur, on the average, about once every 100 years at these two places or to have a 1-percent chance of occurring in any year.

If development in the Peace River basin is to be orderly and if flood losses are to be avoided, information should be made available on flood heights, flood frequencies, and areas subject to inundation. Flood-prone areas along the Peace River main stem may be delineated on topographic maps using flood-profile data for given recurrence intervals determined as part of this study. Flood profiles presented in this report reflect existing conditions in the Peace River basin. Flood-peak discharges were determined by weighting station data and data from a regional analysis. Future development may alter the drainage basin characteristics to the extent that these flood profiles may no longer apply.

Cooperation

This investigation was conducted in cooperation with the Southwest Florida Water Management District as part of a flood-profile program involving principal streams in south-central and west-central Florida. The Water Management District measured the stream-channel cross sections, provided data on bridge-site geometry, and supplied detailed photo-base maps.

Purpose and Scope

This report presents flood profiles for a 70-mi reach of the Peace River beginning at State Road 70 at Arcadia and extending upstream along the main stem of the river to State Road 60 at Bartow in Polk County (fig. 1). The study reach is upstream from the influence of tidewater.

Flood heights used in constructing flood profiles were calculated using the U.S. Geological Survey step-backwater model (Shearman, 1976) using flood-peak discharges for selected recurrence intervals, land-surface elevation data for 183 cross sections, channel and flood-plain roughness coefficients, and stage-discharge ratings for four stream-gaging stations along the study reach.

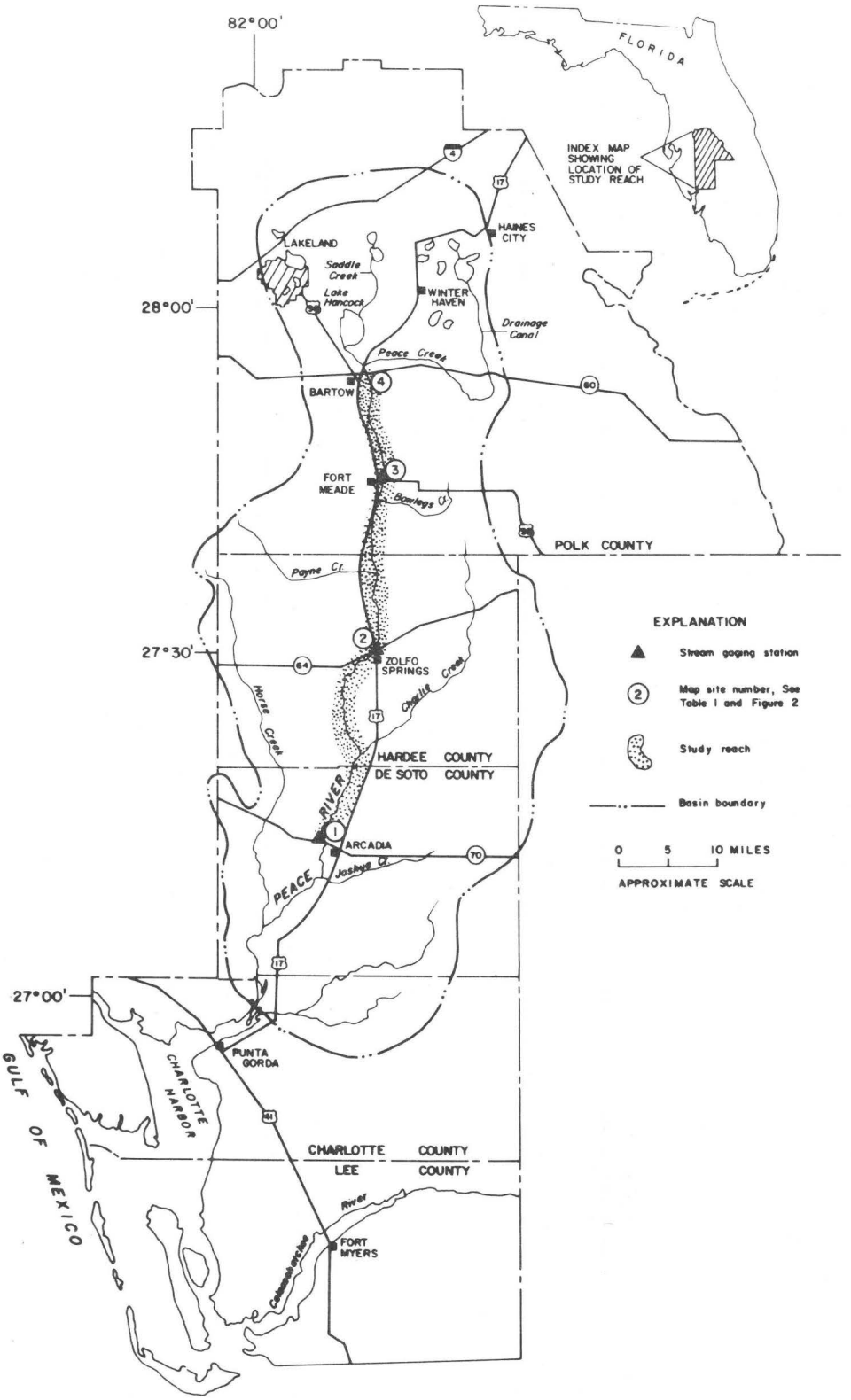

Figure 1. --Location of Peace River study reach

Area Description

Peace River has its headwaters among a group of lakes between Lakeland and Haines City. This headwaters area is drained by Saddle Creek and Peace Creek drainage canal. Peace River begins at their confluence, immediately northeast of Bartow (fig. 1).

The river flows southward through Polk, Hardee, DeSoto, and Charlotte Counties to the Gulf of Mexico. Bowlegs, Payne, Charlie, Joshua, and Horse Creeks are its principal tributaries (fig. 1).

The Peace River basin is generally rural, but includes several small municipalities. Large phosphate mining operations exist in the upper part of the basin.

At normal stages, the channel of Peace River, within the study reach, is well defined. The river's flood plain varies in width and is sparsely developed. At the downstream end of the study reach, the drainage area is 1,367 mi^2. Annual rainfall for the study area is about 55 in, much of which falls during June-September.

METHODOLOGY

Flood profiles presented in this report represent crests for floods of selected recurrence intervals along the study reach. Flood heights were computed for 183 stream-channel cross sections. Computed flood heights for each recurrence interval were plotted on a graph versus measured distance of each cross section above the mouth of the river. The plotted points were then connected to form the profiles.

Flood heights used in constructing the profiles were calculated using the U.S. Geological Survey step-backwater model (Shearman, 1976). This program is based on the standard step method of backwater analysis that is described in many hydraulics textbooks. See, for example, Chow (1959), and Posey (1950).

Step-backwater computations were verified by the use of stage-discharge ratings for stream stations along the study reach. Data available for these stations are summarized in table 1. The flood-peak discharges used in the step-backwater analysis were taken from areal flood-frequency relations described in the following section.

AREAL FLOOD-FREQUENCY RELATIONS

Areal flood-frequency relations used in the study are based on an analysis of long-term records for 20 streamflow stations in west-central Florida and on annual peak discharges for three stream gaging stations in

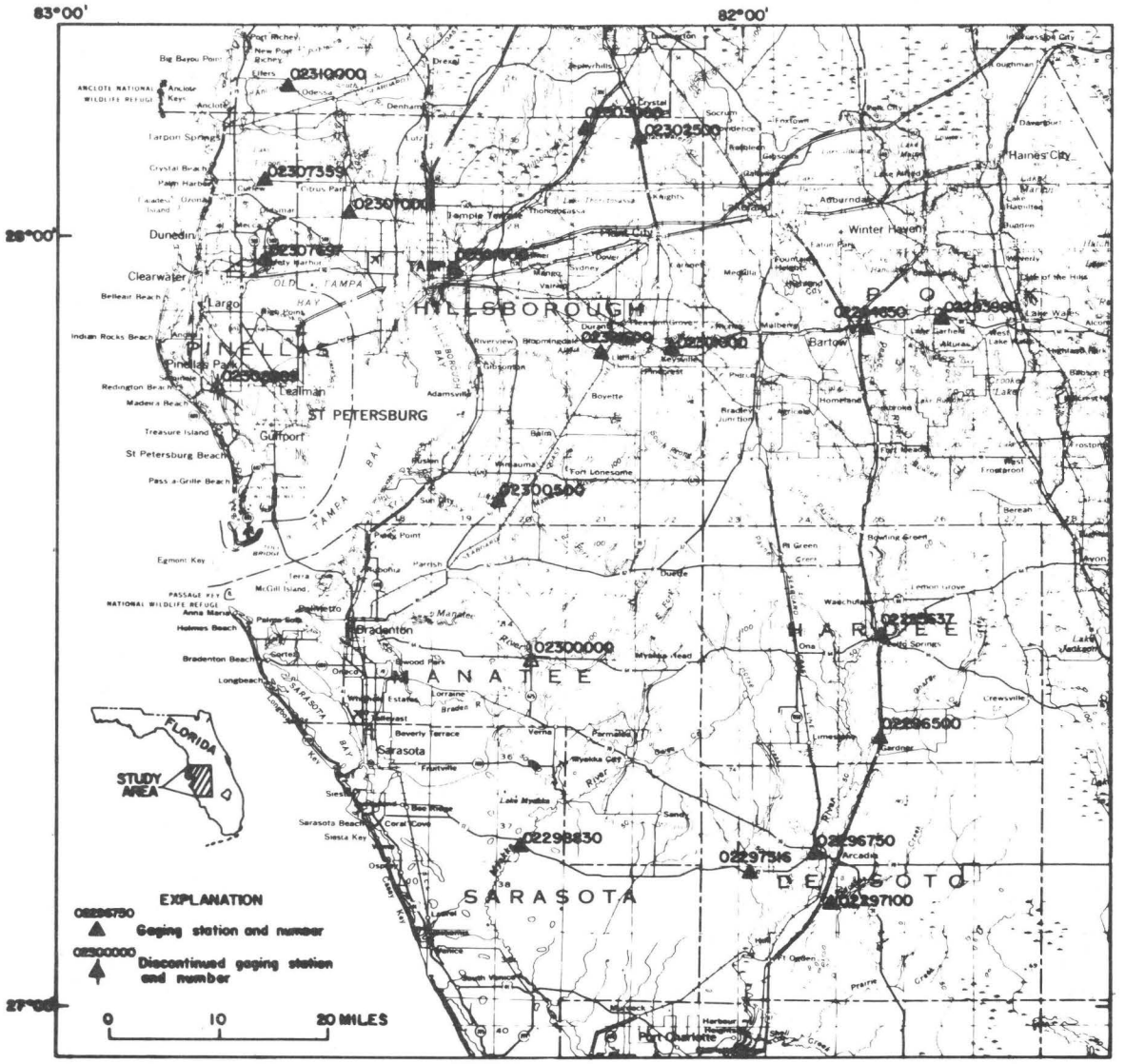

Figure 2. --Location of stream gaging stations used in multiple-linear regression analysis

the study reach. All unregulated streamflow records for stations having at least 20 years of record were used in the study; their locations are shown in figure 2.

Log-Pearson Type III flood-frequency distributions were determined for each station using U.S. Water Resources Council (1976) guidelines and a generalized map skew coefficient of -0.05. Areal flood-frequency relations were developed in the multiple-linear regression analysis of flood-peak discharges (selected recurrence intervals) for each station and selected basin parameters. These parameters include drainage area, stream length and slope, and percentage of basin as lake and swamp area. The ranges in basin parameters used are summarized in the following table:

Basin Parameter	Range
Drainage area	9.0 to 1,367 mi^2
Length	6.2 to 140 mi
Slope	1.2 to 5.0 ft/mi
Lake and swamp area	4.5 to 28.7 percent of drainage basin

Areal flood-frequency relations, standard errors of estimate, and multiple-correlation coefficients obtained in the regression study are summarized in table 2. The average standard error of estimate for regional flood relations is 25.8 percent. The average multiple-correlation coefficient is 0.98.

The standard error of estimate (Ezekiel, 1950) is the standard deviation of residuals about the regression line; the multiple-correlation coefficient indicates the degree of linear relationship between discharge and basin parameters used. A complete discussion of multiple-linear regression analysis is given by Bryant (1960). Application of regression analysis in a similar hydrologic study is given by Rabon (1971).

Log-Pearson Type III distributions for Peace River stream-gaging stations differ slightly from regression distributions. Therefore, the Peace River flood-frequency relations shown in figure 3 are based on weighted flood-frequency distributions for the Bartow, Zolfo Springs, and Arcadia stream-gaging stations (period of record was insufficient for Fort Meade gaging station) and for six ungaged locations in the study reach. The weighting procedure used is referred to as weighting of independent estimates by the Water Resources Council (1976). Weighting factors used include years of record for log-Pearson Type III distributions and equivalent years of record for regression distributions. Equivalent years of record for regression distributions were determined using a procedure described by Hardison (1969). Regression distributions determined for ungaged sites were adjusted using gaged site ratios of weighted station distribution to regional distribution.

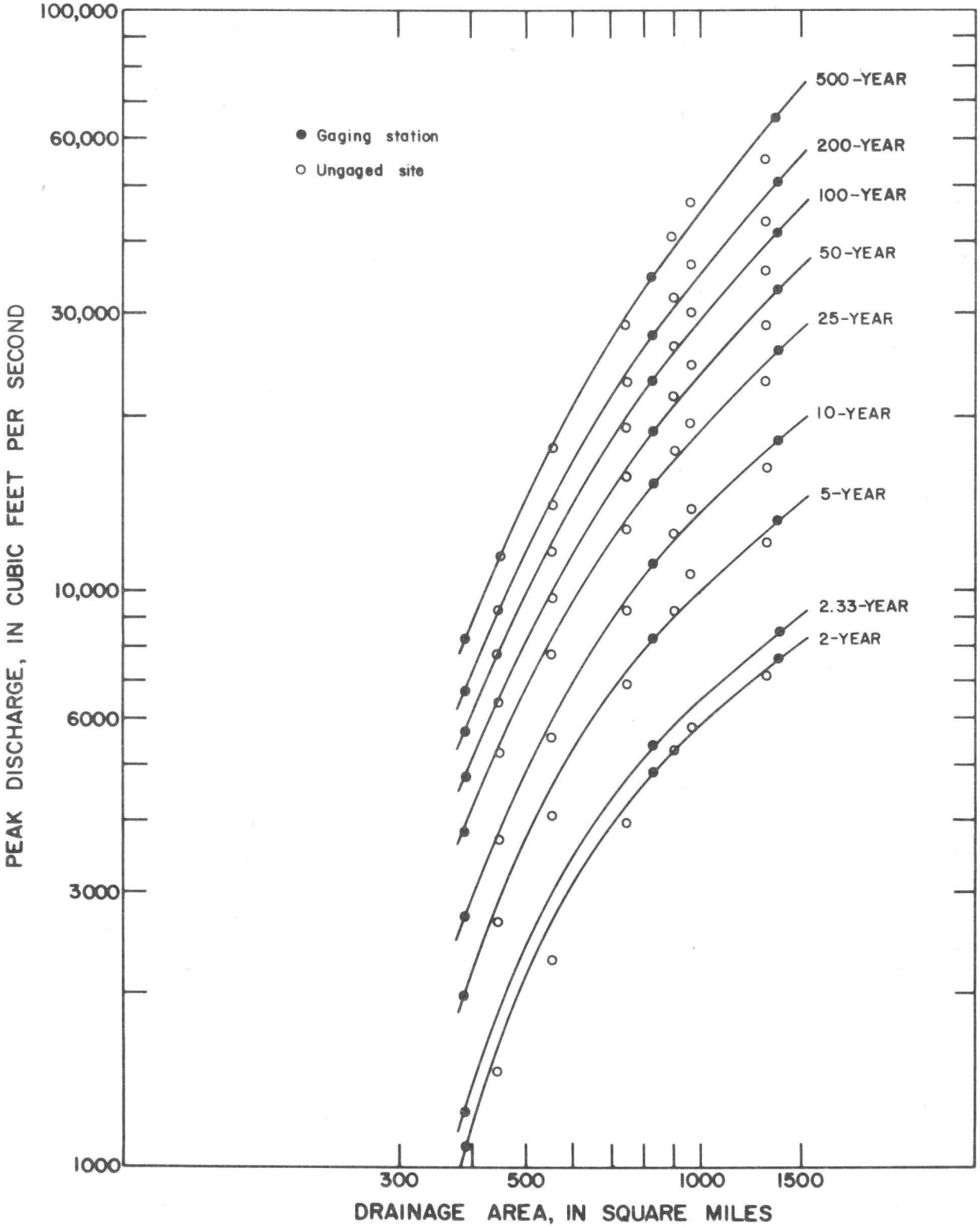

Figure 3. --Flood-frequency relations for Peace River study reach

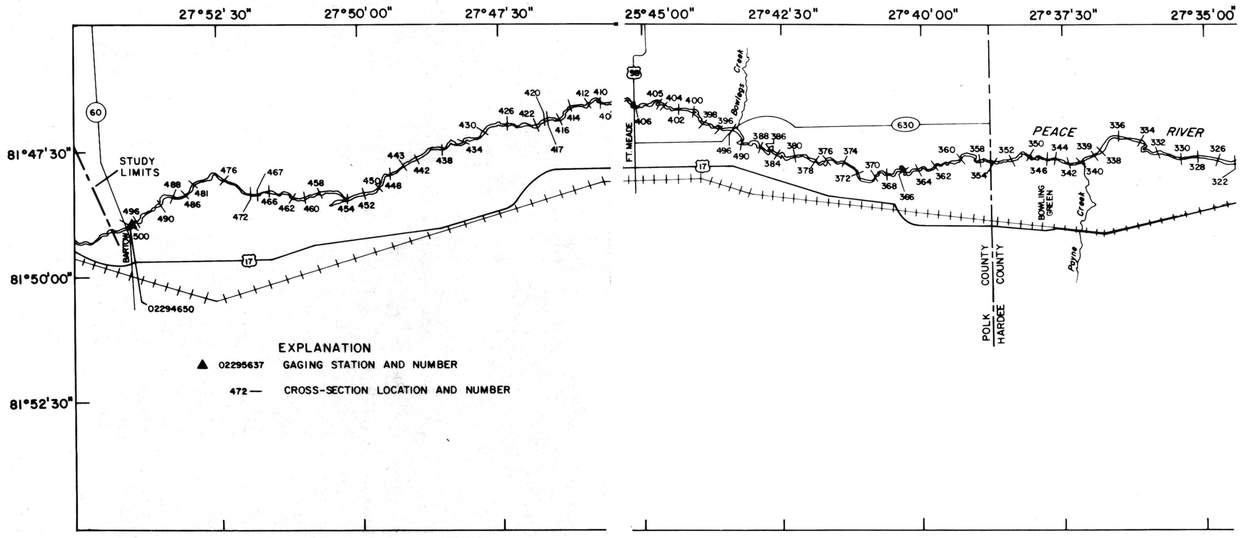

Figure 4. --Peace River study reach and approximate cross-section locations

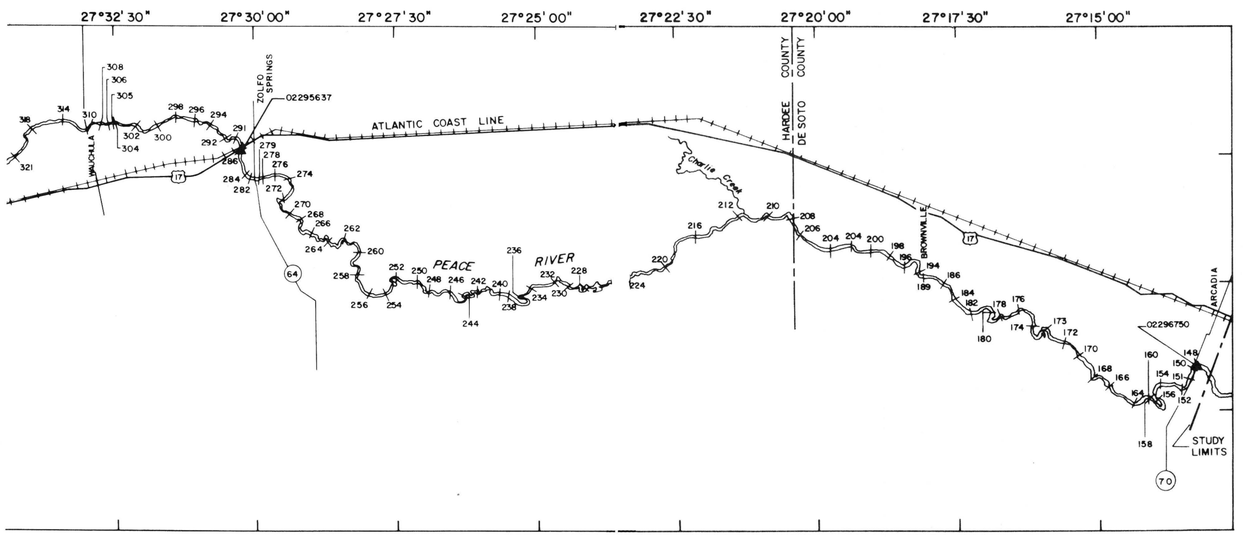

Figure 4. --Peace River study reach and approximate cross-section locations --continued

Peace River flood-frequency relations were developed for each recurrence interval by plotting weighted flood-peak discharges for gaged and ungaged sites versus respective drainage areas on a logarithmic graph. Smooth curves were drawn through the plotted points to form a relation for each recurrence interval as shown in figure 3.

FLOOD-HEIGHT COMPUTATION

Flood heights depend on hydraulic conditions at each selected stream-channel cross section. Input data used in the step-backwater analysis include measured land-surface elevations at each stream-channel cross section, and roughness coefficients. Cross-section data used as part of this investigation were compiled from photo-base topographic maps having scales of 1:2,400 with 1-ft contour intervals. Bridge-section geometry and low-water channel data were obtained by field surveys.

Stream-channel cross sections were defined by coordinates of horizontal distance and land-surface elevation. Cross sections were divided into several subareas to evaluate flow variations created by geometric and roughness differences. In this study, at least three subareas were defined for each cross section. At locations where the channel flows through a wide flood plain, as many as six subareas were specified.

Each cross section was assigned a reference distance, measured upstream from the mouth of the river along the low-water channel. A reference identification number was also assigned each cross section beginning with number 148 at State Road 70 at Arcadia and increasing upstream to number 500 at State Road 60 at Bartow (fig. 4). Where the cross sections were taken at bridge crossings, information was obtained on wingwall and abutment configurations.

A value of roughness coefficient was selected for each subarea of each cross section, with provision to vary it with depth. Photo-base topographic maps, streamflow data, and results of field surveys were used to select the roughness coefficients.

Step-Backwater Analysis

Flood heights were computed for the Peace River study reach by step-backwater analysis procedures, using land-surface elevation data for 183 cross sections and flood-peak discharges having 2-, 2.33-, 5-, 10-, 25-, 50-, 100-, 200-, and 500-year recurrence intervals. Flood-peak discharges used were taken from flood-frequency relations shown in figure 3.

Beginning profile elevations were taken from a stage-discharge rating available for the Arcadia gaging station, located at the downstream end of the study reach (site 1, fig. 1). As computations progressed upstream,

reduced flood-peak discharges were introduced into the step-backwater analyses to compensate for drainage area decreases of 4 to 30 percent. (See table 3 for drainage areas used.) Values of roughness coefficient were verified at the four gaging stations in the study reach by virtue of the fact that computed flood heights agreed with stage-discharge ratings within plus or minus 0.5 ft. Roughness coefficient verification is good for the parts of the ratings defined by current meter. Some verification is implied for rating extensions. Gaging station ratings were extended on logarithmic graphs, using step-backwater points, to include maximum peak discharges used. Stage-discharge data used, including rating extensions, are listed in table 4.

Results of the step-backwater analyses are summarized in table 5 by cross section. For user convenience, land-section lines and their distance upstream from the mouth of Peace River are also shown in table 5.

FLOOD PROFILES

Flood profiles were constructed from flood heights calculated in the step-backwater analysis. Graphs were prepared showing computed flood heights at each cross section versus cross-section distance upstream from the mouth of the Peace River. The resulting profiles, for the 2-, 2.33-, 5-, 10-, 25-, 50-, 100-, 200-, and 500-year floods, are presented in figure 5 for the cross sections in the study reach from Arcadia to Zolfo Springs, and in figure 6 for the remainder of the study reach upstream from Zolfo Springs to Bartow.

The flood profiles shown in figures 5 and 6 reflect existing hydraulic and hydrologic conditions along the study reach. These profiles are adequate to permit flood-hazard areas to be identified.

The computed flood height at State Road 60 for the 100-year recurrence interval agrees within 0.1 ft with that determined by the U.S. Army Corps of Engineers (1974) in its study of Peace River and Saddle Creek for a study reach extending upstream from State Road 60.

The Southwest Florida Water Management District (1976) conducted a study of lower Peace River from U.S. Highway 41 at Punta Gorda to State Road 70 at Arcadia. Although much of this stream reach is affected by tidal flooding, the 2.33-, 25-, and 100-year flood profiles determined for the fluvial areas as part of its study agree with the profiles presented in this report within 0.4, 0.4, and 0.6 ft, respectively.

Roads and bridges in the study reach and the recurrence interval for which they are expected to be inundated are listed in table 6.

Flood maps can be prepared from the flood-profile data, delineating, on a topographic base, the areas subject to inundation. They can be used by local government agencies to aid in regulating development, avoiding,

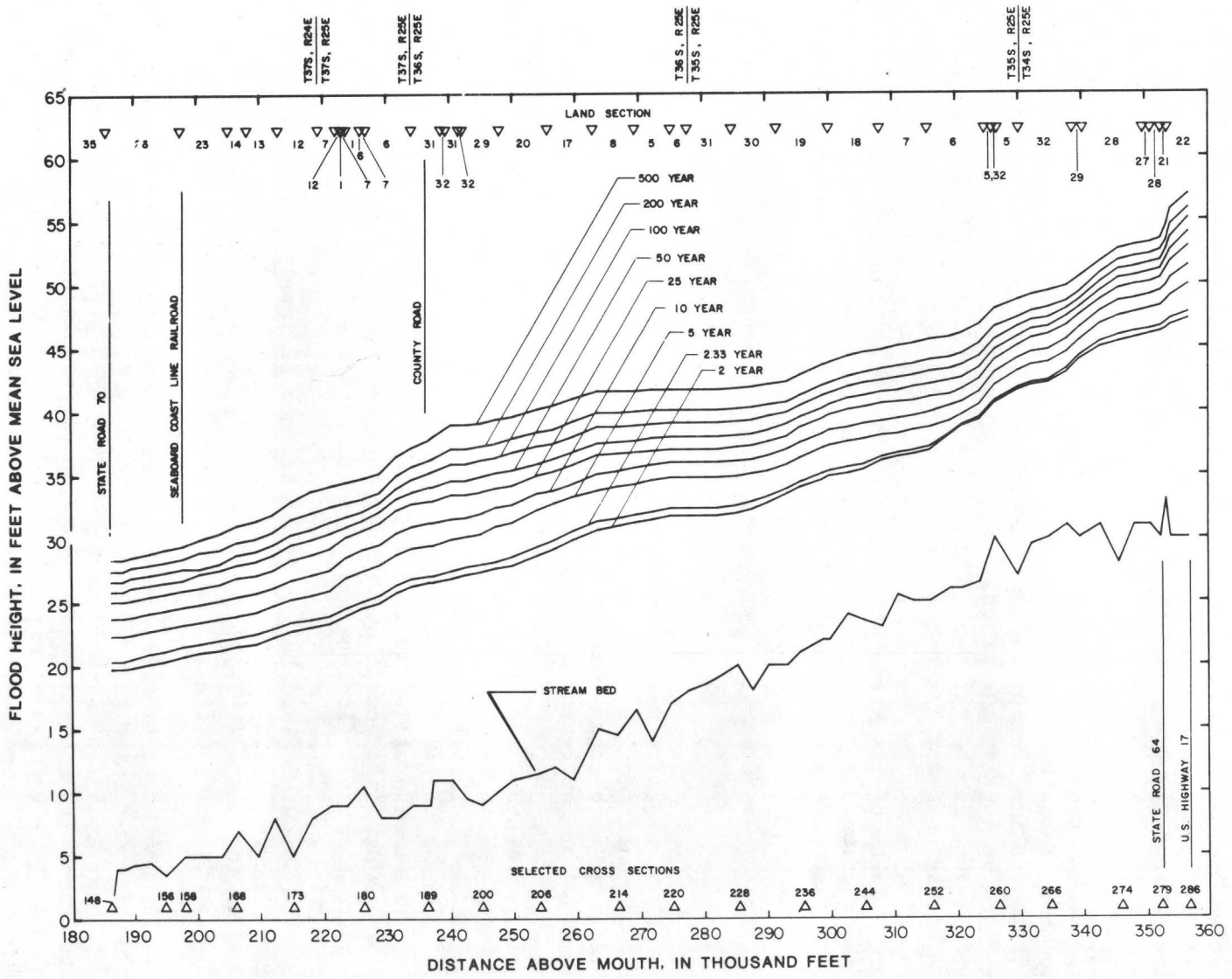

Figure 5. --Flood profiles for Peace River, Arcadia to Zolfo Springs

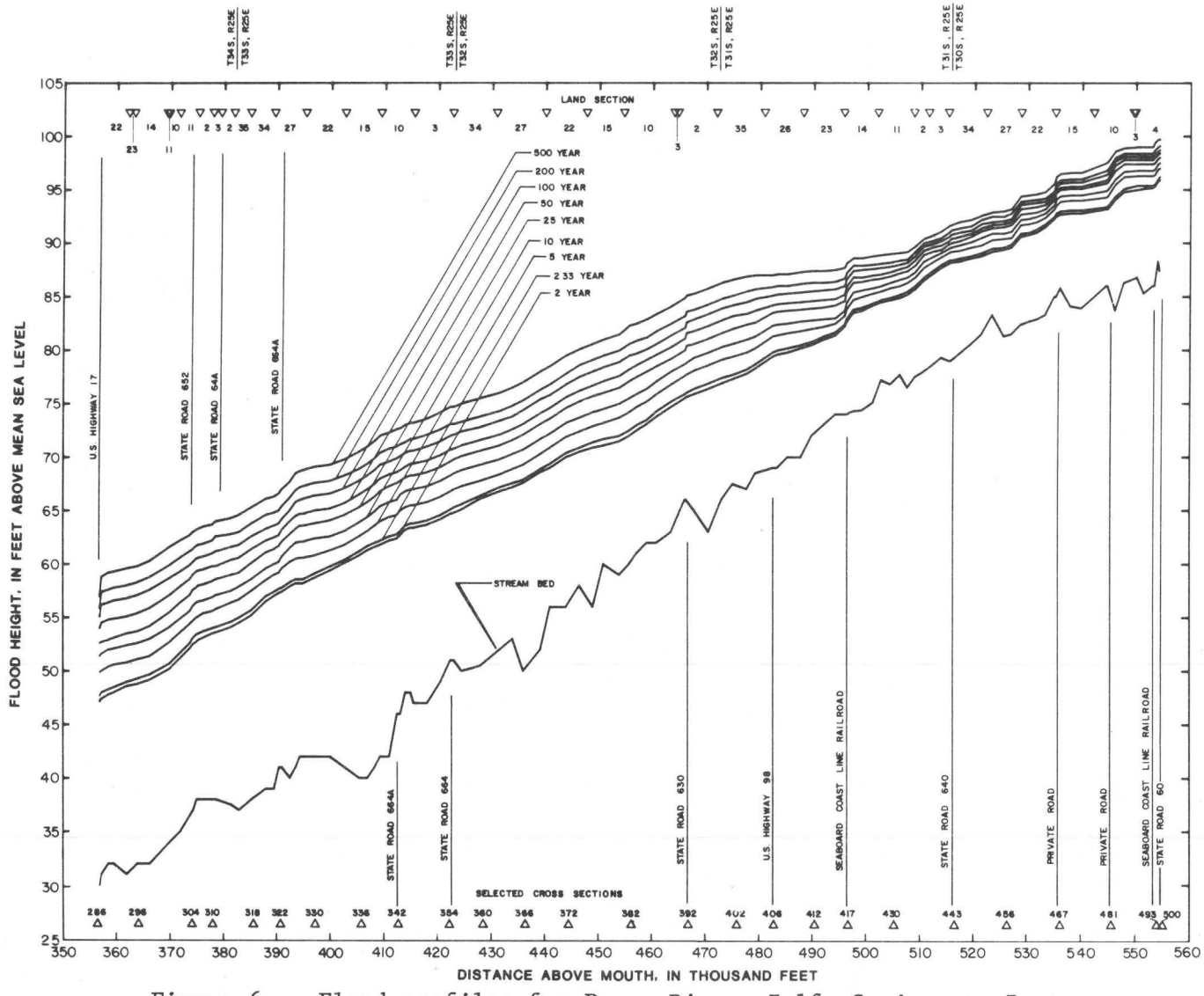

Figure 6. --Flood profiles for Peace River, Zolfo Springs to Bartow

where possible, the areas subject to inundation. The maps would be similar to the Flood Prone Area Maps prepared by the U.S. Geological Survey for the Federal Flood Insurance Administration. Those parts of the Flood Prone Area Maps that cover the study reach, along the Peace River main stem, are superseded by this report, which is more detailed and is considered to be more accurate.

SUMMARY

The Peace River is a principal stream of south-central Florida that discharges into the Gulf of Mexico. The study reach drains 1,367 mi^2 of predominantly rural land. In the headwaters, lakes and large phosphate mining complexes are prominent. Low-lying areas near the Peace River main stem are subject to flooding, particularly during large regional storms.

Magnitude and frequency of floods for the 70-mi study reach were determined in a regional analysis of data available for 20 gaging stations located in the Peace River and nearby basins. Weighted peak discharges and ground-elevation data for 183 stream-channel cross sections were used in step-backwater analyses to determine flood heights along the study reach for recurrence intervals of 2, 2.33, 5, 10, 25, 50, 100, 200, and 500 years. The flood profiles constructed from computed flood heights for these recurrence intervals represent current basin conditions and they may no longer apply if development conditions change materially.

The study reach excluded the tidally affected areas of Peace River downstream from State Road 70. Results of this study generally agree with results of studies of reaches by other agencies that adjoin the upper and lower ends of the study reach.

Flood maps can be prepared from the flood-profile data, delineating, on a topographic base, the areas subject to inundation. They can be used by local government agencies to aid in regulating development, discouraging it in areas subject to inundation. The maps would be similar to the Flood Prone Area Maps prepared by the U.S. Geological Survey for the Federal Flood Insurance Administration. Those parts of the Flood Prone Area Maps covering the study reach and along the Peace River main stem, are superseded by this report, which is more detailed and is considered to be more accurate.

Most roads and two bridges are expected to be inundated during some periods of flooding.

Table 1.--Peace River streamflow records

Map site[1]	Station	Location	Cross section number	Drainage area (mi^2)	Period of record	Data available
1	Arcadia	At State Road 70, DeSoto County	148	1367	1931-75	Daily stage and discharge
2	Zolfo Springs	At U. S. Highway 17, Hardee County	286	826	1933-75	Daily stage and discharge
3	Fort Meade	At U. S. Highway 98, Polk County	406	465	[2]1964-67; [2]1967-69; [3]1972	Stage and discharge measurements
4	Bartow	At State Road 60, Polk County	500	390	1939-75	Daily stage and discharge

1 Map site refers to sites shown on figures 1 and 2.
2 Intermittent record available for indicated periods.
3 Discharge measurements only, February to September 1972.

Table 2.--Aerial flood-frequency relations resulting from multiple-linear regression analysis

Regional peak discharge equation	Average standard error of estimate	Multiple correlation coefficient
$Q_2 = 23.281\ A^{.817}\ L^{.184}\ S^{.546}\ P^{-.446}$	27.3	0.97
$Q_5 = 38.994\ A^{.688}\ L^{.400}\ S^{.582}\ P^{-.450}$	23.7	.98
$Q_{10} = 49.88\ A^{.624}\ L^{.516}\ S^{.601}\ P^{-.453}$	23.0	.98
$Q_{25} = 64.269\ A^{.557}\ L^{.642}\ S^{.620}\ P^{-.458}$	23.4	.98
$Q_{50} = 74.817\ A^{.515}\ L^{.724}\ S^{.634}\ P^{-.461}$	24.6	.98
$Q_{100} = 85.507\ A^{.479}\ L^{.799}\ S^{.645}\ P^{-.465}$	26.1	.97
$Q_{200} = 95.940\ A^{.446}\ L^{.869}\ S^{.656}\ P^{-.468}$	27.8	.97
$Q_{500} = 109.901\ A^{.407}\ L^{.954}\ S^{.668}\ P^{-.472}$	30.4	.97

A - Drainage area in mi^2

L - Main-channel length in mi from gaging site to basin border

S - Main-channel slope, in ft per mi is the average slope of the main channel between points 10 and 85 percent of the distance upstream from the gaging site to the basin border

P - Percent of drainage basin occupied by lakes and swamps

Table 3.--Drainage areas used to obtain selected frequency peak discharges for use in step-backwater computations

Cross-section number	Drainage area used, mi^2	Cross-section number	Drainage area used, mi^2
[1]148-206	1,367	382-390	583
208-210	1,302	392-405	542
212-284	960	[3]406-446	465
[2]286-321	826	448-498	434
322-339	791	[4]500	390
340-380	730		

1/ State Road 70 (site 1, figs. 1 and 4).
2/ U.S. Highway 17 (site 2, figs. 1 and 4).
3/ U.S. Highway 98 (site 3, figs. 1 and 4).
4/ State Road 60 (site 4, figs. 1 and 4).

Note. -- Drainage area change between cross sections 210 and 212 results from tributary inflow (Charlie Creek).

Table 4.--Stage-discharge data used in the study

Recurrence inverval, years	Peace River stream gaging stations							
	Arcadia		Zolfo Springs		Fort Meade		Bartow	
	Stage, feet above mean sea level	Discharge, ft^3/s	Stage, feet above mean sea level	Discharge, ft^3/s	Stage, feet above mean sea level	Discharge, ft^3/s	Stage, feet above mean sea level	Discharge, ft^3/s
2	19.8	7600	47.2	4800	79.4	1810	95.9	1080
2.33	20.4	8500	47.7	5140	79.8[1/]	2080	96.3	1350
5	22.4	13,200	49.9	8340	81.3[1/]	3230	96.9	1990
10	23.8	18,200	51.4	11,100	82.3[1/]	4280	97.5	2740
25	25.1	26,000	52.9	15,300	83.5[1/]	5800	98.1[1/]	3830
50	25.9	33,000	54.0	19,000	84.2[1/]	7000	98.5[1/]	4720
100	26.7	41,200	55.1[1/]	23,100	85.1[1/]	8450	98.9[1/]	5680
200	27.5	50,800	55.9[1/]	27,700	85.9[1/]	9900	99.3[1/]	6730
500	28.4	66,000	57.0[1/]	34,600	87.0[1/]	12,300	99.8[1/]	8240

1/ Rating extension

Table 5.--Computed flood heights for selected flood-peak discharges at 183 cross sections on Peace River between State Road 70 at Arcadia and State Road 60 at Bartow

Cross section number or location	Distance above mouth, in feet	Computed flood height, feet above mean sea level								
		Recurrence interval, in years								
		2	2.33	5	10	25	50	100	200	500
[1] Sec. 26S., T.37S., R.24E.	185,660	-	-	-	-	-	-	-	-	-
[2] 148	186,470	19.8	20.4	22.4*	23.8	25.1	25.9	26.7	27.5	28.4
150	187,000	19.8	20.4	22.4	23.8	25.1	25.9	26.7	27.5	28.4
151	188,260	19.8	20.4	22.4	23.8	25.1	25.9	26.7	27.5	28.4
152	189,600	19.9	20.6	22.5	23.9	25.2	26.2	27.0	27.8	28.6
154	192,400	20.2	21.0	22.8	24.2	25.5	26.4	27.2	28.0	28.9
156	194,800	20.4	21.2	23.0	24.4	25.7	26.6	27.4	28.2	29.2
[1] Sec. 23S., T.37S., R.24E.	197,470	-	-	-	-	-	-	-	-	-
[3] 158	197,800	20.8	21.6	23.3	24.7	26.0	26.8	27.7	28.5	29.5
164	200,400	21.1	21.8	23.5	24.9	26.2	27.3	27.7	29.0	30.0
166	203,700	21.3	22.1	23.8	25.2	26.5	27.6	28.1	29.2	30.5
[1] Sec. 14S., T.37S., R.24E.	205,110	-	-	-	-	-	-	-	-	-
168	206,300	21.6	22.3	24.0	25.5	27.0	28.0	28.8	29.8	31.1
[1] Sec. 13W., T.37S., R.24E.	208,110	-	-	-	-	-	-	-	-	-
170	209,500	21.8	22.6	24.3	25.8	27.2	28.3	29.1	30.1	31.5
172	212,100	22.3	23.0	24.8	26.2	27.6	28.8	29.6	30.6	32.0
[1] Sec. 12S., T.37S., R.24E.	212,970	-	-	-	-	-	-	-	-	-
173	214,900	22.8	23.5	25.3	26.8	28.4	29.6	30.4	31.6	33.0
174	218,000	23.1	23.7	25.6	27.2	28.8	30.0	30.8	32.1	33.8
[1] Sec. 7W., T.37S., R.25E.	219,320	-	-	-	-	-	-	-	-	-
176	221,100	23.4	24.0	26.0	27.6	29.3	30.5	31.4	32.6	34.2
[1] Sec. 12E., T.37S., R.24E.	222,000	-	-	-	-	-	-	-	-	-
[1] Sec. 1S., T.37S., R.24E.	222,940	-	-	-	-	-	-	-	-	-
[1] Sec. 7W., T.37S., R.25E.	223,170	-	-	-	-	-	-	-	-	-

Footnotes are at end of table.

Table 5.--Computed flood heights for selected flood-peak discharges at 183 cross sections on Peace River between State Road 70 at Arcadia and State Road 60 at Bartow - continued

Cross section number or location	Distance above mouth, in feet	Computed flood height, feet above mean sea level								
		Recurrence interval, in years								
		2	2.33	5	10	25	50	100	200	500
178	223,600	24.0	24.6	27.0	28.6	30.2	31.0	31.8	32.9	34.5
[1] Sec. 1E., T.37S., R.24E.	223,750	-	-	-	-	-	-	-	-	-
[1] Sec. 6W., T.37S., R.25E.	225,950	-	-	-	-	-	-	-	-	-
[1] Sec. 7N., T.37S., R.25E.	226,070	-	-	-	-	-	-	-	-	-
180	226,200	24.6	25.1	27.5	29.2	30.7	31.5	32.2	33.2	34.8
[1] Sec. 6S., T.37S., R.25E.	226,880	-	-	-	-	-	-	-	-	-
182	229,000	25.0	25.6	28.0	29.6	31.3	32.2	32.9	33.7	35.2
184	231,600	25.8	26.4	28.8	30.5	32.3	33.2	34.0	35.0	36.5
186	234,000	26.3	26.9	29.3	31.0	32.8	33.7	34.7	35.7	37.2
[1] Sec. 31S., T.36S., R.25E.	234,180	-	-	-	-	-	-	-	-	-
[4] 189	236,770	26.6	27.1	29.5	31.3	33.0	34.1	35.2	36.2	37.8
194	237,300	26.6	27.1	29.5	31.3	33.0	34.1	35.3	36.3	38.0
[1] Sec. 32W., T.36S., R.25E.	238,800	-	-	-	-	-	-	-	-	-
[1] Sec. 31E., T.36S., R.25E.	239,600	-	-	-	-	-	-	-	-	-
196	240,300	26.9	27.5	30.0	31.6	33.5	34.6	35.9	37.1	39.0
[1] Sec. 32W., T.36S., R.25E.	241,630	-	-	-	-	-	-	-	-	-
[1] Sec. 29S., T.36S., R.25E.	242,180	-	-	-	-	-	-	-	-	-
198	242,600	27.2	27.8	30.2	31.7	33.5	34.6	35.9	37.1	39.0
200	245,000	27.4	28.0	30.4	32.0	33.7	34.9	36.2	37.3	39.1
202	247,400	27.7	28.2	31.0	32.5	34.0	35.2	36.4	37.5	39.4
[1] Sec. 20S., T.36S., R.25E.	248,160	-	-	-	-	-	-	-	-	-
204	250,000	27.9	28.6	31.3	32.7	34.2	35.4	36.8	37.9	39.6
206	254,000	28.7	29.4	32.3	33.6	35.0	35.9	37.3	38.4	40.2
[1][5] Sec. 17S., T.36S., R.25E.	255,720	-	-	-	-	-	-	-	-	-

Table 5.--Computed flood heights for selected flood-peak discharges at 183 cross sections on Peace River between State Road 70 at Arcadia and State Road 60 at Bartow - continued

Cross section number or location	Distance above mouth, in feet	Computed flood height, feet above mean sea level								
		Recurrence interval, in years								
		2	2.33	5	10	25	50	100	200	500
208	256,600	29.2	29.9	32.8	33.8	35.3	36.3	37.5	38.6	40.5
210	259,500	29.9	30.6	33.3	34.3	35.8	36.8	38.0	39.2	41.0
1/ Sec. 8S., T.36S., R.25E.	262,860	-	-	-	-	-	-	-	-	-
212	263,500	30.7	31.4	33.8	35.1	36.6	37.5	38.8	39.9	41.6
214	266,500	31.0	31.6	34.1	35.3	36.7	37.6	38.8	39.9	41.6
216	269,500	31.3	31.9	34.3	35.6	36.8	37.7	38.9	40.0	41.6
1/ Sec. 5S., T.36S., R.25E.	269,790	-	-	-	-	-	-	-	-	-
218	272,000	31.5	32.1	34.6	35.8	36.9	37.9	39.0	40.1	41.7
220	275,000	31.8	32.4	34.8	36.0	37.0	38.0	39.1	40.1	41.7
1/ Sec. 6E., T.36S., R.25E.	275,130	-	-	-	-	-	-	-	-	-
222	277,850	31.8	32.4	34.8	36.0	37.0	38.0	39.1	40.1	41.7
1/ Sec. 31S., T.35S., R.25E.	277,850	-	-	-	-	-	-	-	-	-
224	280,500	31.8	32.4	34.8	36.0	37.0	38.0	39.1	40.1	41.7
226	282,400	31.8	32.4	34.8	36.0	37.0	38.0	39.1	40.1	41.7
1/ Sec. 30S., T.35S., R.25E.	284,940	-	-	-	-	-	-	-	-	-
228	285,600	32.0	32.6	34.9	36.1	37.2	38.1	39.2	40.2	41.8
230	288,000	32.3	32.9	35.1	36.2	37.3	38.2	39.3	40.3	41.9
232	290,500	32.8	33.3	35.3	36.5	37.6	38.5	39.6	40.5	42.1
1/ Sec. 19S., T.35S., R.25E.	292,070	-	-	-	-	-	-	-	-	-
234	293,500	33.5	33.9	35.8	37.0	38.0	39.0	39.9	40.7	42.3
236	295,500	34.0	34.4	36.3	37.5	38.7	39.5	40.4	41.2	42.8
238	299,100	34.6	35.1	37.1	38.2	39.4	40.2	41.2	42.0	43.6
240	300,200	34.9	35.3	37.3	38.5	39.7	40.5	41.4	42.2	43.8
1/ Sec. 18S., T.35S., R.25E.	300,200	-	-	-	-	-	-	-	-	-

Table 5.--Computed flood heights for selected flood-peak discharges at 183 cross sections on Peace River between State Road 70 at Arcadia and State Road 60 at Bartow - continued

Cross section number or location	Distance above mouth, in feet	Computed flood height, feet above mean sea level								
		Recurrence interval, in years								
		2	2.33	5	10	25	50	100	200	500
242	303,100	35.1	35.6	37.6	38.7	40.1	41.0	41.9	42.7	44.3
244	305,600	35.4	35.8	37.8	39.0	40.3	41.2	42.2	43.0	44.6
1/ Sec. 7S., T.35S., R.25E.	308,280	-	-	-	-	-	-	-	-	-
246	308,500	36.1	36.4	38.1	39.2	40.6	41.5	42.4	43.3	44.8
248	311,000	36.4	36.7	38.2	39.4	40.7	41.6	42.6	43.5	45.1
250	313,500	36.6	36.9	38.5	39.6	40.8	41.9	42.8	43.7	45.3
1/ Sec. 6S., T.35S., R.25E.	315,800	-	-	-	-	-	-	-	-	-
252	316,100	36.9	37.2	38.7	39.9	41.1	42.1	43.1	44.0	45.6
254	319,300	38.1	38.2	39.2	40.4	41.3	42.4	43.3	44.2	45.8
256	321,200	38.8	38.9	39.7	40.7	41.7	42.6	43.6	44.5	46.1
258	324,000	39.3	39.5	40.5	41.5	42.5	43.4	44.3	45.3	46.8
1/ Sec. 5N., T.35S., R.25E.	324,970	-	-	-	-	-	-	-	-	-
1/ Sec. 32S., T.34S., R.25E.	326,040	-	-	-	-	-	-	-	-	-
260	326,400	40.6	40.8	42.0	43.0	44.0	44.8	45.6	46.6	48.0
1/ Sec. 5N., T.35S., R.25E.	327,000	-	-	-	-	-	-	-	-	-
262	330,000	41.6	41.8	43.1	44.1	45.1	45.8	46.6	47.3	48.7
1/ Sec. 32S., T.34S., R.25E.	330,380	-	-	-	-	-	-	-	-	-
264	332,200	42.0	42.2	43.6	44.6	45.7	46.4	47.1	47.8	49.1
266	334,900	42.2	42.4	43.8	44.8	46.0	46.6	47.3	48.1	49.4
268	337,800	43.0	43.3	44.6	45.6	46.7	47.4	48.0	48.6	49.8
1/ Sec. 29S., T.34S., R.25E.	338,920	-	-	-	-	-	-	-	-	-
270	339,800	44.0	44.3	45.5	46.5	47.5	48.1	48.7	49.3	50.5
1/ Sec. 28W., T.34S., R.25E.	340,600	-	-	-	-	-	-	-	-	-
272	343,100	45.0	45.4	46.8	47.8	48.7	49.4	50.1	50.8	51.7
274	346,000	45.4	45.9	47.4	48.6	49.6	50.4	51.1	51.8	52.7

Table 5.--Computed flood heights for selected flood-peak discharges at 183 cross sections on Peace River between State Road 70 at Arcadia and State Road 60 at Bartow - continued

Cross section number or location	Distance above mouth, in feet	Computed flood height, feet above mean sea level								
		Recurrence interval, in years								
		2	2.33	5	10	25	50	100	200	500
276	348,500	45.7	46.2	47.7	48.8	49.9	50.6	51.3	52.1	53.0
[1] Sec. 27W., T.34S., R.25E.	350,000	-	-	-	-	-	-	-	-	-
278	351,000	46.0	46.4	48.0	49.1	50.1	50.9	51.6	52.3	53.2
[1] Sec. 28E., T.34S., R.25E.	351,220	-	-	-	-	-	-	-	-	-
[6] 279	352,650	46.2	46.6	48.2	49.4	50.4	51.1	51.8	52.6	53.5
[1] Sec. 21S., T.34S., R.25E.	352,850	-	-	-	-	-	-	-	-	-
282	353,500	46.4	46.9	48.6	49.8	51.1	51.9	52.6	53.3	54.5
[1] Sec. 22W., T.34S., R.25E.	353,920	-	-	-	-	-	-	-	-	-
[7] 284	354,200	46.7	47.2	49.0	50.4	51.7	52.6	53.6	54.6	55.8
286	357,000	47.2	47.7	49.9	51.4	52.7	54.0	55.1	55.9	57.0
290	357,300	47.4	48.0	50.0	51.6	52.5	54.5	56.2	57.4	58.8
291	358,600	47.8	48.3	50.4	52.0	52.9	54.8	56.4	57.6	59.2
292	359,600	48.0	48.5	50.6	52.1	53.1	54.9	56.6	57.8	59.3
294	362,000	48.6	49.0	50.8	52.4	53.5	55.1	56.8	58.0	59.6
[1] Sec. 23W., T.34S., R.25E.	362,200	-	-	-	-	-	-	-	-	-
[1] Sec. 14S., T.34S., R.25E.	363,250	-	-	-	-	-	-	-	-	-
296	364,000	48.8	49.3	51.1	52.6	53.7	55.4	57.1	58.3	59.8
298	366,300	49.2	49.7	51.4	53.0	54.2	55.9	57.6	58.8	60.3
[1] Sec. 11S., T.34S., R.25E.	369,400	-	-	-	-	-	-	-	-	-
[1] Sec. 10E., T.34S., R.25E.	369,600	-	-	-	-	-	-	-	-	-
300	370,000	50.2	50.7	52.7	54.1	55.5	57.1	58.7	59.9	61.6
[1] Sec. 11W., T.34S., R.25E.	371,750	-	-	-	-	-	-	-	-	-
[8] 302	372,000	51.2	51.7	53.6	54.9	56.4	57.9	59.3	60.6	62.2
304	373,800	52.1	52.6	54.4*	55.6	57.1	58.6	59.9	61.2	62.7
304A	374,400	52.5	53.1	54.7	56.1	57.6	59.0	60.2	61.4	63.0

Table 5.--Computed flood heights for selected flood-peak discharges at 183 cross sections on Peace River between State Road 70 at Arcadia and State Road 60 at Bartow - continued

Cross section number or location	Distance above mouth, in feet	Computed flood height, feet above mean sea level								
		Recurrence interval, in years								
		2	2.33	5	10	25	50	100	200	500
305	375,000	52.7	53.4	55.0	56.4	57.8	59.3	60.5	61.7	63.2
1/ Sec. 2S., T.34S., R.25E.	375,300	-	-	-	-	-	-	-	-	-
306	375,400	52.9	53.5	55.1	56.5	58.0	59.4	60.6	61.8	63.3
308	376,300	53.1	53.7	55.4	56.6	58.1	59.5	60.7	61.9	63.5
1/ Sec. 3E., T.34S., R.25E.	377,950	-	-	-	-	-	-	-	-	-
9/ 310	378,000	53.5	54.0	55.6	56.9	58.4	59.8	61.0	62.2	63.7
312	378,650	53.6	54.1	55.8	57.1	58.6	59.8	61.2	62.6	64.0
1/ Sec. 2W., T.34S., R.25E.	379,450	-	-	-	-	-	-	-	-	-
314	381,500	54.1	54.6	56.4	57.5	59.0	60.4	61.6	62.8	64.3
1/ Sec. 35S., T.33S., R.25E.	381,850	-	-	-	-	-	-	-	-	-
316	383,000	54.5	55.0	56.7	57.9	59.2	60.6	61.8	63.0	64.6
1/ Sec. 34E., T.33S., R.25E.	384,950	-	-	-	-	-	-	-	-	-
318	385,300	55.2	55.7	57.5	58.6	60.1	61.4	62.6	63.8	65.3
320	388,000	56.5	57.0	58.5	59.6	61.1	62.2	63.3	64.6	66.1
321	389,500	57.0	57.4	59.0	60.0	61.4	62.5	63.6	64.8	66.3
1/ Sec. 27S., T.33S., R.25E.	389,500	-	-	-	-	-	-	-	-	-
10/ 322	390,450	57.3	57.7	59.2	60.2	61.7*	62.7	63.8	65.0†	66.6
324	391,000	57.4	57.8	59.6	60.7	62.1	63.2	64.2	65.4	67.0
326	392,500	57.9	58.3	60.2	61.5	62.8	64.0	65.0	66.2	67.7
327	393,600	58.2	58.6	60.5	62.0	63.3	64.5	65.8	66.9	68.5
327A	394,400	58.2	58.6	60.6	62.1	63.6	64.7	66.0	67.2	68.7
328	395,000	58.2	58.6	60.6	62.1	63.6	64.7	66.1	67.3	68.8
1/ Sec. 22S., T.33S., R.25E.	395,280	-	-	-	-	-	-	-	-	-
330	397,000	58.7	59.1	60.8	62.4	63.8	65.0	66.4	67.6	69.1
332	400,000	59.4	59.8	61.3	62.6	64.1	65.2	66.6	67.8	69.3

Table 5.--Computed flood heights for selected flood-peak discharges at 183 cross sections on Peace River between State Road 70 at Arcadia and State Road 60 at Bartow - continued

Cross section number or location	Distance above mouth, in feet	Computed flood height, feet above mean sea level								
		Recurrence interval, in years								
		2	2.33	5	10	25	50	100	200	500
334	402,700	60.1	60.4	61.8	63.1	64.6	65.7	67.1	68.3	69.8
[1]Sec. 15S., T.33S., R.25E.	402,700	-	-	-	-	-	-	-	-	-
336	405,400	60.8	61.2	62.6	63.9	65.3	66.5	67.8	68.9	70.5
337	407,000	61.3	61.7	63.1	64.4	65.8	67.0	68.3	69.4	71.0
338	408,300	61.6	62.0	63.6	64.9	66.3	67.5	68.8	69.9	71.5
339	409,300	61.8	62.2	64.0	65.4	66.8	68.0	69.3	70.4	72.0
[1]Sec. 10S., T.33S., R.25E.	409,300	-	-	-	-	-	-	-	-	-
340	411,000	62.2	62.6	64.4	65.8	67.3	68.4	69.6	70.8	72.3
[11]342	412,450	62.4	62.8	64.6	66.0	67.6*	68.6	69.9	71.0	72.6
343	413,100	62.7	63.1	65.0	66.5	67.8	68.8	70.1	71.2	72.7
344	414,000	63.2	63.6	65.3	66.8	68.1	69.1	70.4	71.4	73.0
346	415,000	63.4	63.8	65.5	67.0	68.3	69.4	70.6	71.7	73.2
348	415,500	63.4	63.8	65.5	67.0	68.3	69.4	70.6	71.7	73.2
[1]Sec. 3S., T.33S., R.25E.	415,500	-	-	-	-	-	-	-	-	-
350	418,100	63.7	64.1	65.8	67.3	68.6	69.7	71.0	72.1	73.6
352	420,600	64.2	64.6	66.3	67.8	69.1	70.2	71.5	72.6	74.2
354	422,450	64.7	65.1	66.8	68.3*	69.6	70.7	72.0†	73.1	74.7
[1][12]Sec. 34S., T.32S., R.25E.	422,750	-	-	-	-	-	-	-	-	-
356	423,100	64.8	65.3	67.0	68.5	69.8	70.8	72.1	73.1	74.7
358	424,500	65.1	65.6	67.3	68.8	70.1	71.1	72.4	73.3	75.0
360	428,000	66.1	66.4	67.8	69.3	70.6	71.6	72.8	73.8	75.5
[1]Sec. 27S., T.32S., R.25E.	430,900	-	-	-	-	-	-	-	-	-
362	431,600	66.8	67.2	68.4	69.8	71.1	72.1	73.4	74.3	76.0
364	434,000	67.2	67.6	68.9	70.3	71.6	72.6	73.8	74.8	76.5
366	436,000	67.6	67.9	69.3	70.7	72.1	73.1	74.4	75.3	77.0

Table 5.--Computed flood heights for selected flood-peak discharges at 183 cross sections on Peace River between State Road 70 at Arcadia and State Road 60 at Bartow - continued

Cross section number or location	Distance above mouth, in feet	Computed flood height, feet above mean sea level								
		Recurrence interval, in years								
		2	2.33	5	10	25	50	100	200	500
368	439,200	68.6	68.9	70.3	71.7	73.1	74.1	75.4	76.3	78.0
[1] Sec. 22S., T.32S., R.25E.	440,000	-	-	-	-	-	-	-	-	-
370	441,000	69.0	69.4	70.9	72.2	73.6	74.6	75.8	76.8	78.5
372	444,000	70.0	70.4	71.9	73.2	74.6	75.6	76.8	77.8	79.5
374	446,500	70.5	70.9	72.4	73.7	75.2	76.2	77.5	78.6	80.1
[1] Sec. 15S., T.32S., R.25E.	447,650	-	-	-	-	-	-	-	-	-
376	449,000	70.9	71.4	72.9	74.2	75.7	76.7	78.0	79.1	80.6
378	451,000	71.1	71.7	73.2	74.5	76.0	77.1	78.4	79.5	81.0
380	454,000	71.5	72.0	73.7	75.0	76.5	77.6	78.9	80.0	81.5
[1] Sec. 10S., T.32S., R.25E.	454,650	-	-	-	-	-	-	-	-	-
382	455,800	72.0	72.5	74.2	75.5	77.1	78.2	79.5	80.6	82.3
384	457,200	72.5	73.0	74.7	75.9	77.5	78.6	79.7	80.9	82.5
386	459,100	73.1	73.5	75.2	76.4	78.0	79.1	80.1	81.2	82.9
388	460,900	73.8	74.3	75.9	77.1	78.5	79.6	80.6	81.8	83.4
390	463,600	74.7	75.2	76.8	78.0	79.2	80.3	81.4	82.5	84.1
[1] Sec. 3S., T.32S., R.25E.	464,050	-	-	-	-	-	-	-	-	-
[1] Sec. 2W., T.32S., R.25E.	464,700	-	-	-	-	-	-	-	-	-
[13] 392	466,150	75.5	75.9	77.6	78.7	80.0	81.1	82.1*	83.2	84.9
394	466,400	75.6	76.0	77.7	78.8	80.4	81.6	82.6	83.6	85.1
396	467,900	75.9	76.4	78.1	79.3	80.6	81.8	82.9	83.8	85.3
398	470,600	76.4	76.9	78.6	79.8	81.1	82.3	83.4	84.3	85.8
[1] Sec. 35S., T.31S., R.25E.	472,000	-	-	-	-	-	-	-	-	-
400	473,000	76.9	77.4	79.1	80.3	81.6	82.8	83.9	84.8	86.3
402	475,100	77.3	77.7	79.4	80.6	82.0	83.2	84.2	85.1	86.6
404	477,700	77.8	78.2	79.8	81.0	82.4	83.4	84.5	85.5	86.9

Table 5.--Computed flood heights for selected flood-peak discharges at 183 cross sections on Peace River between State Road 70 at Arcadia and State Road 60 at Bartow - continued

Cross section number or location	Distance above mouth, in feet	Computed flood height, feet above mean sea level								
		Recurrence interval, in years								
		2	2.33	5	10	25	50	100	200	500
405	479,300	78.3	78.7	80.2	81.3	82.6	83.7	84.8	85.7	87.0
[1] Sec. 26S., T.31S., R.25E.	480,800	-	-	-	-	-	-	-	-	-
[14] 406	482,500	79.4	79.8	81.3	82.3*	83.5	84.2	85.1	85.9	87.0
407	483,400	79.6	80.0	81.4	82.4	83.6	84.3	85.2	86.0	87.1
408	485,300	79.8	80.2	81.6	82.5	83.7	84.4	85.3	86.0	87.1
410	487,800	80.2	80.5	81.8	82.7	83.8	84.5	85.4	86.2	87.3
[1] Sec. 23S., T.31S., R.25E.	488,100	-	-	-	-	-	-	-	-	-
412	489,800	80.5	80.8	82.0	82.8	83.9	84.6	85.5	86.3	87.4
414	492,000	81.0	81.3	82.2	82.9	84.0	84.7	85.6	86.3	87.4
416	494,200	81.4	81.7	82.5	83.0	84.2	84.8	85.7	86.4	87.5
[1] Sec. 14S., T.31S., R.25E.	495,750	-	-	-	-	-	-	-	-	-
[15] 417	495,890	82.2	82.4	83.2	83.7	84.6	85.2	86.0	86.7	87.7
420	496,240	82.6	82.9	83.8	84.4	85.4	85.9	86.6	87.2	88.1
422	497,500	83.5	83.8	84.7	85.4	86.3	86.8	87.4	87.9	88.6
424	499,200	83.7	84.0	85.0	85.6	86.4	86.8	87.5	87.9	88.6
426	501,200	84.2	84.4	85.3	85.8	86.6	87.0	87.6	88.0	88.8
[1] Sec. 11S., T.31S., R.25E.	502,000	-	-	-	-	-	-	-	-	-
428	502,700	84.5	84.7	85.5	86.0	86.7	87.1	87.7	88.1	88.9
430	504,400	84.7	84.9	85.8	86.3	86.9	87.3	87.8	88.2	89.0
432	506,200	84.9	85.2	86.0	86.6	87.2	87.6	88.0	88.4	89.1
434	507,600	85.2	85.5	86.3	86.8	87.4	87.8	88.2	88.5	89.2
[1] Sec. 2S., T.31S., R.25E.	508,700	-	-	-	-	-	-	-	-	-
436	509,000	85.7	86.0	86.8	87.3	87.9	88.4	88.8	89.2	89.7
438	510,600	86.5	86.8	87.7	88.3	88.9	89.3	89.7	90.0	90.4
[1] Sec. 3E., T.31S., R.25E.	511,450	-	-	-	-	-	-	-	-	-

Table 5.--Computed flood heights for selected flood-peak discharges at 183 cross sections on Peace River between State Road 70 at Arcadia and State Road 60 at Bartow - continued

Cross section number or location	Distance above mouth, in feet	Computed flood height, feet above mean sea level								
		Recurrence interval, in years								
		2	2.33	5	10	25	50	100	200	500
440	512,200	87.1	87.4	88.2	88.7	89.2	89.6	89.9	90.2	90.7
442	513,900	87.7	88.0	88.7	89.1	89.4	89.8	90.2	90.5	91.1
[1] Sec. 34S., T.30S., R.25E.	515,150	-	-	-	-	-	-	-	-	-
[16] 443	515,300	88.1	88.4	89.1	89.5	89.9	90.2	90.6	91.0	91.6
446	515,700	88.2	88.4	89.2	89.6	90.0	90.4	90.8	91.2	91.7
448	517,330	88.3	88.6	89.3	89.8	90.2	90.6	91.0	91.4	92.0
450	519,500	88.6	88.8	89.6	90.1	90.6	90.9	91.2	91.6	92.2
452	521,400	88.8	89.1	89.8	90.5	91.1	91.4	91.8	92.2	92.6
[1] Sec. 27S., T.30S., R.25E.	522,300	-	-	-	-	-	-	-	-	-
454	523,400	89.2	89.5	90.3	90.9	91.4	91.7	92.0	92.5	92.9
456	525,550	89.4	89.6	90.4	90.9	91.5	91.8	92.1	92.5	93.0
458	526,960	89.6	89.9	90.5	91.1	91.7	92.0	92.3	92.8	93.2
[1] Sec. 22S., T.30S., R.25E.	528,660	-	-	-	-	-	-	-	-	-
460	528,730	90.6	90.9	91.7	92.2	92.7	93.2	93.6	93.9	94.4
462	530,340	90.8	91.0	91.8	92.3	92.8	93.3	93.7	94.0	94.5
464	531,750	91.0	91.3	92.0	92.5	92.9	93.4	93.8	94.1	94.6
466	533,340	91.5	91.8	92.4	92.8	93.2	93.6	93.9	94.2	94.8
[17] 467	535,000	92.3	92.5	93.2	93.6*	94.1	94.3	94.6	94.9	95.6
[1] Sec. 15S., T.30S., R.25E.	535,120	-	-	-	-	-	-	-	-	-
470	535,300	92.5	92.8	93.5	94.1	94.7	95.0	95.3	95.6	96.2
472	536,100	92.7	93.0	93.9	94.4	95.0	95.2	95.6	95.9	96.5
474	538,000	92.8	93.1	94.0	94.5	95.1	95.3	95.7	96.0	96.6
476	540,000	92.8	93.1	94.0	94.5	95.1	95.3	95.7	96.0	96.6
[1] Sec. 10S., T.30S., R.25E.	542,250	-	-	-	-	-	-	-	-	-
[18] 481	544,600	93.2	93.4	94.3	94.9	95.6*	95.9	96.4	96.8	97.5

Table 5.--Computed flood heights for selected flood-peak discharges at 183 cross sections on Peace River between State Road 70 at Arcadia and State Road 60 at Bartow - continued

Cross section number or location	Distance above mouth, in feet	Computed flood height, feet above mean sea level								
		Recurrence interval, in years								
		2	2.33	5	10	25	50	100	200	500
484	544,900	93.2	93.5	94.4	95.0	95.7	96.0	96.5	96.9	97.6
486	546,300	94.1	94.4	95.5	96.0	96.8	97.3	97.7	98.0	98.6
488	547,900	94.8	95.1	96.2	96.7	97.4	97.8	98.1	98.4	98.9
1/ Sec. 3S., T.30S., R.25E.	549,650	-	-	-	-	-	-	-	-	-
1/ Sec. 4E., T.30S., R.25E.	549,800	-	-	-	-	-	-	-	-	-
490	550,350	95.0	95.4	96.3	96.8	97.4	97.8	98.1	98.4	99.0
492	551,600	95.1	95.4	96.3	96.8	97.4	97.8	98.1	98.4	99.0
19/ 493	553,250	95.2	95.4	96.3	96.8	97.4	97.8	98.1	98.4	99.0
496	553,600	95.3	95.5	96.4	96.9	97.5	98.0	98.3	98.7	99.4
498	554,200	95.8	96.0	96.9	97.4	97.9	98.3	98.6	99.0	99.7
20/ 500	554,500	95.9	96.2	97.0	97.5	98.0	98.4	98.7	99.1	99.7

1/ Land section line (east, north, south, or west), township, and range, at intersection with Peace River.
2/ Peace River at Arcadia gaging station (State Road 70).
3/ Seaboard Coast Line Railroad.
4/ County road (Brownsville).
5/ Hardee County line (south).
6/ State Road 64.
7/ Peace River at Zolfo Springs gaging station (U.S. Highway 17).
8/ State Road 652.
9/ State Road 64A.
10/ State Road 664A (Wauchula).
11/ State Road 664A (Bowling Green).
12/ State Road 664 (Hardee-Polk County line).

13/ State Road 630.
14/ Peace River at Fort Meade gaging station (U.S. Highway 98).
15/ Seaboard Coast Line Railroad.
16/ State Road 640.
17/ Private Road.
18/ Private Road.
19/ Seaboard Coast Line Railroad.
20/ Peace River at Bartow gaging station (State Road 60).
* Road inundated at this and higher floods.
† Bridge inundated at this and higher floods.

Table 6.--Recurrence intervals for which roads and bridges in study reach are expected to be inundated

Cross-section number[1]	Road	Inundated at and above indicated recurrence interval, in yrs[2]	Bridge	Inundated at and above indicated recurrence interval, in yrs[2]	Location
148	X	5	-	-	State Road 70 (old road)
304	X	5	-	-	State Road 652
322	X	25	X	200	State Road 664A
342	X	25	-	-	State Road 664A
354	X	10	X	100	State Road 664
392	X	100	-	-	State Road 630
406	X	10	-	-	U.S. Highway 98
467	X	10	-	-	Private road
481	X	25	-	-	Private road

1 See figure 4 and table 5.
2 See table 5.

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