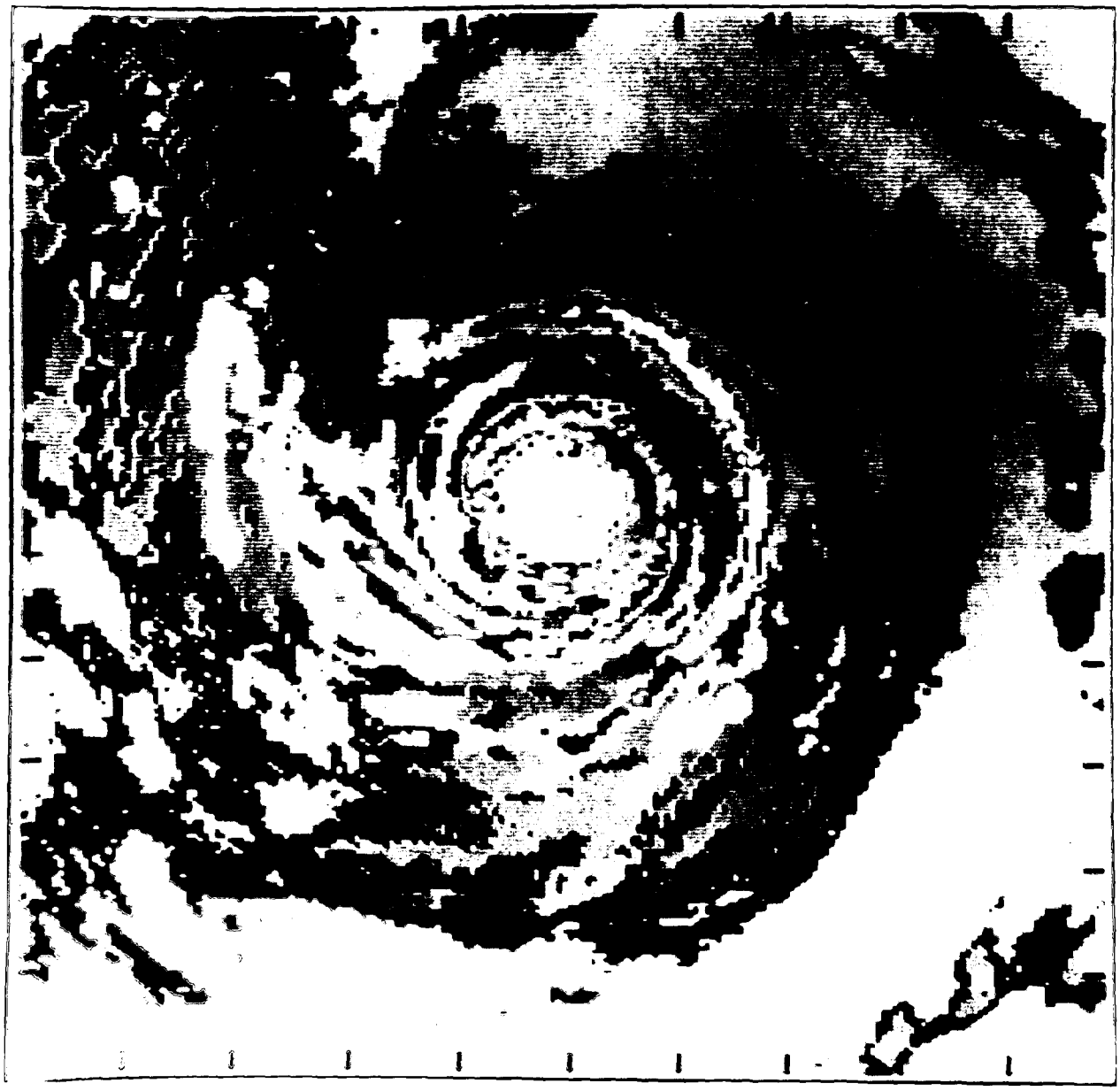
WEST FLORIDA REGION
HURRICANE LOSS AND CONTINGENCY
PLANNING STUDY



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HURRICANE LOSS AND CONTINGENCY PLANNING STUDY

DECEMBER 1985

The West Florida Regional Planning Council
in conjunction with the seven counties
in the region produced this document
for the Florida Bureau of Disaster
Preparedness, Department of Community Affairs

This publication was funded by the Department of Environmental Regulation, Office of Coastal Management, 2600 Blairstone Road, Tallahassee, Florida 32301, through a grant from the United States Office of Coastal Resource Management, National Oceanic and Atmospheric Administration, under the Coastal Zone Management Act of 1982, as amended.

Photo supplied by the:
National Hurricane Center
NOAA - National Weather Service
Gables One Tower - Room 631
1320 South Dixie Highway
Coral Gables, Florida 33146

(Hurricane Anita - September 3, 1977)
Made landfall on the Mexican Coast
with minor damage to Brownsville, Texas

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April 18, 1985	Okaloosa Civil Defense Meeting Room
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CHAPTER I

INTRODUCTION

In December, 1984, the West Florida Regional Planning Council (WFRPC) entered into a contract with the State of Florida, Department of Community Affairs (DCA), to conduct a West Florida Region Hurricane Loss and Contingency Planning Study. Throughout the course of the Study, the Division of Emergency Management, Bureau of Planning (DCA) monitored the research methodology and findings. Funding for the Study was provided through DCA.

Purpose

The primary purposes for the Study are (1), estimating the fiscal impacts on the West Florida region from hurricanes, and (2), formulating response/recovery strategies and hurricane hazard mitigation policies. Estimating the dollar damage caused by a hurricane has traditionally consisted of post-disaster field work. Although pre-disaster estimates do not eliminate traditional damage assessment, prior knowledge of potential loss can provide preliminary estimates to determine disaster assistance requirements. Additionally, potential loss estimates may assist local and state officials in disaster preparedness and mitigation planning.

Response and recovery strategies encompass the immediate emergency period, the short-range restoration period and the long-range reconstruction period. Post-hurricane disaster assistance

programs are the principal recovery vehicles available to local governments during the recovery period.

Hurricane hazard mitigation policies, based on projected loss estimates, identify ways to reduce or avoid the future damage from hurricanes. Such policies address both future development and post-disaster redevelopment. They are intended to guide development and minimize the loss of life and property.

Study Elements

The Study is organized into two phases: Phase One being the Loss Study and Phase Two, the Contingency and Mitigation Strategies. Technical data and background research serve as the foundation for all Study results and recommendations.

PHASE I. LOSS STUDY

Initial requirements (technical data) for estimating losses from hurricane surge and wind are hypothetical hurricane simulations provided by the West Florida region SLOSH model. A description of the SLOSH model begins on page 20. Surge information together with land elevations show varying degrees of vulnerability within the Study area. From this initial vulnerability analysis, each County is assigned loss zones.

Next, a series of land use acreage and structural inventories are developed by loss zone for analysis of property vulnerability

(See Appendix A). Four individual inventories are used for vulnerability analysis:

(1) land use acreage inventory

(2) structural inventory

(3) agricultural inventory

(4) hazardous waste and materials inventory

Valuation of structural loss is computed by applying surge and wind damage percentages (vulnerability coefficients) to assessed structural values. Likewise, the projected loss value of the following public facilities is derived:

water	transportation, including:
wastewater	land
electricity	water
health care	air

Temporary unemployment and income loss is estimated based on projected structural damage caused by hypothetical hurricanes. It is assumed that temporary employment loss results from structural damage to industrial, commercial and service establishments.

The final section of Phase I analyzes the probability of a hurricane affecting the West Florida region. Historical data are the primary source of information for establishing county probabilities of occurrence or return periods. Return periods are used to project the annual amount of structural loss at risk because of potential hurricane damage.

Summarily, hurricane dollar loss estimates are based on a location's vulnerability to hurricane storm surge and wind speed. The amount (percentage) of damage is correlated to the intensity

of the hurricane, that is, the height of storm surge and peak gust wind speeds. Multiplying structure values by loss percentages results in quantitative loss estimates.

The amount of structural damage is also indicative of the amount of time non-residential structures may be inoperative. For example, if a retail business establishment loses its roof as a result of hurricane damage, the business likely will be inoperative until a new roof is in place. Not only is the business unable to operate, but employees may be out of work and income until sufficient repairs are complete.

PHASE II. CONTINGENCY PLANNING

Efficient management of the disaster is addressed in Phase II of the Study. Estimates of the types and amounts of disaster assistance requirements are provided for federal, state and local disaster assistance agencies. Disaster relief programs are outlined together with state and local eligibility requirements.

The implementation of hurricane hazard mitigation policies may be accomplished by local governments through a variety of growth management mechanisms. Some programs addressing mitigation are already either in place or being formulated. The final chapter of Phase II of the Study offers mitigation policy recommendations for local government consideration.

Study Value

Five of the seven counties in the West Florida region are coastal counties, highly vulnerable to both hurricane storm surge and wind damage. The two "inland" counties are located within the area projected to experience hurricane strength wind speeds. Recognizing the needs of local, state and federal emergency management and planning agencies, this Study attempts to facilitate effective disaster preparedness.

The magnitude of a hurricane disaster may be described in terms of (1) the amount of human suffering and (2) the amount of visible property damage. Successful public education programs and hurricane evacuation planning in the West Florida region have significantly reduced the loss of lives attributed to hurricanes. However, the potential for human suffering is still present. The loss of a home, a business, a service, are all sources of human suffering.

Phase I of this study serves two important aspects of disaster preparedness. First, it estimates the amount and location of property damage expected from future hurricanes. These estimates may be used by emergency management agencies when making preliminary damage assessments--the first step in requesting an emergency or major disaster declaration.

Second, Phase I estimates the length of service disruption for public facilities such as water, wastewater and transportation facilities. Restoring operation of public facilities is a primary

consideration for local, state and federal governments during the period immediately following a hurricane.

Loss estimates set forth in Phase I are the foundation for the recovery and mitigation policy plans contained in Phase II. Recovery plans identify a variety of disaster assistance programs and how they can be made available to local governments, businesses and individuals.

The final section of Phase II contains hurricane mitigation policies which, if implemented by local governments, could reduce the effects of future hurricanes. Recommended policies are based on hurricane vulnerability as identified by the West Florida region SLOSH computer model. Mitigation policies address a number of mechanisms to reduce the impact of future hurricanes on the study area.

Study Organization

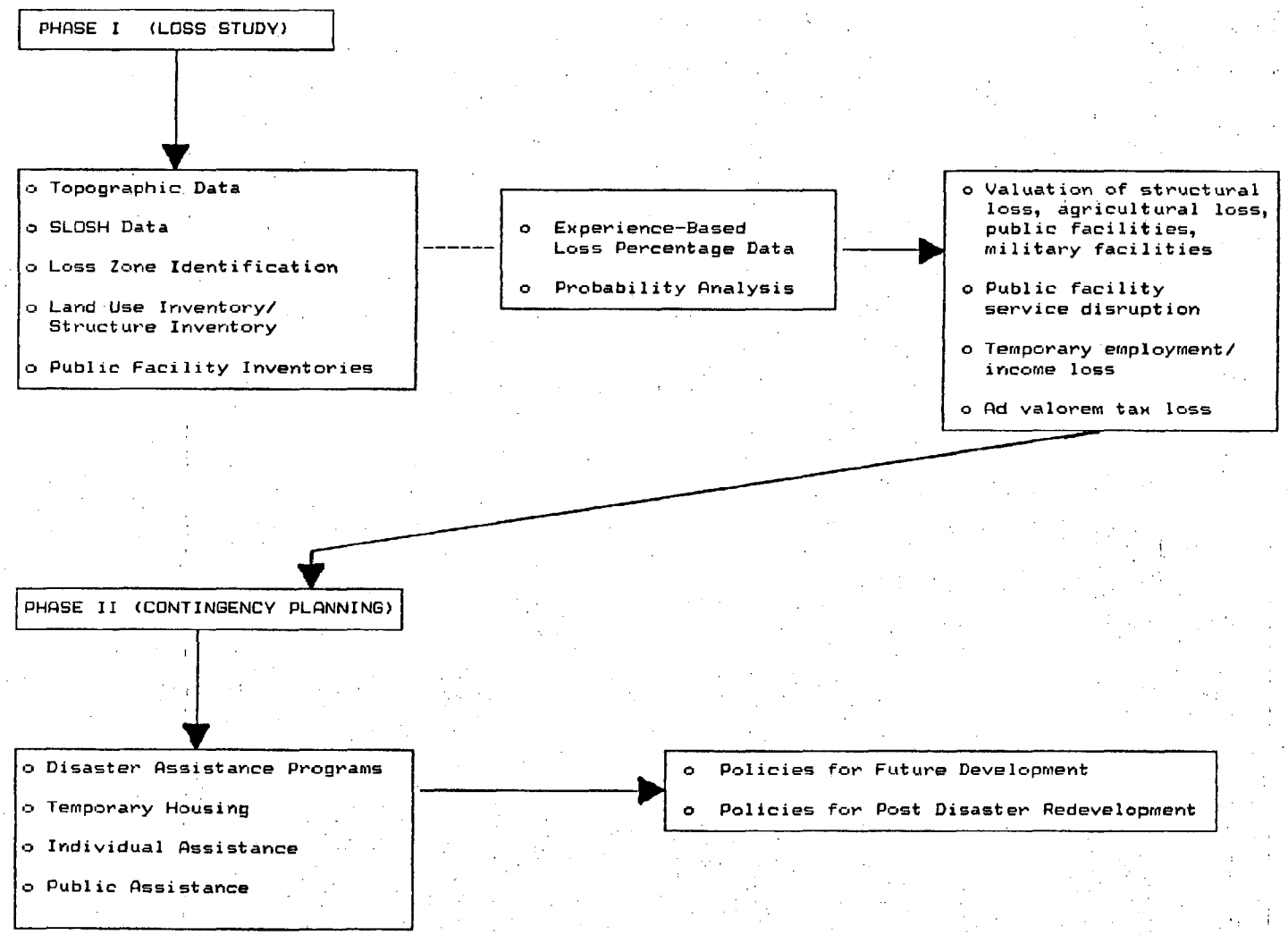
To assist the reader and/or user, an explanation and summary of the Study's organization is helpful. Primary technical data are the individual SLOSH computer printouts which include surge heights and wind speeds. Also of primary importance are the structural loss percentages for various categories of structures. Additional primary data include topographic data, loss zone identification and probability analysis. Phase I of the Study is based on analyses of these primary sources of data as applied to existing land use in the Study area. Quantitative loss estimates are the results of the analyses.

Phase II, Contingency Planning, applies the technical data base and loss estimates toward development of efficient emergency management programs and hazard mitigation techniques. Emergency management programs address the recovery phases following a disaster event. They are primarily to be used by federal, state and local disaster relief agencies. Hazard mitigation policies are for use by local planning agencies in an effort to minimize future losses resulting from hurricanes. Figure 1 illustrates the components and work progression of the Study.

Finally, a variety of land use inventories and maps are included within the Appendices. Although the inventories and maps were originally developed for the Hurricane Loss and Contingency Planning Study, they may serve the data needs of other state and local planning activities.

Figure 1

HURRICANE LOSS AND CONTINGENCY PLANNING STUDY



CHAPTER II

METHOD OF ESTIMATING HURRICANE LOSSES

Saffir Simpson Scale

Hurricanes are categorized according to wind velocity. The Saffir Simpson Scale separates hurricanes into five categories. Category 1 hurricane is the smallest beginning at a sustained wind speed of 74 mph. The largest is a category 5 hurricane which begins at 155 mph. The following chart indicates the wind speeds for the five hurricanes.

	Winds	Surge + Wave Hgt.	Damage
Category 1	Winds 74 to 95 mph	6.2-7.7 ft.	Minimal
Category 2	Winds 96-110 mph	9.3-12.4 ft.	Moderate
Category 3	Winds 111-130 mph	13.9-18.6 ft.	Extensive
Category 4	Winds 131-155 mph	20.1-27.9 ft.	Extreme
Category 5	Winds 155+ mph	28+	Catastrophic

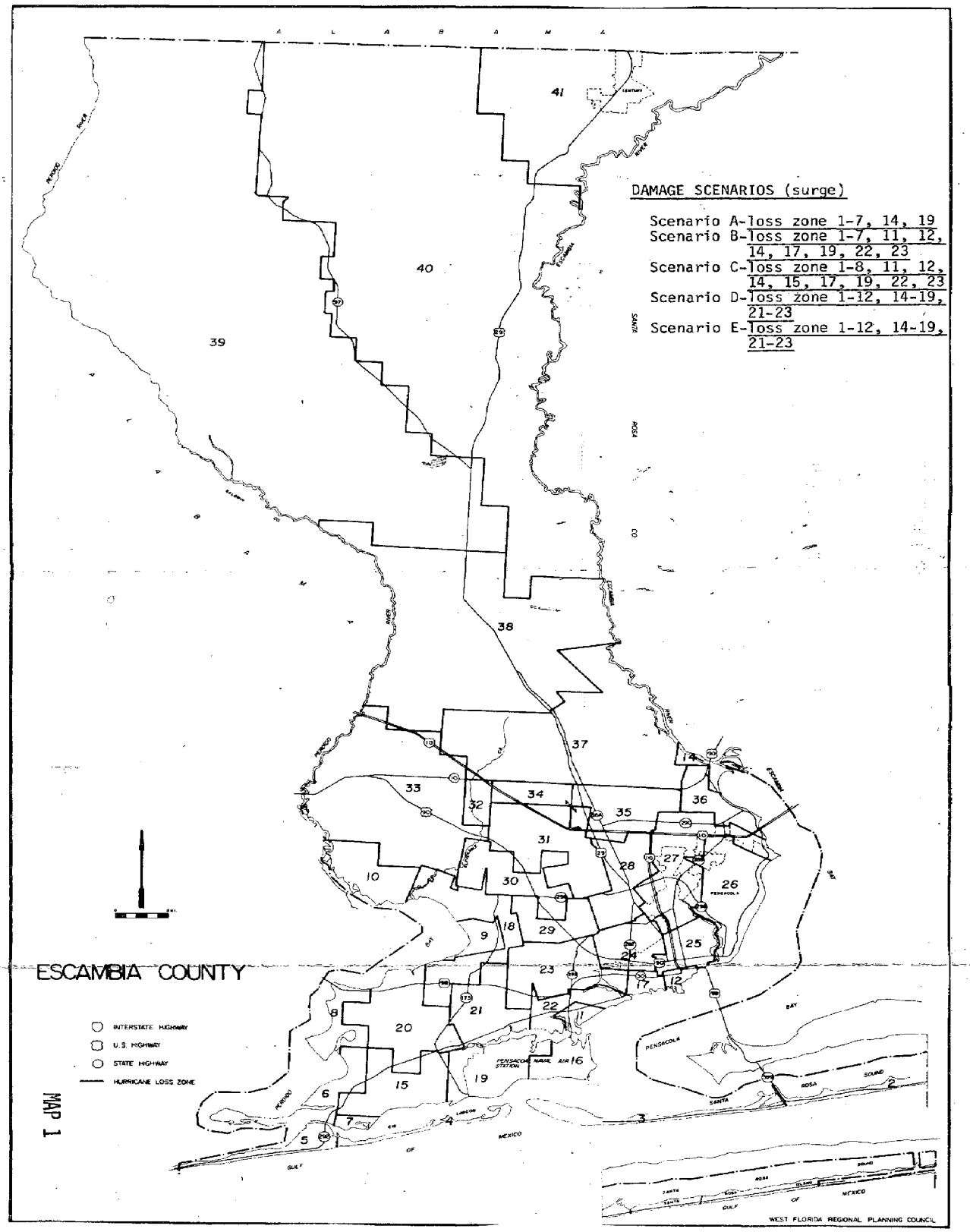
In this study all hurricanes are identified using this scale. Prior to reaching 74 mph tropical disturbances are classified as tropical storms.

Selected reference hurricanes represent the graduating hurricane intensities (Category 1 through 5) as defined by the Saffir/Simpson Scale (Attached). Characteristics unique to the West Florida study area such as bathymetry and shoreline configuration, account for higher surge heights in many locations, than those defined by the Saffir/Simpson Scale. For example, the Saffir/Simpson Scale identifies a surge height of 4-5 feet accompanying a Category 1 hurricane. Reference hurricanes analyzed for the West Florida Study projected surge heights in some areas for a category 1 hurricane reaching as high as eight (8) feet. Surge height ranges for the Study area are shown at the far right side of the Saffir/Simpson Scale.

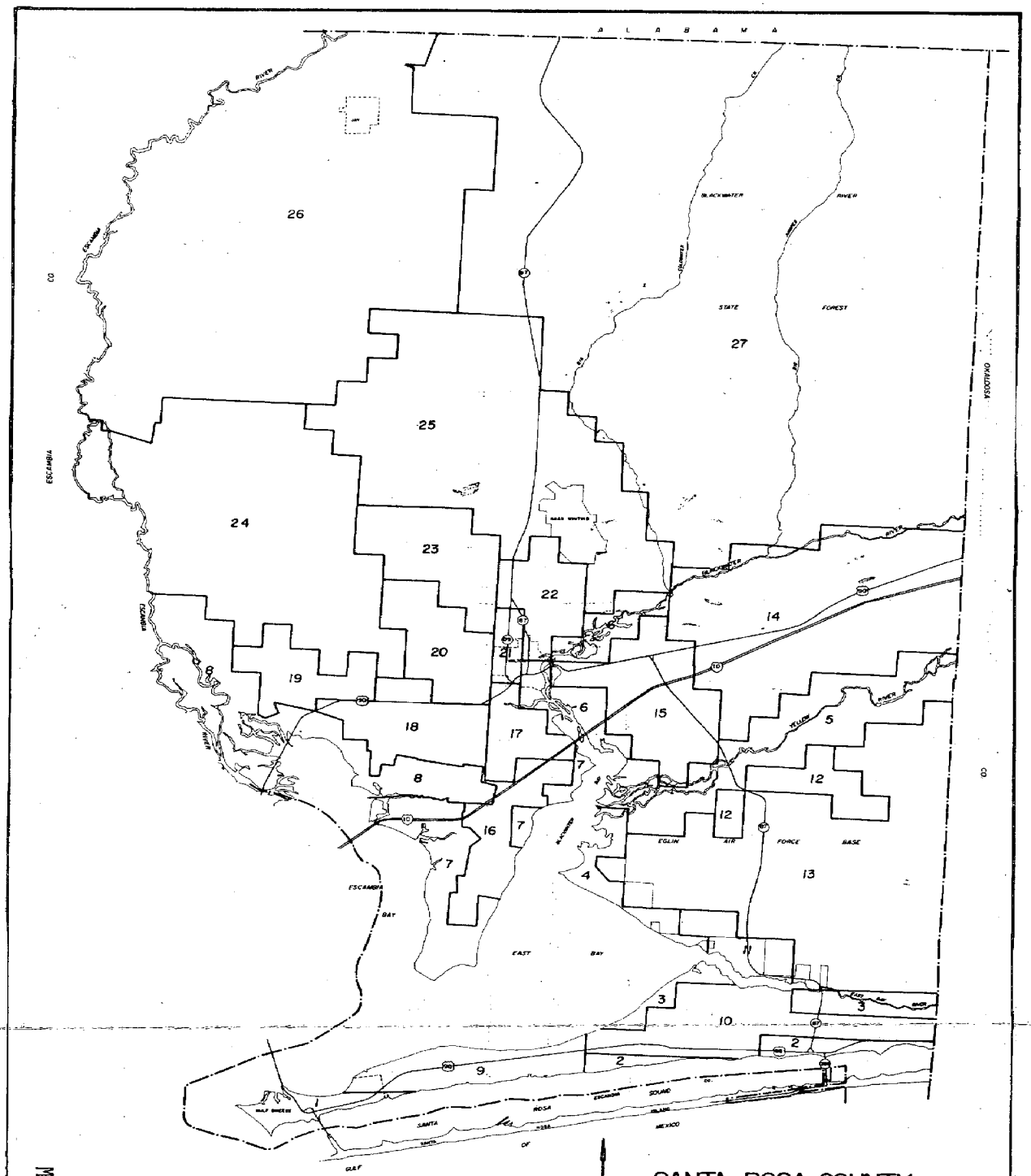
Analysis of the reference hurricanes and associated surge levels indicate various degrees of hurricane vulnerability within the region. Concurrent with this study, the Tri-State Hurricane Evacuation Study (funded by FEMA) is being conducted by the Army Corps of Engineers, Mobile District. Using the SLOSH model as technical data base, evacuation zones have been identified for the Tri-State Study. In order to more closely correlate the Tri-State Study and this study, evacuation zones defined by the Corps are used in this report as loss zones. Continuity provided by the common demarcations simplifies the use of the reports and benefits future users of the reports.

Loss zone configurations for each county within the study area are shown in Maps 1 through 7. Note Washington and Holmes Counties are divided into four and two loss zones, respectively. Both counties are inland and will experience no hurricane surge

flooding; the loss zones therefore indicate levels of projected wind damage.


DAMAGE SCENARIOS (surge)
Scenario A-loss zone 1-7, 14, 19
Scenario B-loss zone 1-7, 11, 12, 14, 17, 19, 22, 23
Scenario C-loss zone 1-8, 11, 12, 14, 15, 17, 19, 22, 23
Scenario D-loss zone 1-12, 14-19, 21-23
Scenario E-loss zone 1-12, 14-19, 21-23
ESCAMBIA COUNTY
INTERSTATE HIGHWAY
U.S. HIGHWAY
STATE HIGHWAY
HURRICANE LOSS ZONE
PENSACOLA
PENSACOLA NAVAL AIR STATION
WEST FLORIDA REGIONAL PLANNING COUNCIL

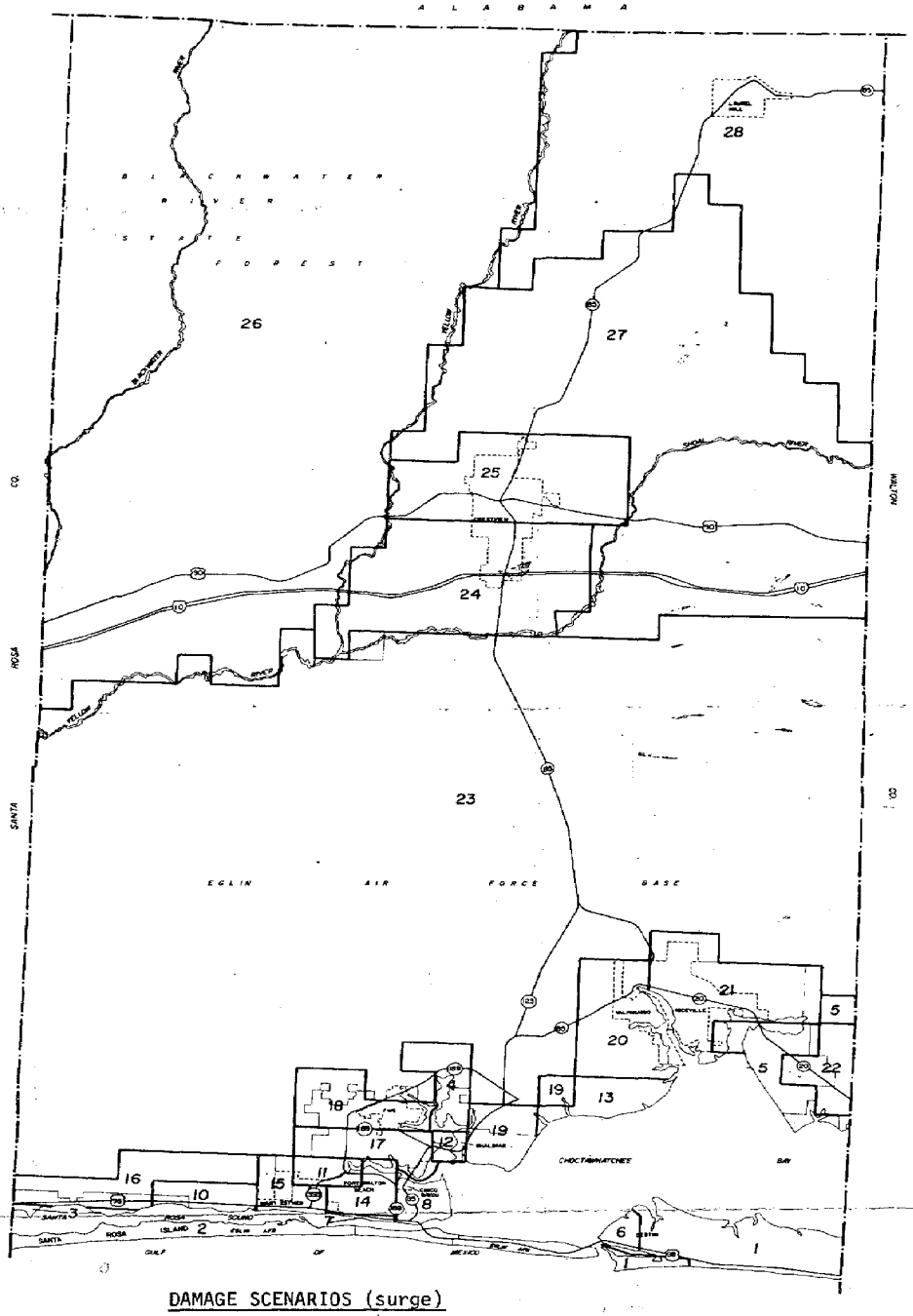
MAP 1



MAP 2

DAMAGE SCENARIOS (surge)

Scenario A-loss zone 2
Scenario B-loss zone 1-7, 16
Scenario C-loss zone 1-4, 7-9, 11
Scenario D-loss zone 1-9, 11, 16
Scenario E-loss zone 1, 2, 4-7, 9, 10



OKALOOSA COUNTY

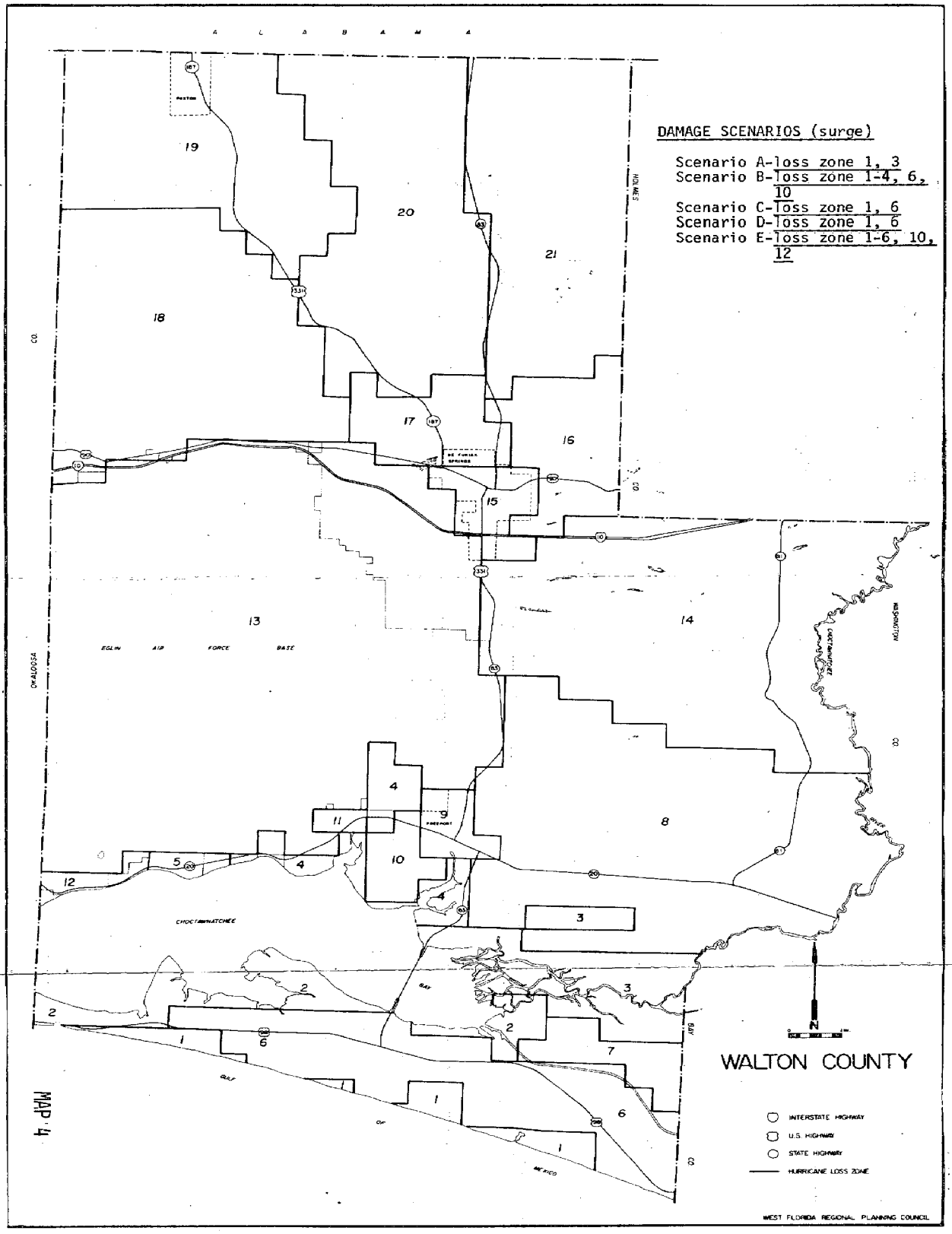
DAMAGE SCENARIOS (surge)

Scenario A-loss zone 1, 2, 6
Scenario B-loss zone 1, 2, 6-8, 19
Scenario C-loss zone 1, 2, 6-8, 19
Scenario D-loss zone 1, 2, 6-8, 19
Scenario E-loss zone 1, 2, 5-8, 17, 19, 20, 21

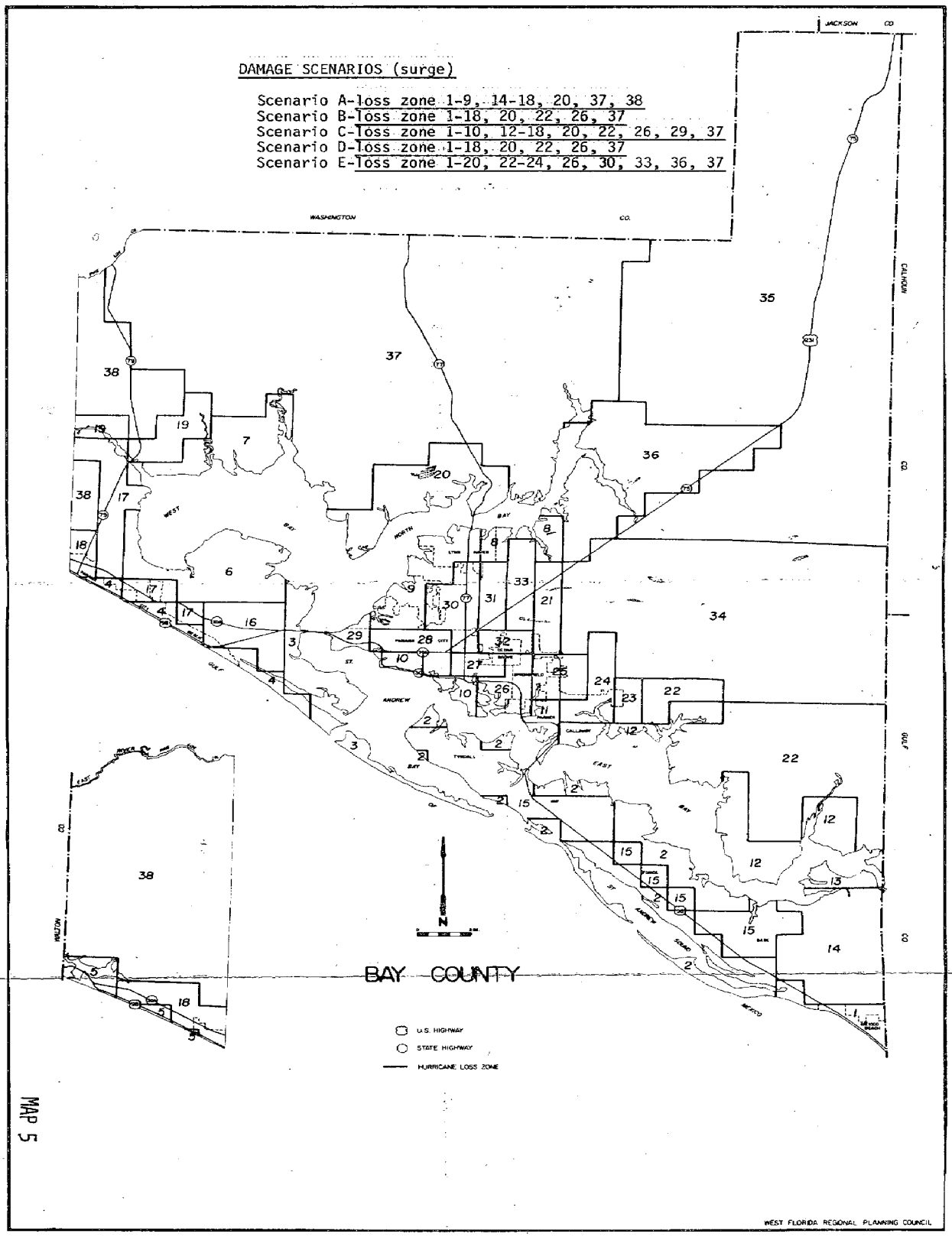
INTERSTATE HIGHWAY
U.S. HIGHWAY
STATE HIGHWAY
HURRICANE LOSS ZONE

MAP 3

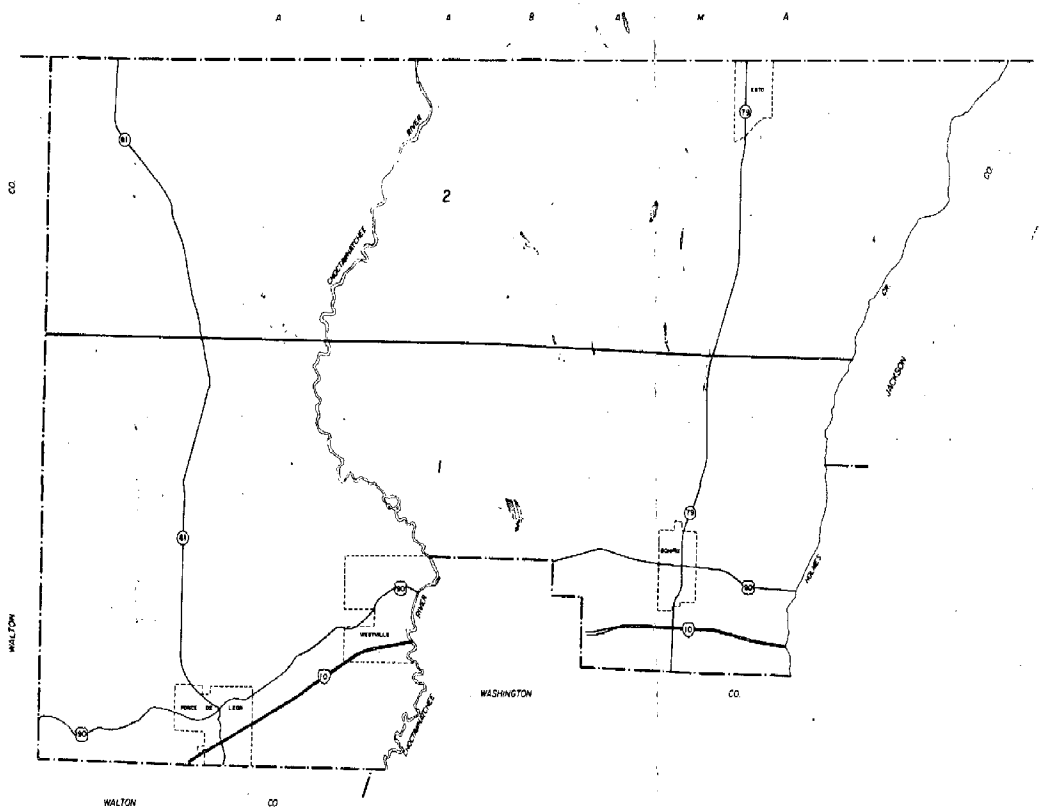
WEST FLORIDA REGIONAL PLANNING COUNCIL



WEST FLORIDA REGIONAL PLANNING COUNCIL


DAMAGE SCENARIOS (surge)
Scenario A-loss zone 1-9, 14-18, 20, 37, 38
Scenario B-loss zone 1-18, 20, 22, 26, 37
Scenario C-loss zone 1-10, 12-18, 20, 22, 26, 29, 37
Scenario D-loss zone 1-18, 20, 22, 26, 37
Scenario E-loss zone 1-20, 22-24, 26, 30, 33, 36, 37
JACKSON CO
WASHINGTON CO.
CALHOUN CO
WALTON CO
BAY COUNTY
U.S. HIGHWAY
STATE HIGHWAY
HURRICANE LOSS ZONE
WEST FLORIDA REGIONAL PLANNING COUNCIL

MAP 5



DAMAGE SCENARIOS (WIND)

Scenario A-E--loss zone 1 & 2

N

HOLMES COUNTY

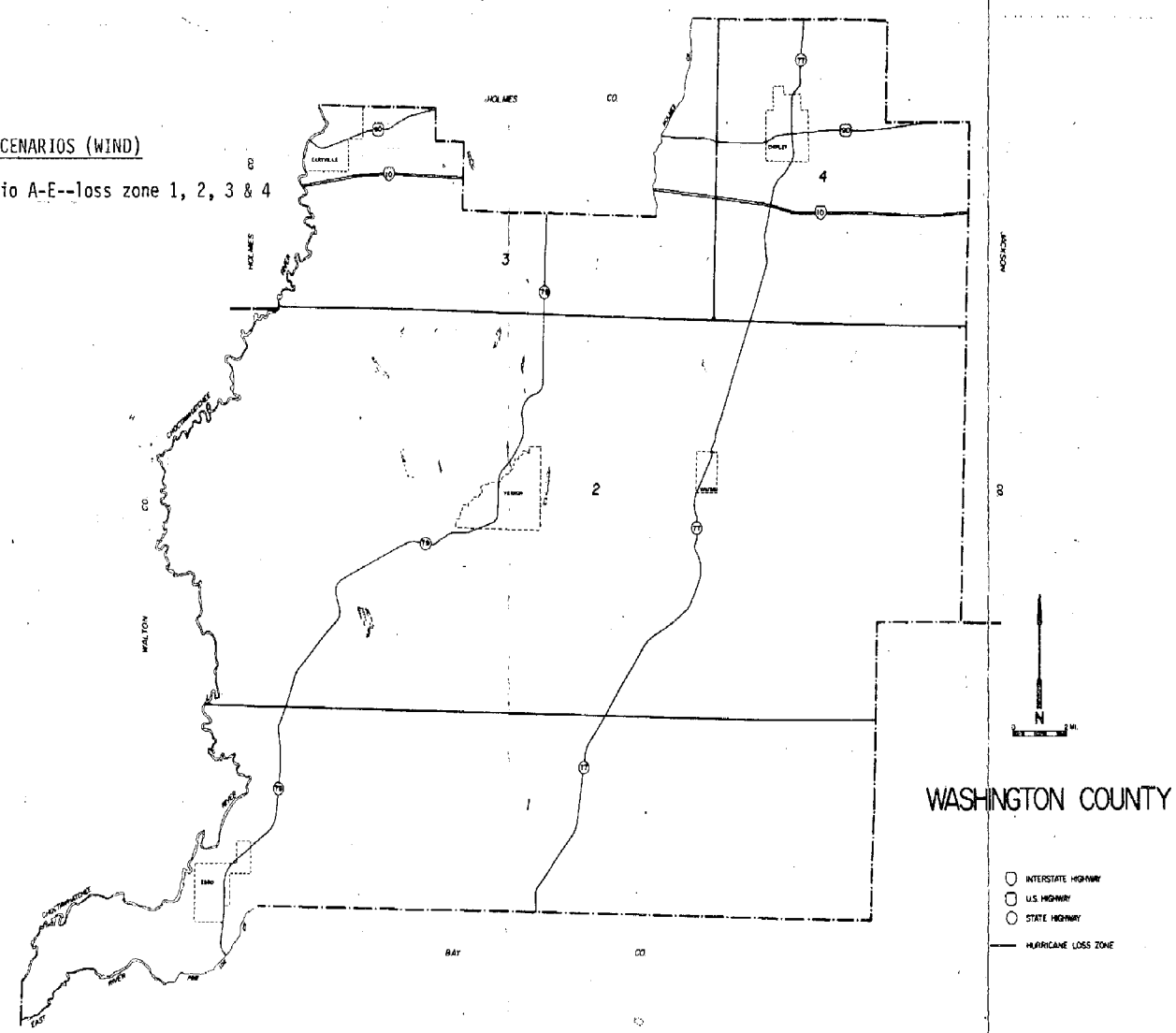
- INTERSTATE HIGHWAY
- U.S. HIGHWAY
- STATE HIGHWAY
- HURRICANE LOSS ZONE

MAP 6

WEST FLORIDA REGIONAL PLANNING COUNCIL

DAMAGE SCENARIOS (WIND)

Scenario A-E--loss zone 1, 2, 3 & 4



MAP 7

WEST FLORIDA REGIONAL PLANNING COUNCIL

HISTORY AND PROBABILITY OF TROPICAL CYCLONES IN WEST FLORIDA

The first step in studying where future hurricanes might hit, and what category they might be, is to look at previous hurricanes that entered the area. The directions these hurricanes took and the category provide trends which can be used to estimate future hurricane direction and strength. From the 330 hypothetical hurricanes sent to us by the National Hurricane Center, 30 were selected which came closest to the historical hurricane strikes in our area in direction, category, and location (county). These 30 hypothetical hurricanes are called reference hurricanes. Each of the five coastal counties has five hurricane entries and there are five additional hurricanes that are analyzed for their regional impact.

Tropical storms are characterized by wind speeds between 39-73 mph and low atmospheric pressure; hurricanes have wind speeds of 74 mph to 200+ mph and low atmospheric pressure. A tropical cyclone is a term which includes both tropical storms and hurricanes. In this study tropical storms and hurricanes are examined since many category 1 hurricanes were tropical storms until approaching landfall and they intensified.

The initial step in determining the probability of tropical cyclones in the West Florida region involves selection of an approximate mid-point along the coast of the study area. Destin, Florida, was selected as the mid-point. The range to the left and right of this mid-point is 100-miles, which is the minimum distance for issuing a hurricane warning. This 200-mile coastal

range is the area included in establishing historical data and the subsequent probability figures for tropical cyclone occurrence. For ease of geographical identification, the western border of this area is defined as the western limit of Mobile, Alabama, and the eastern border is defined as Apalachicola, Florida.

Historical information regarding tropical storms and hurricanes passing on the fringe of or directly within the 200 mile range is presented in Table 1 (adapted and compiled from NOAA, 1981; 89th Congress, 2nd Session, House Document No. 459, 1966; Hebert, 1975; Friedman, 1984; Haywood, 1985). During the period 1886 to 1985, West Florida has been affected by 72 tropical cyclones (tropical storms and hurricanes). The term "affected" is defined as, "experiencing loss of property and/or life as a result of tropical storm or hurricane wind and/or storm surge." Tropical storms (sustained winds reaching between 39 and 73 miles per hour, inclusively) account for 36 of the total 72 occurrences, while 36 reached hurricane intensity (sustained winds more than 73 miles per hour).

These figures translate into a regional probability that approximately 7 out of every 10 years the 200-mile span of coastline is at risk for a tropical cyclone. A hurricane is expected to affect all or some portion of the 200-mile range 3.5 times every 10 years. Similarly, a tropical storm may be expected to occur 3.6 times every 10 years.

Table 1 provides historical information on approximate storm headings, hurricane category (strength), affected counties, and differentiates between fringe pass and direct landing storms.

Direct landings are defined for this study as those storms whose core passed through the 200 mile range. A fringe pass refers to those storms whose core passed outside the 200 mile range but produced some significant affect (rain, wind or storm surge damage) in the area (adapted from Hebert, 1975). Direct landings account for 74 percent of the hurricanes and 58 percent of the tropical storms in the area while fringe passes account for 26 percent of the hurricanes and 44 percent of the storms.

Regionally, tropical cyclones with a northerly heading are most predominant (45% probability) followed by a northeasterly heading (30%), northwesterly heading (14%), westerly heading (4%), easterly heading (4%) and a southwesterly heading (3%).

Ten of the 35 hurricanes affecting the area occurred during the period from 1886 to 1899. Sufficient information to categorize these storms on the basis of the Saffir/Simpson Index is not available. These storms are therefore excluded from regional and county hurricane strength probability calculations. Additionally, Hurricane Hilda (See table 1; storm 10 - 1964) is excluded from these calculations. At the time of entrance into the study region she had been downgraded from a hurricane to a tropical storm. Of the remaining 25 hurricanes, 48 percent have been in category 1, 17 percent in 2, and 30 percent have been category 3. No category 4 or 5 hurricanes have been recorded in the area.

Category 3, 4, and 5 strength hurricanes cause tremendous damage and are responsible for many deaths. Since 1900, storms of this magnitude have affected the region approximately once every

ten years. Category 1 and 2 strength hurricanes have affected the area approximately once every five years. During the last ten years three category 3 hurricanes have caused considerable damage to the area, "Eloise" in 1975, "Frederic" in 1979, and "Elena" in 1985.

The official Atlantic hurricane season is defined as occurring from June 1 through November 30. Figure 2 provides a breakdown by month of the occurrences of hurricanes and tropical storms for the 1886 to 1984 period. The three month period from August to October accounts for 71 percent of all tropical cyclones which have affected the West Florida region.

Table 1.
Tropical Cyclones Affecting the West Florida Region
Between 1886 and 1985 Within A 100 Mile Radius of Destin, Florida

Hurricane No. and/or Name	Hurricane(1) Tropical Storm(2)	Direct Landing(1) Fringe Pass(2)	Heading: N(1)NE(2) NW(3)S(4) SE(5)SW(6) E(7)W(8)	Category	Counties Affected Escambia(E) Santa Rosa(SR) Okaloosa(O) Walton(WL) Washington(WS) Holmes(H) Bay(B)	Month
2	1	1	1		B, WL	6
3	1	2	2		B	6
2	1	1	1		E, SR, O, WL, WS, B, H	7
11	1	2	2		E, SR	10
6	1	1	2		E, SR, O	9
1	1	2	2		*	6
10	2	1	3		E	9
1	2	1	3		E, SR	8
4	1	1	2		B, WL, WS	10
1	1	1	1		SR, O, WL, WS, H, B	7
1	1	1	3		E, SR, O, WL, WS, B, H	8
1	1	2	2		B	8
3	2	2	2		E	9
1	2	2	1		E	6
6	2	1	2		E, SR, H, O	9
8	2	2	1		*	9
4	2	2	2		E	10
3	1	1	1	1	WL, B, WS	9
5	2	1	2		E, SR	10
1	2	1	1		B, WL, O	6
5	1	2	1	3	E	9
1	2	1	2		*	6
3	2	1	2		O, WL, B	9
2	2	1	3		B, WL, O, H, WS	6
1	1	1	3	1	E, SR	8
3	1	2	1	1	*	9
1	2	1	6		E, SR, O, WL, WS, H, B	9
4	1	1	1	1	WL, B, H, WS	9
1	1	2	1	3	E	7
8	2	1	8		B, WS, H, WL	9
13	1	1	1	2	WL, O, SR, E, H	10
3	1	1	2	3	E, SR, O, WL, WS, H, B	9

Table 1. (continued)

Hurricane No. and/or Name	Hurricane(1) Tropical Storm(2)	Direct Landing(1) Fringe Pass(2)	Heading: N(1)NE(2) NW(3)S(4) SE(5)SW(6) E(7)W(8)	Category	Counties Affected Escambia(E) Santa Rosa(SR) Okaloosa(O) Walton(WL) Washington(WS) Holmes(H) Bay(B)	Month
1	2	1	1		E, SR, O	7
3	2	1	1		E, SR	10
4	1	1	2	1	WL, WS, H, B	9
6	1	1	8	3	E, SR, O	9
1	2	2	1		WS, H	8
2	2	1	1		WL, H, WS, B	8
2	1	1	1	2	WL, B, WS, H	10
3	1	2	3	1	E	8
5	2	2	2		B	9
6	2	1	1		B, WS, H	8
12	2	2	1		WS	9
9	2	2	1		E, SR	10
5	1	1	3	3	SR, O, WL, H, WS, B	7
9	2	1	8		E, SR, O, WL, WS, H, B	8
6	2	2	7		B, WL	9
7	2	2	2		B	10
1	2	2	1		E, SR	6
2	1	1	3	1	SR, O, WL, WS, H, B	8
5	1	1	1	2	B, WS, H	10
5	2	2	3		E	9
7	2	1	6		B, WS, H	10
2	2	1	1		E, SR, O, WL, WS, H, B	7
2 (Baker)	1	1	1	1	E	8
1 (Alice)	2	1	1		SR, O, WS, WL, H, B	6
7	2	2	7		B	9
8 (Florence)	1	1	2	1	SR, O, WL, WS, H, B	9
7 (Flossy)	1	1	2	1	SR, O, WL, WS, B, H	9
1	2	2	2		B	6
5 (Debbie)	2	1	1		E, SR, O, WL, WS, H, B	9
10 (Irene)	2	1	1		E, SR	10
6 (Dora)	2	2	3		WS, H	9

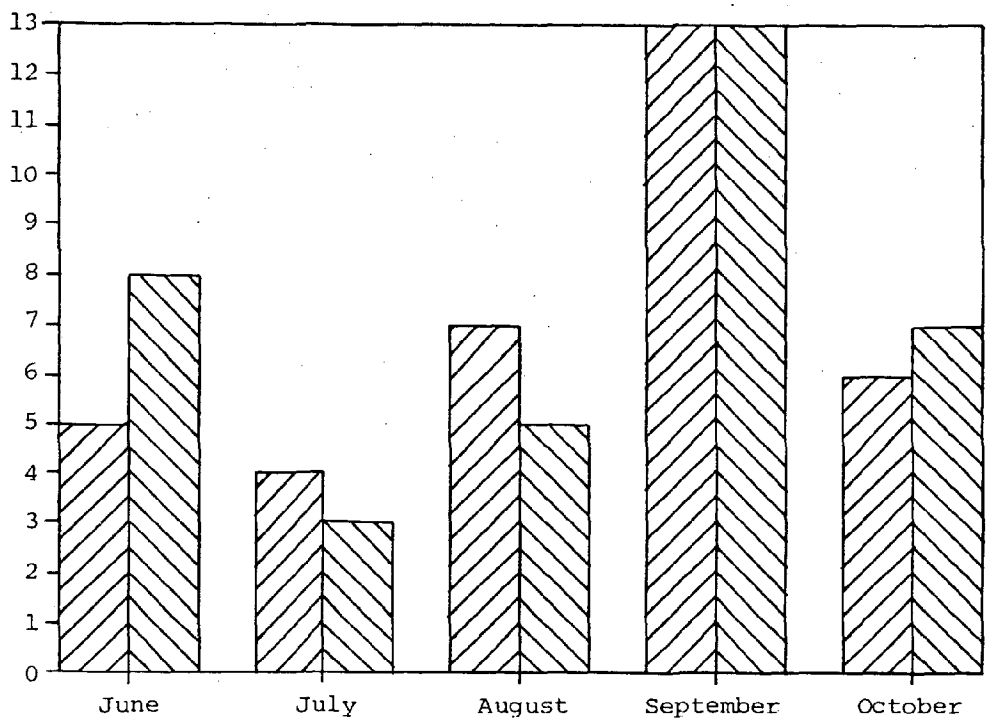
Table 1. (continued)

Hurricane No. and/or Name	Hurricane(1) Tropical Storm(2)	Direct Landing(1) Fringe Pass(2)	Heading: N(1)NE(2) NW(3)S(4) SE(5)SW(6) E(7)W(8)	Category	Counties Affected Escambia(E) Santa Rosa(SR) Okaloosa(O) Walton(WL) Washington(WS) Holmes(H) Bay(B)	Month
10 (Hilda)	1	1	7	Extratopic	E,SR,WS,WL,B,O,H	10
1	2	1	2		SR,O,WL,WS,H,B	6
1 (Alma)	1	2	2	2	B,WS,H	6
2 (Becky)	2	1	1		B,WS,H	7
2 (Agnes)	1	1	1	1	B,WS,H	6
5 (Eloise)	1	1	1	3	SR,O,WL,WS,H,B	9
6 (Frederic)	1	1	1	3	E,SR,O,WL,B	9
(Elena)	1	2	3	3	E,SR,O,WL,B	10
(Juan)	2	2	2		E, SR	10

At * refers to storms which affected areas included within the study area but which are not included within the seven county border.

Areas include parts of Alabama and other sections of Northwest Florida.

Figure 2



MONTHLY OCCURRENCES OF HURRICANES AND TROPICAL STORMS DURING THE PERIOD 1886 TO 1985 WITHIN A 100 MILE RADIUS OF DESTIN, FLORIDA.

HURRICANES (total: 35)

TROPICAL STORMS (total: 36)

SEA, LAKE, OVERLAND SURGE FROM HURRICANES (SLOSH)

The dynamics of hurricanes as they form over the warm seas, move toward the coastline, progress inland, and finally dissipate over large land masses or colder waters is a very complex study. Ocean temperatures, wind patterns and high and low pressure systems over North America are analyzed with space age technology providing better estimates of our vulnerability to hurricanes. In addition, historical hurricane data provides dates, tracks and other meteorological measurements which the National Weather Service is using to study trends. We can predict that the greatest vulnerability to hurricanes in the seven county area occurs during August, September, and October. However, the official hurricane period, from the National Hurricane Center, runs from June 1 to November 30.

Hurricanes can wander without a general direction for several days, begin to drift northward and eventually come ashore hundreds of miles from where they were forecast to hit. During this time they also can change intensity (category) either becoming stronger or weaker. In order to be able to forecast the storm surge height and wind direction/speed, the NOAA has developed a computer model that estimates how high the water is going to be above mean sea level, wind direction and velocity. The surge height figures are provided for hundreds of grid points (locations) over the water and land and the wind for 60 coastal locations. As the storm moves forward, updated values are

provided in 30 minute increments. During this forward movement wind directions and water surge heights change as the hurricane approaches the coastline. The span of time provided by SLOSH begins eighteen (18) hours prior to landfall to twelve (12) hours after landfall for an elapsed time of thirty (30) hours.

All the hypothetical "panhandle" hurricanes presented by the SLOSH make landfall at five common entry points, one entry point in each county (with the exception of the paralleling hurricanes off-shore). Therefore, for the five coastal counties there are five hurricane entry points. These landfalling hurricanes enter at the following locations, 20 left, 0, 20, 40 and 60 right, based on a point two miles to the east of where the Bob Sikes Bridge enters Santa Rosa Island from Gulf Breeze. The following chart indicates hurricane landfall points to the west or east of this location:

County	Miles left or right	Approx. Location
Escambia	20L	Perdido Key
Santa Rosa	00	Pensacola Beach
Okaloosa	20R	4 Miles West of Hurlburt AFB
Walton	40R	Miramar Beach
Bay	60R	Hollywood Beach

Hypothetical hurricanes from SLOSH enter these common landfall points from three directions--southeast to northwest (315°), due north (360°), and southwest to northeast (045°). In

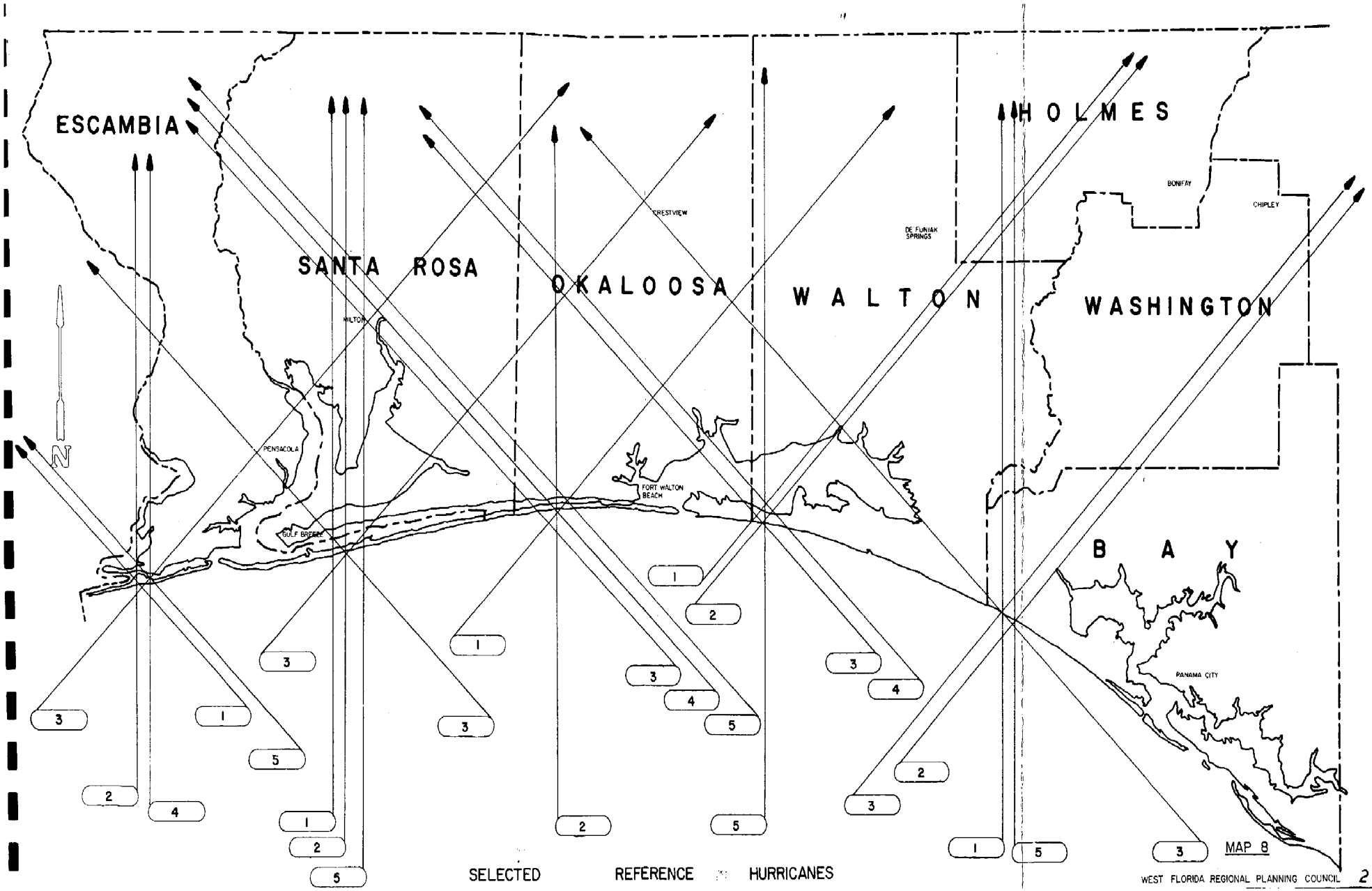
addition there are paralleling hurricanes moving east to west, and west to east 20, 40, 60 and 80 miles south of Pensacola.

There are category 1 through category 5 hurricanes that progress over each heading for each of the five county landfalls. The National Hurricane Center provided 330 hypothetical hurricanes which have been analyzed for the study. From this number, 25 hurricanes were selected for detailed analysis regarding water and wind figures. Each coastal county has five hurricanes of various strengths and directions affecting their jurisdiction. Holmes and Washington, two interior counties, each have five hurricanes affecting their area. (See map 8 and Table 2 for complete listing).

In order to assess regionally how any one hurricane might affect the seven county area, five additional hurricanes were selected. The effects from each hurricane were analyzed in all the counties. A hurricane entering Okaloosa County for example, would affect the other six counties with varying surge and wind speeds. These five hurricanes are referred to as regional hurricanes. The following chart lists these five:

Landfall	Direction	Category
Escambia	NW	5
Santa Rosa	NW	4
Okaloosa	NE	4
Bay	N	4
Paralleling Coastline	W	4

From the parelleling offshore hurricanes one was selected to document the effects onshore. This category 4 westward moving hurricane has an impact on all the counties in one study area, and



MAP 8

SELECTED REFERENCE HURRICANES

HURRICANES SIMULATED BY NUMERICAL STORM SURGE PREDICTION MODELS

COUNTY	TRACK	CATEGORY	SLOSH POSITION	LANDFALL OR CLOSEST APPROACH	FORWARD SPEED (M.P.H.)	AREA RECEIVING MAXIMUM SURGE/ WINDS	PRESSURE DROP (MILLIBARS)	RADIUS OF MAX WINDS (STAT. MILES)	DIRECTION MOVING TOWARDS	REMARKS
ESC	NW	1	20L	PERDIDO KEY	15	PENSACOLA BEACH PERDIDO KEY	20	15	315°	
ESC	N	2	20L	PERDIDO KEY	15	PENSACOLA BEACH PERDIDO KEY	40	15	360°	
ESC	NE	3	20L	PERDIDO KEY	15	PENSACOLA BEACH PERDIDO KEY	60	15	045°	
ESC	N	4	20L	PERDIDO KEY	15	PENSACOLA BEACH PERDIDO KEY	80	15	360°	
ESC	NW	5	20L	PERDIDO KEY	15	PENSACOLA BEACH PERDIDO KEY	100	10	315°	
SR	N	1	00	PENSACOLA BEACH	15	NAVARRE	20	15	360°	
SR	N	2	00	PENSACOLA BEACH	15	NAVARRE	40	15	360°	
SR	NE	3	00	PENSACOLA BEACH	15	NAVARRE	60	15	045°	
SR	NW	3	00	PENSACOLA BEACH	15	NAVARRE	60	15	315°	
SR	N	5	00	PENSACOLA BEACH	15	NAVARRE	100	10	360°	
OK	NE	1	20R	WEST OF HURLBURT AFB	15	FT. WALTON BEACH DESTIN	20	15	045°	
OK	N	2	20R	WEST OF HURLBURT AFB	15	FT. WALTON BEACH DESTIN	40	15	360°	
OK	NW	3	20R	WEST OF HURLBURT AFB	15	FT. WALTON BEACH DESTIN	60	15	315°	
OK	NW	4	20R	WEST OF HURLBURT AFB	15	FT. WALTON BEACH DESTIN	80	15	315°	
OK	NW	5	20R	WEST OF HURLBURT AFB	15	FT. WALTON BEACH DESTIN	100	10	315°	

TABLE 2

WEST FLORIDA REGIONAL PLANNING COUNCIL

HURRICANES SIMULATED BY NUMERICAL STORM SURGE PREDICTION MODELS										
COUNTY	TRACK	CATEGORY	SLOSH POSITION	LANDFALL OR CLOSEST APPROACH	FORWARD SPEED (M.P.H.)	AREA RECEIVING MAXIMUM SURGE / WINDS	PRESSURE DROP (MILLIBARS)	RADIUS OF MAX WINDS (STAT. MILES)	DIRECTION MOVING TOWARDS	REMARKS
WAL	NE	1	40R	MIRAMAR BEACH	15	GRAYTON BEACH	20	15	045°	
WAL	NE	2	40R	MIRAMAR BEACH	15	GRAYTON BEACH	40	15	045°	
WAL	NW	3	40R	MIRAMAR BEACH	15	GRAYTON BEACH	60	15	315°	
WAL	NW	4	40R	MIRAMAR BEACH	15	GRAYTON BEACH	80	15	315°	
WAL	N	5	40R	MIRAMAR BEACH	15	GRAYTON BEACH	100	10	360°	
BAY	N	1	60R	HOLLYWOOD BEACH	15	PANAMA CITY BEACH	20	15	360°	
BAY	NE	2	60R	HOLLYWOOD BEACH	15	PANAMA CITY BEACH	40	15	045°	
BAY	NW	3	60R	HOLLYWOOD BEACH	15	PANAMA CITY BEACH	60	15	315°	
BAY	NE	3	60R	HOLLYWOOD BEACH	15	PANAMA CITY BEACH	60	15	045°	
BAY	N	5	60R	HOLLYWOOD BEACH	15	PANAMA CITY BEACH	100	10	360°	
HOL	N	5	–	N/A	15	BONIFAY *	100	10	360°	*WINDS ONLY
HOL	NE	2	–	N/A	15	BONIFAY *	40	15	045°	*WINDS ONLY
WAS	N	5	–	N/A	15	CHIPLEY *	100	10	360°	*WINDS ONLY
WAS	NE	3	–	N/A	15	CHIPLEY *	60	15	045°	*WINDS ONLY

TABLE 2 (CONT.)

WEST FLORIDA REGIONAL PLANNING COUNCIL

therefore, is included as a regional hurricane. The distance offshore varies slightly from county to county, passing 40 miles south of Pensacola. (See map 9).

There are several significant factors which the SLOSH model does not consider in its computations:

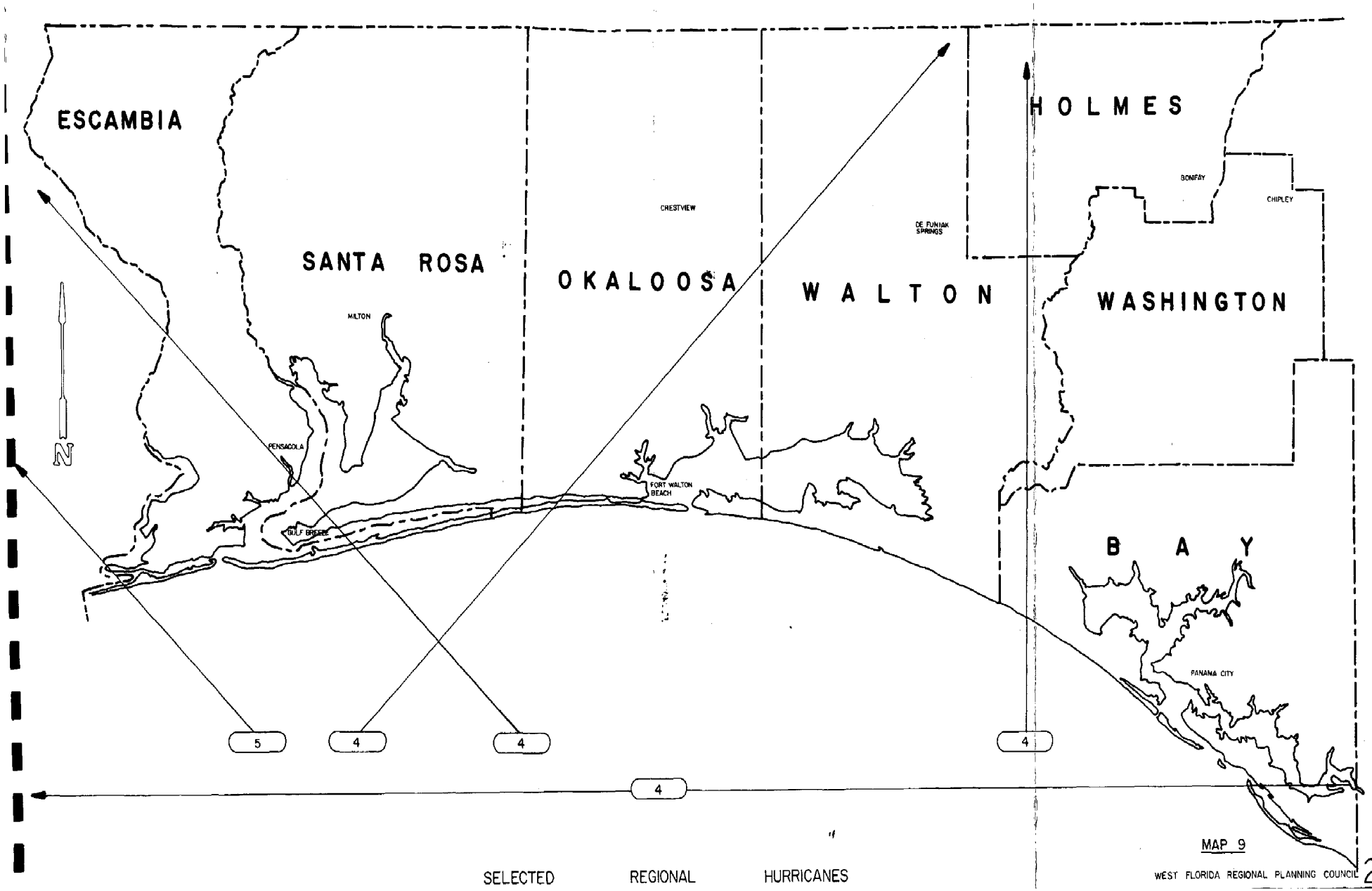
- o wave action on the projected surge;
- o peak gusts for winds;
- o the affects of rainfall; and
- o astronomical tides.

The projected wave build-up on top of the surge is computed by using a 0.55 factor. If the surge given by the SLOSH printout is 10 feet, the wave height is 5.5 feet. SLOSH surge x factor = waves (10' x 0.55 = 5.5')

(10' + 5.5' = 15.5' wave height)

This projects the hurricane surge and wave heights to be 15.5 feet above mean sea level in the example provided (see Table 3, page 35).

The reduced atmospheric pressure and the counter-clockwise circulating winds, along with the forward movement of the hurricane, forms a dome of water. As the hurricane approaches shallower water this dome is elevated and eventually over the beach and dunes. The water piles-up against the land and buildings. Waves are an integral part of this hurricane surge coming on-shore. With strong winds pushing the wave itself onto land the destructive force is considerable for anything in its path. Many barrier islands will have surge water across the



MAP 9

SELECTED REGIONAL HURRICANES

WEST FLORIDA REGIONAL PLANNING COUNCIL

island. The storm surge usually lasts for approximately six hours.

SLOSH also indicates there will be extensive flooding of the bays and bayous in our region. The wind packs the water against the shoreline and pushes it into narrow water areas where water elevations can reach 12'-14' above normal levels. This water packing is determined by the direction of the approach, category and forward speed of the hurricane.

Two important flooding problems that cannot be included in the SLOSH model predictions are rainfall and river drainage basins. Heavy rain may begin 6-12 hours prior to hurricane landfall, inundating low lying areas and increasing river levels which cannot discharge into the bays due to the piling up effect of the wind driven water against the mouths of the rivers and streams. As the winds reverse and the water is blown away from the shoreline this water can very rapidly flow causing as much damage as the static water rise. The three major bays in the region, Pensacola Bay, Choctawhatchee Bay and West, East and St. Andrew Bay complex are forecast to experience extensive flooding.

SLOSH figures are estimated to be accurate within a +/-20% range by the individuals who constructed the model.

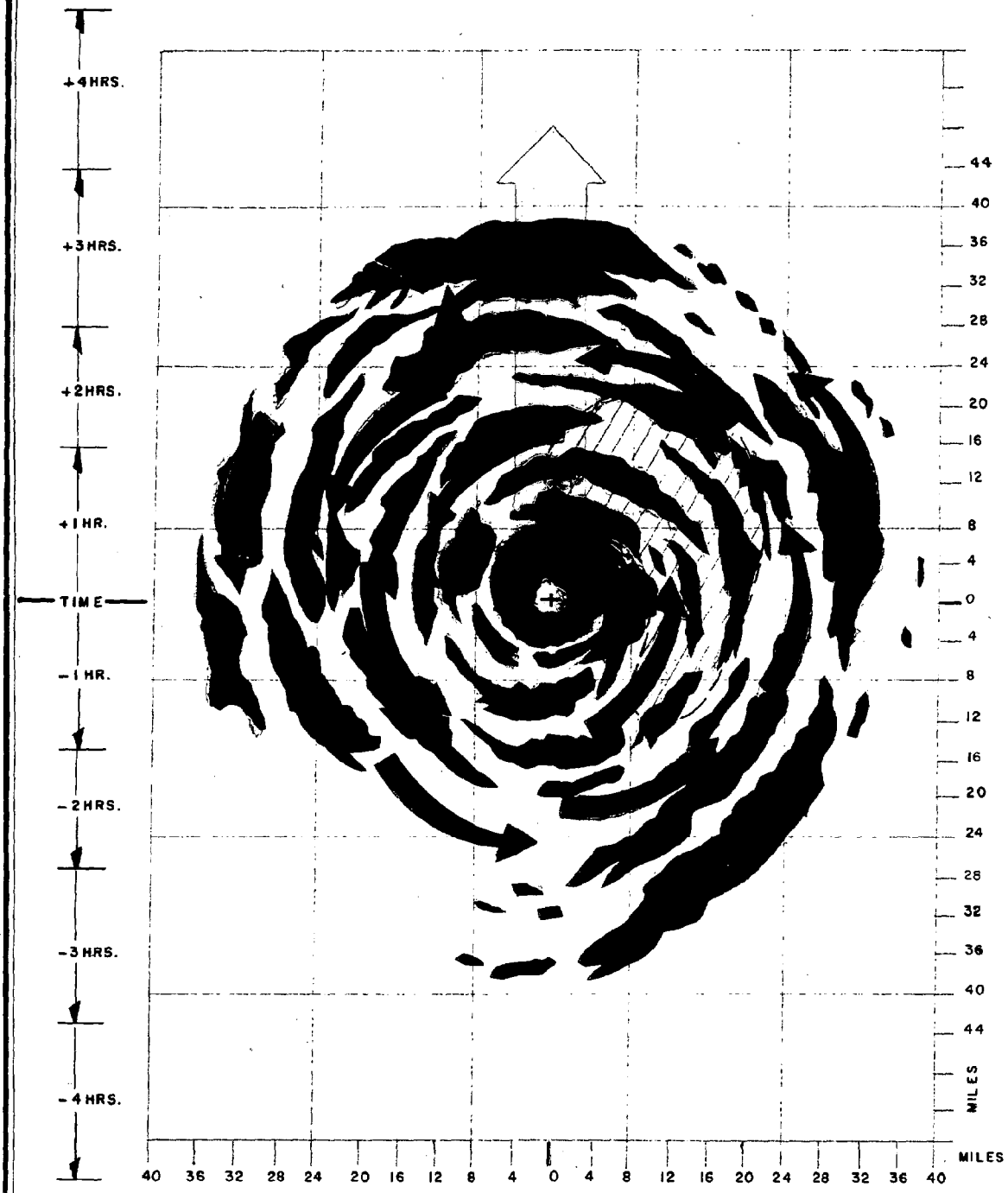
Gale force winds may begin affecting the coastal areas as much as twelve hours prior to the hurricane eye making landfall. Hurricane force winds (peak gusts) can begin, for the category 4 and 5 hurricanes, six hours prior to landfall. The following example has the eye for a north moving hurricane approaching

Okaloosa County at 15 mph (11:30 a.m. is the front edge of hurricane eye making landfall on Santa Rosa Island).

Time	Miles Out Hurricane Eye	Hurricane Category	Peak Gusts mph
6:00 A.M.	90	1	38
		3	68
		4	78
9:00 A.M.	45	1	65
		3	113
		4	132
11:30 A.M.	0 (front edge of eye touching land)	1	91
		3	160
		4	184
3:00 P.M.	45 (miles inland)	1	49
		3	81
		4	86

In this example the category 4 peak wind gusts of hurricane force are affecting Santa Rosa Island six hours prior (6:00 A.M.) to the center of the eye making landfall and are just below hurricane force for the category 3 hurricane. The maximum winds for most hurricanes occur in the right forward quadrant, usually 15 to 25 miles from the center of the eye (see diagram on page 30). Those hurricanes moving forward at 5 mph the maximum winds are at a radius of 15 miles and 15 mph forward at a 25 mile radius from the center of the eye. The eye dimensions vary considerably but normally a 8-10 mile width is evident in most hurricanes (see diagram on page 31). With a hurricane moving at 15 mph it may take 30-45 minutes for the center of a 10 mile eye to cross any point. At a forward speed of 5 mph it could extend eye passage to more than two hours.

HURRICANE CHARACTERISTICS

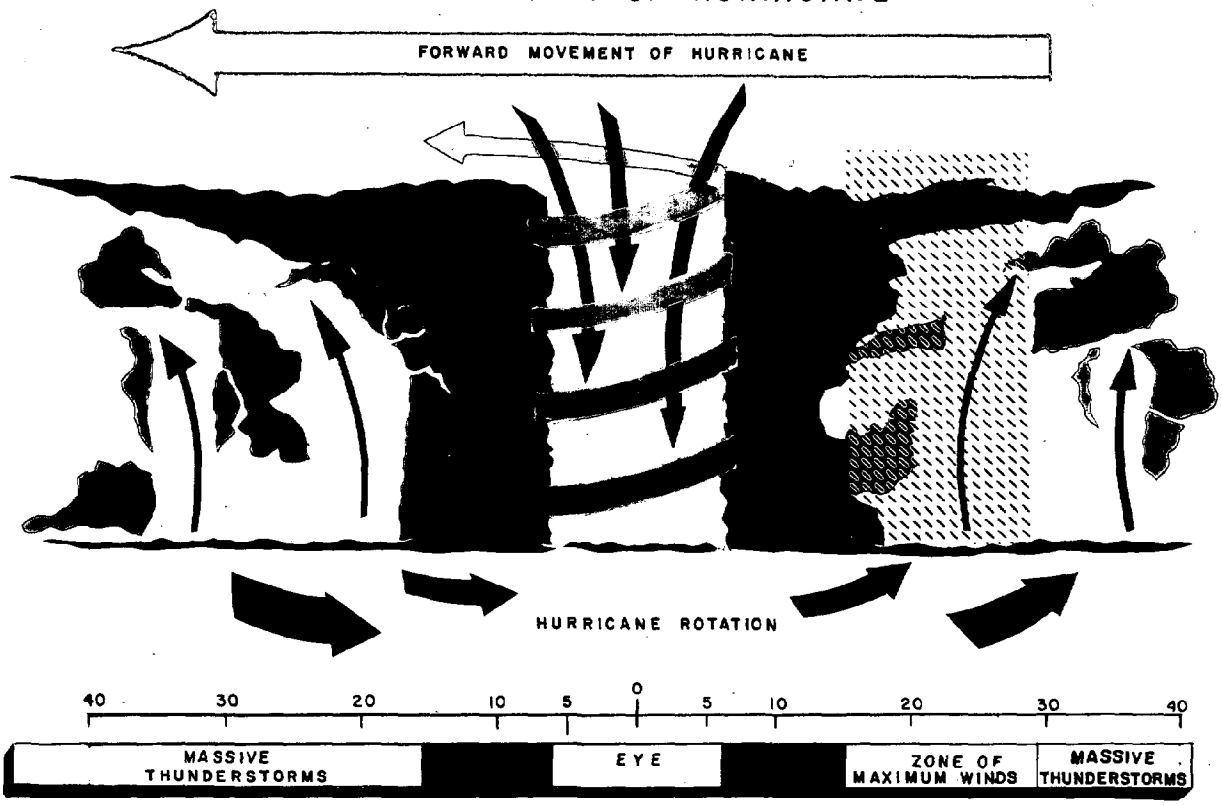


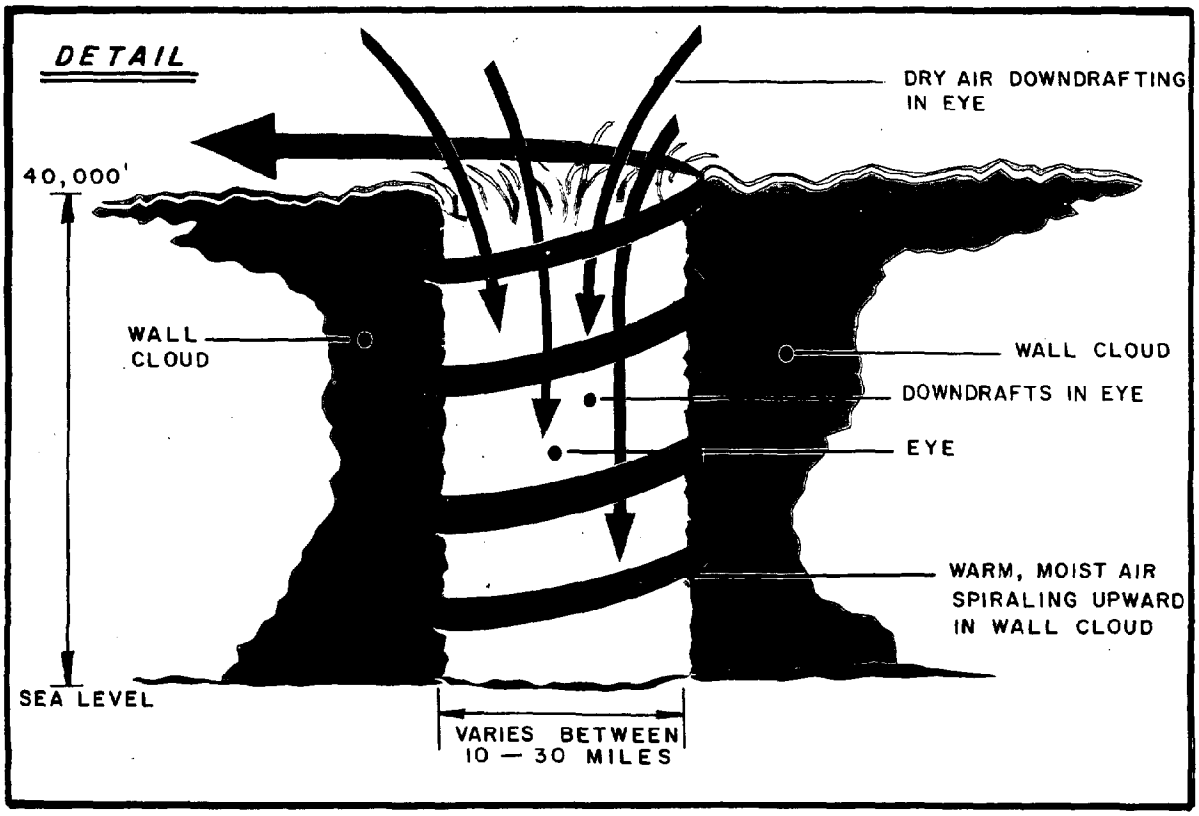
FORWARD MOVEMENT
AT 15 MPH

KEY:

- DIRECTION OF HURRICANE MOVEMENT
- WIND DIRECTION
- AREA OF MAXIMUM DAMAGE
- THUNDERSTORM CELLS
- WALL CLOUD SURROUNDING EYE

CUTAWAY VIEW OF HURRICANE





The peak gusts for wind are computed by using the SLOSH ten-minute sustained winds and multiplying by a 1.3 factor to get one-minute sustained winds. In order to arrive at a peak gust wind speed, the one-minute sustained wind is multiplied by a 1.43 factor for open water, 1.22 for developed coastal areas and 1.11 for woodlands. These factors that are used provide for the effects of friction between the interface of the wind and the surface it is passing over. Terrain covered with pine and hardwoods on uneven terrain would cause the maximum resistance and the greatest wind reduction in our area. A typical conversion of a 100 mph ten-minute sustained wind to peak gust factors would indicate:

- ten minute sustained wind 100 mph
- one minute sustained wind 130 mph
- peak gusts
  - over forested land 143.7 mph
  - over coastal areas 158.6 mph
  - over open water 185.9 mph

As the hurricane moves over land the winds gradually diminish in intensity and the low atmospheric pressure increases or "fills." Some researchers suggest a 2 to 4 millibar/hour "filling" when the hurricane is over land. This "filling" rate appears to occur for a period of time and then the rate of atmospheric change levels off. The hurricane reverts to a tropical storm once the winds decrease below 74 mph. Should the

center of the hurricane move over a warm water source the intensity can increase.

A generally accepted peak gust bleed-off factor for a hurricane after landfall is referred to as Malkin's Factor:

Hurricane Miles Inland	Reduction % of Peak Gust	Example of Peak Gust Windspeeds
0	100	120
5	.98	117.6
10	.96	115.2
15	.94	112.8
20	.92	110.4
25	.90	108
30	.88	105.6
35	.87	104.4
40	.86	103.2
45	.85	102
50	.84	100.8

Using Malkin's Factor and the example provided, the peak gusts would diminish from 120 mph at the coast to between 102 and 100.8 mph at the Alabama border from a hurricane moving on a northerly heading. At a point 25 miles inland, the peak gust reduction is 10% and at 50 miles, 16%.

The time span for hurricane force winds to affect a coastal city with the hurricane striking that point is approximately 8-9 hours for a category 3 storm. [A category 3 hurricane is the 100-year storm event on which the Federal Flood Insurance Administration (FEMA) has based their flooding computations, and the Flood Insurance Rate Map (FIRM)].

For the smallest hurricane, category 1, there may be only the coastal fringe flooded or several loss zones affected which cover the coastal elevations between sea level and 5 feet. Increasing the hurricane intensity to category 2 and 3, the higher storm surge heights become and the greater the flooding and thus the more loss zones that are effected. Generally at the category 3 level most coastal municipalities and development show extensive flooding at higher elevations (10' to 15').

From the numerous SLOSH hurricane computer sheets, 30 hypothetical hurricane were selected, 5 hurricanes entering each of the five coastal counties and an additional 5 hurricanes to show regional affects. Washington and Holmes Counties being inland were studied using hurricanes moving through the coastal counties and progressing inland. Table 3 lists the hurricanes selected, the direction moving, location left or right of Santa Rosa Island, and the category of the hurricane. The left hand column of the table lists the damage scenarios.

Table 3.
Hurricane Scenarios

Scenario	SLOSH Projected Hurricane Surge (Feet)	Estimated Wave Build-up on Surge (Feet)	Surge + Wave Build-up (Feet)	Wind	Estimated Damage
SCENARIO A	4-5	2.2-2.8	6.2-7.8	74-95	Minimal
SCENARIO B	6-8	3.3-4.4	9.3-12.4	96-110	Moderate
SCENARIO C	9-12	5.0-6.6	14.0-18.6	111-130	Extensive
SCENARIO D	13-18	7.0-9.9	20.0-28.0	131-155	Extreme
SCENARIO E	19+	11+	30+	156+	Catastrophic

Regional Damage Scenarios
Storm Surge + Wave Build-up

County	NW 20L 5	NW 00 4	NE 20R 4	NOR 60R 4	WP 60L 4
Escambia	E	D	C	A	C
Santa Rosa	D	E	C	A	C
Okaloosa	D	E	D	A	C
Walton	C	D	D	C	C
Bay	B	D	C	D	B

Regional SLOSH Surge and Wave Build-up

County	NW 20L 5 Surge/Surge + Waves	NW 00 4 Surge/Surge + Waves	NE 20R 4 Surge/Surge + Waves	NOR 60R 4 Surge/Surge + Waves	WP 60L 4 Surge/Surge + Waves
Escambia	7.2 / 11.1	8.3 / 12.8	13 / 20	2.9 / 4.5	7.5 / 11.6
Santa Rosa	8.0 / 12.4	13 / 20.1	10.5 / 16.3	3.0 / 4.6	6.7 / 10.3
Okaloosa	9.0 / 14	11.4 / 17.6	8.5 / 13.1	3.0 / 4.6	6.4 / 9.9
Walton	9.0 / 14	10.0 / 15.5	6.5 / 10.0	8.0 / 12.4	6.0 / 9.3
Bay	7.0 / 10.8	5 / 12.4	5 / 7.7	9.6 / 14.9	5.5 / 8.5

Table 3. (continued)
County Scenarios

Damage Scenario	ESCAMBIA	SANTA ROSA	OKALOOSA	WALTON	BAY	HOLMES	WASHINGTON
A	NW-20L-1	N-00-1	NE-20R-1	NE-40R-1	N-60R-1	NE-40R-1	N-60R-1
B	N-20L-2	N-00-2	N-20R-2	NE-40R-2	NE-60R-2	N-60R-1	NE-60R-2
C	NE-20L-3	NE-00-3	NW-20R-3	NW-40R-3	NW-60R-3	NE-40R-2	NW-60R-3
D	N-20L-4	NW-00-3	NW-20R-4	NW-40R-4	NE-60R-3	N-40R-5	NE-60R-3
E	NE-20L-5	N-00-5	NW-20R-5	N-40R-5	N-60R-5	N-60R-5	N-60R-5

LANDFALL LOCATION:

20L - PERDIDO KEY, ESCAMBIA COUNTY
00 - PENSACOLA BEACH (SANTA ROSA ISLAND)
20R - WYNN HAVEN, OKALOOSA COUNTY
40R - OKALOOSA/WALTON COUNTY LINE
60R - PHILIPS INLET, BAY COUNTY

DIRECTION:

N - NORTH
NE - NORTHEAST
NW - NORTHWEST

COUNTY DAMAGE SCENARIOS

Scenario A through E development allows the scaling of water surge depths from 4 feet to 18 feet + (4' to 18'+) to show how far inland the flooding will spread. In other words, a 4 foot surge height may go to the dune line and an 18 feet surge may extend inland several miles. The five scenario designations outlined below delineate areas on a map projected to be impacted by hurricane damage from storm surge:

Scenario A	4' to 5'
Scenario B	6' to 8'
Scenario C	9' to 12'
Scenario D	13' to 18'
Scenario E	18'+

A simplified explanation of the use of these five scenarios would show the category 1 hurricanes producing 4 feet to 5 feet storm surge over sea level to 5 feet coastal elevations. The county directly affected by the hurricane has loss zones, numbered on the maps with the sea level to 5 feet elevations showing zones inundated by the storm surge. The counties outside the area affected by storm surge of 4 feet but encountering water 2 to 3 feet would not be in Scenario A. For a more severe hurricane with surge of 12 feet (Scenario C), in a particular county, the bordering counties with surge of 7 feet would place them in Scenario B and further away in Scenario A. In many cases in our area, a portion of a county would be Scenario D (13' to 18' height), while 15 to 20 miles away would be experiencing Scenario

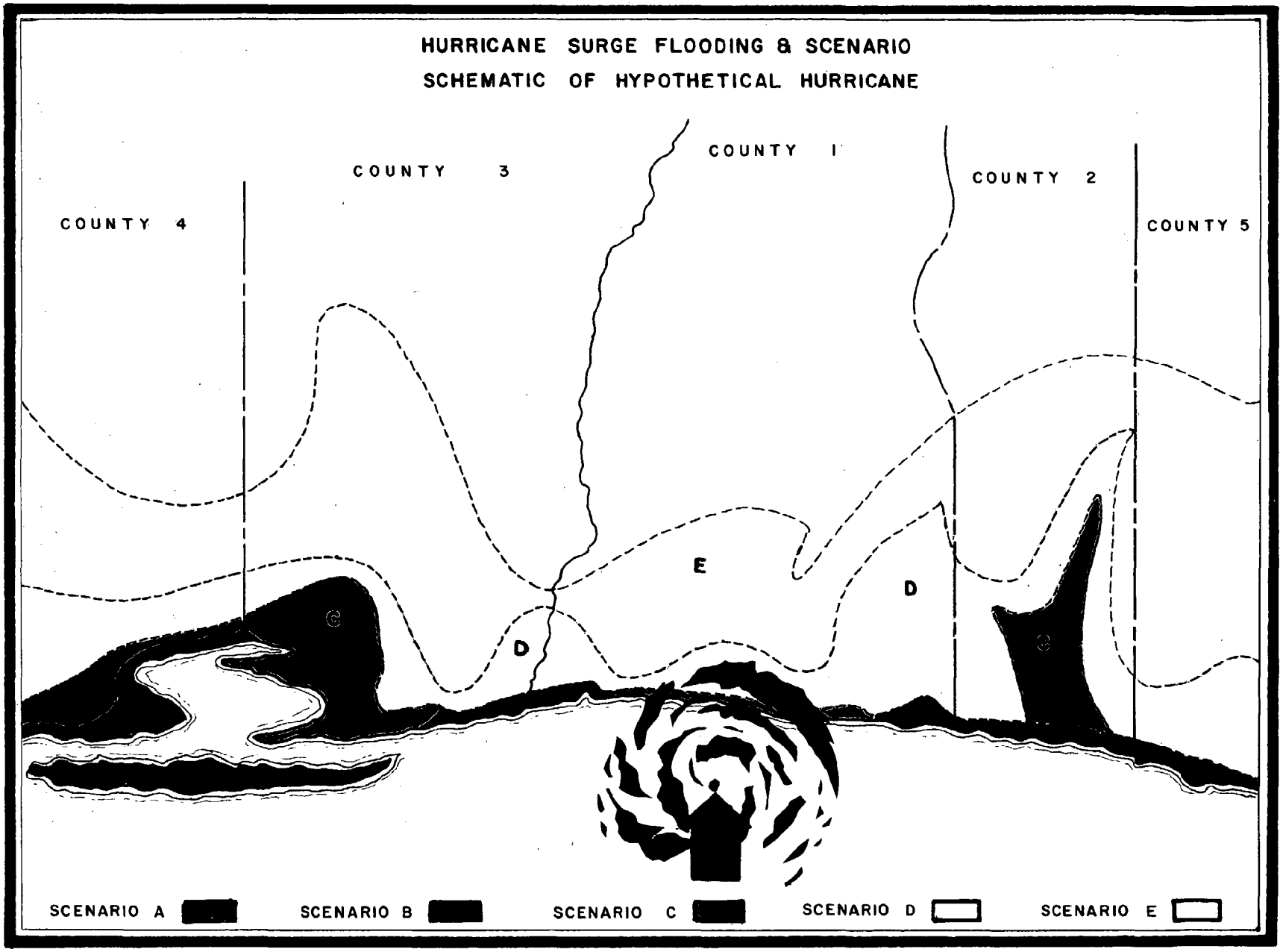
C or lower conditions (see diagram on page 40 and Table 3 in the preceeding chapter).

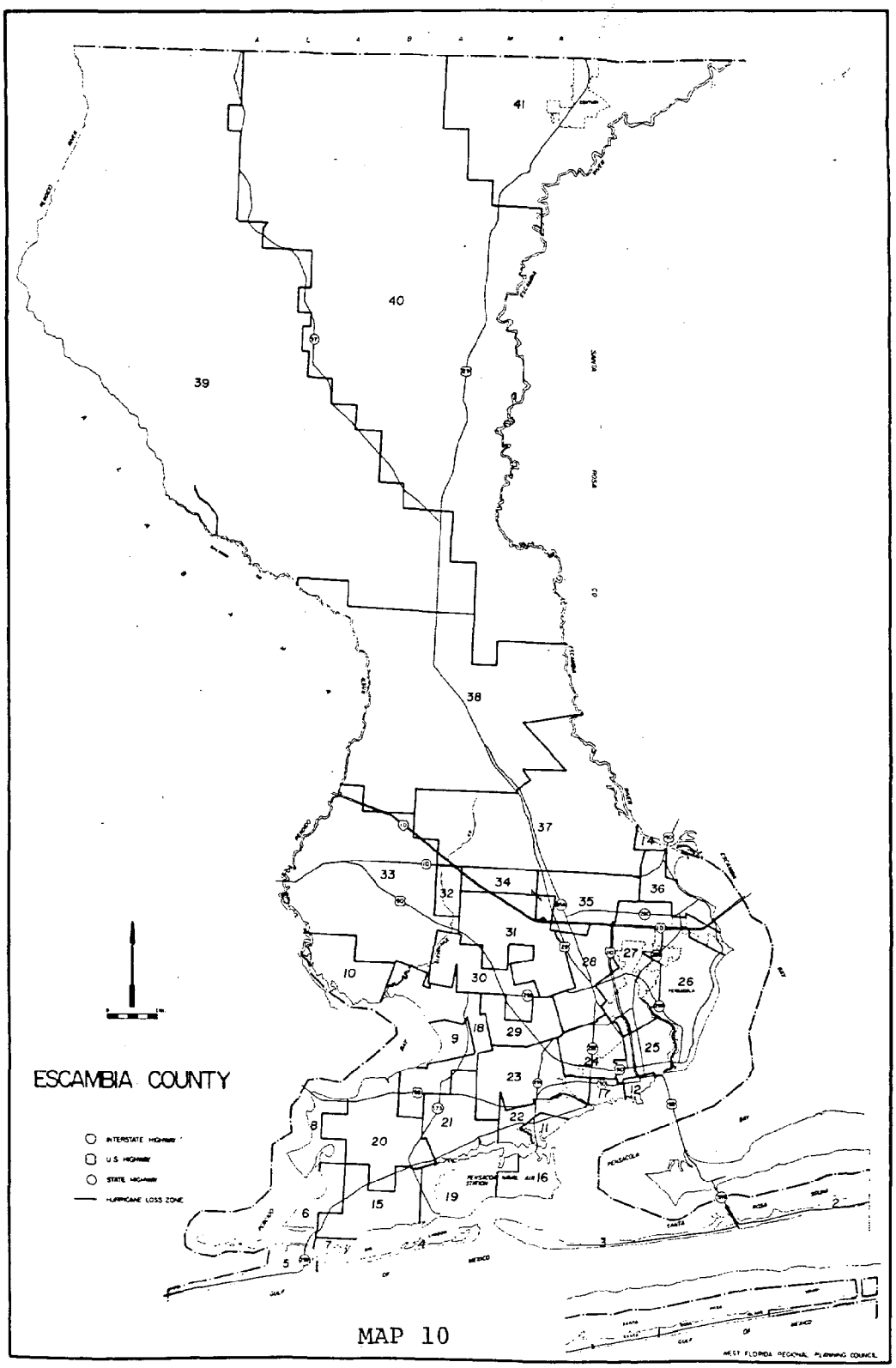
The greater the hurricane surge height of water at the coastline, the further inland the flooding spreads. As the water moves inland more loss zones are affected and structures flooded.

The loss zones are areas with similar elevations and exposure to hurricane conditions. In order to delineate loss zones on a map, locations at 8 feet elevation, for example, have been averaged out to 10 feet for the overall zone. However, in most zones where 50 percent of the terrain is at 5 feet elevation, and 50 percent at 10 feet, the average for the zone would be 5 feet in order to safely project a "worst case" situation. This was necessary because the elevations in the zones could not be subdivided to show all the elevation variations that actually exist. Where higher elevations (50 feet +) are found, large tracts of land are included in the loss zone regardless of the variation in elevation, as long as it does not include lower elevations, 5 to 20 feet for example, which include rivers entering bayous.

The northern portions of the counties have large loss zones, and generally this is where the higher elevations are. Large unpopulated areas such as Eglin Air Force Base and Blackwater State Forest are presented as separate loss zones. The densely populated coastal regions are divided into smaller loss zones (see map 10).

The critical areas for this study involve the coastal loss zones, which include the areas around the edge of the bayous, since this is where the greatest water damage will occur.


HURRICANE SURGE FLOODING & SCENARIO
SCHEMATIC OF HYPOTHETICAL HURRICANE
COUNTY 4
COUNTY 3
COUNTY 1
COUNTY 2
COUNTY 5
C
D
E
D
C
SCENARIO A
SCENARIO B
SCENARIO C
SCENARIO D
SCENARIO E


ESCAMBIA COUNTY
INTERSTATE HIGHWAY
U.S. HIGHWAY
STATE HIGHWAY
HURRICANE LOSS ZONE
MAP 10
WEST FLORIDA REGIONAL PLANNING COUNCIL

CHAPTER III

PROPERTY VULNERABLE TO HURRICANES

Knowing the hurricane surge height and the peak wind speeds for the selected hurricanes, the effects can be forecast for the designated loss zones. The overall land development pattern is divided into four main categories: land use inventory, structural inventory; agricultural inventory; and hazardous materials/waste inventory.

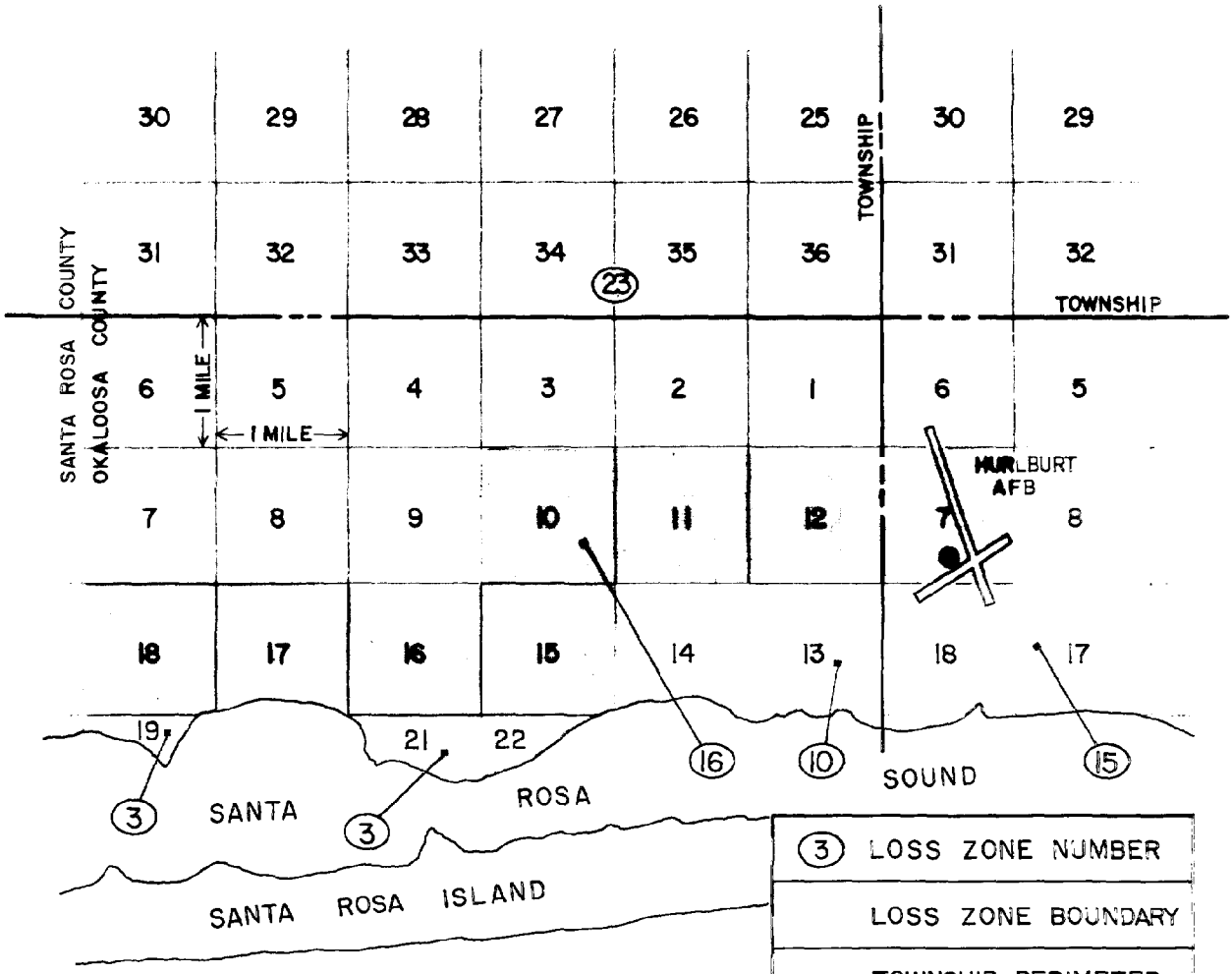
Land Use Inventory

Charts showing the broad classifications of land use exposure to hurricane effects are provided, by county, with damage scenarios included. The damage scenarios beginning with the smallest hurricane (A) and graduating to a large hurricane (E), show how many and what type structure will be affected.

Structural Inventory of Hurricane Loss Zones

The depth of water and peak wind gusts in each hurricane loss zone have been quantified. These two figures are converted into percentage of loss and totaled per type of structure. There are ten structure types: single and multi-family residential, mobile home, commercial, industrial, public utilities and transportation, and government/institution/ military. The county tax role information is recorded by section from the

LOSS ZONES & SECTION / TOWNSHIP DIAGRAM



(3)	LOSS ZONE NUMBER
	LOSS ZONE BOUNDARY
——	TOWNSHIP PERIMETER
	SECTION
12	SECTION NUMBER

- TOWNSHIP -

	6	5	4	3	2	1
	7	8	9	10	11	12
6 MILES	18	17	16	15	14	13
	19	20	21	22	23	24
	30	29	28	27	26	25
	31	32	33	34	35	36

6 MILES

LOSS ZONES	AVERAGE ELEVATION
3	5
10	15
15	15
16	15
23	15

section/township/range system of land measurement. Each of these sections falls within an identified loss zone (see diagram on page 43). The county tax role tapes have identified how many of each type of the ten structure types are located in each section. The percentage of loss to water and wind is applied to each of these ten structure types which vary as to their vulnerability to damage. A home with a wooden floor, rugs, furniture, plasterboard walls will suffer greater damage than will a factory with a cement floor and cinderblock walls and metal equipment. The totals for each loss zone in a county provide an overall county loss and subtotals for each type of structure. This is an important figure for emergency management officials because it identifies single family homes that may be a total loss necessitating temporary shelter for the occupants. It also focuses on potential unemployment and monetary losses for businesses that are closed down. Tables 4, 5, 6, 7, 8, 9, and 10 show the structural inventories of hurricane loss zones for each of the seven counties of the region.

Agricultural Inventory

Agricultural structures are a significant factor in the economic make-up of the agricultural sector in the region. Although few, if any, agricultural structures could possibly be damaged by hurricane surge, wind damage could be extensive. Not only are the structures affected but the ability to produce crops and maintain animals can be directly impacted. A detailed

discussion of potential hurricane damage to agriculture begins on page 52.

Table 4

ESCAMBIA COUNTY

STRUCTURAL INVENTORY OF HURRICANE LOSS ZONES

HURRICANE LOSS ZONE	NUMBER OF STRUCTURES BY TYPE										
	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
*1	345	2,051	0	58	0	7	0	1	0	34	2,496
5	116	620	1	9	0	1	0	0	0	1	748
6	742	319	59	28	1	1	1	1	0	3	1,155
7	16	0	0	0	0	0	0	0	0	0	16
8	148	2	12	8	1	0	0	0	0	0	171
9	216	1	1	1	0	0	0	0	0	0	219
10	23	0	1	0	0	0	8	0	0	0	32
11	536	6	3	44	0	1	0	0	0	12	602
12	184	3	0	283	17	3	0	1	5	102	598
14	98	1	0	0	0	0	0	0	0	0	99
15	533	3	68	16	6	2	6	0	0	4	633
17	1,630	30	2	231	31	10	0	1	13	101	2,049
18	1,430	7	81	17	6	3	16	0	0	6	1,565
19	113	1	12	6	0	0	4	0	0	5	141
20	300	2	44	9	2	2	8	0	0	2	369
21	1,503	12	307	39	4	2	5	0	0	11	1,383
22	2,425	103	8	118	10	7	0	0	0	13	2,684
23	5,875	77	138	271	37	4	0	0	1	35	6,438
24	4,694	32	92	500	47	5	0	0	4	137	1,843
25	5,165	140	1	365	49	7	0	2	16	253	5,119
26	4,265	376	5	154	5	4	0	0	1	28	4,838
27	8,812	612	102	537	57	7	0	0	7	106	10,240
28	4,381	30	141	377	36	4	2	0	0	41	5,012
29	3,460	75	29	72	7	3	1	0	1	8	3,656
30	1,591	5	252	69	5	0	26	0	1	17	1,965
31	3,281	13	189	68	20	4	15	0	0	20	3,610
32	108	0	4	3	0	0	11	0	0	0	126
33	807	4	134	15	0	3	157	1	0	11	1,132
34	825	65	73	40	17	2	13	0	0	9	1,044
35	2,624	77	237	137	21	4	7	0	0	40	3,197
36	1,478	31	7	27	6	0	1	0	1	6	1,557
37	3,934	81	302	109	35	5	101	0	1	29	4,597
38	2,088	19	146	63	10	10	383	0	0	43	2,762
39	552	4	61	26	2	7	1,016	0	0	24	1,692
40	834	7	61	25	1	9	956	0	0	43	1,936
41	967	3	42	62	10	3	382	0	1	46	1,516
TOTALS:	66,099	4,812	2,665	3,787	443	120	3,119	7	52	527	82,294

STRUCTURE CODES

SR -- SINGLE UNIT RESIDENTIAL
MR -- MULTI-UNIT RESIDENTIAL
MH -- MOBILE HOME RESIDENTIAL
C -- COMMERCIAL
I -- INDUSTRIAL
PU -- PUBLIC UTILITIES
AG -- AGRICULTURAL
PT -- PUBLIC TRANSPORTATION
HC -- HEALTH CARE
GI -- GOVERNMENT AND INSTITUTIONAL

**Includes Loss Zones 2 and 3*
(No structures in Loss Zone 4)

Table 5

SANTA ROSA COUNTY

STRUCTURAL INVENTORY OF HURRICANE LOSS ZONES

HURRICANE LOSS ZONE	NUMBER OF STRUCTURES BY TYPE										
	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	1,740	307	4	80	3	2	0	0	0	14	2,150
2	128	0	32	3	0	0	0	0	0	1	164
3	208	0	58	2	1	1	1	0	0	1	272
4	6	0	2	0	0	0	3	0	0	0	11
5	43	0	17	0	1	0	24	0	0	0	85
6	778	3	60	127	9	3	13	1	0	30	1,024
7	280	12	86	1	1	0	9	0	0	1	390
8	601	2	116	26	5	1	47	0	0	2	800
9	2,561	80	102	56	12	1	1	0	2	12	2,827
10	518	26	497	49	8	3	4	0	0	9	1,114
11	180	0	34	3	1	0	2	0	0	2	222
13	34	0	25	1	0	1	2	0	0	1	64
14	143	0	125	2	1	1	118	0	0	2	392
15	662	1	207	27	5	1	59	0	0	8	970
16	59	0	35	5	1	0	29	0	0	2	131
17	631	6	128	43	10	2	20	0	0	13	853
18	1,937	1	316	68	11	6	34	0	0	22	2,445
19	715	0	78	9	3	0	49	0	0	2	856
20	805	7	28	28	2	0	60	0	0	9	939
21	1,565	78	29	48	9	0	11	0	0	18	1,758
22	843	35	122	61	9	0	35	0	2	26	1,133
23	406	0	10	2	0	0	68	0	0	2	488
24	637	0	86	6	5	0	301	0	0	6	1,041
25	219	0	38	9	2	3	359	0	0	11	641
26	770	0	86	71	21	4	897	0	0	32	1,881
27	400	0	84	6	3	1	890	0	0	15	1,399
TOTALS:	16,919	558	2,405	733	123	30	3,036	1	4	241	24,050

STRUCTURE CODES

SR -- SINGLE UNIT RESIDENTIAL
MR -- MULTI-UNIT RESIDENTIAL
MH -- MOBILE HOME RESIDENTIAL
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I -- INDUSTRIAL
PU -- PUBLIC UTILITIES
AG -- AGRICULTURAL
PT -- PUBLIC TRANSPORTATION
HC -- HEALTH CARE
GI -- GOVERNMENT AND INSTITUTIONAL

Table 6

OKALOOSA COUNTY

STRUCTURAL INVENTORY OF HURRICANE LOSS ZONES

HURRICANE LOSS ZONE	NUMBER OF STRUCTURES BY TYPE SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
*1	1,605	2,401	32	163	3	1	0	0	0	16	4,221
3	14	0	0	0	0	0	0	0	0	0	14
4	683	0	0	1	1	0	0	0	0	0	685
5	493	36	4	4	0	0	0	0	0	1	538
7	28	137	0	17	1	0	0	0	0	1	234
8	1,847	147	2	290	19	2	0	0	3	30	2,340
10	89	19	10	5	0	1	0	0	0	1	125
11	1,466	130	20	62	17	0	0	0	0	8	1,753
12	130	148	0	17	0	0	0	0	0	6	301
14	2,621	134	0	74	17	2	0	0	0	12	2,910
15	1,075	151	0	59	8	0	0	0	0	5	1,298
16	693	1	74	11	0	2	0	0	0	1	782
17	3,536	134	110	250	21	6	0	0	3	28	4,088
18	427	0	19	7	3	0	0	0	0	1	457
19	1,574	4	11	19	1	1	0	0	0	5	1,615
20	1,458	3	0	104	13	4	0	0	1	16	1,609
21	3,298	34	54	70	2	0	37	0	1	26	3,572
22	629	1	21	15	0	1	0	0	0	4	671
23	1,637	15	30	96	5	2	115	0	1	12	1,963
24	35	0	1	1	0	0	60	0	0	1	98
25	60	0	3	0	0	0	17	0	0	0	80
26	350	0	16	6	1	3	919	0	0	23	1,318
27	4,791	2	85	307	32	6	905	0	3	92	6,223
28	194	0	2	8	0	2	706	0	0	13	925
TOTALS:	28,793	3,697	494	1,586	144	33	2,759	0	12	302	37,820

STRUCTURE CODES

SR -- SINGLE UNIT RESIDENTIAL
MR -- MULTI-UNIT RESIDENTIAL
MH -- MOBILE HOME RESIDENTIAL
C -- COMMERCIAL
I -- INDUSTRIAL
PU -- PUBLIC UTILITIES
AG -- AGRICULTURAL
PT -- PUBLIC TRANSPORTATION
HC -- HEALTH CARE
GI -- GOVERNMENT AND INSTITUTIONAL

Includes Loss Zones 2 and 6

Table 7

WALTON COUNTY

STRUCTURAL INVENTORY OF HURRICANE LOSS ZONES

HURRICANE LOSS ZONE	NUMBER OF STRUCTURES BY TYPE										
	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	607	1,810	27	21	1	1	13	0	0	2	2,482
2	344	1,608	168	15	4	3	38	0	0	4	2,184
3	229	0	149	4	0	0	72	0	0	0	454
4	270	5	68	6	1	0	43	0	0	2	395
5	23	0	16	0	2	0	6	0	0	0	47
6	801	257	87	22	2	0	94	0	0	9	1,272
7	24	0	12	0	0	0	25	0	0	0	61
8	111	0	61	1	0	0	288	0	0	2	463
9	210	0	38	21	2	0	45	2	0	10	328
10	28	0	7	1	0	0	45	0	0	1	82
11	48	0	10	0	0	0	26	0	0	1	85
12	335	0	143	4	1	0	1	0	0	5	489
13	155	0	55	5	0	0	320	0	0	7	542
14	378	0	75	4	1	0	1,018	0	0	17	1,493
15	1,678	6	72	140	36	2	54	0	1	65	2,054
16	160	0	53	10	4	1	200	0	0	5	433
17	499	1	127	13	3	0	124	0	0	9	776
18	207	0	228	3	1	3	460	0	0	6	908
19	397	0	31	15	4	1	487	0	0	16	951
20	154	0	46	5	1	1	561	0	0	13	781
21	134	0	32	3	2	1	625	0	0	19	866
TOTALS:	6,842	3,687	1,505	293	65	13	4,545	2	1	193	17,146

STRUCTURE CODES

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AG -- AGRICULTURAL
PT -- PUBLIC TRANSPORTATION
HC -- HEALTH CARE
GI -- GOVERNMENT AND INSTITUTIONAL

Table 8

BAY COUNTY

STRUCTURAL INVENTORY OF HURRICANE LOSS ZONES

HURRICANE LOSS ZONE	NUMBER OF STRUCTURES BY TYPE										
	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	58	0	14	4	2	0	8	0	0	1	87
2	0	0	0	0	0	0	0	0	0	1	1
3	69	0	2	21	0	1	2	0	0	17	112
4	164	2	39	103	2	1	0	0	0	7	318
5	112	0	4	13	0	0	0	0	0	1	130
6	0	0	0	0	0	0	23	0	0	0	23
7	63	0	14	1	0	0	18	0	0	2	98
8	99	0	4	1	0	0	7	0	0	2	113
9	541	2	73	42	10	0	2	4	1	10	685
10	479	17	1	79	5	1	0	0	1	26	609
11	132	4	9	35	0	0	1	1	0	16	198
12	155	0	33	4	1	2	78	0	0	4	277
13	1	0	0	0	0	0	4	0	0	0	5
14	0	0	0	0	0	0	20	0	0	0	20
15	0	0	0	0	0	0	1	0	0	0	1
16	63	0	41	47	5	0	5	0	0	6	167
17	76	0	21	12	0	0	19	0	0	8	136
18	80	11	14	18	1	1	7	0	0	4	136
19	20	0	5	3	0	0	8	0	0	0	36
20	187	0	60	12	1	1	41	0	0	9	311
21	208	0	61	5	4	0	10	0	0	4	292
22	70	0	7	1	0	0	61	0	0	0	139
23	24	0	0	1	0	0	5	0	0	0	30
24	323	1	28	10	1	0	9	0	0	7	379
25	586	5	128	49	6	1	9	0	1	20	805
26	625	11	66	54	24	0	0	0	0	42	822
27	375	0	19	21	14	1	0	0	2	30	462
28	756	11	6	168	27	3	2	0	2	57	1,032
29	24	4	0	11	2	0	1	0	0	11	53
30	314	3	18	83	27	1	28	1	0	18	493
31	100	0	21	0	0	0	11	0	0	0	132
32	169	0	48	23	19	2	5	0	0	9	275
33	112	0	13	4	1	0	12	0	0	1	143
34	93	0	46	1	1	1	95	0	0	17	254
35	382	0	277	14	2	3	634	0	0	10	1,322
36	301	0	200	9	0	0	76	0	0	4	590
37	338	0	144	4	1	1	288	0	0	9	785
38	25	0	11	1	1	0	54	0	0	4	96
TOTALS:	7,124	71	1,427	854	157	20	1,544	6	7	357	11,567

STRUCTURE CODES

SR -- SINGLE UNIT RESIDENTIAL
MR -- MULTI-UNIT RESIDENTIAL
MH -- MOBILE HOME RESIDENTIAL
C -- COMMERCIAL
I -- INDUSTRIAL
PU -- PUBLIC UTILITIES
AG -- AGRICULTURAL
PT -- PUBLIC TRANSPORTATION
HC -- HEALTH CARE
GI -- GOVERNMENT AND INSTITUTIONAL

Table 9

HOLMES COUNTY

STRUCTURAL INVENTORY OF HURRICANE LOSS ZONES

HURRICANE LOSS ZONE	NUMBER OF STRUCTURES BY TYPE										
	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	1,047	0	256	75	20	10	1,408	0	6	55	2,877
2	1,750	2	255	142	17	14	2,563	2	0	105	4,850
TOTALS:	2,797	2	511	217	37	24	3,971	2	6	160	7,727

STRUCTURE CODES

SR -- SINGLE UNIT RESIDENTIAL
MR -- MULTI-UNIT RESIDENTIAL
MH -- MOBILE HOME RESIDENTIAL
C -- COMMERCIAL
I -- INDUSTRIAL
PU -- PUBLIC UTILITIES
AG -- AGRICULTURAL
PT -- PUBLIC TRANSPORTATION
HC -- HEALTH CARE
GI -- GOVERNMENT AND INSTITUTIONAL

Table 10

WASHINGTON COUNTY

STRUCTURAL INVENTORY OF HURRICANE LOSS ZONES

HURRICANE LOSS ZONE	NUMBER OF STRUCTURES BY TYPE										
	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	74	0	11	1	0	0	24	0	0	0	110
2	335	1	139	4	0	1	242	0	0	0	722
3	885	1	165	41	2	1	753	0	0	1	1,849
4	2,013	4	88	167	17	7	3,050	0	1	134	5,481
TOTALS:	3,307	6	403	213	19	9	4,069	0	1	135	8,162

STRUCTURE CODES

SR -- SINGLE UNIT RESIDENTIAL
MR -- MULTI-UNIT RESIDENTIAL
MH -- MOBILE HOME RESIDENTIAL
C -- COMMERCIAL
I -- INDUSTRIAL
PU -- PUBLIC UTILITIES
AG -- AGRICULTURAL
PT -- PUBLIC TRANSPORTATION
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GI -- GOVERNMENT AND INSTITUTIONAL

AGRICULTURAL INVENTORY

Agriculture is a major contributor to the economic structure of the seven county area. A hurricane moving through the area can cause large losses of field crops, vegetables, livestock, dairy, poultry and timber. Torrential rain and high winds can destroy the field crops and vegetables, disrupt dairy and livestock operations and may be disasterous to the poultry industry. The timber industry can experience massive tree blow-down areas. The importance of estimating the value of each of these agricultural efforts is important to emergency managers and disaster assistance teams. Federal and State financial assistance to the agricultural sector must be expeditiously handled after hurricane devastation. The magnitude of potential dollar losses may be much greater than we can perceive at this time. The loss of agricultural income ripples down to numerous businesses supporting the farming sector.

Farming

A difficult problem in arriving at a dollar value for each type of agriculture endeavor is the fluctuating market price and the shifting from one type of crop to another as potential prices change in the marketplace. In addition, average yields per acre, date of sale and prices paid by processors varies. However, the figures presented may fluctuate from month to month, year to year, but are a general price from which agricultural values can be estimated.

Should a hurricane destroy a large percentage of a field crop, the price in the marketplace may rise reflecting the supply and demand impact. If the product has been degraded but is marketable the price paid to the farmer could decrease.

The hurricane season and the harvest season for most crops in our region occur at the same time (Table 11). The table shows that most of the field crops are harvested during August, September and October which are the three prime months for hurricanes to strike the region. Only tobacco is harvested prior to this prime vulnerability period and it is grown only in Holmes County. Crop destruction late in the growing season usually precludes another seeding and harvest. Loss of major income producing crops is a serious financial setback for the farmer who may not have the necessary funds to plant winter and spring crops. In addition to crop damage, equipment and building damage further increases the severity of the problem. Table 12 indicates how much of the county acres are dedicated to farming and the percentage in crops or forestry. The value of farms in our region is outlined in Table 13.

In the seven county region there are 2,940 farms actively engaged in an agricultural pursuit. The average value of the land, buildings and farming structures is $207,430. The average size of the farms is 194 acres which runs from an average high of 246 acres in Walton County to a low of 158 acres in Escambia County.

Table 11.
Agricultural Vulnerability Periods to Hurricanes

```
                        June      July        August    September    October    November
Hurricane Season   /_____________________:::::::::::::::::::::::::::::::_____________/

Crop Season

   Corn

   o  Grain        ----------------*----.-.-.-.-.-.-.-.-.-*________*/////////////// *

   o  Forage       ----------------------------*-.-.-.-.-*_______________*//////////*

Sorghum            *------------------*-.-.-.-.-.-.-.*____________*//////////*

Soybeans           ----------------*-.-.-.-.-.-.-.-.-.-.-.*______________*////////////*

Peanuts            ------------------------*-.-.-.-.-.-.-.-*____________*////////*

Tobacco            *-.-.-.*_________*.-.-*

Cotton             ----------------------------*-.-.-.-.-.-.*__________*///////////////*
```

* Notes change of farming activity
---- Planted
-.-. Begin Harvest
____ Most active harvest time
//// End of harvest season

Table 12.
Farmland

County	Approx. county land in acres	Farm Acres	% of Total Acreage	Land in Farms by Use (%)		
				Cropland	Woodland	All Other
Escambia	425,600	79.991	18.8	62	28	10
Santa Rosa	660,352	92,386	14.0	73	17	10
Okaloosa	604,350	70,612	11.6	55	28	17
Walton	673,600	115,433	17.1	62	20	18
Bay	478,336	18,676	3.9	47	35	18
Holmes	308,352	106,128	34.4	56	26	18
Washington	374,592	79,647	21.2	50	31	19

Table 13.
Farm Value

	Number of Farms	Sales of $2500+	Average Value of Land, Bldgs/Farm (1,000's)	Average Size in Acres
Escambia	523	348	205	158
Santa Rosa	480	353	263	192
Okaloosa	371	265	206	190
Walton	470	344	204	246
Bay	93	51	245	201
Holmes	579	465	165	183
Washington	424	283	164	188

Source: Florida Statistical Abstract, 1984.

Farms, as they are categorized by the federal government system, are listed by county and reflect the 1982 Agriculture Census figures are listed in Table 14.

Table 15, Market Value of Agricultural Products Sold (1982), clearly shows that the majority of the market value is in poultry and poultry products; dairy products; and cattle and calves. These three broad livestock categories are 91.3 percent of the total agricultural value: crops, 8.7%, make up the remainder. However, these three livestock categories depend on field crops to feed the beef cattle, poultry and milk cows. An interruption in the locally grown supply of feed due to storm damage would require transporting the products from other areas. The additional cost of producing the product cannot be added to the price paid to the farmer.

A hurricane that kills a large percentage of the poultry and cattle or destroys the major feed crops is catastrophic; however, as is more often the case the livestock survive and the dollar losses are on a daily basis reflecting the inability to market the product. The following charts are provided to present an estimated daily dollar loss, while bearing in mind market price fluctuations. In addition, the charts indicate in what counties what agricultural products are a major income producer. They also indicate in what types of agricultural endeavors there may be unemployment after hurricane passage. State and Federal assistance can be focused on the major agricultural products to accelerate the recovery and reduce the economic loss by providing low interest rates for money.

Table 14.
Farms by Standard Industrial Classification (1982)

	Escambia	Santa Rosa	Okaloosa	Walton	Bay	Holmes	Washington
Cash Grains (1)	203	156	89	132	6	91	91
Field Crops (2)	29	54	17	20	2	53	23
o Cotton	--	17	--	1	---	--	--
o Tobacco	--	--	--	--	---	--	--
o Sugar Crops, Potatoes, hay, peanuts & other field crops	29	37	17	19	2	53	23
Vegetables & Melons	34	16	16	13	7	19	19
Fruits & Tree nuts	21	12	15	13	3	9	2
Horticultural specialties	27	13	11	5	15	2	6
General farms (3)	9	44	8	18	1	39	15
Livestock (4)	165	153	182	203	44	264	240
o Beefcattle (5)	123	102	129	147	23	187	200
Dairy Farms	10	2	1	4	1	16	7
Poultry & eggs	2	5	14	38	3	71	5
Animal specialities (6)	18	19	11	21	10	11	8
General farms (7)	4	5	7	3	1	4	8

(1) Includes wheat, rice, corn, soybeans, barley, buckwheat, cowpeas, dry field and seed beans and peas, emmer, field seeds, flakseed, lentils, mustard seed, oats, popcorn, rye, safflower, sorghum and other small grains.
(2) except cash grains
(3) primarily crop
(4) except dairy, poultry, and animal specialities
(5) except feedlots
(6) fur-bearing animals, rabbits, horses, bees, fish in captivity except fish hatcheries.
(7) primarily livestock

1982 Census of Agriculture; Geographic Area Series, Part 9, Florida, County Data.

Table 15.

Market Value of Agricultural Products Sold (1982)[2]

(All figures 1,000)	Escambia	Santa Rosa	Okaloosa	Walton	Bay	Holmes	Washington
Crops:							
o Fruits, nuts, berries	d	28	8	188	d	7	5
o Nursery & green-house products	403	595	114	29	684	d	22
o Other crops	d	3144	297	614	d	1706	573
Livestock poultry and their products:	4704	3751	4773	13709	484	17947	6295
o Poultry & poultry products	7	d	1408	9453	14	11640	d
o Dairy products	3599	d	d	241	d	2310	2921
o Cattle & Calves	916	1350	2661	2565	105	3057	2054
o Hogs & Pigs	d	d	d	d	d	d	496
o Sheep, lambs & wool	d	d	d	d	d	d	3
o Other Livestock and livestock products (1)	51	139	d	224	d	76	d

d. *withheld to avoid disclosing data for individual farms.*

(1) includes all livestock and livestock products not listed separately.
(2) 1982 Census of Agriculture, Vol. 1, Geographic Area Series, Part 9 Florida, State of Florida, Bureau of the Census.

Field Crops

The destruction of field crops and vegetables by hurricane wind and flooding usually results in a total loss. The harvest period for most crops grown in our region falls in the middle of the period when hurricanes are most prevalent--August, September and October.

The major field crops lost during a hurricane and soybeans, corn, sorghum and small grains. The acreage planted in each county varies from year to year; however, the figures provided in Tables 16, 17 and 18 indicate a general value for three of the major field crops, corn and soybeans and peanuts for the 1983 growing season.

Table 16.
Soybean Crop Value By County
1983

County	Planted (acres)	Harvested (acres)	Yield (per acre)	Bushels	Approx. Value[1] ($)
Escambia	21,500	21,000	31	630,000	5,134,500
Santa Rosa	34,500	33,500	26	871,000	7,098,650
Okaloosa	16,000	15,500	20	310,000	2,526,500
Walton	29,500	28,500	22	627,000	5,110,050
Bay	--	--	--	--	--
Holmes	18,500	18,000	20	360,000	2,934,000
Washington	16,000	15,500	24	372,000	3,031,800

[1]Computed at $8.15/bushel

Table 17.
Corn Crop Value By County
1983

County	Planted (acres)	Harvested (acres)	Yield/Acre (bushels)	Approximate Value[1] ($)
Escambia	8,000	3,000	83	946,200
Santa Rosa	6,000	4,700	70	1,250,200
Okaloosa	3,000	2,400	50	456,000
Walton	2,500	2,000	60	446,000
Bay	--	--	--	--
Holmes	7,000	3.400	55	710,600
Washington	3,000	2,400	65	592,800
TOTALS	29,500	17,900	63.8 (AV)	4,411,800

[1]Computed at $3.80 per bushel

Table 18.
Peanut Crop Value By County
1983

County	Acres Harvested	Yields per acre	Production lbs. (000)	Value[2] (dollars)
Escambia	35	2,060	72	17,592
Santa Rosa	5,550	3,365	18,676	4,556,883
Okaloosa	535	3,360	2,034	496,296
Walton	1,585	2,505	3,970	968,680
Bay	--	--	--	--
Holmes	3,715	2,715	10,086	2,460,984
Washington	875	3,050	2,669	651,708
TOTALS	12,295	2842.5	37,507	9,151,708

[1]Computed at $0.24/lb.

Milk Production

Milk production is centered in three counties, Escambia, Holmes, and Washington Counties. There are small herds in Walton and Bay Counties--Santa Rosa and Okaloosa have no milk producing cattle.

There are two federally designated marketing areas, #93 and #6, where milk is sold to consumers in the seven county area (not necessarily where the milk is produced). The price received per hundred weight varies between the two major market order areas. Escambia, Santa Rosa, Okaloosa and Walton Counties are in area #93 which comes under the Alabama Federal Order. Prices per hundred weight are in the $14.00 range. Farmers receive approximately $12.00 to $12.50 of this sum after paying for pick-up, transportation, and tax on the product. Holmes, Washington and Bay Counties are in marketing area #6, Upper Florida, where milk prices are generally in the $15.50 price range per hundred weight.

Tank trucks pick-up the refrigerated milk at the farms for transport to one of the major companies processing and marketing the product. The large trucks collecting the milk are not refrigerated requiring off-loading at the plant no more than two to three days after pick-up at the farms. Escambia County, where a major portion of the herd exists, sells milk to companies in Mobile, Pensacola and Jacksonville. Holmes and Washington Counties sell milk to processors in Escambia, Tampa, and Jacksonville.

Hurricane debris blockage and flooding of roads, and the shutdown of major processing establishments due to damage, could curtail timely processing and cause spoilage of the milk. Disruption of electrical power to farms would have a minor impact since most farms have portable generators to power automatic milking equipment and refrigeration units prior to pick-up in the tank trucks. A major milk producing county, such as Escambia or Holmes, might potentially lose $113,000 to $122,000 per day if the milk was lost due to power outage, lack of transportation or other processing delays.

Table 19 outlines the milk production in the seven county area, and the potential impact financially, an extended disruption between farm and retailer might have for this industry.

Table 19.
Milk Production

County	Milk Cows	Average lbs. per cow/day	Average Price per 100 weight	Income/day
Escambia	2400	36.5	$14.00	$122,640
Santa Rosa	0	--	--	--
Okaloosa	0	--	--	--
Walton[1]				
Holmes	2000	36.5	$15.50	113,150
Washington	1250	36.5	$15.50	70,718
Bay	60	36.5	$15.50	3,394
Average/Total	5710	36.5	$14 to $15.50	$946,902

[1]No figures available.

Poultry and Egg Production

Chicken farms producing broiler chickens are located primarily in Okaloosa, Walton and Holmes Counties. During hurricanes there are some major problems faced by farmers. The structure housing the chickens must remain intact, providing protection from the wind. The other problem is loss of electricity which can be provided by generators. Large broiler farms require processing equipment to continue on a daily basis. Once this daily sequencing is delayed for an extended period, the chickens become too large to be used. Refrigeration and air conditioning are essential to maintain sanitary conditions and the quality of the processed broilers. The incubation of eggs in the hatchery is dependent on a constant oxygen supply so the embryos do not suffocate. From the hatcheries to the processed broilers an uninterrupted flow in the production schedule is essential or the losses can be disastrous. Table 20 indicates the broiler production in our region.

Table 20.
Broilers

County	Broiler Farms	No. of Broilers	Lbs. produced	Yearly value	$ Value per day
Escambia	0	--	--	--	--
Santa Rosa	3	90	315	101	--
Okaloosa	8	1,261,525	4,415,337	1,412,907	3,870
Walton	34	5,146,789	18,013,761	5,764,403	15,792
Bay	1	*	*	*	*
Holmes	55	10,095,627	35,334,694	11,307,102	30,978
Washington	1	*	*	*	*

Average broiler weight 3.5 lbs.
Average 1984 broiler price $0.32 lb.

*Information withheld to avoid disclosure about individual farms.

Eggs

Egg production is affected by hurricane conditions. Assuming the chickens can be protected from wind and flooding the major problem is loss of electricity for extended length of time and the loss of egg production. Layer farms are located primarily in Holmes and Washington Counties although there is production in the other counties.

Table 21.
Layers

County	Layer Farms	Average # of layers	Av. price dz. eggs	Average # eggs/bird per day	Average value per day
Escambia	66	1,629	$0.64[1]	67[2]	$58.00
Santa Rosa	--	--	$0.64	67	--
Okaloosa	--	--	$0.64	67	--
Walton	--	--	$0.64	67	--
Bay	15	550	$0.64	67	$20.00
Holmes	58	117,200	$0.64	67	$4188.00
Washington	53	6,162	$0.64	67	$220.00

[1] 1984 price

[2] 1984 average eggs per layer

Should a hurricane devastate a large broiler and egg producing county, such as Holmes, a potential daily loss of $35,000 can be anticipated (broilers, $30,978/day; eggs, $4,188/day). This figure does not include damage to structures, feed losses, or chicken mortality.

FORESTRY

The effects of hurricane winds to trees commercially grown for sawtimber or pulp in our region can have a serious impact on the industry. The trees take many years to reach a marketable size for cutting. Trees blown-down often cannot be used for sawtimber due to the degradation of the wood, and therefore must be used for pulp. Saplings and immature trees blown-down are a total loss to the commercial forester since they can not be processed for pulp nor timber.

The industry must process the trees after blow-down before decay begins, flooding the market and driving prices down. Not only do the growers suffer extensive losses in volume, but also in dollars earned per cord or boardfeet. The added cost of hauling the wood out from a massive tree blow-down over damaged and flooded roads greatly increases the harvesting costs. In effect, we have lower prices paid for the wood and increased harvesting costs.

The seven county region has extensive forestland in proportion to the total acreage in the counties. As a county-by-county low and high average the forested land is 61-86 percent of the total acreage. Almost all of the forested land is categorized as commercial forest. (See Table 22). The commercial forest is divided into eight ownership classes showing acreage in each class. (See Table 23). The acreage figures presented in Table 23 are shown as percentages in Table 24 which identifies at a glance where and what type of owner has the commercial forested land in each county.

The forest industry owns approximately twenty-nine percent (29%) of all the forested land in the seven county region. In addition, it purchases timber on private property, both corporate and individual, as well as in some federal areas, such as Eglin Air Force Base reservation, and Blackwater River State Forest.

Table 22.
Forestland

County	All Land[1]	Total	Commercial Forest	Unproductive Forest	Productive-Reserved	Nonforested Land[2]
Escambia	424,754	275,494 (65%)	268,028	7,087	379	149,260 (35%)
Santa Rosa	653,397	500,681 (77%)	500,356	--	325	152,716 (23%)
Okaloosa	598,961	471,489 (79%)	470,230	627	632	127,472 (21%)
Walton	683,559	544,768 (80%)	541,959	2,633	176	138,791 (14%)
Holmes	307,994	188,003 (61%)	187,690	--	313	119,991 (39%)
Washington	387,383	301,899 (80%)	301,744	--	155	85,484 (20%)
TOTAL	3,549,440	2,706,046	2,691,118	12,377	2,561	843,384

[1]U.S. Geological Survey

[2]includes some acres of water classified as land by the survey.

SOURCE: Forest Statistics for Florida, 1980
William Bechtold and Raymond Sheffield
Asheville, North Carolina

Table 23.
Commercial Forest Land
By Ownership Class and County - 1980
(acres)

County	All Ownerships of forested land	Ownership Class: National Forest	Federal Misc.	State	Co. and Municipal	Forest[1] Industry	Farmer	Misc. - Private Corporate	Misc. - Private Indiv.
Escambia	268,028	--	3,017	855	88	80,006	18,920	79,464	85,678
Santa Rosa	500,356	--	60,467	119,110	909	166,743	25,943	31,713	95,471
Okaloosa	470,230	--	209,540	59,457	822	44,358	13,304	19,957	122,792
Walton	541,959	--	136,133	136	95	127,200	68,551	46,900	162,944
Bay	421,111	--	21,609	5,147	358	249,761	3,434	78,984	61,818
Holmes	187,690	--	499	175	434	55,843	81,269	--	49,470
Washington	301,744	--	--	2,155	241	53,375	73,697	98,262	74,014

[1]does not include farmer-owned and miscellaneous private lands leased to forest industry.

SOURCE: Forest Statistics for Florida, 1980.
Bechtold, W.A. and Sheffield, R. M.
Asheville, N.C.

Table 24.
Commercial Forestland
Percentage Ownership Class and County - 1980

County	All Ownership of Forested Land	Ownership Class								
		National	Fed.	Misc.	State	County & Munic.	Forest[1] Indus.	Farm	Misc. Corp.	Private Individual
Escambia	268,028	--	1.1	0.3	.03	29.8	7.0	29.6	31.9
Santa Rosa	500,356	--	12.0	23.8	0.2	33.3	5.2	6.3	19.0
Okaloosa	470,230	--	44.5	12.6	0.2	9.4	2.8	4.2	26.1
Walton	541,959	--	25.1	0.02	0.01	23.4	12.6	8.6	30.0
Bay	421,111	--	5.1	1.2	0.08	59.3	0.8	18.7	14.7
Holmes	187,690	--	0.2	0.1	0.2	29.7	43.2	--	26.3
Washington	301,744	--	--	0.7	0.07	17.6	24.4	32.5	24.5

[1]Does not include farmer-owned and miscellaneous private lands leased to forest industry.

The Commercial Forest Land by Stand-size Class, Table 25, is included to indicate the breakout of the various timber sizes. One of the significant factors which the table shows is the relationship between saplings/non-stocked (non-producing) areas and the sawtimber/poletimber (producing) area figures. For example, in Bay County the sapling/non-stocked areas are 280,000 acres in relation to sawtimber/poletimber 141,103 acres which means sixty-six percent (66%) of the timber acres are not being used or the trees are immature. The mature-immature classification can be related directly to value in dollars.

Table 25.
Commercial Forest Land, by Stand-size Class, 1980
(Acres)

County	All Stands	Stand-size class			
		Sawtimber[1]	Poletimber[2]	Saplings/ Seedlings[3]	Non-Stocked Areas[4]
Escambia	268,028	102,178	87,628	67,176	11,046
Santa Rosa	500,356	183,384	142,234	148,274	26,464
Okaloosa	470,230	179,764	82,598	141,550	66,318
Walton	541,959	160,911	137,015	153,749	90,284
Bay	421,111	55,883	85,220	236,247	43,761
Holmes	187,690	59,840	62,868	51,390	13,592
Washington	301,744	69,690	59,941	115,803	56,310

[1]Live trees of commercial species; softwoods must be at least 9.0" and hardwoods 11.0" in diameter at breast height.

[2]Stands at least 16.7% stocked with growing-stock trees of which half of more of this stocking is in poletimber and sawtimber trees.

[3]Stands at least 16.7% stocked with growing stock trees of which more than half of the stocking is sapling and seedlings. Saplings are 1"-5" in diameter at breast height.

[4]Commercial forest land less than 16.7% stocked with growing-stock trees.

This study deals with potential dollar losses. The chart shows the timber industry in each county with approximate dollar values for various categories of timber, such as pine, softwoods, hard woods, etc. These categories are divided into sawtimber and growing stock. Dollar values can be computed by using average market prices for thousands of board feet and the price of a cord of wood. Table 26 shows the approximate value of the various types of timber in each county. The values used are normal market prices and do not reflect the downward price trends that normally occur after a hurricane.

Table 26.
Commercial Forest Land, Volume of Sawtimber and Growing Stock - 1980

County	All Species	Pine	Other Softwood	Soft Hardwood	Hard Hardwood	Sawtimber Total Value[1]
Sawtimber	/-.-.-.-.-.-.-.-.-.-.-thousand board feet-.-.-.-.-.-.-.-.-.-./					
Escambia	912,555	513,354	12,151	276,560	110,490	
		($85)[1]	($0.86)	($19.91)	($1.79)	$107.5
Santa Rosa	1,444,564	1,054,809	120,659	198,005	71,091	
		($174)	($8.59)	($14.25)	($1.15)	$197.9
Okaloosa	1,149,692	944,741	60,706	73,829	70,416	
		($156)	($4.32)	($5.25)	($1.14)	$166.7
Walton	1,135,832	764,907	48,298	275,481	47,146	
		($126)	($3.43)	($19.83)	($0.76)	$150.0
Bay	326,803	249,255	22,837	48,985	5,726	
		($ 41)	($1.63)	($ 3.53)	($.093)	$ 44.0
Holmes	414,319	209,208	25,802	122,565	56,744	
		($ 34)	($1.84)	($ 8.82)	($0.92)	$ 45.5
Washington	475,897	172,706	112,629	104,516	86,046	
		($ 28)	($8.11)	($ 7.52)	($1.39)	$ 45.0
Growing Stock						Growing Stock Total Value[1]
Escambia	292,966	173,636	2,846	82,357	34,127	
		($43.7)	($0.20)	($ 5.90)	($0.55)	$ 50.3
Santa Rosa	466,973	317,635	36,203	87,358	25,777	
		($72)	($2.60)	($ 6.28)	($0.41)	$ 81.3
Okaloosa	315,594	237,564	14,561	41,350	22,119	
		($99)	($1.04)	($ 2.97)	($0.36)	$103.3
Walton	383,275	248,740	11,533	102,743	20,259	
		($61)	($0.83)	($ 7.39)	($0.33)	$ 69.5
Bay	136,332	107,229	9,264	14,093	5,746	
		($31)	($0.66)	($ 1.01)	($0.09)	$ 32.7

Table 26. (continued)
Commercial Forest Land, Volume of Sawtimber and Growing Stock -- 1980

Growing Stock

County	All Species	Pine	Other Softwood	Soft Hardwood	Hard Hardwood	Sawtimber Total Value[1]
	/-.-.-.-.-.-.-.-.-.-.-.-thousand board feet-.-.-.-.-.-.-.-.-.-./					
Holmes	154,681	71,222 ($18)	6,041 ($0.43)	56,435 ($ 4.06)	20,983 ($0.34)	$ 22.8
Washington	154,566	53,223 ($12)	26,108 ($1.88)	44,770 ($ 3.22)	30,465 ($0.49)	$ 17.6

[1]All dollar figures are approximate values in the millions of dollars.

Forest product prices fluctuate within a range; therefore, both the average high and low prices are provided as well as an average price (see Table 27). The three main categories for timber use are pulpwood, chip-n-saw and sawtimber. After a hurricane we can assume prices will be at the lower end of the scale.

Table 27.

Northwest Florida Pine Stumpage Prices, 1984

Pulpwood (Standard Cord)		Chip-N-Saw (Standard Cord)		Sawtimber (per 1,000 boardfeet, Scribner)	
Average	Range	Average	Range	Average	Range
$30	$24-34	$47	$40-55	$165	$153-177

Adding the sawtimber value to the growing stock value provides a total value for timber in each of the seven counties in the region (see Table 28). Three counties possess sixty-eight percent (68%) of the dollar value of timber in the region--Santa Rosa, Okaloosa and Walton Counties. Since these counties are bordering counties a category 3, 4, or 5 hurricane entering Okaloosa, the county in the center of the three, could damage a major portion of the timber value in the three largest timber producing counties.

The damage is caused by hurricane strength winds; whereas, in some regions in Florida, saltwater inundation is a problem which can cause long term tree effects. This is not the case in our region.

Table 28.
Total Timber Value

County	Sawtimber Value	Growing Stock Value	Total Value
	($ millions)		
Escambia	98.50	50.25	148.7
Santa Rosa	188.0	78.50	266.5
Okaloosa	160.40	101.60	262.0
Walton	139.80	65.90	205.7
Bay	44.0	32.0	76.0
Holmes	40.9	20.8	61.7
Washington	38.2	15.3	53.5

In addition to tree blow-down, the industry is also faced with transportation problems after a hurricane. Not only is the soil saturated and areas flooded but the secondary road system may be impassable due to downed electric lines, poles, and debris. The use of heavy trucks can be difficult, if not dangerous, due to the weakening of road foundations and bridges by storm erosion.

The potential commercial forest industry losses for our region could be extensive with large economic losses incurred not only by the growers and processors, but the supporting industries as well. It is a major natural resource and along with other agricultural sectors continues to be a long term asset.

HAZARDOUS WASTE

The definition of a hazardous waste is any discarded material which may pose a threat to human health and the environment according to the criteria established by the U.S. Environmental Protection Agency (EPA). It is further defined as a solid waste which may cause an increase in serious irreversible or incapacitating reversible illness. The discarded waste has one or more of the following properties--ignitable, corrosive, reactive, and toxic. There are more than 300 chemical compounds that exhibit the characteristics of a hazardous waste.

Congress enacted the Resource Conservation and Recovery Act in 1976 to deal specifically with hazardous wastes, which prior to enactment, were often dumped in landfills. Leakage from landfills often contaminated drinking water sources.

Industries generating more than 1000 kg (approximately 2000 pounds) a month were required to report to EPA what system is in use to dispose of the hazardous waste. Businesses generating less than 1000 kg/month (2000 lbs.) now come under the Small Quantity Generator program administered by Florida DER (Solid and Hazardous Waste).

Nationally there are four primary industries, chemicals and associated products, machinery, primary metals, and paper products which account for more than 84% of the hazardous waste generated.

One of the major hurricane threats confronting governments is the release of hazardous waste into the environment where it could contaminate drinking water sources and kill acquatic or

terrestrial plant and animal life. Due to the wide dispersion patterns caused by very strong winds from varying directions, heavy rainfall, and high water levels, the release may not be discovered or go unattended for 12-24 hours. Equipment to contain the release and repair the damage may not be able to reach the location for several days.

The wastes that are generated from manufacturing processes are normally stored in 55 gallon drums, pumped into outdoor surface impoundments, storage tanks, injected into deep wells, or chemically neutralized on site. Transportation companies haul wastes to locations out-of-state where it is treated. Most of the large quantity generators of hazardous waste have located storage areas at higher elevations safe from storm surge, static water rise, and riverine flooding (see Table 29). Those areas at 5-15 feet elevation, located along the shorelines, are vulnerable to wave and wind battering action, undermining of foundations, and breaching of containment areas. Heavy rainfall (trapped by diking or containment walls) during a hurricane passage may inundate hazardous waste storage areas. These potential problems are not only a concern of the industries involved but emergency management officials, the Coast Guard, and health officers.

Although the previous information has been discussing hazardous <u>waste</u>, there is also the consideration of hazardous <u>materials</u>--raw materials before they are used in the manufacturing processes. Considerable quantities of these raw materials are transported into the region by ship, barge, truck, and train and stored in large tanks or in drums. In the study area there are

large storage tanks in close proximity to the bays and rivers where the potential for accidental release of these hazardous materials is greatly increasing and the problem of dispersion magnified. If the stored hazardous materials are released into the environment they immediately are classified as hazardous waste.

The effort to identify storage locations, chemicals and quantities involved are underway by the Florida Department of Environmental Regulation. These findings may provide insight for industry to further protect the stored hazardous materials and to provide emergency management officials with additional information for hurricane mitigation actions that can be implemented.

This study focuses on hazardous waste. Future revisions will have to address hazardous materials as well as hazardous waste vulnerability to hurricane surge, flooding, and wind.

Table 29.
Hazardous Waste Data

Name	City	Storage Process Code	Storage Design Capacity	Approx. Elev.	Hazardous Waste	Disposal	Quantity Tons Metric
Naval Air Station	Pensacola	Containers Surface Impoundment	27,500 gals.	10'	spent halogenated solvents used in degreasing	containers	119.7
					spent cyanide plating; bath solutions from electroplating	other	140,616
					solid waste (not HW) ignitability	containers	90.72
					wastewater treatment sludges from electroplating operations	treatment	2,449.4
Air Products	Pace	Containers		50'	no hazardous waste	containers	
Escambia Treating Company (not in operation 1984)	Pensacola	Surface Impoundment	225,000 gals. per day 25 cu. yds.	86'	bottom sedimentation sludge from treatment of wastewaters from wood preserving using creosole and/or penta-chlorophenol	surface impoundment	9.0
					phenol, 2-4-6 trinitro ammonium salt	waste pile	0.45
American Cyanamid	Milton	Deep Well		100'	dilute sulphuric acid neutralized	deep well injection	19,700
					dilute sodium hydroxide neutralized	impounded and treated	12,411
Monsanto	Gonzalez	Storage Containers	493,020 gals.		spent non-halogenated solvents	container	6.8
		Treatment surface Impoundments	2,736,000 u		sludge from oil baths where cyanides used	containers	1.36

Table 29. (continued)

Name	City	Storage Process Code	Storage Design Capacity	Approx. Elev.	Hazardous Waste	Disposal	Quantity Tons Metric
Monsanto					vanadic acid, ammonium salt	containers	1.36
		Treatment surface Impoundment			toxic waste - ignitable	containers surface impoundment injection well	105 gals.
					spent halogenated solvents used in degreasing	container	68
					spent non-halo-genated solvents (cresols, nitro-benzene, still bottoms)	container	1.36
		Storage Surface	81,243,941 gals.		toxic waste corrosive	surface impoundment injection well	2267.9 gals.
					spent halogenated solvents	containers	68
					spent non-halo-genated solvents	containers	13.6
Eglin AFB	Okaloosa County	Other Treatment Process	30,000 gal/day	75'	solid waste (not haz. waste) but reactive	container and other	55.2
		Other Treatment Process	30,000 gal/day	75'			
		Containers	850 gals.				
Tyndall AFB	Bay County	Storage Tank	32,000 gal/day	10'	butanone	land application tank treat, surface impoundment	3.4
					benzene	(same)	1.4
					carbamic acid	(same)	0.5
					xylene	(same)	0.2
					non-HW but ignitability	(same) other	114

Table 29. (continued)

Name	City	Storage Process Code	Storage Design Capacity	Approx. Elev.	Hazardous Waste	Disposal	Quantity Tons Metric
Tyndall					cadmium	(same)	41
					non-HW but corrosive	land application	0.3
					trichloroethylene	other tank	0.6
USN Coastal Systems Center	Panama City	Storage Container	1,000 gals/day	13.5'	waste water treatment sludges from electroplating	containers	0.7
					spent cyanide plating bath solutions	containers	1.8
					spent stripping and cleaning bath solutions	containers	0.7
					spent halogenated solvents used in degreasing	containers	0.3

CHAPTER IV

VALUATION OF PROJECTED LOSS

Translating hurricane damage to projected dollar losses for the West Florida region is the purpose of Phase I of this Study. Dollar losses result from storm surge and wind damage to structures in or near the hurricane's path. Additional losses result from the effects of wave action on development located along the shoreline. The following paragraphs outline the methodology used for projecting dollar losses resulting from hurricane storm surge, wave action and high velocity winds.

Using the ten structural inventories described earlier, assessed values of existing structures are tabulated. Structural inventories are based on section/township/range location and aggregated within the appropriate loss zone. The water level of the storm surge is identified for each section along with the expected wind speed affecting each section. Areas vulnerable to velocity storm surge, or wave action, are identified in order to consider the added damage caused by "breaking" waves on top of the storm surge striking the beach area.

The next step in the valuation process is determination of the amount or percentage of structural damage caused by varying

*Note: Specific loss curves were adapted and utilized by Tampa Bay Regional Planning Council, Tampa Bay Region Hurricane Loss and Contingency Planning Study, October, 1983.

degrees of surge depth, wave battering, and wind speeds. Based on damages caused by past storms, structural loss percentages have been compiled by public and private agencies. The following list* identifies the sources used to determine structural loss.

- surge flooding/single unit residential - Friedman, 1974
- surge flooding/multi-unit residential - Friedman, 1974
- surge flooding/mobile home - Pinellas County Interim Natural Disaster Plan, 1980
- surge flooding/commercial - J.H. Wiggins Co., 1978
- surge flooding/industrial - J.H. Wiggins Co., 1978
- surge flooding/public utilities - Friedman, 1974
- surge flooding/agriculture - Friedman, 1974
- surge flooding/public transportation - Friedman, 1974
- surge flooding/health care - Friedman, 1974
- surge flooding/government and institutional - Friedman, 1974
- velocity surge flooding/single unit residential - FIA, FEMA 1978-80, 1982
- velocity surge flooding/mobile home - J.H. Wiggins, 1978
- velocity surge flooding/commercial - J.H. Wiggins, 1978
- velocity surge flooding/industrial - J.H. Wiggins, 1978
- velocity surge flooding/public utilities - J.H. Wiggins, 1978
- velocity surge flooding/agriculture - J.H. Wiggins, 1978
- velocity surge flooding/public transportation - J.H. Wiggins, 1978
- velocity surge flooding/health care - J.H. Wiggins, 1978
- velocity surge flooding/government and institutional - J.H. Wiggins, 1978
- peak gust windspeed/single unit residential - Friedman, 1974
- peak gust windspeed/multi-unit residential - Friedman, 1974
- peak gust windspeed/mobile home - Foremost Insurance Co., 1979
- peak gust windspeed/commercial - Friedman, 1974
- peak gust windspeed/industrial - Friedman, 1974
- peak gust windspeed/public utilities - Friedman, 1974
- peak gust windspeed/agriculture - Friedman, 1974
- peak gust windspeed/public transportation - Friedman, 1974
- peak gust windspeed/health care - Friedman, 1974
- peak gust windspeed/government and institutional - Friedman, 1974

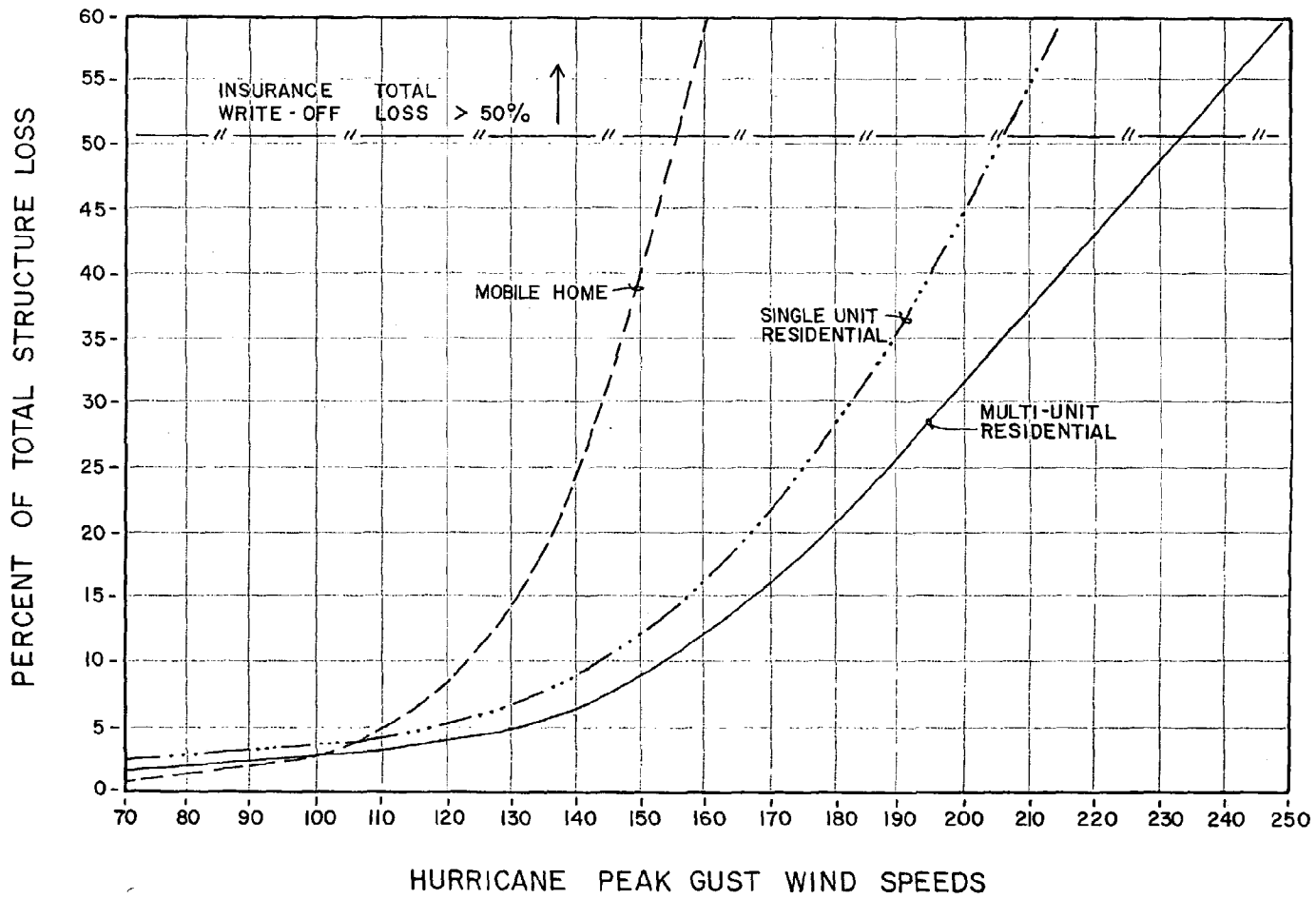
Analysis of actual hurricane occurrences and resulting damage indicated predictable levels of structural damage associated with specific surge heights and windspeeds. Additionally, different structural categories, or types, experienced different levels of damage. For example, single-family residential structures are expected to experience thirty percent (30%) structural damage caused by two feet (2') of slowly rising water above the elevation of the structure. If the structures are located in an area of velocity surge (wave action) the expected structural damage is thirty-six percent (36%). Peak gust wind speeds of 120 miles per hour are expected to cause losses of 5.5% of the total value of a single-family residential structure (see Figure 3, page 90). A mathematical computation combining surge damage with wind damage results in the total expected damage to a single-family residential structure inundated by two feet (2') of slowly rising water and impacted by 120 mph peak gust winds.

Flood Loss + Wind Loss	-	Flood Loss X Wind Loss	= Total Structural Loss
(30% + 5.5%)	-	(30% X 5.5%)	
35.5%	-	1.65%	= 33.85%

The same structure exposed to wave action:

36% + 5.5%	-	36% X 5.5%	
41.5%	-	1.98	= 39.52%

PERCENTAGE OF WIND DAMAGE TO HOMES



The same surge depth (2 feet) and peak gust wind speed (120 mph) is expected to cause structural loss amounting to eighteen percent (18%) of the structure to multi-family residential structures, forty-five percent (45%) to mobile homes, and twenty percent (20%) to commercial structures.

Each hypothetical hurricane selected for analysis produced specific locational surge heights and wind speeds affecting the county. By applying the surge and wind damage percents to the assessed structural values, dollar loss projections are derived for each reference hypothetical hurricane. County Structural Loss ($$$) Projections By Loss Zone appear in Appendix B.

MILITARY FACILITIES

In each of the five coastal counties in the study area, military bases/land holdings are vulnerable to hurricane damage. Table 30, pages 93 through 94, presents a military facilities inventory for the West Florida Region. Information included on the inventory was provided by military disaster preparedness personnel from each of the bases.

Table 30.
Military Facilities Inventory

County	Loss Zone	Base/Location	Acres	Total Number/Type of Structures	Structural Value ($)	Structural Loss ($) Scenario A	B	C	D	E
Bay	2 15	Tyndall AFB		Industrial	$69,614,500	13,923	62,653	85,537	104,422	208,844
				Administrative	63,656,900	12,731	57,291	76,388	95,485	190,971
				Officer Quarters	21,702,200	4,340	19,532	26,043	32,553	65,107
				Visiting Officer Quarters	25,467,500	5,094	22,921	30,561	38,201	76,403
				Base Housing	157,748,700	3,154,970	14,197,383	18,929,844	23,662,305	47,324,610
				Commissary	16,929,300	3,386	15,236	20,315	25,394	50,788
				Base Exchange	9,356,700	1,871	8,421	11,228	14,035	28,070
				Recreational	11,548,400	2,310	10,394	13,858	17,323	34,645
				Hospital	10,924,400	2,185	9,832	13,109	16,387	32,773
				Storage	35,135,300	7,027	31,622	42,162	52,703	105,406
				Training	12,419,600	2,484	11,178	14,903	18,629	37,259
				Research, Development, Test & Engineering	1,875,000	375	1,688	2,250	2,813	5,625
				TOTAL	$ 436,378,500	8,727,570	39,274,065	52,365,420	65,456,775	130,913,550
	3	Naval Coastal Systems Center	1,110	172 Buildings	33,623,360	10,087	30,261	33,623	50,435	141,218
				103 Structures & Utilities	13,640,485	4,092	12,276	13,640	20.461	57,290
				TOTAL	$ 47,263,845					
Escambia	23	Naval Technical Training Center, Corry Station	431.5	120 Structures	70,000,000	-0-	21,000	42,000	70,000	24,500,000
				TOTAL	$ 70,000,000					
	16, 19	Naval Air Station Pensacola	5,345.45	495 Structures	866,000,000	17.3M	26M	52M	155.9M	346.4M
	16, 19	Public Works Center	254.07	327 Structures	394,000,000	7.88M	11.8M	23.6M	70.9M	157.6M
	23	Naval Hospital	35.90	47 Structures	19,000,000	-0-	.57M	1.14M	1.9M	6.65M
	16	National Cemetary	24.85	7 Structures	9,000,000	.18M	.27M	.54M	.9M	3.6M
	16 & 19	U.S. Coast Guard	44.0	4 Structures	10,000,000	.2M	.3M	.6M	1.8M	4M
	15	National Sea Shore	64.06							
				TOTAL	$1,298,000,000					
Escambia	30	NAAS Saufley Field	NA	133 Structures	14,600,000	146	394	730	1,314	2,774
				TOTAL	$ 14,600,000					

*Data not available by loss zone

M = Millions

Table 30. (continued)
Military Facilities Inventory

County	Loss Zone	Base/Location	Acres	Total Number/Type of Structures	Structural Value ($)	Structural Loss ($) Scenario A	B	C	D	E
Santa Rosa	2,12,13	Eglin AFB	465,000	2,200 Structures	$ 314,000,000					
				TOTAL	$ 314,000,000	*	*	*	*	*
	25	NAAS Whiting Field	NA	520 Structures	$ 334,400,000					
				TOTAL	$ 334,400,000	5,016	8,360	9,698	12,707	78,584
Okaloosa	2,20,23 19,13	Eglin AFB		(See Santa Rosa County)						
	10,16	Hurlburt Field		NA						
Walton	12,13,5	Eglin AFB		(See Santa Rosa County)						

CHAPTER V

VALUATION OF SERVICE AND/OR SOCIAL DISRUPTION

During the emergency period following a hurricane strike, "normal social and economic activities are disrupted" (Rubin, 1979). Damage to public facilities such as water, sewer, and electric power, creates an inconvenience and may cause a serious health and safety problem to the public. Immediately following search and rescue activities, local government attention tends to focus on the restoration of public facilities.

In order to determine the hurricane vulnerability of public facilities, a locational inventory by county is required. Five facility inventories (listed below) have been prepared for each county. Inventories are derived from the Florida Department of Environmental Regulation, local government Public Works Departments, health care facility administrators and electric utility facility administrators.

Appendices C through I present general facility information by county, and structural value assessments, where such values could be determined. Facility maps are included for potable water facilities, wastewater treatment facilities, electric utility facilities and health care facilities.

Information provided by SLOSH projects the amount of storm surge and wind speed impacting each public facility in each hypothetical reference hurricane occurrence. Loss percentages developed as a result of actual past occurrence represent the amount of damage resulting from specific surge heights and wind speeds. Proceeding further, the amount, or degree of damage

experienced by a public facility determines the potential length of service interruption. For example, a public facility impacted by a two-foot surge combined with seventy mile per hour peak gust winds is expected to have seven percent (7%) structural damage (Friedman, 1974): moderate damage with one (1) day of service disruption (Whitman, 1974). A six-foot surge combined with 120 mile per hour peak gust winds is expected to result in thirteen percent (13%) structural damage to the same public facility: heavy damage with five (5) to ten (10) days of service disruption. Tables 31 through 37, pages 97-124, list public facilities by county and their projected length of service disruption for each storm scenario.

In addition to service disruption, the Study estimates the cost of repair/replacement of public facilities. Repair/replacement costs are determined based on the loss percentage of assessed value. Tables 31 through 37, pages 97-124, list public facilities by county and projected dollar loss estimates for each storm scenario.

Table 31.
Potential Hurricane Service Disruption and Structural Loss ($)

Escambia County Public Facilities

Loss Zone	Facility	Service Disruption (Days) Damage Scenario A	B	C	D	E	Projected Loss (In Thousands)$$$ Damage Scenario A	B	C	D	E
	POTABLE WATER										
	Escambia County Utility Authority Well Sites										
5	Elevated Storage	1	6	20	25	59	4	11	18	25	45
6	Elevated Storage	1	1	13	18	58	6	35	60	85	205
23	Elevated Storage	1	1	1	5	50	6	35	40	50	175
23	Elevated Storage	1	1	1	5	50	13	50	80	100	350
24	Elevated Storage	1	1	1	5	50	6	35	40	50	175
26	Elevated Storage	1	1	1	7	21	13	50	80	110	180
30	Elevated Storage	0	1	1	2	45	--	3	18	23	75
34	Elevated Storage	0	1	1	2	25	--	13	80	90	200
6	Ground Storage	1	1	13	18	58	13	80	130	160	410
	Santa Rosa Island Authority										
2	Pumping Station	1	12	17	34	47	3	12	16	25	31
2	Elevated Storage	1	12	17	34	47	2	17	24	38	47
2	Ground Storage	1	12	17	34	47	2	17	24	38	47
2	Ground Storage	1	12	17	34	47	4	34	48	76	94
2	Ground Storage	1	12	17	34	47	8	68	96	152	188
	Peoples Water Service										
11	Well Sites	0	2	12	25	58	--	225	350	500	1025
11	Elevated Service	0	2	12	25	58	--	11	16	25	51
11	Elevated Service	0	2	12	25	58	--	25	39	55	113
22	Elevated Service	0	1	12	17	58	--	3	35	40	103
21	Ground Storage	1	1	1	5	45	10	40	64	80	240
11	Ground Storage	0	2	12	25	58	--	68	98	150	308
38	Timberland Utilities	1	1	1	1	21	NA	NA	NA	NA	NA

Table 31. (continued)

Loss Zone	Facility	Service Disruption (Days) Damage Scenario A	B	C	D	E	Projected Loss (In Thousands)$$$ Damage Scenario A	B	C	D	E
3	Gulf Isles National Seashore	1	12	17	34	47	NA	NA	NA	NA	NA
37	University of West Florida	0	1	1	1	25	NA	NA	NA	NA	NA
37	Gonzalez Utilities Assn.	0	1	1	1	25	NA	NA	NA	NA	NA
38	Cottage Hill Water Works	1	1	1	1	21	NA	NA	NA	NA	NA
38	Farm Hill Utilities	1	1	1	1	21	NA	NA	NA	NA	NA
38	Molino Utilities	1	1	1	1	21	NA	NA	NA	NA	NA
39	Walnut Hill Water Works	1	1	1	1	10	NA	NA	NA	NA	NA
39, 40	Bratt-Davisville Water System	1	1	1	1	10	NA	NA	NA	NA	NA
41	Town of Century	0	1	1	1	1	NA	NA	NA	NA	NA
41	Central Water Works	0	1	1	1	1	NA	NA	NA	NA	NA
	WASTEWATER										
2	Santa Rosa Island Authority	1	12	17	34	47	94	975	1200	1875	2325
4	Vista Del Mar	2	6	20	30	60	2	2	4	4	9
4	Gulfside Condo	2	6	20	30	60	2	2	4	4	9
5	Seawind Condo	1	6	20	25	59	--	2	3	4	8
5	Mariner Condo	1	6	20	25	59	--	2	3	4	8
5	Needle Rush Point	1	6	20	25	59	--	2	3	4	8
5	Sandy Key Condos	1	6	20	25	59	--	2	3	4	8
5	Seaspray	1	6	20	25	59	--	2	3	4	8
5	Shipwatch	1	6	20	25	59	--	2	3	4	8
5	Sundown Condo	1	6	20	25	59	--	2	3	4	8
5	Windward Condos	1	6	20	25	59	--	2	3	4	8

Table 31. (continued)

Loss Zone	Facility	Service Disruption (Days) Damage Scenario A	B	C	D	E	Projected Loss (In Thousands)$$$ Damage Scenario A	B	C	D	E
8	Weekly Bayou	1	1	13	16	32	NA	NA	NA	NA	NA
9	Perdido Bay Country Club	0	1	1	2	41	NA	NA	NA	NA	NA
11	Moreno Court	0	2	12	25	58	NA	NA	NA	NA	NA
11	Warrington	0	2	12	25	58	NA	NA	NA	NA	NA
12	Mainstreet Treatment Plant	0	1	12	25	58	500	2500	6000	10,000	20,500
15	Grande Lagoon	1	1	15	17	53	NA	NA	NA	NA	NA
15	Southwind Marine	1	1	15	17	53	NA	NA	NA	NA	NA
18	Fountain Blue Mobile Home	0	1	1	2	41	NA	NA	NA	NA	NA
18	Pensacola Greyhound Racing	0	1	1	2	41	NA	NA	NA	NA	NA
21	Bayou Grande Villa	1	1	1	5	45	NA	NA	NA	NA	NA
28	University Mall	1	1	1	5	50	NA	NA	NA	NA	NA
29	Avondale	1	1	1	5	50	NA	NA	NA	NA	NA
29	Century Woods Apts.	1	1	1	5	50	NA	NA	NA	NA	NA
31	Timberlake Mobile Home	0	1	1	2	43	NA	NA	NA	NA	NA
33	Beulah School	0	1	1	2	23	NA	NA	NA	NA	NA
33	Florida DOT, I-10 Rest	0	1	1	2	23	NA	NA	NA	NA	NA
33	Lakeview Mobile Estates	0	1	1	2	23	NA	NA	NA	NA	NA
33	Pine Forest Work Center	0	1	1	2	23	NA	NA	NA	NA	NA
37	Pine Meadow Elementary	0	1	1	1	25	NA	NA	NA	NA	NA
37	Azalea Trace	0	1	1	1	25	NA	NA	NA	NA	NA
37	Grantwood Apts.	0	1	1	1	25	NA	NA	NA	NA	NA
37	McArthur School	0	1	1	1	25	NA	NA	NA	NA	NA
37	Scenic Hills Country Club	0	1	1	1	25	NA	NA	NA	NA	NA

Table 31. (continued)

Loss Zone	Facility	Service Disruption (Days) Damage Scenario A	B	C	D	E	Projected Loss (In Thousands)$$$ Damage Scenario A	B	C	D	E
37	Tate High School	0	1	1	1	25	NA	NA	NA	NA	NA
37	University of West Florida	0	1	1	1	25	NA	NA	NA	NA	NA
37	Webbs Apts.	0	1	1	1	25	NA	NA	NA	NA	NA
38	Escambia County Road Camp	1	1	1	1	21	NA	NA	NA	NA	NA
38	Wild Oak Farms	1	1	1	1	21	NA	NA	NA	NA	NA
39	Molino Elementary	1	1	1	1	10	NA	NA	NA	NA	NA
39	Ernest Ward High	1	1	1	1	10	NA	NA	NA	NA	NA
	ELECTRICITY (Gulf Power)										
41	L.L. & E. (46)	0	1	1	1	1	--	6	15	38	40
41	Century (46)	0	1	1	1	1	--	6	15	38	40
41	Byrnville (115)	0	1	1	1	1	--	13	30	75	80
39	Molino Crossroads (115)	1	1	1	1	10	13	30	50	80	130
37	Chemstrand (115)	0	1	1	1	25	--	13	50	80	200
38	Cantonment (115)	1	1	1	1	21	13	30	50	80	180
35	Scenic Hills (115)	0	1	1	2	23	--	13	50	90	190
34	Pine Forest (115)	0	1	1	2	25	--	13	50	90	200
33	Beulah (115)	0	1	1	2	23	--	13	50	90	190
27	Eastgate (115)	1	1	1	5	45	13	30	60	100	300
28	Oakfield (115)	1	1	1	5	50	13	30	60	100	350
26	Cordova (115)	1	1	1	7	21	13	30	60	110	180
27	Honeysuckle (115)	1	1	1	5	45	13	30	60	100	300
28	Brentwood (115)	1	1	1	5	50	13	30	60	100	350
31	Bellview (230)	0	1	1	2	43	--	50	300	360	1120

Table 31. (continued)

Loss Zone	Facility	Service Disruption (Days) Damage Scenario A	B	C	D	E	Projected Loss (In Thousands)$$$ Damage Scenario A	B	C	D	E
29	Bayou Marcus (115)	1	1	1	5	50	13	30	60	100	350
24	Fairfield (115)	1	1	1	5	50	13	30	60	100	350
23	Bayou Chico (115)	1	1	1	5	50	13	30	60	100	350
27	Goulding (115)	1	1	1	5	45	13	30	60	100	300
17	Devilliers (115)	0	1	1	5	50	--	13	30	100	350
17	Romana (115)	0	1	1	19	58	--	13	60	160	410
21	Beach Haven (115)	1	1	1	5	45	13	30	60	100	300
15	Innerarity (115)	1	1	15	17	53	13	60	150	160	370
37	Crist 115 (115)	0	1	1	1	25	--	13	30	70	200
37	Crist 230 (230)	0	1	1	1	25	--	50	160	320	800
37	Crist Steam Plant	0	1	1	1	25	NA	NA	NA	NA	NA
	HEALTH CARE										
24	Baptist Hospital	1	1	1	5	50	550	1760	3520	4400	15,400
24	Baptist Specialty Care	1	1	1	5	50	37	150	240	300	1050
24	University Hospital	1	1	1	5	50	104	415	664	830	2905
23	Navy Hospital	1	1	1	5	50	188	750	1200	1500	5250
27	Sacred Heart Hospital	1	1	1	5	45	875	3500	5600	7000	21,000
27	West Florida Regional Medical Center	1	1	1	5	45	NA	NA	NA	NA	NA
41	Century	0	1	1	1	1	--	24	76	133	152
	NURSING HOMES										
24	Pensacola Health Center	1	1	1	5	50	NA	NA	NA	NA	NA
24	Escambia Cty. Nursing Home	1	1	1	5	50	13	40	80	100	350
25	Magnolias	1	1	1	7	21	NA	NA	NA	NA	NA

Table 31. (continued)

Loss Zone	Facility	Service Disruption (Days) Damage Scenario A	B	C	D	E	Projected Loss (In Thousands)$$$ Damage Scenario A	B	C	D	E
26	Bluffs	1	1	1	7	21	44	175	280	385	595
27	Haven of Our Lady of Peace	1	1	1	5	45	NA	NA	NA	NA	NA
36	Azalea Trace	0	1	1	2	--	NA	NA	NA	NA	NA
37	Cross Creek	0	1	1	1	25	NA	NA	NA	NA	NA
	TRANSPORTATION										
12	Port of Pensacola	0	1	12	25	58	--	1500	3900	6000	12,300
26	Pensacola Regional Airport	1	1	1	7	21	NA	NA	NA	NA	NA

Table 32.
Potential Hurricane Service Disruption and Structural Loss ($)

Santa Rosa County Public Facilities

Loss Zone	Facility	Service Disruption (Days) Damage Scenario A	B	C	D	E	Projected Loss (In Thousands) $$$ Damage Scenario A	B	C	D	E
	POTABLE WATER										
1	Gulf Breeze Water	0	1	3	5	25	--	14	104	110	220
2	Navarre Beach, Division of Santa Rosa County Includes Elevated Storage tank	2	10	17	22	61	455	657	859	909	2273
	Midway Water System										
10	Booster Pumps	1	1	1	1	50	3	8	14	16	70
2	Ground Storage	1	1	1	1	50	1	3	5	6	26
10	Ground Storage	1	1	1	1	50	3	10	18	20	88
9	Elevated Storage	1	1	1	1	49	4	12	21	24	104
10	Elevated Storage	1	1	1	1	50	1	4	7	8	35
3,10	Holley-Navarre Water System 2 Elevated Tanks	1	1	1	1	50	4	13	23	26	116
9	Santa Rosa County Utilities	1	1	1	1	49	NA	NA	NA	NA	NA
9	Gulf Isles Utilities	1	1	1	1	49	NA	NA	NA	NA	NA
15	Bagdad-Garcon Water System	1	1	1	1	30	NA	NA	NA	NA	NA
21,22, 25	City of Milton Water System	1	1	1	1	30	2	5	9	10	29
10	Colonial Pines Mobile Homes	1	1	1	1	50	NA	NA	NA	NA	NA
14	Blackwater River State Park	1	1	1	1	30	NA	NA	NA	NA	NA
15	I-10 Rest Area	1	1	1	1	30	NA	NA	NA	NA	NA
18	Pace Water System	1	1	1	1	33	NA	NA	NA	NA	NA
23,25	Point Baker Water System	1	1	1	1	30	NA	NA	NA	NA	NA
24	Chumuckla Water System	1	1	1	1	15	NA	NA	NA	NA	NA

Table 32. (continued)

Loss Zone	Facility	Service Disruption (Days) Damage Scenario A	B	C	D	E	Projected Loss (In Thousands)$$$ Damage Scenario A	B	C	D	E
26	Moore Creek-Mt. Carmel Utility	1	1	1	1	7	NA	NA	NA	NA	NA
26	City of Jay Utilities	1	1	1	1	7	NA	NA	NA	NA	NA
27	Krul Recreation Area	1	1	1	1	7	NA	NA	NA	NA	NA
27	Coldwater Recreation Area	1	1	1	1	7	NA	NA	NA	NA	NA
27	Camp Paquette Recreation Area	1	1	1	1	7	NA	NA	NA	NA	NA
27	Blackwater Forest Hqtrs.	1	1	1	1	7	NA	NA	NA	NA	NA
27	Bear Lake Recreation Area	1	1	1	1	7	NA	NA	NA	NA	NA
27	Berrydale Water System	1	1	1	1	7	NA	NA	NA	NA	NA
	WASTEWATER										
1	City of Gulf Breeze	0	1	3	5	25	NA	NA	NA	NA	NA
1	Santa Rosa Shores	0	1	3	5	25	NA	NA	NA	NA	NA
1	Villa Venyce Subdivision	0	1	3	5	25	NA	NA	NA	NA	NA
2	Holley-Navarre Elementary	1	1	1	1	50	NA	NA	NA	NA	NA
2	Navarre-Beach, Division of Santa Rosa County	2	10	17	22	61	455	657	859	909	2273
3	Colonial Pines	1	1	1	1	48	NA	NA	NA	NA	NA
15	I-10 Rest Area (East)	1	1	1	1	30	NA	NA	NA	NA	NA
15	I-10 Rest Area (West)	1	1	1	1	30	NA	NA	NA	NA	NA
15	East Milton Elementary	1	1	1	1	30	NA	NA	NA	NA	NA
15	Santa Rosa Industrial Park	1	1	1	1	30	NA	NA	NA	NA	NA
18	Santa Villa Subdivision	1	1	1	1	33	NA	NA	NA	NA	NA
18	Pea Ridge Elementary	1	1	1	1	33	NA	NA	NA	NA	NA
18	Dixon Elementary	1	1	1	1	33	NA	NA	NA	NA	NA
19	Pace High School	0	1	1	1	20	NA	NA	NA	NA	NA

Table 32. (continued)

Loss Zone	Facility	Service Disruption (Days) Damage Scenario A	B	C	D	E	Projected Loss (In Thousands)$$$ Damage Scenario A	B	C	D	E
19	Andora Village	0	1	1	1	20	NA	NA	NA	NA	NA
21	City of Milton	1	1	1	1	30	NA	NA	NA	NA	NA
23	Milton Voc-Tech.	1	1	1	1	15	NA	NA	NA	NA	NA
26	Town of Jay	1	1	1	1	7	NA	NA	NA	NA	NA
27	Berrydale Forestry	1	1	1	1	7	NA	NA	NA	NA	NA
	ELECTRICITY (Gulf Power)										
26	Humble Oil (115)	1	1	1	1	7	13	40	70	80	120
26	Amerada Hess (46)	1	1	1	1	7	6	20	35	40	55
26	Humble Oil #5 (46)	1	1	1	1	7	6	20	35	40	55
26	Blackjack (115)	1	1	1	1	7	13	40	70	80	120
25	Whiting Field (46)	1	1	1	1	30	6	20	35	40	115
22	Munson Road (115)	1	1	1	1	30	13	40	70	80	250
22	Jay Road (115)	1	1	1	1	30	13	40	70	80	250
18	Pace (115)	1	1	1	1	33	13	40	70	80	270
18	Escambia Chemical (115)	1	1	1	1	33	13	40	70	80	270
18	American Cyanamid (115)	1	1	1	1	33	13	40	70	80	270
11	Holley (115)	1	1	1	10	50	13	40	70	130	350
2	East Bay (115)	1	1	1	2	50	13	40	70	90	350
10	Navarre (46)	1	1	1	1	50	6	20	35	40	175
9	Live Oak (115)	1	1	1	1	49	13	40	70	80	340
1	Gulf Breeze (115)	0	1	3	5	25	--	40	95	100	200
13	Choctaw (46)	1	1	1	1	50	6	20	35	40	175

*Escambia River Electric Cooperative
(No information available)

Table 32. (continued)

Loss Zone	Facility	Service Disruption (Days) Damage Scenario A	B	C	D	E	Projected Loss (In Thousands)$$$ Damage Scenario A	B	C	D	E
	HEALTH CARE										
1	Gulf Breeze Hospital	0	1	3	5	25	--	100	760	800	1600
20	Santa Rosa Hospital	1	1	1	1	30	150	480	840	960	3000
26	Jay Hospital	1	1	1	1	7	8	24	42	48	67
	NURSING HOMES										
6	Santa Rosa Convalescent Center	1	1	1	1	30	14	34	78	90	280
9	Bay Breeze Nursing & Retirement Center	1	1	1	1	49	44	105	245	280	1225
17	Annette's Nursing Home	1	1	1	1	30	1	3	7	8	24
22	West Florida Community Center	1	1	1	1	30	43	104	242	276	863
	TRANSPORTATION										
15	Milton "T" Airport	1	1	1	1	30	1	2	5	6	19

Table 33.
Potential Hurricane Service Disruption and Structural Loss ($)

Okaloosa County Public Facilities

Loss Zone	Facility	Service Disruption (Days) Damage Scenario A	B	C	D	E	Projected Loss (In Thousands)$$$ Damage Scenario A	B	C	D	E
	POTABLE WATER										
1	Destin Water Users	1	14	21	32	60	28	286	396	550	990
1	Elevated Storage	1	14	21	32	60	13	130	220	260	350
3,16	Seashore Village Water	1	1	1	5	49	1	2	6	8	26
14	City of Fort Walton Beach	1	1	1	5	49	26	63	168	210	735
14	Ground Storage	1	1	1	5	49	14	35	92	115	403
14	Elevated Storage	1	1	1	5	49	14	33	88	110	385
17	Okaloosa County Water and Sewer	1	1	1	5	53	NA	NA	NA	NA	NA
17	Elevated Storage	1	1	1	5	53	24	59	156	195	741
20	City of Valparaiso	1	1	1	5	50	NA	NA	NA	NA	NA
21	City of Niceville	1	1	1	5	50	NA	NA	NA	NA	NA
1	Silver Beach Wayside Park	1	14	21	32	60	NA	NA	NA	NA	NA
5,21	Rocky Bayou Estates	1	1	1	5	50	NA	NA	NA	NA	NA
5	Fred Gannon State Rec.	1	1	1	5	49	NA	NA	NA	NA	NA
8	Northgate Devel. Water System	1	1	6	16	52	NA	NA	NA	NA	NA
10	Rush's Mobile Home Ranch	1	1	1	5	49	NA	NA	NA	NA	NA
15	Town of Mary Esther	1	1	1	5	15	NA	NA	NA	NA	NA
	Ground Storage	1	1	1	5	15	NA	NA	NA	NA	NA
	Elevated Storage	1	1	1	5	15	NA	NA	NA	NA	NA
16	Pippin Mobile Home Park	1	1	1	5	49	NA	NA	NA	NA	NA
22	Bluewater Bay-Raintree Development	1	1	1	5	49	NA	NA	NA	NA	NA
22	Maxwell Guntner Rec. Area	1	1	1	5	49	NA	NA	NA	NA	NA

Table 33. (continued)

Loss Zone	Facility	Service Disruption (Days) Damage Scenario A	B	C	D	E	Projected Loss (In Thousands)$$$ Damage Scenario A	B	C	D	E
24	City of Crestview Water Dept.	1	1	1	2	43	NA	NA	NA	NA	NA
24	Sundial Mobile Home Park	1	1	1	2	43	NA	NA	NA	NA	NA
24	Crestview Country Club	1	1	1	2	43	NA	NA	NA	NA	NA
24	I-10 Rest Area	1	1	1	2	43	NA	NA	NA	NA	NA
24	Scottish Inn	1	1	1	2	43	NA	NA	NA	NA	NA
25	Del Cerro Vista Subdivision	0	1	1	1	30	NA	NA	NA	NA	NA
26	Baker Water System	0	1	1	1	5	NA	NA	NA	NA	NA
26	Holt Water Works	0	1	1	1	5	NA	NA	NA	NA	NA
26	Milligan Water Works	0	1	1	1	5	NA	NA	NA	NA	NA
26	Hurricane Lake Rec. Area	0	1	1	1	5	NA	NA	NA	NA	NA
26	Karrich Lake Rec. Area	0	1	1	1	5	NA	NA	NA	NA	NA
27	Auburn Water System	0	1	1	1	6	NA	NA	NA	NA	NA
28	City of Laurel Hill	0	1	1	1	5	NA	NA	NA	NA	NA
	WASTEWATER										
1	Breakaway Condos	1	14	21	32	60	NA	NA	NA	NA	NA
1	Destin Water Users	1	14	21	32	60	NA	NA	NA	NA	NA
3	Pippin Mobile Homes	1	1	1	5	49	NA	NA	NA	NA	NA
3	Victoria Mobile Home	1	1	1	5	49	NA	NA	NA	NA	NA
10	Florosa Elementary	1	1	1	5	49	NA	NA	NA	NA	NA
10	The Marks Apts.	1	1	1	5	49	NA	NA	NA	NA	NA
10	Westwood Apts.	1	1	1	5	49	NA	NA	NA	NA	NA
15	Town of Mary Esther	1	1	1	5	49	NA	NA	NA	NA	NA

Table 33. (continued)

Loss Zone	Facility	Service Disruption (Days) Damage Scenario A	B	C	D	E	Projected Loss (In Thousands)$$$ Damage Scenario A	B	C	D	E
16	Chateau Pres de la Mer	1	1	1	5	49	NA	NA	NA	NA	NA
17	Okaloosa County Water and Sewer	1	1	1	5	53	NA	NA	NA	NA	NA
18	Fort Walton Beach	1	1	1	2	44	200	480	1280	1440	4640
21	Regional WWTP--Niceville/ Valparaiso	1	1	1	5	50	NA	NA	NA	NA	NA
23	Okaloosa County Auxiliary Field #3	0	1	1	2	49	NA	NA	NA	NA	NA
23	Okloosa County Correctional Institution	0	1	1	2	49	NA	NA	NA	NA	NA
24	I-10 Rest Area (East)	1	1	1	2	43	NA	NA	NA	NA	NA
24	I-10 Rest Area (West)	1	1	1	2	43	NA	NA	NA	NA	NA
25	Bob Sikes Airport	0	1	1	1	30	NA	NA	NA	NA	NA
25	City of Crestview	0	1	1	1	30	NA	NA	NA	NA	NA
26	Baker Elementary and High School	0	1	1	1	5	NA	NA	NA	NA	NA
	ELECTRICITY (Gulf Power)										
1	Destin (115)	1	14	21	32	60	13	130	180	250	450
14	Ft. Walton (115)	1	1	1	5	40	13	30	80	100	350
11	Sullivan St. (115)	1	1	1	5	40	13	30	80	100	270
16	Hurlburt (115)	1	1	1	5	49	13	30	80	100	350
17	Wright (230)	1	1	1	5	53	50	120	320	400	1540
17	Ocean City (115)	1	1	1	5	53	13	30	80	100	385
23	Shalimar (115)	1	1	1	1	49	13	30	75	80	340

Table 33. (continued)

Loss Zone	Facility	Service Disruption (Days) Damage Scenario A	B	C	D	E	Projected Loss (In Thousands)$$$ Damage Scenario A	B	C	D	E
20	Valparaiso (115)	1	1	1	5	50	13	30	80	100	350
21	Niceville (115)	1	1	1	5	50	13	30	80	100	350
24	Shoal River (230)	1	1	1	2	43	50	120	320	360	1160
24	South Crestview (115)	1	1	1	2	43	13	30	80	90	290
25	Crestview City (46)	0	1	1	1	30	NA	10	30	38	115
26	Milligan (46)	0	1	1	1	5	NA	10	30	38	50
26	Baker (46)	0	1	1	1	5	NA	10	30	38	50
28	Laurel Hill (46)	0	1	1	1	5	NA	10	30	38	50
	ELECTRICITY (Choctawhatchee Electric)										
5	Bluewater Bay	1	1	1	5	50	NA	NA	NA	NA	NA
26	Baker	0	1	1	1	5	NA	NA	NA	NA	NA
27	Auburn	0	1	1	1	6	NA	NA	NA	NA	NA
28	Laurel Hill	1	1	1	1	5	NA	NA	NA	NA	NA
	HEALTH CARE										
18	Humana Hospital	1	1	1	2	44	78	188	501	564	1849
18	Gulf Coast Hospital	1	1	1	2	44	20	63	127	143	467
20	Twin City Hospital	1	1	1	5	50	28	67	167	223	780
24	Crestview Community Hospital	1	1	1	2	43	37	89	223	268	863
	NURSING HOMES										
8	Ft. Walton Beach Extended Care	1	1	6	16	52	NA	NA	NA	NA	NA
14	Gulf Convalescent Center	1	1	1	5	49	25	49	147	196	667
18	Westwood Retirement Center	1	1	1	2	44	included in Gulf Coast Hospital				
25	Crestview Manor	0	1	1	1	30	NA	8	20	52	150

Table 33. (continued)

Loss Zone	Facility	Service Disruption (Days) Damage Scenario A	B	C	D	E	Projected Loss (In Thousands)$$$ Damage Scenario A	B	C	D	E
	TRANSPORTATION										
1	Destin-Ft. Walton Beach Airport	1	14	21	32	60	NA	NA	NA	NA	NA
13	Okaloosa County Airport	1	1	1	5	49	100	260	360	480	880
25	Bob Sikes Airport	0	1	1	1	30	NA	NA	NA	NA	NA

Table 34.
Potential Hurricane Service Disruption and Structural Loss ($)

Walton County Public Facilities

Loss Zone	Facility	Service Disruption (Days) Damage Scenario A	B	C	D	E	Projected Loss (In Thousands)$$$ Damage Scenario A	B	C	D	E
	POTABLE WATER										
1	Grayton Beach Water	1	5	15	25	50	3	4	6	8	14
1	Seagrove Beach Water	1	5	15	25	50	35	47	70	93	163
6	South Walton County Utility	1	1	10	20	45	38	57	95	133	228
6	Elevated Storage	1	1	10	20	45	4	23	38	53	90
6	Elevated Storage	1	1	10	20	45	4	23	38	53	90
6	Inlet Beach Water System	1	1	10	20	45	1	7	11	16	27
1	Grayton Beach State Rec. Area	1	5	15	25	50	NA	NA	NA	NA	NA
1	Holiday Travel Park	1	5	15	25	50	NA	NA	NA	NA	NA
2	Sun & Sand Motel	1	1	1	2	30	NA	NA	NA	NA	NA
2	Eden's State Gardens	1	1	1	2	30	NA	NA	NA	NA	NA
3	Chapman's Seafood Rest.	1	1	1	2	30	NA	NA	NA	NA	NA
4	Nick's Seafood Rest.	1	1	1	2	40	NA	NA	NA	NA	NA
4	Basin Bayou State Rec. Area	1	1	1	2	40	NA	NA	NA	NA	NA
6	Sandcliff's Condos	1	1	10	20	45	NA	NA	NA	NA	NA
6	Santa Rosa Golf & Beach Club	1	1	10	20	45	NA	NA	NA	NA	NA
7	Bay Elementary School	1	1	1	3	40	NA	NA	NA	NA	NA
9	City of Freeport	1	1	1	3	40	NA	NA	NA	NA	NA
12	Choctaw Beach Water	1	1	1	5	45	NA	NA	NA	NA	NA
12	Lake Sharon Estates	1	1	1	5	45	NA	NA	NA	NA	NA
12	Villa Tasso Water System	1	1	1	5	45	NA	NA	NA	NA	NA

Table 34. (continued)

Loss Zone	Facility	Service Disruption (Days) Damage Scenario A	B	C	D	E	Projected Loss (In Thousands)$$$ Damage Scenario A	B	C	D	E
13	Spanish Trail Scout Residence	1	1	1	2	45	NA	NA	NA	NA	NA
14	Argyle Water System	1	1	1	1	15	NA	NA	NA	NA	NA
15	City of DeFuniak Springs	1	1	1	1	20	NA	NA	NA	NA	NA
16	Showill Farms, Inc.	1	1	1	1	10	NA	NA	NA	NA	NA
16	Ten Lakes Estates	1	1	1	1	10	NA	NA	NA	NA	NA
17	Juniper Village Subdivision	1	1	1	1	23	NA	NA	NA	NA	NA
17	Juniper Lake Pines Subdivision	1	1	1	1	23	NA	NA	NA	NA	NA
17	Kolomoki Girl Scout Camp	1	1	1	1	23	NA	NA	NA	NA	NA
18	Roadrunner Pit Stop Rest.	1	1	1	1	23	NA	NA	NA	NA	NA
18	Town of Mossy Head	1	1	1	1	23	NA	NA	NA	NA	NA
	Camp Creek Water System	1	1	1	1	23	NA	NA	NA	NA	NA
19	Town of Paxton	1	1	1	1	17	NA	NA	NA	NA	NA
21	Bob's Restaurant	1	1	1	1	10	NA	NA	NA	NA	NA
	WASTEWATER TREATMENT										
1	Cassine Gardens	1	5	15	25	50	5	10	15	20	35
1	Dune I Townhomes	1	5	15	25	50	NA	NA	NA	NA	NA
1	Sandliff STP	1	5	15	25	50	NA	NA	NA	NA	NA
1	Palms of Dune Allen	1	5	15	25	50	NA	NA	NA	NA	NA
1	Hidden Beach Condo	1	5	15	25	50	NA	NA	NA	NA	NA
1	Seaside I	1	5	15	25	50	3	6	9	13	22
2	Sandestin	1	1	1	2	30	NA	NA	NA	NA	NA
2	South Walton Utility	1	1	1	2	30	50	200	320	360	960
6	Emerald Hills	1	1	10	20	45	13	20	31	46	78

Table 34. (continued)

Loss Zone	Facility	Service Disruption (Days) Damage Scenario A	B	C	D	E	Projected Loss (In Thousands)$$$ Damage Scenario A	B	C	D	E
9	Freeport High School	1	1	1	3	40	NA	NA	NA	NA	NA
13	Eglin AFB, Site C-6	1	1	1	2	45	NA	NA	NA	NA	NA
15	City of DeFuniak Springs	1	1	1	1	20	NA	NA	NA	NA	NA
17	Maude Sanders Elementary	1	1	1	1	23	NA	NA	NA	NA	NA
17	Walton High School	1	1	1	1	23	NA	NA	NA	NA	NA
	ELECTRICITY (Gulf Power)										
2	Miramar Beach (115)	1	1	1	2	30	13	50	80	90	225
6	Santa Rosa (115)	1	1	10	20	45	40	80	125	175	300
15	DeFuniak Springs (46)	1	1	1	1	20	6	15	35	40	88
15	Glendale Road (115)	1	1	1	1	20	13	30	50	80	175
19	Paxton (46)	1	1	1	1	17	6	15	35	40	70
	ELECTRICITY (Choctawhatchee Electric Cooperative, Inc.										
6	Santa Rosa Substation	1	1	10	20	45	NA	NA	NA	NA	NA
9	Freeport Substation	1	1	1	3	40	NA	NA	NA	NA	NA
12	Villa Tasso Substation	1	1	1	5	45	NA	NA	NA	NA	NA
13	Portland (SPADAT:USAF)	1	1	1	2	45	NA	NA	NA	NA	NA
14	Red Bay Substation	1	1	1	1	15	NA	NA	NA	NA	NA
15	DeFuniak Springs Substation	1	1	1	1	20	NA	NA	NA	NA	NA
19	Paxton Substation	1	1	1	1	17	NA	NA	NA	NA	NA
21	Glendale Substation	1	1	1	1	10	NA	NA	NA	NA	NA

Table 34. (continued)

Loss Zone	Facility	Service Disruption (Days) Damage Scenario A	B	C	D	E	Projected Loss (In Thousands)$$$ Damage Scenario A	B	C	D	E
	HEALTH CARE										
15	Valley Springs Hospital	1	1	1	1	20	NA	NA	NA	NA	NA
	NURSING HOMES										
15	Walton County Convalescent Center	1	1	1	1	20	NA	NA	NA	NA	NA

Table 35.
Potential Hurricane Service Disruption and Structural Loss ($)

Bay County Public Facilities

Loss Zone	Facility	Service Disruption (Days) Damage Scenario A	B	C	D	E	Projected Loss (In Thousands)$$$ Damage Scenario A	B	C	D	E
	POTABLE WATER										
1	Mexico Beach	5	7	17	19	40	150	165	240	255	420
1	Elevated Storage	5	7	17	19	40	10	11	16	17	28
1	Ground Storage	5	7	17	19	40	15	17	24	26	42
	Ground Storage	5	7	17	19	40	8	8	12	13	21
4	Panama City Beach	2	11	13	18	60	360	480	560	680	1800
4	Elevated Storage	2	11	13	18	60	23	30	35	43	113
4	Elevated Storage	2	11	13	18	60	14	17	21	26	68
4	Ground Storage	2	11	13	18	60	113	150	175	213	563
4	Ground Storage	2	11	13	18	60	45	60	70	85	225
36	Bay County Water System	1	1	1	1	5	138	330	660	880	1100
36	Elevated Storage	1	1	1	1	5	13	30	60	80	100
35	Ground Storage	1	1	1	1	5	26	60	120	160	200
8	City of Lynn Haven	1	1	5	10	45	38	94	125	156	375
*12	City of Parker	1	1	5	7	49	NA	NA	NA	NA	NA
*22	City of Callaway	1	1	5	10	30	NA	NA	NA	NA	NA
*26	City of Springfield	1	1	1	5	25	NA	NA	NA	NA	NA
*28	City of Panama City	1	1	1	1	25	NA	NA	NA	NA	NA
*32	Town of Cedar Grove	1	1	1	1	29	NA	NA	NA	NA	NA
3	Bayside Park	2	11	17	14	60	NA	NA	NA	NA	NA
5	Camp Helen	2	7	15	20	60	NA	NA	NA	NA	NA
6	Marlin Motel & Grill	1	2	5	15	60	NA	NA	NA	NA	NA
8	Southport Elementary School	1	1	5	10	45	NA	NA	NA	NA	NA
17	West Bay Elementary School	1	1	1	5	50	NA	NA	NA	NA	NA
17	L.A.-Pacific Corp.	1	1	1	5	50	NA	NA	NA	NA	NA
18	Lansing Smith Electric	1	1	1	11	60	NA	NA	NA	NA	NA

*Purchase water from Bay County Water System
(No facilities/structures)

Table 35. (continued)

Loss Zone	Facility	Service Disruption (Days) Damage Scenario A	B	C	D	E	Projected Loss (In Thousands)$$$ Damage Scenario A	B	C	D	E
21	K.O.A. Campground	1	1	1	1	30	NA	NA	NA	NA	NA
21	Lisenby Mobile Home Park	1	1	1	1	30	NA	NA	NA	NA	NA
21	Derby Woods Subdivision	1	1	1	1	30	NA	NA	NA	NA	NA
21	Bland's Trailer Park	1	1	1	1	30	NA	NA	NA	NA	NA
22	Crews Mobile Home Park	1	1	5	10	30	NA	NA	NA	NA	NA
23	Bay Pines Mobile Home Park	1	1	1	1	30	NA	NA	NA	NA	NA
26	Southwest Forest Industries	1	1	1	5	25	NA	NA	NA	NA	NA
26	Magnolia Beach Campground	1	1	1	5	25	NA	NA	NA	NA	NA
30	Woodlawn Utility	1	1	1	1	30	NA	NA	NA	NA	NA
30	St. Andrew Bay Real Estate	1	1	1	1	30	NA	NA	NA	NA	NA
32	Legear Mobile Home Park	1	1	1	1	29	NA	NA	NA	NA	NA
35	Waller Elementary School	1	1	1	1	5	NA	NA	NA	NA	NA
36	Whistling Oyster Bar	1	1	1	1	5	NA	NA	NA	NA	NA
	WASTEWATER TREATMENT										
3	Bay Point	2	11	17	18	60	NA	NA	NA	NA	NA
3	KOA/Panama City Beach	2	11	17	18	60	NA	NA	NA	NA	NA
3	Venture Out In America	2	11	17	18	60	NA	NA	NA	NA	NA
3	Commodore	2	11	17	18	60	NA	NA	NA	NA	NA
5	Gulf Coast Campgrounds	2	7	15	20	60	NA	NA	NA	NA	NA
5	Pinnacle Port	2	7	15	20	60	NA	NA	NA	NA	NA
5	The Shores	2	7	15	20	60	NA	NA	NA	NA	NA
7	Bay Side	1	1	5	10	60	NA	NA	NA	NA	NA
7	Woodlawn	1	1	5	10	60	NA	NA	NA	NA	NA
9	Lynn Haven Irrigation Site	1	1	5	10	45	13	75	100	120	300
15	Tyndall Air Force Base	1	1	3	7	19	NA	NA	NA	NA	NA

Table 35. (continued)

Loss Zone	Facility	Service Disruption (Days) Damage Scenario A	B	C	D	E	Projected Loss (In Thousands)$$$ Damage Scenario A	B	C	D	E
17	Naval Coastal Systems	1	1	1	5	50	NA	NA	NA	NA	NA
17	Panama City Beach	1	1	1	10	50	56	135	338	540	1575
18	Lattitude 29 Condos	1	1	1	12	60	NA	NA	NA	NA	NA
18	Sunnyside Villas	1	1	1	12	60	NA	NA	NA	NA	NA
18	Portside, Inc.	1	1	1	12	60	NA	NA	NA	NA	NA
20	Southport Elementary	1	1	5	11	32	NA	NA	NA	NA	NA
21	Lane Mobile Homes	1	1	1	1	30	NA	NA	NA	NA	NA
22	Sandy Creek Ranch	1	1	5	10	30	NA	NA	NA	NA	NA
24	Callaway Elementary	1	1	1	1	30	NA	NA	NA	NA	NA
24	Grimes Calloway Estates	1	1	1	1	30	NA	NA	NA	NA	NA
28	St. Andrews Plant	1	1	1	1	25	NA	NA	NA	NA	NA
30	Tanglewood	1	1	1	1	30	NA	NA	NA	NA	NA
31	Highland Park School	1	1	1	1	30	NA	NA	NA	NA	NA
32	Bland Trailer Park	1	1	1	1	29	NA	NA	NA	NA	NA
33	Derby Woods	1	1	1	1	32	NA	NA	NA	NA	NA
33	Douglas Road	1	1	1	1	32	NA	NA	NA	NA	NA
35	Waller School	1	1	1	1	5	NA	NA	NA	NA	NA
	ELECTRICITY (Gulf Power)										
18	Laguna Beach (230)	1	1	1	13	60	50	120	240	560	1800
18	Philips Inlet (115)	1	1	1	13	60	13	50	80	140	450
38	West Bay (115)	1	1	1	1	50	13	50	70	80	350
17	Lullwater (115)	1	1	1	5	50	13	50	80	100	350
4	Long Beach (115)	2	11	14	18	60	90	120	145	165	450
3	Hathaway (115)	2	11	12	18	45	90	120	135	165	300
28	Greenwood (115)	1	1	1	1	25	13	30	60	80	200

Table 35. (continued)

Loss Zone	Facility	Service Disruption (Days) Damage Scenario A	B	C	D	E	Projected Loss (In Thousands)$$$ Damage Scenario A	B	C	D	E
30	Northside (115)	1	1	1	1	30	13	30	60	80	220
32	Highland City (115)	1	1	1	1	29	13	30	60	80	210
27	Redwood (115)	1	1	1	1	20	13	30	60	80	180
26	Arizona Chemical (46)	1	1	1	5	25	6	25	38	50	100
26	Wewa Road (115)	1	1	1	5	25	13	30	75	100	200
24	Parker (115)	1	1	1	1	30	13	30	60	80	220
12	Long Point (46)	1	1	5	7	38	6	38	50	53	120
2	Military Point (46)	1	12	14	16	40	38	68	73	78	140
15	Tyndall Field (46)	1	1	3	7	19	25	38	49	55	88
34	Callaway (230)	1	1	1	1	12	50	120	240	320	460
20	Lansing Smith Steam Plant	1	1	5	11	32	NA	NA	NA	NA	NA
	HEALTH CARE										
10	Bay Medical Center	1	1	2	5	30	NA	NA	NA	NA	NA
30	Gulf Coast Community Hospital	1	1	1	1	30	NA	NA	NA	NA	NA
15	U.S. Air Force Hospital	1	1	3	7	19	NA	NA	NA	NA	NA
	NURSING HOMES										
9	Bay Convalescent Center	1	1	5	10	45	15	36	48	63	145
18	Beaches Emergency Medical Center	1	1	1	13	60	NA	NA	NA	NA	NA
28	Lelah G. Wagner Nursing Home	1	1	1	1	25	7	16	32	43	108
28	Panama City Nursing Center	1	1	1	1	25	139	334	668	891	2226
30	Gulf Coast Convalescent	1	1	1	1	30	NA	NA	NA	NA	NA
10	Lisenby Retirement Home	1	1	2	5	30	13	34	40	45	99
20	Fountain House Retirement Village	1	1	5	11	32	NA	NA	NA	NA	NA

Table 35. (continued)

Loss Zone	Facility	Service Disruption (Days) Damage Scenario A	B	C	D	E	Projected Loss (In Thousands)$$$ Damage Scenario A	B	C	D	E
29	Highland Park Retirement Home	1	1	5	10	50	NA	NA	NA	NA	NA
13	Lynn Haven Villa	1	1	12	15	40	NA	NA	NA	NA	NA
24	Mary Ella Villa	1	1	1	1	30	1	2	3	4	11
10	St. Andrews Towers Apts.	1	1	2	5	30	NA	NA	NA	NA	NA
31	Village Park	1	1	1	1	30	NA	NA	NA	NA	NA
	TRANSPORTATION										
29	Port of Panama City	1	1	5	8	50	450	1125	1500	1725	5250
9	Panama City Airport	1	1	5	10	45	NA	NA	NA	NA	NA
10, 28, 29, 31, 32, 33, 30, 9, 21, 34, 35, 36	Atlanta and St. Andrews Bay Railroad										

Table 36.

Potential Hurricane Service Disruption and Structural Loss ($)

Holmes County Public Facilities

Loss Zone	Facility	Service Disruption (Days) Damage Scenario A	B	C	D	E	Projected Loss (In Thousands)$$$ Damage Scenario A	B	C	D	E
	POTABLE WATER										
1	City of Bonifay Water Dept.	1	1	1	5	20	13	30	75	100	175
1	Cerro Gordo Estates	1	1	1	5	20	NA	NA	NA	NA	NA
1	Dogwood Lakes Estates	1	1	1	5	20	NA	NA	NA	NA	NA
1	Town of Westville	1	1	1	5	20	NA	NA	NA	NA	NA
1	Bethlehem High School	1	1	1	5	20	NA	NA	NA	NA	NA
1	*Choctawhatchee River Camp* Site	1	1	1	5	20	NA	NA	NA	NA	NA
1	Kountry Kitchen	1	1	1	5	20	NA	NA	NA	NA	NA
1	New Ponce Shirt Co., Inc.	1	1	1	5	20	NA	NA	NA	NA	NA
1	Ponce de Leon High School	1	1	1	5	20	NA	NA	NA	NA	NA
1	Ponce de Leon Elementary	1	1	1	5	20	NA	NA	NA	NA	NA
1	*Ponce de Leon Springs* State Park	1	1	1	5	20	NA	NA	NA	NA	NA
1	Prosperity Elementary School	1	1	1	5	20	NA	NA	NA	NA	NA
2	Town of Esto	0	1	1	2	10	NA	NA	NA	NA	NA
2	Noma Water Works, Inc.	0	1	1	2	10	NA	NA	NA	NA	NA
2	Poplar Springs High School	0	1	1	2	10	NA	NA	NA	NA	NA
	WASTEWATER										
1	City of Bonifay	1	1	1	5	20	28	88	165	220	385

Table 36. (continued)

Loss Zone	Facility	Service Disruption (Days) Damage Scenario A	B	C	D	E	Projected Loss (In Thousands)$$$ Damage Scenario A	B	C	D	E
1	DOT I-10 Rest Area	1	1	1	5	20	NA	NA	NA	NA	NA
1	Ponce de Leon Elementary	1	1	1	5	20	NA	NA	NA	NA	NA
	ELECTRICITY (Gulf Power)										
1	Ponce de Leon (46)	1	1	1	5	20	6	20	38	50	88
1	Caryville (46)	1	1	1	5	20	6	20	38	50	88
1	Bonifay (115)	1	1	1	5	20	13	40	75	100	175
2	Holmes Creek (115)	0	1	1	2	10	NA	30	75	90	125
2	Pittman (115)	0	1	1	2	10	NA	30	75	90	125
	HEALTH CARE										
1	Doctor's Memorial Hospital	1	1	1	5	20	NA	NA	NA	NA	NA
	NURSING HOMES										
1	Bonifay Nursing Home	1	1	1	5	20	NA	NA	NA	NA	NA

Table 37.
Potential Hurricane Service Disruption and Structural Loss ($)

Washington County Public Facilities

Loss Zone	Facility	Service Disruption (Days) Damage Scenario A	B	C	D	E	Projected Loss (In Thousands)$$$ Damage Scenario A	B	C	D	E
	POTABLE WATER										
1	Washington County Kennel Club	1	1	1	1	30	NA	NA	NA	NA	NA
1	Pine Log Recreation Area	1	1	1	1	30	NA	NA	NA	NA	NA
2	Holmes River Camp Sites	1	1	1	1	15	NA	NA	NA	NA	NA
2	Town of Wausau	1	1	1	1	15	NA	NA	NA	NA	NA
2	City of Vernon	1	1	1	1	15	NA	NA	NA	NA	NA
2	Sunnyhills Utility	1	1	1	1	15	NA	NA	NA	NA	NA
3	Town of Caryville	1	1	1	1	15	NA	NA	NA	NA	NA
4	Falling Waters State Rec. Area	1	1	1	1	5	NA	NA	NA	NA	NA
4	City of Chipley	1	1	1	1	5	NA	NA	NA	NA	NA
	WASTEWATER										
1	Washington County Kennel Club	1	1	1	1	30	NA	NA	NA	NA	NA
2	Sunnyhills Utilities	1	1	1	1	15	NA	NA	NA	NA	NA
2	City of Vernon	1	1	1	1	15	NA	NA	NA	NA	NA
3	Caryville Vocational Center	1	1	1	1	15	NA	NA	NA	NA	NA
4	City of Chipley	1	1	1	1	5	NA	NA	NA	NA	NA
	ELECTRICITY (Gulf Power)										
1	Greenhead (115)	1	1	1	1	30	13	30	50	75	230

Table 37. (continued)

Loss Zone	Facility	Service Disruption (Days) Damage Scenario A	B	C	D	E	Projected Loss (In Thousands)$$$ Damage Scenario A	B	C	D	E
2	Sunnyhills (115)	1	1	1	1	15	13	30	50	75	230
2	Vernon (115)	1	1	1	1	15	13	30	50	75	230
3	Chipley (115)	1	1	1	1	15	13	30	50	75	230
	HEALTH CARE										
4	Washington County Hospital	1	1	1	1	5	62	148	296	395	494
	NURSING HOMES										
4	Washington County Convalescent Center	1	1	1	1	5	10	25	50	66	83

TRANSPORTATION

Major transportation facilities in the West Florida Region include roadways (arterials and major collectors), port facilities, airport facilities, and rail facilities. Land, water and air transportation facilities, loss zone locations and value assessments appear on Tables 38 through 41.

Roads and Bridges

Transportation systems located within the highly vulnerable loss zones of the Study area are exposed to velocity storm surge from hurricanes. The interaction of velocity storm surge on a roadway, bridge approach or bridge supporting system can result in major damage (washout or upheaval) to all or portions of the transportation system. Roadways and bridges identified in Table 38, are located in areas projected to be impacted by overland velocity storm surge. Predictions of the proportional amount of potential road damage is beyond current capabilities. That is, it is currently impossible to accurately predict which sections of a roadway will experience damage from velocity surge. Table identifies the maximum potential dollar loss (reconstruction cost) for roadways vulnerable to velocity storm surge on the coastline.

The State of Florida Department of Transportation provided the current costs per mile for roadway construction and the costs per square foot for bridge construction (see page 127). Construction cost estimates for the Sam Lovelace Bridge, Pensacola NAS, were provided by Sam Lovelace, Facilities Management Director, Pensacola Naval Air Station.

Lane Configuration	Construction Cost per Mile
2 Lane Rural	$ 570,000
4 Lane Rural	$1,140,000
4 Lane Urban	$1,890,000

Bridge Type	Construction Cost Per Square Foot
Low Level	$ 32.00
Medium Level	45.00
High Level	64.00
Movable Span	250.00
Sam Lovelace Bridge (Pensacola NAS)	34.00

Table 38.
Potential Roadway Loss ($)

County	Loss Zone	Road/Bridge Location	Lane Configuration/ Structure Type	Miles/ Sq. Ft.	Potential Loss ($)
ESCAMBIA	1	CR 399	Rural 2-lane	7.0 mi.	$ 3,990,000
	2	CR 399	Rural 2-lane	6.0 mi.	3,420,000
		SR 399	Rural 4-lane	.8 mi.	912,000
		SR 399	Urban 4-lane	.125 mi.	236,250
		Bob Sikes (Pensacola Beach)	High Level Bridge	262,440 sq. ft.	16,796,160
	3	SR 399	Rural 2-lane	9.15 mi.	5,215,500
	4	Johnson Beach Rd.	Rural 2-lane	2.5 mi.	1,425,000
	5	SR 292	Rural 2-lane	11.5 mi.	6,555,000
		Perdido Key	High Level Bridge	77,796 sq. ft.	4,978,944
	8	SR 298 (Lillian Bridge)	Mov. Span	45,386 sq. t.	11,346,500
	14	Hwy. 90 (Causeway)	High Level Bridge	123,103 sq. ft.	7,878,592
	16	Pensacola NAS	Medium Level Bridge	190,995 sq. ft.	6,500,000
	17	Bayou Chico	Movable Span	23,490 sq. ft.	5,872,500
	25	Pensacola Bay	High Level Bridge	922,760 sq. ft.	59,056,640
		Bayou Texar (Cervantes St.)	Low Level Bridge	26,659 sq. ft.	853,088
	40	SR 184	Medium Level Bridge	107,170 sq. ft.	4,822,650

TOTAL POTENTIAL LOSS: $139,858,824

Table 38. (continued)
Potential Roadway Loss ($)

County	Loss Zone	Road/Bridge Location	Lane Configuration/ Structure Type	Miles/ Sq. Ft.	Potential Loss ($)
SANTA ROSA	2	SR 87	Rural 2-lane	7.2 mi.	$ 4,104,000
		CR 399	Rural 2-lane		
		CR 191	Rural 2-lane		
		U.S. 98	Rural 4-lane	6.0 mi.	6,840,000
		SR 399 (Navarre Beach)	Low Level Bridge	109,344 sq. ft.	3,499,008
	7	I-10	High Level Bridge	909,659 sq. ft.	58,218,176
	8	Hwy. 90	Low Level Bridge	31,680 sq. ft.	1,013,760

TOTAL POTENTIAL LOSS: $73,674,944

Table 38. (continued)
Potential Roadway Loss ($)

County	Loss Zone	Road/Bridge Location	Lane Configuration/ Structure Type	Miles/ Sq. Ft.	Potential Loss ($)
OKALOOSA	1	SR 30	Rural 2-lane	10.0 mi.	$ 5,700,000
		CR 30 A	Rural 2-lane		
		CR 30 B			
		CR 30 F			
		(Gulf Shores Drive)			
		New U.S. 98	Rural 4-lane	4.15 mi.	4,731,000
		U.S. 98	Urban 4-lane	2.1 mi.	3,969,000
	2	U.S. 98 and Santa Rosa Blvd.	Rural 4-lane	7.0 mi.	7,980,000
		SR 30 (East Pass)	Low Level Bridge	218,248 sq.ft.	6,983,936
	5	SR 20 (Rocky Bayou)	Low Level Bridge	68,244 sq. ft.	2,183,808
	8	SR 85 (Cinco Bayou)	Low Level Bridge	71,808 sq. ft.	2,297,856
	12	SR 85 (Ocean City)	Low Level Bridge	95,832 sq. ft.	3,066,624
	20	SR 397	Low Level Bridge	108,072 sq.ft.	3,458,304

TOTAL POTENTIAL LOSS: $40,370,528

Table 38. (continued)
Potential Roadway Loss ($)

County	Loss Zone	Road/Bridge Location	Lane Configuration/ Structure Type	Miles/ Sq. Ft.	Potential Loss ($)
WALTON	1	CR 30 A	Rural 2-lane		
		CR 395	Rural 2-lane		
		CR 83	Rural 2-lane	15.9 mi.	$ 9,063,000
		U.S. 98	Rural 2-lane		
		CR 187			
		30 A	Low Level Bridge	800 sq. ft.	25,600
		30 A	Low Level Bridge	1020 sq. ft.	32,640
		30 A	Low Level Bridge	2210 sq. ft.	70,720
		30 A	Low Level Bridge	680 sq. ft.	21,760
		30 A	Low Level Bridge	640 sq. ft.	20,480
		30 A	Low Level Bridge	640 sq. ft.	20,480
	2	SR 83	High Level Bridge	140,025 sq.ft.	8,961,600
	3	(Choctawhatchee			
		Bay)	Low Level Bridge	7,525 sq. ft.	240,800
		SR 393	Low Level Bridge	1,530 sq. ft.	48,960
	4	SR 20	Low Level Bridge	782 sq. ft.	25,024
		SR 20	Low Level Bridge	5290 sq. ft.	169,280
		SR 83 A	Low Level Bridge	1248 sq. ft.	39,936
	6	U.S. 98	Rural 2-lane	48.1 mi.	27,417,000
		CR 395	Rural 2-lane		
		CR 283	Rural 2-lane		
		CR 83	Rural 2-lane		
		CR 393	Rural 2-lane		
		CR 30 A	Rural 2-lane		
		CR 457	Rural 2-lane		
		SR 83 (U.S. 331)	Rural 2-lane		
		30	Low Level Bridge	3100 sq. ft.	99,200

TOTAL POTENTIAL LOSS: $46,256,480

Table 38. (continued)
Potential Roadway Loss ($)

County	Loss Zone	Road/Bridge Location	Lane Configuration/ Structure Type	Miles/ Sq. Ft.	Potential Loss ($)
BAY	1	U.S. 98	Rural 2-lane	5.85 mi.	$ 3,334,500
		CR 386	Rural 2-lane		
		CR 386 A	Rural 2-lane		
		SR 30 (Mexico Beach)	Low Level Bridge	1104 sq. ft.	35,328
		SR 30 (Mexico Beach)	Low Level Bridge	1564 sq. ft.	50,048
		SR 386 A (Mexico Beach)	Low Level Bridge	3016 sq. ft.	96,512
	2	U.S. 98	Rural 2-lane	6.50 mi.	3,705,000
	3	CR 392	Rural 2-lane		
		CR 392 A	Rural 2-lane		
		CR 396	Rural 2-lane		
		CR 747	Rural 2-lane		
		CR 396 A	Rural 2-lane	11.0 mi.	6,270,000
		CR 3031	Rural 2-lane		
		U.S. 98	Rural 4-lane	.75 mi.	855,000
		CR 392 (Grand Lagoon)	Low Level Bridge	5625 sq. ft.	180,000
		Hathaway Bridge	High Level Bridge	140,998 sq. ft.	9.023,872
	4	CR 3031	Rural 2-lane		
		CR 392	Rural 2-lane		
		CR 3030	Rural 2-lane		
		U.S. 98	Rural 2-lane		
		SR 30	Rural 2-lane		
		CR 30 B	Rural 2-lane		
		CR 30 C	Rural 2-lane	18.4 mi.	10,488,000
		CR 30 H	Rural 2-lane		
		CR 3035	Rural 2-lane		
		CR 3033	Rural 2-lane		
		SR 392 A	Urban 4-lane	2.8 mi.	5,292,000
	5	U.S. 98	Rural 2-lane		
		SR 30	Rural 2-lane		
		CR 3037	Rural 2-lane	6.5 mi.	3,705,000
		SR 30 (Avondale Resort)	Low Level Bridge	53,854 sq. ft.	1,723,328
	9	SR 391 (Robinson Bayou)	Low Level Bridge	1288 sq. ft.	41,216

10	SR 30 A	Low Level Bridge	4664 sq. ft.	149,248
	SR 30 (Watson Bayou)	Low Level Bridge	15,840 sq. ft.	506,880
11	SR 30 (Bay Harbor)	Low Level Bridge	1568 sq. ft.	50,176
	SR 30 (Tyndall AFB)	Low Level Bridge	170,376 sq. ft.	5,452,032
17	SR 79	Low Level Bridge	1152 sq. ft.	36,864
19	SR 79	Movable Span	22,528 sq. ft.	5,632,000
21	SR 75	Movable Span	12,692 sq. ft.	3,173,000
29	SR 390 A	Low Level Bridge	1913 sq. ft.	61,216

TOTAL POTENTIAL LOSS: $59,861,220

Table 39.
Port Facilities

County	Facility Name	Loss Zone	Value Assessment
Escambia	Port of Pensacola	12	$ 30 M (G.A.B. Business Services Appraisal, April, 1982)
Bay	Port of Panama City	29	$ 15 M (Assistant Port Director, Panama City Port Authority)

Table 40.
Public Airports

County	Facility Name	Loss Zone	Value Assessment
Escambia	Pensacola Regional Airport	26	
Santa Rosa	Milton "T" Airport	15	$ 75 T
Okaloosa	Okaloosa County Airport		$ 2 M
	Bob Sikes Airport	25	
	Destin-Ft. Walton Beach Airport	1	
Bay	Panama City Airport	9	*

*No appraisals available

Table 41.
Rail Facilities

County	Facility Name	Value Assessment
Bay	Atlanta & St. Andrews Bay Railroad Company	$ 4,200 T (total value)
Escambia	Seaboard System Railroad	$ 307 T (structures only)
	Burlington Northern	*
Santa Rosa	Seaboard System Railroad	$ 24 T (structures only)
Okaloosa	Seaboard System Railroad	$ 11 T (structures only)
Walton	Seaboard System Railroad	$ 25 T (structures only)
Washington	Seaboard System Railroad	$ 28 T (structures only)

*Structures appraised under the unit assessment rule; replacement cost reflected by typical market indicators.

FISHING INDUSTRY

Commercial fishing often is severely impacted by hurricane conditions entering the Gulf of Mexico. Fishing is cancelled for deep sea pleasure boat fishing and commercial fishing boat operations for several days, and in the case of Hurricane Elena, for longer periods. Businesses supporting fishing activities such as marine fuel, bait, ice and tackle, lose money. Motels and hotels that accommodate fishing clientele have room cancellations and subsequent loss of income.

Three counties, Escambia, Okaloosa, and Bay have extensive daily fishing activity and can anticipate losses of more than $21,000 per day as the high figure in Bay County to $10,000 per day in Escambia County (see Table 42).

The biggest income producers are red snapper, vermillion snapper and shrimp, making up 40 to 50 percent of the total value of the fish landed (see Table 43). Any post-hurricane disruption in the successful catch and sale of these three varieties of fish can have a serious impact on commercial fishermen, fish wholesalers/retailers, and seafood restaurants.

The long range effect on the fish population is not well understood after a hurricane. Water clarity, changes in salinity and mixing of large quantities of foreign materials from flooding affects the food chain and living environments of finfish and shellfish.

Table 42.
Fish and Shellfish: Quantity and Value
(1981)

County	Fish	Shellfish[1]	Total	Value (Dollars)
Escambia	3,976,435	1,086,637	5,063,072	$3,573,161 (9,789 p/day)
Santa Rosa	670,344	42,224	712,568	279,994 (767 p/day)
Okaloosa	4,000,972	1,027,072	5,028,044	4,360,690 (11,947 p/day)
Walton	4,348	397,275	401,623	94,441 (258 p/day)
Bay	9,456,590	1,737,518	11,194,108	7,658,158 (20,981 p/day)
Totals	18,108,689	4,290,726	22,399,415	$15,966,444

[1] Includes Shrimp

Table 43.
Major Fisheries--Alabama & Northwest Florida (1978)

	Species	Lbs. Lnd.	% of total landings	Value ($)	% of total value of landings
Escambia	Black Mullet	968,728	26	216,482	7
	Shrimp	845,612	23	1,404,682	55
	Red Snapper	380,580	10	437,429	17
	Croaker	292,536	8	---	---
	Spanish Mackerel	260,744	7	---	---
	Spotted Seatrout	---	---	89,468	3
	Vermillion Snapper	---	---	101,391	4
Santa Rosa	Black Mullet	191,465	49	41,020	41
	Shrimp	60,294	15	---	---
	Red Snapper	51,932	13	---	---
	Croaker	37,972	10	11,769	12
	Spanish Mackerel	12,798	3	---	---
	Spotted Seatrout	---	---	7,360	7
	White Snapper	---	---	12,632	13
	Blue Crab	---	---	8,708	9

Table 43. (continued)
Major Fisheries--Alabama & Northwest Florida (1978)

	Species	Lbs. Lnd.	% of total landings	Value ($)	% of total value of landings
Okaloosa	Tenpounder	523,128	22	91,391	11
	Spanish Sardine	321,745	14	---	---
	Cigarfish	311,145	13	50,651	6
	Black Mullet	239,132	10	48,751	6
	Red Snapper	187,581	8	240,941	29
	Vermillion Snapper	---	---	93,863	11
Walton	Black Mullet	89,119	75	19,717	56
	Spotted Seatrout	12,724	11	7,225	21
	Flounder	3,026	3	2,081	6
	Bait Shrimp	1,806	2	3,840	11
	Oyster	1,771	2	1,952	6
Bay	Black Mullet	2,135,070	24	363,890	8
	Red Snapper	1,370,497	16	1,692,440	38
	Shrimp	904,317	10	1,393,029	31
	Crevalle Jack	662,347	8	---	---
	Tenpounder	585,572	7	---	---
	Grouper	---	---	226,838	5
	Vermillion Snapper	---	---	154,641	3

Source: Florida Statistical Abstract, 1984.

BOATING

Pleasure boats and commercial boats although protected from open water and direct hurricane surge still suffer from the effects of high winds and elevated water levels and rough surface conditions. There are approximately 14,000 boats in Escambia and 11,000 in Bay County and a total of 41,713 registered boats in the five coastal counties (see Table 44).

The dollar value of the pleasure and commercial boats is not available; however, it is safe to assume the approximate value could be in the half billion dollar range.

A major attraction to tourists who come to the coastal area are the boating activities available, ranging from deep sea fishing to windsurfing. Many of these businesses depend on the summer and fall season income to carry them through financially the rest of the year. The loss of income due to a hurricane in the prime season is very costly, especially if it occurs over a big fishing holiday weekend, such as Labor Day.

Damage to docking facilities, piers, and the buildings associated with boating can cause long term disruption to services required to conduct day to day operations. Storm induced shoaling may require dredging of harbors and entrances to marinas.

Table 44.
Boats: Registered, Fiscal Year 1983-1984

	Pleasure Boats	Commercial Boats
Escambia	13,495	645
Santa Rosa	5,267	224
Okaloosa	8,385	478
Walton	2,104	131
Bay	10,051	933

Source: State of Florida, DNR, Vessels Registered in Florida, Fiscal Year 1982-1983.

CHAPTER VI

VALUATION OF TEMPORARY EMPLOYMENT LOSS

Temporary employment loss estimates are based on structural damage to non-residential structures such as restaurants, retail stores and public buildings. Anaysis of the surge and wind damage to non-residential establishments together with the resulting days of inoperation is the first step in the valuation of temporary employment loss. The structural inventory described in Chapter 3 identifies the total number of each industry type by section. Quantified employment and income loss estimates are based on average number of employees by industry type, average daily employee income, and expected days of establishment inoperation caused by structural damage.

Table 45 projects employment and income loss by county for each hurricane scenario. Appendix J presents employment and income losses by scenario and loss zone for each county.

The unemployment caused by hurricanes entering our region is directly related to the severity of the associated weather factors. The height of flooding and the severity of the wind damage in the manufacturing, wholesale and retail areas determines how quickly these categories can return to normal business operations. The same effects are felt in the service industries, although they normally are not involved with flood damaged inventory and restocking. The amount of rainfall associated with the hurricane is one of the major factors in the flood damage to buildings. Wind damage to glass, signs and the

Table 45.
*Temporary Employment and Income Loss By Hurricane Damage Scenario

	A		B		C		D		E	
County	Empl. Loss. (Days)	Income Loss ($$$)	Empl. Loss (days)	Income Loss ($$$)	Empl. Loss (days)	Income Loss ($$$)	Empl. Loss (days)	Income Loss ($$$)	Empl. Loss (days)	Income Loss ($$$)
Escambia	1,888 / 3 days	727	1,996 / 30 days	7,720	12,135 / 30 days	50,002	12,823 / 40 days	69,920	49,963 / 60 days	417,613
Santa Rosa	-0-	-0-	60 / 2 days	8	1,106 / 5 days	796	1,337 / 20 days	3,833	6,039 / 60 days	51,975
Okaloosa	1,833 / 30 days	8,202	2,620 / 56 days	18,295	4,362 / 67 days	35,365	5,196 / 120 days	76,320	8,164 / 160 days	152,344
Walton	890 / 5 days	531	1,068 / 10 days	1,201	1,227 / 15 days	2,166	1,589 / 20 days	3,664	2,473 / 60 days	16,900
Bay	2,649 / 15 days	5,706	2,885 / 25 days	10,639	3,461 / 50 days	28,833	3,547 / 60 days	32,718	11,404 / 90 days	171,231
Holmes	-0-	-0-	-0-	-0-	-0-	-0-	4,600 / 5 days	3,045	5,913 / 10 days	7,759
Washington	-0-	-0-	-0-	-0-	-0-	-0-	-0-	-0-	2,494 / 10 days	2,903

*Projections based on average number of employees per unit and average annual income.

basic structure can delay the restoration of normal business activities for several months. Electricity and telephone service are vital to the business community. Loss of these services, even with no additional damage, hinders the businesses' ability to be conducted in a profitable fashion. Restrictions to normal street and highway travel to commercial areas directly impacts the business community.

One of the overriding effects is that retail stores, with the exception of hardware and lumber stores, do a minimum of business as residents are engrossed with recovery efforts. Experience has shown that in times of great stress purchases are limited to items that are essential for daily survival. High value items not essential are not purchased, further slowing the long range economic recovery of the community. Many businesses with low profit margins may have to close or go out of business.

For category 3, 4, or 5 hurricanes there will be major structural damage to many buildings. Hardest hit are those along the beach and at lower elevations bordering the bays. Hotels, motels, townhouses, and restaurants receiving major surge damage will lay off wage rate employees until the business can open again, which may be six months to a year later. During the peak summer season this may result in as many as 50 to 250 employees unemployed in each of the large tourist resorts. Not only is the tourist industry seriously affected but so are all the groups in the retail and wholesale businesses supporting tourism.

One of the primary concerns for both county and state officials is the unemployment compensation paid out with reduced

state and local taxes coming in. The following tables (46-48) show what industry group people are generally employed in by county. Manufacturing employment and earnings are summarized on Table 49 and Table 50 outlines the estimated daily and hourly wage rates for the industry by county. Tables 51-71 indicate county businesses divided into wholesale, retail and service industry groups. The information presented shows average annual pay which is further divided into average pay per hour. Tables 72 through 78 present manufacturing groups by employment size. Multiplying the number of employees by the estimated days of unemployment, a loss of income figure can be derived in the wholesale, retail, service and manufacturing industry groups.

With these figures the economic loss can be estimated for an indeterminate period after a hurricane. Problems experienced by county and city administrators indicates there is a need for easy to calculate economic impact figures. After the hurricane, FEMA and state officials need estimates on numbers of people unemployed and how many businesses are affected. A Presidential Disaster Declaration provides several sources of disaster assistance, one of which is disaster unemployment assistance.

Employment has been divided into four main business categories:

- wholesale trade;
- retail trade;
- service industries; and
- manufacturing.

Provided on tables 79-85 are the estimated income dollar loss for these four categories. The number of days of income loss are

provided in 5 day increments (5, 10, 15) up to 30 and then 45, 60, and 90 days. For periods longer than 3 months, multiply the 30 day column by estimated months that this business category will be inoperative.

Assuming there will be a five day period when businesses cannot operate in Escambia County, the chart shows an income loss of $10,633,000 for the four employment groups. In the counties where these four income groups have a smaller effect on the economy the chart shows losses of $208,000 in Holmes and $108,000 in Washington for a five-day inoperative period.

A ninety day inoperative period for just 50 percent of the wholesale, retail and service sectors (excluding manufacturing) in Escambia County shows between $57-60 million dollar loss in employee income. Adding 50% of the manufacturing income to this figure raises the total to close to $100 million for 90 days. The impact on the other counties would be proportionally as devastating, just on a smaller scale of dollar income lost.

In summary, it is necessary to emphasize the critical impact of a hurricane strike on summer tourism. The seasonal nature of tourism income and the location of the tourist facilities on the beach or bays where they are vulnerable to extensive damage, places one of the major sources of income for the five coastal counties in constant jeopardy (see Table 86). Therefore, when major resort areas are damaged for extended periods, it removes the one business sector where most of the unemployed can work for five months of the year. The economic impact of being out of operation for 30 days during the peak earning period may

Table 46.
Average Employment and Average Income
of Selected Industries By County

County	Commercial	(Manufact.) Industrial	Public Utilities	Agriculture	Public Transp.	Health Care	Govt. Inst.
ESCAMBIA							
Avg. # Employees	18	68	29	5	29		
Avg. Income					$25,815		
SANTA ROSA							
Avg. # Employees	11	89	23	9	23		
Avg. Income					$22,951		
OKALOOSA							
Avg. # Employees	13	44	17	4	17		
Avg. Income					$22,691		
WALTON							
Avg. # Employees	16	48	NA	39	NA		
Avg. Income							
BAY							
Avg. # Employees	12	41	24	2	24		
Avg. Income					$22,874		
WASHINGTON							
Avg. # Employees	11	10	30	11	30		
Avg. Income							
HOLMES							
Avg. # Employees	11	23	6	87	6		
Avg. Income					$28,466		

NA - Not Available

Table 47.
Employment in Selected Industries - 1981 and 1983

County	Total Employment All Industries 1981	Total Employment All Industries 1983	Construction 1981	Construction 1983	Trade 1981	Trade 1983	Services 1981	Services 1983	Manufacturing 1981	Manufacturing 1983
Escambia	111,314	105,621	7,980	6,526	21,565	21,963	22,021	23,448	10,797	10,487
Santa Rosa	16,170	15,391	972	1,079	2,382	2,774	1,855	1,961	1,756	1,842
Okaloosa	51,834	53,720	2,623	3,423	8,382	9,691	8,157	9,525	3,081	3,309
Walton	5,803	4,677	188	163	881	854	1,048	992	769	776
Bay	44,084	42,230	2,487	2,556	9,744	10,074	7,599	7,770	3,736	3,792
Holmes	3,962	2,910	55	71	456	480	338	359	802	829
Washington	4,620	3,451	200	246	509	488	508	604	201	223

Source: U.S. Dept. of Commerce, Bureau of Economic Analysis, Regional Economic Information System (July 1985).

Table 48.
Income In Selected Industries, 1983
(In Thousands of Dollars)

County	Total Income All Industries	Construction	Trade	Services	Manufacturing
Escambia	1,690,412	133,021	286,013	360,090	273,580
Santa Rosa	235,179	21,263	31,136	29,645	43,550
Okaloosa	786,570	54,678	106,362	144,051	57,069
Walton	53,862	4,334	10,654	12,392	11,007
Bay	613,868	48,209	124,922	115,044	73,409
Holmes	28,165	1,668	5,975	4,239	8,260
Washington	40,687	4,146	5,413	7,623	2,714

Source: U.S. Dept. of Commerce, Bureau of Economic Analysis, Regional Economic Information System (May 1985).

Table 49.
Manufacturing Employment

County	Employment in Manufacturing as a Percent of Total Employment 1981	1983	Earnings Generated by Manufacturing as a Percent of Total Earnings 1981	1983
Escambia	10.3	9.9	15.9	14.3
Santa Rosa	12.2	12.0	17.7	15.5
Okaloosa	6.3	6.2	6.9	6.5
Walton	16.1	16.6	17.5	16.7
Bay	9.1	9.0	13.2	10.6
Holmes	29.4	28.5	21.5	21.8
Washington	5.5	6.5	5.0	4.8

Source: U.S. Dept. of Commerce, Bureau of Economic Analysis, Regional Economic Information System.

Table 50.
Manufacturing - 1982

County	All Establishments: Total Number	All Establishments: With 20 employees or more	All Employees: Number	All Employees: Payroll (millions $)	Production Workers: Number	Production Workers: Wages (millions $)	Av. Pay for All Employees: Average[1] Pay/Day	Av. Pay for All Employees: Average[2] Pay/Hour
Escambia	183	41	10,500	227.7	6,700	127.2	$82.14	$10.26
Santa Rosa	38	5	2,000	30.2	1,200	15.7	$57.20	$ 7.14
Okaloosa	90	24	3,000	39.6	2,200	25.6	$50.00	$ 6.25
Walton	21	4	300	2.6	200	1.7	$32.82	$ 4.10
Bay	121	29	3,800	60.4	3,000	44.1	$60.20	$ 7.52
Holmes	33	5	800	6.2	700	4.9	$29.35	$ 3.67
Washington	23	2	200	1.5	200	1.3	$28.40	$ 3.55

SOURCE: U.S. Dept. of Commerce, Bureau of Census, 1982 Census of Manufacturers, Florida, May 1985.

[1]Based on 264 work days per year.
[2]Based on an eight hour work day.

Table 51.
Wholesale Trade - 1982
Escambia County

	Establishments	Sales ($1000)	Annual Payroll ($1000)	Paid Employees	Average Pay/Year	Average Pay/Day (1)	Average Pay/Hour (2)
ESCAMBIA	321	888,891	$57,268	3,886	$14,737	$55.82	$ 6.97
o Pensacola	165	476,028	$30,915	2,124	$14,555	$55.13	$ 6.89
o Balance of County	156	412,863	$26,353	1,762	$14,956	$56.65	$ 7.08

	Merchant Wholesalers				Other Operating Type	
	Establishments	Sales ($1,000)	Annual Payroll ($1,000)	Paid Employees	Establishments	Sales ($1000)
ESCAMBIA	278	685,492	$50,962	3,576	43	$203,399
o Pensacola	142	360,043	$27,950	1,955	23	$115,985
o Balance of County	136	325,449	$23,012	1,621	20	$ 87,414

(1) Based on 264 work days per year
(2) Based on an eight hour work day

SOURCE: U.S. Dept. of Commerce, Bureau of the Census; Census of Wholesale Trade, 1982, Florida, November, 1984.

Table 52.
Retail Trade -- 1982
Escambia County

	Establishments	Sales ($1,000)	Annual Payroll ($1,000)	Paid Employees	Average Pay/Year	Average Pay/Day (1)	Average Per/Hour (2)
ESCAMBIA	1961	1,178,543	135,956	16,413	$ 8,283	$ 31.37	$ 3.92
o Pensacola	633	418,690	50,094	5,562	$ 9,006	$ 34.11	$ 4.26
o Balance of County	1328	759,853	85,862	10,851	$ 7,912	$ 29.96	$ 3.74

(1) Based on 264 work days per year
(2) Based on an eight hour day

SOURCE: U.S. Dept. of Commerce, Bureau of the Census; Census of Retail Trade 1982, Florida, November, 1984.

Table 53.
Service Industries -- 1982
Escambia County

	Establishments	Sales ($1,000)	Annual Payroll ($1,000)	Paid Employees	Average Pay/Year	Average Pay/Day (1)	Average Pay/Hour (2)
ESCAMBIA	1,237	358,791	140,646	10,908	$12,894	$48.84	$6.10
o Pensacola	668	207,164	87,504	6,213	$14,084	$54.86	$6.85
o Balance of County	569	151,627	53,142	4,695	$11,318	$45.43	$5.68

	Hotels, Motels, & Other Lodging Places	Receipts ($1,000)	Auto Repair, Services, & Garages	Receipts ($1,000)	Amusement, Recreation (motion pictures)	Receipts ($1,000)	Health Services (except hospitals)	Receipts ($1,000)	Legal Services	Receipts ($1,000)
ESCAMBIA	40	22,480	135	34,793	61	20,022	323	115,401	86	25,571
o Pensacola	13	10,484	43	9,505	23	11,736	225	66,267	76	25,968
o Balance of County	27	11,996	92	25,288	38	8,286	98	49,194	10	603

(1) Based on 264 work days per year
(2) Based on an eight hour day

SOURCE: U.S. Dept. of Commerce, Bureau of the Census; Census of Wholesale Trade, 1982, Florida, November, 1984.

Table 54.
Wholesale Trade -- 1982
Santa Rosa County

	Establishments	Sales ($1000)	Annual Payroll ($1,000)	Paid Employees	Average Pay/Year	Average Pay/Day (1)	Average Pay/Hour (2)
SANTA ROSA	43	51,363	$3,182	283	$11,243	$ 42.59	$ 5.32
o Gulf Breeze	12	5,451	$ 494	42	$11,761	$ 44.55	$ 5.56
o Milton	10	6,963	$ 715	78	$ 9,166	$ 34.72	$ 4.34
o Balance of County	21	38,949	$1,973	163	$12,104	$ 45.85	$ 5.73

	Merchant Wholesalers				Other Operating Type	
	Establishments	Sales ($1,000)	Annual Payroll ($1,000)	Paid Employees	Establishments	Sales ($1000)
SANTA ROSA	36	47,687	$2,976	275	7	$3,676
o Gulf Breeze	7	D	D	D	5	D
o Milton	10	6,963	715	78	---	---
o Balance of County	19	D	D	D	2	D

(1) Based on 264 work days per year
(2) Based on an eight hour work day
D Data not shown to avoid disclosure of individual firm operations.

SOURCE: U.S. Dept. of Commerce, Bureau of the Census; Census of Wholesale Trade, 1982, Florida, November, 1984.

Table 55.
Retail Trade -- 1982
Santa Rosa County

	Establishments	Sales ($1,000)	Annual Payroll ($1,000)	Paid Employees	Average Pay/Year	Average Pay/Day (1)	Average Per/Hour (2)
SANTA ROSA	381	$173,339	16,590	2,311	$ 7,178	$ 27.19	$ 3.40
o Gulf Breeze	89	41,570	4,304	573	7,511	28.45	3.55
o Milton	167	89,513	8,608	1,257	6,848	25.93	3.25
o Balance of County	125	42,256	3,678	481	7,646	28.96	3.62

(1) Based on 264 work days per year
(2) Based on an eight hour day

SOURCE: U.S. Dept. of Commerce, Bureau of the Census; Census of Retail Trade 1982, Florida, November, 1984.

Table 56.
Service Industries - 1982
Santa Rosa County

	Establishments	Sales ($1,000)	Annual Payroll ($1,000)	Paid Employees	Average Pay/Year	Average Pay/Day (1)	Average Pay/Hour (2)
SANTA ROSA	185	27,847	10,514	879	$11,961	$45.30	$ 5.66
o Gulf Breeze	58	8,134	2,687	267	$10,063	$38.11	$ 4.76
o Milton	79	12,663	5,968	414	$14,415	$54.60	$ 6.82
o Balance of County	48	7.050	1,859	196	$ 9,484	$35.92	$ 4.49

	Hotels, Motels, & Other Lodging Places	Receipts ($1,000)	Auto Repair, Services, & Garages	Receipts ($1,000)	Amusement, Recreation (motion pictures)	Receipts ($1,000)	Health Services (except hospitals)	Receipts ($1,000)	Legal Services	Receipts ($1,000)
SANTA ROSA	7	3,439	24	2,251	12	1,064	47	11,419	8	1,358
o Gulf Breeze	4	D	5	477	4	320	13	2,155	1	D
o Milton	1	D	7	344	3	D	26	7,388	7	D
o Balance of County	2	D	12	1,430	5	D	8	1,876	--	D

(1) Based on 264 work days per year
(2) Based on an eight hour day
D Data not shown to avoid disclosure of individual firm operations.

SOURCE: U.S. Dept. of Commerce, Bureau of the Census; Census of Wholesale Trade, 1982, Florida, November, 1984.

Table 57.
Wholesale Trade - 1982
Okaloosa County

	Establishments	Sales ($1000)	Annual Payroll	Paid Employees	Average Pay/Year	Average Pay/Day (1)	Average Pay/Hour (2)
OKALOOSA	118	130,983	$10,649	827	$12,876	$ 48.77	$ 6.09
o Crestview	14	33,065	1,847	124	14,895	56.42	7.05
o Ft. Walton Beach	54	47,533	4,819	321	15,012	56.86	7.10
o Mary Esther	1	D	D	D	--	--	--
o Niceville	6	D	D	D	--	--	--
o Valparaiso	6	10,660	1,411	128	11,023	41.75	7.10
o Balance of County	37	D	D	D	--	--	--

	Merchant Wholesalers				Other Operating Type	
	Establishments	Sales ($1,000)	Annual Payroll ($1,000)	Paid Employees	Establishments	Sales ($1000)
OKALOOSA	102	101,749	8,608	717	16	29,234
o Crestview	12	D	D	D	2	D
o Ft. Walton Beach	46	40,644	3,899	283	8	6,889
o Mary Esther	1	D	D	D	---	---
o Niceville	5	D	D	D	1	D
o Valparaiso	5	D	D	D	1	D
o Balance of County	33	D	D	D	4	D

(1) Based on 264 work days per year
(2) Based on an eight hour work day
D Data not shown to avoid disclosure of individual firm operations.

SOURCE: U.S. Dept. of Commerce, Bureau of the Census; Census of Wholesale Trade, 1982, Florida, November, 1984.

Table 58.
Retail Trade - 1982
Okaloosa County

	Establishments	Sales ($1,000)	Annual Payroll ($1,000)	Paid Employees	Average Pay/Year	Average Pay/Day (1)	Average Per/Hour (2)
OKALOOSA	1,095	563,528	65,996	8,362	$7,892	$29.89	$3.73
o Crestview	120	55,840	5,469	676	$8,090	$30.64	$3.83
o Ft. Walton Beach	488	287,999	32,851	4,041	$8,129	$30.79	$3.85
o Mary Esther	92	72,977	10,392	1,363	$7,624	$28.88	$3.61
o Niceville	96	42,102	4,597	627	$7,321	$27.77	$3.47
o Valparaiso	27	5,603	D	D	---	---	---
o Balance of County	272	99,007	D	D	---	---	---

(1) Based on 264 work days per year
(2) Based on an eight hour day
D Data not shown to avoid disclosure of individual firm operations.

SOURCE: U.S. Dept. of Commerce, Bureau of the Census; Census of Retail Trade 1982, Florida, November, 1984.

Table 59.
Service Industries - 1982
Okaloosa County

	Establishments	Sales ($1,000)	Annual Payroll ($1,000)	Paid Employees	Average Pay/Year	Average Pay/Day (1)	Average Pay/Hour (2)
OKALOOSA	656	171,161	67,831	6,155	11,020	$41.74	$5.21
o Crestview	66	6,922	2,264	277	8,173	$30.95	$3.86
o Ft. Walton Beach	336	101,760	45,769	3,770	12,140	$45.98	$5.74
o Mary Esther	16	2,199	861	194	4,438	$16.81	$2.10
o Niceville	39	5,444	1,951	152	12,835	$48.62	$6.07
o Valparaiso	24	1,929	419	77	5,441	$20.61	$2.57
o Balance of County	175	52,907	16,567	1,685	9,992	$37.85	$4.73

	Hotels, Motels, & Other Lodging Places	Receipts ($1,000)	Auto Repair, Services, & Garages	Receipts ($1,000)	Amusement, Recreation (motion pictures)	Receipts ($1,000)	Health Services (except hospitals)	Receipts ($1,000)	Legal Services	Receipts ($1,000)
OKALOOSA	40	37,090	74	15,710	44	9,995	128	25,924	49	7,557
o Crestview	1	D	3	290	1	D	18	3,136	9	775
o Ft. Walton Beach	15	11,847	46	8,509	24	6,478	63	13,694	24	3,710
o Mary Esther	--	--	--	--	1	D	1	D	--	--
o Niceville	--	--	5	719	--	D	11	2,454	5	904
o Valparaiso	1	D	3	585	1	D	6	332	1	D
o Balance of County	23	D	17	5,607	17	3,036	29	D	10	D

(1) Based on 264 work days per year
(2) Based on an eight hour day
D Data not shown to avoid disclosure of individual firm operations.
SOURCE: U.S. Dept. of Commerce, Bureau of the Census; Census of Wholesale Trade, 1982, Florida, November, 1984.

Table 60.
Wholesale Trade - 1982
Walton County

	Establishments	Sales ($1000)	Annual Payroll ($1000)	Paid Employees	Average Pay/Year	Average Pay/Day (1)	Average Pay/Hour (2)
WALTON	19	43,017	$1,511	140	$10,792	$40.87	$ 5.11
o DeFuniak Springs	10	D	D	D	--	--	--
o Balance of County	9	D	D	D	--	--	--

	Merchant Wholesalers				Other Operating Type	
	Establishments	Sales ($1,000)	Annual Payroll ($1,000)	Paid Employees	Establishments	Sales ($1000)
WALTON	17	D	D	D	2	D
o DeFuniak Springs	10	D	D	D	---	---
o Balance of County	7	D	D	D	2	D

(1) Based on 264 work days per year
(2) Based on an eight hour work day
D Data not shown to avoid disclosure of individual firm operations.

SOURCE: U.S. Dept. of Commerce, Bureau of the Census; Census of Wholesale Trade, 1982, Florida, November, 1984.

Table 61.
Retail Trade - 1982
Walton County

	Establishments	Sales ($1,000)	Annual Payroll ($1,000)	Paid Employees	Average Pay/Year	Average Pay/Day (1)	Average Per/Hour (2)
WALTON	173	64,460	5,400	775	$6,967	$26.39	$ 3.30
o DeFuniak Springs	91	43,009	4,248	582	$7,299	$27.64	$ 3.45
o Balance of County	82	21,361	1,152	193	$5,969	$22.60	$ 2.82

(1) Based on 264 work days per year
(2) Based on an eight hour day

SOURCE: U.S. Dept. of Commerce, Bureau of the Census; Census of Retail Trade 1982, Florida, November, 1984.

Table 62.
Service Industries - 1982
Walton County

	Establishments	Sales ($1,000)	Annual Payroll ($1,000)	Paid Employees	Average Pay/Year	Average Pay/Day (1)	Average Pay/Hour (2)
WALTON	60	9,630	2,938	344	$8,540	$32.35	$ 4.04
o DeFuniak Springs	38	7,417	2,353	278	$8,464	$32.06	$ 4.00
o Balance of County	22	2,213	585	66	$8,863	$33.57	$ 4.19

	Hotels, Motels, & Other Lodging Places	Receipts ($1,000)	Auto Repair, Services, & Garages	Receipts ($1,000)	Amusement, Recreation (motion pictures)	Receipts ($1,000)	Health Services (except hospitals)	Receipts ($1,000)	Legal Services	Receipts ($1,000)
WALTON	4	1,453	4	1,506	2	D	15	3,149	6	636
o DeFuniak Springs	1	D	2	D	---	---	11	2,635	6	636
o Balance of County	3	D	2	D	2	D	4	514	---	

(1) Based on 264 work days per year
(2) Based on an eight hour day
D Data not shown to avoid disclosure of individual firm operations.

SOURCE: U.S. Dept. of Commerce, Bureau of the Census; Census of Wholesale Trade, 1982, Florida, November, 1984.

Table 63.
Wholesale Trade - 1982
Bay County

	Establishments	Sales ($1000)	Annual Payroll ($1000)	Paid Employees	Average Pay/Year	Average Pay/Day (1)	Average Pay/Hour (2)
BAY	134	300,251	$17,156	1,376	$12,468	$47.22	$ 5.90
o Callaway	--	--	--	--	--	--	--
o Lynn Haven	5	6,870	556	39	$14,256	$54.00	$ 6.75
o Panama City	100	261,580	13,980	1,120	$12,482	$47.28	$ 5.91
o Parker	1	D	D	D	--	--	--
o Springfield	2	D	D	D	--	--	--
o Balance of County	26	D	D	D	--	--	--

	Merchant Wholesalers				Other Operating Type	
	Establishments	Sales ($1,000)	Annual Payroll ($1,000)	Paid Employees	Establishments	Sales ($1000)
BAY	120	167,333	14,982	1,259	14	132,918
o Callaway	---	---	---	--	--	---
o Lynn Haven	4	D	D	D	1	D
o Panama City	87	D	D	D	13	D
o Parker	1	D	D	D	--	---
o Springfield	2	D	D	D	--	D
o Balance of County	26	D	D	D	--	---

(1) Based on 264 work days per year
(2) Based on an eight hour work day
D Data not shown to avoid disclosure of individual firm operations.

SOURCE: U.S. Dept. of Commerce, Bureau of the Census; Census of Wholesale Trade, 1982, Florida, November, 1984.

Table 64.
Retail Trade - 1982
Bay County

	Establishments	Sales ($1,000)	Annual Payroll ($1,000)	Paid Employees	Average Pay/Year	Average Pay/Day (1)	Average Per/Hour (2)
BAY	1059	579,996	69,085	8,611	$8,022	$30.38	$ 3.79
o Callaway	14	5,625	D	D	---	---	---
o Lynn Haven	50	14,772	1,494	195	7,661	29.02	3.62
o Panama City	650	418,050	49,044	5,745	8,536	32.33	4.04
o Parker	25	20,533	2,288	290	7,889	29.88	3.73
o Springfield	19	5,910	533	54	9,870	37.38	4.67
o Balance of County	301	115,106	D	D	---	---	---

(1) Based on 264 work days per year
(2) Based on an eight hour day
D Data not shown to avoid disclosure of individual firm operations.

SOURCE: U.S. Dept. of Commerce, Bureau of the Census; Census of Retail Trade 1982, Florida, November, 1984.

Table 65.
Service Industries - 1982
Bay County

	Establishments	Sales ($1,000)	Annual Payroll ($1,000)	Paid Employees	Average Pay/Year	Average Pay/Day (1)	Average Pay/Hour (2)
BAY	681	157,117	52,893	4,779	$11,067	$41.92	$ 5.24
o Callaway	3	327	70	24	$ 2,916	$11.04	$ 1.38
o Lynn Haven	34	3,421	1,067	93	$11,473	$43.45	$ 5.43
o Panama City	441	94,598	36,041	2,774	$12,992	$49.21	$ 6.15
o Parker	7	405	147	19	$ 7,736	$29.30	$ 3.66
o Springfield	8	1,948	560	43	$13,023	$49.33	$ 6.16
o Balance of County	188	56,418	15,008	1,826	$ 8,219	$31.13	$ 3.89

	Hotels, Motels, & Other Lodging Places	Receipts ($1,000)	Auto Repair, Services, & Garages	Receipts ($1,000)	Amusement, Recreation (motion pictures)	Receipts ($1,000)	Health Services (except hospitals)	Receipts ($1,000)	Legal Services	Receipts ($1,000)
BAY	116	41,970	58	8,727	54	16,443	143	39,113	35	7,464
o Callaway	1	D	---	---	1	D	---	---	---	---
o Lynn Haven	1	D	4	190	1	D	3	D	1	D
o Panama City	25	9,963	42	6,439	25	4,951	121	33,550	32	7,261
o Parker	1	D	1	D	---	---	2	D	---	---
o Springfield	---	---	1	D	---	---	2	D	1	D
o Balance of County	88	31,877	10	D	27	D	15	4,275	1	D

(1) Based on 264 work days per year
(2) Based on an eight hour day
D Data not shown to avoid disclosure of individual firm operations.

SOURCE: U.S. Dept. of Commerce, Bureau of the Census; Census of Wholesale Trade, 1982, Florida, November, 1984.

Table 66.
Wholesale Trade - 1982
Holmes County

	Establishments	Sales ($1000)	Annual Payroll ($1000)	Paid Employees	Average Pay/Year	Average Pay/Day (1)	Average Pay/Hour (2)
HOLMES	15	12,572	793	68	$11,661	$44.17	$ 5.52
o Bonifay	7	10,234	532	37	$14,378	$54.46	$ 6.80
o Balance of County	8	2,338	261	31	$ 8,419	$31.89	$ 3.98

	Merchant Wholesalers				Other Operating Type	
	Establishments	Sales ($1,000)	Annual Payroll ($1,000)	Paid Employees	Establishments	Sales ($1000)
HOLMES	15	D	D	D	---	D
o Bonifay	7	10,234	532	37	---	---
o Balance of County	8	D	D	D	---	D

(1) Based on 264 work days per year
(2) Based on an eight hour work day
D Data not shown to avoid disclosure of individual firm operations.

SOURCE: U.S. Dept. of Commerce, Bureau of the Census; Census of Wholesale Trade, 1982, Florida, November, 1984.

Table 67.
Retail Trade -- 1982
Holmes County

	Establishments	Sales ($1,000)	Annual Payroll ($1,000)	Paid Employees	Average Pay/Year	Average Pay/Day (1)	Average Per/Hour (2)
HOLMES	109	33,489	3,042	346	$8,791	$33.30	$ 4.16
o Bonifay	48	18,312	1,897	235	$8,072	$30.57	$ 3.82
o Balance of County	61	15,177	1,145	111	$10,315	$39.07	$ 4.88

(1) Based on 264 work days per year
(2) Based on an eight hour day

SOURCE: U.S. Dept. of Commerce, Bureau of the Census; Census of Retail Trade 1982, Florida, November, 1984.

Table 68.
Service Industries - 1982
Holmes County

	Establishments	Sales ($1,000)	Annual Payroll ($1,000)	Paid Employees	Average Pay/Year	Average Pay/Day (1)	Average Pay/Hour (2)
HOLMES	28	4,039	1,391	126	$11,039	$41.81	$ 5.22
o Bonifay	16	2,581	1,130	82	$13,780	$52.19	$ 6.52
o Balance of County	12	1,458	261	44	$ 5,931	$22.47	$ 2.80

	Hotels, Motels, & Other Lodging Places	Receipts ($1,000)	Auto Repair, Services, & Garages	Receipts ($1,000)	Amusement, Recreation (motion pictures)	Receipts ($1,000)	Health Services (except hospitals)	Receipts ($1,000)	Legal Services	Receipts ($1,000)
HOLMES	2	D	2	D	1	D	9	1,715	4	124
o Bonifay	---	D	1	D	---	D	6	D	1	D
o Balance of County	2	D	1	D	1	D	1	D	3	D

(1) Based on 264 work days per year
(2) Based on an eight hour day
D Data not shown to avoid disclosure of individual firm operations.

SOURCE: U.S. Dept. of Commerce, Bureau of the Census; Census of Wholesale Trade, 1982, Florida, November, 1984.

Table 69.
Wholesale Trade - 1982
Washington County

	Establishments	Sales ($1000)	Annual Payroll ($1,000)	Paid Employees	Average Pay/Year	Average Pay/Day (1)	Average Pay/Hour (2)
WASHINGTON	9	23,618	702	98	$7,163	$27.13	$ 3.39
o Chipley	6	D	D	D	---	---	
o Balance of County	3	D	D	D	---	---	

	Merchant Wholesalers				Other Operating Type	
	Establishments	Sales ($1,000)	Annual Payroll ($1,000)	Paid Employees	Establishments	Sales ($1000)
WASHINGTON	8	D	D	D	1	D
o Chipley	5	D	D	D	1	D
o Balance of County	3	D	D	D	---	---

(1) Based on 264 work days per year
(2) Based on an eight hour work day
D Data not shown to avoid disclosure of individual firm operations.

SOURCE: U.S. Dept. of Commerce, Bureau of the Census; Census of Wholesale Trade, 1982, Florida, November, 1984.

Table 70.
Retail Trade - 1982
Washington County

	Establishments	Sales ($1,000)	Annual Payroll ($1,000)	Paid Employees	Average Pay/Year	Average Pay/Day (1)	Average Per/Hour (2)
WASHINGTON	115	40,068	3,989	557	$ 7,161	$27.12	$ 3.39
o Chipley	75	30,492	3,259	485	$ 6,719	$25.45	$ 3.18
o Balance of County	40	9,576	730	72	$10,138	$38.40	$ 4.80

(1) Based on 264 work days per year
(2) Based on an eight hour day

SOURCE: U.S. Dept. of Commerce, Bureau of the Census; Census of Retail Trade 1982, Florida, November, 1984.

Table 71.
Service Industries - 1982
Washington County

	Establishments	Sales ($1,000)	Annual Payroll ($1,000)	Paid Employees	Average Pay/Year	Average Pay/Day (1)	Average Pay/Hour (2)
WASHINGTON	53	9,701	3,370	273	$12,344	$46.75	$ 5.84
o Chipley	43	5,822	2,480	239	$10,376	$39.30	$ 4.91
o Balance of County	10	3,879	890	34	$26,176	$99.15	$12.39

	Hotels, Motels, & Other Lodging Places	Receipts ($1,000)	Auto Repair, Services, & Garages	Receipts ($1,000)	Amusement, Recreation (motion pictures)	Receipts ($1,000)	Health Services (except hospitals)	Receipts ($1,000)	Legal Services	Receipts ($1,000)
WASHINGTON	2	D	3	D	3	D	13	2,580	2	D
o Chipley	2	D	3	D	2	D	13	2,580	2	D
o Balance of County	---	---	---	---	1	D	---	---	---	---

(1) Based on 264 work days per year
(2) Based on an eight hour day
D Data not shown to avoid disclosure of individual firm operations.

SOURCE: U.S. Dept. of Commerce, Bureau of the Census; Census of Wholesale Trade, 1982, Florida, November, 1984.

Table 72.
Manufacturing Groups by Employment Size - 1982
Escambia County

	20	22	23	24	25	26	27	28	30	32	34	35	36	37	38	39	Auxilaries
1-19 employees	6	2	8	27	3	--	29	1	6	10	11	13	4	5	4	11	2
20-99 employees	4	--	--	7	1	1	2	1	--	4	1	1	2	2	--	--	2
100-249 employees	2	--	--	--	--	--	--	1	--	1	--	--	--	--	--	--	--
250 + employees	1	--	--	--	--	2	1	2	--	1	1	--	--	--	--	--	1

20 - food and kindred products
21 - tobacco (none, not listed)
22 - textile mill products
23 - apparel and other textile products
24 - lumber and wood products
25 - furniture and fixtures
26 - paper and allied products
27 - printing and publishing
28 - chemicals and allied products
29 - petroleum & coal products (none, not listed)
30 - rubber & miscellaneous plastic products
31 - leather and leather products (none, not listed)
32 - stone, clay and glass products
33 - primary metal industries (none, not listed)
34 - fabricated metal products
35 - machinery, except electrical
36 - electric and electronic equipment
37 - transportation equipment
38 - instruments and related products
39 - miscellaneous manufacturing industries

Table 73.
Manufacturing Groups by Employment Size - 1982
Santa Rosa County

	23	24	25	27	28	30	32	34	35	36	37
1-19 employees[1]	2	11	3	7	1	1	4	1	1	--	2
20-99 employees	--	--	--	--	--	--	1	1	--	1	--
100-249 employees	1	1	--		--	--	--	--	--	--	--
250 + employees	1	--	--	--	1	--	--	--	--	--	--

20 - food and kindred products
21 - tobacco (none, not listed)
22 - textile mill products
23 - apparel and other textile products
24 - lumber and wood products
25 - furniture and fixtures
26 - paper and allied products
27 - printing and publishing
28 - chemicals and allied products
29 - petroleum & coal products (none, not listed)
30 - rubber & miscellaneous plastic products
31 - leather and leather products (none, not listed)
32 - stone, clay and glass products
33 - primary metal industries (none, not listed)
34 - fabricated metal products
35 - machinery, except electrical
36 - electric and electronic equipment
37 - transportation equipment
38 - instruments and related products
39 - miscellaneous manufacturing industries

[1]Where no number is listed for manufacturing group, none existed in 1982.

Table 74.
Manufacturing Groups by Employment Size - 1982
Okaloosa County

	20	22	23	24	25	27	28	29	30	32	34	35	36	37	38	39	Auxilaries
1-19 employees[1]	3	3	2	12	1	9	1	1	1	4	3	7	4	8	1	4	2
20-99 employees	--	1	1	3	--	--	--	1	1	2	1	1	2	1	--	1	--
100-249 employees	--	--	1	1	--	1	--	--	--	--	--	--	--	1	1	--	--
250 + employees	--	--	1	--	--	--	--	--	--	--	--	--	2	1	--	--	--

20 - food and kindred products
21 - tobacco (none, not listed)
22 - textile mill products
23 - apparel and other textile products
24 - lumber and wood products
25 - furniture and fixtures
26 - paper and allied products
27 - printing and publishing
28 - chemicals and allied products
29 - petroleum & coal products (none, not listed)
30 - rubber & miscellaneous plastic products
31 - leather and leather products (none, not listed)
32 - stone, clay and glass products
33 - primary metal industries (none, not listed)
34 - fabricated metal products
35 - machinery, except electrical
36 - electric and electronic equipment
37 - transportation equipment
38 - instruments and related products
39 - miscellaneous manufacturing industries

[1]Where no number is listed for manufacturing group, none existed in 1982.

Table 75.
Manufacturing Groups by Employment Size - 1982
Walton County

	20	23	24	27	32	35	37
1-19 employees[1]	2	--	8	1	5	1	--
20-99 employees	--	--	1	--	--	--	2
100-249 employees	--	1	--	--	--	--	--

20 - food and kindred products
21 - tobacco (none, not listed)
22 - textile mill products
23 - apparel and other textile products
24 - lumber and wood products
25 - furniture and fixtures
26 - paper and allied products
27 - printing and publishing
28 - chemicals and allied products
29 - petroleum & coal products (none, not listed)
30 - rubber & miscellaneous plastic products
31 - leather and leather products (none, not listed)
32 - stone, clay and glass products
33 - primary metal industries (none, not listed)
34 - fabricated metal products
35 - machinery, except electrical
36 - electric and electronic equipment
37 - transportation equipment
38 - instruments and related products
39 - miscellaneous manufacturing industries

[1]Where no number is listed for manufacturing group, none existed in 1982.

Table 76.
Manufacturing Groups by Employment Size - 1982
Bay County

	20	23	24	25	26	27	28	29	30	32	33	34	35	36	37	38	39
1-19 employees[1]	4	1	26	3	--	14	2	1	1	3	1	4	3	3	11	1	4
20-99 employees	3	--	--	1	1	1	--	1	2	2	--	5	--	--	2	--	2
100-249 employees	--	1	1	--	--	1	--	--	--	1	--	1	1	--	--	--	--
250 + employees	--	--	--	--	1	--	1	--	--	--	--	--	--	--	1	--	--

20 - food and kindred products
21 - tobacco (none, not listed)
22 - textile mill products
23 - apparel and other textile products
24 - lumber and wood products
25 - furniture and fixtures
26 - paper and allied products
27 - printing and publishing
28 - chemicals and allied products
29 - petroleum & coal products (none, not listed)
30 - rubber & miscellaneous plastic products
31 - leather and leather products (none, not listed)
32 - stone, clay and glass products
33 - primary metal industries (none, not listed)
34 - fabricated metal products
35 - machinery, except electrical
36 - electric and electronic equipment
37 - transportation equipment
38 - instruments and related products
39 - miscellaneous manufacturing industries

[1]Where no number is listed for manufacturing group, none existed in 1982.

Table 77.
Manufacturing Groups by Employment Size - 1982
Holmes County

	20	23	24	27	30	32	35
1-19 employees[1]	1	--	21	3	1	--	2
20-99 employees	--	1	--	--	--	1	--
100-249 employees	--	2	--	--	--	--	--
250 + employees	--	1	--	--	--	--	--

20 - food and kindred products
21 - tobacco (none, not listed)
22 - textile mill products
23 - apparel and other textile products
24 - lumber and wood products
25 - furniture and fixtures
26 - paper and allied products
27 - printing and publishing
28 - chemicals and allied products
29 - petroleum & coal products (none, not listed)
30 - rubber & miscellaneous plastic products
31 - leather and leather products (none, not listed)
32 - stone, clay and glass products
33 - primary metal industries (none, not listed)
34 - fabricated metal products
35 - machinery, except electrical
36 - electric and electronic equipment
37 - transportation equipment
38 - instruments and related products
39 - miscellaneous manufacturing industries

[1]Where no number is listed for manufacturing group, none existed in 1982.

Table 78.
Manufacturing Groups by Employment Size - 1982
Washington County

	20	23	24	25	32	36	37
1-19 employees[1]	2	--	14	1	2	1	1
20-99 employees	--	1	1	--	--	--	--
100-249 employees	--	--	--	--	--	--	--
250 + employees	--	--	--	--	--	--	--

20 - food and kindred products
21 - tobacco (none, not listed)
22 - textile mill products
23 - apparel and other textile products
24 - lumber and wood products
25 - furniture and fixtures
26 - paper and allied products
27 - printing and publishing
28 - chemicals and allied products
29 - petroleum & coal products (none, not listed)
30 - rubber & miscellaneous plastic products
31 - leather and leather products (none, not listed)
32 - stone, clay and glass products
33 - primary metal industries (none, not listed)
34 - fabricated metal products
35 - machinery, except electrical
36 - electric and electronic equipment
37 - transportation equipment
38 - instruments and related products
39 - miscellaneous manufacturing industries

[1]Where no number is listed for manufacturing group, none existed in 1982.

Table 79.
Escambia County
Employee Income Losses Per Days Inoperative

	DAYS INOPERATIVE - (1,000)								
	5	10	15	20	25	30	45	60	90
WHOLESALE TRADE	1,084	2,168	3,252	4,336	5,420	6,504	9,756	13,008	19,512
RETAIL TRADE	2,574	5,148	7,722	10,296	12,870	15,444	23,166	30,888	46,332
SERVICE INDUSTRIES	2,633	5,327	7,990	10,654	13,317	15,981	23,971	26,634	47,943
MANUFACTURING	4,312	8,624	12,936	17,248	21,560	25,872	38,808	51,744	77,616
TOTALS	10,633	21,267	31,900	42,534	53,167	63,801	95,701	122,274	191,403

Table 80.
Santa Rosa County
Employee Income Losses Per Days Inoperative

	DAYS INOPERATIVE - (1,000)								
	5	10	15	20	25	30	45	60	90
WHOLESALE TRADE	60	120	180	240	300	360	540	720	1,080
RETAIL TRADE	62	124	186	248	310	372	558	744	1,116
SERVICE INDUSTRIES	39	78	117	156	195	234	351	468	702
MANUFACTURING	572	1,144	1,716	2,288	2,860	3,432	5,148	6,864	10,296
TOTALS	733	1,466	2,199	2,932	3,665	4,398	6,597	8,796	13,194

Table 81.
Okaloosa County
Employee Income Losses Per Days Inoperative

	DAYS INOPERATIVE - (1,000)								
	5	10	15	20	25	30	45	60	90
WHOLESALE TRADE	201	402	603	804	1,005	1,206	1,809	2,412	3,618
RETAIL TRADE	1,249	2,499	3,748	4,998	6,247	7,497	11,245	14,994	22,491
SERVICE INDUSTRIES	256	512	768	1,024	1,280	1,536	2,304	3,072	4,608
MANUFACTURING	150	300	450	600	750	900	1,350	1,800	2,700
TOTAL	1,856	3,713	5,569	7,426	9,282	11,139	16,708	22,278	33,417

Table 82.
Walton County
Employee Income Losses Per Days Inoperative

	DAYS INOPERATIVE - (1,000)								
	5	10	15	20	25	30	45	60	90
WHOLESALE TRADE	28	56	84	112	140	168	252	336	504
RETAIL TRADE	102	204	306	408	510	612	816	1,224	1,632
SERVICE INDUSTRIES	55	110	165	220	275	330	495	660	990
MANUFACTURING	49	98	147	196	245	294	441	588	882
TOTAL	234	468	702	936	1,170	1,404	2,004	2,808	4,008

Table 83.
Bay County
Employee Income Losses Per Days Inoperative

	DAYS INOPERATIVE - (1,000)								
	5	10	15	20	25	30	45	60	90
WHOLESALE TRADE	324	648	972	1,296	1,620	1,944	2,916	3,888	5,832
RETAIL TRADE	1,308	2,616	3,924	5,232	6,540	7,848	11,772	15,696	23,544
SERVICE INDUSTRIES	1,001	2,002	3,003	4,004	5,005	6,006	9,009	12,012	18,018
MANUFACTURING	228	456	684	912	1,410	1,368	2,052	2,736	4,104
TOTAL	2,861	5,722	8,583	11,444	14,305	17,166	25,749	34,332	51,498

Table 84.
Holmes County
Employee Income Losses Per Days Inoperative

	DAYS INOPERATIVE - (1,000)								
	5	10	15	20	25	30	45	60	90
WHOLESALE TRADE	3	6	9	12	15	18	27	36	54
RETAIL TRADE	57	114	171	228	285	342	513	684	1,026
SERVICE INDUSTRIES	26	52	78	104	130	156	234	312	468
MANUFACTURING	117	234	351	468	585	702	1,053	1,404	2,106
TOTAL	208	416	624	832	1,040	1,248	1,872	2,496	3,744

Table 85.
Washington County
Employee Income Losses Per Days Inoperative

	DAYS INOPERATIVE - (1,000)								
	5	10	15	20	25	30	45	60	90
WHOLESALE TRADE	2.6	5.2	7.8	10.4	13	15.6	23.4	31.2	46.8
RETAIL TRADE	15	30	45	60	75	90	135	180	270
SERVICE INDUSTRIES	63	126	189	252	315	378	567	756	1,134
MANUFACTURING	28	56	84	112	140	168	252	336	504
TOTAL	108.6	217.2	325.8	434.4	543	651.6	977.4	1,303.2	1,954.8

Table 86.
Measures of Tourist Activity

County	Service Establishments 1983	Service Establishments 1985	Hotels and Motels 1983	Hotels and Motels 1985	Use Tax Collections ($) 1983	Use Tax Collections ($) 1985
Escambia	413	422	55	59	214	330
Santa Rosa	67	82	9	10	112	173
Okaloosa	289	307	64	66	194	312
Walton	55	62	10	11	110	174
Bay	372	398	228	219	251	386
Holmes	2	20	4	4	73	113
Washington	22	25	4	3	83	122
Av.	1220	1316	374	372	148 Av.	203

Source: "Master File Statistics: Public Lodging and Food Service Establishments," Dept. of Business Regulation, Division of Hotels and Restaurants, February 22, 1985.

Annual Report of the Comptroller, Fiscal Year 1981-82. Office of the Comptroller, Dept. of Banking and Finance.

CHAPTER VII

HURRICANE IMPACT RETURN PERIODS FOR THE WEST FLORIDA REGION

Historical information regarding the occurrence of hurricanes in the West Florida region is presented in Chapter II, Table 1., pages 16-18. Twenty-four hurricanes categorized on the basis of the Saffir/Simpson Index have affected the region during the period 1900-1985. The Saffir/Simpson Index is a descriptive scale, over a range of categories 1 through 5, which relates hurricane intensity to damage potential. Category 1 is least intense followed by graduations to category 5, the most intense. These 24 hurricanes represent the data base from which approximate hurricane impact return periods have been calculated for category 1, 2, and 3 strength storms. Since there have not been any category 4 or 5 hurricanes, a special methodology was developed for estimating the hurricane impact return periods. This methodology is based on the historical occurrence of category 4 and 5 strength storms along the coastline from Texas to Maine during the period 1900-1985.

The hurricane impact return periods (Table 87) represent estimations of the likelihood of some specified strength of hurricane producing some loss of property and/or life within a given county or area. The following formula was developed and used for calculating the approximate hurricane impact return periods:

$$R_{county} = \frac{t}{x + (y\ 1..N\ )\ x)} \quad \frac{(do)}{(ds)}$$

Where R (return period) is calculated as a function of the number of occurrences of a hurricane at or above a given strength (x + (y 1..N) x) across time (t), by the length of coastline in which the selected hurricanes occurred (do) and affected the given county or area, over the coastline length of the study area (ds). Note that this model assumes that hurricanes of greater magnitude will meet and/or exceed the losses associated with hurricanes of a lesser magnitude. Therefore losses associated with a category 1 strength storm are met by category 1 through 5 strength hurricanes, losses associated with a category 2 strength hurricane will be met by category 2 through 5 strength hurricanes, and so forth.

For example, the approximate hurricane impact return period for Escambia County experiencing the extent of property loss and/or loss of life associated with a category 1 strength storm was calculated as follows:

Hurricane Category	1	2	3	4	5
Hurricane Occurrences	5	3	9	0	0

$$R_{Escambia\ County} = \frac{86\ years}{17\ hurricanes} \quad \frac{200\ miles}{200\ miles} = 5.1\ years$$

Table 87.
Hurricane-Effect Return Periods
(Years)

County	CATEGORIES OF HURRICANES 1*	2*	3*	4**	5**
Escambia	5	8	11	99	795
Santa Rosa	5	8	11	99	795
Okaloosa	6	9	12	99	795
Walton	5	9	12	99	795
Bay	4.5	8.5	12	99	795
Holmes	5	11	21	99	795
Washington	5	12	21	99	795

*calculations based upon actual hurricane occurrences in the West Florida region.

**calculations based upon actual hurricane occurrences along the United States coast from Texas to Maine.

Since there have been no category 4 or 5 strength hurricanes which affected the study area, it was necessary to calculate hurricane-impact return periods for these storms as a function of the length of coastline from Texas to Maine. For example, the approximate hurricane impact return period for a category 4 strength hurricane is calculated as follows:

> The coastline from Texas to Maine is 3700 miles and that there have been fourteen occurrences of category 4 and two occurrences of category 5 strength hurricanes during the period 1900-1985. Therefore, the formula for return period is as follows:

$$R_{Region} \quad \frac{86 \text{ years}}{14+2} \times \frac{3700 \text{ miles}}{200 \text{ miles}} = 99.3$$

It is important to note that the hurricane return periods incorporate impacts associated with wind and storm surge and do not represent the probability of occurrence of any given storm. While the rarity of hurricane occurrences precludes some degree of uncertainty in computing these return periods, this methodology provides a greater ease of calculation and a "truer" representation of hurricane impact than other methods currently in use (see W. Petak and A. Atkisson). These other methods have a distinct disadvantage in that they tend to provide probability information for exceeding a certain tide height without accounting for wind or they provide probability information for hurricane force winds and central pressure without accounting for storm surge. These factors and the lack of historical information for occurrences of category 4 or 5 strength hurricanes necessitated the development of an alternative methodology for estimating

hurricane impact return periods for the West Florida region which is shown in the above formula.

Annualized Hurricane Structural Loss

Hurricane impact return periods are used to calculate annual percentages of the risk of structural loss. Multiplying the return periods by the structural vulnerability coefficient results in the percentage of structural loss at risk annually to damage from a hurricane. Tables 88 through 122 present the results of this calculation for the ten structure types in each of the seven counties in the study area.

Going one step further, annualized loss percentages are converted to annualized dollar ($$$) losses for each county scenario (Table 123).

Table 88

ESCAMBIA COUNTY

ANNUALIZED HURRICANE STRUCTURAL LOSS (%%%) BY LOSS ZONE

SCENARIO A

HURRICANE LOSS ZONE	ANNUALIZED PERCENTAGE LOSS BY STRUCTURE TYPE									
	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	0.00039	0.00019	0.00050	0.00027	0.00012	0.00012	0.00012	0.00012	0.00012	0.00012
5	0.00316	0.00166	0.00425	0.00179	0.00064	0.00070	0.00070	0.00070	0.00070	0.00070
6	0.00033	0.00020	0.00015	0.00019	0.00017	0.00017	0.00017	0.00017	0.00017	0.00017
7	0.00115	0.00057	0.00200	0.00055	0.00020	0.00018	0.00018	0.00018	0.00018	0.00018
8	0.00011	0.00007	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004
9	0.00011	0.00007	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004
10	0.00042	0.00026	0.00014	0.00020	0.00020	0.00020	0.00020	0.00020	0.00020	0.00020
11	0.00006	0.00004	0.00002	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003
12	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
14	0.00018	0.00010	0.00012	0.00008	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004
15	0.00041	0.00025	0.00015	0.00024	0.00024	0.00024	0.00024	0.00024	0.00024	0.00024
17	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
18	0.00054	0.00034	0.00018	0.00020	0.00020	0.00020	0.00020	0.00020	0.00020	0.00020
19	0.00023	0.00014	0.00009	0.00014	0.00014	0.00014	0.00014	0.00014	0.00014	0.00014
20	0.00056	0.00035	0.00020	0.00026	0.00026	0.00026	0.00026	0.00026	0.00026	0.00026
21	0.00038	0.00024	0.00013	0.00015	0.00015	0.00015	0.00015	0.00015	0.00015	0.00015
22	0.00017	0.00011	0.00007	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010
23	0.00051	0.00032	0.00019	0.00026	0.00026	0.00026	0.00026	0.00026	0.00026	0.00026
24	0.00046	0.00029	0.00018	0.00027	0.00027	0.00027	0.00027	0.00027	0.00027	0.00027
25	0.00006	0.00004	0.00002	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003
26	0.00080	0.00047	0.00047	0.00035	0.00021	0.00021	0.00021	0.00021	0.00021	0.00021
27	0.00088	0.00054	0.00038	0.00024	0.00018	0.00018	0.00018	0.00018	0.00018	0.00018
28	0.00072	0.00045	0.00025	0.00015	0.00015	0.00015	0.00015	0.00015	0.00015	0.00015
29	0.00028	0.00018	0.00010	0.00014	0.00014	0.00014	0.00014	0.00014	0.00014	0.00014
30	0.00049	0.00031	0.00017	0.00014	0.00014	0.00014	0.00014	0.00014	0.00014	0.00014
31	0.00070	0.00044	0.00023	0.00012	0.00012	0.00012	0.00012	0.00012	0.00012	0.00012
32	0.00011	0.00007	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004
33	0.00180	0.00112	0.00061	0.00085	0.00085	0.00085	0.00085	0.00085	0.00085	0.00085
34	0.00022	0.00014	0.00007	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004
35	0.00038	0.00024	0.00013	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001
36	0.00058	0.00034	0.00030	0.00017	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009
37	0.00166	0.00104	0.00056	0.00034	0.00034	0.00034	0.00034	0.00034	0.00034	0.00034
38	0.00329	0.00203	0.00113	0.00175	0.00175	0.00175	0.00175	0.00175	0.00175	0.00175
39	0.00932	0.00565	0.00290	0.00515	0.00515	0.00515	0.00515	0.00515	0.00515	0.00515
40	0.00773	0.00467	0.00243	0.00417	0.00417	0.00417	0.00417	0.00417	0.00417	0.00417
41	0.00167	0.00099	0.00047	0.00038	0.00038	0.00038	0.00038	0.00038	0.00038	0.00038

STRUCTURE CODES

SR -- SINGLE UNIT RESIDENTIAL
MR -- MULTI-UNIT RESIDENTIAL
MH -- MOBILE HOME RESIDENTIAL
C -- COMMERCIAL
I -- INDUSTRIAL
PU -- PUBLIC UTILITIES
AG -- AGRICULTURAL
PT -- PUBLIC TRANSPORTATION
HC -- HEALTH CARE
GI -- GOVERNMENT AND INSTITUTIONAL

Table 89

ESCAMBIA COUNTY

ANNUALIZED HURRICANE STRUCTURAL LOSS (%%%) BY LOSS ZONE

SCENARIO B

ANNUALIZED PERCENTAGE LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	0.00178	0.00104	0.00250	0.00104	0.00034	0.00034	0.00034	0.00034	0.00034	0.00034
5	0.00371	0.00203	0.00552	0.00200	0.00069	0.00067	0.00067	0.00067	0.00067	0.00067
6	0.00059	0.00032	0.00063	0.00034	0.00019	0.00020	0.00020	0.00020	0.00020	0.00020
7	0.00086	0.00048	0.00125	0.00048	0.00017	0.00016	0.00016	0.00016	0.00016	0.00016
8	0.00008	0.00005	0.00004	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005
9	0.00011	0.00007	0.00011	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007
10	0.00037	0.00023	0.00026	0.00022	0.00022	0.00022	0.00022	0.00022	0.00022	0.00022
11	0.00042	0.00022	0.00054	0.00024	0.00011	0.00011	0.00011	0.00011	0.00011	0.00011
12	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
14	0.00053	0.00028	0.00070	0.00031	0.00014	0.00015	0.00015	0.00015	0.00015	0.00015
15	0.00041	0.00026	0.00046	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025
17	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
18	0.00055	0.00035	0.00055	0.00034	0.00034	0.00034	0.00034	0.00034	0.00034	0.00034
19	0.00025	0.00016	0.00029	0.00015	0.00015	0.00015	0.00015	0.00015	0.00015	0.00015
20	0.00058	0.00037	0.00062	0.00035	0.00035	0.00035	0.00035	0.00035	0.00035	0.00035
21	0.00039	0.00025	0.00040	0.00024	0.00024	0.00024	0.00024	0.00024	0.00024	0.00024
22	0.00018	0.00012	0.00021	0.00011	0.00011	0.00011	0.00011	0.00011	0.00011	0.00011
23	0.00053	0.00034	0.00059	0.00033	0.00033	0.00033	0.00033	0.00033	0.00033	0.00033
24	0.00049	0.00031	0.00057	0.00030	0.00030	0.00030	0.00030	0.00030	0.00030	0.00030
25	0.00006	0.00004	0.00007	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004
26	0.00056	0.00036	0.00058	0.00035	0.00035	0.00035	0.00035	0.00035	0.00035	0.00035
27	0.00079	0.00050	0.00082	0.00048	0.00048	0.00048	0.00048	0.00048	0.00048	0.00048
28	0.00074	0.00047	0.00078	0.00045	0.00045	0.00045	0.00045	0.00045	0.00045	0.00045
29	0.00029	0.00019	0.00032	0.00018	0.00018	0.00018	0.00018	0.00018	0.00018	0.00018
30	0.00050	0.00032	0.00051	0.00031	0.00031	0.00031	0.00031	0.00031	0.00031	0.00031
31	0.00072	0.00046	0.00072	0.00044	0.00044	0.00044	0.00044	0.00044	0.00044	0.00044
32	0.00011	0.00007	0.00011	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007
33	0.00164	0.00102	0.00129	0.00099	0.00099	0.00099	0.00099	0.00099	0.00099	0.00099
34	0.00022	0.00014	0.00022	0.00014	0.00014	0.00014	0.00014	0.00014	0.00014	0.00014
35	0.00039	0.00025	0.00039	0.00024	0.00024	0.00024	0.00024	0.00024	0.00024	0.00024
36	0.00044	0.00028	0.00044	0.00027	0.00027	0.00027	0.00027	0.00027	0.00027	0.00027
37	0.00162	0.00103	0.00151	0.00099	0.00099	0.00099	0.00099	0.00099	0.00099	0.00099
38	0.00311	0.00195	0.00260	0.00189	0.00189	0.00189	0.00189	0.00189	0.00189	0.00189
39	0.00748	0.00470	0.00324	0.00446	0.00446	0.00446	0.00446	0.00446	0.00446	0.00446
40	0.00742	0.00462	0.00483	0.00441	0.00441	0.00441	0.00441	0.00441	0.00441	0.00441
41	0.00201	0.00125	0.00142	0.00120	0.00120	0.00120	0.00120	0.00120	0.00120	0.00120

STRUCTURE CODES

SR -- SINGLE UNIT RESIDENTIAL
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PU -- PUBLIC UTILITIES
AG -- AGRICULTURAL
PT -- PUBLIC TRANSPORTATION
HC -- HEALTH CARE
GI -- GOVERNMENT AND INSTITUTIONAL

Table 90

ESCAMBIA COUNTY

ANNUALIZED HURRICANE STRUCTURAL LOSS (%%%) BY LOSS ZONE

SCENARIO C

ANNUALIZED PERCENTAGE LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	0.00139	0.00089	0.00182	0.00089	0.00033	0.00031	0.00031	0.00031	0.00031	0.00031
5	0.00321	0.00200	0.00433	0.00201	0.00079	0.00075	0.00075	0.00075	0.00075	0.00075
6	0.00123	0.00071	0.00203	0.00028	0.00041	0.00043	0.00043	0.00043	0.00043	0.00043
7	0.00070	0.00045	0.00091	0.00045	0.00017	0.00016	0.00016	0.00016	0.00016	0.00016
8	0.00015	0.00009	0.00031	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009
9	0.00015	0.00009	0.00031	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009
10	0.00045	0.00028	0.00076	0.00028	0.00028	0.00028	0.00028	0.00028	0.00028	0.00028
11	0.00041	0.00023	0.00063	0.00024	0.00011	0.00012	0.00012	0.00012	0.00012	0.00012
12	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
14	0.00061	0.00033	0.00091	0.00095	0.00033	0.00016	0.00017	0.00017	0.00017	0.00017
15	0.00059	0.00041	0.00144	0.00056	0.00039	0.00039	0.00039	0.00039	0.00039	0.00039
17	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
18	0.00073	0.00045	0.00155	0.00045	0.00045	0.00045	0.00045	0.00045	0.00045	0.00045
19	0.00033	0.00022	0.00080	0.00022	0.00022	0.00022	0.00022	0.00022	0.00022	0.00022
20	0.00076	0.00049	0.00173	0.00049	0.00049	0.00049	0.00049	0.00049	0.00049	0.00049
21	0.00052	0.00033	0.00113	0.00033	0.00033	0.00033	0.00033	0.00033	0.00033	0.00033
22	0.00025	0.00016	0.00060	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016
23	0.00071	0.00046	0.00166	0.00046	0.00046	0.00046	0.00046	0.00046	0.00046	0.00046
24	0.00065	0.00044	0.00160	0.00044	0.00044	0.00044	0.00044	0.00044	0.00044	0.00044
25	0.00008	0.00005	0.00020	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005
26	0.00075	0.00047	0.00165	0.00047	0.00099	0.00047	0.00047	0.00047	0.00047	0.00047
27	0.00105	0.00066	0.00230	0.00066	0.00066	0.00066	0.00066	0.00066	0.00066	0.00066
28	0.00098	0.00063	0.00219	0.00063	0.00063	0.00063	0.00063	0.00063	0.00063	0.00063
29	0.00039	0.00025	0.00091	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025
30	0.00066	0.00042	0.00144	0.00042	0.00042	0.00042	0.00042	0.00042	0.00042	0.00042
31	0.00095	0.00059	0.00201	0.00059	0.00059	0.00059	0.00059	0.00059	0.00059	0.00059
32	0.00015	0.00009	0.00031	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009
33	0.00193	0.00121	0.00329	0.00120	0.00120	0.00120	0.00120	0.00120	0.00120	0.00120
34	0.00029	0.00018	0.00062	0.00018	0.00018	0.00018	0.00018	0.00018	0.00018	0.00018
35	0.00051	0.00032	0.00108	0.00032	0.00032	0.00032	0.00032	0.00032	0.00032	0.00032
36	0.00058	0.00036	0.00124	0.00036	0.00036	0.00036	0.00036	0.00036	0.00036	0.00036
37	0.00170	0.00109	0.00294	0.00108	0.00108	0.00108	0.00108	0.00108	0.00108	0.00108
38	0.00292	0.00190	0.00419	0.00187	0.00187	0.00187	0.00187	0.00187	0.00187	0.00187
39	0.00714	0.00432	0.00509	0.00413	0.00413	0.00413	0.00413	0.00413	0.00413	0.00413
40	0.00605	0.00372	0.00473	0.00357	0.00357	0.00357	0.00357	0.00357	0.00357	0.00357
41	0.00155	0.00093	0.00113	0.00089	0.00089	0.00089	0.00089	0.00089	0.00089	0.00089

STRUCTURE CODES

SR -- SINGLE UNIT RESIDENTIAL
MR -- MULTI-UNIT RESIDENTIAL
MH -- MOBILE HOME RESIDENTIAL
C -- COMMERCIAL
I -- INDUSTRIAL
PU -- PUBLIC UTILITIES
AG -- AGRICULTURAL
PT -- PUBLIC TRANSPORTATION
HC -- HEALTH CARE
GI -- GOVERNMENT AND INSTITUTIONAL

Table 91

ESCAMBIA COUNTY

ANNUALIZED HURRICANE STRUCTURAL LOSS (%%%) BY LOSS ZONE

SCENARIO D
ANNUALIZED PERCENTAGE LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	0.00016	0.00015	0.00019	0.00016	0.00006	0.00005	0.00005	0.00005	0.00005	0.00005
5	0.00038	0.00028	0.00047	0.00027	0.00011	0.00010	0.00010	0.00010	0.00010	0.00010
6	0.00027	0.00015	0.00042	0.00015	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008
7	0.00008	0.00008	0.00010	0.00008	0.00003	0.00002	0.00002	0.00002	0.00002	0.00002
8	0.00005	0.00003	0.00010	0.00003	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002
9	0.00003	0.00002	0.00009	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002
10	0.00014	0.00009	0.00033	0.00012	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007
11	0.00008	0.00004	0.00010	0.00004	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002
12	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
14	0.00013	0.00008	0.00018	0.00007	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003
15	0.00035	0.00020	0.00052	0.00020	0.00021	0.00011	0.00011	0.00011	0.00011	0.00011
17	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
18	0.00015	0.00010	0.00045	0.00013	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009
19	0.00021	0.00012	0.00034	0.00012	0.00006	0.00007	0.00007	0.00007	0.00007	0.00007
20	0.00029	0.00017	0.00059	0.00018	0.00012	0.00012	0.00012	0.00012	0.00012	0.00012
21	0.00017	0.00010	0.00038	0.00010	0.00007	0.00008	0.00008	0.00008	0.00008	0.00008
22	0.00008	0.00005	0.00020	0.00005	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004
23	0.00013	0.00009	0.00048	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008
24	0.00012	0.00008	0.00047	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008
25	0.00001	0.00001	0.00006	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001
26	0.00013	0.00009	0.00047	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009
27	0.00019	0.00012	0.00065	0.00012	0.00012	0.00012	0.00012	0.00012	0.00012	0.00012
28	0.00017	0.00012	0.00062	0.00011	0.00011	0.00011	0.00011	0.00011	0.00011	0.00011
29	0.00007	0.00005	0.00026	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005
30	0.00012	0.00008	0.00040	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008
31	0.00017	0.00011	0.00056	0.00011	0.00011	0.00011	0.00011	0.00011	0.00011	0.00011
32	0.00003	0.00002	0.00009	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002
33	0.00040	0.00026	0.00125	0.00026	0.00026	0.00026	0.00026	0.00026	0.00026	0.00026
34	0.00005	0.00003	0.00017	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003
35	0.00009	0.00006	0.00030	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006
36	0.00010	0.00007	0.00035	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007
37	0.00035	0.00023	0.00106	0.00023	0.00023	0.00023	0.00023	0.00023	0.00023	0.00023
38	0.00066	0.00044	0.00192	0.00043	0.00043	0.00043	0.00043	0.00043	0.00043	0.00043
39	0.00136	0.00088	0.00280	0.00085	0.00085	0.00085	0.00085	0.00085	0.00085	0.00085
40	0.00147	0.00095	0.00376	0.00093	0.00093	0.00093	0.00093	0.00093	0.00093	0.00093
41	0.00039	0.00026	0.00098	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025

STRUCTURE CODES

SR -- SINGLE UNIT RESIDENTIAL
MR -- MULTI-UNIT RESIDENTIAL
MH -- MOBILE HOME RESIDENTIAL
C -- COMMERCIAL
I -- INDUSTRIAL
PU -- PUBLIC UTILITIES
AG -- AGRICULTURAL
PT -- PUBLIC TRANSPORTATION
HC -- HEALTH CARE
GI -- GOVERNMENT AND INSTITUTIONAL

Table 92

ESCAMBIA COUNTY

ANNUALIZED HURRICANE STRUCTURAL LOSS (%%%) BY LOSS ZONE

SCENARIO E

ANNUALIZED PERCENTAGE LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	0.00002	0.00002	0.00003	0.00002	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001
5	0.00006	0.00005	0.00006	0.00005	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003
6	0.00005	0.00003	0.00006	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003
7	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001
8	0.00001	0.00001	0.00003	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001
9	0.00001	0.00001	0.00003	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001
10	0.00003	0.00002	0.00010	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002
11	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001
12	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
14	0.00002	0.00001	0.00003	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001
15	0.00005	0.00004	0.00009	0.00004	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003
17	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
18	0.00004	0.00004	0.00013	0.00004	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003
19	0.00002	0.00002	0.00005	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002
20	0.00005	0.00004	0.00013	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004
21	0.00004	0.00003	0.00009	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003
22	0.00002	0.00001	0.00003	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001
23	0.00005	0.00004	0.00011	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004
24	0.00004	0.00003	0.00010	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004
25	0.00001	0.00000	0.00001	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
26	0.00003	0.00002	0.00013	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002
27	0.00006	0.00005	0.00018	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005
28	0.00006	0.00005	0.00017	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005
29	0.00003	0.00002	0.00006	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002
30	0.00004	0.00003	0.00011	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003
31	0.00005	0.00004	0.00017	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004
32	0.00001	0.00000	0.00003	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
33	0.00012	0.00009	0.00043	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009
34	0.00002	0.00001	0.00005	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001
35	0.00003	0.00003	0.00009	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003
36	0.00003	0.00002	0.00010	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002
37	0.00010	0.00008	0.00039	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008
38	0.00017	0.00012	0.00075	0.00012	0.00012	0.00012	0.00012	0.00012	0.00012	0.00012
39	0.00026	0.00017	0.00074	0.00017	0.00017	0.00017	0.00017	0.00017	0.00017	0.00017
40	0.00023	0.00016	0.00071	0.00015	0.00015	0.00015	0.00015	0.00015	0.00015	0.00015
41	0.00005	0.00003	0.00012	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003

STRUCTURE CODES

SR -- SINGLE UNIT RESIDENTIAL
MR -- MULTI-UNIT RESIDENTIAL
MH -- MOBILE HOME RESIDENTIAL
C -- COMMERCIAL
I -- INDUSTRIAL
PU -- PUBLIC UTILITIES
AG -- AGRICULTURAL
PT -- PUBLIC TRANSPORTATION
HC -- HEALTH CARE
GI -- GOVERNMENT AND INSTITUTIONAL

Table 93

SANTA ROSA COUNTY

ANNUALIZED HURRICANE STRUCTURAL LOSS (%%%) BY LOSS ZONE

SCENARIO A

ANNUALIZED PERCENTAGE LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	0.00034	0.00019	0.00010	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016
2	0.00046	0.00029	0.00018	0.00027	0.00027	0.00027	0.00027	0.00027	0.00027	0.00027
3	0.00058	0.00036	0.00022	0.00034	0.00034	0.00034	0.00034	0.00034	0.00034	0.00034
4	0.00022	0.00014	0.00008	0.00013	0.00013	0.00013	0.00013	0.00013	0.00013	0.00013
5	0.00085	0.00053	0.00031	0.00050	0.00050	0.00050	0.00050	0.00050	0.00050	0.00050
6	0.00052	0.00032	0.00018	0.00031	0.00031	0.00031	0.00031	0.00031	0.00031	0.00031
7	0.00101	0.00063	0.00036	0.00060	0.00060	0.00060	0.00060	0.00060	0.00060	0.00060
8	0.00117	0.00069	0.00031	0.00062	0.00062	0.00062	0.00062	0.00062	0.00062	0.00062
9	0.00110	0.00068	0.00042	0.00065	0.00065	0.00065	0.00065	0.00065	0.00065	0.00065
10	0.00099	0.00061	0.00037	0.00058	0.00058	0.00058	0.00058	0.00058	0.00058	0.00058
11	0.00022	0.00014	0.00008	0.00013	0.00013	0.00013	0.00013	0.00013	0.00013	0.00013
13	0.00022	0.00014	0.00008	0.00013	0.00013	0.00013	0.00013	0.00013	0.00013	0.00013
14	0.00261	0.00161	0.00091	0.00151	0.00151	0.00151	0.00151	0.00151	0.00151	0.00151
15	0.00123	0.00077	0.00045	0.00073	0.00073	0.00073	0.00073	0.00073	0.00073	0.00073
16	0.00075	0.00047	0.00027	0.00045	0.00045	0.00045	0.00045	0.00045	0.00045	0.00045
17	0.00036	0.00022	0.00013	0.00022	0.00022	0.00022	0.00022	0.00022	0.00022	0.00022
18	0.00079	0.00048	0.00023	0.00043	0.00043	0.00043	0.00043	0.00043	0.00043	0.00043
19	0.00043	0.00026	0.00011	0.00022	0.00022	0.00022	0.00022	0.00022	0.00022	0.00022
20	0.00064	0.00038	0.00019	0.00036	0.00036	0.00036	0.00036	0.00036	0.00036	0.00036
21	0.00026	0.00016	0.00009	0.00015	0.00015	0.00015	0.00015	0.00015	0.00015	0.00015
22	0.00047	0.00029	0.00016	0.00027	0.00027	0.00027	0.00027	0.00027	0.00027	0.00027
23	0.00076	0.00045	0.00023	0.00041	0.00041	0.00041	0.00041	0.00041	0.00041	0.00041
24	0.00279	0.00176	0.00085	0.00133	0.00133	0.00133	0.00133	0.00133	0.00133	0.00133
25	0.00320	0.00207	0.00112	0.00170	0.00170	0.00170	0.00170	0.00170	0.00170	0.00170
26	0.00574	0.00428	0.00244	0.00253	0.00253	0.00253	0.00253	0.00253	0.00253	0.00253
27	0.01095	0.00672	0.00338	0.00616	0.00616	0.00616	0.00616	0.00616	0.00616	0.00616

STRUCTURE CODES

SR -- SINGLE UNIT RESIDENTIAL
MR -- MULTI-UNIT RESIDENTIAL
MH -- MOBILE HOME RESIDENTIAL
C -- COMMERCIAL
I -- INDUSTRIAL
PU -- PUBLIC UTILITIES
AG -- AGRICULTURAL
PT -- PUBLIC TRANSPORTATION
HC -- HEALTH CARE
GI -- GOVERNMENT AND INSTITUTIONAL

Table 94

SANTA ROSA COUNTY

ANNUALIZED HURRICANE STRUCTURAL LOSS (XXX) BY LOSS ZONE

SCENARIO B

ANNUALIZED PERCENTAGE LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	0.00059	0.00035	0.00051	0.00027	0.00024	0.00026	0.00026	0.00026	0.00026	0.00026
2	0.00061	0.00038	0.00072	0.00039	0.00029	0.00032	0.00032	0.00032	0.00032	0.00032
3	0.00060	0.00039	0.00074	0.00039	0.00036	0.00036	0.00036	0.00036	0.00036	0.00036
4	0.00033	0.00019	0.00033	0.00020	0.00013	0.00015	0.00015	0.00015	0.00015	0.00015
5	0.00035	0.00054	0.00032	0.00054	0.00047	0.00048	0.00048	0.00048	0.00048	0.00048
6	0.00065	0.00041	0.00065	0.00042	0.00032	0.00034	0.00034	0.00034	0.00034	0.00034
7	0.00116	0.00070	0.00116	0.00072	0.00058	0.00061	0.00061	0.00061	0.00061	0.00061
8	0.00108	0.00068	0.00061	0.00064	0.00064	0.00064	0.00064	0.00064	0.00064	0.00064
9	0.00103	0.00068	0.00131	0.00065	0.00065	0.00065	0.00065	0.00065	0.00065	0.00065
10	0.00093	0.00060	0.00117	0.00059	0.00059	0.00059	0.00059	0.00059	0.00059	0.00059
11	0.00024	0.00015	0.00027	0.00015	0.00012	0.00014	0.00014	0.00014	0.00014	0.00014
13	0.00020	0.00013	0.00023	0.00012	0.00012	0.00012	0.00012	0.00012	0.00012	0.00012
14	0.00222	0.00144	0.00206	0.00139	0.00139	0.00139	0.00139	0.00139	0.00139	0.00139
15	0.00102	0.00066	0.00095	0.00064	0.00064	0.00064	0.00064	0.00064	0.00064	0.00064
16	0.00071	0.00044	0.00070	0.00043	0.00040	0.00041	0.00041	0.00041	0.00041	0.00041
17	0.00031	0.00020	0.00029	0.00019	0.00019	0.00019	0.00019	0.00019	0.00019	0.00019
18	0.00072	0.00045	0.00049	0.00043	0.00043	0.00043	0.00043	0.00043	0.00043	0.00043
19	0.00041	0.00025	0.00022	0.00024	0.00024	0.00024	0.00024	0.00024	0.00024	0.00024
20	0.00057	0.00037	0.00048	0.00033	0.00034	0.00034	0.00034	0.00034	0.00034	0.00034
21	0.00022	0.00014	0.00021	0.00014	0.00014	0.00014	0.00014	0.00014	0.00014	0.00014
22	0.00040	0.00026	0.00037	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025
23	0.00068	0.00044	0.00058	0.00038	0.00041	0.00041	0.00041	0.00041	0.00041	0.00041
24	0.00269	0.00167	0.00134	0.00148	0.00155	0.00155	0.00155	0.00155	0.00155	0.00155
25	0.00297	0.00185	0.00203	0.00176	0.00176	0.00176	0.00176	0.00176	0.00176	0.00176
26	0.00540	0.00338	0.00203	0.00318	0.00318	0.00318	0.00318	0.00318	0.00318	0.00318
27	0.00706	0.00502	0.00600	0.00489	0.00489	0.00489	0.00489	0.00489	0.00489	0.00489

STRUCTURE CODES

SR -- SINGLE UNIT RESIDENTIAL
MR -- MULTI-UNIT RESIDENTIAL
MH -- MOBILE HOME RESIDENTIAL
C -- COMMERCIAL
I -- INDUSTRIAL
PU -- PUBLIC UTILITIES
AG -- AGRICULTURAL
PT -- PUBLIC TRANSPORTATION
HC -- HEALTH CARE
GI -- GOVERNMENT AND INSTITUTIONAL

Table 95

SANTA ROSA COUNTY

ANNUALIZED HURRICANE STRUCTURAL LOSS (%%%) BY LOSS ZONE

SCENARIO C

ANNUALIZED PERCENTAGE LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	0.00034	0.00048	0.00151	0.00032	0.00031	0.00032	0.00032	0.00032	0.00032	0.00032
2	0.00139	0.00083	0.00241	0.00093	0.00054	0.00059	0.00059	0.00059	0.00059	0.00059
3	0.00111	0.00068	0.00226	0.00063	0.00054	0.00056	0.00056	0.00056	0.00056	0.00056
4	0.00049	0.00029	0.00091	0.00030	0.00020	0.00021	0.00021	0.00021	0.00021	0.00021
5	0.00091	0.00059	0.00154	0.00057	0.00057	0.00057	0.00057	0.00057	0.00057	0.00057
6	0.00040	0.00025	0.00043	0.00024	0.00024	0.00024	0.00024	0.00024	0.00024	0.00024
7	0.00111	0.00069	0.00140	0.00076	0.00056	0.00058	0.00058	0.00058	0.00058	0.00058
8	0.00129	0.00083	0.00157	0.00082	0.00077	0.00078	0.00078	0.00078	0.00078	0.00078
9	0.00137	0.00075	0.00183	0.00078	0.00061	0.00062	0.00062	0.00062	0.00062	0.00062
10	0.00126	0.00082	0.00312	0.00081	0.00081	0.00081	0.00081	0.00081	0.00081	0.00081
11	0.00055	0.00032	0.00098	0.00034	0.00022	0.00023	0.00023	0.00023	0.00023	0.00023
13	0.00027	0.00018	0.00060	0.00017	0.00017	0.00017	0.00017	0.00017	0.00017	0.00017
14	0.00261	0.00169	0.00438	0.00165	0.00165	0.00165	0.00165	0.00165	0.00165	0.00165
15	0.00121	0.00078	0.00205	0.00076	0.00076	0.00076	0.00076	0.00076	0.00076	0.00076
16	0.00058	0.00037	0.00071	0.00036	0.00036	0.00036	0.00036	0.00036	0.00036	0.00036
17	0.00027	0.00018	0.00029	0.00017	0.00017	0.00017	0.00017	0.00017	0.00017	0.00017
18	0.00075	0.00048	0.00092	0.00047	0.00047	0.00047	0.00047	0.00047	0.00047	0.00047
19	0.00046	0.00030	0.00060	0.00029	0.00029	0.00029	0.00029	0.00029	0.00029	0.00029
20	0.00055	0.00035	0.00060	0.00034	0.00034	0.00034	0.00034	0.00034	0.00034	0.00034
21	0.00020	0.00013	0.00024	0.00013	0.00013	0.00013	0.00013	0.00013	0.00013	0.00013
22	0.00035	0.00023	0.00038	0.00022	0.00022	0.00022	0.00022	0.00022	0.00022	0.00022
23	0.00067	0.00043	0.00071	0.00041	0.00041	0.00041	0.00041	0.00041	0.00041	0.00041
24	0.00296	0.00187	0.00285	0.00180	0.00180	0.00180	0.00180	0.00180	0.00180	0.00180
25	0.00268	0.00168	0.00246	0.00162	0.00162	0.00162	0.00162	0.00162	0.00162	0.00162
26	0.00572	0.00350	0.00427	0.00341	0.00341	0.00341	0.00341	0.00341	0.00341	0.00341
27	0.00513	0.00323	0.00533	0.00311	0.00311	0.00311	0.00311	0.00311	0.00311	0.00311

STRUCTURE CODES

SR -- SINGLE UNIT RESIDENTIAL
MR -- MULTI-UNIT RESIDENTIAL
MH -- MOBILE HOME RESIDENTIAL
C -- COMMERCIAL
I -- INDUSTRIAL
PU -- PUBLIC UTILITIES
AG -- AGRICULTURAL
PT -- PUBLIC TRANSPORTATION
HC -- HEALTH CARE
GI -- GOVERNMENT AND INSTITUTIONAL

Table 96

SANTA ROSA COUNTY

ANNUALIZED HURRICANE STRUCTURAL LOSS (%%%) BY LOSS ZONE

SCENARIO D

ANNUALIZED PERCENTAGE LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	0.00008	0.00005	0.00018	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005
2	0.00010	0.00006	0.00020	0.00007	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005
3	0.00009	0.00006	0.00022	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006
4	0.00007	0.00004	0.00012	0.00004	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003
5	0.00013	0.00008	0.00021	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007
6	0.00009	0.00005	0.00013	0.00006	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004
7	0.00026	0.00016	0.00047	0.00017	0.00012	0.00013	0.00013	0.00013	0.00013	0.00013
8	0.00020	0.00013	0.00038	0.00013	0.00013	0.00013	0.00013	0.00013	0.00013	0.00013
9	0.00020	0.00013	0.00044	0.00014	0.00012	0.00012	0.00012	0.00012	0.00012	0.00012
10	0.00015	0.00010	0.00036	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010
11	0.00005	0.00003	0.00009	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003
13	0.00003	0.00002	0.00007	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002
14	0.00031	0.00020	0.00056	0.00020	0.00020	0.00020	0.00020	0.00020	0.00020	0.00020
15	0.00014	0.00009	0.00026	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009
16	0.00013	0.00008	0.00027	0.00008	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007
17	0.00004	0.00003	0.00007	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003
18	0.00012	0.00008	0.00024	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008
19	0.00008	0.00005	0.00016	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005
20	0.00008	0.00005	0.00014	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005
21	0.00003	0.00002	0.00005	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002
22	0.00005	0.00003	0.00009	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003
23	0.00010	0.00006	0.00016	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006
24	0.00045	0.00029	0.00067	0.00029	0.00029	0.00029	0.00029	0.00029	0.00029	0.00029
25	0.00038	0.00025	0.00052	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025
26	0.00076	0.00047	0.00093	0.00046	0.00046	0.00046	0.00046	0.00046	0.00046	0.00046
27	0.00127	0.00081	0.00193	0.00081	0.00081	0.00081	0.00081	0.00081	0.00081	0.00081

STRUCTURE CODES

SR -- SINGLE UNIT RESIDENTIAL
MR -- MULTI-UNIT RESIDENTIAL
MH -- MOBILE HOME RESIDENTIAL
C -- COMMERCIAL
I -- INDUSTRIAL
PU -- PUBLIC UTILITIES
AG -- AGRICULTURAL
PT -- PUBLIC TRANSPORTATION
HC -- HEALTH CARE
GI -- GOVERNMENT AND INSTITUTIONAL

Table 97

SANTA ROSA COUNTY

ANNUALIZED HURRICANE STRUCTURAL LOSS (%%%) BY LOSS ZONE

SCENARIO E
ANNUALIZED PERCENTAGE LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	0.00003	0.00002	0.00010	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002
2	0.00007	0.00005	0.00010	0.00005	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004
3	0.00005	0.00004	0.00013	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004
4	0.00002	0.00001	0.00005	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001
5	0.00006	0.00005	0.00020	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005
6	0.00004	0.00003	0.00013	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003
7	0.00009	0.00007	0.00024	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007
8	0.00010	0.00007	0.00037	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007
9	0.00011	0.00009	0.00024	0.00009	0.00008	0.00009	0.00009	0.00009	0.00009	0.00009
10	0.00009	0.00007	0.00022	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008
11	0.00002	0.00002	0.00005	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002
13	0.00002	0.00002	0.00005	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002
14	0.00020	0.00015	0.00064	0.00015	0.00015	0.00015	0.00015	0.00015	0.00015	0.00015
15	0.00009	0.00007	0.00029	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007
16	0.00006	0.00005	0.00018	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005
17	0.00003	0.00002	0.00009	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002
18	0.00006	0.00005	0.00023	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005
19	0.00004	0.00003	0.00014	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003
20	0.00005	0.00004	0.00018	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004
21	0.00002	0.00001	0.00006	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001
22	0.00004	0.00003	0.00011	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003
23	0.00006	0.00004	0.00022	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004
24	0.00021	0.00015	0.00093	0.00015	0.00015	0.00015	0.00015	0.00015	0.00015	0.00015
25	0.00023	0.00017	0.00088	0.00017	0.00017	0.00017	0.00017	0.00017	0.00017	0.00017
26	0.00038	0.00027	0.00163	0.00027	0.00027	0.00027	0.00027	0.00027	0.00027	0.00027
27	0.00075	0.00054	0.00301	0.00053	0.00053	0.00053	0.00053	0.00053	0.00053	0.00053

STRUCTURE CODES

SR -- SINGLE UNIT RESIDENTIAL
MR -- MULTI-UNIT RESIDENTIAL
MH -- MOBILE HOME RESIDENTIAL
C -- COMMERCIAL
I -- INDUSTRIAL
PU -- PUBLIC UTILITIES
AG -- AGRICULTURAL
PT -- PUBLIC TRANSPORTATION
HC -- HEALTH CARE
GI -- GOVERNMENT AND INSTITUTIONAL

Table 98

OKALOOSA COUNTY

ANNUALIZED HURRICANE STRUCTURAL LOSS (%%%) BY LOSS ZONE

SCENARIO A

ANNUALIZED PERCENTAGE LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	0.00091	0.00051	0.00200	0.00047	0.00019	0.00016	0.00016	0.00016	0.00016	0.00016
3	0.00012	0.00007	0.00004	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007
4	0.00012	0.00007	0.00004	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007
5	0.00035	0.00022	0.00013	0.00020	0.00020	0.00020	0.00020	0.00020	0.00020	0.00020
7	0.00006	0.00004	0.00002	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003
8	0.00023	0.00014	0.00009	0.00014	0.00014	0.00014	0.00014	0.00014	0.00014	0.00014
10	0.00006	0.00004	0.00002	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003
11	0.00012	0.00007	0.00004	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007
12	0.00006	0.00004	0.00002	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003
14	0.00017	0.00011	0.00007	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010
15	0.00017	0.00011	0.00007	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010
16	0.00023	0.00014	0.00009	0.00014	0.00014	0.00014	0.00014	0.00014	0.00014	0.00014
17	0.00029	0.00018	0.00011	0.00017	0.00017	0.00017	0.00017	0.00017	0.00017	0.00017
18	0.00016	0.00010	0.00006	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010
19	0.00023	0.00014	0.00009	0.00014	0.00014	0.00014	0.00014	0.00014	0.00014	0.00014
20	0.00029	0.00018	0.00011	0.00017	0.00017	0.00017	0.00017	0.00017	0.00017	0.00017
21	0.00069	0.00043	0.00026	0.00041	0.00041	0.00041	0.00041	0.00041	0.00041	0.00041
22	0.00012	0.00007	0.00004	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007
23	0.00150	0.00097	0.00052	0.00087	0.00087	0.00087	0.00087	0.00087	0.00087	0.00087
24	0.00069	0.00040	0.00020	0.00036	0.00036	0.00036	0.00036	0.00036	0.00036	0.00036
25	0.00014	0.00009	0.00004	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008
26	0.00513	0.00253	0.00110	0.00221	0.00221	0.00221	0.00221	0.00221	0.00221	0.00221
27	0.00740	0.00449	0.00225	0.00410	0.00410	0.00410	0.00410	0.00410	0.00410	0.00410
28	0.03446	0.00268	0.00134	0.00244	0.00244	0.00244	0.00244	0.00244	0.00244	0.00244

STRUCTURE CODES

SR -- SINGLE UNIT RESIDENTIAL
MR -- MULTI-UNIT RESIDENTIAL
MH -- MOBILE HOME RESIDENTIAL
C -- COMMERCIAL
I -- INDUSTRIAL
PU -- PUBLIC UTILITIES
AG -- AGRICULTURAL
PT -- PUBLIC TRANSPORTATION
HC -- HEALTH CARE
GI -- GOVERNMENT AND INSTITUTIONAL

Table 99

OKALOOSA COUNTY

ANNUALIZED HURRICANE STRUCTURAL LOSS (%%%) BY LOSS ZONE

SCENARIO B

ANNUALIZED PERCENTAGE LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	0.00079	0.00044	0.00111	0.00044	0.00016	0.00015	0.00015	0.00015	0.00015	0.00015
3	0.00011	0.00007	0.00014	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007
4	0.00011	0.00007	0.00014	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007
5	0.00033	0.00021	0.00041	0.00021	0.00021	0.00021	0.00021	0.00021	0.00021	0.00021
7	0.00005	0.00004	0.00007	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003
8	0.00024	0.00027	0.00061	0.00030	0.00019	0.00019	0.00019	0.00019	0.00019	0.00019
10	0.00005	0.00004	0.00007	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003
11	0.00011	0.00007	0.00014	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007
12	0.00005	0.00004	0.00007	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003
14	0.00016	0.00011	0.00021	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010
15	0.00016	0.00011	0.00021	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010
16	0.00022	0.00014	0.00028	0.00014	0.00014	0.00014	0.00014	0.00014	0.00014	0.00014
17	0.00027	0.00018	0.00034	0.00017	0.00017	0.00017	0.00017	0.00017	0.00017	0.00017
18	0.00014	0.00009	0.00015	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008
19	0.00041	0.00024	0.00053	0.00027	0.00017	0.00019	0.00019	0.00019	0.00019	0.00019
20	0.00027	0.00018	0.00034	0.00017	0.00017	0.00017	0.00017	0.00017	0.00017	0.00017
21	0.00065	0.00042	0.00081	0.00041	0.00041	0.00041	0.00041	0.00041	0.00041	0.00041
22	0.00011	0.00007	0.00014	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007
23	0.00131	0.00084	0.00123	0.00081	0.00081	0.00081	0.00081	0.00081	0.00081	0.00081
24	0.00076	0.00049	0.00071	0.00047	0.00047	0.00047	0.00047	0.00047	0.00047	0.00047
25	0.00013	0.00008	0.00012	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008
26	0.00526	0.00404	0.00481	0.00400	0.00400	0.00400	0.00400	0.00400	0.00400	0.00400
27	0.00668	0.00441	0.00563	0.00426	0.00426	0.00426	0.00426	0.00426	0.00426	0.00426
28	0.00255	0.00242	0.00276	0.00242	0.00242	0.00242	0.00242	0.00242	0.00242	0.00242

STRUCTURE CODES

SR -- SINGLE UNIT RESIDENTIAL
MR -- MULTI-UNIT RESIDENTIAL
MH -- MOBILE HOME RESIDENTIAL
C -- COMMERCIAL
I -- INDUSTRIAL
PU -- PUBLIC UTILITIES
AG -- AGRICULTURAL
PT -- PUBLIC TRANSPORTATION
HC -- HEALTH CARE
GI -- GOVERNMENT AND INSTITUTIONAL

Table 100

OKALOOSA COUNTY

ANNUALIZED HURRICANE STRUCTURAL LOSS (%%%) BY LOSS ZONE

SCENARIO C

ANNUALIZED PERCENTAGE LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	0.00065	0.00043	0.00083	0.00043	0.00017	0.00015	0.00015	0.00015	0.00015	0.00015
3	0.00015	0.00010	0.00037	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010
4	0.00015	0.00010	0.00037	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010
5	0.00045	0.00030	0.00110	0.00030	0.00030	0.00030	0.00030	0.00030	0.00030	0.00030
7	0.00008	0.00005	0.00018	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005
8	0.00053	0.00032	0.00100	0.00033	0.00024	0.00024	0.00024	0.00024	0.00024	0.00024
10	0.00008	0.00005	0.00018	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005
11	0.00015	0.00010	0.00037	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010
12	0.00008	0.00005	0.00018	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005
14	0.00023	0.00015	0.00055	0.00015	0.00015	0.00015	0.00015	0.00015	0.00015	0.00015
15	0.00023	0.00015	0.00055	0.00015	0.00015	0.00015	0.00015	0.00015	0.00015	0.00015
16	0.00030	0.00020	0.00073	0.00020	0.00020	0.00020	0.00020	0.00020	0.00020	0.00020
17	0.00038	0.00025	0.00092	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025
18	0.00020	0.00013	0.00043	0.00013	0.00013	0.00013	0.00013	0.00013	0.00013	0.00013
19	0.00049	0.00029	0.00094	0.00032	0.00024	0.00024	0.00024	0.00024	0.00024	0.00024
20	0.00038	0.00025	0.00092	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025
21	0.00039	0.00059	0.00216	0.00059	0.00059	0.00059	0.00059	0.00059	0.00059	0.00059
22	0.00015	0.00010	0.00037	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010
23	0.00153	0.00101	0.00311	0.00101	0.00101	0.00101	0.00101	0.00101	0.00101	0.00101
24	0.00090	0.00059	0.00178	0.00059	0.00059	0.00059	0.00059	0.00059	0.00059	0.00059
25	0.00015	0.00010	0.00028	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010
26	0.00718	0.00453	0.01123	0.00453	0.00453	0.00453	0.00453	0.00453	0.00453	0.00453
27	0.00806	0.00528	0.01311	0.00528	0.00528	0.00528	0.00528	0.00528	0.00528	0.00528
28	0.00413	0.00248	0.00661	0.00248	0.00248	0.00248	0.00248	0.00248	0.00248	0.00248

STRUCTURE CODES

SR -- SINGLE UNIT RESIDENTIAL
MR -- MULTI-UNIT RESIDENTIAL
MH -- MOBILE HOME RESIDENTIAL
C -- COMMERCIAL
I -- INDUSTRIAL
PU -- PUBLIC UTILITIES
AG -- AGRICULTURAL
PT -- PUBLIC TRANSPORTATION
HC -- HEALTH CARE
GI -- GOVERNMENT AND INSTITUTIONAL

Table 101

OKALOOSA COUNTY

ANNUALIZED HURRICANE STRUCTURAL LOSS (%%%) BY LOSS ZONE

SCENARIO D

ANNUALIZED PERCENTAGE LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	0.00008	0.00008	0.00010	0.00008	0.00003	0.00002	0.00002	0.00002	0.00002	0.00002
3	0.00003	0.00002	0.00012	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002
4	0.00003	0.00002	0.00012	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002
5	0.00009	0.00006	0.00035	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006
7	0.00001	0.00001	0.00006	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001
8	0.00009	0.00006	0.00026	0.00006	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004
10	0.00001	0.00001	0.00006	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001
11	0.00003	0.00002	0.00012	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002
12	0.00001	0.00001	0.00006	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001
14	0.00004	0.00003	0.00018	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003
15	0.00004	0.00003	0.00018	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003
16	0.00006	0.00004	0.00024	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004
17	0.00007	0.00005	0.00029	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005
18	0.00004	0.00003	0.00013	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003
19	0.00006	0.00004	0.00024	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004
20	0.00007	0.00005	0.00029	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005
21	0.00018	0.00012	0.00069	0.00011	0.00011	0.00011	0.00011	0.00011	0.00011	0.00011
22	0.00003	0.00002	0.00012	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002
23	0.00032	0.00021	0.00095	0.00020	0.00020	0.00020	0.00020	0.00020	0.00020	0.00020
24	0.00018	0.00012	0.00054	0.00012	0.00012	0.00012	0.00012	0.00012	0.00012	0.00012
25	0.00003	0.00002	0.00008	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002
26	0.00133	0.00086	0.00299	0.00084	0.00084	0.00084	0.00084	0.00084	0.00084	0.00084
27	0.00149	0.00097	0.00389	0.00095	0.00095	0.00095	0.00095	0.00095	0.00095	0.00095
28	0.00078	0.00051	0.00189	0.00047	0.00047	0.00047	0.00047	0.00047	0.00047	0.00047

STRUCTURE CODES

SR -- SINGLE UNIT RESIDENTIAL
MR -- MULTI-UNIT RESIDENTIAL
MH -- MOBILE HOME RESIDENTIAL
C -- COMMERCIAL
I -- INDUSTRIAL
PU -- PUBLIC UTILITIES
AG -- AGRICULTURAL
PT -- PUBLIC TRANSPORTATION
HC -- HEALTH CARE
GI -- GOVERNMENT AND INSTITUTIONAL

Table 102

OKALOOSA COUNTY

ANNUALIZED HURRICANE STRUCTURAL LOSS (%%%) BY LOSS ZONE

SCENARIO E

ANNUALIZED PERCENTAGE LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	0.00001	0.00001	0.00001	0.00000	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001
3	0.00001	0.00001	0.00003	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001
4	0.00001	0.00001	0.00003	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001
5	0.00003	0.00003	0.00008	0.00003	0.00003	0.00002	0.00002	0.00002	0.00002	0.00002
7	0.00001	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
8	0.00003	0.00002	0.00003	0.00002	0.00001	0.00002	0.00002	0.00002	0.00002	0.00002
10	0.00001	0.00000	0.00001	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
11	0.00001	0.00001	0.00000	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001
12	0.00001	0.00000	0.00001	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
14	0.00002	0.00001	0.00000	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001
15	0.00002	0.00001	0.00000	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001
16	0.00002	0.00002	0.00005	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002
17	0.00003	0.00002	0.00001	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002
18	0.00001	0.00001	0.00004	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001
19	0.00003	0.00002	0.00005	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002
20	0.00003	0.00002	0.00006	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002
21	0.00007	0.00005	0.00015	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005
22	0.00001	0.00001	0.00003	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001
23	0.00012	0.00009	0.00037	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009
24	0.00007	0.00005	0.00022	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005
25	0.00001	0.00001	0.00004	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001
26	0.00038	0.00026	0.00166	0.00026	0.00026	0.00026	0.00026	0.00026	0.00026	0.00026
27	0.00041	0.00029	0.00176	0.00029	0.00029	0.00029	0.00029	0.00029	0.00029	0.00029
28	0.00019	0.00013	0.00082	0.00013	0.00013	0.00013	0.00013	0.00013	0.00013	0.00013

STRUCTURE CODES

SR -- SINGLE UNIT RESIDENTIAL
MR -- MULTI-UNIT RESIDENTIAL
MH -- MOBILE HOME RESIDENTIAL
C -- COMMERCIAL
I -- INDUSTRIAL
PU -- PUBLIC UTILITIES
AG -- AGRICULTURAL
PT -- PUBLIC TRANSPORTATION
HC -- HEALTH CARE
GI -- GOVERNMENT AND INSTITUTIONAL

Table 103

WALTON COUNTY

ANNUALIZED HURRICANE STRUCTURAL LOSS (%%%) BY LOSS ZONE

SCENARIO A

HURRICANE LOSS ZONE	ANNUALIZED PERCENTAGE LOSS BY STRUCTURE TYPE									
	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	0.00831	0.00468	0.01826	0.00445	0.00193	0.00181	0.00181	0.00181	0.00181	0.00181
2	0.00163	0.00102	0.00051	0.00096	0.00096	0.00096	0.00096	0.00096	0.00096	0.00096
3	0.00223	0.00139	0.00090	0.00133	0.00127	0.00128	0.00128	0.00128	0.00128	0.00128
4	0.00065	0.00041	0.00024	0.00038	0.00038	0.00038	0.00038	0.00038	0.00038	0.00038
5	0.00005	0.00003	0.00002	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003
6	0.00404	0.00246	0.00318	0.00231	0.00203	0.00200	0.00200	0.00200	0.00200	0.00200
7	0.00066	0.00041	0.00025	0.00039	0.00039	0.00039	0.00039	0.00039	0.00039	0.00039
8	0.00695	0.00433	0.00262	0.00406	0.00406	0.00406	0.00406	0.00406	0.00406	0.00406
9	0.00038	0.00024	0.00014	0.00022	0.00022	0.00022	0.00022	0.00022	0.00022	0.00022
10	0.00043	0.00027	0.00016	0.00026	0.00026	0.00026	0.00026	0.00026	0.00026	0.00026
11	0.00011	0.00007	0.00004	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006
12	0.00023	0.00014	0.00009	0.00014	0.00014	0.00014	0.00014	0.00014	0.00014	0.00014
13	0.00238	0.00149	0.00086	0.00139	0.00139	0.00139	0.00139	0.00139	0.00139	0.00139
14	0.00647	0.00398	0.00235	0.00372	0.00372	0.00372	0.00372	0.00372	0.00372	0.00372
15	0.00053	0.00033	0.00020	0.00031	0.00031	0.00031	0.00031	0.00031	0.00031	0.00031
16	0.00130	0.00078	0.00044	0.00073	0.00073	0.00073	0.00073	0.00073	0.00073	0.00073
17	0.00097	0.00060	0.00036	0.00056	0.00056	0.00056	0.00056	0.00056	0.00056	0.00056
18	0.00351	0.00242	0.00133	0.00212	0.00212	0.00212	0.00212	0.00212	0.00212	0.00212
19	0.00273	0.00174	0.00087	0.00167	0.00167	0.00167	0.00167	0.00167	0.00167	0.00167
20	0.00401	0.00244	0.00123	0.00227	0.00227	0.00227	0.00227	0.00227	0.00227	0.00227
21	0.00318	0.00194	0.00099	0.00168	0.00168	0.00168	0.00168	0.00168	0.00168	0.00168

STRUCTURE CODES

SR -- SINGLE UNIT RESIDENTIAL
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AG -- AGRICULTURAL
PT -- PUBLIC TRANSPORTATION
HC -- HEALTH CARE
GI -- GOVERNMENT AND INSTITUTIONAL

Table 104

WALTON COUNTY

ANNUALIZED HURRICANE STRUCTURAL LOSS (XXX) BY LOSS ZONE

SCENARIO B

HURRICANE LOSS ZONE	ANNUALIZED PERCENTAGE LOSS BY STRUCTURE TYPE									
	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	0.00671	0.00372	0.00990	0.00379	0.00153	0.00148	0.00148	0.00148	0.00148	0.00148
2	0.00149	0.00093	0.00164	0.00096	0.00080	0.00083	0.00083	0.00083	0.00083	0.00083
3	0.00148	0.00090	0.00107	0.00093	0.00082	0.00084	0.00084	0.00084	0.00084	0.00084
4	0.00077	0.00047	0.00080	0.00050	0.00034	0.00037	0.00037	0.00037	0.00037	0.00037
5	0.00004	0.00003	0.00006	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003
6	0.00324	0.00203	0.00453	0.00200	0.00166	0.00167	0.00167	0.00167	0.00167	0.00167
7	0.00043	0.00027	0.00037	0.00026	0.00026	0.00026	0.00026	0.00026	0.00026	0.00026
8	0.00469	0.00304	0.00457	0.00296	0.00296	0.00296	0.00296	0.00296	0.00296	0.00296
9	0.00023	0.00014	0.00016	0.00014	0.00014	0.00014	0.00014	0.00014	0.00014	0.00014
10	0.00039	0.00023	0.00033	0.00024	0.00018	0.00020	0.00020	0.00020	0.00020	0.00020
11	0.00009	0.00006	0.00011	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006
12	0.00018	0.00012	0.00023	0.00011	0.00011	0.00011	0.00011	0.00011	0.00011	0.00011
13	0.00143	0.00087	0.00061	0.00085	0.00085	0.00085	0.00085	0.00085	0.00085	0.00085
14	0.00385	0.00232	0.00202	0.00229	0.00229	0.00229	0.00229	0.00229	0.00229	0.00229
15	0.00027	0.00017	0.00012	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016
16	0.00071	0.00044	0.00028	0.00042	0.00042	0.00042	0.00042	0.00042	0.00042	0.00042
17	0.00048	0.00029	0.00017	0.00028	0.00028	0.00028	0.00028	0.00028	0.00028	0.00028
18	0.00269	0.00167	0.00110	0.00158	0.00158	0.00158	0.00158	0.00158	0.00158	0.00158
19	0.00188	0.00114	0.00065	0.00108	0.00108	0.00108	0.00108	0.00108	0.00108	0.00108
20	0.00218	0.00134	0.00078	0.00127	0.00127	0.00127	0.00127	0.00127	0.00127	0.00127
21	0.00174	0.00109	0.00064	0.00103	0.00103	0.00103	0.00103	0.00103	0.00103	0.00103

STRUCTURE CODES

SR -- SINGLE UNIT RESIDENTIAL
MR -- MULTI-UNIT RESIDENTIAL
MH -- MOBILE HOME RESIDENTIAL
C -- COMMERCIAL
I -- INDUSTRIAL
PU -- PUBLIC UTILITIES
AG -- AGRICULTURAL
PT -- PUBLIC TRANSPORTATION
HC -- HEALTH CARE
GI -- GOVERNMENT AND INSTITUTIONAL

Table 105

WALTON COUNTY

ANNUALIZED HURRICANE STRUCTURAL LOSS (%%%) BY LOSS ZONE

SCENARIO C

ANNUALIZED PERCENTAGE LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	0.00364	0.00230	0.00554	0.00229	0.00108	0.00102	0.00102	0.00102	0.00102	0.00102
2	0.00122	0.00078	0.00301	0.00077	0.00077	0.00077	0.00077	0.00077	0.00077	0.00077
3	0.00148	0.00096	0.00318	0.00094	0.00094	0.00094	0.00094	0.00094	0.00094	0.00094
4	0.00047	0.00031	0.00107	0.00030	0.00030	0.00030	0.00030	0.00030	0.00030	0.00030
5	0.00004	0.00003	0.00010	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003
6	0.00318	0.00198	0.00698	0.00196	0.00163	0.00162	0.00162	0.00162	0.00162	0.00162
7	0.00047	0.00030	0.00104	0.00030	0.00030	0.00030	0.00030	0.00030	0.00030	0.00030
8	0.00468	0.00304	0.00932	0.00298	0.00298	0.00298	0.00298	0.00298	0.00298	0.00298
9	0.00027	0.00017	0.00057	0.00017	0.00017	0.00017	0.00017	0.00017	0.00017	0.00017
10	0.00030	0.00020	0.00065	0.00019	0.00019	0.00019	0.00019	0.00019	0.00019	0.00019
11	0.00008	0.00005	0.00021	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005
12	0.00017	0.00011	0.00042	0.00011	0.00011	0.00011	0.00011	0.00011	0.00011	0.00011
13	0.00147	0.00094	0.00261	0.00092	0.00092	0.00092	0.00092	0.00092	0.00092	0.00092
14	0.00400	0.00251	0.00712	0.00251	0.00251	0.00251	0.00251	0.00251	0.00251	0.00251
15	0.00028	0.00018	0.00044	0.00017	0.00017	0.00017	0.00017	0.00017	0.00017	0.00017
16	0.00072	0.00046	0.00102	0.00045	0.00045	0.00045	0.00045	0.00045	0.00045	0.00045
17	0.00049	0.00031	0.00075	0.00030	0.00030	0.00030	0.00030	0.00030	0.00030	0.00030
18	0.00262	0.00166	0.00413	0.00161	0.00161	0.00161	0.00161	0.00161	0.00161	0.00161
19	0.00186	0.00117	0.00271	0.00114	0.00114	0.00114	0.00114	0.00114	0.00114	0.00114
20	0.00221	0.00140	0.00316	0.00136	0.00136	0.00136	0.00136	0.00136	0.00136	0.00136
21	0.00188	0.00119	0.00245	0.00109	0.00109	0.00109	0.00109	0.00109	0.00109	0.00109

STRUCTURE CODES

SR -- SINGLE UNIT RESIDENTIAL
MR -- MULTI-UNIT RESIDENTIAL
MH -- MOBILE HOME RESIDENTIAL
C -- COMMERCIAL
I -- INDUSTRIAL
PU -- PUBLIC UTILITIES
AG -- AGRICULTURAL
PT -- PUBLIC TRANSPORTATION
HC -- HEALTH CARE
GI -- GOVERNMENT AND INSTITUTIONAL

Table 106

WALTON COUNTY

ANNUALIZED HURRICANE STRUCTURAL LOSS (%%%) BY LOSS ZONE

SCENARIO D

HURRICANE LOSS ZONE	ANNUALIZED PERCENTAGE LOSS BY STRUCTURE TYPE									
	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	0.00098	0.00067	0.00164	0.00066	0.00034	0.00033	0.00033	0.00033	0.00033	0.00033
2	0.00043	0.00029	0.00169	0.00028	0.00028	0.00028	0.00028	0.00028	0.00028	0.00028
3	0.00030	0.00033	0.00172	0.00033	0.00033	0.00033	0.00033	0.00033	0.00033	0.00033
4	0.00016	0.00011	0.00058	0.00011	0.00011	0.00011	0.00011	0.00011	0.00011	0.00011
5	0.00001	0.00001	0.00006	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001
6	0.00094	0.00064	0.00337	0.00062	0.00056	0.00056	0.00056	0.00056	0.00056	0.00056
7	0.00016	0.00011	0.00056	0.00011	0.00011	0.00011	0.00011	0.00011	0.00011	0.00011
8	0.00153	0.00102	0.00479	0.00100	0.00100	0.00100	0.00100	0.00100	0.00100	0.00100
9	0.00009	0.00006	0.00030	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006
10	0.00010	0.00007	0.00034	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007
11	0.00003	0.00002	0.00012	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002
12	0.00006	0.00004	0.00024	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004
13	0.00048	0.00032	0.00139	0.00031	0.00031	0.00031	0.00031	0.00031	0.00031	0.00031
14	0.00129	0.00085	0.00357	0.00083	0.00083	0.00083	0.00083	0.00083	0.00083	0.00083
15	0.00009	0.00006	0.00024	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006
16	0.00025	0.00016	0.00063	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016
17	0.00017	0.00011	0.00042	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010
18	0.00085	0.00054	0.00211	0.00053	0.00053	0.00053	0.00053	0.00053	0.00053	0.00053
19	0.00059	0.00039	0.00146	0.00038	0.00038	0.00038	0.00038	0.00038	0.00038	0.00038
20	0.00072	0.00047	0.00178	0.00045	0.00045	0.00045	0.00045	0.00045	0.00045	0.00045
21	0.00060	0.00038	0.00137	0.00038	0.00038	0.00038	0.00038	0.00038	0.00038	0.00038

STRUCTURE CODES

SR -- SINGLE UNIT RESIDENTIAL
MR -- MULTI-UNIT RESIDENTIAL
MH -- MOBILE HOME RESIDENTIAL
C -- COMMERCIAL
I -- INDUSTRIAL
PU -- PUBLIC UTILITIES
AG -- AGRICULTURAL
PT -- PUBLIC TRANSPORTATION
HC -- HEALTH CARE
GI -- GOVERNMENT AND INSTITUTIONAL

Table 107

WALTON COUNTY

ANNUALIZED HURRICANE STRUCTURAL LOSS (%%%) BY LOSS ZONE

SCENARIO E

ANNUALIZED PERCENTAGE LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	0.00016	0.00014	0.00027	0.00014	0.00010	0.00009	0.00009	0.00009	0.00009	0.00009
2	0.00018	0.00013	0.00037	0.00013	0.00012	0.00012	0.00012	0.00012	0.00012	0.00012
3	0.00016	0.00011	0.00050	0.00011	0.00011	0.00011	0.00011	0.00011	0.00011	0.00011
4	0.00006	0.00005	0.00012	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005
5	0.00001	0.00001	0.00001	0.00001	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
6	0.00029	0.00021	0.00071	0.00022	0.00020	0.00020	0.00020	0.00020	0.00020	0.00020
7	0.00005	0.00003	0.00015	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003
8	0.00043	0.00031	0.00166	0.00031	0.00031	0.00031	0.00031	0.00031	0.00031	0.00031
9	0.00003	0.00002	0.00009	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002
10	0.00004	0.00003	0.00010	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003
11	0.00001	0.00001	0.00003	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001
12	0.00002	0.00002	0.00005	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002
13	0.00018	0.00014	0.00060	0.00014	0.00014	0.00014	0.00014	0.00014	0.00014	0.00014
14	0.00035	0.00025	0.00152	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025
15	0.00003	0.00003	0.00013	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003
16	0.00007	0.00005	0.00029	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005
17	0.00006	0.00005	0.00024	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005
18	0.00033	0.00024	0.00123	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025
19	0.00022	0.00016	0.00094	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016
20	0.00027	0.00020	0.00111	0.00020	0.00020	0.00020	0.00020	0.00020	0.00020	0.00020
21	0.00020	0.00014	0.00084	0.00014	0.00014	0.00014	0.00014	0.00014	0.00014	0.00014

STRUCTURE CODES

SR -- SINGLE UNIT RESIDENTIAL
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AG -- AGRICULTURAL
PT -- PUBLIC TRANSPORTATION
HC -- HEALTH CARE
GI -- GOVERNMENT AND INSTITUTIONAL

Table 108

BAY COUNTY

ANNUALIZED HURRICANE STRUCTURAL LOSS (XXX) BY LOSS ZONE

SCENARIO A

ANNUALIZED PERCENTAGE LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	0.00534	0.00283	0.01000	0.00233	0.00096	0.00097	0.00097	0.00097	0.00097	0.00097
2	0.00006	0.00004	0.00002	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003
3	0.00710	0.00389	0.01269	0.00384	0.00154	0.00150	0.00150	0.00150	0.00150	0.00150
4	0.00553	0.00300	0.00919	0.00310	0.00119	0.00119	0.00119	0.00119	0.00119	0.00119
5	0.00136	0.00075	0.00211	0.00074	0.00036	0.00035	0.00035	0.00035	0.00035	0.00035
6	0.00378	0.00220	0.00357	0.00255	0.00122	0.00141	0.00141	0.00141	0.00141	0.00141
7	0.00160	0.00104	0.00125	0.00102	0.00063	0.00068	0.00068	0.00068	0.00068	0.00068
8	0.00070	0.00041	0.00057	0.00046	0.00025	0.00028	0.00028	0.00028	0.00028	0.00028
9	0.00112	0.00066	0.00024	0.00072	0.00044	0.00048	0.00048	0.00048	0.00048	0.00048
10	0.00029	0.00018	0.00011	0.00017	0.00017	0.00017	0.00017	0.00017	0.00017	0.00017
11	0.00017	0.00011	0.00007	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010
12	0.00130	0.00080	0.00048	0.00075	0.00075	0.00075	0.00075	0.00075	0.00075	0.00075
13	0.00017	0.00010	0.00006	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010
14	0.00196	0.00111	0.00232	0.00108	0.00070	0.00071	0.00071	0.00071	0.00071	0.00071
15	0.00006	0.00003	0.00002	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003
16	0.00125	0.00073	0.00113	0.00084	0.00042	0.00048	0.00048	0.00048	0.00048	0.00048
17	0.00163	0.00096	0.00145	0.00107	0.00058	0.00065	0.00065	0.00065	0.00065	0.00065
18	0.00055	0.00033	0.00033	0.00034	0.00027	0.00028	0.00028	0.00028	0.00028	0.00028
19	0.00041	0.00025	0.00015	0.00024	0.00024	0.00024	0.00024	0.00024	0.00024	0.00024
20	0.00276	0.00162	0.00241	0.00184	0.00093	0.00106	0.00106	0.00106	0.00106	0.00106
21	0.00022	0.00014	0.00008	0.00013	0.00013	0.00013	0.00013	0.00013	0.00013	0.00013
22	0.00223	0.00137	0.00084	0.00129	0.00129	0.00129	0.00129	0.00129	0.00129	0.00129
23	0.00012	0.00007	0.00004	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007
24	0.00029	0.00018	0.00011	0.00017	0.00017	0.00017	0.00017	0.00017	0.00017	0.00017
25	0.00023	0.00014	0.00009	0.00014	0.00014	0.00014	0.00014	0.00014	0.00014	0.00014
26	0.00029	0.00018	0.00011	0.00017	0.00017	0.00017	0.00017	0.00017	0.00017	0.00017
27	0.00012	0.00007	0.00004	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007
28	0.00022	0.00014	0.00008	0.00013	0.00013	0.00013	0.00013	0.00013	0.00013	0.00013
29	0.00023	0.00014	0.00009	0.00014	0.00014	0.00014	0.00014	0.00014	0.00014	0.00014
30	0.00032	0.00020	0.00012	0.00019	0.00019	0.00019	0.00019	0.00019	0.00019	0.00019
31	0.00011	0.00007	0.00004	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006
32	0.00011	0.00007	0.00004	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006
33	0.00016	0.00010	0.00006	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010
34	0.00387	0.00241	0.00147	0.00226	0.00226	0.00226	0.00226	0.00226	0.00226	0.00226
35	0.00561	0.00349	0.00226	0.00326	0.00326	0.00326	0.00326	0.00326	0.00326	0.00326
36	0.00130	0.00080	0.00050	0.00075	0.00075	0.00075	0.00075	0.00075	0.00075	0.00075
37	0.00918	0.00568	0.00379	0.00542	0.00521	0.00524	0.00524	0.00524	0.00524	0.00524
38	0.00325	0.00201	0.00135	0.00192	0.00185	0.00186	0.00186	0.00186	0.00186	0.00186

STRUCTURE CODES

SR -- SINGLE UNIT RESIDENTIAL
MR -- MULTI-UNIT RESIDENTIAL
MH -- MOBILE HOME RESIDENTIAL
C -- COMMERCIAL
I -- INDUSTRIAL
PU -- PUBLIC UTILITIES
AG -- AGRICULTURAL
PT -- PUBLIC TRANSPORTATION
HC -- HEALTH CARE
GI -- GOVERNMENT AND INSTITUTIONAL

Table 109

BAY COUNTY

ANNUALIZED HURRICANE STRUCTURAL LOSS (%%%) BY LOSS ZONE

SCENARIO B

ANNUALIZED PERCENTAGE LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	0.00409	0.00219	0.00625	0.00219	0.00078	0.00074	0.00074	0.00074	0.00074	0.00074
2	0.00036	0.00018	0.00044	0.00022	0.00009	0.00010	0.00010	0.00010	0.00010	0.00010
3	0.00748	0.00404	0.01059	0.00431	0.00169	0.00173	0.00173	0.00173	0.00173	0.00173
4	0.00332	0.00212	0.00548	0.00213	0.00092	0.00090	0.00090	0.00090	0.00090	0.00090
5	0.00117	0.00067	0.00161	0.00066	0.00033	0.00033	0.00033	0.00033	0.00033	0.00033
6	0.00471	0.00253	0.00600	0.00279	0.00132	0.00142	0.00142	0.00142	0.00142	0.00142
7	0.00327	0.00176	0.00415	0.00192	0.00091	0.00098	0.00098	0.00098	0.00098	0.00098
8	0.00098	0.00053	0.00119	0.00057	0.00028	0.00030	0.00030	0.00030	0.00030	0.00030
9	0.00160	0.00088	0.00192	0.00094	0.00051	0.00053	0.00053	0.00053	0.00053	0.00053
10	0.00088	0.00047	0.00104	0.00054	0.00028	0.00030	0.00030	0.00030	0.00030	0.00030
11	0.00077	0.00040	0.00093	0.00047	0.00021	0.00023	0.00023	0.00023	0.00023	0.00023
12	0.00599	0.00320	0.00755	0.00350	0.00163	0.00175	0.00175	0.00175	0.00175	0.00175
13	0.00125	0.00065	0.00160	0.00072	0.00029	0.00032	0.00032	0.00032	0.00032	0.00032
14	0.00353	0.00192	0.00454	0.00203	0.00103	0.00107	0.00107	0.00107	0.00107	0.00107
15	0.00042	0.00022	0.00053	0.00024	0.00010	0.00011	0.00011	0.00011	0.00011	0.00011
16	0.00184	0.00098	0.00233	0.00109	0.00050	0.00054	0.00054	0.00054	0.00054	0.00054
17	0.00103	0.00061	0.00126	0.00062	0.00048	0.00049	0.00049	0.00049	0.00049	0.00049
18	0.00069	0.00043	0.00137	0.00042	0.00031	0.00031	0.00031	0.00031	0.00031	0.00031
19	0.00043	0.00027	0.00050	0.00026	0.00026	0.00026	0.00026	0.00026	0.00026	0.00026
20	0.00558	0.00295	0.00709	0.00328	0.00153	0.00163	0.00163	0.00163	0.00163	0.00163
21	0.00021	0.00013	0.00018	0.00013	0.00013	0.00013	0.00013	0.00013	0.00013	0.00013
22	0.00485	0.00275	0.00570	0.00287	0.00186	0.00192	0.00192	0.00192	0.00192	0.00192
23	0.00012	0.00008	0.00013	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007
24	0.00029	0.00019	0.00030	0.00018	0.00018	0.00018	0.00018	0.00018	0.00018	0.00018
25	0.00023	0.00015	0.00024	0.00014	0.00014	0.00014	0.00014	0.00014	0.00014	0.00014
26	0.00058	0.00032	0.00066	0.00035	0.00022	0.00023	0.00023	0.00023	0.00023	0.00023
27	0.00011	0.00007	0.00011	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007
28	0.00022	0.00014	0.00020	0.00013	0.00013	0.00013	0.00013	0.00013	0.00013	0.00013
29	0.00023	0.00014	0.00022	0.00014	0.00014	0.00014	0.00014	0.00014	0.00014	0.00014
30	0.00031	0.00020	0.00027	0.00019	0.00019	0.00019	0.00019	0.00019	0.00019	0.00019
31	0.00010	0.00007	0.00009	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006
32	0.00010	0.00007	0.00009	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006
33	0.00015	0.00010	0.00014	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009
34	0.00408	0.00257	0.00398	0.00247	0.00247	0.00247	0.00247	0.00247	0.00247	0.00247
35	0.00583	0.00365	0.00514	0.00351	0.00351	0.00351	0.00351	0.00351	0.00351	0.00351
36	0.00134	0.00084	0.00130	0.00081	0.00081	0.00081	0.00081	0.00081	0.00081	0.00081
37	0.00915	0.00568	0.00868	0.00550	0.00550	0.00550	0.00550	0.00550	0.00550	0.00550
38	0.00327	0.00207	0.00373	0.00200	0.00200	0.00200	0.00200	0.00200	0.00200	0.00200

STRUCTURE CODES

SR -- SINGLE UNIT RESIDENTIAL
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MH -- MOBILE HOME RESIDENTIAL
C -- COMMERCIAL
I -- INDUSTRIAL
PU -- PUBLIC UTILITIES
AG -- AGRICULTURAL
PT -- PUBLIC TRANSPORTATION
HC -- HEALTH CARE
GI -- GOVERNMENT AND INSTITUTIONAL

Table 110

BAY COUNTY

ANNUALIZED HURRICANE STRUCTURAL LOSS (%%%) BY LOSS ZONE

SCENARIO C

HURRICANE LOSS ZONE	ANNUALIZED PERCENTAGE LOSS BY STRUCTURE TYPE									
	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	0.00329	0.00198	0.00455	0.00197	0.00077	0.00073	0.00073	0.00073	0.00073	0.00073
2	0.00019	0.00011	0.00031	0.00013	0.00007	0.00008	0.00008	0.00008	0.00008	0.00008
3	0.00560	0.00312	0.00858	0.00331	0.00156	0.00159	0.00159	0.00159	0.00159	0.00159
4	0.00300	0.00175	0.00504	0.00174	0.00092	0.00089	0.00089	0.00089	0.00039	0.00039
5	0.00104	0.00062	0.00191	0.00061	0.00040	0.00039	0.00039	0.00039	0.00039	0.00039
6	0.00429	0.00238	0.00678	0.00269	0.00148	0.00156	0.00156	0.00156	0.00156	0.00156
7	0.00226	0.00129	0.00396	0.00138	0.00087	0.00091	0.00091	0.00091	0.00091	0.00091
8	0.00115	0.00065	0.00195	0.00069	0.00038	0.00040	0.00040	0.00040	0.00040	0.00040
9	0.00181	0.00103	0.00313	0.00109	0.00068	0.00071	0.00071	0.00071	0.00071	0.00071
10	0.00063	0.00039	0.00123	0.00041	0.00030	0.00032	0.00032	0.00032	0.00032	0.00032
11	0.00045	0.00028	0.00081	0.00031	0.00019	0.00021	0.00021	0.00021	0.00021	0.00021
12	0.00496	0.00281	0.00809	0.00300	0.00170	0.00180	0.00180	0.00180	0.00180	0.00180
13	0.00099	0.00054	0.00145	0.00059	0.00028	0.00030	0.00030	0.00030	0.00030	0.00030
14	0.00320	0.00187	0.00553	0.00194	0.00118	0.00121	0.00121	0.00121	0.00121	0.00121
15	0.00033	0.00018	0.00048	0.00020	0.00009	0.00010	0.00010	0.00010	0.00010	0.00010
16	0.00140	0.00078	0.00231	0.00087	0.00051	0.00053	0.00053	0.00053	0.00053	0.00053
17	0.00114	0.00070	0.00248	0.00071	0.00060	0.00061	0.00061	0.00061	0.00061	0.00061
18	0.00078	0.00048	0.00194	0.00047	0.00039	0.00040	0.00040	0.00040	0.00040	0.00040
19	0.00057	0.00036	0.00140	0.00036	0.00036	0.00036	0.00036	0.00036	0.00036	0.00036
20	0.00447	0.00246	0.00649	0.00267	0.00133	0.00141	0.00141	0.00141	0.00141	0.00141
21	0.00032	0.00021	0.00080	0.00020	0.00020	0.00020	0.00020	0.00020	0.00020	0.00020
22	0.00484	0.00239	0.00904	0.00299	0.00227	0.00232	0.00232	0.00232	0.00232	0.00232
23	0.00016	0.00010	0.00040	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010
24	0.00040	0.00026	0.00100	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025	0.00025
25	0.00032	0.00021	0.00080	0.00020	0.00020	0.00020	0.00020	0.00020	0.00020	0.00020
26	0.00051	0.00032	0.00111	0.00033	0.00027	0.00028	0.00028	0.00028	0.00028	0.00028
27	0.00016	0.00010	0.00040	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010
28	0.00032	0.00021	0.00080	0.00020	0.00020	0.00020	0.00020	0.00020	0.00020	0.00020
29	0.00032	0.00021	0.00080	0.00020	0.00020	0.00020	0.00020	0.00020	0.00020	0.00020
30	0.00049	0.00031	0.00120	0.00031	0.00031	0.00031	0.00031	0.00031	0.00031	0.00031
31	0.00016	0.00010	0.00040	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010
32	0.00016	0.00010	0.00040	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010
33	0.00024	0.00016	0.00060	0.00015	0.00015	0.00015	0.00015	0.00015	0.00015	0.00015
34	0.00549	0.00352	0.01231	0.00349	0.00349	0.00349	0.00349	0.00349	0.00349	0.00349
35	0.00712	0.00460	0.01291	0.00450	0.00450	0.00450	0.00450	0.00450	0.00450	0.00450
36	0.00158	0.00102	0.00291	0.00100	0.00100	0.00100	0.00100	0.00100	0.00100	0.00100
37	0.01235	0.00779	0.02387	0.00779	0.00729	0.00732	0.00732	0.00732	0.00732	0.00732
38	0.00430	0.00275	0.01042	0.00271	0.00271	0.00271	0.00271	0.00271	0.00271	0.00271

STRUCTURE CODES

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HC -- HEALTH CARE
GI -- GOVERNMENT AND INSTITUTIONAL

Table 111

BAY COUNTY

ANNUALIZED HURRICANE STRUCTURAL LOSS (%%%) BY LOSS ZONE

SCENARIO D

ANNUALIZED PERCENTAGE LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	0.00035	0.00022	0.00048	0.00022	0.00009	0.00008	0.00008	0.00008	0.00008	0.00008
2	0.00005	0.00003	0.00007	0.00003	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001
3	0.00074	0.00044	0.00107	0.00044	0.00019	0.00020	0.00020	0.00020	0.00020	0.00020
4	0.00044	0.00026	0.00068	0.00026	0.00012	0.00011	0.00011	0.00011	0.00011	0.00011
5	0.00012	0.00007	0.00020	0.00007	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004
6	0.00091	0.00049	0.00134	0.00051	0.00022	0.00025	0.00025	0.00025	0.00025	0.00025
7	0.00032	0.00018	0.00053	0.00018	0.00010	0.00011	0.00011	0.00011	0.00011	0.00011
8	0.00018	0.00010	0.00026	0.00010	0.00004	0.00005	0.00005	0.00005	0.00005	0.00005
9	0.00027	0.00014	0.00041	0.00015	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008
10	0.00013	0.00007	0.00021	0.00007	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004
11	0.00011	0.00006	0.00017	0.00006	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003
12	0.00074	0.00070	0.00116	0.00042	0.00021	0.00022	0.00022	0.00022	0.00022	0.00022
13	0.00015	0.00008	0.00022	0.00008	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004
14	0.00041	0.00024	0.00068	0.00024	0.00013	0.00014	0.00014	0.00014	0.00014	0.00014
15	0.00005	0.00003	0.00007	0.00003	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001
16	0.00025	0.00014	0.00041	0.00014	0.00007	0.00008	0.00008	0.00008	0.00008	0.00008
17	0.00013	0.00008	0.00022	0.00008	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007
18	0.00016	0.00009	0.00030	0.00009	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005
19	0.00006	0.00004	0.00015	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004
20	0.00077	0.00041	0.00111	0.00041	0.00018	0.00019	0.00019	0.00019	0.00019	0.00019
21	0.00003	0.00002	0.00005	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002
22	0.00040	0.00030	0.00084	0.00025	0.00022	0.00022	0.00022	0.00022	0.00022	0.00022
23	0.00002	0.00011	0.00004	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001
24	0.00004	0.00023	0.00010	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003
25	0.00003	0.00012	0.00009	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002
26	0.00009	0.00005	0.00016	0.00005	0.00003	0.00004	0.00004	0.00004	0.00004	0.00004
27	0.00002	0.00001	0.00004	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001
28	0.00003	0.00002	0.00007	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002
29	0.00003	0.00002	0.00006	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002
30	0.00004	0.00002	0.00007	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003
31	0.00001	0.00001	0.00002	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001
32	0.00001	0.00001	0.00002	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001
33	0.00002	0.00001	0.00004	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001
34	0.00054	0.00055	0.00116	0.00034	0.00034	0.00034	0.00034	0.00034	0.00034	0.00034
35	0.00073	0.00046	0.00131	0.00033	0.00033	0.00033	0.00033	0.00033	0.00033	0.00033
36	0.00017	0.00010	0.00031	0.00011	0.00011	0.00011	0.00011	0.00011	0.00011	0.00011
37	0.00143	0.00086	0.00277	0.00087	0.00078	0.00078	0.00078	0.00078	0.00078	0.00078
38	0.00045	0.00029	0.00109	0.00028	0.00028	0.00028	0.00028	0.00028	0.00028	0.00028

STRUCTURE CODES

SR -- SINGLE UNIT RESIDENTIAL
MR -- MULTI-UNIT RESIDENTIAL
MH -- MOBILE HOME RESIDENTIAL
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I -- INDUSTRIAL
PU -- PUBLIC UTILITIES
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HC -- HEALTH CARE
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Table 112

BAY COUNTY

ANNUALIZED HURRICANE STRUCTURAL LOSS (%%%) BY LOSS ZONE

SCENARIO E

HURRICANE LOSS ZONE	ANNUALIZED PERCENTAGE LOSS BY STRUCTURE TYPE									
	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	0.00005	0.00004	0.00006	0.00004	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002
2	0.00001	0.00001	0.00001	0.00001	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
3	0.00015	0.00012	0.00020	0.00011	0.00008	0.00008	0.00008	0.00008	0.00008	0.00008
4	0.00011	0.00009	0.00014	0.00009	0.00006	0.00006	0.00006	0.00006	0.00006	0.00006
5	0.00004	0.00003	0.00008	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003
6	0.00020	0.00014	0.00024	0.00013	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010
7	0.00013	0.00009	0.00017	0.00009	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007
8	0.00004	0.00003	0.00006	0.00003	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002
9	0.00007	0.00004	0.00013	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004
10	0.00003	0.00002	0.00006	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002
11	0.00002	0.00001	0.00004	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001
12	0.00016	0.00010	0.00029	0.00010	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007
13	0.00003	0.00002	0.00004	0.00002	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001
14	0.00008	0.00005	0.00022	0.00005	0.00004	0.00004	0.00004	0.00004	0.00004	0.00004
15	0.00000	0.00000	0.00001	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
16	0.00006	0.00004	0.00009	0.00004	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003
17	0.00008	0.00006	0.00014	0.00006	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005
18	0.00005	0.00004	0.00009	0.00004	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003
19	0.00005	0.00004	0.00009	0.00004	0.00003	0.00003	0.00003	0.00003	0.00003	0.00003
20	0.00016	0.00010	0.00023	0.00010	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007
21	0.00002	0.00001	0.00005	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001
22	0.00013	0.00009	0.00047	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009
23	0.00001	0.00001	0.00003	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001
24	0.00002	0.00001	0.00006	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001
25	0.00001	0.00001	0.00005	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001
26	0.00002	0.00002	0.00005	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001
27	0.00001	0.00000	0.00003	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
28	0.00002	0.00001	0.00005	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001
29	0.00002	0.00002	0.00005	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002
30	0.00003	0.00002	0.00008	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002
31	0.00001	0.00001	0.00003	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001
32	0.00001	0.00001	0.00003	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001
33	0.00001	0.00001	0.00004	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001	0.00001
34	0.00020	0.00014	0.00084	0.00014	0.00014	0.00014	0.00014	0.00014	0.00014	0.00014
35	0.00025	0.00018	0.00108	0.00017	0.00017	0.00017	0.00017	0.00017	0.00017	0.00017
36	0.00007	0.00005	0.00031	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005
37	0.00069	0.00052	0.00207	0.00052	0.00051	0.00051	0.00051	0.00051	0.00051	0.00051
38	0.00029	0.00023	0.00069	0.00023	0.00023	0.00023	0.00023	0.00023	0.00023	0.00023

STRUCTURE CODES

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AG -- AGRICULTURAL
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HC -- HEALTH CARE
GI -- GOVERNMENT AND INSTITUTIONAL

Table 113

HOLMES COUNTY

ANNUALIZED HURRICANE STRUCTURAL LOSS (%%%) BY LOSS ZONE

SCENARIO A

ANNUALIZED PERCENTAGE LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	0.00702	0.00398	0.03490	0.00363	0.00363	0.00363	0.00363	0.00363	0.00363	0.00363
2	0.01306	0.00758	0.03414	0.00707	0.00707	0.00707	0.00707	0.00707	0.00707	0.00707

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Table 114

HOLMES COUNTY

ANNUALIZED HURRICANE STRUCTURAL LOSS (%%%) BY LOSS ZONE

SCENARIO B

HURRICANE LOSS ZONE	ANNUALIZED PERCENTAGE LOSS BY STRUCTURE TYPE									
	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	0.00524	0.00315	0.00189	0.00287	0.00287	0.00287	0.00287	0.00287	0.00287	0.00287
2	0.00746	0.00441	0.00243	0.00407	0.00407	0.00407	0.00407	0.00407	0.00407	0.00407

STRUCTURE CODES

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HC -- HEALTH CARE
GI -- GOVERNMENT AND INSTITUTIONAL

Table 115

HOLMES COUNTY

ANNUALIZED HURRICANE STRUCTURAL LOSS (%%%) BY LOSS ZONE

SCENARIO C

ANNUALIZED PERCENTAGE LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	0.00626	0.00333	0.00420	0.00365	0.00365	0.00365	0.00365	0.00365	0.00365	0.00365
2	0.00909	0.00574	0.00671	0.00550	0.00550	0.00550	0.00550	0.00550	0.00550	0.00550

STRUCTURE CODES

SR -- SINGLE UNIT RESIDENTIAL
MR -- MULTI-UNIT RESIDENTIAL
MH -- MOBILE HOME RESIDENTIAL
C -- COMMERCIAL
I -- INDUSTRIAL
PU -- PUBLIC UTILITIES
AG -- AGRICULTURAL
PT -- PUBLIC TRANSPORTATION
HC -- HEALTH CARE
GI -- GOVERNMENT AND INSTITUTIONAL

Table 116

HOLMES COUNTY

ANNUALIZED HURRICANE STRUCTURAL LOSS (XXX) BY LOSS ZONE

SCENARIO D

HURRICANE LOSS ZONE	ANNUALIZED PERCENTAGE LOSS BY STRUCTURE TYPE									
	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	0.00308	0.00214	0.01248	0.00210	0.00210	0.00210	0.00210	0.00210	0.00210	0.00210
2	0.00360	0.00247	0.01202	0.00246	0.00246	0.00246	0.00246	0.00246	0.00246	0.00246

STRUCTURE CODES

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MR -- MULTI-UNIT RESIDENTIAL
MH -- MOBILE HOME RESIDENTIAL
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Table 117

HOLMES COUNTY

ANNUALIZED HURRICANE STRUCTURAL LOSS (%%%) BY LOSS ZONE

SCENARIO E

ANNUALIZED PERCENTAGE LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	0.00066	0.00048	0.00262	0.00048	0.00048	0.00048	0.00048	0.00048	0.00048	0.00048
2	0.00032	0.00058	0.00344	0.00058	0.00058	0.00058	0.00058	0.00058	0.00058	0.00058

STRUCTURE CODES

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Table 118

WASHINGTON COUNTY

ANNUALIZED HURRICANE STRUCTURAL LOSS (%%%) BY LOSS ZONE

SCENARIO A

ANNUALIZED PERCENTAGE LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	0.00101	0.00061	0.00036	0.00054	0.00054	0.00054	0.00054	0.00054	0.00054	0.00054
2	0.00525	0.00336	0.00199	0.00315	0.00315	0.00315	0.00315	0.00315	0.00315	0.00315
3	0.01065	0.00646	0.00375	0.00606	0.00606	0.00606	0.00606	0.00606	0.00606	0.00606
4	0.00314	0.00189	0.00104	0.00175	0.00175	0.00175	0.00175	0.00175	0.00175	0.00175

STRUCTURE CODES

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C -- COMMERCIAL
I -- INDUSTRIAL
PU -- PUBLIC UTILITIES
AG -- AGRICULTURAL
PT -- PUBLIC TRANSPORTATION
HC -- HEALTH CARE
GI -- GOVERNMENT AND INSTITUTIONAL

STRUCTURE CODES

SR -- SINGLE UNIT RESIDENTIAL
MR -- MULTI-UNIT RESIDENTIAL
MH -- MOBILE HOME RESIDENTIAL
C -- COMMERCIAL
I -- INDUSTRIAL
PU -- PUBLIC UTILITIES
AG -- AGRICULTURAL
PT -- PUBLIC TRANSPORTATION
HC -- HEALTH CARE
GI -- GOVERNMENT AND INSTITUTIONAL

Table 119

WASHINGTON COUNTY

ANNUALIZED HURRICANE STRUCTURAL LOSS (%%%) BY LOSS ZONE

SCENARIO B

ANNUALIZED PERCENTAGE LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	0.00053	0.00032	0.00030	0.00030	0.00030	0.00030	0.00030	0.00030	0.00030	0.00030
2	0.00318	0.00200	0.00228	0.00191	0.00191	0.00191	0.00191	0.00191	0.00191	0.00191
3	0.00582	0.00354	0.00344	0.00338	0.00338	0.00338	0.00338	0.00338	0.00338	0.00338
4	0.00188	0.00118	0.00096	0.00112	0.00112	0.00112	0.00112	0.00112	0.00112	0.00112

STRUCTURE CODES

SR -- SINGLE UNIT RESIDENTIAL
MR -- MULTI-UNIT RESIDENTIAL
MH -- MOBILE HOME RESIDENTIAL
C -- COMMERCIAL
I -- INDUSTRIAL
PU -- PUBLIC UTILITIES
AG -- AGRICULTURAL
PT -- PUBLIC TRANSPORTATION
HC -- HEALTH CARE
GI -- GOVERNMENT AND INSTITUTIONAL

STRUCTURE CODES

SR -- SINGLE UNIT RESIDENTIAL
MR -- MULTI-UNIT RESIDENTIAL
MH -- MOBILE HOME RESIDENTIAL
C -- COMMERCIAL
I -- INDUSTRIAL
PU -- PUBLIC UTILITIES
AG -- AGRICULTURAL
PT -- PUBLIC TRANSPORTATION
HC -- HEALTH CARE
GI -- GOVERNMENT AND INSTITUTIONAL

Table 120

WASHINGTON COUNTY

ANNUALIZED HURRICANE STRUCTURAL LOSS (XXX) BY LOSS ZONE

SCENARIO C

HURRICANE LOSS ZONE	ANNUALIZED PERCENTAGE LOSS BY STRUCTURE TYPE									
	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	0.00055	0.00036	0.00094	0.00034	0.00034	0.00034	0.00034	0.00034	0.00034	0.00034
2	0.00346	0.00227	0.00640	0.00218	0.00218	0.00218	0.00218	0.00218	0.00218	0.00218
3	0.00505	0.00322	0.00729	0.00313	0.00313	0.00313	0.00313	0.00313	0.00313	0.00313
4	0.00164	0.00107	0.00208	0.00103	0.00103	0.00103	0.00103	0.00103	0.00103	0.00103

STRUCTURE CODES

SR -- SINGLE UNIT RESIDENTIAL
MR -- MULTI-UNIT RESIDENTIAL
MH -- MOBILE HOME RESIDENTIAL
C -- COMMERCIAL
I -- INDUSTRIAL
PU -- PUBLIC UTILITIES
AG -- AGRICULTURAL
PT -- PUBLIC TRANSPORTATION
HC -- HEALTH CARE
GI -- GOVERNMENT AND INSTITUTIONAL

STRUCTURE CODES

SR -- SINGLE UNIT RESIDENTIAL
MR -- MULTI-UNIT RESIDENTIAL
MH -- MOBILE HOME RESIDENTIAL
C -- COMMERCIAL
I -- INDUSTRIAL
PU -- PUBLIC UTILITIES
AG -- AGRICULTURAL
PT -- PUBLIC TRANSPORTATION
HC -- HEALTH CARE
GI -- GOVERNMENT AND INSTITUTIONAL

Table 121

WASHINGTON COUNTY

ANNUALIZED HURRICANE STRUCTURAL LOSS (%%%) BY LOSS ZONE

SCENARIO D

ANNUALIZED PERCENTAGE LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	0.00008	0.00005	0.00009	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005	0.00005
2	0.00060	0.00035	0.00077	0.00033	0.00033	0.00033	0.00033	0.00033	0.00033	0.00033
3	0.00093	0.00059	0.00115	0.00057	0.00057	0.00057	0.00057	0.00057	0.00057	0.00057
4	0.00037	0.00023	0.00055	0.00022	0.00022	0.00022	0.00022	0.00022	0.00022	0.00022

STRUCTURE CODES

SR -- SINGLE UNIT RESIDENTIAL
MR -- MULTI-UNIT RESIDENTIAL
MH -- MOBILE HOME RESIDENTIAL
C -- COMMERCIAL
I -- INDUSTRIAL
PU -- PUBLIC UTILITIES
AG -- AGRICULTURAL
PT -- PUBLIC TRANSPORTATION
HC -- HEALTH CARE
GI -- GOVERNMENT AND INSTITUTIONAL

STRUCTURE CODES

SR -- SINGLE UNIT RESIDENTIAL
MR -- MULTI-UNIT RESIDENTIAL
MH -- MOBILE HOME RESIDENTIAL
C -- COMMERCIAL
I -- INDUSTRIAL
PU -- PUBLIC UTILITIES
AG -- AGRICULTURAL
PT -- PUBLIC TRANSPORTATION
HC -- HEALTH CARE
GI -- GOVERNMENT AND INSTITUTIONAL

Table 122

WASHINGTON COUNTY

ANNUALIZED HURRICANE STRUCTURAL LOSS (%%%) BY LOSS ZONE

SCENARIO E

ANNUALIZED PERCENTAGE LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	0.00008	0.00007	0.00023	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007	0.00007
2	0.00038	0.00027	0.00134	0.00028	0.00028	0.00028	0.00028	0.00028	0.00028	0.00028
3	0.00056	0.00039	0.00232	0.00039	0.00039	0.00039	0.00039	0.00039	0.00039	0.00039
4	0.00013	0.00009	0.00051	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009	0.00009

STRUCTURE CODES

SR -- SINGLE UNIT RESIDENTIAL
MR -- MULTI-UNIT RESIDENTIAL
MH -- MOBILE HOME RESIDENTIAL
C -- COMMERCIAL
I -- INDUSTRIAL
PU -- PUBLIC UTILITIES
AG -- AGRICULTURAL
PT -- PUBLIC TRANSPORTATION
HC -- HEALTH CARE
GI -- GOVERNMENT AND INSTITUTIONAL

Table 123.
West Florida Region
Annualized Hurricane Structural Loss
(In Thousand $$$)

County	Scenario A	Scenario B	Scenario C	Scenario D	Scenario E
Escambia	1,423	2,218	2,591	518	137
Santa Rosa	358	299	228	64	37
Okaloosa	2,577	2,300	2,408	427	94
Walton	571	422	352	101	30
Bay	636	667	701	92	35
Holmes	47	24	55	25	6
Washington	53	34	37	7	4

CHAPTER VIII

DISASTER ASSISTANCE

In order for the State to receive federal disaster relief, FEMA requires post disaster planning to reduce hurricane vulnerability in affected communities. This requirement is covered under PL 93-288 Section 406.

The federal government (FEMA) will accept disaster application requests within specific deadlines. These limits should be carefully monitored by local governments and state agencies involved in requesting federal assistance. FEMA has published guidelines and criteria, some of which are:

- requests must be made within 10 days after a major disaster declaration;
- time limitation for completion of emergency work or debris removal by a federal agency under a mission assignment is 3 months after President's declaration. The State must take over the funding and management responsibilities after the expiration of the 3 month period.

The completion deadlines used by FEMA for the three categories of assistance are:

- debris clearance 6 months
- emergency work 6 months
- permanent work 18 months

The first two categories can be extended an additional 6 months, and the third category not to exceed one year.

Federal disaster assistance programs can assist the state and local efforts to recover from hurricane destruction. The federal programs are a wide assortment covering both federal financial assistance, benefits and counseling. These programs are:

(1) legal services;

(2) crisis counseling;

(3) individual and family grants;

(4) disaster unemployment benefits;

(5) disaster loans;

(6) Federal income tax assistance in claiming casualty losses;

(7) temporary housing; and

(8) consumer aid.

The Federal government can assist local efforts, when requested to do so, through FEMA, in the following areas:

(1) emergency communications;

(2) emergency transportation;

(3) emergency shelter, feeding and medical assistance;

(4) emergency repairs to water, sewer, electric, gas and debris collection;

(5) search and rescue;

(6) reducing public hazards; and

(7) temporary housing.

In addition to the short-term Federal assistance there are longer term disaster assistance programs from nine agencies

coordinated through FEMA. The nine major assistance agencies are:

(1) Disaster Unemployment Assistance (DUA);

(2) Individual Family Grants (IFG), pensions and security;

(3) Corps of Engineers (COE);

(4) Federal Insurance Administration (FIA), flood insurance;

(5) Emergency Food Stamps, Dept. of Agriculture;

(6) Small Business Administration, business loans;

(7) Small Business Administration, home loans;

(8) Farmers Home Administration, Dept. of Agriculture;

(9) Emergency Conservation Program, and Agricultural Stabilization and Conservation Service, farmland cleared to accelerate crop production.

From these agencies disaster victims can anticipate the following types of assistance:

* agricultural assistance
* social security assistance
* veteran's assistance
* loans to individuals, businesses, and farmers for repair, rehabilitation or replacement of damaged real and personal property
* legal services for low income families and individuals
* up to $5,000 to pay necessary expenses or serious needs for those unable to pay expenses not covered by other programs or means
* unemployment assistance
* temporary assistance with mortgages or rental payments for persons facing loss of residence because of disaster caused financial hardships.

* essential repairs to homes so occupants can return

* those whose homes are uninhabitable may be located in temporary housing

* IRS tax relief/casualty losses

* waiver of penalty for early withdrawal of funds from certain time deposits.

Disaster Field Offices/Disaster Assistance Centers

Temporary offices have been considered by county management authorities to be used by disaster assistance personnel in the period following a hurricane occurrence. Potential facilities will be capable of processing diaster assistance applicants who have experienced losses as a result of a hurricane. The following list identifies potential sites to be designated as Disaster Field Offices (DFO)/Disaster Assistance Centers (DAC).

County	Potential DFO/DAC	DFO/DAC Designation	Loss Zone Location
Escambia	National Guard Armory Gregory Street	DAC	17
	Perdido Bay Country Club	DAC	6
	Ellyson Field if unoccupied office space is available	DFO	36

Santa Rosa	Pensacola Junior College Milton	DFO	18
	Army Reserve Center County Road 191C	DFO	17
Okaloosa	Chester R. Pruett Bldg. Holmes Boulevard Fort Walton Beach	DFO/DAC	14
	Okaloosa County Courthouse Crestview	DFO/DAC	25
Walton	OWJC Chautauga Neighborhood Center	DFO/DAC	15
	DeFuniak Springs Community Center	DFO/DAC	15
	Area Emergency Shelters	DAC	
Bay	Waller Elementary School Youngstown	DFO/DAC	35
	Beach Civic Center Highway 79	DFO/DAC	18
	County EOC 644 Mulberry Avenue	DFO/DAC	28
Holmes			
Washington	Municipal City Hall nearest area of need and/or	DFO/DAC	1, 2, & 3
	Courthouse (Chipley)	DFO/DAC	4

CHAPTER IX

PERCENTAGE OF DAMAGE TO HOMES

Factors for Consideration for Temporary Housing and Mitigation Measures

Introduction

Using county tax assessor tapes and National Hurricane Center SLOSH figures, from which wind and water losses have been calculated, for each loss zone in each county, provides structural loss estimate figures. This loss zone information provides projected structural loss figures greater than 25% for ten structural categories:

- single family residential
- multi-family residential
- mobile home residential
- commercial
- industrial
- public utilities
- agricultural structures
- public transportation structures
- health care facilities
- government and institutional buildings.

The first three categories are analyzed in this section which represent inhabited dwellings.

Maps depicting loss zones for each county are included in the report. There are five scenarios (A through E) developed which project the smallest hurricane (Scenario A) to a large hurricane (Scenario E) See Table 3, page 35-36

The complete listing for each county of the projected structural inventory loss greater than 25% is in Appendix K. A summary of these charts and the mitigation efforts that should be considered based on data from these charts is presented in a

narrative format. In addition, charts show the average percentage loss by structure type in each loss zone in each county. These charts are found in Appendix L. These figures are summarized and can be used to suggest mitigation measures that may be feasible.

Projected Dwelling Structural Inventory Loss
(>25%)

The structural loss figures presented focus primarily on single family and multi-family residential structures and mobile homes. These three categories can be used to estimate the population requiring temporary housing due to structural damage to their primary residence. Structures located on the beach, along the bays and tributaries are forecast to receive the highest percentage of damage and will involve the highest number of structures.

Temporary housing units imported to provide shelter for disaster victims shoud be located outside the most vulnerable county loss zones. Maps 1 through 7, Chapter I, provide information which should be considered when locating temporary housing units as well as relocating damaged residential structures and public utilities. Loss zones included in county scenarios A and B should not be considered for temporary housing sites.

ESCAMBIA COUNTY

Structural Loss More Than 25%

	Single family Residential	Multi-family Residential	Mobile Home Residential
SCENARIO A	102	0	1
SCENARIO B	1,239	2,761	29
SCENARIO C	1,452	2,986	86
SCENARIO D	3,496	3,005	2,544
SCENARIO E	51,677	4,218	2,575

The loss zone showing the greatest losses have been selected from the total listing of loss zones and are presented in the following chart.

Average Percentage Loss by Structure Type - Most Severely Impacted Loss Zones -

	Loss Zone	Single Family Residential	Multi-family Residential	Mobile Homes
SCENARIO A	1	10%	5%	15%
	5	32%	17%	42%
	7	57%	28%	100%
SCENARIO B	1	71%	42%	100%
	5	59%	32%	88%
	7	69%	38%	100%

SCENARIO C	1	76%	49%	100%
	5	71%	44%	95%
	7	77%	49%	100%
SCENARIO D	1	86%	81%	100%
	5	80%	58%	99%
	7	85%	85%	100%
	11	83%	46%	100%
SCENARIO E	1	87%	86%	100%
	5	88%	72%	100%
	7	90%	78%	100%
	11	89%	70%	100%

The four loss zones listed here show where the largest structural losses are forecast to occur in Escambia County; however, other loss zones are not far behind. Loss zones 1 and 5 are the two barrier islands that will receive the surge and wave effects and the greatest percentage of structural losses. Loss zones 11, 12, 17, and 22 front the bay in the City of Pensacola. These loss zones are projected to receive heavy flooding from hurricanes of scenarios B-E. Since these areas are primarily commercial, the losses are business losses rather than homes which force inhabitants to relocate.

SANTA ROSA COUNTY

The following charts indicate the estimated structural damage (more than 25%) for dwellings and the average percentage loss by structure type for Scenario A through E conditions.

SANTA ROSA COUNTY

Structural Loss More Than 25%

	Single family Residential	Multi-family Residential	Mobile Home Residential
SCENARIO A	0	0	0
SCENARIO B	0	0	0
SCENARIO C	221	0	40
SCENARIO D	227	0	54
SCENARIO E	15,337	394	2,405

The loss zones showing the greatest losses have been selected from the total listing of loss zones and are presented in the following chart.

Average Percentage Loss by Structure Type
- Most Severely Impacted Loss Zones -

	Loss Zone	Single Family Residential	Multi-family Residential	Mobile Homes
SCENARIO A	2	3	2	1
	3	3	2	1
	9	3	2	1
	10	3	2	1
SCENARIO B	2	7	4	8
	4	7	4	7
	6	6	4	6
	7	6	3	5
SCENARIO C	2	21	12	36
	3	13	8	27
	4	15	9	24
	11	16	9	29
SCENARIO D	2	13	8	26
	4	18	11	32
	7	14	9	26
	11	12	8	25

SCENARIO E	2	65	47	100
	3	42	34	100
	9	45	36	100
	10	43	35	100

Loss zones in Santa Rosa County where the estimated losses may be the highest for single family residential, multi-family residential, and mobile homes are 2, 3, 4, 7, 9, 10, and 11. These zones are found to the east of Gulf Breeze along the Santa Rosa Sound and East Bay, the areas along East Bay River and areas on Blackwater Bay.

The charts indicate no losses greater than 25% for single family residential, multi-family residential and mobile homes for Scenario A and B hurricanes. When the severity of the hurricane reaches Scenario C, the percentage of loss doubles or triples a Scenario B hurricane. In the mobile home residential category losses increase by a factor of four. Between a Scenario D and E conditions, mobile homes become an estimated total loss due to the hurricane winds.

Santa Rosa County should anticipate problems faced by all coastal counties for category 1 or 2 hurricanes. For a category 3, 4, or 5 hurricane flooding is anticipated for all low lying areas fronting the bays on Santa Rosa Sound.

OKALOOSA COUNTY

The following charts indicate the estimated structural damage (more than 25%) for dwellings, and the average percentage loss by structure type for Scenario A through E conditions.

OKALOOSA COUNTY

Structural Loss More Than 25%

	Single family Residential	Multi-family Residential	Mobile Home Residential
SCENARIO A	1,605	2,401	32
SCENARIO B	1,605	2,401	32
SCENARIO C	1,698	2,401	32
SCENARIO D	1,698	2,401	437
SCENARIO E	27,164	3,695	464

The loss zones showing the greatest losses have been selected from the total listing of loss zones and are presented in the following chart.

Average Percentage Loss by Structure Type
- Most Severely Impacted Loss Zones -

	Loss Zone	Single Family Residential	Multi-family Residential	Mobile Homes
SCENARIO A	1	46	25	100
	8	3	2	1
	19	3	2	1
SCENARIO B	1	71	40	100
	8	5	6	14
	19	9	5	12
SCENARIO C	1	78	52	100
	8	16	9	30
	19	15	9	28
SCENARIO D	1	86	85	100
	8	24	15	67
	19	15	10	62
SCENARIO E	1	89	77	100
	8	54	46	55
	19	50	38	100

Loss zones in Okaloosa County where the estimated losses are the highest for single family residential, multi-family residential and mobile home residential are 1, 8, and 19. Loss zone 1 includes Santa Rosa Island and Destin. Loss zone 8 is Cinco Bayou area and 19 the Shalimar area.

Beginning with Scenario A conditions through Scenario D the estimated number of dwelling structures that will receive more than 25% damage falls between 1,600 and 1,700 for single family residential and 2,400 for multi-family residential. Mobile homes estimated to receive more than 25% damage number 32 structures, for Scenario A-C conditions; however, for D and E conditions, these figures increase to approximately 450 mobile homes. For Scenario E conditions Okaloosa County may have 27,000 homes damaged more than 25% and 3,695 multi-family homes in the same category.

Attention should be focused on mitigation measures for homes and commercial establishments fronting the Gulf of Mexico and Choctawhatchee Bay. Detail loss figures are in Appendices K and L.

WALTON COUNTY

The following charts indicate the estimated structural damage (more than 25%) for dwellings, and the average percentage loss by structure type for Scenario A through E conditions.

WALTON COUNTY

Structural Loss More Than 25%

	Single family Residential	Multi-family Residential	Mobile Home Residential
SCENARIO A	383	167	25
SCENARIO B	383	901	38
SCENARIO C	475	881	31
SCENARIO D	492	911	869
SCENARIO E	5,829	3,503	1,505

The loss zones showing the greatest losses have been selected from the total listing of loss zones and are presented in the following chart.

Average Percentage Loss by Structure Type
- Most Severely Impacted Loss Zones -

	Loss Zone	Single Family Residential	Multi-family Residential	Mobile Homes
SCENARIO A	1	20	11	43
	2	3	2	1
	4	3	2	1
	5	3	2	1
	6	4	2	3
SCENARIO B	1	35	19	52
	2	6	6	6
	4	7	4	7
	5	5	3	6
	6	6	4	9
SCENARIO C	1	36	23	55
	2	9	6	22
	4	8	5	19
	5	9	6	22
	6	12	7	26
SCENARIO D	1	48	33	82
	2	15	10	61
	4	14	9	51
	5	15	10	62
	6	18	12	63

SCENARIO E	1	61	53	100
	2	48	35	100
	4	42	31	81
	5	57	42	100
	6	41	30	100

Loss zones in Walton County where the estimated losses are the highest for single family residential structures, multi-family residential, and mobile home residential are 1, 2, 4, 5, and 6. Loss zones 1 and 6 front the Gulf of Mexico, 2 spans the shores of Choctawhatchee Bay on the south side, 4 and 5 fronts the north shore of the Bay.

Scenario A, B, and C conditions the estimated single family residential losses of more than 25% fall between 380 and 480 structures. Multi-family residential increases from 167 structures (Scenario A) to 880-900 structures for Scenario B and C conditions. Under Scenario D conditions approximately 2,300 structures could receive more than 25% damage.

Loss zone 1 figures indicate that the average percentage loss for single family structures is 36% for a 100-year hurricane event, 23% for multi-family residential and 55% for mobile home residents.

BAY COUNTY

The following charts indicate the estimated structural damage (more than 25%) for dwellings, and the average percentage loss by structure type for Scenario A through E conditions.

BAY COUNTY

Structural Loss More Than 25%

	Single family Residential	Multi-family Residential	Mobile Home Residential
SCENARIO A	160	2	44
SCENARIO B	647	2	158
SCENARIO C	533	2	151
SCENARIO D	713	32	154
SCENARIO E	5,027	142	1,427

The loss zones showing the greatest losses have been selected from the total number of loss zones and are presented in the following chart.

Average Percentage Loss by Structure Type
- Most Severely Impacted Loss Zones -

	Loss Zone	Single Family Residential	Multi-family Residential	Mobile Homes
SCENARIO A	1	53	28	100
	2	3	2	1
	3	22	12	40
	4	25	14	42
	13	3	2	1
SCENARIO B	1	65	35	100
	2	28	15	35
	3	37	20	53
	4	28	15	40
	13	33	17	43
SCENARIO C	1	72	43	100
	2	28	15	35
	3	39	21	59
	4	30	17	50
	13	36	20	53
SCENARIO D	1	74	47	100
	2	53	28	77
	3	48	29	70
	4	42	25	65
	13	53	28	76

SCENARIO E	1	78	59	100
	2	74	45	100
	3	76	57	100
	4	77	62	100
	13	78	47	100

Loss zones in Bay County where the estimated losses are the highest for single family residential structures, multi-family structures, and mobile homes are zones 1, 2, 3, 4, and 13. These loss zones front the Gulf of Mexico and the three bays in the county.

The charts indicate the average percentage loss is high in loss zones 1, 3, and 4 even for Scenario A which equates to category 1 hurricane conditions. In loss zone 1 the estimate for single family residential structures is 53% average percentage loss and 28% for multi-family structures.

HOLMES COUNTY

The following charts indicate the estimated structural damage (more than 25%) for dwellings and the average percentage loss by structure type for Scenario A through E conditions.

HOLMES COUNTY

Structural Loss More Than 25%

	Single family Residential	Multi-family Residential	Mobile Home Residential
SCENARIO A	0	0	111
SCENARIO B	0	0	111
SCENARIO C	0	0	111
SCENARIO D	0	0	511
SCENARIO E	612	0	511

The loss zones showing the greatest losses have been selected from the total number of loss zones and are presented in the following chart.

Average Percentage Loss by Structure Type
- Most Severely Impacted Loss Zones -

	Loss Zone	Single Family Residential	Multi-family Residential	Mobile Homes
SCENARIO A	1	2	1	10
	2	2	1	1
SCENARIO B	1	2	1	1
	2	2	1	1
SCENARIO C	1	4	2	2
	2	4	2	3
SCENARIO D	1	15	11	63
	2	12	9	41
SCENARIO E	1	25	18	98
	2	21	15	89

Holmes County is an interior county with no coastline that can be affected by hurricane surge, although flooding will occur from rain and river overflow. The structural loss that does occur is from wind damage. Mobile home evacuation should be a primary concern as soon as the evacuation is announced.

WASHINGTON COUNTY

The following charts indicate the estimated structural damage (more than 25%) for dwellings, and the average percentage loss by structure type for Scenario A through E conditions.

WASHINGTON COUNTY

Structural Loss More Than 25%

	Single family Residential	Multi-family Residential	Mobile Home Residential
SCENARIO A	0	0	0
SCENARIO B	0	0	0
SCENARIO C	0	0	0
SCENARIO D	0	0	0
SCENARIO E	92	0	403

The loss zones showing the greatest losses have been selected from the total listing of loss zones and are presented in the following chart.

Average Percentage Loss by Structure Type
- Most Severely Impacted Loss Zones -

	Loss Zone	Single Family Residential	Multi-family Residential	Mobile Homes
SCENARIO A	1	3	2	1
	2	2	2	1
	3	3	2	1
	4	2	1	1
SCENARIO B	1	3	2	2
	2	4	2	3
	3	3	2	2
	4	3	2	2
SCENARIO C	1	6	4	11
	2	7	5	13
	3	5	3	8
	4	5	3	6
SCENARIO D	1	5	3	5
	2	6	3	8
	3	5	3	6
	4	5	3	8
SCENARIO E	1	37	29	100
	2	28	20	100
	3	22	15	91
	4	14	10	57

Washington County is an interior county with no coastline that can be affected by hurricane surge, although extensive flooding will occur from heavy rainfall and river overflow. The structural loss that is forecast to occur will be from wind damage. Mobile home evacuation should be a primary concern as soon as the evacuation is announced.

CHAPTER X

MITIGATION OF HURRICANE LOSSES

> Mitigation actions are the calculated efforts by individuals or governmental agencies that can preclude, limit and reduce losses to life, structures, infrastructure, and the environment, from a disaster event, such as a hurricane, that is forecast to occur in the future.

Introduction

The first step in the development of hurricane mitigation strategy is the development of a plan which focuses on short-term and long-term mitigation goals. Short-term goals must by necessity deal with evacuation and the sheltering of the population located in the surge zones and flood zones on the coast. These areas are referred to as velocity zones or V zones and A zones or static flooding zones by FEMA (Federal Emergency Management Agency) and are outlined on the Federal Insurance Rate Maps (FIRMS). The short-term planning for our region is presently being developed and will be published as the Tri-State Hurricane Evacuation Study during 1986. It will include the five coastal counties in our region--Escambia, Santa Rosa, Okaloosa, Walton and Bay Counties.

Mitigation Plans

Long-term mitigation planning is now becoming more important as coastal populations increase and more structures and supporting infrastructure spreads to lower elevations and borders on the Gulf of Mexico and numerous bays in our region. The time may be approaching when we cannot safely evacuate the number of people living, renting or camping on the barrier islands and coastal fringes in our region, with the warning time capabilities of the National Hurricane Center (see tables 124 and 125). Local governments have information available showing where the danger zones are located. In order to reduce structural vulnerability requires a hurricane mitigation plan which outlines the protection measures that must be undertaken. The guiding principles for local governments are the clearly written federal, state, and county initiatives, to protect the population from hurricane surge, flooding and wind damage (see Table 126).

Barrier Islands

There are two basic geological changes affecting coastal areas. All barrier islands are gradually moving toward the mainland. Wave action moves sand from the beachfront and deposits the washover inland and in some cases in the back bays. This sand transfer is greatly accelerated during hurricanes moving in a northerly quadrant. Fixed property boundaries on the beach are gradually being reduced which can cause loss of invested real

Table 124.
Population Density, 1984

County	Population	Land Area in Square Miles	Persons per Square Mile	Rank in Florida
Escambia	256,715	661	388.4	9
Santa Rosa	61,842	1,024	60.4	35
Okaloosa	128,941	936	137.8	23
Walton	24,217	1,066	22.7	52
Bay	112,949	758	149.6	21
Holmes	15,356	488	31.5	47
Washington	14,860	590	25.2	51

Source: University of Florida, Bureau of Economic and Business Research. Florida Estimates of Population, 1984 (February 1985).

Table 125.
Population Projections, 2000 to 2020

County	Year 1984	Percent Increase	Year 2000	Percent Increase	Year 2010	Percent Increase	Year 2020	Rank in Population 1984	Forecast Rank in Pop.[1] 2020
Escambia	256,715	+18%	313,700	+10%	346,400	+9.5%	382,800	9	15
Santa Rosa	61,842	+28%	79,900	+11%	89,200	+9.5%	98,600	35	34
Okaloosa	128,941	+31%	186,200	+13%	215,900	+9.6%	238,600	23	22
Walton	24,217	+30%	34,700	+13%	39,800	+9.4%	43,900	52	43
Bay	112,949	+28%	156,100	+13%	178,200	+9.5%	196,900	21	25
Holmes	15,356	+10%	17,100	+ 7%	18,300	+10%	20,300	47	54
Washington	14,860	+ 8%	16,100	+ 6%	17,100	+10%	19,000	51	56

[1]There are 67 counties in Florida.

Source: University of Florida, Bureau of Economic and Business Research; and Executive Office of the Governor, Office of Planning and Budgeting, 1985 County Projections, 1985

Table 126.
Hurricane Wind Speeds in
Relation to Population Casualty Estimates

Maximum Peak Gust Windspeed	Casualties per Number of Persons In Areas Affected By High Winds
40 mph	1 per 5,000,000
60 mph	1 per 300,000
80 mph	1 per 50,000
100 mph	1 per 11,000
120 mph	1 per 3,000
140 mph	1 per 1,000
160 mph	1 per 400

Source: Friedman, D.G., The Geneva Papers on Risk and Insurance Association.

Internationale Pour L'Etude de L'Economie de L'Assurance, Geneva, Switzerland, 1984.

Estimated Casualty Factor for Population
Related to Average Storm Surge

Average Storm Surge (feet)	Ratio of Casualties to Number of Persons in Affected Coastal Areas
1	1 per 100,000
6.89	1 per 10,000
14.10	1 per 1,000
20	1 per 100
24.9	1 per 10

Source: Friedman, D.G., The Geneva Papers on Risk and Insurance Association.

Internationale Pour L'Etude de L'Economie de L'Assurance, Geneva, Switzerland, 1984.

estate money and reduces or eliminates tax revenue paid to municipalities and counties. This barrier island movement process cannot be stopped.

The second geological factor, which is driving the first one, is the gradual increase of sea level causing more low areas to be flooded and existing developed areas to be more exposed to hurricane surge.

There is one additional meteorological factor that will continue to occur--hurricanes. Nothing in the foreseeable future is going to change the Gulf of Mexico coastline from being in the track of summer and fall hurricanes.

These three factors, landward movement of barrier islands, sea level rise, and hurricane vulnerability will continue to shape the region's future. There is nothing we can do to change these natural phenomena, we can only prepare to adjust to the inevitable change in our coastal counties. This is one of the reasons long-range mitigation planning is so important.

Both the Federal Flood Insurance Program and the state's CCCL (Coastal Construction Control Line) program require that structures damaged more than 50% of the assessed value be rebuilt to more demanding coastal construction criteria. The value of the structure is based on the assessed value prior to the storm.

Public and Private Investment

The investment of large sums of money, both private and public money, in areas that inevitably will be under water or

destroyed during the next 30-50 years needs to be carefully scrutinized by taxpayers and lending institutions. It is a well known fact that recent hurricanes losses have placed tremendous stress on insurance companies to increase insurance premiums for those living in hurricane vulnerable coastal areas. Insurance on all coastal structures may become so expensive that very few will be able to afford the cost.

Houses financed by a 30-year mortgage that are located in the 100-year floodplain have greater than a one chance in four of being flooded by a 100-year flood event (see Table 127, Frequency Flood).

National Flood Insurance Program (NFIP)

Homes insured by a homeowner's policy are not covered for flooding damage. People living in the flood plains require affordable insurance which is the primary objective of the NFIP. Flood insurance is required by law as a condition for getting loans and grants from a federal agency in order to buy or build structures in the flood hazard areas of a participating community. In order to qualify, construction techniques have to comply with the established NFIP guidelines for structures being built in the identified flood plain. Local governments are required to adopt flood plain management ordinances mandated by FEMA in order to qualify as a participating community in the National Flood Insurance Program. Flood insurance can be purchased through the National Flood Insurance Program by a local insurance agent or

Table 127.
Table of Frequency Flood

Frequency Flood	1 year	10 years	20 years	25 years	50 years
10-year	10%	60%	84%	93%	99%
25-year	7%	36%	59%	67%	87%
50-year	2%	18%	33%	40%	64%
100-year	1%	10%	18%	22%	40%
200-year	.8%	5%	10%	12%	22%
500-year	.2%	2%	4%	5%	10%

Source: Southwest Florida Water Management District.

broker. It is necessary for the community to be in the Emergency or Regular National Flood Insurance Program. If the community has been approved to participate the following amounts of insurance coverage can be provided.

STRUCTURES	Emergency Program	Regular Program
*Single family	$ 35,000	$185,000
*All other residential	100,000	250,000
Small business	100,000	250,000
*Any other structure	100,000	200,000
CONTENTS		
*Residential	$ 10,000	$ 60,000
*Small business[1]	100,000	300,000
*Any other structure	100,000	200,000

[1]Check with insurance agent to see if you qualify.

Federal Flood Insurance Program Changes - 1986

The Federal Insurance Administration has revised recently the National Flood Insurance Program which becomes effective on 1 January 1986. The rule changes affect all communities participating in the National Flood Insurance Program and require communities to revise floodplain management ordinances within six months (1 July).

Probation Surcharge

The new FEMA changes permit a $25 premium surcharge on all policies within the community. This charge is going to put all policyholders on notice that the community is on probation to correct FEMA noted deficiencies before suspending the community from the National Flood Insurance Program. This surcharge will begin for communities placed on probation after September 30, 1986. The new regulation allows communities 90 days to correct deficiencies, "to the maximum extent possible," to avoid probation. Public pressure on governments to correct or comply with the NFIP deficiencies or requirements should initiate the momentum to resolve the problem. A spin-off effect of the surcharge should be an increased policyholder awareness of the new FEMA rules and the Flood Insurance Rate Maps (FIRMS).

New FEMA Structure Elevation Requirements

FEMA, under the new rule, requires elevation information on all buildings. This information provides evidence that compliance with floodplain management has been accomplished. All structures in a V-zone must have the NFIP Elevation Certificate and floodproofing certification performed by a registered engineer or architect. In the new regulation, FEMA states that designed wind load values have only a one percent chance of being equalled or exceeded in any given year.

Mobile Homes

Mobile homes in the floodplain will require elevation so that the floor of the mobile home is above the 100-year base flood elevation. In addition, anchoring of the home to resist flotation, collapse, and lateral movement must be accomplished. FEMA is publishing additional guidance and clarification titled, "Manufactured Home Installation in Flood Hazard Areas."

Additional Mitigation Insurance Support

The Standard Flood Insurance Policy has been changed to include mitigation measures for fill for temporary levees, pumps and wood, in addition to sandbagging which is still covered by the insurance policy.

CHAPTER XI

NATIONAL FLOOD INSURANCE PROGRAM--CONSTRUCTION REQUIREMENTS

Revised Flood Insurance Rate Maps

The initial publication of FEMA Flood Insurance Rate Maps did not include wave build-up on the hurricane surge for the 100-year flood. New maps, now in the revision stage, will show wave height elevations in the V-zones. When using the old maps, insurance agents must calculate and add the wave height build-up to the Base Flood Elevation (BFE) for calculating insurance rates for new construction in V-zones.

Protection Against Flooding

If the community has chosen to participate in the National Flood Insurance Program there are specific construction guidelines that must be met in the designated V (velocity) zones and A zones shown on the Flood Insurance Rate Maps (FIRMS). The basic differences between the two zones are:

V-Zone. Hurricane wave actionis a great threat to structures. The V-zone area can be found along beaches, inlets, barrier islands and coastlines on bays and waterways. Hurricane surge with wave build-up can cause waves more than 3 feet high to impact structures, causing flooding damage and structure

destruction. This size wave is the minimum height to do damage to a wood frame structure.

A-Zone. Areas where static flooding will occur. No velocity wave action is anticipated during a 100-year flood. Structural damage due to water elevations inside and outside but no wave battering is anticipated.

V-Zone and A-Zone Figures

The flooding figures published by FEMA are only for a 100-year flood event. The 100-year flood event equates approximately to a category 3 hurricane. Category 4 or 5 hurricane surge and flooding will probably be more severe causing greater structural damage. The V-zone may move further inland for the category 4 or 5 hurricane and the A-zone, static flooding, may expand to affect more structures.

Structure Relocation or Acquisition

FEMA's Flood Program, Section 1362, provides authority to relocate structures that are perpetually flooded. There are no clear cut guidelines from FEMA regarding qualifications of structures for relocation. Structures must meet stringent eligibility requirements to qualify for relocation or acquisition. The structure must be in a flood hazard zone and be covered by the

Standard Flood Insurance Policy. In addition it must meet one of the following criteria:

(1) The structure must have been damaged beyond repair by flooding (more than 50% damage of the assessed value);

(2) Significant flood damage on not less than three occasions over the previous five years--the cost of repairs averaged at least 25% of the assessed value on each occasion;

(3) State or local government regulations prohibit repair or restoration of property sustaining damage from one storm occurrence;

(4) Repairs to the structure are significantly increased by state or local regulations or ordinances.

An owner of coastal real estate meeting the four parts of the NFIP criteria, who foresees limited long-range options for the property, may be willing to sell, and the local government willing to accept responsibility under Section 1362 of the Flood Program. The real estate must be of value to the public to justify the expenditure of tax money.

Construction Implications

Structures must be elevated on pilings so that the lowest horizontal beam supporting the lowest floor is above the forecasted 100-year flood elevation. This means that in our region most beach dwellers will reside approximately 10' to 20' above mean sea level in the living area of the structure.

Pilings must be securely imbedded and attached with adequate cross bracing and additional attachment hardware to strengthen the joints. Areas below the lowest floor must have no walls or wash-out walls designed to fail under the water loading. A state registered engineer or architect must certify the pilings are anchored correctly and can withstand the 100-year hurricane waves.

CHAPTER XII

STATE PROGRAMS

Coastal Construction Control Line Program

This is a major effort by the State to mitigate hurricane losses. Through a review process of the beach, dunes and landward topography, a line is drawn taking into account the natural beach features and distance from the mean high water line that can provide some protection to structures. The primary objective is to preserve the beach and dune system. Any construction on the line or seaward must receive permit approval. Detailed technical data are required as part of the permit application process. All proposed buildings must be elevated so that the lowest supporting horizontal beam is above the 100-year storm surge. In most areas the 100-year surge must include clearance for wave build-up as well. New coastal construction must meet more stringent construction standards.

Coastal Zone Protection Act of 1985

The primary focus of this Act is to protect the beach and dune system, and to reduce the losses incurred from hurricanes and storms. In addition to the existing coastal construction control line (CCCL) program, a coastal building zone 1,500 feet landward of the CCCL, and where there is no established CCCL, 3000 feet landward of the mean high water line, is established.

Construction or activities within the coastal building zone after March 1, 1986 must meet the following construction standards:

(1) major structures shall conform to the Standard Building Code;

(2) mobile homes shall conform to the Federal Mobile Home Construction and Safety Standards or the Uniform Standards Code ANSI book A 119.1 in addition to other requirements included;

(3) major structures shall be designed and constructed to resist the anticipated wave, hydrostatic, and hydrodynamic loads accompanying a 100-year storm event;

(4) major structures, except mobile homes shall be constructed to withstand a wind velocity of 140 miles per hour up to a height of 30 feet above the average surrounding ground level;

(5) structures must be elevated so that the building support structure is above the waves for a 100-year storm;

(6) foundation design and construction of a major structure must take into consideration water scouring and loss of soil supporting the structure;

(7) no substantial walls below the level of the building support structure below the wave action of a 100-year storm event.

Purchasers of coastal property partially or totally seaward of the CCCL are made aware of the potential erosion of the property and are provided a survey showing the location of the CCCL on the property being purchased.

Local Government Comprehensive Planning and Land Development Act

In addition to the National Flood Insurance Program and the Florida Coastal Construction Control Line Program, the Local Government Comprehensive Planning and Land Development Act, Chapter 163 F.S., requires coastal counties and communities to plan for the mitigation of natural disasters. The Coastal Zone

Element in the Local Comprehensive Plan must establish how the coastal community or county plans to:

(1) limit public expenditures that subsidize development in high-hazard coastal areas;

(2) protect human life against the effects of natural disasters;

(3) avoidance of irreversible and irretrievable loss of coastal zone resources;

(4) ecological planning principles and assumptions to be used in the determination of suitability and extent of permitted development;

(5) an analysis of the environmental, socioeconomic, and fiscal impact of development and redevelopment proposed in future land use plan, with required infrastructure to support this redevelopment or development on the natural and historical resources of the coast and the plans and principles to be used to control development and redevelopment to eliminate or mitigate the adverse impacts on coastal wetlands, living marine resources, barrier islands including beach and dune systems, unique wildlife habitat, historical and archaeological sites, and other fragile coastal resources;

(6) the element must include principles for hazard mitigation and protection of human life against effects of natural disasters including population evacuation which take into consideration the capability to safely evacuate the density of coastal population proposed in the future land use plan element, in the event of an impending natural disaster;

(7) principles for protecting existing beach and dune systems;

(8) a redevelopment component which outlines the principles which shall be used to eliminate inappropriate and unsafe development in the coastal areas when opportunities arise;

(9) designation of high hazard coastal areas subject to destruction or severe damage by natural disasters which shall be subject to the provisions of FS 380.27(2); and

(10) an identification of management techniques that the local government plans to adopt or has adopted in order to mitigate the threat to human life and control proposed development and redevelopment in order to protect the coastal environment and give consideration to cumulative impacts.

CHAPTER XIII

DISASTER MITIGATION PLANNING

Hazardous Materials

The permitting of future hazardous materials sites should be carefully evaluated if they are to be located in a V-zone or A-zone projected to receive extensive flooding in proximity to a V-zone. Storage tanks containing hazardous materials located on barrier islands, shoreline of bays, and rivers entering bays, should be discouraged if the elevation of the base of the storage structure is less than 15 feet. A lower elevation may place the structure in the wave/surge zone where large debris can damage or puncture the containment unit. Lower base elevations are prone to soil erosion underneath the structure allowing tilting, sinking or toppling into the water.

Where hazardous material storage or transhipment from ship to container must be located at docking locations, provisions in local ordinances and port authority regulations should require measures to physically shield tanks, pipes, valves and storage buildings from hurricane wave surge and flooding.

Hazardous Waste Storage

Future site selection for hazardous waste storage should be at least 15 feet elevation to protect the area from water rise in the bays and rivers. Under no circumstances should hazardous waste be stored in the velocity zone or on barrier islands. The

bay side of barrier islands are often outside the V-zone but in the A-zone. There is the danger of the surge cutting through the dune line and opening a channel of high velocity water which could disperse hazardous waste from containment areas into the bays.

During the hurricane vulnerability period, June through November, those businesses storing hazardous waste should take steps to reduce the storage quantities to a minimum level as a mitigation measure. This can be particularly important where hazardous wastes are stored in lagoons or embayments, exposed to heavy precipitation and high winds, increasing the chances of overtopping and/or breaching of the containment walls.

Dune Conservation and Vegetation

All levels of government should pass ordinances to protect existing dunes and take necessary actions to reconstruct dune fields on public property fronting on the Gulf of Mexico. Private property owners should be encouraged to follow published procedures for the maintenance and growth of dune systems. A public education program using the media to emphasize the importance of dune vegetation and dune protection is a necessary part of any mitigation effort in coastal communities.

The dune system is the most important natural element which can reduce the hurricane surge and protect landward structures and life support infrastructure. Encouraging the dunes to gradually increase in elevation can be a very effective mitigation measure that all coastal residents can participate in. Planting

dune vegetation and sand fencing are the approved measures for accumulating wind blown sand at the primary dune line. Sea oats are the recommended vegetation to plant on the primary dune line in our region. There are several native plants which can be interspersed with the sea oats. Sand fencing placed in parallel rows behind the dune line effectively traps wind blown sand and acts as a barrier to pedestrian traffic. Channeling pedestrian traffic to specified locations, where elevated dune cross-over steps are located, saves the dune vegetation from trampling and the wearing down of a foot trail.

Funds for the purchase of sea oats, sand fencing and dune cross-over steps should be a line item in coastal county and municipal budgets. Matching grant funds from DNR can be requested providing the state requirements are met. The most effective program is to have on-going dune and beach enhancement projects which are continually improving the dune height and width. Civic organizations can be recruited to assist with manpower, funds, equipment, and media coverage. The small sums of money invested in the public beach areas together with beach homeowner self-help effort may provide the dune elevation necessary to save the structures from hurricane waves and reduce the wind impact forces.

Hazard Mitigation Policies

Technical data contained in the West Florida Region Hurricane Loss and Contingency Planning Study can be used by local governments in formulating hazard conscious land use plans. One impetus for careful consideration of hazard mitigation policies is the federal modification of the disaster assistance cost sharing formula. Currently, the federal government share is 75% and the state and/or local share is 25%. Existing development trends in the Panhandle indicate future hurricane disasters will place much heavier financial burdens on local governments.

All property and development in the West Florida region is vulnerable to wind and water damage caused by hurricanes. In order to mitigate hurricane disaster, the following policy recommendations are provided for local government consideration.

Hurricane Disaster Mitigation Policies for Future Development

1. When developing land use codes/regulations or zoning ordinances, local governments should incorporate hurricane vulnerability considerations including impacts from static water rise, wind and waves. (Projected surge heights and wind speeds for the five coastal counties may be obtained from the West Florida Regional Planning Council.)

2. In the absence of land development codes and/or local zoning ordinances, strict coastal construction standards should be adopted and enforced in areas highly vulnerable to hurricane storm surge.

3. Local governments should consider adoption of local housing codes as a measure of protection against hurricane wind damage, particularly for substandard housing in blighted locations highly vulnerable to hurricane force winds.

4. Where coastal development is permitted by local government, the potential cost to local government of disaster assistance and the sources of revenue to be used for recovery should be reviewed in the permitting process.

5. Hurricane hazard disclosure statements should be required in sales agreements for purchase of property in high hazard areas of the region.

6. Local governments should coordinate the use of subdivision regulations, zoning, building codes and public facility siting to reduce the impact of hurricane hazards.

7. Health care, educational, and governmental facilities should be discouraged from locating in areas highly vulnerable to major hurricane damage.

8. Beach nourishment and dune protection programs should be encouraged by local governments to preserve the protective function of the beach and dune system.

9. Integration of hurricane hazard mitigation and regional planning council review responsibilities should progress to include the most current available data and analyses pertaining to hurricane vulnerability.

Hurricane Disaster Mitigation Policies for Post-Hurricane Redevelopment

1. Post-hurricane redevelopment plans should be developed prior to the occurrence of disaster, including formulation of local ordinances to be enacted immediately following a hurricane disaster.

2. Post-hurricane redevelopment in areas highly vulnerable to hurricanes should be accompanied by designation of a special assessment district to mitigate the future cost of local disaster assistance/restoration.

3. The replacement of public facilities in high hazard areas should be discouraged.

4. Local governments should seek funding for acquisition of coastal high hazard property.

5. The repair or replacement of structures in post-hurricane redevelopment should conform to established local, state, and federal hurricane protection standards.

6. Temporary housing units moved into the region for the purpose of disaster assistance should be located in areas other than those highly vulnerable to hurricane storm surge and wind.

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APPENDIX A

HURRICANE DAMAGE PROJECTION SYSTEM

System Overview

The Hurricane Damage Projection System is an application software system designed to run on Data General Corp. hardware under Data General Corp. Real Time Disc Operating System (RDOS) in Business Basic. The system compiles data from two primary sources into one data base from which selected report/table output is generated. All user application software is selected from Master Menue Format and requires no formal data processing education and minimal operator training.

Hardware Outline

Computer hardware used in development and processing consists of an Eclipse S-280 with 512 kb of memory, a 147 megabyte cartridge disc subsystem, 1600 bpi tape drive, console terminal, and printer.

Software Outline

The data base for the Hurricane Damage Projection System is constructed from two primary sources, in two phases. Phase I involves reading Florida Department of Revenue data files from tape. A conversion of data record format from EBCDIC to ASCII is made as each record is read. These data files are parcel by parcel records of land values, land use types, and location in section/township/range format from the seven County Property Appraisers. Structure just values and structure taxable values are calculated, land use codes are compressed from 100 to 10, a land use structure count is made and the values added to a unique data record indexed by county number, section, township and range.

Phase II of building the data base involves data entry of hurricane structure vulnerability coefficients for each storm scenario, for each of ten structure types, in each section. Loss zones, unique within each county, are assigned to each section and an index by loss zone is added. Entry is accomplished via the system video display terminal, entering the damage percentage matrix and loss zone assignment for each section at one time. Data base maintenance for updating/changing the damage percentage matrix and loss zones is accomplished via the same software module.

Report/table-form output is available in several formats, sorted by county and loss zone or county and section. Formats include but are not limited to: (a) Structural Inventory of Hurricane Loss Zones; (b) Projected Hurricane Structural Loss ($) By Hurricane Loss Zone; (c) Projected Hurricane Structural Taxable Loss ($) By Hurricane Loss Zone; (d) Temporary Employment and Income Loss By Hurricane Loss Zone; and (e) Annualized Hurricane Structural Loss ($) By Hurricane Loss Zone.

The latter table is generated using matrix tables for average number of employees and daily income for each employment related structure type and lost time correlation to damage percentages.

The system is expandable from five storm scenarios to ten and allows for the inclusion of additional counties without further software modifications.

ESCAMBIA COUNTY

PROJECTED HURRICANE STRUCTURAL LOSS ($$$) BY LOSS ZONE

SCENARIO A

DOLLAR LOSS BY STRUCTURE TYPE (IN THOUSANDS)

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	178	456	0	89	0	0	0	0	0	23	746
5	206	832	0	9	0	0	0	0	0	0	1,047
6	103	53	0	5	0	0	0	0	0	0	161
7	69	0	0	0	0	0	0	0	0	0	69
8	13	0	0	0	0	0	0	0	0	0	13
9	21	0	0	0	0	0	0	0	0	0	21
10	1	0	0	0	0	0	1	0	0	0	2
11	38	2	0	2	0	0	0	0	0	6	48
12	186	3	0	879	74	1	0	1	12	740	1,896
14	22	3	0	0	0	0	0	0	0	0	25
15	68	0	0	1	0	0	0	0	0	0	69
17	1,216	95	0	428	85	4	0	4	64	476	2,452
18	125	8	0	0	0	0	1	0	0	1	135
19	8	0	0	0	0	0	1	0	0	2	11
20	31	0	0	2	0	0	0	0	0	0	33
21	133	1	1	2	0	0	0	0	0	3	140
22	158	12	0	16	0	0	0	0	0	18	204
23	456	34	0	38	8	0	0	0	1	19	556
24	1,453	21	0	330	16	1	0	0	3	323	2,147
25	4,545	75	0	913	93	8	0	4	52	462	6,152
26	746	46	0	23	0	0	0	0	1	5	821
27	1,062	110	0	26	7	0	0	0	4	19	1,228
28	310	24	0	25	2	0	0	0	0	8	369
29	266	18	0	10	0	0	1	0	0	3	293
30	155	0	1	5	0	0	3	0	0	3	167
31	271	0	0	2	1	0	1	0	0	2	277
32	15	0	0	0	0	0	2	0	0	0	17
33	73	0	0	1	0	0	25	0	0	2	101
34	71	3	0	1	0	0	2	0	0	0	77
35	212	5	1	0	0	0	0	0	0	0	218
36	269	35	0	1	12	0	0	0	0	1	318
37	467	8	0	1	1	0	9	0	0	11	497
38	146	0	0	2	28	0	43	0	0	3	222
39	31	0	0	0	0	0	104	0	0	3	138
40	39	0	0	0	0	0	75	0	0	4	118
41	31	0	0	0	0	0	11	0	0	0	42
TOTALS:	13,194	1,844	1,667	2,811	327	14	279	9	137	2,137	20,835

STRUCTURE CODES

SR -- SINGLE UNIT RESIDENTIAL
MR -- MULTI-UNIT RESIDENTIAL
MH -- MOBILE HOME RESIDENTIAL
C -- COMMERCIAL
I -- INDUSTRIAL
PU -- PUBLIC UTILITIES
AG -- AGRICULTURAL
PT -- PUBLIC TRANSPORTATION
HC -- HEALTH CARE
GI -- GOVERNMENT AND INSTITUTIONAL

ESCAMBIA COUNTY

PROJECTED HURRICANE STRUCTURAL LOSS ($$$) BY LOSS ZONE

SCENARIO B

DOLLAR LOSS BY STRUCTURE TYPE (IN THOUSANDS)

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	1,305	3,962	0	553	0	2	0	0	0	100	5,922
5	402	1,486	1	13	0	0	0	0	0	0	1,902
6	360	311	4	28	0	0	0	1	0	2	706
7	83	0	0	0	0	0	0	0	0	0	83
8	17	0	0	1	0	0	0	0	0	0	18
9	35	0	0	0	0	0	0	0	0	0	35
10	2	0	0	0	0	0	4	0	0	0	6
11	440	19	1	26	0	0	0	0	0	33	519
12	1,421	20	0	7,600	283	6	0	5	54	3,223	12,612
14	31	3	0	0	0	0	0	0	0	0	34
15	113	0	1	2	0	0	1	0	0	1	118
17	8,389	530	3	4,280	704	35	0	38	566	4,200	18,745
18	205	13	2	3	0	0	5	0	0	3	231
19	13	0	0	0	0	0	1	0	0	3	17
20	50	0	2	5	0	0	1	0	0	0	58
21	219	1	7	5	0	0	2	0	0	8	242
22	268	21	0	28	0	1	0	0	0	33	351
23	758	59	2	69	13	0	0	0	2	34	937
24	2,396	36	2	583	30	2	0	0	5	571	3,625
25	7,680	129	0	1,612	165	14	0	7	91	815	10,513
26	800	63	0	39	0	1	0	0	3	24	930
27	1,453	166	2	281	29	2	0	0	111	127	2,171
28	512	39	4	104	9	0	1	0	0	68	737
29	440	31	0	19	0	0	1	0	0	7	498
30	256	0	6	15	1	0	7	0	0	21	306
31	444	0	5	12	4	0	4	0	0	15	484
32	25	0	0	0	0	0	6	0	0	0	31
33	115	0	1	1	0	0	54	0	0	7	178
34	114	4	1	8	3	0	4	0	0	6	140
35	346	8	7	20	8	0	1	0	0	17	407
36	276	42	0	3	33	0	1	0	12	4	371
37	741	13	6	22	44	0	31	0	3	135	995
38	229	0	1	5	46	0	75	0	0	9	365
39	42	0	0	2	0	0	189	0	0	3	236
40	58	0	0	1	0	0	158	0	0	8	225
41	63	0	0	4	0	0	33	0	2	7	109
TOTALS:	30,101	6,956	58	15,344	1,372	63	579	51	849	9,484	64,857

STRUCTURE CODES

SR -- SINGLE UNIT RESIDENTIAL
MR -- MULTI-UNIT RESIDENTIAL
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ESCAMBIA COUNTY

PROJECTED HURRICANE STRUCTURAL LOSS ($$$) BY LOSS ZONE

SCENARIO C

DOLLAR LOSS BY STRUCTURE TYPE (IN THOUSANDS)

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	1,397	4,646	0	647	0	2	0	0	0	125	6,817
5	487	1,957	1	19	0	0	0	0	0	0	2,464
6	1,133	529	11	56	0	0	0	1	0	5	1,735
7	93	0	0	0	0	0	0	0	0	0	93
8	39	1	1	1	0	0	0	0	0	0	42
9	63	0	0	0	0	0	0	0	0	0	63
10	4	0	0	0	0	0	6	0	0	0	10
11	596	27	2	35	0	0	0	0	0	48	708
12	2,919	41	0	13,806	536	11	0	8	94	5,618	23,033
14	54	6	0	0	0	0	0	0	0	0	60
15	215	0	8	9	2	0	1	0	0	2	237
17	12,584	1,060	10	5,041	503	25	0	25	377	2,800	22,425
18	372	23	11	4	2	0	7	0	0	6	425
19	25	1	1	0	0	0	2	0	0	7	36
20	91	0	8	11	0	0	3	0	0	0	113
21	397	2	31	8	1	0	4	0	0	15	458
22	493	41	1	56	1	2	0	0	0	65	659
23	1,392	113	13	138	29	0	0	0	4	71	1,760
24	4,401	72	9	1,168	60	4	0	0	9	1,142	6,865
25	14,106	251	0	3,226	328	29	0	14	183	1,633	19,770
26	1,457	114	0	73	2	1	0	0	6	44	1,697
27	2,640	299	11	523	55	3	0	0	204	239	3,974
28	932	74	12	198	20	0	2	0	0	127	1,365
29	805	59	3	37	2	0	3	0	1	13	923
30	468	0	26	30	1	0	12	0	0	40	577
31	808	0	22	25	8	0	7	0	0	30	900
32	46	0	0	1	0	0	11	0	0	0	58
33	195	0	13	2	0	0	96	0	0	12	318
34	207	8	8	15	5	0	7	0	0	11	261
35	629	14	28	37	15	0	3	0	0	29	755
36	503	76	0	5	60	0	1	0	23	8	676
37	1,159	21	21	40	60	0	48	0	6	245	1,600
38	322	0	7	8	74	0	103	0	0	12	526
39	51	0	0	2	1	0	217	0	0	4	275
40	68	0	0	1	0	0	166	0	0	11	246
41	65	0	0	4	0	0	33	0	2	7	111
TOTALS:	51,216	9,435	258	25,226	1,427	77	732	40	909	12,369	102,035

STRUCTURE CODES

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ESCAMBIA COUNTY

PROJECTED HURRICANE STRUCTURAL LOSS ($$$) BY LOSS ZONE

SCENARIO D

DOLLAR LOSS BY STRUCTURE TYPE (IN THOUSANDS)

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	1,570	7,685	0	1,124	0	2	0	0	0	180	10,561
5	554	2,685	1	25	0	0	0	0	0	1	3,265
6	1,892	754	22	71	0	0	0	1	0	7	2,747
7	104	0	0	0	0	0	0	0	0	0	104
8	116	3	3	6	0	0	0	0	0	0	128
9	107	0	0	0	0	0	0	0	0	0	107
10	22	0	1	0	0	0	14	0	0	0	37
11	1,090	50	3	54	0	0	0	0	0	77	1,274
12	4,912	70	0	20,113	820	17	0	12	146	8,710	34,800
14	264	38	0	0	0	0	0	0	0	0	302
15	1,240	2	28	24	4	0	4	0	0	7	1,309
17	20,973	1,326	16	7,562	704	38	0	38	603	4,480	35,740
18	650	41	26	8	3	0	13	0	0	11	752
19	154	3	6	3	0	0	6	0	0	20	192
20	186	0	23	22	0	0	7	0	0	0	233
21	1,667	5	100	30	2	0	8	0	0	31	1,843
22	848	72	2	94	1	3	0	0	0	154	1,174
23	2,374	201	35	235	49	0	0	0	7	119	3,020
24	7,580	124	24	1,967	102	6	0	0	16	1,921	11,740
25	24,293	440	0	5,430	553	48	0	24	308	2,748	33,844
26	2,480	206	0	132	3	2	0	0	10	78	2,911
27	4,480	537	25	928	94	6	0	0	364	419	6,853
28	1,585	130	35	344	32	0	3	0	0	227	2,356
29	1,374	104	9	62	2	0	5	0	2	21	1,579
30	793	0	73	55	3	0	21	0	1	68	1,014
31	1,366	2	59	43	15	0	15	0	0	54	1,554
32	78	0	1	1	0	0	21	0	0	0	101
33	346	0	45	6	0	1	178	0	0	23	599
34	351	14	18	27	10	0	12	0	0	18	450
35	1,062	25	74	66	27	0	6	0	0	52	1,312
36	854	134	1	10	109	0	2	0	40	13	1,163
37	2,135	42	77	76	131	1	98	0	11	439	3,010
38	617	1	23	19	132	0	228	0	0	27	1,047
39	126	0	11	6	1	2	406	0	0	14	566
40	167	0	5	1	0	0	399	0	0	34	606
41	137	0	2	12	1	1	79	0	5	22	259
TOTALS:	88,547	14,694	748	38,556	2,798	127	1,525	75	1,513	19,975	168,558

STRUCTURE CODES

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ESCAMBIA COUNTY

PROJECTED HURRICANE STRUCTURAL LOSS ($$$) BY LOSS ZONE

SCENARIO E

DOLLAR LOSS BY STRUCTURE TYPE (IN THOUSANDS)

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	1,600	8,189	0	1,144	0	4	0	0	0	232	11,169
5	618	3,075	1	29	0	1	0	0	0	1	3,725
6	2,452	1,119	26	108	0	1	1	3	0	16	3,726
7	109	0	0	0	0	0	0	0	0	0	109
8	155	3	6	6	1	0	0	0	0	0	171
9	282	0	0	1	0	0	0	0	0	0	283
10	19	0	1	0	0	0	39	0	0	0	59
11	1,152	76	3	76	0	1	0	0	0	158	1,476
12	5,189	92	0	28,180	1,783	35	0	25	305	18,160	53,769
14	315	48	0	0	0	0	0	0	0	0	363
15	1,532	3	30	34	11	0	8	0	0	16	1,684
17	27,264	2,545	16	12,603	1,910	101	0	101	1,591	11,815	57,946
18	1,660	134	58	23	9	0	37	0	0	36	1,957
19	116	3	8	3	0	0	12	0	0	38	180
20	409	0	50	62	0	1	19	0	0	1	542
21	1,732	15	178	44	4	0	24	0	0	85	2,132
22	2,353	232	5	326	5	11	0	0	0	406	3,338
23	6,472	647	61	807	169	1	0	0	23	413	8,593
24	21,027	406	43	6,816	355	21	0	0	55	6,659	35,382
25	67,394	1,422	0	18,816	1,917	167	0	82	1,067	9,522	100,387
26	4,541	399	1	291	7	5	0	0	21	190	5,455
27	11,035	1,610	57	3,030	322	16	0	0	1,180	1,371	18,621
28	4,336	414	73	1,152	114	1	9	0	0	742	6,841
29	3,735	339	17	220	8	0	17	0	5	73	4,414
30	2,009	0	131	147	9	0	49	0	1	198	2,544
31	3,420	3	134	127	39	0	35	0	0	152	3,910
32	148	0	3	3	0	0	42	0	0	0	196
33	709	0	106	15	0	1	417	1	0	49	1,298
34	832	45	42	70	28	0	25	0	0	59	1,101
35	2,878	82	164	217	86	1	17	0	0	169	3,614
36	1,673	318	1	24	227	0	6	0	130	32	2,411
37	5,062	125	199	223	351	2	225	0	36	1,369	7,592
38	1,197	2	78	37	289	3	465	0	0	60	2,131
39	191	0	29	11	1	2	643	0	0	23	900
40	206	0	10	4	0	1	450	0	0	54	725
41	147	0	3	14	1	1	73	0	6	22	267
TOTALS:	184,079	21,346	1,534	74,663	7,646	377	2,613	192	4,420	52,121	349,011

STRUCTURE CODES

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SANTA ROSA COUNTY

PROJECTED HURRICANE STRUCTURAL LOSS ($$$) BY LOSS ZONE

SCENARIO A

DOLLAR LOSS BY STRUCTURE TYPE (IN THOUSANDS)

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	194	23	0	12	0	0	0	0	0	4	233
2	13	0	0	0	0	0	0	0	0	0	13
3	23	0	0	0	0	0	0	0	0	0	23
4	0	0	0	0	0	0	0	0	0	0	0
5	3	0	0	0	0	0	0	0	0	0	3
6	54	0	0	12	1	0	0	0	0	14	81
7	23	1	0	0	0	0	0	0	0	0	24
8	36	0	0	1	0	0	0	0	0	0	37
9	373	7	0	9	0	0	0	0	2	1	392
10	59	3	5	3	0	0	0	0	0	1	71
11	14	0	0	0	0	0	0	0	0	0	14
13	2	0	0	0	0	0	0	0	0	0	2
14	6	0	0	0	0	0	0	0	0	0	6
15	46	0	0	0	1	0	0	0	0	2	49
16	5	0	0	0	0	0	0	0	0	0	5
17	38	1	0	7	1	0	0	0	0	1	48
18	138	0	2	5	9	0	0	0	0	2	156
19	53	0	0	1	0	0	0	0	0	1	55
20	84	1	0	3	2	0	2	0	0	7	99
21	125	5	0	9	0	0	0	0	0	10	149
22	61	4	1	4	0	0	0	0	4	6	80
23	51	0	0	0	0	0	0	0	0	0	51
24	38	0	0	0	0	0	0	0	0	0	38
25	12	0	0	0	0	0	0	0	0	110	122
26	31	0	0	1	1	0	0	0	0	2	35
27	6	0	0	0	0	0	0	0	0	0	6
TOTALS:	1,488	45	8	67	15	0	2	0	6	161	1,792

STRUCTURE CODES

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SANTA ROSA COUNTY

PROJECTED HURRICANE STRUCTURAL LOSS ($$$) BY LOSS ZONE

SCENARIO B

DOLLAR LOSS BY STRUCTURE TYPE (IN THOUSANDS)

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	364	134	0	24	0	1	0	0	0	13	536
2	25	0	2	0	0	0	0	0	0	1	23
3	40	0	4	0	0	1	0	0	0	0	45
4	1	0	0	0	0	0	0	0	0	0	1
5	15	0	1	0	0	0	0	0	0	0	16
6	103	1	0	19	2	1	0	0	0	22	148
7	53	1	4	0	0	0	0	0	0	0	58
8	57	0	2	2	0	0	0	0	0	0	61
9	633	13	5	14	1	0	0	0	4	3	673
10	96	6	30	7	0	0	0	0	0	3	142
11	26	0	1	0	0	0	1	0	0	0	28
13	4	0	3	0	0	1	0	0	0	0	8
14	12	0	2	0	0	0	0	0	0	0	14
15	66	0	7	1	2	0	1	0	0	4	81
16	8	0	0	0	0	0	2	0	0	0	10
17	60	1	3	12	1	1	0	0	0	2	80
18	227	0	9	11	20	0	1	0	0	6	274
19	90	0	0	2	0	0	1	0	0	2	95
20	127	1	0	5	3	0	5	0	0	14	155
21	193	9	0	14	1	0	0	0	0	18	235
22	94	8	4	6	0	0	0	0	7	12	131
23	80	0	0	1	0	0	1	0	0	0	82
24	71	0	0	0	0	0	3	0	0	0	74
25	20	0	0	0	0	0	4	0	0	184	208
26	58	0	0	5	2	0	14	0	0	6	85
27	20	0	0	0	0	0	5	0	0	1	26
TOTALS:	2,543	174	77	123	32	5	38	0	11	291	3,294

STRUCTURE CODES

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SANTA ROSA COUNTY

PROJECTED HURRICANE STRUCTURAL LOSS ($$$) BY LOSS ZONE

SCENARIO C

DOLLAR LOSS BY STRUCTURE TYPE (IN THOUSANDS)

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	581	260	0	39	0	1	0	0	0	22	903
2	105	0	11	1	0	0	0	0	0	1	118
3	74	0	14	0	0	1	0	0	0	0	89
4	3	0	1	0	0	0	0	0	0	0	4
5	9	0	2	0	0	0	1	0	0	0	12
6	97	1	0	22	2	1	0	0	0	25	148
7	66	2	6	0	0	0	0	0	0	0	74
8	80	0	5	3	1	0	0	0	0	0	89
9	817	15	6	16	1	0	0	0	4	3	862
10	175	10	113	15	1	0	1	0	0	8	323
11	66	0	9	0	0	0	1	0	0	1	77
13	7	0	7	0	0	1	0	0	0	1	16
14	22	0	11	0	0	0	1	0	0	0	34
15	100	0	19	3	3	0	4	0	0	6	135
16	10	0	2	0	0	0	2	0	0	0	14
17	69	1	4	14	1	1	1	0	0	3	94
18	320	1	19	18	31	1	1	0	0	8	399
19	134	0	4	2	1	0	3	0	0	3	147
20	155	2	0	5	3	0	6	0	0	16	187
21	226	10	1	16	2	0	0	0	0	20	275
22	112	9	6	8	0	0	0	0	8	13	156
23	94	0	0	1	0	0	4	0	0	0	99
24	105	0	2	0	0	0	9	0	0	1	117
25	25	0	0	0	0	0	7	0	0	213	245
26	88	0	0	6	4	0	26	0	0	3	132
27	38	0	0	0	1	0	8	0	0	1	48
TOTALS:	3,578	311	242	169	51	6	75	0	12	353	4,797

STRUCTURE CODES

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SANTA ROSA COUNTY

PROJECTED HURRICANE STRUCTURAL LOSS ($$$) BY LOSS ZONE

SCENARIO D

DOLLAR LOSS BY STRUCTURE TYPE (IN THOUSANDS)

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	842	154	0	68	0	2	0	0	0	27	1,093
2	53	0	7	1	0	0	0	0	0	1	62
3	71	0	12	0	0	1	0	0	0	0	84
4	2	0	0	0	0	0	0	0	0	0	2
5	28	0	3	0	0	0	1	0	0	0	32
6	168	1	6	29	3	2	0	0	0	34	243
7	106	3	15	0	0	0	0	0	0	0	124
8	126	0	13	5	1	0	1	0	0	0	146
9	1,583	25	21	44	3	0	0	0	8	6	1,690
10	177	10	113	16	1	1	1	0	0	8	327
11	54	0	9	0	0	0	1	0	0	1	65
13	7	0	7	0	0	1	0	0	0	1	16
14	21	0	11	0	0	0	1	0	0	0	33
15	108	0	20	3	4	0	3	0	0	8	146
16	19	0	6	1	0	0	1	0	0	0	27
17	90	2	9	18	1	1	1	0	0	4	126
18	475	1	42	26	49	1	3	0	0	12	609
19	203	0	10	4	1	0	6	0	0	5	229
20	203	2	3	7	4	0	7	0	0	22	248
21	293	12	2	22	2	0	0	0	0	26	357
22	142	11	11	10	0	0	0	0	11	18	203
23	123	0	0	1	0	0	4	0	0	0	128
24	144	0	7	0	0	0	15	0	0	1	167
25	33	0	4	0	1	0	13	0	0	278	329
26	98	0	1	6	4	0	30	0	0	10	149
27	41	0	0	0	1	0	21	0	0	1	64
TOTALS:	5,210	221	332	261	75	9	109	0	19	463	6,699

STRUCTURE CODES

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SANTA ROSA COUNTY

PROJECTED HURRICANE STRUCTURAL LOSS ($$$) BY LOSS ZONE

SCENARIO E

DOLLAR LOSS BY STRUCTURE TYPE (IN THOUSANDS)

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	2,455	576	2	215	2	6	0	0	0	88	3,344
2	277	0	27	4	0	0	0	0	0	5	313
3	333	0	54	0	0	7	0	0	0	0	394
4	3	0	1	0	0	0	1	0	0	0	5
5	40	0	12	0	0	0	7	0	0	0	59
6	653	6	44	177	14	8	5	2	0	211	1,120
7	309	13	69	0	1	0	4	0	0	1	397
8	441	4	91	17	4	0	10	0	0	2	569
9	5,897	143	96	186	17	0	0	0	45	33	6,417
10	904	59	517	110	9	4	5	0	0	45	1,653
11	201	0	33	3	1	0	7	0	0	4	249
13	34	0	34	0	0	6	0	0	0	5	79
14	107	0	111	0	0	1	32	0	0	1	252
15	516	2	181	19	21	1	35	0	0	38	813
16	64	0	35	6	1	0	13	0	0	4	123
17	454	12	97	112	9	6	9	0	0	27	726
18	1,733	3	338	110	192	6	13	0	0	61	2,456
19	673	0	66	15	4	0	20	0	0	18	796
20	980	12	30	49	24	0	38	0	0	129	1,262
21	1,478	79	26	133	9	0	2	0	0	165	1,892
22	723	72	116	64	4	0	7	0	66	112	1,164
23	615	0	9	5	0	0	29	0	0	4	662
24	505	0	75	2	1	0	69	0	0	5	657
25	185	0	36	5	4	1	112	0	0	1,729	2,072
26	392	0	52	33	23	2	171	0	0	47	720
27	214	0	69	2	5	0	197	0	0	16	503
TOTALS:	20,136	981	2,221	1,267	345	48	786	2	111	2,750	28,697

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OKALOOSA COUNTY

PROJECTED HURRICANE STRUCTURAL LOSS ($$$) BY LOSS ZONE

SCENARIO A

DOLLAR LOSS BY STRUCTURE TYPE (IN THOUSANDS)

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	3,463	5,672	44	488	6	1	0	0	0	13	9,687
3	3	0	0	0	0	0	0	0	0	0	3
4	108	0	0	0	0	0	0	0	0	0	108
5	95	6	0	2	0	0	0	0	0	0	103
7	4	23	0	6	0	0	0	0	0	1	34
8	158	17	0	29	1	2	0	0	3	4	214
10	12	4	0	0	0	0	0	0	0	1	17
11	170	10	0	11	10	0	0	0	0	1	202
12	17	9	0	7	0	0	0	0	0	3	36
14	244	14	0	9	2	2	0	0	0	6	277
15	114	9	0	30	4	0	0	0	0	2	159
16	70	0	1	1	0	0	0	0	0	0	72
17	347	24	1	32	2	2	0	0	1	9	418
18	39	0	0	0	0	0	0	0	0	0	39
19	208	4	0	4	1	0	0	0	0	1	218
20	140	2	0	10	2	2	0	0	4	5	165
21	380	4	0	9	0	0	0	0	1	10	404
22	79	2	0	1	0	0	0	0	0	1	83
23	218	14	1	12	0	0	1	0	10	6	262
24	0	0	0	0	0	0	0	0	0	0	0
25	3	0	0	0	0	0	0	0	0	0	3
26	7	0	0	0	0	0	2	0	0	0	9
27	302	1	0	22	4	1	1	0	8	25	364
28	5	0	0	0	0	0	0	0	0	1	6
TOTALS:	6,186	5,815	47	673	32	10	4	0	27	89	12,883

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OKALOOSA COUNTY

PROJECTED HURRICANE STRUCTURAL LOSS ($$$) BY LOSS ZONE

SCENARIO B

DOLLAR LOSS BY STRUCTURE TYPE (IN THOUSANDS)

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	5,403	8,888	44	829	9	1	0	0	0	23	15,197
3	5	0	0	0	0	0	0	0	0	0	5
4	183	0	0	0	0	0	0	0	0	0	183
5	151	10	0	4	0	0	0	0	0	0	175
7	6	40	0	11	0	0	0	0	0	1	58
8	272	31	0	54	3	3	0	0	6	8	377
10	20	7	1	0	0	0	0	0	0	2	30
11	288	17	2	20	18	0	0	0	0	1	346
12	28	17	0	14	0	0	0	0	0	5	64
14	411	25	0	16	3	3	0	0	0	13	471
15	193	16	0	54	6	0	0	0	0	3	272
16	121	0	7	1	0	0	0	0	0	0	129
17	585	42	8	58	5	4	0	0	1	17	720
18	61	0	2	0	0	0	0	0	0	0	63
19	383	7	3	7	1	0	0	0	0	3	404
20	236	4	0	18	3	3	0	0	7	10	281
21	639	8	7	15	0	0	0	0	2	17	688
22	133	3	1	2	0	0	0	0	0	1	140
23	345	23	2	21	0	0	4	0	16	11	422
24	3	0	0	0	0	0	2	0	0	0	5
25	5	0	0	0	0	0	0	0	0	0	5
26	22	0	0	0	0	0	18	0	0	2	42
27	488	1	1	38	6	1	18	0	13	44	610
28	6	0	0	0	0	0	5	0	0	2	13
TOTALS:	9,997	9,139	78	1,162	54	15	47	0	65	163	20,700

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OKALOOSA COUNTY

PROJECTED HURRICANE STRUCTURAL LOSS ($$$) BY LOSS ZONE

SCENARIO C

DOLLAR LOSS BY STRUCTURE TYPE (IN THOUSANDS)

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	5,925	11,635	44	1,087	12	1	0	0	0	30	18,734
3	9	0	0	0	0	0	0	0	0	0	9
4	335	0	0	0	0	0	0	0	0	0	335
5	296	19	2	8	0	0	0	0	0	0	325
7	11	75	0	22	0	0	0	0	0	3	111
8	578	57	1	103	5	6	0	0	12	16	778
10	37	14	4	1	0	1	0	0	0	4	61
11	529	32	4	40	35	0	0	0	0	2	642
12	52	31	0	26	0	0	0	0	0	10	119
14	755	47	0	31	6	6	0	0	0	24	869
15	354	31	0	104	12	0	0	0	0	7	508
16	221	0	26	2	0	0	0	0	0	0	249
17	1,074	79	32	113	9	7	0	0	2	31	1,347
18	114	0	5	2	0	0	0	0	0	1	122
19	687	13	9	13	2	0	0	0	0	6	730
20	434	6	0	37	5	6	0	0	13	19	520
21	1,174	16	25	31	0	0	0	0	4	35	1,285
22	244	5	5	3	0	0	0	0	0	2	259
23	641	42	10	38	0	0	5	0	31	21	788
24	5	0	0	0	0	0	3	0	0	0	8
25	7	0	0	0	0	0	2	0	0	0	9
26	38	0	0	0	0	0	46	0	0	2	86
27	740	2	10	62	9	2	46	0	21	72	964
28	13	0	0	0	0	0	18	0	0	2	33
TOTALS:	14,273	12,104	177	1,723	95	29	120	0	83	287	28,891

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OKALOOSA COUNTY

PROJECTED HURRICANE STRUCTURAL LOSS ($$$) BY LOSS ZONE

SCENARIO D

DOLLAR LOSS BY STRUCTURE TYPE (IN THOUSANDS)

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	6,494	18,938	44	1,770	20	2	0	0	0	39	27,307
3	15	0	0	0	0	0	0	0	0	0	15
4	578	0	0	0	0	0	0	0	0	0	578
5	510	34	4	14	0	0	0	0	0	0	562
7	20	132	0	37	1	0	0	0	0	4	194
8	953	100	2	173	9	10	0	0	19	26	1,292
10	54	24	13	1	0	1	0	0	0	6	109
11	910	56	11	66	59	0	0	0	0	3	1,105
12	90	52	0	44	0	0	0	0	0	17	203
14	1,300	82	0	52	11	9	0	0	0	41	1,495
15	608	54	0	174	20	0	0	0	0	11	867
16	380	1	71	3	0	0	0	0	0	0	455
17	1,851	138	87	138	14	12	0	0	4	54	2,348
18	195	0	14	2	1	0	0	0	0	1	213
19	1,111	21	26	22	4	1	0	0	0	9	1,194
20	746	11	0	62	9	10	0	0	23	33	894
21	2,022	27	70	54	0	0	3	0	6	59	2,241
22	421	9	14	5	0	0	0	0	0	4	453
23	1,083	75	28	68	2	0	12	0	56	38	1,362
24	9	0	1	1	0	0	5	0	0	0	16
25	13	0	1	0	0	0	3	0	0	0	17
26	59	0	1	0	0	0	82	0	0	5	147
27	1,301	4	34	109	17	4	89	0	36	128	1,722
28	26	0	0	0	0	0	45	0	0	4	75
TOTALS:	20,759	19,758	421	2,845	167	49	239	0	144	482	44,864

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OKALOOSA COUNTY

PROJECTED HURRICANE STRUCTURAL LOSS ($$$) BY LOSS ZONE

SCENARIO E

DOLLAR LOSS BY STRUCTURE TYPE (IN THOUSANDS)

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	6,759	17,308	44	655	28	3	0	0	0	71	24,868
3	42	0	0	0	0	0	0	0	0	0	42
4	1,567	0	0	1	0	0	0	0	0	0	1,568
5	1,397	108	7	45	0	0	0	0	0	1	1,558
7	53	425	0	126	3	0	0	0	0	14	621
8	2,681	321	0	584	29	35	0	0	67	88	3,805
10	175	77	20	5	0	4	0	0	0	21	302
11	2,468	180	2	226	200	0	0	0	0	11	3,087
12	243	176	0	150	0	0	0	0	0	57	626
14	3,525	262	0	174	36	32	0	0	0	137	4,166
15	1,649	175	0	591	67	0	0	0	0	37	2,519
16	1,029	2	118	12	0	1	0	0	0	1	1,163
17	5,011	449	13	640	48	40	0	0	14	183	6,398
18	519	0	32	8	2	0	0	0	0	4	565
19	3,071	71	42	74	12	3	0	0	0	31	3,304
20	2,032	35	0	209	30	34	0	0	76	110	2,526
21	5,738	90	113	179	1	0	8	0	21	195	6,345
22	1,139	28	22	19	0	1	0	0	0	12	1,221
23	2,895	231	65	224	5	1	52	0	182	122	3,777
24	27	0	2	2	0	0	25	0	0	0	56
25	39	0	4	0	0	0	7	0	0	0	50
26	179	0	14	1	0	1	218	0	0	15	423
27	3,407	12	123	360	52	13	229	0	119	419	4,734
28	64	0	1	1	0	0	113	0	0	7	186
TOTALS:	45,709	19,950	622	4,286	513	168	652	0	479	1,536	73,915

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WALTON COUNTY

PROJECTED HURRICANE STRUCTURAL LOSS ($$$) BY LOSS ZONE

SCENARIO A

DOLLAR LOSS BY STRUCTURE TYPE (IN THOUSANDS)

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	416	1,630	9	28	0	0	0	0	0	0	2,133
2	29	200	0	12	0	0	0	0	0	0	241
3	11	0	0	0	0	0	0	0	0	0	11
4	15	0	0	2	0	0	0	0	0	0	17
5	1	0	0	0	0	0	0	0	0	0	1
6	206	31	1	1	0	0	0	0	0	0	239
7	1	0	0	0	0	0	0	0	0	0	1
8	1	0	0	0	0	0	0	0	0	0	1
9	10	0	0	1	0	0	0	0	0	1	12
10	0	0	0	0	0	0	0	0	0	0	0
11	1	0	0	0	0	0	1	0	0	0	2
12	23	0	0	0	0	0	0	0	0	0	23
13	5	0	0	0	0	0	1	0	0	0	6
14	7	0	0	0	0	0	2	0	0	0	9
15	61	3	0	11	1	0	1	0	1	12	90
16	7	0	0	2	3	0	1	0	0	0	13
17	32	0	0	0	0	0	0	0	0	3	35
18	2	0	0	0	0	0	1	0	0	0	3
19	8	0	0	0	0	0	0	0	0	1	9
20	2	0	0	0	0	0	1	0	0	0	3
21	4	0	0	0	0	0	0	0	0	0	4
TOTALS:	842	1,914	10	57	4	0	8	0	1	17	2,853

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WALTON COUNTY

PROJECTED HURRICANE STRUCTURAL LOSS ($$$) BY LOSS ZONE

SCENARIO B

DOLLAR LOSS BY STRUCTURE TYPE (IN THOUSANDS)

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	670	3,055	16	46	0	0	1	0	0	0	3,788
2	57	357	5	23	0	0	0	0	0	1	443
3	13	0	0	0	0	0	0	0	0	0	13
4	32	1	0	2	0	0	2	0	0	0	37
5	3	0	1	0	1	0	0	0	0	0	5
6	396	80	5	2	0	0	2	0	0	1	486
7	1	0	0	0	0	0	1	0	0	0	2
8	4	0	0	0	0	0	0	0	0	0	4
9	12	0	0	1	0	0	0	0	0	1	14
10	2	0	0	0	0	0	1	0	0	0	3
11	3	0	0	0	0	0	1	0	0	0	4
12	40	0	4	0	0	0	0	0	0	0	44
13	7	0	0	0	0	0	4	0	0	0	11
14	12	0	0	0	0	0	9	0	0	0	21
15	68	3	0	12	1	0	2	0	1	12	99
16	8	0	0	2	4	0	2	0	0	0	16
17	33	0	0	0	0	0	0	0	0	3	36
18	7	0	0	0	0	0	2	0	0	0	9
19	19	0	0	0	0	0	1	0	0	1	21
20	3	0	0	0	0	0	2	0	0	0	5
21	4	0	0	0	0	0	3	0	0	0	7
TOTALS:	1,394	3,496	31	88	6	0	33	0	1	19	5,068

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WALTON COUNTY

PROJECTED HURRICANE STRUCTURAL LOSS ($$$) BY LOSS ZONE

SCENARIO C

DOLLAR LOSS BY STRUCTURE TYPE (IN THOUSANDS)

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	651	4,003	16	62	0	0	1	0	0	0	4,733
2	96	638	20	41	0	0	0	0	0	2	797
3	31	0	7	0	0	0	2	0	0	0	40
4	47	2	6	5	0	0	3	0	0	0	63
5	5	0	2	0	1	0	0	0	0	0	8
6	705	183	13	9	0	0	17	0	0	3	930
7	2	0	0	0	0	0	1	0	0	0	3
8	9	0	1	0	0	0	17	0	0	0	27
9	25	0	3	4	0	0	4	0	0	3	39
10	5	0	0	0	0	0	4	0	0	0	9
11	5	0	0	0	0	0	2	0	0	0	7
12	72	0	18	0	0	0	0	0	0	1	91
13	23	0	1	1	0	0	19	0	0	0	44
14	33	0	0	0	0	0	36	0	0	0	69
15	132	6	3	25	4	0	5	0	2	27	204
16	17	0	1	4	8	0	9	0	0	0	39
17	68	0	4	1	1	0	5	0	0	7	86
18	16	0	11	0	0	0	36	0	0	0	63
19	33	0	0	0	0	0	27	0	0	2	62
20	8	0	0	0	0	0	32	0	0	1	41
21	13	0	0	0	0	0	29	0	0	0	42
TOTALS:	1,996	4,832	106	152	14	0	249	0	2	46	7,397

STRUCTURE CODES

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WALTON COUNTY

PROJECTED HURRICANE STRUCTURAL LOSS ($$$) BY LOSS ZONE

SCENARIO D

DOLLAR LOSS BY STRUCTURE TYPE (IN THOUSANDS)

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	900	5,240	20	74	0	0	4	0	0	1	6,239
2	167	1,174	57	73	0	0	0	0	0	4	1,475
3	56	0	20	0	0	0	7	0	0	0	83
4	81	3	16	10	0	0	8	0	0	0	118
5	8	0	6	0	2	0	1	0	0	0	17
6	750	210	31	11	2	0	38	0	0	4	1,046
7	4	0	1	0	0	0	6	0	0	0	11
8	14	0	10	0	0	0	34	0	0	0	58
9	42	0	9	7	0	0	8	0	0	5	71
10	8	0	2	0	0	0	9	0	0	0	19
11	10	0	2	0	0	0	5	0	0	0	17
12	125	0	53	0	1	0	0	0	0	1	180
13	31	0	9	1	0	0	29	0	0	2	72
14	57	0	3	0	0	0	74	0	0	1	135
15	224	10	8	45	6	0	7	0	4	47	351
16	28	0	4	7	15	0	18	0	0	0	72
17	116	0	17	1	2	0	9	0	0	16	161
18	35	0	27	0	0	0	68	0	0	2	132
19	57	0	1	2	0	0	55	0	0	3	118
20	25	0	3	1	0	0	71	0	0	2	102
21	24	0	1	0	0	0	61	0	0	2	88
TOTALS:	2,762	6,637	300	232	28	0	512	0	4	90	10,565

STRUCTURE CODES

SR -- SINGLE UNIT RESIDENTIAL
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WALTON COUNTY

PROJECTED HURRICANE STRUCTURAL LOSS ($$$) BY LOSS ZONE

SCENARIO E

DOLLAR LOSS BY STRUCTURE TYPE (IN THOUSANDS)

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	1,263	9,239	23	135	1	1	11	0	0	2	10,675
2	524	4,242	91	291	1	1	8	0	0	14	5,172
3	138	0	42	2	0	0	28	0	0	0	210
4	219	9	31	29	0	0	26	0	0	1	315
5	31	0	10	0	8	0	3	0	0	0	52
6	1,340	624	47	33	5	0	101	0	0	14	2,164
7	9	0	3	0	0	0	17	0	0	0	29
8	36	0	24	1	0	0	113	0	0	1	175
9	101	0	22	21	0	0	20	1	0	16	181
10	20	0	4	1	0	0	23	0	0	1	49
11	27	0	3	0	0	0	16	0	0	1	47
12	347	0	84	2	2	0	0	0	0	4	439
13	101	0	37	5	0	0	107	0	0	6	256
14	130	0	28	1	0	0	187	0	0	3	349
15	626	32	37	146	21	0	27	0	13	152	1,054
16	61	0	26	26	29	0	52	0	0	1	195
17	322	1	78	7	6	0	31	0	0	50	495
18	108	0	130	0	0	0	222	0	0	5	465
19	168	0	11	8	1	1	169	0	0	16	374
20	71	0	21	4	0	0	224	0	0	8	323
21	68	0	18	1.	0	0	164	0	0	6	257
TOTALS:	5,710	14,147	770	713	74	3	1,549	1	13	301	23,281

STRUCTURE CODES

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BAY COUNTY

PROJECTED HURRICANE STRUCTURAL LOSS ($$$) BY LOSS ZONE

SCENARIO A
DOLLAR LOSS BY STRUCTURE TYPE (IN THOUSANDS)

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	171	0	17	15	2	0	9	0	0	0	214
2	0	0	0	0	0	0	0	0	0	0	0
3	104	0	0	60	0	0	0	0	0	83	247
4	330	32	39	719	0	0	0	0	0	40	1,160
5	69	0	0	5	0	0	0	0	0	0	74
6	0	0	0	0	0	0	0	0	0	0	0
7	7	0	0	1	0	0	1	0	0	0	9
8	42	0	0	0	0	0	0	0	0	0	42
9	103	3	1	9	3	0	0	2	1	1	123
10	45	6	0	45	2	0	0	0	1	4	103
11	22	3	0	13	0	0	1	0	0	4	43
12	25	0	0	1	1	1	0	0	0	0	28
13	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	6	0	0	0	6
15	0	0	0	0	0	0	0	0	0	0	0
16	25	0	5	71	1	0	2	0	0	2	106
17	20	0	0	22	0	0	7	0	0	0	49
18	46	2	0	26	0	0	1	0	0	2	77
19	1	0	0	0	0	0	0	0	0	0	1
20	53	0	9	4	1	0	0	0	0	1	68
21	22	0	1	0	1	0	0	0	0	1	25
22	11	0	0	1	0	0	0	0	0	0	12
23	3	0	0	0	0	0	0	0	0	0	3
24	44	1	0	3	0	0	0	0	0	3	51
25	62	3	2	9	0	0	0	0	0	3	79
26	40	7	1	7	8	0	0	0	0	12	75
27	23	0	0	3	2	0	0	0	1	9	38
28	60	19	0	47	10	2	0	0	18	22	178
29	4	11	0	4	6	0	0	0	0	12	37
30	57	4	0	67	12	0	0	0	0	18	158
31	11	0	0	0	0	0	0	0	0	0	11
32	17	0	1	4	4	0	0	0	0	4	30
33	17	0	0	0	0	0	0	0	0	0	17
34	11	0	0	0	0	0	0	0	0	0	11
35	23	0	2	0	0	0	0	0	0	0	25
36	27	0	2	0	0	0	0	0	0	0	29
37	46	0	1	0	0	0	0	0	0	1	48
38	1	0	0	0	0	0	0	0	0	0	1
TOTALS:	1,542	91	81	1,136	53	3	27	2	21	222	3,179

STRUCTURE CODES

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BAY COUNTY

PROJECTED HURRICANE STRUCTURAL LOSS ($$$) BY LOSS ZONE

SCENARIO B

DOLLAR LOSS BY STRUCTURE TYPE (IN THOUSANDS)

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	208	0	17	18	2	0	11	0	0	0	256
2	0	0	0	0	0	0	0	0	0	0	0
3	230	0	2	143	0	0	0	0	0	131	506
4	394	43	39	820	0	0	0	0	0	32	1,328
5	100	0	0	8	0	0	0	0	0	0	108
6	0	0	0	0	0	0	2	0	0	0	2
7	36	0	6	2	0	0	4	0	0	1	49
8	115	0	0	0	0	0	0	0	0	0	115
9	169	5	4	13	5	0	1	2	1	1	201
10	92	19	0	293	4	0	0	0	1	8	417
11	139	27	3	55	0	0	2	0	0	17	243
12	59	0	9	1	4	2	7	0	0	0	82
13	2	0	0	0	0	0	0	0	0	0	2
14	0	0	0	0	0	0	10	0	0	0	10
15	0	0	0	0	0	0	0	0	0	0	0
16	64	0	22	120	3	0	3	0	0	4	216
17	12	0	1	11	0	0	7	0	0	0	31
18	41	8	1	59	0	0	1	0	0	1	111
19	1	0	0	0	0	0	0	0	0	0	1
20	177	0	43	11	2	0	5	0	0	3	241
21	34	0	3	1	2	0	0	0	0	1	41
22	20	0	1	2	0	0	3	0	0	0	26
23	6	0	0	0	0	0	0	0	0	0	6
24	70	2	3	7	0	0	0	0	0	4	86
25	98	4	10	16	0	0	0	0	0	5	133
26	97	12	5	21	23	0	0	0	0	19	177
27	36	0	0	5	2	0	0	0	1	14	58
28	95	31	0	74	16	3	0	0	28	36	283
29	6	16	0	7	9	0	0	0	0	20	58
30	84	6	1	104	17	0	0	0	0	29	241
31	18	0	2	0	0	0	0	0	0	0	20
32	25	0	2	6	7	0	0	0	0	6	46
33	28	0	1	1	0	0	0	0	0	0	30
34	19	0	2	0	0	0	0	0	0	1	22
35	44	0	10	0	0	0	1	0	0	1	56
36	47	0	17	0	0	0	0	0	0	0	64
37	55	0	7	1	0	0	1	0	0	2	66
38	3	0	0	0	0	0	0	0	0	0	3
TOTALS:	2,624	173	211	1,799	96	5	58	2	31	336	5,335

STRUCTURE CODES

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BAY COUNTY

PROJECTED HURRICANE STRUCTURAL LOSS ($$$) BY LOSS ZONE

SCENARIO C

DOLLAR LOSS BY STRUCTURE TYPE (IN THOUSANDS)

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	232	0	17	23	3	0	16	0	0	0	291
2	0	0	0	0	0	0	0	0	0	0	0
3	254	0	4	152	0	1	0	0	0	157	568
4	377	38	41	872	0	1	0	0	0	61	1,390
5	138	0	0	15	0	0	0	0	0	0	153
6	0	0	0	0	0	0	6	0	0	0	6
7	24	0	4	2	0	0	6	0	0	1	37
8	152	0	1	0	0	0	1	0	0	1	155
9	329	11	23	29	10	0	1	5	3	4	415
10	148	25	1	292	6	0	0	0	3	15	480
11	117	22	6	61	0	0	4	0	0	20	230
12	92	0	20	2	5	5	12	0	0	1	137
13	2	0	0	0	0	0	1	0	0	0	3
14	0	0	0	0	0	0	13	0	0	0	13
15	0	0	0	0	0	0	0	0	0	0	0
16	65	0	27	135	5	0	5	0	0	5	242
17	22	0	5	19	0	0	13	0	0	0	59
18	64	9	5	79	1	0	3	0	0	2	163
19	3	0	1	1	0	0	0	0	0	0	5
20	188	0	48	13	2	0	5	0	0	3	259
21	76	0	20	2	4	0	0	0	0	2	104
22	37	0	4	4	0	0	11	0	0	0	56
23	11	0	0	0	0	0	0	0	0	0	11
24	135	4	14	12	0	0	0	0	0	8	173
25	191	7	45	32	2	0	1	0	0	9	287
26	141	23	20	30	30	0	0	0	0	39	283
27	70	0	3	10	5	1	0	0	4	28	121
28	191	63	1	156	37	7	1	0	62	77	595
29	11	33	0	16	20	0	0	0	0	40	120
30	186	13	7	238	38	0	1	1	0	64	548
31	39	0	8	0	0	0	2	0	0	0	49
32	55	0	15	16	14	0	1	0	0	13	114
33	60	0	6	1	1	0	1	0	0	0	69
34	36	0	16	0	0	0	6	0	0	3	61
35	79	0	65	1	0	0	29	0	0	1	175
36	76	0	49	0	0	0	2	0	0	0	127
37	141	0	34	1	0	1	17	0	0	4	198
38	4	0	2	0	1	0	6	0	0	0	13
TOTALS:	3,746	248	512	2,204	194	16	164	6	72	558	7,710

STRUCTURE CODES

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BAY COUNTY

PROJECTED HURRICANE STRUCTURAL LOSS ($$$) BY LOSS ZONE

SCENARIO D

DOLLAR LOSS BY STRUCTURE TYPE (IN THOUSANDS)

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	238	0	17	25	3	0	17	0	0	0	300
2	0	0	0	0	0	0	0	0	0	1	1
3	327	0	6	189	0	0	1	0	0	183	706
4	521	57	38	1,205	1	1	0	0	0	108	1,931
5	143	0	0	15	0	0	0	0	0	0	158
6	0	0	0	0	0	0	10	0	0	0	10
7	31	0	5	3	0	0	7	0	0	1	47
8	219	0	1	0	0	0	1	0	0	1	222
9	313	8	18	26	9	0	1	4	2	4	385
10	179	40	1	505	8	0	0	0	3	16	752
11	260	51	8	98	0	0	4	0	0	28	449
12	106	0	24	2	6	5	13	0	0	2	158
13	2	0	0	0	0	0	1	0	0	0	3
14	0	0	0	0	0	0	14	0	0	0	14
15	0	0	0	0	0	0	0	0	0	0	0
16	120	0	47	257	6	0	5	0	0	7	442
17	22	0	5	19	0	0	13	0	0	0	59
18	320	22	5	204	1	0	3	0	0	6	561
19	3	0	1	1	0	0	0	0	0	0	5
20	318	0	85	20	3	0	6	0	0	5	437
21	59	0	13	2	3	0	0	0	0	1	78
22	37	0	4	5	0	0	7	0	0	0	53
23	11	0	0	0	0	0	1	0	0	0	12
24	136	41	14	13	0	0	0	0	0	8	212
25	196	57	48	32	2	0	1	0	0	10	346
26	190	24	22	39	43	0	0	0	0	40	358
27	72	0	5	10	5	1	0	0	4	30	127
28	183	60	1	143	32	5	1	0	49	73	547
29	11	33	0	16	20	0	0	0	0	40	120
30	145	10	4	185	30	0	1	1	0	49	425
31	30	0	4	0	0	0	0	0	0	0	34
32	44	0	9	12	11	0	1	0	0	10	87
33	46	0	3	1	1	0	1	0	0	0	52
34	33	0	13	0	0	0	3	0	0	3	52
35	74	0	52	0	0	0	12	0	0	0	138
36	78	0	56	0	0	0	2	0	0	0	136
37	183	0	41	1	0	1	18	0	0	4	248
38	4	0	2	0	1	0	6	0	0	0	13
TOTALS:	4,654	403	552	3,028	185	13	150	5	58	630	9,678

STRUCTURE CODES

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BAY COUNTY

PROJECTED HURRICANE STRUCTURAL LOSS ($$$) BY LOSS ZONE

SCENARIO E

DOLLAR LOSS BY STRUCTURE TYPE (IN THOUSANDS)

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	251	0	17	31	5	0	29	0	0	1	334
2	0	0	0	0	0	0	0	0	0	1	1
3	635	0	11	420	0	2	2	0	0	517	1,587
4	731	84	52	2,794	5	5	0	0	0	449	4,120
5	462	0	4	94	0	0	0	0	0	2	562
6	0	0	0	0	0	0	31	0	0	0	31
7	92	0	14	5	0	0	35	0	0	4	150
8	417	0	6	1	0	0	5	0	0	4	433
9	1,338	44	103	144	54	0	3	26	11	16	1,739
10	646	108	3	952	25	0	0	0	9	60	1,803
11	400	81	25	192	0	0	14	1	0	59	772
12	273	0	73	8	12	19	31	0	0	4	420
13	4	0	0	0	0	0	2	0	0	0	6
14	0	0	0	0	0	0	33	0	0	0	33
15	0	0	0	0	0	0	1	0	0	0	1
16	161	0	61	520	19	0	25	0	0	24	810
17	145	0	24	155	0	0	93	0	0	3	420
18	451	42	26	426	6	0	21	0	0	19	991
19	14	0	6	3	0	0	14	0	0	0	37
20	418	0	111	27	5	0	23	0	0	9	593
21	256	0	95	9	17	0	4	0	0	7	388
22	124	0	20	18	0	0	47	0	0	0	209
23	35	0	0	1	0	0	3	0	0	0	39
24	446	16	62	50	1	0	4	0	0	33	612
25	550	26	210	110	5	0	5	0	1	31	938
26	410	76	79	97	100	0	0	0	0	125	887
27	188	0	18	32	17	3	0	0	12	93	363
28	818	294	8	654	144	27	3	0	254	351	2,553
29	53	205	0	98	123	0	0	0	0	252	731
30	649	66	29	978	155	0	8	3	0	265	2,153
31	132	0	33	0	0	0	4	0	0	0	169
32	190	0	68	63	57	2	3	0	0	54	437
33	287	0	25	6	3	0	7	0	0	0	323
34	104	0	76	1	0	0	75	0	0	10	266
35	211	0	350	4	2	0	126	0	0	6	699
36	231	0	426	4	0	0	13	0	0	2	676
37	437	0	237	5	1	2	259	0	0	20	961
38	20	0	8	1	5	0	116	0	0	2	152
TOTALS:	11,579	1,042	2,280	7,903	761	60	1,039	30	287	2,423	27,404

STRUCTURE CODES

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HOLMES COUNTY

PROJECTED HURRICANE STRUCTURAL LOSS ($$$) BY LOSS ZONE

SCENARIO A

DOLLAR LOSS BY STRUCTURE TYPE (IN THOUSANDS)

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	29	0	43	5	0	0	25	0	3	4	109
2	43	0	0	5	0	0	66	0	0	12	126
TOTALS:	72	0	43	10	0	0	91	0	3	16	235

STRUCTURE CODES

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HOLMES COUNTY

PROJECTED HURRICANE STRUCTURAL LOSS ($$$) BY LOSS ZONE

SCENARIO B

DOLLAR LOSS BY STRUCTURE TYPE (IN THOUSANDS)

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	28	0	0	5	0	0	38	0	3	5	79
2	43	0	0	5	0	0	74	0	0	12	134
TOTALS:	71	0	0	10	0	0	112	0	3	17	213

STRUCTURE CODES

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HOLMES COUNTY

PROJECTED HURRICANE STRUCTURAL LOSS ($$$) BY LOSS ZONE

SCENARIO C

DOLLAR LOSS BY STRUCTURE TYPE (IN THOUSANDS)

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	56	0	1	7	0	1	192	0	4	10	271
2	89	1	0	9	0	0	269	0	0	25	393
TOTALS:	145	1	1	16	0	1	461	0	4	35	664

STRUCTURE CODES

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HOLMES COUNTY

PROJECTED HURRICANE STRUCTURAL LOSS ($$$) BY LOSS ZONE

SCENARIO D

DOLLAR LOSS BY STRUCTURE TYPE (IN THOUSANDS)

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	257	0	94	36	2	5	743	0	16	59	1,212
2	352	2	69	34	1	1	897	1	0	103	1,460
TOTALS:	609	2	163	70	3	6	1,640	1	16	162	2,672

STRUCTURE CODES

SR -- SINGLE UNIT RESIDENTIAL
MR -- MULTI-UNIT RESIDENTIAL
MH -- MOBILE HOME RESIDENTIAL
C -- COMMERCIAL
I -- INDUSTRIAL
PU -- PUBLIC UTILITIES
AG -- AGRICULTURAL
PT -- PUBLIC TRANSPORTATION
HC -- HEALTH CARE
GI -- GOVERNMENT AND INSTITUTIONAL

HOLMES COUNTY

PROJECTED HURRICANE STRUCTURAL LOSS ($$$) BY LOSS ZONE

SCENARIO E

DOLLAR LOSS BY STRUCTURE TYPE (IN THOUSANDS)

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	437	0	156	63	4	9	1,263	0	27	97	2,066
2	634	4	173	66	4	2	1,562	2	0	179	2,626
TOTALS:	1,071	4	339	129	8	11	2,825	2	27	276	4,692

STRUCTURE CODES

SR -- SINGLE UNIT RESIDENTIAL
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HC -- HEALTH CARE
GI -- GOVERNMENT AND INSTITUTIONAL

WASHINGTON COUNTY

PROJECTED HURRICANE STRUCTURAL LOSS ($$$) BY LOSS ZONE

SCENARIO A

DOLLAR LOSS BY STRUCTURE TYPE (IN THOUSANDS)

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	2	0	0	3	0	0	0	0	0	0	5
2	4	0	0	0	0	0	1	0	0	0	5
3	18	0	0	0	0	0	9	0	0	0	27
4	86	3	0	9	5	2	100	0	1	20	226
TOTALS:	110	3	0	12	5	2	110	0	1	20	263

STRUCTURE CODES

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PT -- PUBLIC TRANSPORTATION
HC -- HEALTH CARE
GI -- GOVERNMENT AND INSTITUTIONAL

WASHINGTON COUNTY

PROJECTED HURRICANE STRUCTURAL LOSS ($$$) BY LOSS ZONE

SCENARIO 9

DOLLAR LOSS BY STRUCTURE TYPE (IN THOUSANDS)

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	2	0	0	4	0	0	1	0	0	0	7
2	9	0	0	0	0	0	5	0	0	0	14
3	26	0	0	1	0	0	29	0	0	0	56
4	115	4	0	11	7	2	162	0	1	27	329
TOTALS:	152	4	0	16	7	2	197	0	1	27	406

STRUCTURE CODES

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GI -- GOVERNMENT AND INSTITUTIONAL

WASHINGTON COUNTY

PROJECTED HURRICANE STRUCTURAL LOSS ($$$) BY LOSS ZONE

SCENARIO C

DOLLAR LOSS BY STRUCTURE TYPE (IN THOUSANDS)

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	6	0	0	8	0	0	2	0	0	0	16
2	29	0	8	1	0	1	31	0	0	0	70
3	50	0	3	2	0	0	82	0	0	0	137
4	188	5	1	21	11	4	279	0	3	46	558
TOTALS:	273	5	12	32	11	5	394	0	3	46	781

STRUCTURE CODES

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AG -- AGRICULTURAL
PT -- PUBLIC TRANSPORTATION
HC -- HEALTH CARE
GI -- GOVERNMENT AND INSTITUTIONAL

WASHINGTON COUNTY

PROJECTED HURRICANE STRUCTURAL LOSS ($$$) BY LOSS ZONE

SCENARIO D

DOLLAR LOSS BY STRUCTURE TYPE (IN THOUSANDS)

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	4	0	0	6	0	0	1	0	0	0	11
2	24	0	4	1	0	1	20	0	0	0	50
3	39	0	2	1	0	0	70	0	0	0	112
4	212	5	2	22	11	4	299	0	3	49	607
TOTALS:	279	5	8	30	11	5	390	0	3	49	780

STRUCTURE CODES

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GI -- GOVERNMENT AND INSTITUTIONAL

WASHINGTON COUNTY

PROJECTED HURRICANE STRUCTURAL LOSS ($$$) BY LOSS ZONE

SCENARIO E

DOLLAR LOSS BY STRUCTURE TYPE (IN THOUSANDS)

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	37	0	11	58	0	0	29	0	0	0	135
2	141	1	120	3	0	6	182	0	0	0	453
3	233	3	148	14	1	0	400	0	0	0	849
4	572	16	48	66	37	13	890	0	8	151	1,801
TOTALS:	1,033	20	327	141	38	19	1,501	0	8	151	3,238

STRUCTURE CODES

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HC -- HEALTH CARE
GI -- GOVERNMENT AND INSTITUTIONAL

SURVEY OF PUBLIC UTILITIES

POTABLE WATER FACILITIES - ESCAMBIA COUNTY

Facility Name	Loss Zone	Design Capacity (000) Gallons	Storage Capacity (000) Gallons	Value Assessment ($)
Escambia Co. Utility Authority		65,000		1.5 M
(38 well sites)				
Elevated Storage	5		100	100 T
Elevated Storage	6		500	500 T
Elevated Storage	23		500	500 T
Elevated Storage	23		1,000	1 M
Elevated Storage	24		500	500 T
Elevated Storage	26		1,000	1 M
Elevated Storage	30		250	250 T
Elevated Storage	34		1,000	1 M
Ground Storage	6		1,000	1 M
Santa Rosa Island Authority	2	(Pensacola Bay Bridge line)		1 M
Pumping Station	2		NA	100 T
Elevated Storage	2		1,000	150 T
Ground Storage	2		1,000	150 T
Ground Storage	2		1,000	300 T
Ground Storage	2		1,000	300 T
Ground Storage	2		2,750	600 T
Peoples Water Service	22	7,920	2,335	
(5 well sites)	11			2.5 M
Elevated Storage	11		60	125 T
Elevated Storage	11		330	275 T
Elevated Storage	22		150	250 T
Ground Storage	21		1,000	800 T
Ground Storage	11		800	750 T
Timberland Utilities	38	350	NA	
Gulf Isles National Seashore	3	1,022	8,000	
Florida Drum Company	27	NA	NA	
Monsanto Textile	37	6,240	1,895	
University of West Florida	37	1,440	195	
Gonzalez Utilities Assn.	37	900	40	

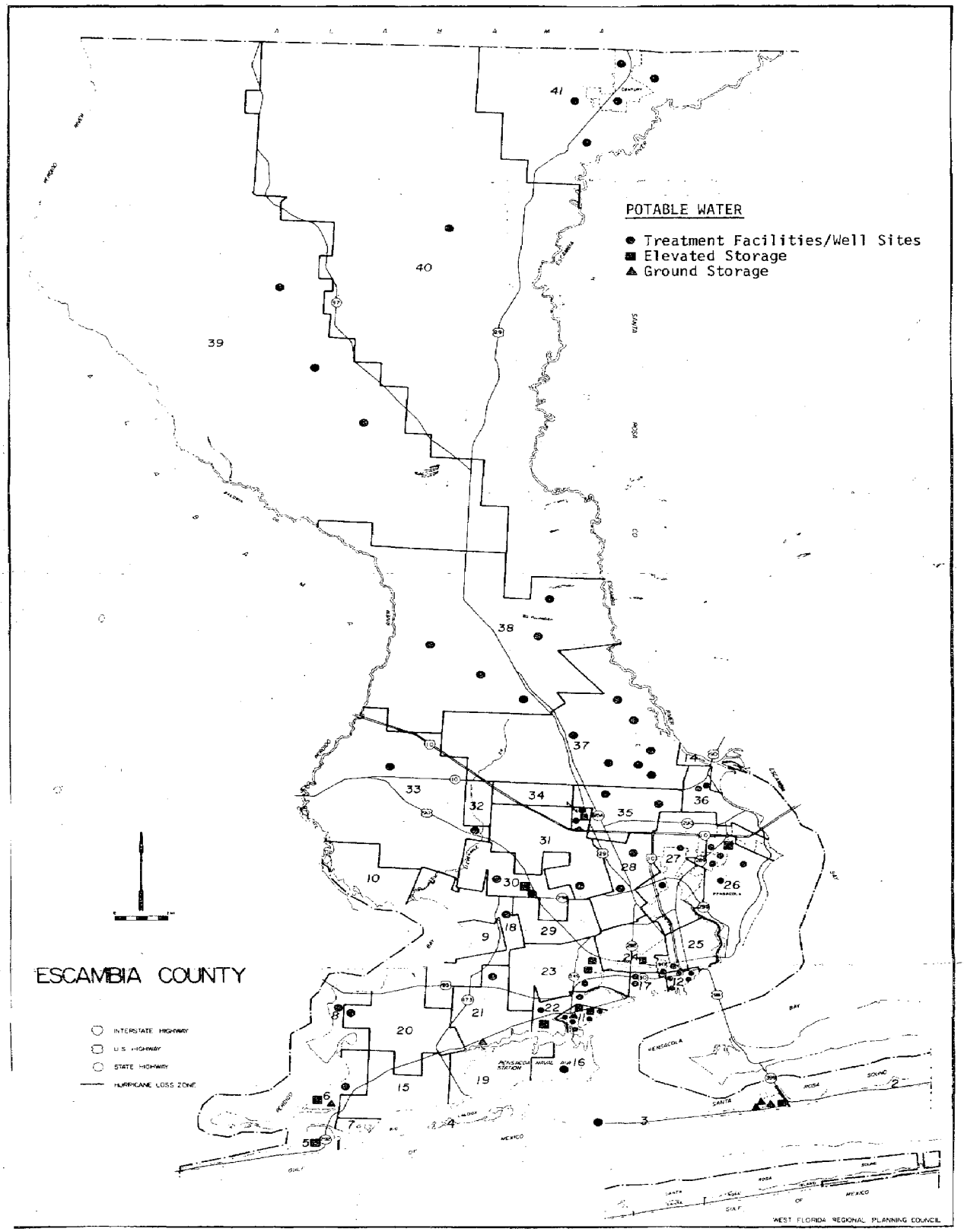
M = Million
T = Thousand

SURVEY OF PUBLIC UTILITIES

POTABLE WATER FACILITIES - ESCAMBIA COUNTY

Facility Name	Loss Zone	Design Capacity (000) Gallons	Storage Capacity (000) Gallons	Value Assessment ($)
Cottage Hill Water Works	38	864	35	
Farm Hill Utilities	38	593	70	
Molino Utilities	38	1,008	288	
Champion Paper Co.	38	34,560	995	
Walnut Hill Water Works	39	612	75	
Bratt-Davisville Water System	39, 40	864	80	
R.L.D.S. Campground	41	144	1,300	
Town of Century	41	800	100	
Central Water Works	41	576	140	

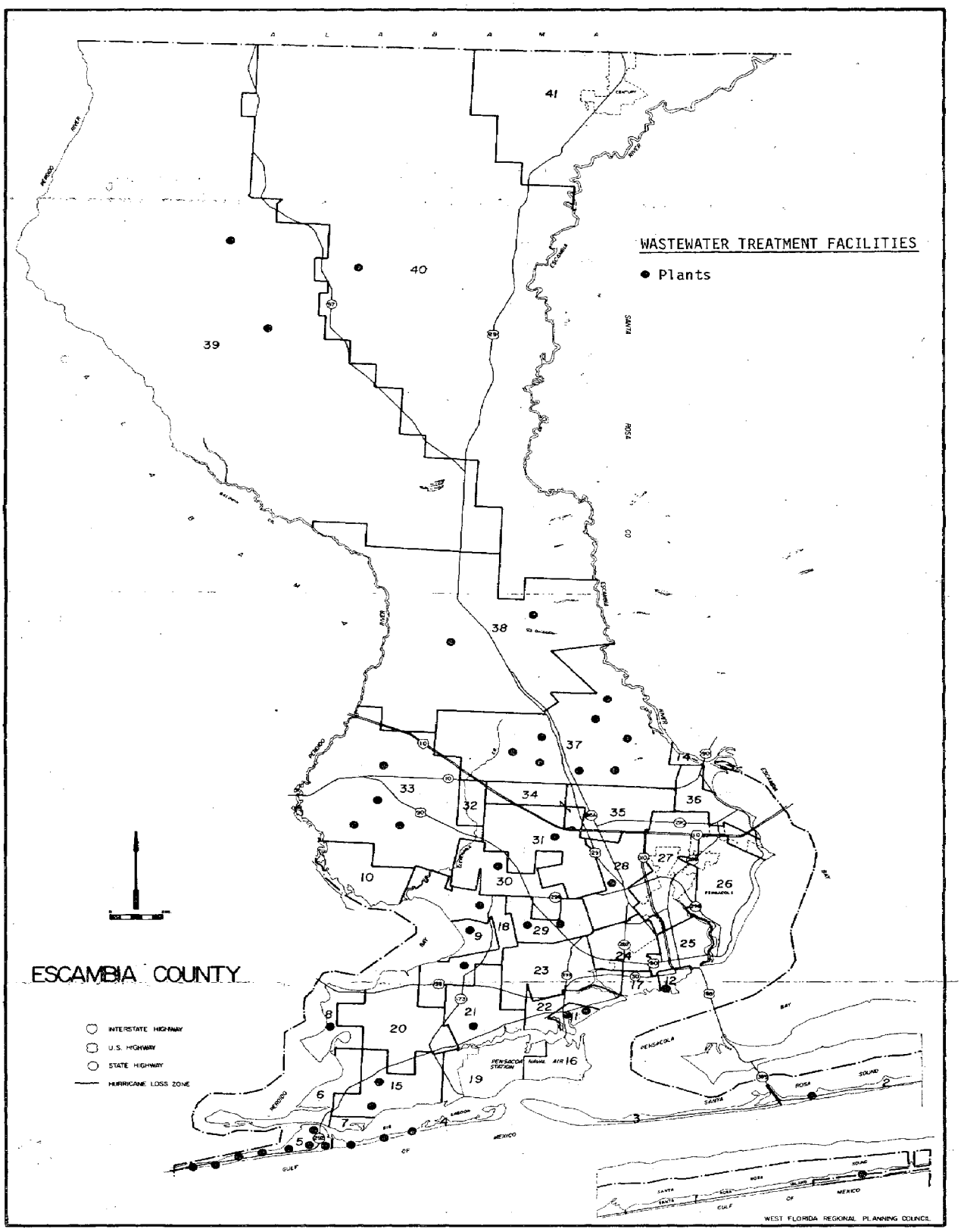
M = Million
T = Thousand


POTABLE WATER
Treatment Facilities/Well Sites
Elevated Storage
Ground Storage
ESCAMBIA COUNTY
INTERSTATE HIGHWAY
U.S. HIGHWAY
STATE HIGHWAY
HURRICANE LOSS ZONE
WEST FLORIDA REGIONAL PLANNING COUNCIL

SURVEY OF PUBLIC FACILITIES - WASTEWATER TREATMENT FACILITIES
ESCAMBIA COUNTY

Facility Name	Loss Zone	Service Pop.	Design Capacity (MG/D)	Level of Treatment	Effluent Disposal Method
Navarre Beach	2	1,480	.900	Secondary	Surface Water & Spray Irrigation
SRIA	2	4,192	1.20	Secondary	Surface Water
City of Century	4	220	.025	Secondary	Surface Waters
Vista Del Mar	4	100	.050	Secondary	Percolation Pond
Gulfside Condo	4	3,000	.030	Secondary	Percolation Ponds
Seawind Condo	5	465	.050	Secondary	Drain Field
Mariner Condos	5	100	.060	Secondary	Percolation Pond
Needle Rush Point	5	15	.025	Secondary	Drain Field
Sandy Key Condos	5	NA	.050	Secondary	Dual Absorption Beds
Seaspray	5	NA	.060	Secondary	Drain Field
Shipwatch	5	NA	.065	Secondary	Percolation Pond
Sundown Condo	5	20	.024	Secondary	Percolation Pond
Windward Condos	5	50	.150	Secondary	Percolation Ponds
Weekly Bayou	8	235	.030	Secondary	Percolation Ponds
Perdido Bay Country Club	9	100	.005	Secondary	Drain Field
Moreno Courts	11	1,400	.210	Secondary	Percolation Pond
Warrington	11	13,350	2.0	Secondary	Surface Waters
Mainstreet	12	97,133	20.0	Secondary	Surface
Grande Lagoon	15	380	.050	Secondary	Percolation Pond

Southwind Marine	15	NA	Septic Tank, 5000 Gallons		Drain Field
Fountain Blue Mobile Home	18	110	.0125	Secondary	Surface Waters
Pensacola Greyhound Racing	18	1,800	.024	Secondary	Drain Field
Bayou Grande Villa	21	312	.041	Secondary	Surface Waters
University Mall	28	NA	.060	Secondary	Spray Field Irrigation
Avondale	29	5,610	1.0	Secondary	Surface Waters
Century Woods Apartments	29	25	.018	Secondary	Percolation Ponds
N.A.S. Saufley Field	30	1,500	.210	Secondary	Surface Water
Timberlake Mobile Home	31	250	.060	Secondary	Surface Waters
Beulah School	33	630	.018	Secondary	Percolation Ponds
Florida DOT, I-10 Rest	33	Transient	.015	Secondary	Drainfield
Lakeview Mobile Estates	33	300	.060	Secondary	Surface
Pine Forest Work Center	33	100	.005	Secondary	Drain Field
Pine Meadow Elementary	37	615	.012	Secondary	Pond and Drain Field
Azalea Trace	37	440	.060	Secondary	Evaporation-Perc Ponds
Grantwood Apartments	37	82	.018	Secondary	Percolation Pond
McArthur School	37	890	.028	Secondary	Percolation Pond
Scenic Hills Country Club	37	3,600	.988	Secondary	Spray Irrigation
Tate High School	37	2,129	.030	Secondary	Percolation Pond
UWF	37	5,000	.500	Secondary	Surface Waters
Webbs Apartments	37	158	.008	Secondary	Percolation Ponds
Escambia County Road Camp	38	150	.015	Secondary	Surface Water
Wild Oak Farms	38	90	.040	Secondary	Percolation/Evaporation Ponds
Molino Elementary	39	204	.012	Secondary	Percolation Pond
Ernest Ward High	39	463	.012	Secondary	Drainfield
Bluff Springs Campground	4	Transient	.014	---	No Discharge


WASTEWATER TREATMENT FACILITIES
● Plants
ESCAMBIA COUNTY
INTERSTATE HIGHWAY
U.S. HIGHWAY
STATE HIGHWAY
HURRICANE LOSS ZONE
WEST FLORIDA REGIONAL PLANNING COUNCIL

Electric Utility Facilities

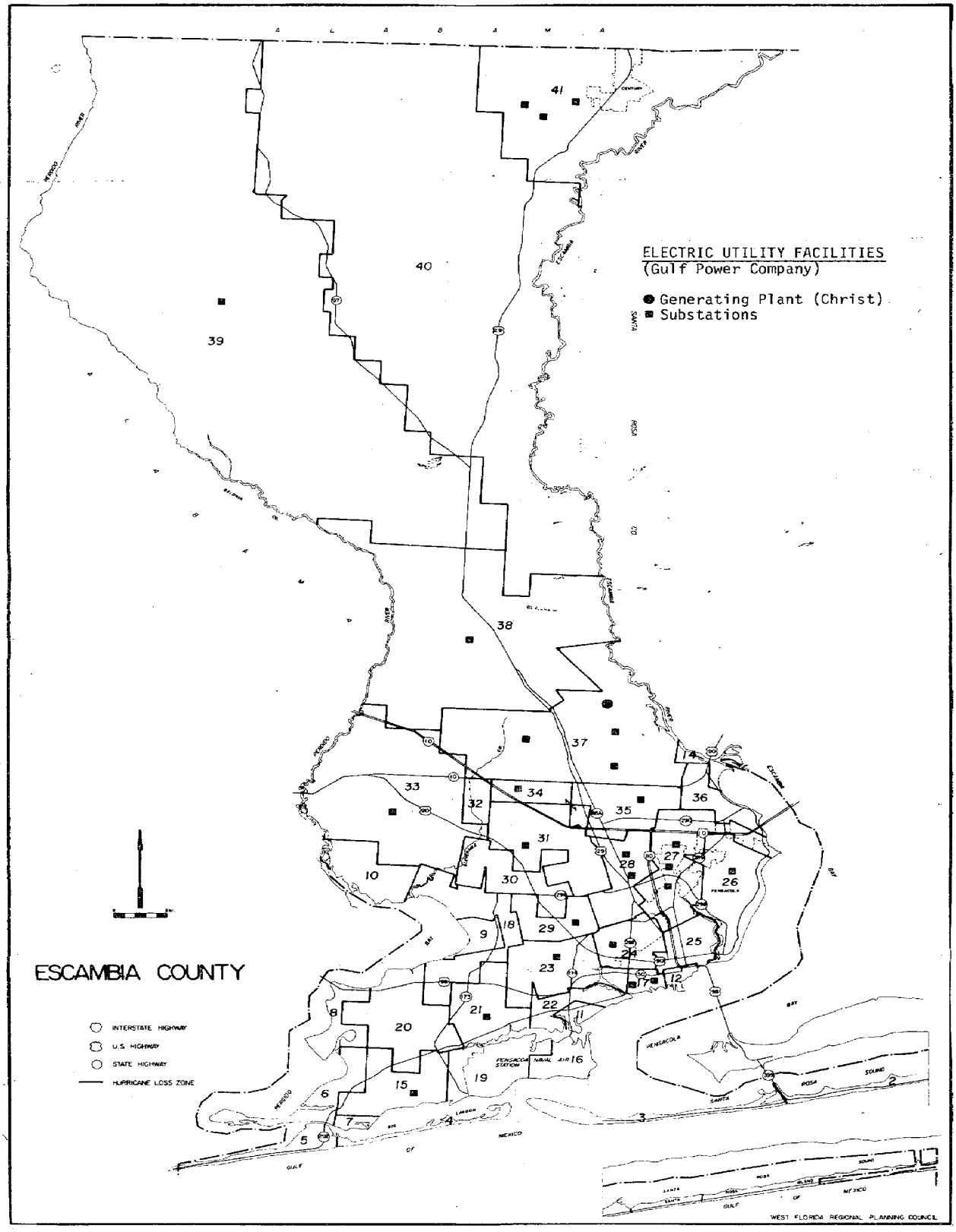
Utility Facility	Loss Zone	Service Population	Voltage Class	Replacement Cost
Gulf Power Electric Utility Facilities				
ESCAMBIA COUNTY		247,360		
L.L. & E.	41		46	SEE NOTE BELOW
Century	41		46	
Byrnville	41		115	
Molino Crossroads	39		115	
Chemstrand	37		115	
Cantonment	38		115	
Scenic Hills	35		115	
Pine Forest	34		115	
Beulah	33		115	
Eastgate	27		115	
Oakfield	28		115	
Cordova	26		115	
Honeysuckle	27		115	
Brentwood	28		115	
Bellview	31		230	
Bayou Marcus	29		115	
Fairfield	24		115	
Bayou Chico	23		115	
Goulding	27		115	

Average present day replacement cost for Gulf Power Company substations:
- Voltage Class 46 KV - $0.5 Million
- Voltage Class 115 KV - $1 Million
- Voltage Class 230 KV - $4 Million

Electric Utility Facilities

Utility Facility	Loss Zone	Service Population	Voltage Class	Replacement Cost
ESCAMBIA COUNTY				
Devilliers	17		115	
Romana	17		115	
Beach Haven	21		115	
Inerarity	15		115	
Crist 115	37		115	
Crist 230	37		230	
Crist Steam Plant	37			

Average present day replacement cost for Gulf Power Company substations:
Voltage Class 46 KV - $0.5 Million
Voltage Class 115 KV - $1 Million
Voltage Class 230 KV - $4 Million

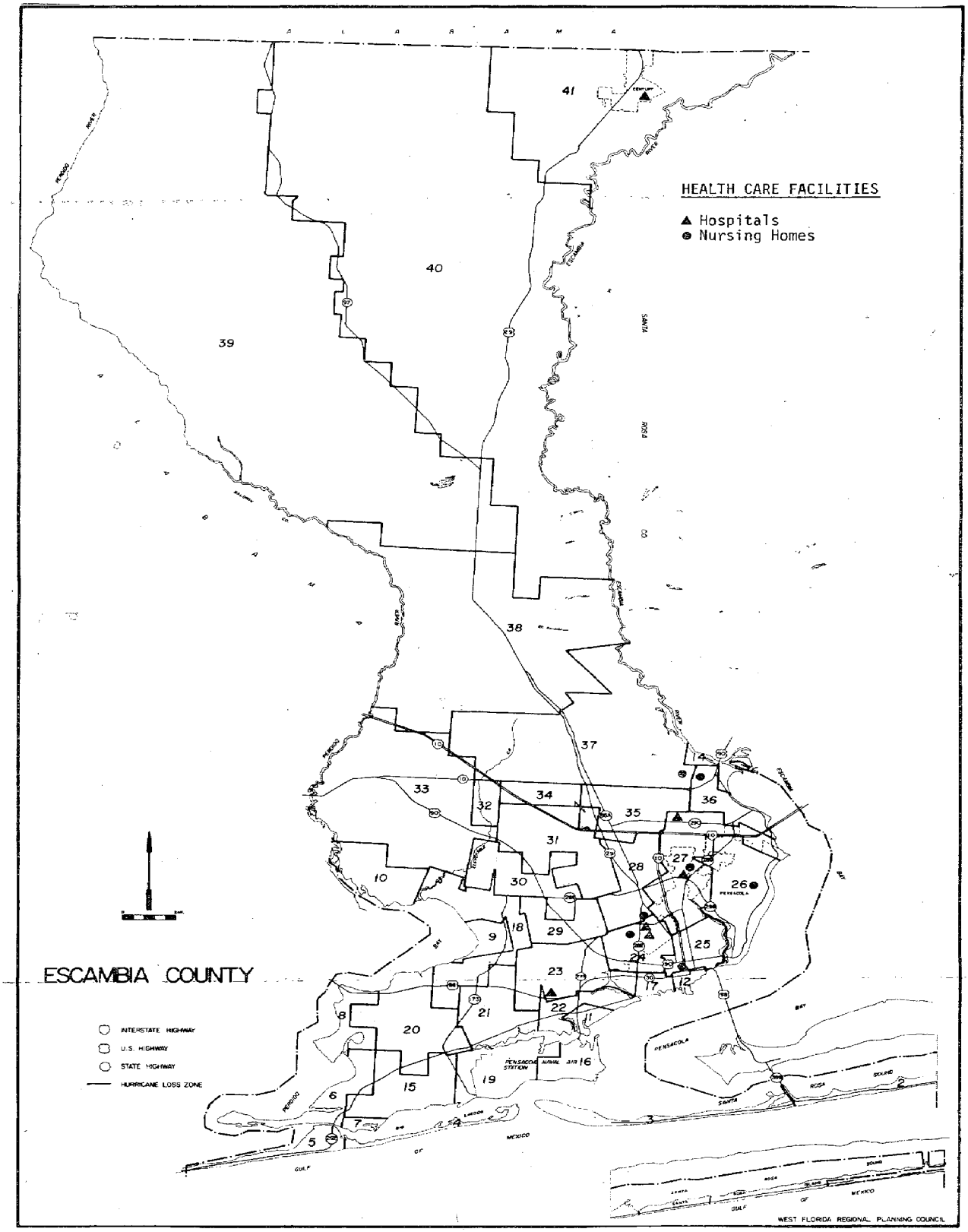

ELECTRIC UTILITY FACILITIES
(Gulf Power Company)
Generating Plant (Christ)
Substations
ESCAMBIA COUNTY
INTERSTATE HIGHWAY
U.S. HIGHWAY
STATE HIGHWAY
HURRICANE LOSS ZONE
WEST FLORIDA REGIONAL PLANNING COUNCIL

SURVEY OF PUBLIC FACILITIES - HEALTH CARE
ESCAMBIA COUNTY

	Facility Name/Location	Number of beds	Loss Zone	Value Assessment ($)
HOSPITALS	Baptist Hospital 1000 West Moreno Pensacola	520	24	44 M
	Baptist Specialty Care		24	3 M
	Sacred Heart Hospital 5151 North 9th Avenue Pensacola	380	27	70 M
	University Hospital 1200 West Leonard Pensacola	130	24	8.3 M
	West Florida Regional Medical Center 8383 North Davis Highway Pensacola	547	27	
	Navy Hospital West Highway 98 Pensacola	310	23	15 M
	Century Hospital 3rd and Mayo Century	34	41	1.9 M
NURSING HOMES	Azalea Trace 10100 Hillview Drive Pensacola	90	36	
	Bluffs 4343 Langley Drive Pensacola	120	26	3.5 M
	Cross Creek 10040 Hillview Drive Pensacola	114	37	
	Haven of our Lady of Peace 5203 North 9th Avenue Pensacola	89	27	
	Magnolias 600 West Gregory Street Pensacola	210	25	

SURVEY OF PUBLIC FACILITIES - HEALTH CARE
ESCAMBIA COUNTY

Facility Name/Location	Number of beds	Loss Zone	Value Assessment ($)
Pensacola Health Care 171 West Avery Pensacola	118	24	
Escambia County Nursing Home 3107 North "H" Street Pensacola	155	24	1 M


HEALTH CARE FACILITIES
▲ Hospitals
● Nursing Homes
ESCAMBIA COUNTY
INTERSTATE HIGHWAY
U.S. HIGHWAY
STATE HIGHWAY
HURRICANE LOSS ZONE
WEST FLORIDA REGIONAL PLANNING COUNCIL

SURVEY OF PUBLIC UTILITIES

POTABLE WATER FACILITIES - SANTA ROSA COUNTY

Facility Name	Loss Zone	Design Capacity (000) Gallons	Storage Capacity (000) Gallons	Value Assessment ($)
Gulf Breeze Water Dept.	1	1,656	1,100	1.1 M
Navarre Beach,				
Division of Santa Rosa County	2	1,008	245	5.05 M*
Elevated Storage	2		333	
Elevated Storage	2		250	
Midway Water System		3,456	370	
Booster Pumps	10			200 T
Ground Storage	2		75	75 T
Ground Storage	10		250	250 T
Elevated Storage	9		300	300 T
Elevated Storage	10		140	100 T
Holley-Navarre Water System	3, 10	1,238	230	70 T
Elevated Tanks (2)			260	260 T
Santa Rosa County Utilities	9	1,728	185	
Gulf Isles Utilities	9	320	5,001	
Bagdad-Garson Water System	15	1,080	295	
City of Milton Water System	21, 22, 25	4,176	545	125 T
American Cyanamid	8	1,152	495	
Colonial Pines Mobile Homes	10	360	2,000	
Blackwater River State Park	14	30	NA	
I-10 Rest Area	15	22	634	
Pace Water System	18	5,100	10,700	
Point Baker Water System	23, 25	1,260	10,125	
Chumuckla Water System	24	468	40	
Moore Creek-Mt. Carmel Utility	26	1,296	98	

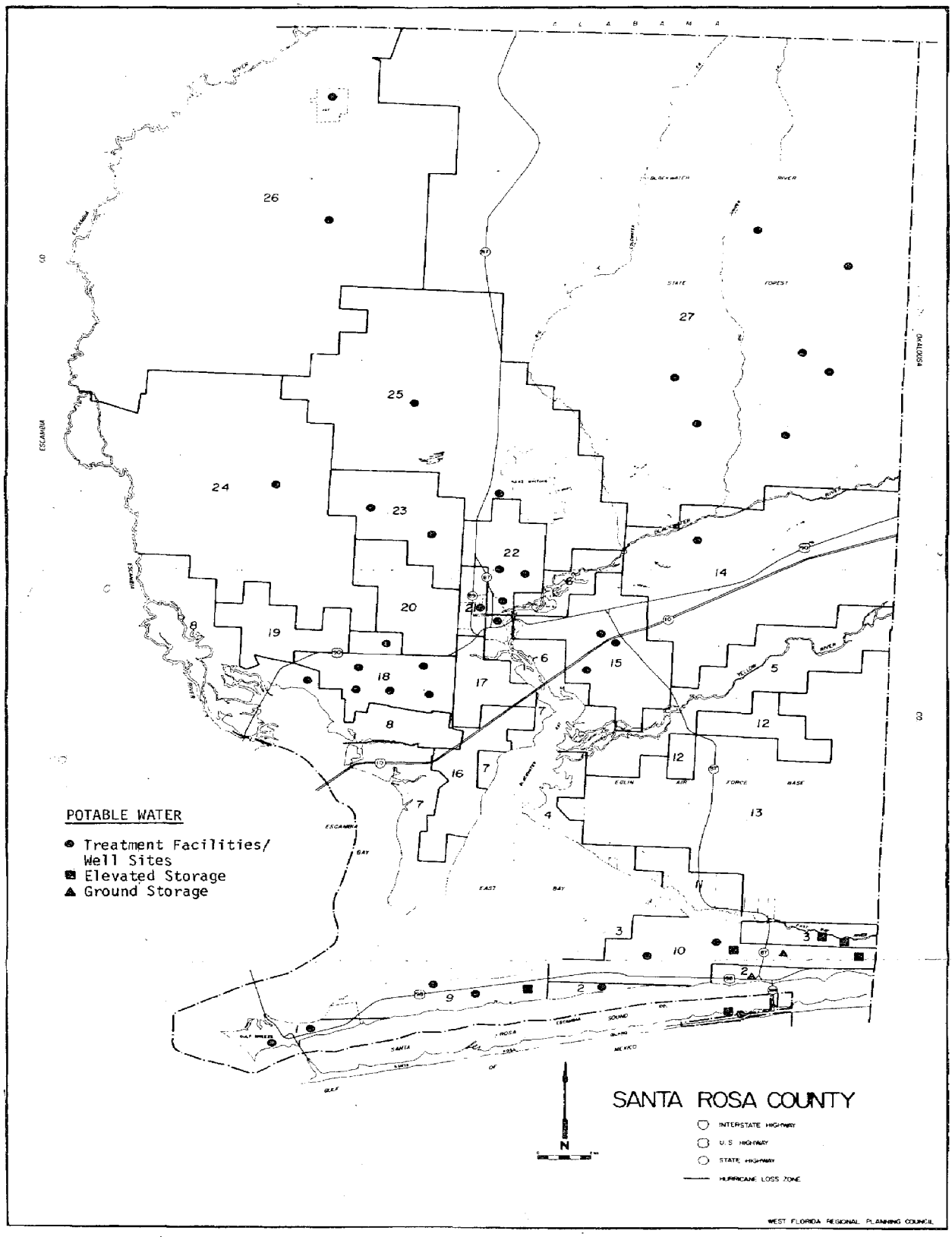
M = Million
T = Thousand
*Includes wastewater treatment value assessment.

SURVEY OF PUBLIC UTILITIES

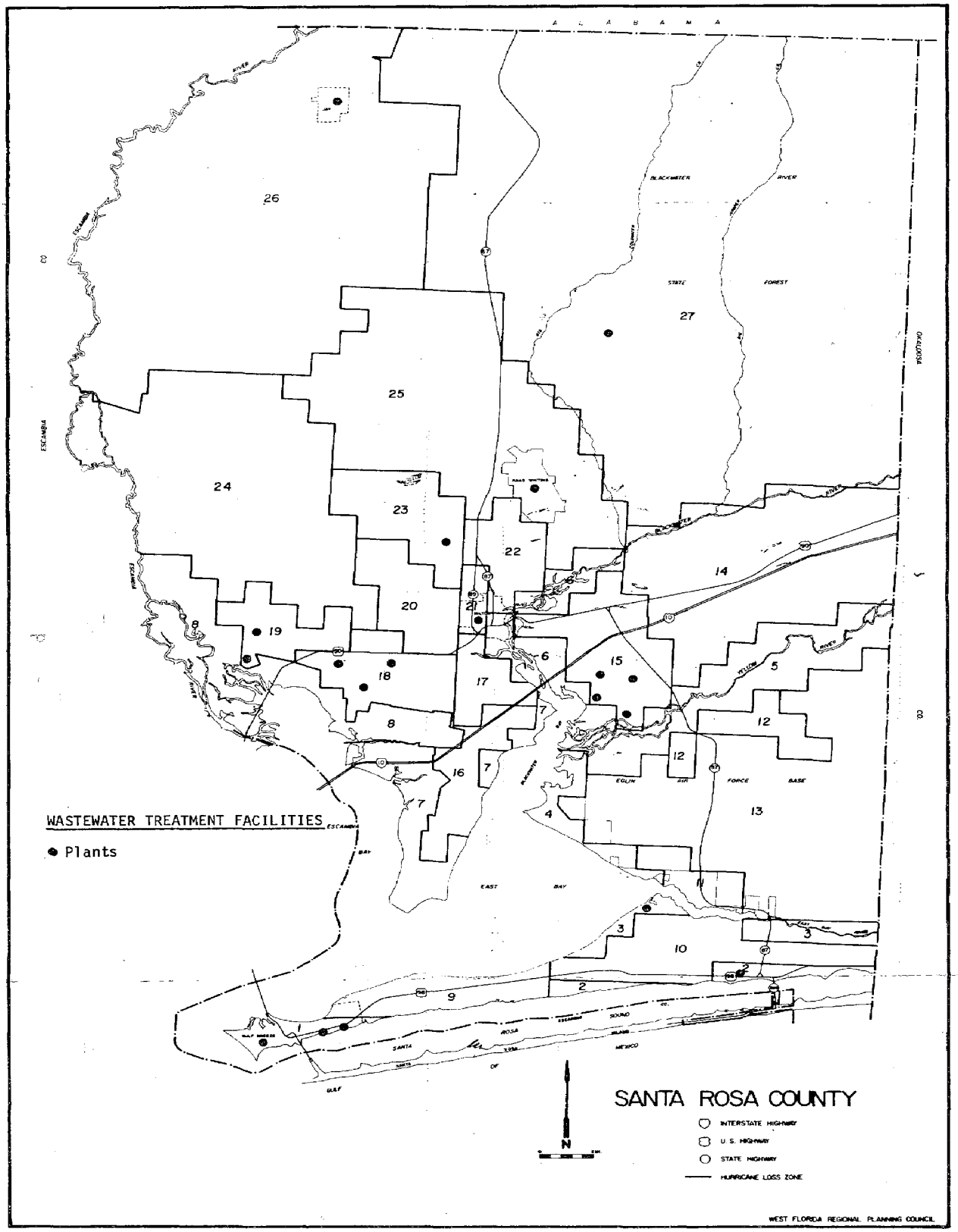
POTABLE WATER FACILITIES - SANTA ROSA COUNTY

Facility Name	Loss Zone	Design Capacity (000) Gallons	Storage Capacity (000) Gallons	Value Assessment ($)
City of Jay Utilities	26	648	75	
Krul Recreation Area	27	86	NA	
Coldwater Recreation Area	27	28	NA	
Camp Paquette Recreation Area	27	86	NA	
Blackwater Forest Headquarters	27	216	NA	
Bear Lake Recreation Area	27	86	NA	
Berrydale Water System	27	1,008	6,075	

M = Million
T = Thousand
*Includes wastewater treatment value assessment.


POTABLE WATER
Treatment Facilities/ Well Sites
Elevated Storage
Ground Storage
SANTA ROSA COUNTY
INTERSTATE HIGHWAY
U.S. HIGHWAY
STATE HIGHWAY
HURRICANE LOSS ZONE
N
WEST FLORIDA REGIONAL PLANNING COUNCIL

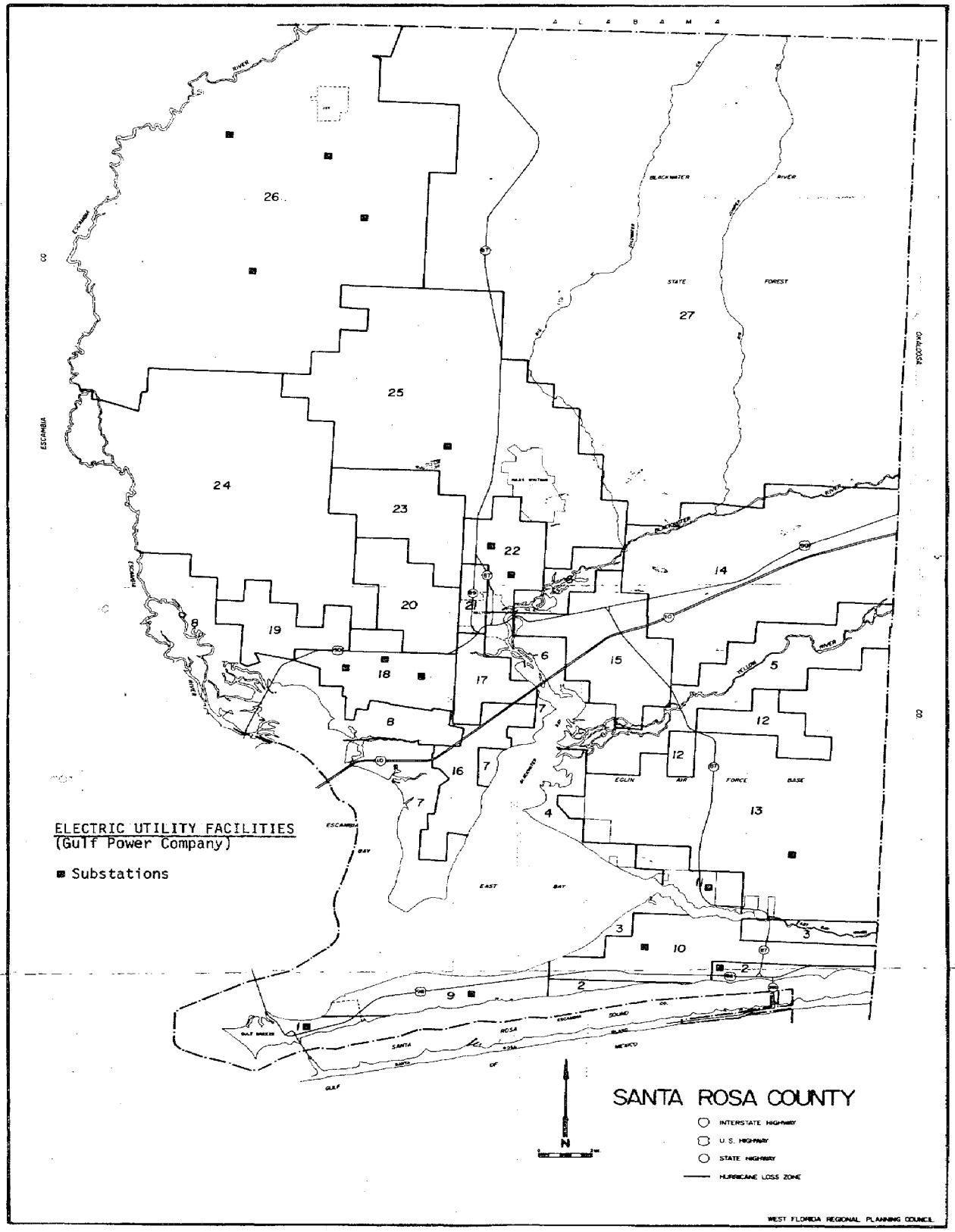
Facility Name	Loss Zone	Service Pop.	Design Capacity (MG/D)	Level of Treatment	Effluent Disposal Method
City of Gulf Breeze	1	2,100	.500	Secondary	Sub-surface Water
Santa Rosa Shores	1	3,962	.600	Secondary	Spray Irrigation
Villa Venyce Subdivision	1	1,900	.315	Secondary	Percolation Ponds
Holley-Navarre Elementary	2	425	.006	Secondary	Underground Drain
Colonial Pines	3	150	.020	Secondary	Drain Field
I-10 Rest Area (East)	15	Transient	.010	Secondary	Drain Field
I-10 Rest Area (West)	15	Transient	.010	Secondary	Drain Field
East Milton Elementary	15	425	.005	Secondary	Surface Water
Santa Rosa Industrial Park	15	8	.030	Secondary	Percolation Ponds
Santa Villa Subdivision	18	840 approx.	.120	Secondary	Percolation Ponds
Pea Ridge Elementary	18	NA	.012	Secondary	Drain Field
Pace Elementary School	18	900	.015	Secondary	Drain Field
Pace High School	19	1,262	.024	Secondary	Percolation Pond
Andora Village	19	94	.012	Secondary	Drain Field
City of Milton	21	9,395	2.5	Secondary	Surface Water
Milton Voc.-Tech.	23	NA	.007	Secondary	Drain Field
Whiting Field NAS	25	4,088	.870	Secondary	Surface Waters
Town of Jay	26	600	.100	Secondary	Bray Mill Creek
Berrydale Forestry	27	115	.020	Secondary	Evaporation


WASTEWATER TREATMENT FACILITIES
Plants
SANTA ROSA COUNTY
INTERSTATE HIGHWAY
U. S. HIGHWAY
STATE HIGHWAY
HURRICANE LOSS ZONE
N
ALABAMA
ESCAMBIA
OKALOOSA
BLACKWATER
RIVER
STATE
FOREST
YELLOW
EGLIN
AIR
FORCE
BASE
EAST
BAY
SANTA
ROSA
SOUND
GULF
OF
MEXICO
WEST FLORIDA REGIONAL PLANNING COUNCIL

Electric Utility Facilities

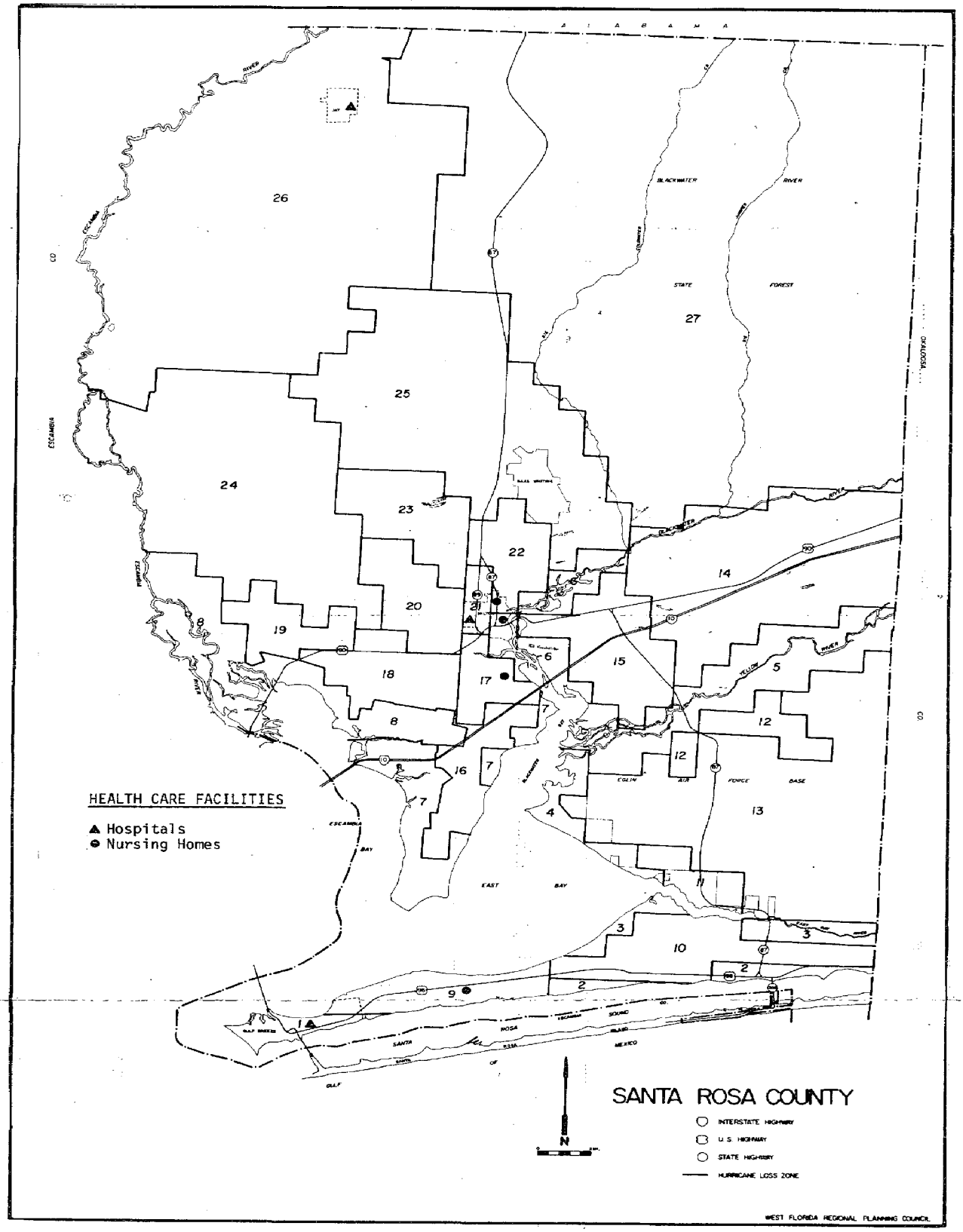
Utility Facility	Loss Zone	Service Population	Voltage Class	Replacement Cost
Gulf Power Electric Utility Facilities				
SANTA ROSA COUNTY		49,050		
Humble Oil	26		115	
Amerada Hess	26		46	
Humble Oil #5	26		46	
Blackjack	26		115	
Whiting Field	25		46	
Munson Road	22		115	
Jay Road	22		115	
Pace	18		115	
Escambia Chemical	18		115	
American Cyanamid	18		115	
Holley	11		115	
East Bay	2		115	
Navarre	10		46	
Live Oak	9		115	
Gulf Breeze	1		115	
Choctaw	13		46	
Escambia River Electric Co-operative				
No information available.				

Average present day replacement cost for Gulf Power Company substations:
Voltage Class 46 KV - $0.5 Million
Voltage Class 115 KV - $1 Million
Voltage Class 230 KV - $4 Million


ALABAMA
ESCAMBIA CO.
OKALOOSA CO.
BLACKWATER RIVER
STATE FOREST
EGLIN AIR FORCE BASE
EAST BAY
ESCAMBIA BAY
SANTA ROSA SOUND
GULF BREEZE
GULF OF MEXICO
ELECTRIC UTILITY FACILITIES
(Gulf Power Company)
Substations
SANTA ROSA COUNTY
INTERSTATE HIGHWAY
U.S. HIGHWAY
STATE HIGHWAY
HURRICANE LOSS ZONE
N
WEST FLORIDA REGIONAL PLANNING COUNCIL

SURVEY OF PUBLIC FACILITIES - HEALTH CARE
SANTA ROSA COUNTY

	Facility/Name	Number of beds	Loss Zone	Value Assessment ($)
HOSPITALS	Santa Rosa Hospital 1450 Berryhill Road Milton	153	20	12 M
	Jay Hospital P.O. Box 397 Jay	55	26	606 T
	Gulf Breeze Hospital 1110 Gulf Breeze Parkway Gulf Breeze	60	1	8 M
NURSING HOMES	Santa Rosa Convalescent Center 500 Broad Street Milton	120	6	1.12 M
	Annettes Nursing Home P.O. Box 258 Bagdad	22	17	94 T
	West Florida Community Center 400 Stewart Street, N.E. Milton	100	22	3.45 M
	Bay Breeze Nursing and Retirement Center Gulf Breeze	120	9	3.5 M


HEALTH CARE FACILITIES
Hospitals
Nursing Homes
SANTA ROSA COUNTY
INTERSTATE HIGHWAY
U.S. HIGHWAY
STATE HIGHWAY
HURRICANE LOSS ZONE
N
WEST FLORIDA REGIONAL PLANNING COUNCIL

SURVEY OF PUBLIC UTILITIES

POTABLE WATER FACILITIES - OKALOOSA COUNTY

Facility Name	Loss Zone	Design Capacity (000) Gallons	Storage Capacity (000) Gallons	Value Assessment ($)
Destin Water Users	1	5,400	110.75	2.2 M
Elevated Storage	1		1,000	1 M
Elevated Storage	1		75	75 T
Seashore Village Water	3, 16	1,238	200	423 T
Elevated Tanks (2)			200	
City of Fort Walton Beach	14			2.1 M
Ground Storage	14		1,000	500 T
Ground Storage	14		150	150 T
Ground Storage	14		223	223 T
Ground Storage	14		250	250 T
Ground Storage	14		27	27 T
Elevated Storage	14		100	100 T
Elevated Storage	14		100	100 T
Elevated Storage	14		200	200 T
Elevated Storage	14		200	200 T
Elevated Storage	14		500	500 T
Okaloosa County Water & Sewer	17	9,000	2,145	
Elevated Storage	17		200	200 T
Elevated Storage	17		250	250 T
Elevated Storage	17		500	500 T
Elevated Storage	17		200	200 T
Elevated Storage	17		200	200 T
Elevated Storage	17		500	500 T
Elevated Storage	17		100	100 T
City of Valparaiso	20	2,592	295	
City of Niceville	21	4,392	835	
Silver Beach Wayside Park	1	43	NA	
Rocky Bayou Estates	5, 21	202	2,865	
Fred Gannon State Rec.	5	72	NA	

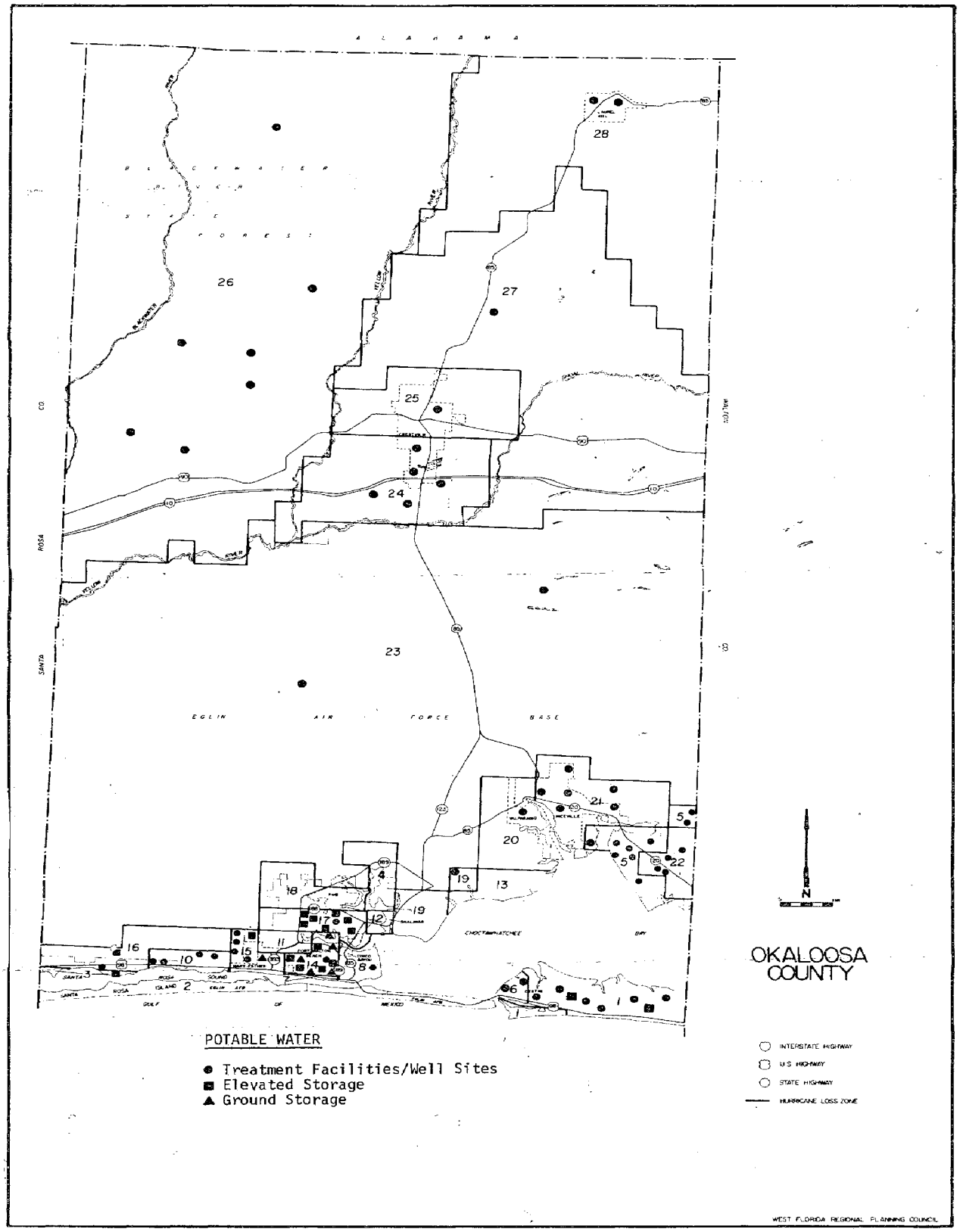
M = Million
T = Thousand

SURVEY OF PUBLIC UTILITIES

POTABLE WATER FACILITIES - OKALOOSA COUNTY

Facility Name	Loss Zone	Design Capacity (000) Gallons	Storage Capacity (000) Gallons	Value Assessment ($)
Northgate Devel. Water System	8	1,150	295	
Rush's Mobile Home Ranch	10	202	2,865	
Town of Mary Esther	15	1,400	476	
Elevated Storage			350	
Ground Storage			176	
Pippin Mobile Home Park	16	72	525	
Bluewater Bay-Raintree Devel.	22	2,196	4,691	
Maxwell Guntner Rec. Area	22	560	NA	
City of Crestview Water Dept.	24	3,204	845	
Sundial Mobile Home Park	24	72	1,000	
Crestview Country Club	24	NA	NA	
I-10 Rest Area	24	86	NA	
Scottish Inn	24	43	220	
Del Cerro Vista Subdivision	25	72	1,000	
Baker Water System	26	936	75	
Holt Water Works	26	350	75	
Milligan Water Works	26	288	853	
Hurricane Lake Rec. Area	26	86	NA	
Karrich Lake Rec. Area	26	86	NA	
Auburn Water System	27	1,800	350	
City of Laurel Hill	28	569	5,060	

M = Million
T = Thousand

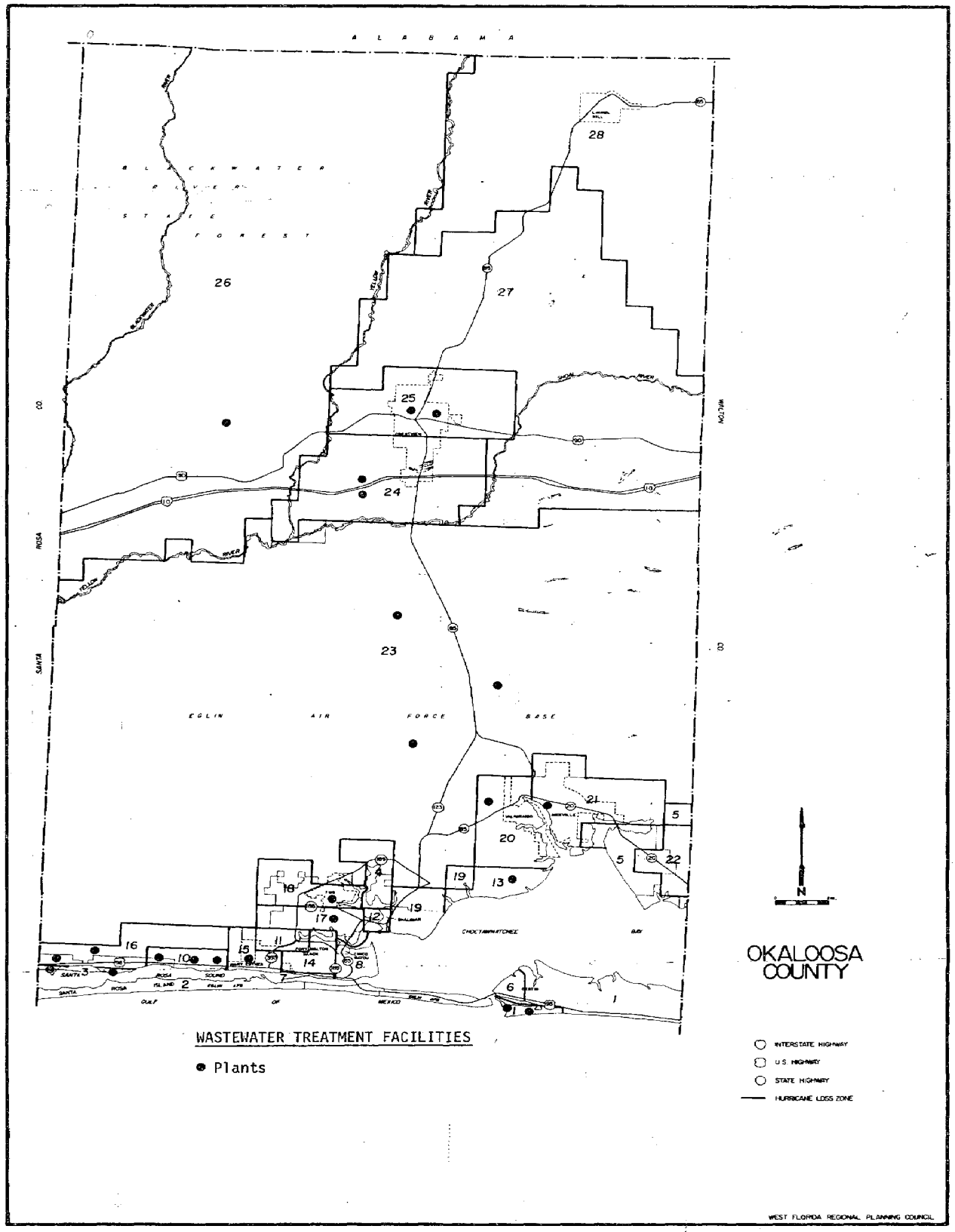

ALABAMA
BLACKWATER RIVER STATE FOREST
EGLIN AIR FORCE BASE
SANTA ROSA SOUND
GULF OF MEXICO
CHOCTAWHATCHEE BAY
OKALOOSA COUNTY
POTABLE WATER
Treatment Facilities/Well Sites
Elevated Storage
Ground Storage
INTERSTATE HIGHWAY
U.S. HIGHWAY
STATE HIGHWAY
HURRICANE LOSS ZONE
WEST FLORIDA REGIONAL PLANNING COUNCIL

SURVEY OF PUBLIC UTILITIES WASTEWATER TREATMENT FACILITIES

Okaloosa County

Facility Name	Loss Zone	Service Pop.	Design Capacity (MG/D)	Level of Treatment	Effluent Disposal Method
Breakaway Condos	1	21	.018	Secondary	Drain Field
Destin Water Users	1	6,000	3.0	Secondary	Percolation Ponds
Pippin Mobile Home	3	42	.005	Secondary	Drain Field
Victoria Mobile Home	3	250	.015	Secondary	Percolation/Evaporation Pond
Florosa Elementary	10	600	.024	Secondary	Drain Field
The Marks Apartments	10	[under construction]			
Westwood Apartments	10	225	.042	Secondary	Percolation Pond
Eglin AFB - PLEW STP	13	15,000	1.5	Secondary	Spray Field
Town of Mary Esther	15	4,250	.8	Secondary	Spray Irrigation
Chateau Pres de la Mer	16	164	.060	Secondary	Percolation Pond
Hurlburt Field	16	5,105	.726	Secondary	Spray Irrigation
Okaloosa County Water and Sewer	17	NA	5.12	Secondary	Spray Field
Fort Walton Beach	18	23,200	4.5	Secondary	Spray Field
Eglin AFB (Main Base)	20	5,000	.500	Secondary	Spray Irrigation
Regional WWTP - Niceville/Valparaiso	21	12,000	2.0	Secondary	Spray Irrigation
Okaloosa County Auxiliary Field #3	23	325	.125	Secondary	Spray
Eglin Auxiliary Field #6	23	300	.072	Secondary	Spray
Okaloosa County Correctional Institution	23	190	.05	Secondary	Spray Irrigation

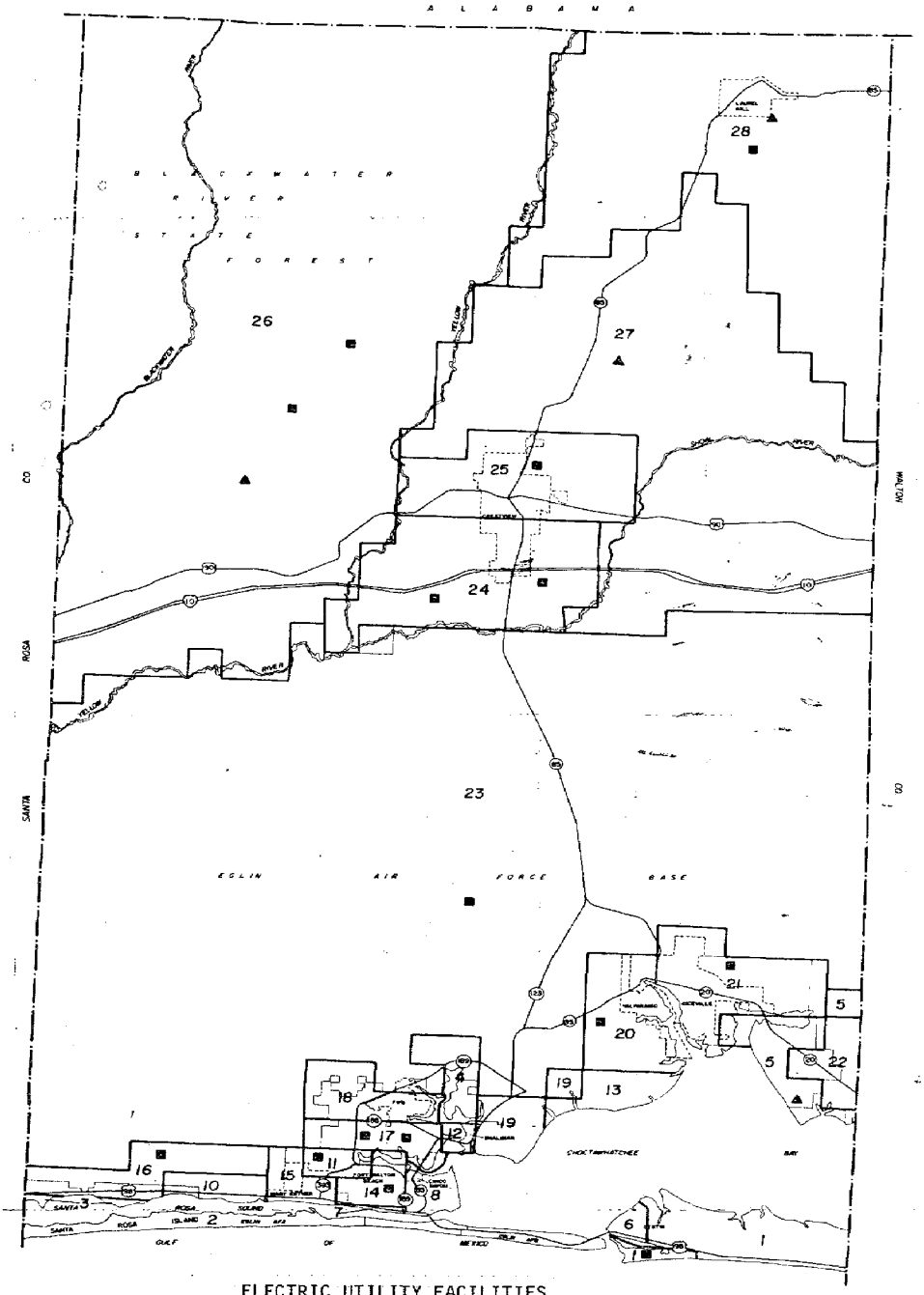
East I-10 Rest Area	24	Transient	.010	Secondary	Drain Field
West I-10 Rest Area	24	Transient	.010	Secondary	Drain Field
Bob Sikes Airport	25	NA	.050	Secondary	Surface Waters
City of Crestview	25	6,674	1.5	Secondary	Surface Water
Baker Elementary and High School	26	900	.024	Secondary	Percolation Ponds


ALABAMA
BLACKWATER RIVER STATE FOREST
EGLIN AIR FORCE BASE
SANTA ROSA
WALTON
CHOCTAWHATCHEE BAY
SANTA ROSA SOUND
SANTA ROSA ISLAND
GULF OF MEXICO
N
OKALOOSA COUNTY
WASTEWATER TREATMENT FACILITIES
Plants
INTERSTATE HIGHWAY
U.S. HIGHWAY
STATE HIGHWAY
HURRICANE LOSS ZONE
WEST FLORIDA REGIONAL PLANNING COUNCIL

Electric Utility Facilities

Utility Facility	Loss Zone	Service Population	Voltage Class	Replacement Cost
Gulf Power Electric Utility Facilities				
OKALOOSA COUNTY		108,800		
Destin	1		115	
Ft. Walton	14		115	
Sullivan Street	11		115	
Hurlburt	16		115	
Wright	17		230	
Ocean City	17		115	
Shalimar	23		115	
Valparaiso	20		115	
Niceville	21		115	
Shoal River	24		230	
South Crestview	24		115	
Crestview City	25		46	
Milligan	26		46	
Baker	26		46	
Laurel Hill	28		46	
Choctawhatchee Electric Cooperative Incorporated				
Blue Water Bay Substation	5	1,786		
Baker Substation	26	1,423		
Auburn	27	1,278		
Laurel Hill Substation	28	847		

Average present day replacement cost for Gulf Power Company substations:
Voltage Class 46 KV - $0.5 Million
Voltage Class 115 KV - $1 Million



OKALOOSA COUNTY

ELECTRIC UTILITY FACILITIES
(Gulf Power Company and Choctawhatchee Electric Cooperative, Inc. (CHELCO))

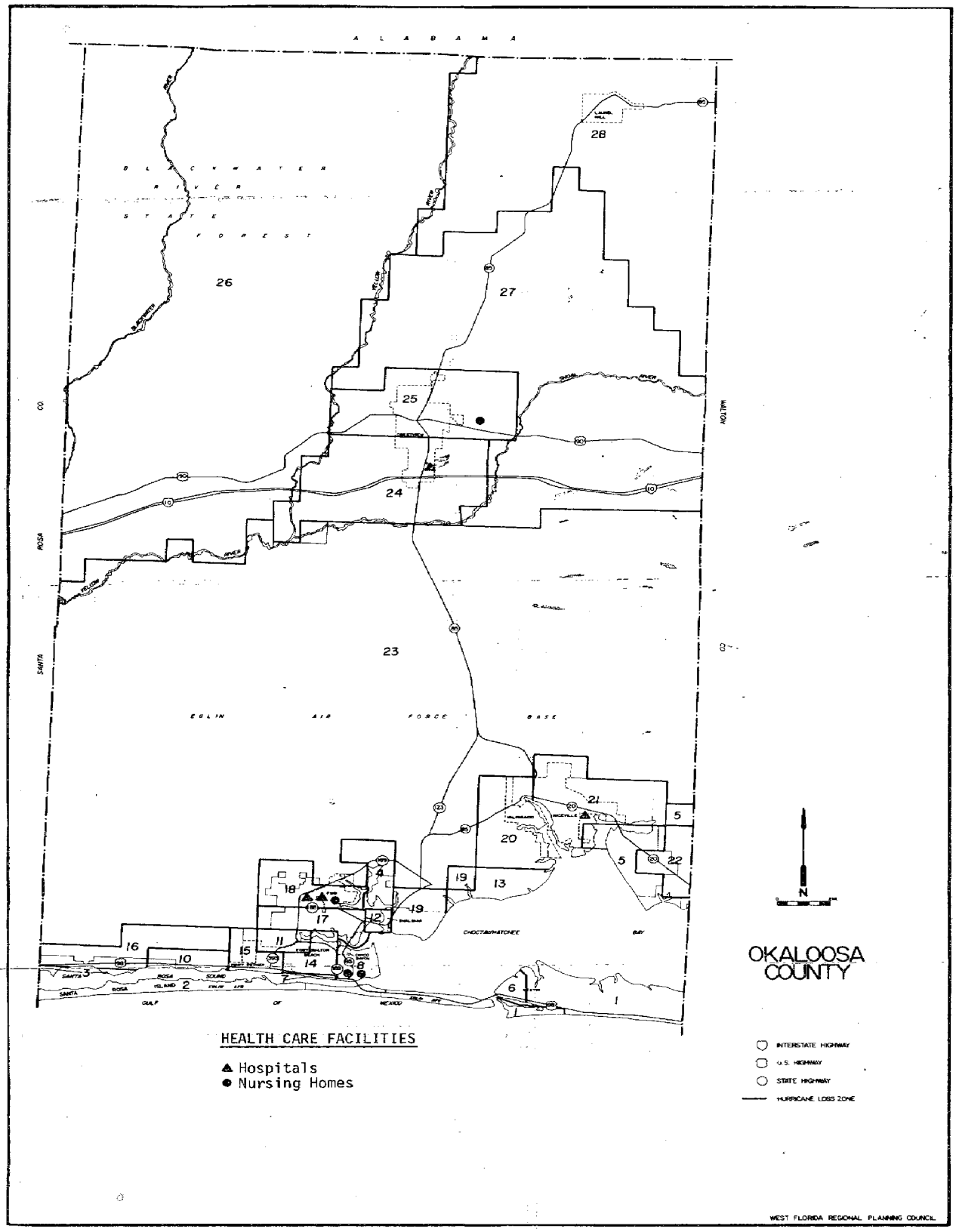
■ Substations (Gulf Power)
▲ Substations (CHELCO)

INTERSTATE HIGHWAY
U.S. HIGHWAY
STATE HIGHWAY
HURRICANE LOSS ZONE

WEST FLORIDA REGIONAL PLANNING COUNCIL

SURVEY OF PUBLIC FACILITIES - HEALTH CARE
OKALOOSA COUNTY

	Facility Name/Location	Number of beds	Loss Zone	Value Assessment ($)
HOSPITALS	Humana Hospital 1000 Mar Walt Drive Fort Walton Beach		18	6,268 M
	Gulf Coast Hospital 1015 Mar Walt Drive Fort Walton Beach		18	1,584 M
	Twin City Hospital Highway 85 North Niceville		20	2,229 M
	Crestview Community Hospital 151 Redstone Avenue, S.E. Crestview		24	2,975 M
NURSING HOMES	Crestview Manor 1849 First Street, East Crestview		25	650 M
	Ft. Walton Beach Extended Care 207 Hospital Drive, N.E. Fort Walton Beach		8	NA
	Gulf Convalescent Center 114 3rd Street, S.E. Fort Walton Beach		14	1,962
	Westwood Retirement Center 1001 Mar Walt Drive Fort Walton Beach		18	included in Gulf Coast Hospital (listed above)


ALABAMA
BLACKWATER RIVER STATE FOREST
EGLIN AIR FORCE BASE
CHOCTAWHATCHEE BAY
GULF OF MEXICO
SANTA ROSA ISLAND
SANTA ROSA COUNTY
OKALOOSA COUNTY
HEALTH CARE FACILITIES
Hospitals
Nursing Homes
INTERSTATE HIGHWAY
U.S. HIGHWAY
STATE HIGHWAY
HURRICANE LOSS ZONE
WEST FLORIDA REGIONAL PLANNING COUNCIL

SURVEY OF PUBLIC UTILITIES

POTABLE WATER FACILITIES - WALTON COUNTY

Facility Name	Loss Zone	Design Capacity (000) Gallons	Storage Capacity (000) Gallons	Value Assessment ($)
Grayton Beach Water	1	99	1,500	
Seagrove Beach Water	1	504	38,513	
South Walton County Utility	6	2,261	10,318	760 T
Elevated Storage	6		300	300 T
Elevated Storage	6		400	300 T
Inlet Beach Water System	6	374	12,500	
Grayton Beach State Rec. Area	1	144	848	
Holiday Travel Park	1	144	848	
Sun and Sand Motel	2	21	500	
Eden State Gardens	2	23	0	
Chapman's Seafood Restaurant	3	0	50	
Nick's Seafood Restaurant	4	43	500	
Basin Bayou State Rec. Area	4	72	500	
Sandcliff's Condominium	6	324	0	
Santa Rosa Golf & Beach Club	6	144	530	
Bay Elementary School	7	36	80	
City of Freeport	9	2,160	107	
Choctaw Beach Water	12	310	2,550	
Lake Sharon Estates	12	122	525	
Villa Tasso Water System	12	288	6,000	

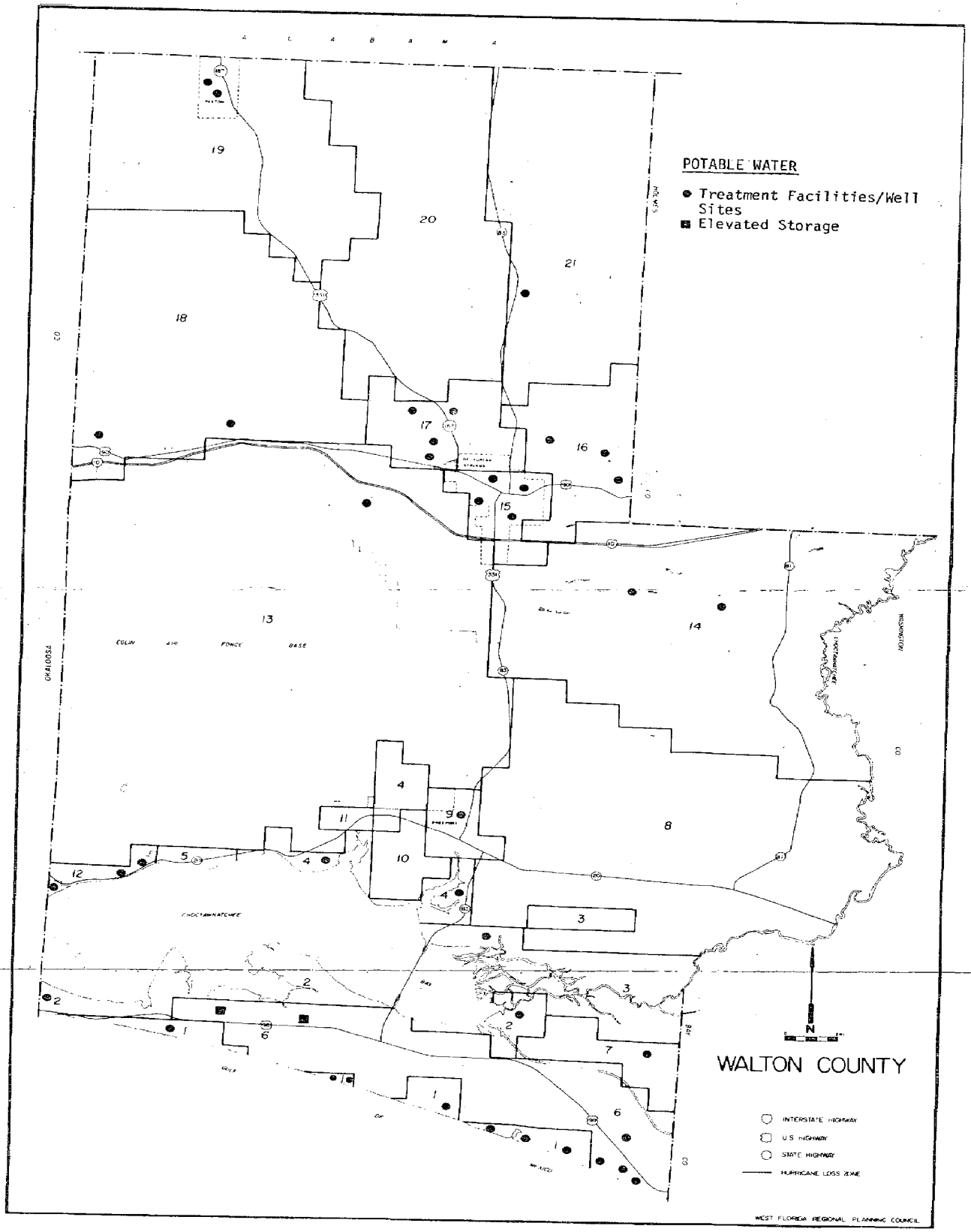
M = Million
T = Thousand
*Includes wastewater treatment value assessment.

SURVEY OF PUBLIC UTILITIES

POTABLE WATER FACILITIES - WALTON COUNTY

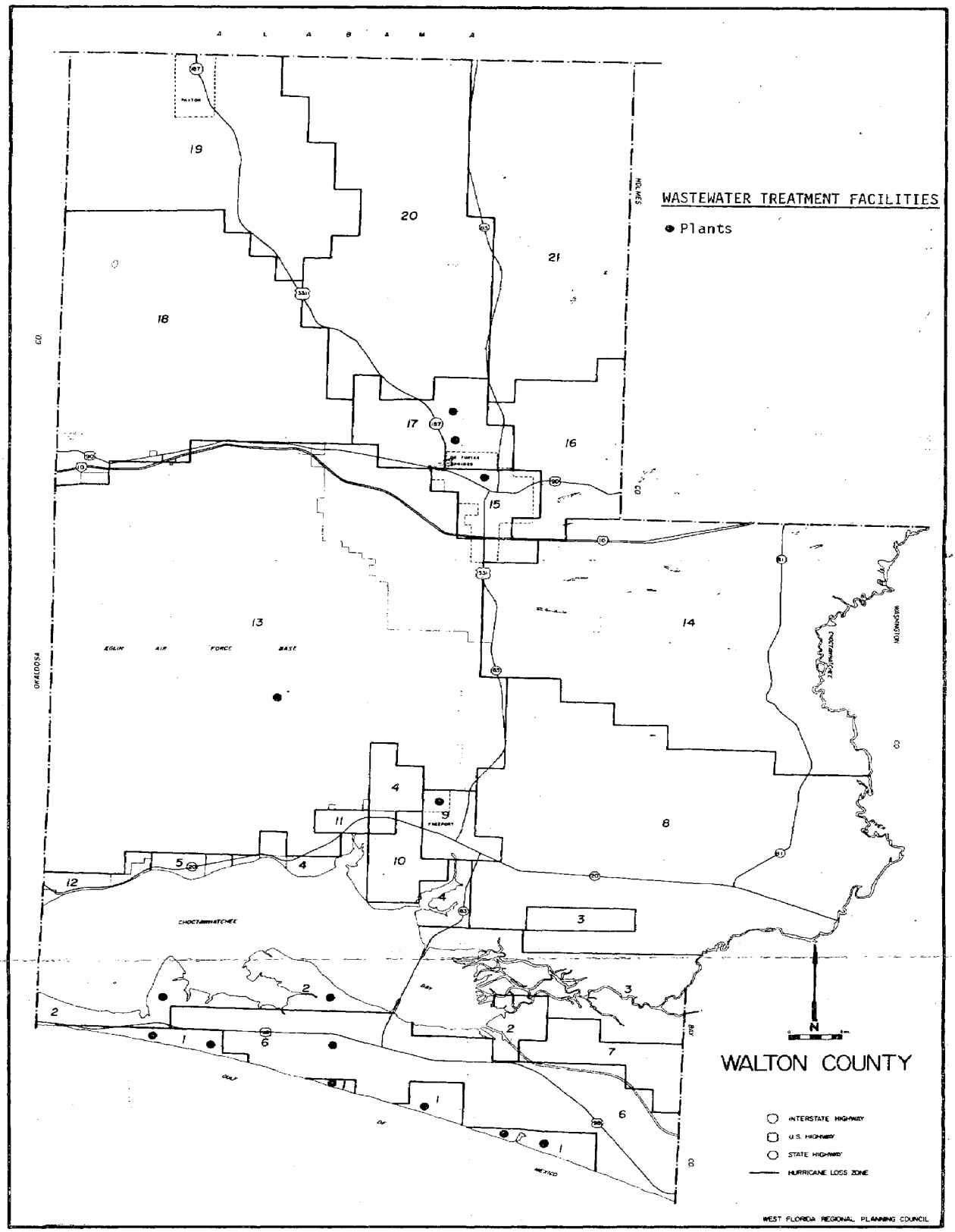
Facility Name	Loss Zone	Design Capacity (000) Gallons	Storage Capacity (000) Gallons	Value Assessment ($)
Spanish Trail Scout Res.	13	216	1,000	
Argyle Water System	14	511	95	
City of DeFuniak Springs	15	2,592	75	
Showell Farms Inc.	16	1,968	47,600	
Ten Lakes Estates	16	72	1,500	
Juniper Village Subdivision	17	79	520	
Juniper Lake Pines Subdivision	17	144	630	
Kolomoki Girl Scout Camp	17	34	0	
Roadrunner Pit Stop Restaurant	18	0	0	
Town of Mossy Head	18	288	500	
Camp Creek Water System		173	11,006	
Town of Paxton	19	864	8,100	
Bob's Restaurant	21	79	0	

M = Million
T = Thousand
*Includes wastewater treatment value assessment.


POTABLE WATER
Treatment Facilities/Well Sites
Elevated Storage
EGLIN AIR FORCE BASE
CHOCTAWHATCHEE
WALTON COUNTY
INTERSTATE HIGHWAY
U.S. HIGHWAY
STATE HIGHWAY
HURRICANE LOSS ZONE
WEST FLORIDA REGIONAL PLANNING COUNCIL

SURVEY OF PUBLIC FACILITIES - WASTEWATER TREATMENT FACILITIES
WALTON COUNTY

Facility Name	Loss Zone	Service Pop.	Design Capacity (MG/D)	Level of Treatment	Effluent Disposal Method
Cassine Gardens	1	50	.035	Secondary	Percolation Pond
Dune I Townhomes	1	49	.005	Secondary	Septic Tank
Sandliff STP	1	15	.060	Secondary	Percolation Ponds
Palms of Dune Allen	1	300	.024 MGD	Secondary	Drain Field
Hidden Beach Condo	1	200	.020 MGD	Secondary	Percolation Ponds
Seaside I	1	NA	.03 MGD	Secondary	Drain Field
Sandestin	2	2,115	.600	Secondary	Land Application
South Walton Utility	2	2,300	.980	Secondary	Percolation Ponds
Emerald Hills	6	20	.030	Secondary	Percolation Pond
Freeport High School	9	854	.015	Secondary	Percolation Ponds
Eglin AFB, Site C-6	13	200	.020	Secondary	Spray
City of DeFuniak Springs	15	3,306	.480	Secondary	Surface Waters
Maude Saunders Elementary	17	677	.015	Secondary	Percolation Ponds
Walton High School	17	980	.015	Secondary	Percolation Ponds

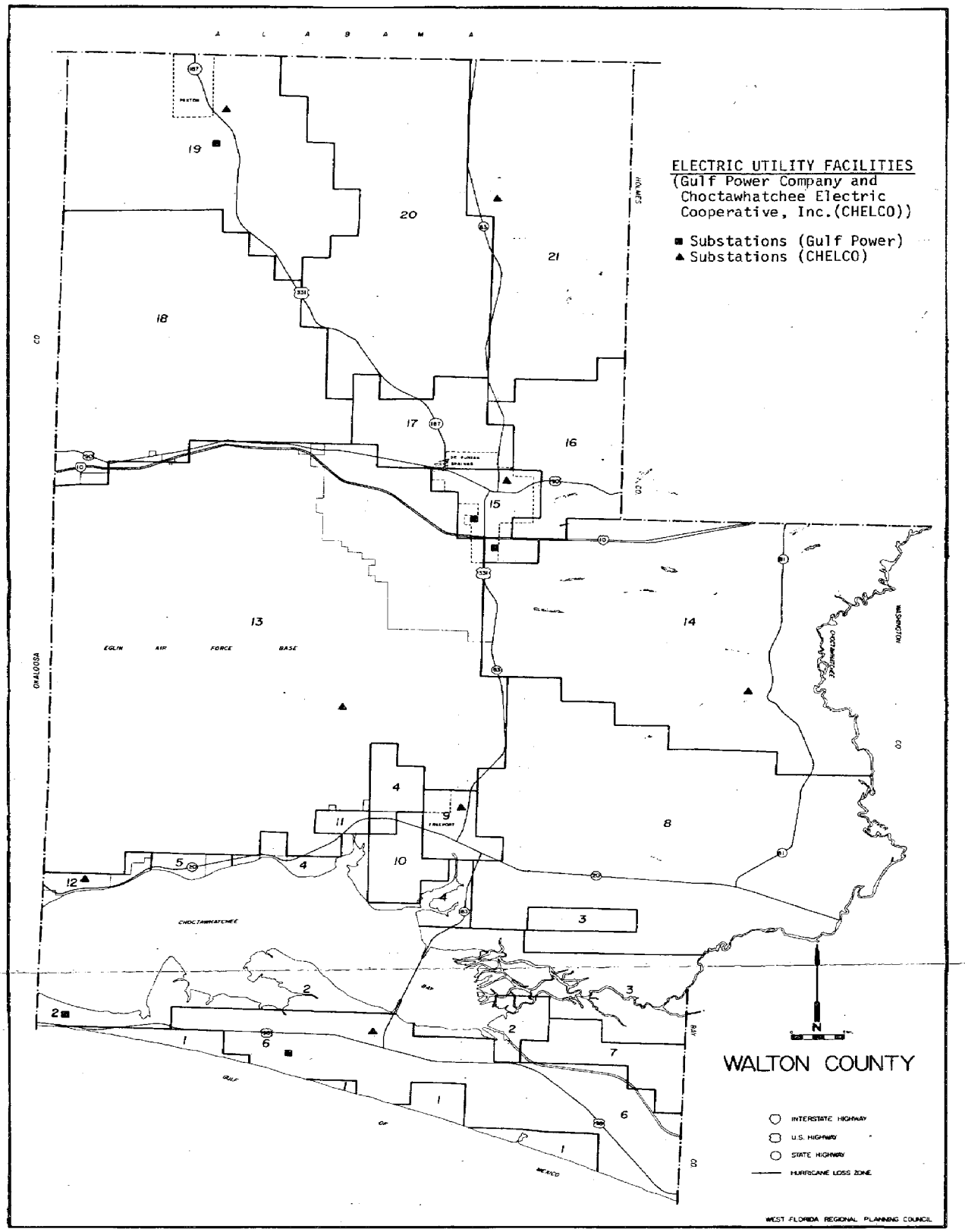

WASTEWATER TREATMENT FACILITIES
Plants
WALTON COUNTY
INTERSTATE HIGHWAY
U.S. HIGHWAY
STATE HIGHWAY
HURRICANE LOSS ZONE
WEST FLORIDA REGIONAL PLANNING COUNCIL
ALABAMA
HOLMES CO
OKALOOSA CO
WASHINGTON CO
EGLIN AIR FORCE BASE
CHOCTAWHATCHEE
BAY
GULF OF MEXICO
FREEPORT
19
20
21
18
17
16
15
13
14
8
4
9
11
10
5
12
3
2
1
6
7

Electric Utility Facilities

Utility Facility	Loss Zone	Service Population	Voltage Class	Replacement Cost
Gulf Power Electric Utility Facilities				
WALTON COUNTY		5,400		
Miramar Beach	2		115	
Santa Rosa	6		115	
DeFuniak Springs	15		46	
Glendale Road	15		115	
Paxton	19		46	
Choctawhatchee Electric Cooperative Incorporated				
Santa Rosa Substation	6	2,756*		
Freeport Substation	9	2,037		
Villa Tasso Substation	12	700		
Portland (SPADAT: USAF)	13	1		
Red Bay Substation	14	913**		
DeFuniak Springs Substation	15	3,128		
Paxton Substation	19	890		
Gendale Substation	21	641		

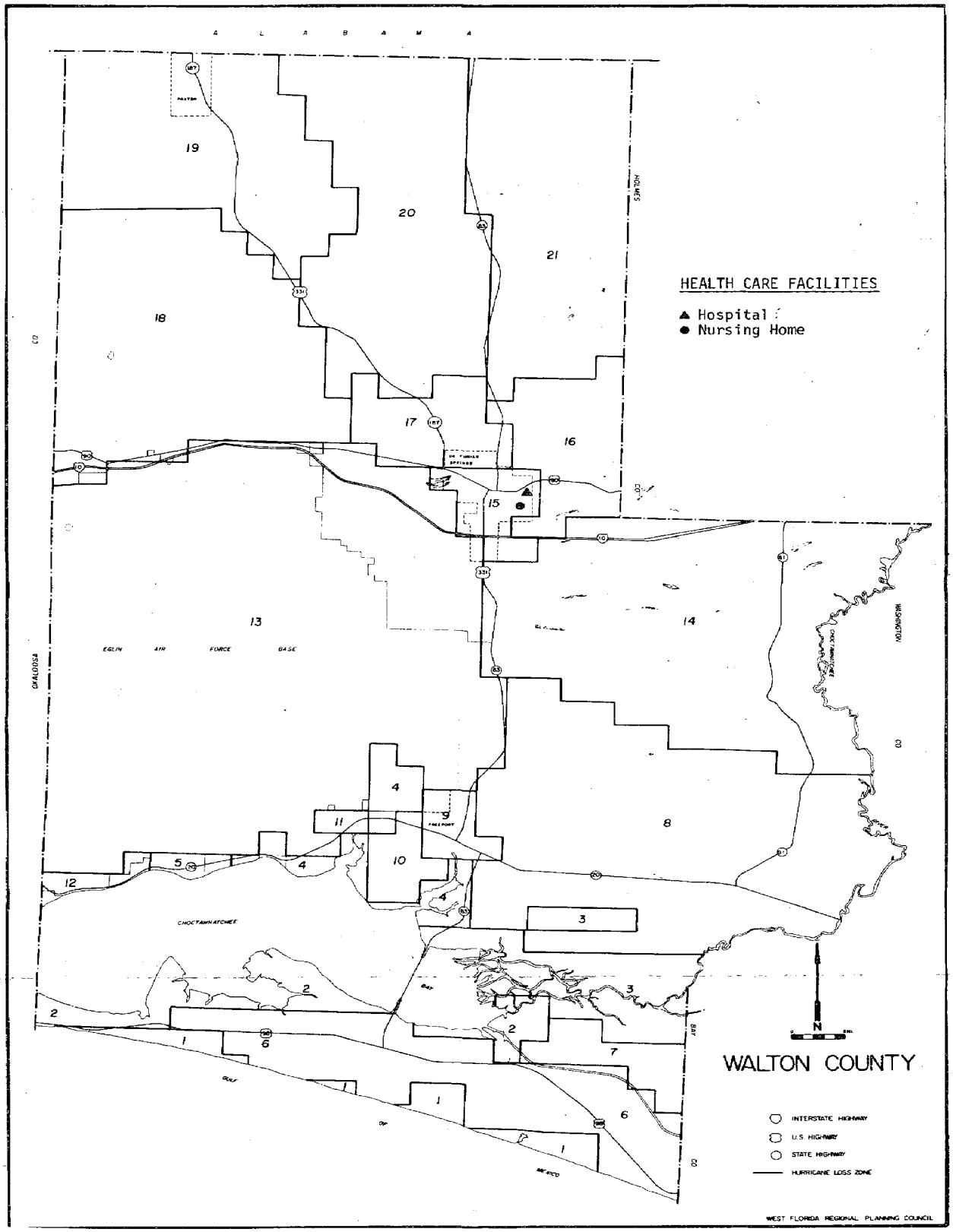
*Portion of Bay County included in service area
**Portion of Holmes County included in service area

Average present day replacement cost for Gulf Power Company substations:
Voltage Class 46 KV - $0.5 Million
Voltage Class 115 KV - $1 Million
Voltage Class 230 KV - $4 Million


ELECTRIC UTILITY FACILITIES
(Gulf Power Company and Choctawhatchee Electric Cooperative, Inc.(CHELCO))
■ Substations (Gulf Power)
▲ Substations (CHELCO)
WALTON COUNTY
INTERSTATE HIGHWAY
U.S. HIGHWAY
STATE HIGHWAY
HURRICANE LOSS ZONE
WEST FLORIDA REGIONAL PLANNING COUNCIL
EGLIN AIR FORCE BASE
CHOCTAWHATCHEE
GULF OF MEXICO
OKALOOSA CO
HOLMES CO
WASHINGTON CO
CHOCTAWHATCHEE BAY
N

SURVEY OF PUBLIC FACILITIES - HEALTH CARE
WALTON COUNTY

	Facility Name/Location	Number of beds	Loss Zone	Value Assessment ($)
HOSPITALS	Valley Springs Hospital 21 College Avenue DeFuniak Springs	100	15	
NURSING HOMES	Walton County Convalescent Center 2nd Street DeFuniak Springs	100	15	



A L A B A M A
HOLMES CO
OKALOOSA CO
WASHINGTON CO
BAY CO
HEALTH CARE FACILITIES
▲ Hospital
● Nursing Home
EGLIN AIR FORCE BASE
CHOCTAWHATCHEE
GULF OF MEXICO
WALTON COUNTY
INTERSTATE HIGHWAY
U.S. HIGHWAY
STATE HIGHWAY
HURRICANE LOSS ZONE
WEST FLORIDA REGIONAL PLANNING COUNCIL

SURVEY OF PUBLIC UTILITIES

POTABLE WATER FACILITIES - BAY COUNTY

Facility Name	Loss Zone	Design Capacity (000) Gallons	Storage Capacity (000) Gallons	Value Assessment ($)
Mexico Beach	1			1.5 M
Elevated Storage	1		100	100 T
Ground Storage	1		150	150 T
Ground Storage	1		100	75 T
Panama City Beach	4			4 M
Elevated Storage	4		150	250 T
Elevated Storage	4		80	150 T
Ground Storage			1,250	1.25 M
Ground Storage	4		500	500 T
Bay County Water System	36			11 M
Elevated Storage	36		1,000	1 M
Ground Storage	35		2,000	2 M
*City of Lynn Haven	8			
*City of Parker	12			
*City of Callaway	22			
*City of Springfield	26			
*City of Panama City	28			
*Town of Cedar Grove	32			
Bayside Park	3	NA	NA	
Camp Helen	5	144	NA	
Marlin Motel & Grill	6	14	NA	
Southport Elementary School	8	4	4,000	
West Bay Elementary School	17	72	750	
La.-Pacific Corp.	17	216	460	

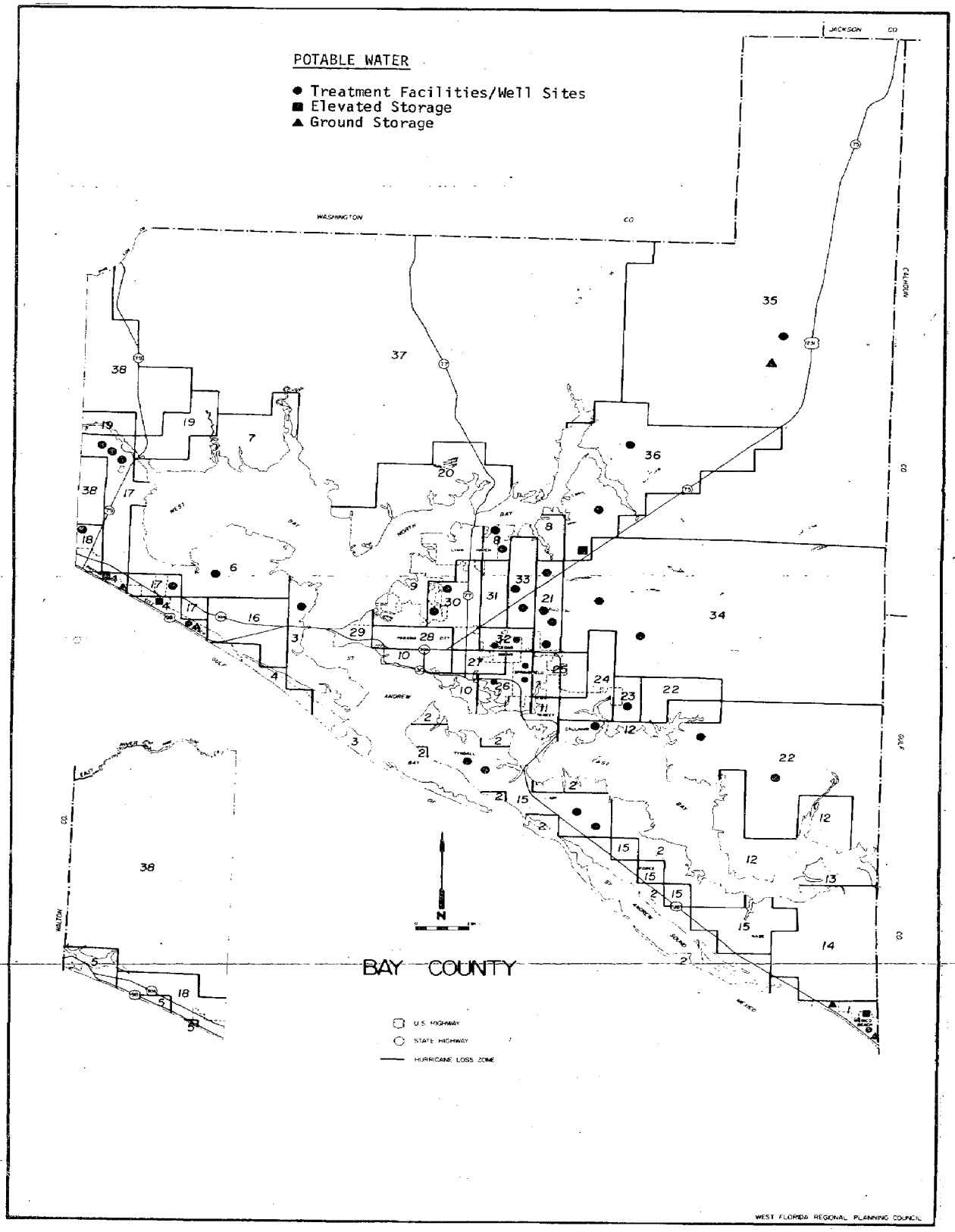
M = Million
T = Thousand
*Purchase water from Bay County Water System
(no facilities/structures)

SURVEY OF PUBLIC UTILITIES

POTABLE WATER FACILITIES - BAY COUNTY

Facility Name	Loss Zone	Design Capacity (000) Gallons	Storage Capacity (000) Gallons	Value Assessment ($)
Lansing-Smith Electric	18	720	20,000	
K.O.A. Campground	21	187	1,000	
Lisenby Mobile Home Park	21	64	NA	
Derby Woods Subdivision	21	NA	NA	
Bland's Trailer Park	21	108	1,000	
Crews Mobile Home Park	22	86	NA	
Bay Pines Mobile Home Park	23	28	500	
Southwest Forest Industries	26	1,000	NA	
Magnolia Beach Campgrounds	26	86	NA	
Woodlawn Utility	30	NA	NA	
St. Andrew Bay Real Estate	30	43	500	
Legear Mobile Home Park	32	43	440	
Waller Elementary School	35	108	775	
Whistling Oyster Bar	36	72	NA	

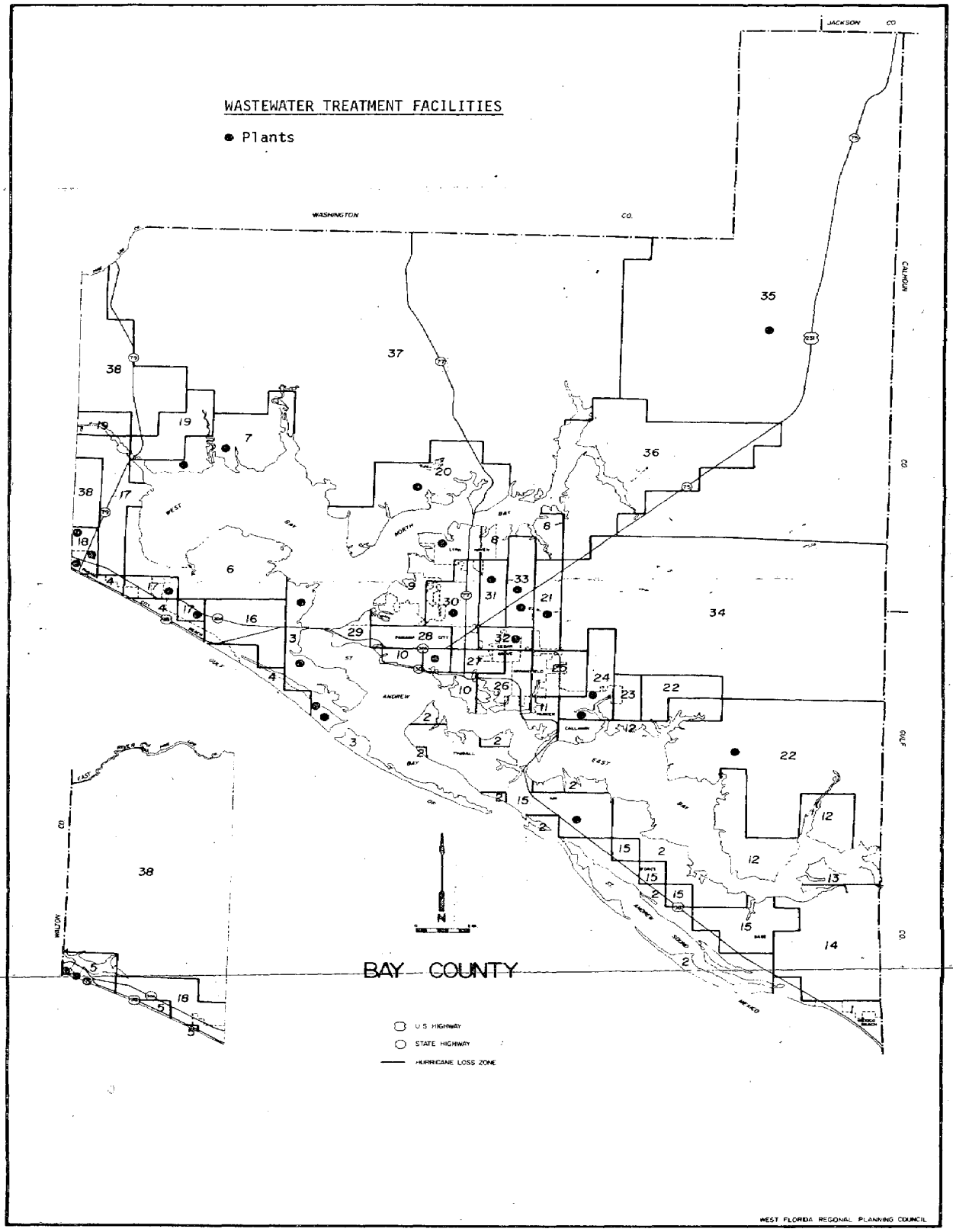
M = Million
T = Thousand


POTABLE WATER
● Treatment Facilities/Well Sites
■ Elevated Storage
▲ Ground Storage
JACKSON CO
WASHINGTON CO
CALHOUN CO
WALTON CO
GULF CO
BAY COUNTY
U.S. HIGHWAY
STATE HIGHWAY
HURRICANE LOSS ZONE
WEST FLORIDA REGIONAL PLANNING COUNCIL

SURVEY OF PUBLIC FACILITIES - WASTEWATER TREATMENT FACILITIES
BAY COUNTY

Facility	Loss Zone	Service Pop.	Design Capacity (MG/D)	Level of Treatment	Effluent Disposal Method
Bay Point	3	1,110	.250	Secondary	Spray Irrigation
KOA/Panama City Beach	3	Variable/ Transient	.048	Secondary	Surface Waters
Venture Out in America	3	500 approx.	.090	Secondary	Surface Waters
Commodore	3	120	.013	Secondary	Drain Field
Gulf Coast Campgrounds	5	6	.040	Secondary	Spray Irrigation/ Percolation Ponds
Pinnacle Port	5	NA	.085	Secondary	Evaporation/Perc Pond
The Shores	5	Transient	.055	Secondary	Drain Field
Bay Side	7	500 approx.	.040	Secondary	Spray Irrigation and Percolation Ponds
Woodlawn	7	260	.150	Secondary	Surface Water
Lynn Haven Irrigation Site	9	7,400	.750	Secondary	Surface Waters
Tyndal Air Force Base	15	NA	1.5	Secondary	Spray Irrigation
Naval Coastal Systems	17	1,500	.200	Secondary	Surface Waters
Panama City Beach	17	18,000 - 25,000	3.0	Secondary	Surface Waters
Lettitude 29 Condos	18	approx. 60 Variable	.008	Secondary	Drain Fields
Sunnyside Villas	18	150 approx.	.050	Secondary	Evaporation/Perc Pond
Portside Inc.	18	2,250	.225	Secondary	Land Application
Southport Elementary	20	NA	.010	Secondary	Drain Field

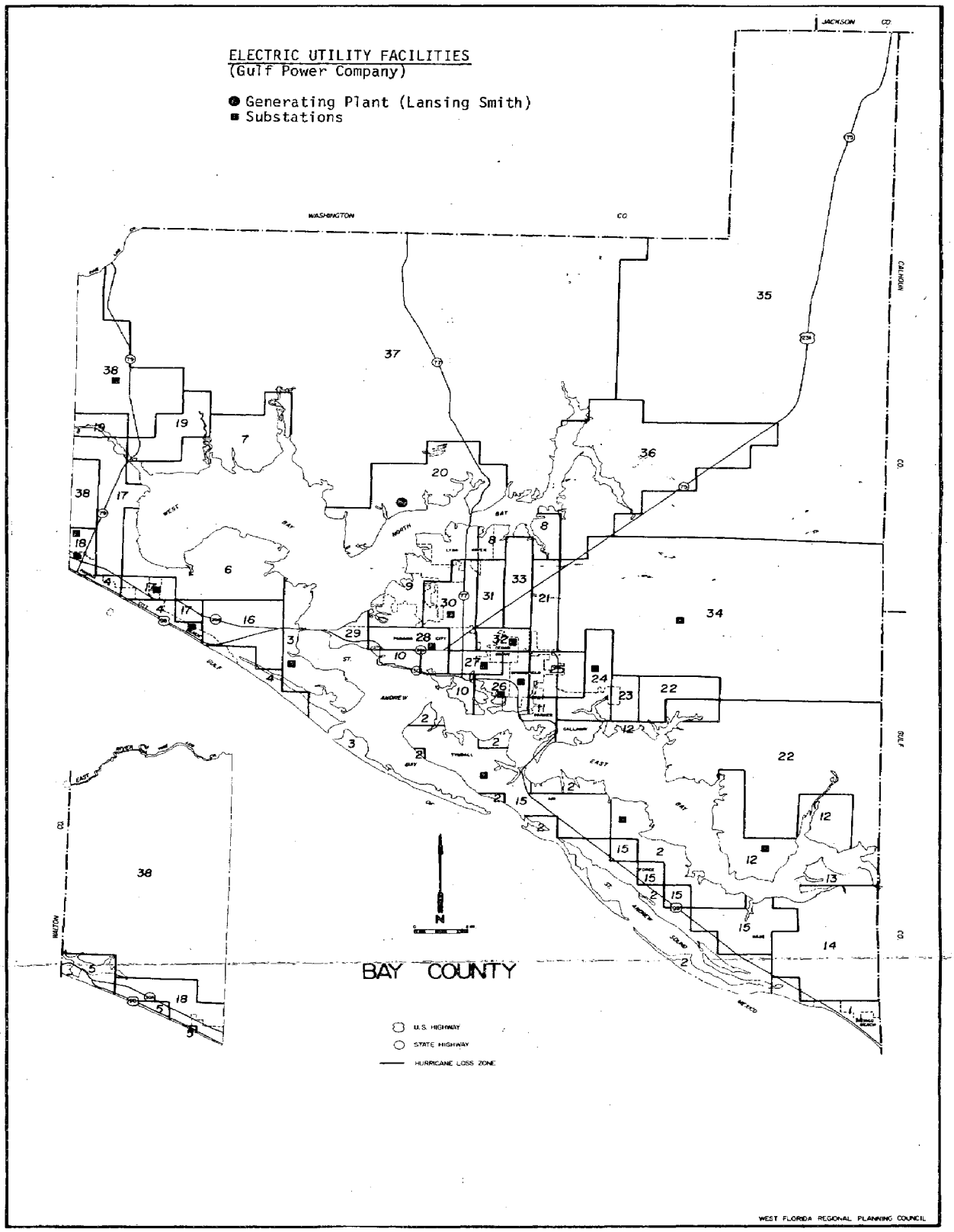
Lane Mobile Homes	21	NA	.017 (average flow)	Secondary	Percolation/Evaporation
Sandy Creek Ranch	22	NA	.036	Secondary	Spray Irrigation
Callaway Elementary	24	NA	.0075	Secondary	Evaporation Pond
Grimes Calloway Estates	24	233	.046	Secondary	Percolation Ponds
St. Andrews Plant	28	17,000	3.5	Secondary	Surface Water
Tanglewood	30	90 approx.	.006	Secondary	Drain Field
Highland Park School	31	NA	.0075	Secondary	Percolation Pond
Bland Trailer Park	32	100	.014	Secondary	Evaporation/Perc Pond
Derby Woods	33	365	.075	Secondary	Polishing Pond/Perc Ponds
Douglas Road	33	108	.008	Secondary	Drain Fields
Waller School	35	NA	.051	Secondary	Sand Filter/Drain Field
Southwood Shopping Center	NA				


WASTEWATER TREATMENT FACILITIES
● Plants
JACKSON CO.
WASHINGTON CO.
CALHOUN CO.
WALTON CO.
GULF CO.
WEST BAY
NORTH BAY
EAST BAY
ST. ANDREW BAY
ST. ANDREW SOUND
GULF OF MEXICO
BAY COUNTY
U.S. HIGHWAY
STATE HIGHWAY
HURRICANE LOSS ZONE
WEST FLORIDA REGIONAL PLANNING COUNCIL

Electric Utility Facilities

Utility Facility	Loss Zone	Service Population	Voltage Class	Replacement Cost
Gulf Power Electric Utility Facilities				
BAY COUNTY		95,850		
Laguna Beach	18		230	
Philips Inlet	18		115	
West Bay	38		115	
Lullwater	17		115	
Long Beach	4		115	
Hathaway	3		115	
Greenwood	28		115	
Northside	30		115	
Highland City	32		115	
Redwood	27		115	
Arizona Chemical	26		46	
Wewa Road	26		115	
Parker	24		115	
Long Point	12		46	
Military Point	2		46	
Tyndall Field	15		46	
Callaway	34		230	
Lansing Smith Steam Plant	20			

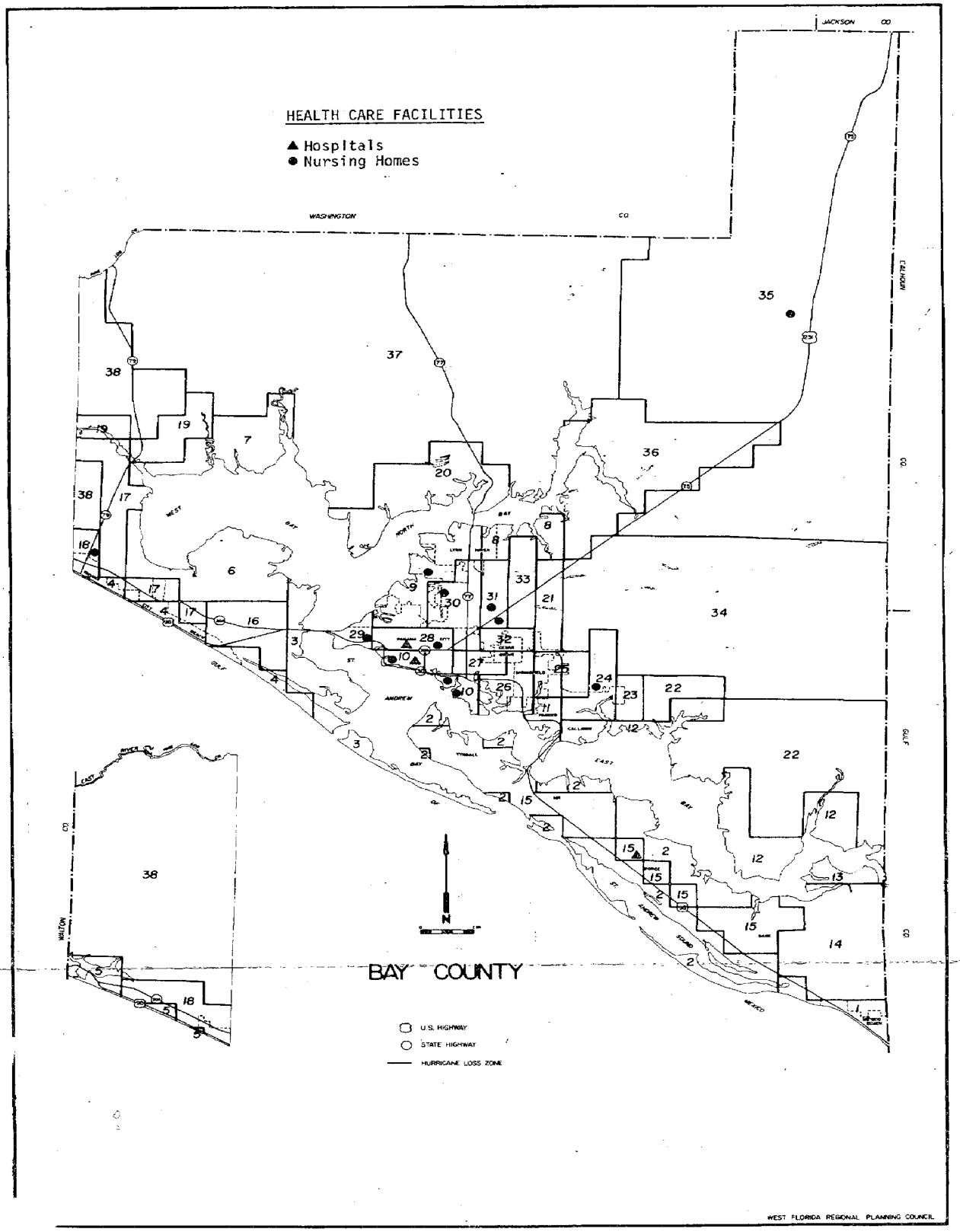
Average present day replacement cost for Gulf Power Company substations:
Voltage Class 46 KV - $0.5 Million
Voltage Class 115 KV - $1 Million
Voltage Class 230 KV - $4 Million


ELECTRIC UTILITY FACILITIES
(Gulf Power Company)
Generating Plant (Lansing Smith)
Substations
JACKSON CO
WASHINGTON CO
CALHOUN CO
GULF CO
WALTON CO
BAY COUNTY
U.S. HIGHWAY
STATE HIGHWAY
HURRICANE LOSS ZONE
WEST FLORIDA REGIONAL PLANNING COUNCIL

SURVEY OF PUBLIC FACILITIES- HEALTH CARE
BAY COUNTY

	Facility/Name	Number of beds	Loss Zone	Value Assessment ($)*
HOSPITALS	Bay Medical Center 615 N. Bonita Avenue	284	10	NA
	Gulf Coast Community Hospital 449 W. 23rd Street	176	30	NA
	U.S. Air Force Hospital Tyndall Air Force Base	50	15	see military structural inventory
NURSING HOMES	Bay Convalescent Center 1336 St. Andrews Blvd.	160	9	483 T
	Beaches Emergency Medical Clinic 881 West Highway 98	8	18	NA
	Lelah G. Wagner Nursing Home 3409 W. 19th Street	66	28	541 T
	Panama City Nursing Center 924 W. 13th Street	120	28	11,132 M
	Gulf Coast Convalescent 1937 Jenks Avenue	120	30	NA
	Lisenby Retirement Home 1400 W. 11th Street	100	10	448 T
	Fountain House Retirement Village Highway 231	20	35	NA
	Highland Park Retirement Home 2430 W. Game Farm Road	29	31	NA
	Lynn Haven Villa 1825 Tennessee Avenue	13	30	NA
	Mary Ella Villa 526 N. Mary Ella Avenue	14	24	51 T
	St. Andrews Towers Apartments 24 Harrison Avenue	265	10	NA
	Village Park 2811 Selma Avenue	16	31	NA

*Value assessments derived from 1984 DOR tax tapes.

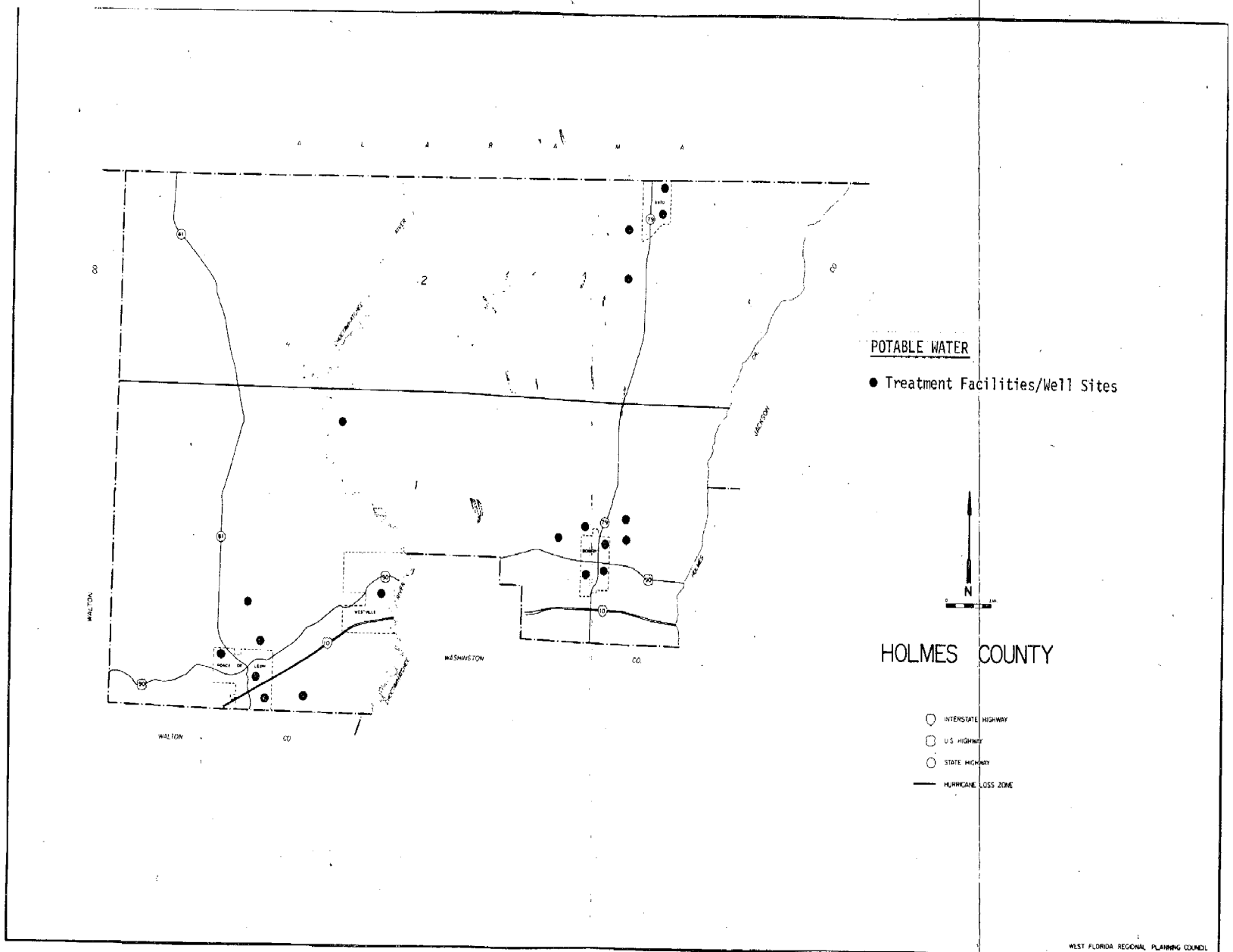

HEALTH CARE FACILITIES
▲ Hospitals
● Nursing Homes
BAY COUNTY
U.S. HIGHWAY
STATE HIGHWAY
HURRICANE LOSS ZONE
WEST FLORIDA REGIONAL PLANNING COUNCIL

SURVEY OF PUBLIC UTILITIES

POTABLE WATER FACILITIES - HOLMES COUNTY

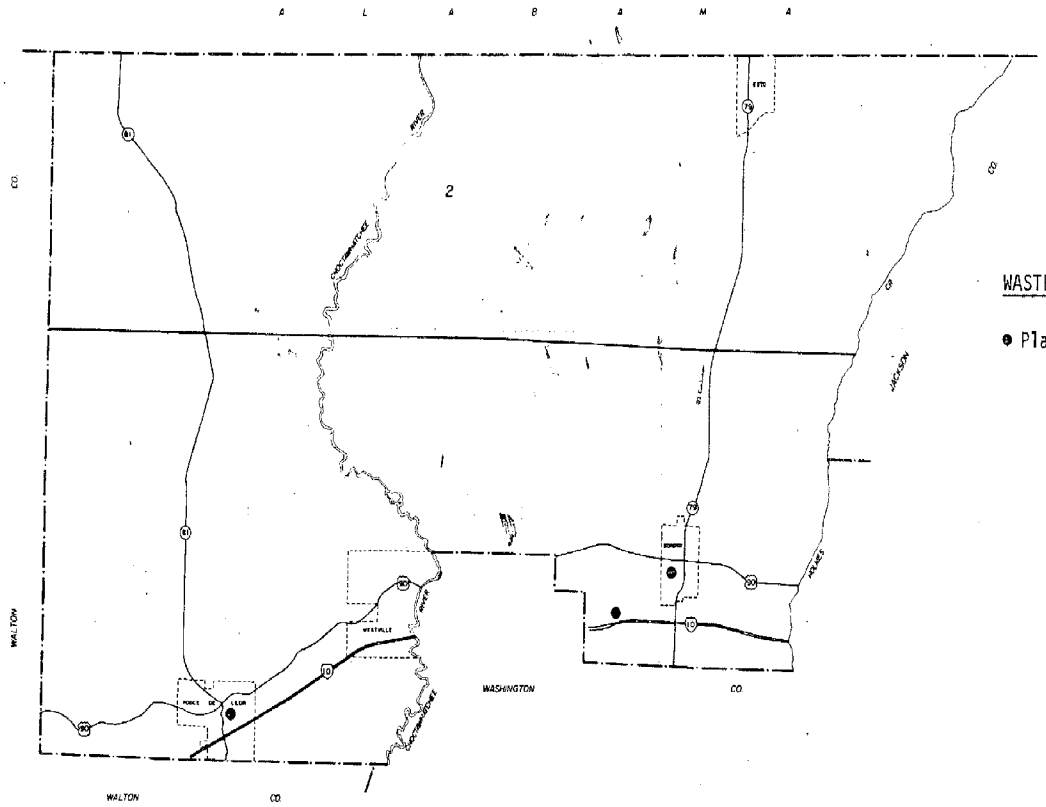
Facility Name	Loss Zone	Design Capacity (000) Gallons	Storage Capacity (000) Gallons	Value Assessment ($)
City of Bonifay Water Dept.	1	1,000	150	
Cerro Gordo Estates	1	100	NA	
Dogwood Lakes Estates	1	173	3,850	
Town of Westville	1	720	40	
Bethlehem High School	1	43	825	
Choctawhatchee River Camp Site	1	86	5	
Kountry Kitchen	1	21	500	
New Ponce Shirt Co., Inc.	1	79	525	
Ponce de Leon High School	1	144	1,860	
Ponce de Leon Elementary School	1	144	4,500	
Ponce de Leon Springs State Park	1	33	500	
Prosperity Elementary School	1	7	250	
Town of Esto	2	576	12,500	
Noma Water Works, Inc.	2	216	3,000	
Poplar Springs High School	2	43	525	

M = Million
T = Thousand


POTABLE WATER
● Treatment Facilities/Well Sites
HOLMES COUNTY
N
INTERSTATE HIGHWAY
U.S. HIGHWAY
STATE HIGHWAY
HURRICANE LOSS ZONE
WALTON CO
WASHINGTON CO.
JACKSON CO
WEST FLORIDA REGIONAL PLANNING COUNCIL

SURVEY OF PUBLIC FACILITIES - WASTEWATER TREATMENT FACILITIES
HOLMES COUNTY

Facility Name	Loss Zone	Service Pop.	Design Capacity (MG/D)	Level of Treatment	Effluent Disposal Method
City of Bonifay	1	2,800	.400	Secondary	Surface
DOT I-10 Rest Area	1	Transient	.028	Secondary	Percolation/Evaporation
Ponce de Leon Elementary	1	494	.012	Secondary	Percolation Ponds



WASTEWATER TREATMENT FACILITIES

● Plants

N

HOLMES COUNTY

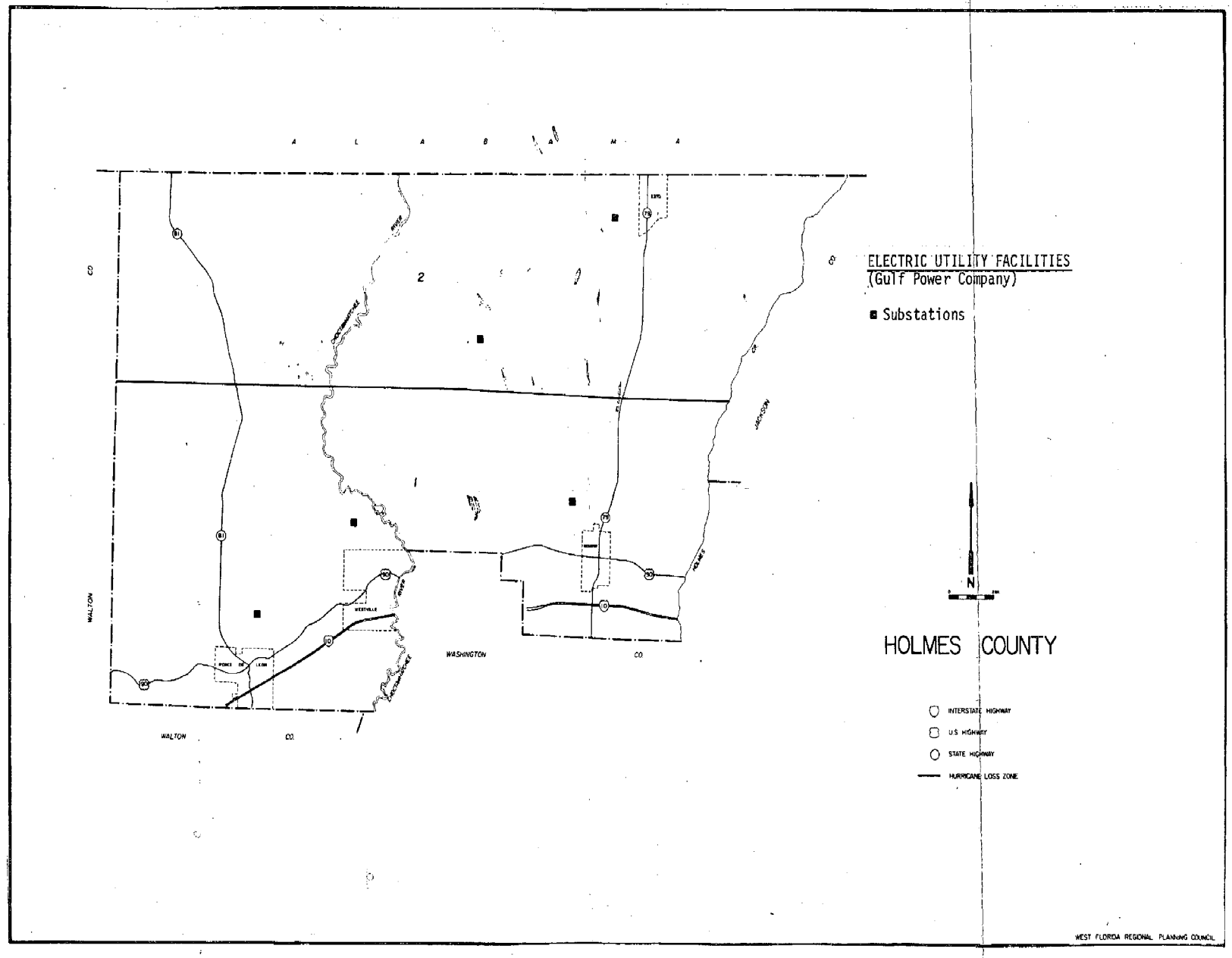
- INTERSTATE HIGHWAY
- U.S. HIGHWAY
- STATE HIGHWAY
- HURRICANE LOSS ZONE

WEST FLORIDA REGIONAL PLANNING COUNCIL

Electric Utility Facilities

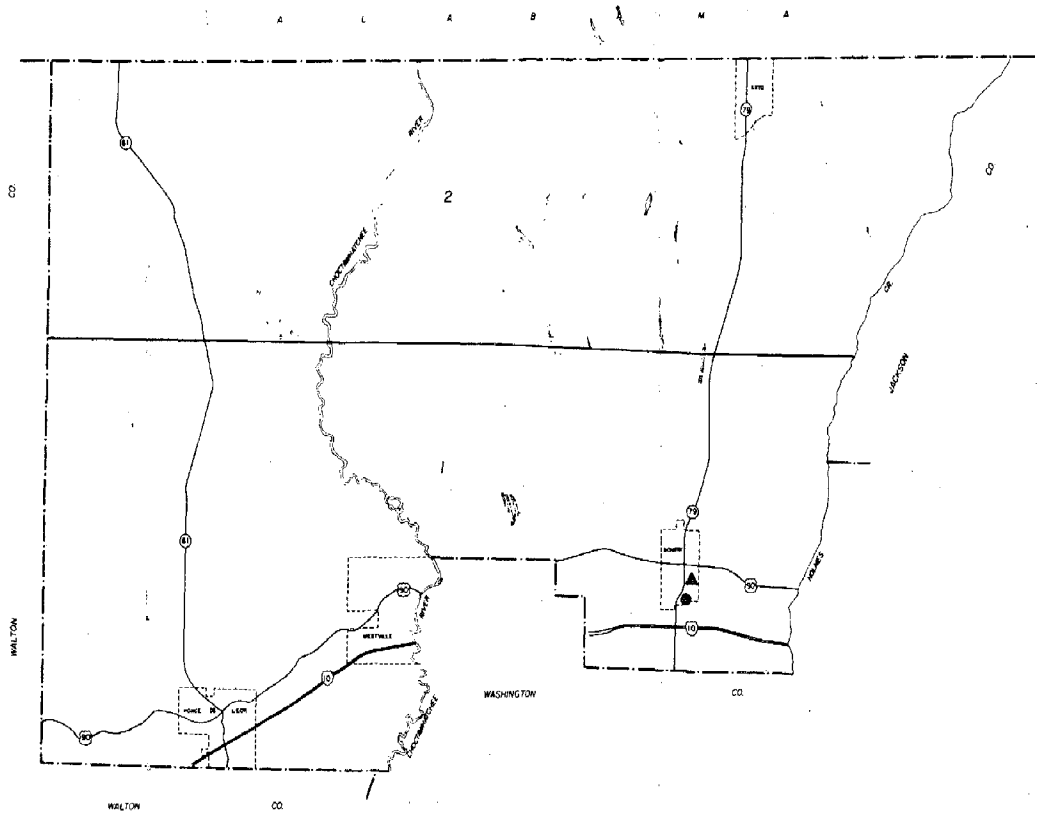
Utility Facility	Loss Zone	Service Population	Voltage Class	Replacement Cost
Gulf Power Electric Utility Facilities				
HOLMES COUNTY		4,470		
Ponce de Leon	1		46	
Caryville	1		46	
Bonifay	1		115	
Holmes Creek	2		115	
Pittman	2		115	

Average present day replacement cost for Gulf Power Company substations:
Voltage Class 46 KV - $0.5 Million
Voltage Class 115 KV - $1 Million
Voltage Class 230 KV - $4 Million


ALABAMA
ELECTRIC UTILITY FACILITIES
(Gulf Power Company)
Substations
HOLMES COUNTY
INTERSTATE HIGHWAY
U.S. HIGHWAY
STATE HIGHWAY
HURRICANE LOSS ZONE
WALTON CO.
WASHINGTON CO.
JACKSON CO.
WESTVILLE
WEST FLORIDA REGIONAL PLANNING COUNCIL

SURVEY OF PUBLIC FACILITIES - HEALTH CARE
HOLMES COUNTY

	Facility Name/Location	Number of beds	Loss Zone	Value Assessment ($)
HOSPITALS	Doctor's Memorial Hospital 401 Byrd Avenue Bonifay, Florida	34	1	
NURSING HOMES	Bonifay Nursing Home 306 W. Brock Avenue Bonifay, Florida	60	1	



HEALTH CARE FACILITIES

▲ Hospital
● Nursing Home

N

HOLMES COUNTY

INTERSTATE HIGHWAY
U.S. HIGHWAY
STATE HIGHWAY
HURRICANE LOSS ZONE

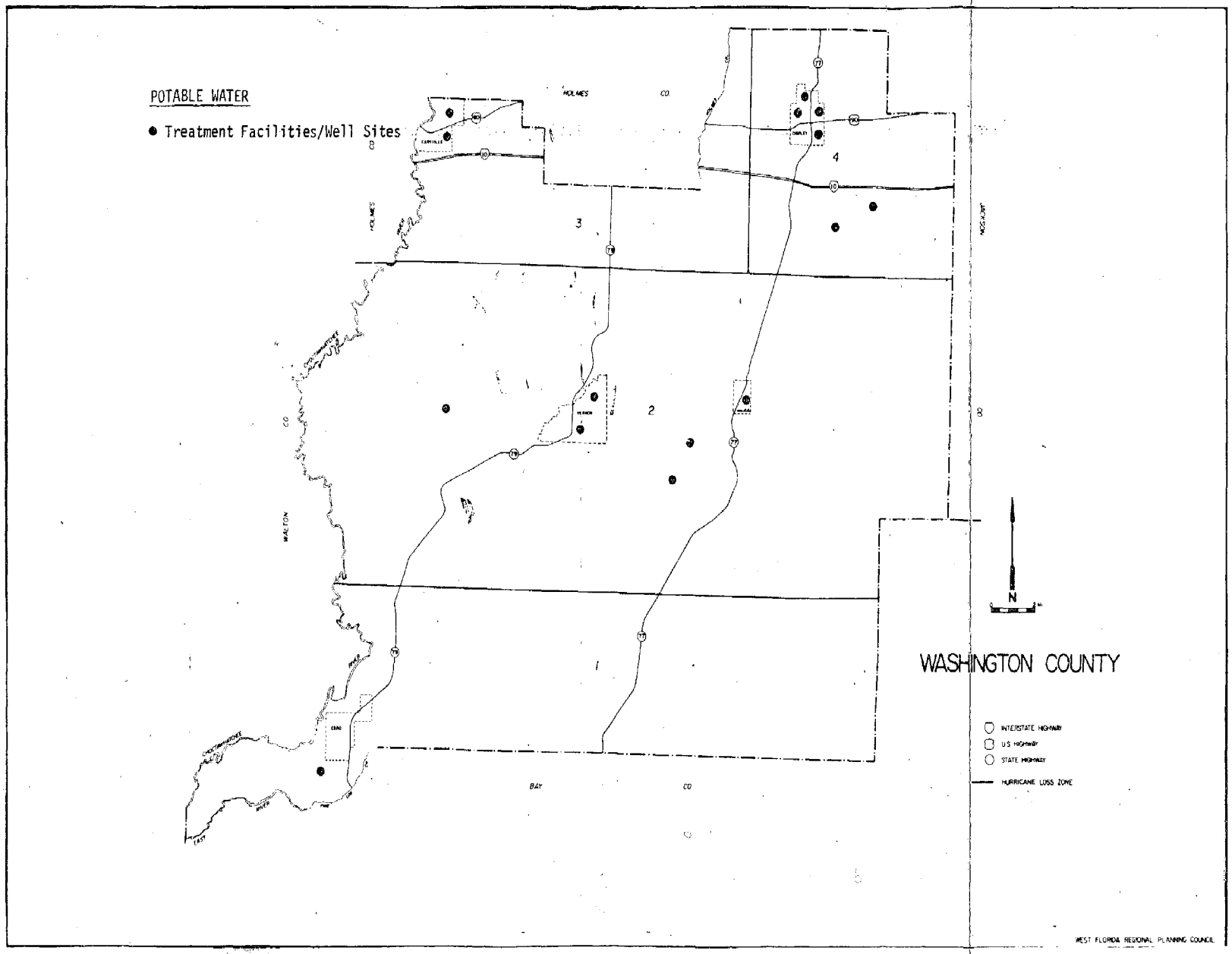
WEST FLORIDA REGIONAL PLANNING COUNCIL

SURVEY OF PUBLIC UTILITIES

POTABLE WATER FACILITIES - WASHINGTON COUNTY

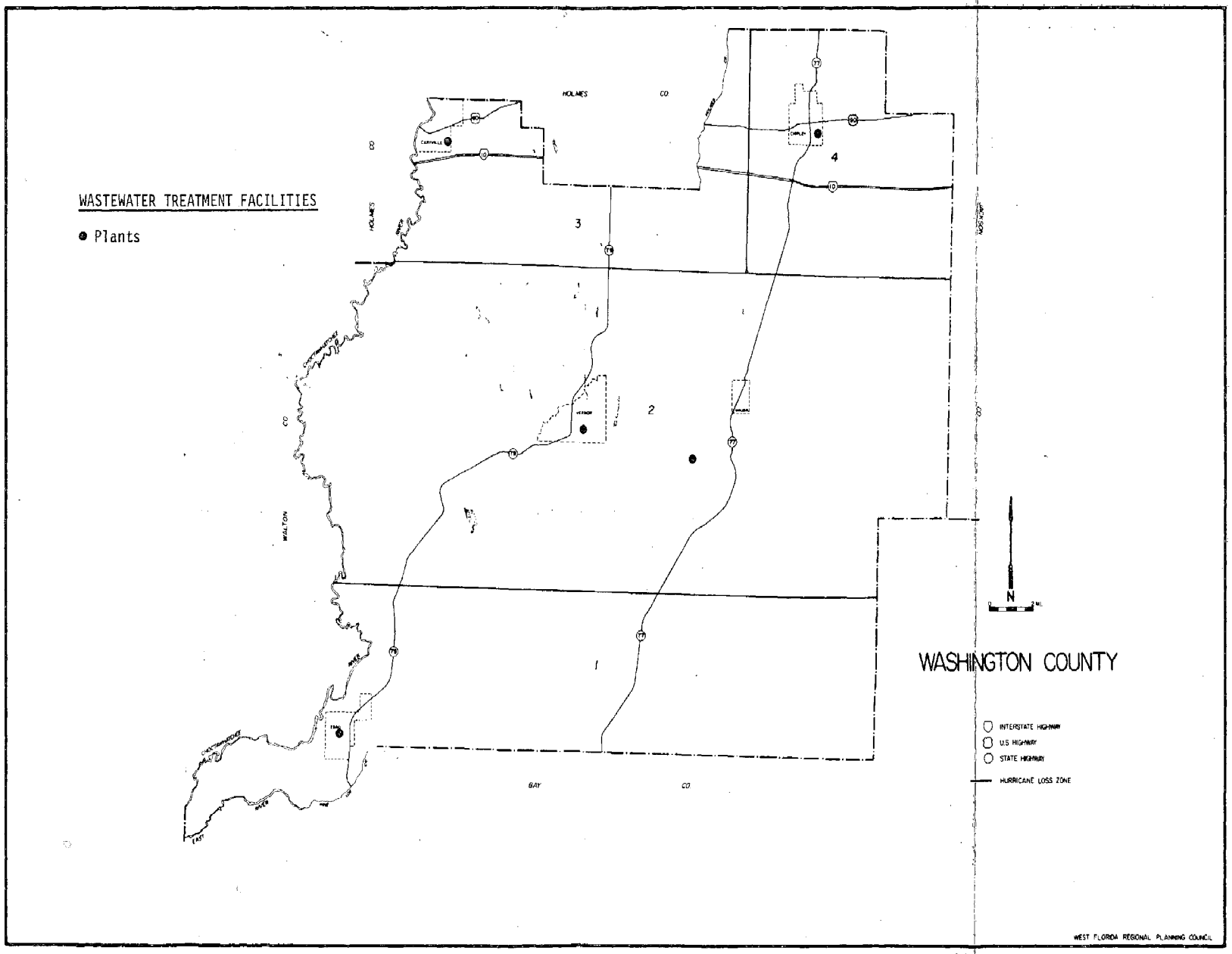
Facility Name	Loss Zone	Design Capacity (000) Gallons	Storage Capacity (000) Gallons	Value Assessment ($)
Washington County Kennel Club	1	216	NA	
Pine Log Rec. Area	1	72	1,000	
Holmes River Camp Sites	2	14	240	
Town of Wausau	2	144	15	
City of Vernon	2	302	30	
Sunnyhills Utilities	2	1,584	80	
Town of Caryville	3	720	60	
Falling Waters State Rec. Area	4	101	2,200	
City of Chipley	4	1,800	150	

M = Million
T = Thousand


POTABLE WATER
● Treatment Facilities/Well Sites
HOLMES CO.
HOLMES CO
WALTON CO
BAY CO
CHOCTAWHATCHEE RIVER
EAST RIVER
1
2
3
4
WASHINGTON COUNTY
INTERSTATE HIGHWAY
U.S. HIGHWAY
STATE HIGHWAY
HURRICANE LOSS ZONE
N
WEST FLORIDA REGIONAL PLANNING COUNCIL

SURVEY OF PUBLIC FACILITIES - WASTEWATER TREATMENT FACILITIES
WASHINGTON COUNTY

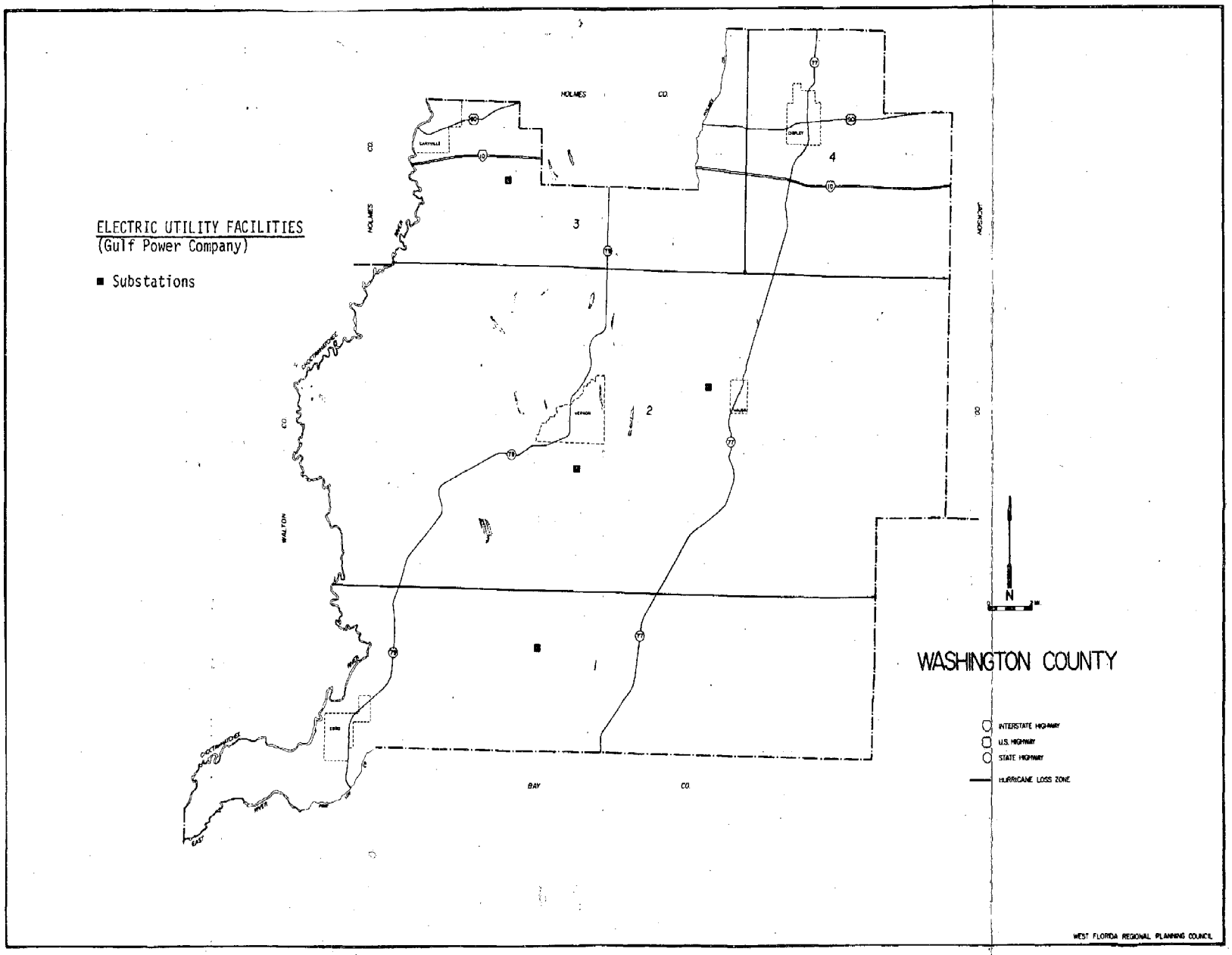
Facility	Loss Zone	Service Pop.	Design Capacity (MG/D)	Level of Treatment	Effluent Disposal Method
Washington Co. Kennel Club (Ebro)	1	NA	.025	Secondary	Surface Water
Sunnyhills Utilities	2	530	.070	Secondary	Evaporation/Perc Pond
City of Vernon.	2	825	.100	Secondary	Surface Waters
Caryville Vocational Center	3	70	.010	Secondary	Dual Surface Sand Filters
City of Chipley	4	5,000	.500	Secondary	Surface Water


WASTEWATER TREATMENT FACILITIES
Plants
WASHINGTON COUNTY
HOLMES CO
WALTON CO
BAY CO
1
2
3
4
N
INTERSTATE HIGHWAY
U.S. HIGHWAY
STATE HIGHWAY
HURRICANE LOSS ZONE
WEST FLORIDA REGIONAL PLANNING COUNCIL

Electric Utility Facilities

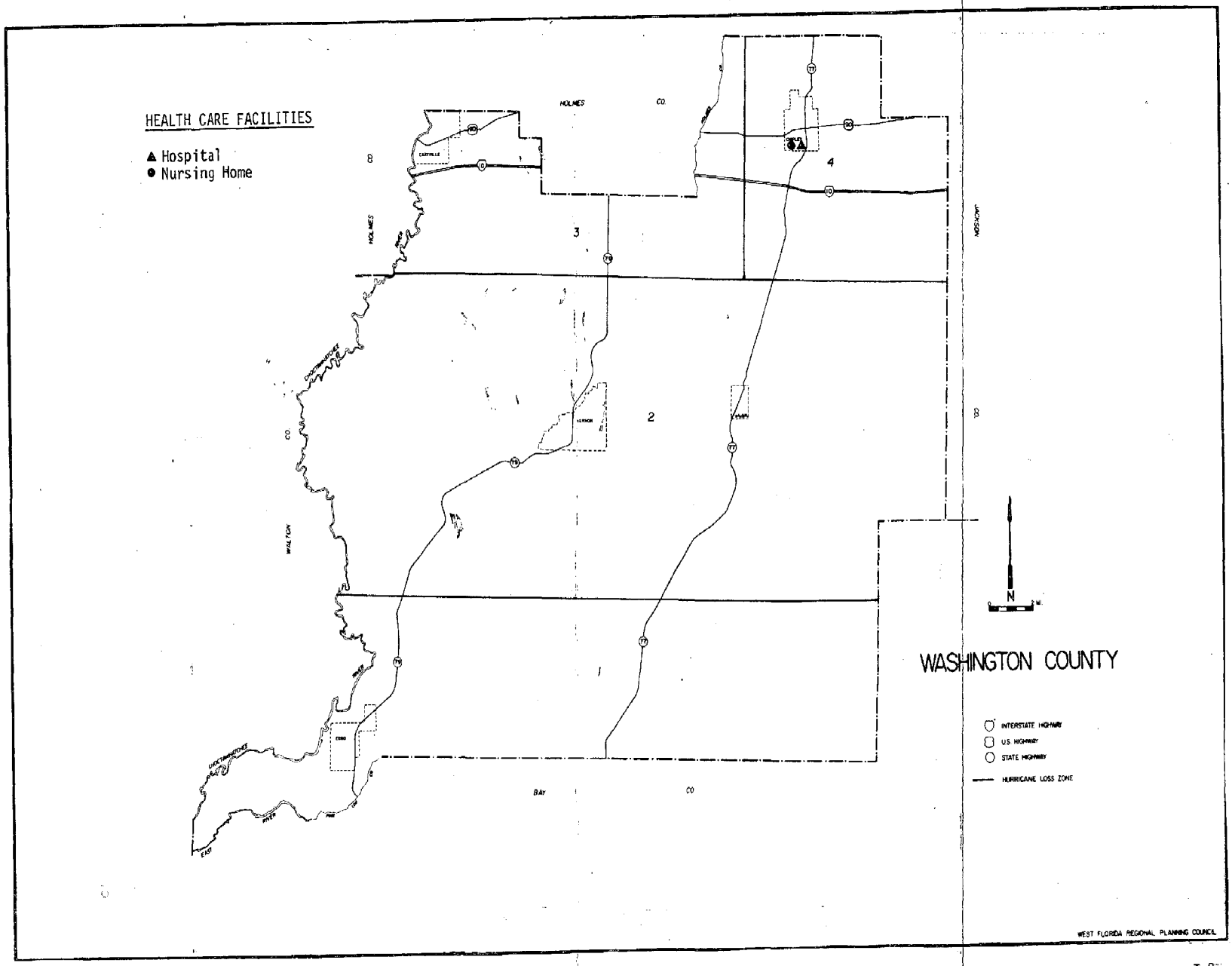
Utility Facility	Loss Zone	Service Population	Voltage Class	Replacement Cost
Gulf Power Electric Utility Facilities				
WASHINGTON COUNTY		9,080		
Greenhead	1		115	
Sunny Hills	2		115	
Vernon	2		115	
Chipley	3		115	

Average present day replacement cost for Gulf Power Company substations:
Voltage Class 46 KV - $0.5 Million
Voltage Class 115 KV - $1 Million
Voltage Class 230 KV - $4 Million


ELECTRIC UTILITY FACILITIES
(Gulf Power Company)
■ Substations
HOLMES CO.
WALTON CO.
BAY CO.
JACKSON CO.
CHOCTAWHATCHEE RIVER
EAST RIVER
1
2
3
4
N
WASHINGTON COUNTY
INTERSTATE HIGHWAY
U.S. HIGHWAY
STATE HIGHWAY
HURRICANE LOSS ZONE
WEST FLORIDA REGIONAL PLANNING COUNCIL

SURVEY OF PUBLIC FACILITIES - HEALTH CARE
WASHINGTON COUNTY

	Facility Name/Location	Number of beds	Loss Zone	Value Assessment ($)
HOSPITALS	Washington County Highway 77 South Chipley, Florida	80	4	4,936 M
NURSING HOMES	Washington County Convalescent Center 805 Usery Road Chipley, Florida	120	4	826 M


HEALTH CARE FACILITIES
▲ Hospital
● Nursing Home
HOLMES CO.
HOLMES
WALTON CO.
BAY CO
CHOCTAWHATCHEE
EAST
RIVER
CARYVILLE
VERNON
CHIPLEY
1
2
3
4
N
WASHINGTON COUNTY
INTERSTATE HIGHWAY
U.S. HIGHWAY
STATE HIGHWAY
HURRICANE LOSS ZONE
WEST FLORIDA REGIONAL PLANNING COUNCIL

ESCAMBIA COUNTY

PROJECTED STRUCURAL INVENTORY LOSS GREATER THAN: 25%

SCENARIO A
STRUCTURAL INVENTORY LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	0	0	0	0	0	0	0	0	0	0	0
5	86	0	1	0	0	0	0	0	0	0	87
6	0	0	0	0	0	0	0	0	0	0	0
7	16	0	0	0	0	0	0	0	0	0	16
8	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0
32	0	0	0	0	0	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0	0	0	0
34	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0
36	0	0	0	0	0	0	0	0	0	0	0
37	0	0	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0	0
39	0	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0
41	0	0	0	0	0	0	0	0	0	0	0
TOTALS:	102	0	1	0	0	0	0	0	0	0	103

STRUCTURE CODES

SR -- SINGLE UNIT RESIDENTIAL
MR -- MULTI-UNIT RESIDENTIAL
MH -- MOBILE HOME RESIDENTIAL
C -- COMMERCIAL
I -- INDUSTRIAL
PU -- PUBLIC UTILITIES
AG -- AGRICULTURAL
PT -- PUBLIC TRANSPORTATION
HC -- HEALTH CARE
GI -- GOVERNMENT AND INSTITUTIONAL

ESCAMBIA COUNTY

PROJECTED STRUCURAL INVENTORY LOSS GREATER THAN: 25%

SCENARIO B

STRUCTURAL INVENTORY LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	345	2,051	0	58	0	0	0	0	0	0	2,454
5	116	620	1	9	0	0	0	0	0	0	746
6	221	0	25	0	0	0	0	0	0	0	246
7	16	0	0	0	0	0	0	0	0	0	16
8	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0
11	536	0	3	0	0	0	0	0	0	0	539
12	0	0	0	0	0	0	0	0	0	0	0
14	5	0	0	0	0	0	0	0	0	0	5
15	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0
32	0	0	0	0	0	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0	0	0	0
34	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0
36	0	0	0	0	0	0	0	0	0	0	0
37	0	0	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0	0
39	0	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0
41	0	0	0	0	0	0	0	0	0	0	0
TOTALS:	1,239	2,671	29	67	0	0	0	0	0	0	4,006

STRUCTURE CODES

SR -- SINGLE UNIT RESIDENTIAL
MR -- MULTI-UNIT RESIDENTIAL
MH -- MOBILE HOME RESIDENTIAL
C -- COMMERCIAL
I -- INDUSTRIAL
PU -- PUBLIC UTILITIES
AG -- AGRICULTURAL
PT -- PUBLIC TRANSPORTATION
HC -- HEALTH CARE
GI -- GOVERNMENT AND INSTITUTIONAL

ESCAMBIA COUNTY

PROJECTED STRUCURAL INVENTORY LOSS GREATER THAN: 25%

SCENARIO C

STRUCTURAL INVENTORY LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	345	2,051	0	58	0	0	0	0	0	0	2,454
5	116	620	1	9	0	0	0	0	0	0	746
6	434	315	25	27	0	0	0	0	0	0	801
7	16	0	0	0	0	0	0	0	0	0	16
8	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0
11	536	0	3	44	0	0	0	0	0	0	583
12	0	0	0	0	0	0	0	0	0	0	0
14	5	0	0	0	0	0	0	0	0	0	5
15	0	0	57	5	0	0	0	0	0	0	62
17	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0
32	0	0	0	0	0	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0	0	0	0
34	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0
36	0	0	0	0	0	0	0	0	0	0	0
37	0	0	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0	0
39	0	0	0	0	0	0	0	0	0	0	0
40	0	0	0	0	0	0	0	0	0	0	0
41	0	0	0	0	0	0	0	0	0	0	0
TOTALS:	1,452	2,986	86	143	0	0	0	0	0	0	4,667

STRUCTURE CODES

SR -- SINGLE UNIT RESIDENTIAL
MR -- MULTI-UNIT RESIDENTIAL
MH -- MOBILE HOME RESIDENTIAL
C -- COMMERCIAL
I -- INDUSTRIAL
PU -- PUBLIC UTILITIES
AG -- AGRICULTURAL
PT -- PUBLIC TRANSPORTATION
HC -- HEALTH CARE
GI -- GOVERNMENT AND INSTITUTIONAL

ESCAMBIA COUNTY

PROJECTED STRUCURAL INVENTORY LOSS GREATER THAN: 25%

SCENARIO D
STRUCTURAL INVENTORY LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	345	2,051	0	58	0	0	0	0	0	0	2,454
5	116	620	1	9	0	0	0	0	0	0	746
6	742	317	59	28	0	0	0	0	0	0	1,146
7	16	0	0	0	0	0	0	0	0	0	16
8	67	0	12	0	0	0	0	0	0	0	79
9	0	0	1	0	0	0	0	0	0	0	1
10	23	0	1	0	0	0	0	0	0	0	24
11	536	6	3	44	0	0	0	0	0	0	589
12	0	0	0	0	0	0	0	0	0	0	0
14	98	1	0	0	0	0	0	0	0	0	99
15	533	3	68	15	0	0	0	0	0	0	619
17	0	0	0	0	0	0	0	0	0	0	0
18	20	0	81	0	0	0	0	0	0	0	101
19	113	1	12	6	0	0	0	0	0	0	132
20	24	0	44	2	0	0	0	0	0	0	70
21	863	6	307	19	0	0	0	0	0	0	1,195
22	0	0	8	0	0	0	0	0	0	0	8
23	0	0	138	0	0	0	0	0	0	0	138
24	0	0	91	0	0	0	0	0	0	0	91
25	0	0	1	0	0	0	0	0	0	0	1
26	0	0	5	0	0	0	0	0	0	0	5
27	0	0	102	0	0	0	0	0	0	0	102
28	0	0	141	0	0	0	0	0	0	0	141
29	0	0	29	0	0	0	0	0	0	0	29
30	0	0	252	0	0	0	0	0	0	0	252
31	0	0	189	0	0	0	0	0	0	0	189
32	0	0	4	0	0	0	0	0	0	0	4
33	0	0	134	0	0	0	0	0	0	0	134
34	0	0	73	0	0	0	0	0	0	0	73
35	0	0	287	0	0	0	0	0	0	0	287
36	0	0	7	0	0	0	0	0	0	0	7
37	0	0	302	0	0	0	0	0	0	0	302
38	0	0	146	0	0	0	0	0	0	0	146
39	0	0	29	0	0	0	0	0	0	0	29
40	0	0	17	0	0	0	0	0	0	0	17
41	0	0	0	0	0	0	0	0	0	0	0
TOTALS:	3,496	3,005	2,544	181	0	0	0	0	0	0	9,226

STRUCTURE CODES

SR -- SINGLE UNIT RESIDENTIAL
MR -- MULTI-UNIT RESIDENTIAL
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GI -- GOVERNMENT AND INSTITUTIONAL

ESCAMBIA COUNTY

PROJECTED STRUCURAL INVENTORY LOSS GREATER THAN: 25%

SCENARIO E
STRUCTURAL INVENTORY LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	345	2,051	0	58	0	7	0	1	0	34	2,496
5	116	620	1	9	0	1	0	0	0	1	748
6	742	319	59	28	1	1	1	1	0	3	1,155
7	16	0	0	0	0	0	0	0	0	0	16
8	148	0	12	0	0	0	0	0	0	0	160
9	216	1	1	1	0	0	0	0	0	0	219
10	23	0	1	0	0	0	1	0	0	0	25
11	536	6	3	44	0	1	0	0	0	12	602
12	0	0	0	0	0	0	0	0	0	0	0
14	98	1	0	0	0	0	0	0	0	0	99
15	533	3	68	16	6	2	6	0	0	4	638
17	0	0	0	0	0	0	0	0	0	0	0
18	1,430	7	31	17	6	3	12	0	0	6	1,562
19	113	1	12	6	0	0	4	0	0	5	141
20	300	2	44	9	2	2	8	0	0	2	369
21	1,503	12	307	39	4	2	5	0	0	11	1,883
22	2,425	103	8	118	10	7	0	0	0	13	2,684
23	5,875	77	138	271	37	4	0	0	1	35	6,438
24	3,082	12	91	373	42	2	0	0	1	65	3,669
25	737	98	1	27	14	0	0	0	1	1	879
26	4,265	4	5	40	1	0	0	0	0	2	4,317
27	8,812	586	102	518	56	5	0	0	7	98	10,184
28	4,331	30	141	377	36	4	2	0	0	41	5,012
29	3,450	75	29	72	7	3	1	0	1	8	3,656
30	1,591	2	252	37	4	0	2	0	0	10	1,898
31	3,231	5	189	43	7	4	3	0	0	14	3,546
32	108	0	4	0	0	0	0	0	0	0	112
33	633	0	134	0	0	0	0	0	0	0	817
34	825	63	73	29	9	1	0	0	0	9	1,009
35	2,624	77	287	137	21	4	7	0	0	40	3,197
36	1,478	5	7	20	5	0	1	0	1	5	1,522
37	1,931	58	302	72	20	0	3	0	1	14	2,401
38	0	0	146	0	0	0	0	0	0	0	146
39	0	0	44	0	0	0	0	0	0	0	44
40	0	0	33	0	0	0	0	0	0	0	33
41	0	0	0	0	0	0	0	0	0	0	0
TOTALS:	51,677	4,218	2,575	2,361	288	53	56	2	13	433	61,676

STRUCTURE CODES

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SANTA ROSA COUNTY

PROJECTED STRUCURAL INVENTORY LOSS GREATER THAN: 25%

SCENARIO A

STRUCTURAL INVENTORY LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0
TOTALS:	0	0	0	0	0	0	0	0	0	0	0

STRUCTURE CODES

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SANTA ROSA COUNTY

PROJECTED STRUCURAL INVENTORY LOSS GREATER THAN: 25%

SCENARIO B

STRUCTURAL INVENTORY LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0
TOTALS:	0	0	0	0	0	0	0	0	0	0	0

STRUCTURE CODES

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SANTA ROSA COUNTY

PROJECTED STRUCURAL INVENTORY LOSS GREATER THAN: 25%

SCENARIO C
STRUCTURAL INVENTORY LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	33	0	0	0	0	0	0	0	0	0	33
2	108	0	28	0	0	0	0	0	0	0	136
3	3	0	5	0	0	0	0	0	0	0	8
4	6	0	2	0	0	0	0	0	0	0	8
5	0	0	0	0	0	0	0	0	0	0	0
6	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0
9	53	0	0	0	0	0	0	0	0	0	53
10	0	0	0	0	0	0	0	0	0	0	0
11	18	0	5	0	0	0	0	0	0	0	23
13	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0
TOTALS:	221	0	40	0	0	0	0	0	0	0	261

STRUCTURE CODES

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SANTA ROSA COUNTY

PROJECTED STRUCURAL INVENTORY LOSS GREATER THAN: 25%

SCENARIO D
STRUCTURAL INVENTORY LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	0	0	0	0	0	0	0	0	0	0	0
2	0	0	10	0	0	0	0	0	0	0	10
3	0	0	0	0	0	0	0	0	0	0	0
4	0	0	2	0	0	0	0	0	0	0	2
5	17	0	5	0	0	0	0	0	0	0	22
6	69	0	9	0	0	0	0	0	0	0	78
7	38	0	21	0	0	0	0	0	0	0	59
8	0	0	0	0	0	0	0	0	0	0	0
9	0	0	2	0	0	0	0	0	0	0	2
10	0	0	0	0	0	0	0	0	0	0	0
11	0	0	5	0	0	0	0	0	0	0	5
13	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0
16	3	0	0	0	0	0	0	0	0	0	3
17	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0
TOTALS:	127	0	54	0	0	0	0	0	0	0	181

STRUCTURE CODES

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SANTA ROSA COUNTY

PROJECTED STRUCURAL INVENTORY LOSS GREATER THAN: 25%

SCENARIO E
STRUCTURAL INVENTORY LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	1,740	276	4	0	0	0	0	0	0	0	2,020
2	128	0	32	3	0	0	0	0	0	1	164
3	208	0	58	2	1	1	1	0	0	1	272
4	6	0	2	0	0	0	3	0	0	0	11
5	43	0	17	0	0	0	0	0	0	0	60
6	778	0	60	1	0	0	0	0	0	0	839
7	280	12	86	1	1	0	6	0	0	1	387
8	601	0	116	0	0	0	0	0	0	0	717
9	2,561	80	102	56	12	1	1	0	2	12	2,827
10	518	26	497	49	8	3	4	0	0	9	1,114
11	180	0	34	3	1	0	2	0	0	2	222
13	34	0	25	1	0	1	1	0	0	1	63
14	143	0	125	0	0	0	0	0	0	0	268
15	662	0	207	0	0	0	0	0	0	0	869
16	59	0	35	2	1	0	10	0	0	1	108
17	631	0	128	0	0	0	0	0	0	0	759
18	1,987	0	316	0	0	0	0	0	0	0	2,303
19	698	0	78	0	0	0	0	0	0	0	776
20	743	0	28	0	0	0	0	0	0	0	771
21	1,565	0	29	0	0	0	0	0	0	0	1,594
22	843	0	122	0	0	0	0	0	0	0	965
23	402	0	10	0	0	0	0	0	0	0	412
24	148	0	86	0	0	0	0	0	0	0	234
25	194	0	38	0	0	0	0	0	0	0	232
26	0	0	86	0	0	0	0	0	0	0	86
27	185	0	84	0	0	0	0	0	0	0	269
TOTALS:	15,337	394	2,405	118	24	6	28	0	2	28	18,342

STRUCTURE CODES

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GI -- GOVERNMENT AND INSTITUTIONAL

OKALOOSA COUNTY

PROJECTED STRUCURAL INVENTORY LOSS GREATER THAN: 25%

SCENARIO A
STRUCTURAL INVENTORY LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	1,605	2,401	32	0	0	0	0	0	0	0	4,038
3	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0
TOTALS:	1,605	2,401	32	0	0	0	0	0	0	0	4,038

STRUCTURE CODES

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OKALOOSA COUNTY

PROJECTED STRUCURAL INVENTORY LOSS GREATER THAN: 25%

SCENARIO B
STRUCTURAL INVENTORY LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	1,605	2,401	32	163	0	0	0	0	0	0	4,201
3	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0
TOTALS:	1,605	2,401	32	163	0	0	0	0	0	0	4,201

STRUCTURE CODES

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GI -- GOVERNMENT AND INSTITUTIONAL

OKALOOSA COUNTY

PROJECTED STRUCURAL INVENTORY LOSS GREATER THAN: 25%

SCENARIO C
STRUCTURAL INVENTORY LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	1,605	2,401	32	163	0	0	0	0	0	0	4,201
3	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0
8	68	0	0	0	0	0	0	0	0	0	68
10	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0
19	25	0	0	0	0	0	0	0	0	0	25
20	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0
TOTALS:	1,698	2,401	32	163	0	0	0	0	0	0	4,294

STRUCTURE CODES

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I -- INDUSTRIAL
PU -- PUBLIC UTILITIES
AG -- AGRICULTURAL
PT -- PUBLIC TRANSPORTATION
HC -- HEALTH CARE
GI -- GOVERNMENT AND INSTITUTIONAL

OKALOOSA COUNTY

PROJECTED STRUCURAL INVENTORY LOSS GREATER THAN: 25%

SCENARIO D
STRUCTURAL INVENTORY LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	1,605	2,401	32	163	3	0	0	0	0	0	4,204
3	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0
5	0	0	4	0	0	0	0	0	0	0	4
7	0	0	0	0	0	0	0	0	0	0	0
8	68	0	2	0	0	0	0	0	0	0	70
10	0	0	10	0	0	0	0	0	0	0	10
11	0	0	20	0	0	0	0	0	0	0	20
12	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0
16	0	0	74	0	0	0	0	0	0	0	74
17	0	0	110	0	0	0	0	0	0	0	110
18	0	0	19	0	0	0	0	0	0	0	19
19	0	0	11	0	0	0	0	0	0	0	11
20	0	0	0	0	0	0	0	0	0	0	0
21	0	0	54	0	0	0	0	0	0	0	54
22	0	0	21	0	0	0	0	0	0	0	21
23	0	0	30	0	0	0	0	0	0	0	30
24	0	0	1	0	0	0	0	0	0	0	1
25	0	0	3	0	0	0	0	0	0	0	3
26	0	0	0	0	0	0	0	0	0	0	0
27	0	0	46	0	0	0	0	0	0	0	46
28	0	0	0	0	0	0	0	0	0	0	0
TOTALS:	1,673	2,401	437	163	3	0	0	0	0	0	4,677

STRUCTURE CODES

SR -- SINGLE UNIT RESIDENTIAL
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GI -- GOVERNMENT AND INSTITUTIONAL

OKALOOSA COUNTY

PROJECTED STRUCURAL INVENTORY LOSS GREATER THAN: 25%

SCENARIO E

STRUCTURAL INVENTORY LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	1,605	2,401	32	163	3	1	0	0	0	16	4,221
3	14	0	0	0	0	0	0	0	0	0	14
4	633	0	0	1	1	0	0	0	0	0	685
5	493	36	4	4	0	0	0	0	0	1	538
7	28	187	0	17	1	0	0	0	0	1	234
8	1,847	147	0	290	19	2	0	0	3	30	2,338
10	89	19	10	5	0	1	0	0	0	1	125
11	1,466	180	0	62	17	0	0	0	0	8	1,733
12	130	148	0	17	0	0	0	0	0	6	301
14	2,621	184	0	74	17	2	0	0	0	12	2,910
15	1,075	151	0	59	8	0	0	0	0	5	1,298
16	693	1	74	11	0	2	0	0	0	1	782
17	3,536	134	0	250	21	6	0	0	3	28	3,978
18	427	0	19	7	3	0	0	0	0	1	457
19	1,574	4	11	19	1	1	0	0	0	5	1,615
20	1,468	3	0	104	13	4	0	0	1	16	1,609
21	3,298	84	54	70	2	0	37	0	1	26	3,572
22	629	1	21	15	0	1	0	0	0	4	671
23	1,687	15	30	94	5	1	0	0	1	11	1,844
24	25	0	1	1	0	0	14	0	0	1	42
25	60	0	3	0	0	0	0	0	0	0	63
26	186	0	18	0	0	0	0	0	0	0	204
27	3,530	0	85	0	0	0	4	0	0	0	3,619
28	0	0	2	0	0	0	0	0	0	0	2
TOTALS:	27,164	3,695	364	1,263	111	21	55	0	9	173	32,855

STRUCTURE CODES

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WALTON COUNTY

PROJECTED STRUCURAL INVENTORY LOSS GREATER THAN: 25%

SCENARIO A

STRUCTURAL INVENTORY LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	232	167	23	0	0	0	0	0	0	0	472
2	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0
6	101	0	2	0	0	0	0	0	0	0	103
7	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0
TOTALS:	383	167	25	0	0	0	0	0	0	0	575

STRUCTURE CODES

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WALTON COUNTY

PROJECTED STRUCURAL INVENTORY LOSS GREATER THAN: 25%

SCENARIO B
STRUCTURAL INVENTORY LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	282	901	24	16	0	0	0	0	0	0	1,223
2	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0
6	101	0	14	0	0	0	0	0	0	0	115
7	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0
TOTALS:	383	901	38	16	0	0	0	0	0	0	1,338

STRUCTURE CODES

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WALTON COUNTY

PROJECTED STRUCURAL INVENTORY LOSS GREATER THAN: 25%

SCENARIO C
STRUCTURAL INVENTORY LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	211	847	17	16	0	0	0	0	0	0	1,091
2	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0
5	0	0	0	0	0	0	0	0	0	0	0
6	264	34	14	3	0	0	0	0	0	0	315
7	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0
TOTALS:	475	881	31	19	0	0	0	0	0	0	1,406

STRUCTURE CODES

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WALTON COUNTY

PROJECTED STRUCURAL INVENTORY LOSS GREATER THAN: 25%

SCENARIO D

STRUCTURAL INVENTORY LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	282	901	27	16	0	0	0	0	0	0	1,226
2	0	0	168	0	0	0	0	0	0	0	168
3	0	0	149	0	0	0	0	0	0	0	149
4	0	0	68	0	0	0	0	0	0	0	68
5	0	0	16	0	0	0	0	0	0	0	16
6	210	10	37	2	0	0	0	0	0	0	309
7	0	0	12	0	0	0	0	0	0	0	12
8	0	0	61	0	0	0	0	0	0	0	61
9	0	0	38	0	0	0	0	0	0	0	38
10	0	0	7	0	0	0	0	0	0	0	7
11	0	0	10	0	0	0	0	0	0	0	10
12	0	0	143	0	0	0	0	0	0	0	143
13	0	0	27	0	0	0	0	0	0	0	27
14	0	0	56	0	0	0	0	0	0	0	56
15	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0
TOTALS:	492	911	869	18	0	0	0	0	0	0	2,290

STRUCTURE CODES

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WALTON COUNTY

PROJECTED STRUCURAL INVENTORY LOSS GREATER THAN: 25%

SCENARIO E
STRUCTURAL INVENTORY LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	607	1,633	27	21	1	1	11	0	0	1	2,302
2	344	1,608	168	15	4	3	24	0	0	4	2,170
3	229	0	149	0	0	0	4	0	0	0	382
4	270	5	68	6	1	0	43	0	0	2	395
5	23	0	16	0	2	0	6	0	0	0	47
6	801	257	87	21	2	0	53	0	0	5	1,226
7	24	0	12	0	0	0	3	0	0	0	39
8	109	0	61	1	0	0	44	0	0	1	216
9	210	0	38	21	2	0	45	2	0	10	328
10	28	0	7	1	0	0	45	0	0	1	82
11	48	0	10	0	0	0	26	0	0	1	85
12	335	0	143	4	1	0	1	0	0	5	489
13	155	0	55	0	0	0	52	0	0	1	263
14	66	0	75	0	1	0	8	0	0	0	150
15	1,678	0	72	0	0	0	0	0	0	0	1,750
16	27	0	53	0	0	0	0	0	0	0	80
17	499	0	127	0	0	0	0	0	0	0	626
18	197	0	228	0	0	0	0	0	0	0	425
19	3	0	31	0	0	0	0	0	0	0	34
20	95	0	46	0	0	0	0	0	0	0	141
21	81	0	32	0	0	0	0	0	0	0	113
TOTALS:	5,829	3,503	1,505	90	14	4	365	2	0	31	11,343

STRUCTURE CODES

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BAY COUNTY

PROJECTED STRUCURAL INVENTORY LOSS GREATER THAN: 25%

SCENARIO A
STRUCTURAL INVENTORY LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	58	0	14	4	0	0	0	0	0	0	76
2	0	0	0	0	0	0	0	0	0	0	0
3	10	0	0	3	0	0	0	0	0	0	13
4	80	2	30	22	0	0	0	0	0	0	134
5	12	0	0	0	0	0	0	0	0	0	12
6	0	0	0	0	0	0	0	0	0	0	0
7	0	0	0	0	0	0	0	0	0	0	0
8	0	0	0	0	0	0	0	0	0	0	0
9	0	0	0	0	0	0	0	0	0	0	0
10	0	0	0	0	0	0	0	0	0	0	0
11	0	0	0	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0
16	0	0	0	0	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0	0	0	0
18	0	0	0	0	0	0	0	0	0	0	0
19	0	0	0	0	0	0	0	0	0	0	0
20	0	0	0	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0
26	0	0	0	0	0	0	0	0	0	0	0
27	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0
32	0	0	0	0	0	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0	0	0	0
34	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0
36	0	0	0	0	0	0	0	0	0	0	0
37	0	0	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0	0
TOTALS:	160	2	44	29	0	0	0	0	0	0	235

STRUCTURE CODES

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BAY COUNTY

PROJECTED STRUCURAL INVENTORY LOSS GREATER THAN: 25%

SCENARIO B
STRUCTURAL INVENTORY LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	58	0	14	4	0	0	0	0	0	0	76
2	0	0	0	0	0	0	0	0	0	0	0
3	68	0	1	0	0	0	0	0	0	0	69
4	80	2	30	22	0	0	0	0	0	0	134
5	12	0	0	0	0	0	0	0	0	0	12
6	0	0	0	0	0	0	0	0	0	0	0
7	61	0	14	0	0	0	0	0	0	0	75
8	30	0	0	0	0	0	0	0	0	0	30
9	5	0	0	0	0	0	0	0	0	0	5
10	11	0	0	0	0	0	0	0	0	0	11
11	63	0	3	0	0	0	0	0	0	0	66
12	17	0	5	0	0	0	0	0	0	0	22
13	1	0	0	0	0	0	0	0	0	0	1
14	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0
16	42	0	37	0	0	0	0	0	0	0	79
17	0	0	0	0	0	0	0	0	0	0	0
18	11	0	0	0	0	0	0	0	0	0	11
19	0	0	0	0	0	0	0	0	0	0	0
20	155	0	52	0	0	0	0	0	0	0	207
21	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0
26	33	0	2	0	0	0	0	0	0	0	35
27	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0
32	0	0	0	0	0	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0	0	0	0
34	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0
36	0	0	0	0	0	0	0	0	0	0	0
37	0	0	0	0	0	0	0	0	0	0	0
38	0	0	0	0	0	0	0	0	0	0	0
TOTALS:	647	2	158	26	0	0	0	0	0	0	833

STRUCTURE CODES

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BAY COUNTY

PROJECTED STRUCURAL INVENTORY LOSS GREATER THAN: 25%

SCENARIO C
STRUCTURAL INVENTORY LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	58	0	14	4	0	0	0	0	0	0	76
2	0	0	0	0	0	0	0	0	0	0	0
3	68	0	1	0	0	0	0	0	0	0	69
4	80	2	30	22	0	0	0	0	0	0	134
5	12	0	0	0	0	0	0	0	0	0	12
6	0	0	0	0	0	0	0	0	0	0	0
7	19	0	3	0	0	0	0	0	0	0	22
8	35	0	0	0	0	0	0	0	0	0	35
9	5	0	0	0	0	0	0	0	0	0	5
10	0	0	0	0	0	0	0	0	0	0	0
11	0	0	3	0	0	0	0	0	0	0	3
12	17	0	5	0	0	0	0	0	0	0	22
13	1	0	0	0	0	0	0	0	0	0	1
14	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0
16	42	0	37	0	0	0	0	0	0	0	79
17	0	0	0	0	0	0	0	0	0	0	0
18	11	0	0	0	0	0	0	0	0	0	11
19	0	0	0	0	0	0	0	0	0	0	0
20	155	0	52	0	0	0	0	0	0	0	207
21	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0	0	0	0
25	0	0	0	0	0	0	0	0	0	0	0
26	0	0	2	0	0	0	0	0	0	0	2
27	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0
32	0	0	0	0	0	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0	0	0	0
34	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0
36	0	0	0	0	0	0	0	0	0	0	0
37	30	0	4	0	0	0	0	0	0	0	34
38	0	0	0	0	0	0	0	0	0	0	0
TOTALS:	533	2	151	26	0	0	0	0	0	0	712

STRUCTURE CODES

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GI -- GOVERNMENT AND INSTITUTIONAL

BAY COUNTY

PROJECTED STRUCURAL INVENTORY LOSS GREATER THAN: 25%

SCENARIO D
STRUCTURAL INVENTORY LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	58	0	14	4	0	0	0	0	0	0	76
2	0	0	0	0	0	0	0	0	0	0	0
3	44	0	1	16	0	0	0	0	0	0	61
4	99	2	29	43	0	0	0	0	0	0	173
5	12	0	0	0	0	0	0	0	0	0	12
6	0	0	0	0	0	0	0	0	0	0	0
7	19	0	3	1	0	0	0	0	0	0	23
8	35	0	0	0	0	0	0	0	0	0	35
9	5	0	0	0	0	0	0	0	0	0	5
10	11	11	0	20	0	0	0	0	0	0	42
11	63	4	3	17	0	0	0	0	0	0	87
12	17	0	5	0	0	0	0	0	0	0	22
13	1	0	0	0	0	0	0	0	0	0	1
14	0	0	0	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0	0	0	0
16	61	0	41	18	0	0	0	0	0	0	120
17	0	0	0	0	0	0	0	0	0	0	0
18	70	11	0	15	0	0	0	0	0	0	96
19	0	0	0	0	0	0	0	0	0	0	0
20	155	0	52	12	0	0	0	0	0	0	219
21	0	0	0	0	0	0	0	0	0	0	0
22	0	0	0	0	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0	0	0	0
24	0	1	0	0	0	0	0	0	0	0	1
25	0	3	0	0	0	0	0	0	0	0	3
26	33	0	2	1	0	0	0	0	0	0	36
27	0	0	0	0	0	0	0	0	0	0	0
28	0	0	0	0	0	0	0	0	0	0	0
29	0	0	0	0	0	0	0	0	0	0	0
30	0	0	0	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0	0	0	0
32	0	0	0	0	0	0	0	0	0	0	0
33	0	0	0	0	0	0	0	0	0	0	0
34	0	0	0	0	0	0	0	0	0	0	0
35	0	0	0	0	0	0	0	0	0	0	0
36	0	0	0	0	0	0	0	0	0	0	0
37	30	0	4	0	0	0	0	0	0	0	34
38	0	0	0	0	0	0	0	0	0	0	0
TOTALS:	713	32	154	147	0	0	0	0	0	0	1,046

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GI -- GOVERNMENT AND INSTITUTIONAL

BAY COUNTY

PROJECTED STRUCURAL INVENTORY LOSS GREATER THAN: 25%

SCENARIO E

STRUCTURAL INVENTORY LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	58	0	14	4	2	0	8	0	0	1	87
2	0	0	0	0	0	0	0	0	0	1	1
3	69	0	2	21	0	1	2	0	0	17	112
4	164	2	39	103	2	1	0	0	0	7	318
5	112	0	4	13	0	0	0	0	0	1	130
6	0	0	0	0	0	0	23	0	0	0	23
7	63	0	14	1	0	0	18	0	0	2	98
8	99	0	4	1	0	0	7	0	0	2	113
9	541	0	73	13	5	0	2	3	0	2	639
10	468	14	1	54	5	1	0	0	0	12	555
11	63	4	9	17	0	0	0	0	0	14	107
12	155	0	33	0	0	0	41	0	0	0	229
13	1	0	0	0	0	0	4	0	0	0	5
14	0	0	0	0	0	0	4	0	0	0	4
15	0	0	0	0	0	0	0	0	0	0	0
16	63	0	41	47	5	0	5	0	0	6	167
17	76	0	21	12	0	0	19	0	0	8	136
18	80	11	14	18	1	1	7	0	0	4	136
19	20	0	5	3	0	0	8	0	0	0	36
20	137	0	60	12	1	1	26	0	0	9	296
21	208	0	61	0	0	0	0	0	0	0	269
22	68	0	7	0	0	0	2	0	0	0	77
23	24	0	0	0	0	0	0	0	0	0	24
24	323	0	28	0	0	0	0	0	0	0	351
25	180	0	128	0	0	0	0	0	0	0	308
26	49	0	66	1	3	0	0	0	0	0	119
27	0	0	19	0	0	0	0	0	0	0	19
28	690	5	6	46	5	0	0	0	0	24	776
29	24	4	0	11	2	0	1	0	0	11	53
30	314	2	18	11	3	0	3	0	0	1	352
31	100	0	21	0	0	0	0	0	0	0	121
32	169	0	48	0	0	0	0	0	0	0	217
33	112	0	13	0	0	0	7	0	0	1	133
34	93	0	46	0	0	0	0	0	0	0	139
35	89	0	277	0	0	0	0	0	0	0	366
36	3	0	200	0	0	0	0	0	0	0	203
37	337	0	144	0	0	0	111	0	0	4	596
38	25	0	11	1	1	0	54	0	0	4	96
TOTALS:	5,027	42	1,427	389	35	5	352	3	0	131	7,411

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HOLMES COUNTY

PROJECTED STRUCURAL INVENTORY LOSS GREATER THAN: 25%

SCENARIO A

STRUCTURAL INVENTORY LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	0	0	111	0	0	0	0	0	0	0	111
2	0	0	0	0	0	0	0	0	0	0	0
TOTALS:	0	0	111	0	0	0	0	0	0	0	111

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HOLMES COUNTY

PROJECTED STRUCURAL INVENTORY LOSS GREATER THAN: 25%

SCENARIO B
STRUCTURAL INVENTORY LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0
TOTALS:	0	0	0	0	0	0	0	0	0	0	0

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HOLMES COUNTY

PROJECTED STRUCURAL INVENTORY LOSS GREATER THAN: 25%

SCENARIO C

STRUCTURAL INVENTORY LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0
TOTALS:	0	0	0	0	0	0	0	0	0	0	0

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HOLMES COUNTY

PROJECTED STRUCURAL INVENTORY LOSS GREATER THAN: 25%

SCENARIO D

STRUCTURAL INVENTORY LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	0	0	256	0	0	0	0	0	0	0	256
2	0	0	255	1	0	0	14	0	0	0	270
TOTALS:	0	0	511	1	0	0	14	0	0	0	526

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HOLMES COUNTY

PROJECTED STRUCURAL INVENTORY LOSS GREATER THAN: 25%

SCENARIO E

STRUCTURAL INVENTORY LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	612	0	256	0	0	0	0	0	0	0	868
2	0	0	255	0	0	0	0	0	0	0	255
TOTALS:	612	0	511	0	0	0	0	0	0	0	1,123

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WASHINGTON COUNTY

PROJECTED STRUCURAL INVENTORY LOSS GREATER THAN: 25%

SCENARIO A

STRUCTURAL INVENTORY LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0
TOTALS:	0	0	0	0	0	0	0	0	0	0	0

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GI -- GOVERNMENT AND INSTITUTIONAL

WASHINGTON COUNTY

PROJECTED STRUCURAL INVENTORY LOSS GREATER THAN: 25%

SCENARIO B
STRUCTURAL INVENTORY LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0
TOTALS:	0	0	0	0	0	0	0	0	0	0	0

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WASHINGTON COUNTY

PROJECTED STRUCURAL INVENTORY LOSS GREATER THAN: 25%

SCENARIO C

STRUCTURAL INVENTORY LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0
TOTALS:	0	0	0	0	0	0	0	0	0	0	0

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WASHINGTON COUNTY

PROJECTED STRUCURAL INVENTORY LOSS GREATER THAN: 25%

SCENARIO D

STRUCTURAL INVENTORY LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	0	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0	0
TOTALS:	0	0	0	0	0	0	0	0	0	0	0

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WASHINGTON COUNTY

PROJECTED STRUCURAL INVENTORY LOSS GREATER THAN: 25%

SCENARIO E

STRUCTURAL INVENTORY LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI	TOTAL
1	74	0	11	1	0	0	24	0	0	0	110
2	331	0	139	0	0	0	0	0	0	0	470
3	587	0	165	0	0	0	0	0	0	0	752
4	0	0	88	0	0	0	0	0	0	0	88
TOTALS:	992	0	403	1	0	0	24	0	0	0	1,420

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ESCAMBIA COUNTY

AVERAGE HURRICANE STRUCTURAL LOSS (XXX) BY LOSS ZONE

SCENARIO A

AVERAGE PERCENTAGE LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	9.70	4.80	15.00	6.70	3.10	3.10	3.10	3.10	3.10	3.10
5	31.64	16.60	42.48	17.94	6.42	6.98	6.98	6.98	6.98	6.98
6	3.26	2.00	1.50	1.90	1.70	1.70	1.70	1.70	1.70	1.70
7	57.30	23.40	100.00	27.70	9.80	8.90	8.90	8.90	8.90	8.90
8	2.70	1.70	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00
9	2.70	1.70	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00
10	2.65	1.65	0.90	1.25	1.25	1.25	1.25	1.25	1.25	1.25
11	2.90	1.80	1.10	1.70	1.70	1.70	1.70	1.70	1.70	1.70
12	2.90	1.80	1.10	1.70	1.70	1.70	1.70	1.70	1.70	1.70
14	4.50	2.60	2.90	2.00	1.00	1.00	1.00	1.00	1.00	1.00
15	2.90	1.80	1.10	1.70	1.70	1.70	1.70	1.70	1.70	1.70
17	2.90	1.80	1.10	1.70	1.70	1.70	1.70	1.70	1.70	1.70
18	2.70	1.70	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00
19	2.90	1.80	1.10	1.70	1.70	1.70	1.70	1.70	1.70	1.70
20	2.78	1.74	0.98	1.28	1.28	1.28	1.28	1.28	1.28	1.28
21	2.73	1.71	0.93	1.10	1.10	1.10	1.10	1.10	1.10	1.10
22	2.90	1.80	1.10	1.70	1.70	1.70	1.70	1.70	1.70	1.70
23	2.83	1.77	1.03	1.47	1.47	1.47	1.47	1.47	1.47	1.47
24	2.90	1.80	1.10	1.70	1.70	1.70	1.70	1.70	1.70	1.70
25	2.90	1.80	1.10	1.70	1.70	1.70	1.70	1.70	1.70	1.70
26	4.00	2.35	2.34	1.75	1.05	1.05	1.05	1.05	1.05	1.05
27	3.13	1.91	1.37	0.85	0.64	0.64	0.64	0.64	0.64	0.64
28	2.76	1.73	0.96	0.59	0.59	0.59	0.59	0.59	0.59	0.59
29	2.82	1.76	1.02	1.42	1.42	1.42	1.42	1.42	1.42	1.42
30	2.72	1.71	0.92	0.78	0.78	0.78	0.78	0.78	0.78	0.78
31	2.70	1.70	0.90	0.45	0.45	0.45	0.45	0.45	0.45	0.45
32	2.70	1.70	0.90	1.00	1.00	1.00	1.00	1.00	1.00	1.00
33	2.65	1.65	0.90	1.25	1.25	1.25	1.25	1.25	1.25	1.25
34	2.70	1.70	0.90	0.55	0.55	0.55	0.55	0.55	0.55	0.55
35	2.70	1.70	0.90	0.10	0.10	0.10	0.10	0.10	0.10	0.10
36	3.60	2.15	1.90	1.05	0.55	0.55	0.55	0.55	0.55	0.55
37	2.67	1.67	0.90	0.55	0.55	0.55	0.55	0.55	0.55	0.55
38	2.61	1.61	0.90	1.39	1.39	1.39	1.39	1.39	1.39	1.39
39	2.26	1.37	0.70	1.25	1.25	1.25	1.25	1.25	1.25	1.25
40	2.29	1.38	0.72	1.23	1.23	1.23	1.23	1.23	1.23	1.23
41	2.04	1.21	0.57	0.46	0.46	0.46	0.46	0.46	0.46	0.46

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ESCAMBIA COUNTY

AVERAGE HURRICANE STRUCTURAL LOSS (XXX) BY LOSS ZONE

SCENARIO B

AVERAGE PERCENTAGE LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	71.20	41.70	100.00	41.70	13.50	13.50	13.50	13.50	13.50	13.50
5	59.28	32.42	88.28	31.96	11.04	10.78	10.78	10.78	10.78	10.78
6	9.40	5.14	10.04	5.46	3.10	3.26	3.26	3.26	3.26	3.26
7	69.00	38.00	100.00	38.00	13.50	12.90	12.90	12.90	12.90	12.90
8	3.30	2.00	1.70	2.00	2.00	2.00	2.00	2.00	2.00	2.00
9	4.40	2.80	4.40	2.70	2.70	2.70	2.70	2.70	2.70	2.70
10	3.66	2.25	2.56	2.21	2.21	2.21	2.21	2.21	2.21	2.21
11	33.50	17.70	43.50	19.50	8.80	8.80	8.80	8.80	8.80	8.80
12	22.10	11.90	29.30	14.70	6.50	7.40	7.40	7.40	7.40	7.40
14	21.15	11.10	27.85	12.45	5.55	5.90	5.90	5.90	5.90	5.90
15	4.71	2.97	5.20	2.87	2.87	2.87	2.87	2.87	2.87	2.87
17	30.30	15.10	39.60	17.20	17.20	17.20	17.20	17.20	17.20	17.20
18	4.40	2.80	4.40	2.70	2.70	2.70	2.70	2.70	2.70	2.70
19	4.90	3.10	5.70	3.00	3.00	3.00	3.00	3.00	3.00	3.00
20	4.60	2.92	4.92	2.82	2.82	2.82	2.82	2.82	2.82	2.82
21	4.47	2.84	4.59	2.74	2.74	2.74	2.74	2.74	2.74	2.74
22	4.90	3.10	5.70	3.00	3.00	3.00	3.00	3.00	3.00	3.00
23	4.73	3.00	5.27	2.90	2.90	2.90	2.90	2.90	2.90	2.90
24	4.90	3.10	5.70	3.00	3.00	3.00	3.00	3.00	3.00	3.00
25	4.90	3.10	5.70	3.00	3.00	3.00	3.00	3.00	3.00	3.00
26	4.50	2.86	4.66	2.76	2.76	2.76	2.76	2.76	2.76	2.76
27	4.51	2.86	4.68	2.76	2.76	2.76	2.76	2.76	2.76	2.76
28	4.55	2.89	4.80	2.79	2.79	2.79	2.79	2.79	2.79	2.79
29	4.70	2.98	5.18	2.88	2.88	2.88	2.88	2.88	2.88	2.88
30	4.46	2.83	4.54	2.73	2.73	2.73	2.73	2.73	2.73	2.73
31	4.40	2.80	4.40	2.70	2.70	2.70	2.70	2.70	2.70	2.70
32	4.40	2.80	4.40	2.70	2.70	2.70	2.70	2.70	2.70	2.70
33	3.85	2.39	3.04	2.34	2.34	2.34	2.34	2.34	2.34	2.34
34	4.40	2.80	4.40	2.70	2.70	2.70	2.70	2.70	2.70	2.70
35	4.40	2.80	4.40	2.70	2.70	2.70	2.70	2.70	2.70	2.70
36	4.40	2.80	4.40	2.70	2.70	2.70	2.70	2.70	2.70	2.70
37	4.19	2.66	3.90	2.56	2.56	2.56	2.56	2.56	2.56	2.56
38	3.94	2.48	3.30	2.40	2.40	2.40	2.40	2.40	2.40	2.40
39	2.90	1.82	1.26	1.73	1.73	1.73	1.73	1.73	1.73	1.73
40	3.51	2.19	2.29	2.09	2.09	2.09	2.09	2.09	2.09	2.09
41	3.70	2.30	2.60	2.20	2.20	2.20	2.20	2.20	2.20	2.20

STRUCTURE CODES

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GI -- GOVERNMENT AND INSTITUTIONAL

ESCAMBIA COUNTY

AVERAGE HURRICANE STRUCTURAL LOSS (%%%) BY LOSS ZONE

SCENARIO C

AVERAGE PERCENTAGE LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	76.20	48.90	100.00	48.80	18.20	16.80	16.80	16.80	16.80	16.80
5	70.64	44.02	95.32	44.20	17.46	16.50	16.50	16.50	16.50	16.50
6	27.00	15.62	44.62	19.36	9.04	9.44	9.44	9.44	9.44	9.44
7	77.00	49.30	100.00	49.30	19.00	17.60	17.60	17.60	17.60	17.60
8	8.00	5.00	17.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
9	8.00	5.00	17.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
10	6.15	3.85	10.50	3.80	3.80	3.80	3.80	3.80	3.80	3.80
11	45.40	24.90	68.80	26.70	12.30	12.90	12.90	12.90	12.90	12.90
12	45.50	24.80	68.80	26.70	12.30	12.90	12.90	12.90	12.90	12.90
14	33.80	18.30	50.20	52.50	18.30	9.00	9.45	9.45	9.45	9.45
15	9.29	6.41	22.56	8.83	6.14	6.20	6.20	6.20	6.20	6.20
17	41.20	20.90	63.60	21.70	9.60	9.80	9.80	9.80	9.80	9.80
18	8.00	5.00	17.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
19	9.00	6.00	22.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
20	8.40	5.40	19.00	5.40	5.40	5.40	5.40	5.40	5.40	5.40
21	8.14	5.14	17.71	5.14	5.14	5.14	5.14	5.14	5.14	5.14
22	9.00	6.00	22.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
23	8.67	5.67	20.33	5.67	5.67	5.67	5.67	5.67	5.67	5.67
24	9.00	6.00	22.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
25	9.00	6.00	22.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
26	8.24	5.20	18.20	5.20	10.90	5.20	5.20	5.20	5.20	5.20
27	8.21	5.21	18.07	5.21	5.21	5.21	5.21	5.21	5.21	5.21
28	8.31	5.31	18.54	5.31	5.31	5.31	5.31	5.31	5.31	5.31
29	8.60	5.60	20.00	5.60	5.60	5.60	5.60	5.60	5.60	5.60
30	8.11	5.11	17.56	5.11	5.11	5.11	5.11	5.11	5.11	5.11
31	8.00	5.00	17.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
32	8.00	5.00	17.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
33	6.25	3.93	10.65	3.88	3.88	3.88	3.88	3.88	3.88	3.88
34	8.00	5.00	17.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
35	8.00	5.00	17.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
36	8.00	5.00	17.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
37	6.04	3.88	10.43	3.84	3.84	3.84	3.84	3.84	3.84	3.84
38	5.10	3.32	7.31	3.26	3.26	3.26	3.26	3.26	3.26	3.26
39	3.82	2.31	2.72	2.21	2.21	2.21	2.21	2.21	2.21	2.21
40	3.94	2.42	3.08	2.32	2.32	2.32	2.32	2.32	2.32	2.32
41	3.79	2.29	2.76	2.19	2.19	2.19	2.19	2.19	2.19	2.19

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ESCAMBIA COUNTY

AVERAGE HURRICANE STRUCTURAL LOSS (%%%) BY LOSS ZONE

SCENARIO D

AVERAGE PERCENTAGE LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	85.60	80.90	100.00	84.80	32.50	24.20	24.20	24.20	24.20	24.20
5	80.04	58.34	99.24	57.62	24.06	22.02	22.02	22.02	22.02	22.02
6	57.00	32.28	87.98	32.06	16.72	17.40	17.40	17.40	17.40	17.40
7	85.70	84.80	100.00	84.80	32.50	24.20	24.20	24.20	24.20	24.20
8	24.35	14.50	53.80	15.75	11.30	11.30	11.30	11.30	11.30	11.30
9	13.50	9.00	45.00	8.90	8.90	8.90	8.90	8.90	8.90	8.90
10	18.75	11.58	43.63	15.63	9.21	9.21	9.21	9.21	9.21	9.21
11	83.10	46.30	100.00	40.70	19.30	20.70	20.70	20.70	20.70	20.70
12	76.40	42.80	100.00	38.90	18.80	20.00	20.00	20.00	20.00	20.00
14	69.25	39.55	91.90	36.80	17.40	17.80	17.80	17.80	17.80	17.80
15	52.23	29.74	77.34	29.64	30.87	16.70	16.70	16.70	16.70	16.70
17	78.90	27.10	91.30	36.70	17.20	18.80	18.80	18.80	18.80	18.80
18	16.10	10.37	46.90	13.45	9.37	9.37	9.37	9.37	9.37	9.37
19	56.10	32.00	88.60	32.60	16.90	17.70	17.70	17.70	17.70	17.70
20	30.54	18.20	62.44	18.38	12.10	12.42	12.42	12.42	12.42	12.42
21	25.53	15.41	56.73	15.54	11.03	11.26	11.26	11.26	11.26	11.26
22	29.03	17.67	70.73	17.60	12.37	12.63	12.63	12.63	12.63	12.63
23	14.83	10.00	55.20	9.70	9.70	9.70	9.70	9.70	9.70	9.70
24	15.50	10.50	61.80	10.10	10.10	10.10	10.10	10.10	10.10	10.10
25	15.50	10.50	61.80	10.10	10.10	10.10	10.10	10.10	10.10	10.10
26	14.01	9.34	49.50	9.33	9.33	9.33	9.33	9.33	9.33	9.33
27	13.95	9.32	48.81	9.18	9.18	9.18	9.18	9.18	9.18	9.18
28	14.12	9.46	50.17	9.27	9.27	9.27	9.27	9.27	9.27	9.27
29	14.70	9.90	55.08	9.62	9.62	9.62	9.62	9.62	9.62	9.62
30	13.72	9.17	46.87	9.03	9.03	9.03	9.03	9.03	9.03	9.33
31	13.50	9.00	45.00	8.90	8.90	8.90	8.90	8.90	8.90	8.90
32	13.50	9.00	45.00	8.90	8.90	8.90	8.90	8.90	8.90	8.90
33	12.25	8.15	33.50	8.00	8.00	8.00	8.00	8.00	8.00	8.00
34	13.50	9.00	45.00	8.90	8.90	8.90	8.90	8.90	8.90	8.90
35	13.50	9.00	45.00	8.90	8.90	8.90	8.90	8.90	8.90	8.90
36	13.55	9.00	45.50	8.95	8.95	8.95	8.95	8.95	8.95	8.75
37	11.73	7.79	35.77	7.62	7.62	7.62	7.62	7.62	7.62	7.62
38	11.00	7.30	32.00	7.10	7.10	7.10	7.10	7.10	7.10	7.10
39	6.94	4.47	14.29	4.35	4.35	4.35	4.35	4.35	4.35	4.35
40	9.12	5.92	23.35	5.81	5.81	5.81	5.81	5.81	5.81	5.81
41	8.41	5.50	20.96	5.41	5.41	5.41	5.41	5.41	5.41	5.41

STRUCTURE CODES

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ESCAMBIA COUNTY

AVERAGE HURRICANE STRUCTURAL LOSS (XXX) BY LOSS ZONE

SCENARIO E

AVERAGE PERCENTAGE LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	87.30	86.20	100.00	86.20	38.80	31.20	31.20	31.20	31.20	31.20
5	88.30	71.68	100.00	71.84	44.74	44.14	44.14	44.14	44.14	44.14
6	77.04	54.40	100.00	54.08	41.46	42.14	42.14	42.14	42.14	42.14
7	90.30	77.60	100.00	77.60	47.10	43.80	43.80	43.80	43.80	43.80
8	31.45	23.60	100.00	23.90	23.90	23.90	23.90	23.90	23.90	23.90
9	35.80	29.70	100.00	28.20	28.20	28.20	28.20	28.20	28.20	28.20
10	31.06	23.46	100.00	23.63	23.14	23.20	23.20	23.20	23.20	23.20
11	88.60	70.20	100.00	57.10	41.70	42.70	42.70	42.70	42.70	42.70
12	80.70	55.80	100.00	54.50	40.90	41.70	41.70	41.70	41.70	41.70
14	75.40	48.45	100.00	43.30	25.80	26.90	26.90	26.90	26.90	26.90
15	60.49	44.56	100.00	44.13	37.26	37.66	37.66	37.66	37.66	37.66
17	82.40	51.60	100.00	53.20	37.30	40.10	40.10	40.10	40.10	40.10
18	35.26	28.89	100.00	27.62	27.37	27.41	27.41	27.41	27.41	27.41
19	48.98	37.98	100.00	38.13	35.25	35.40	35.40	35.40	35.40	35.40
20	38.28	31.42	100.00	30.52	30.52	30.52	30.52	30.52	30.52	30.52
21	40.67	32.59	100.00	31.39	29.74	29.83	29.83	29.83	29.83	29.83
22	50.60	38.40	83.10	36.43	36.60	36.60	36.60	36.60	36.60	36.60
23	40.60	32.57	100.00	32.73	32.73	32.73	32.73	32.73	32.73	32.73
24	43.00	34.00	100.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00
25	43.00	34.00	100.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00
26	26.34	19.32	100.00	19.45	19.45	19.45	19.45	19.45	19.45	19.45
27	35.53	27.49	100.00	27.96	27.96	27.96	27.96	27.96	27.96	27.96
28	38.57	30.19	100.00	30.78	30.78	30.78	30.78	30.78	30.78	30.78
29	40.12	32.28	100.00	32.28	32.28	32.28	32.28	32.28	32.28	32.28
30	31.26	23.67	100.00	23.97	23.97	23.97	23.97	23.97	23.97	23.97
31	32.41	24.73	100.00	25.02	25.02	25.02	25.02	25.02	25.02	25.02
32	25.70	18.70	100.00	18.80	18.80	18.80	18.80	18.80	18.80	18.80
33	26.93	19.83	100.00	19.99	19.99	19.99	19.99	19.99	19.99	19.99
34	31.15	23.60	100.00	23.85	23.85	23.85	23.85	23.85	23.85	23.85
35	36.60	28.50	100.00	28.90	28.90	28.90	28.90	28.90	28.90	28.90
36	30.90	23.40	100.00	23.65	23.65	23.65	23.65	23.65	23.65	23.65
37	26.31	19.44	100.00	19.52	19.52	19.52	19.52	19.52	19.52	19.52
38	20.86	14.85	93.33	14.85	14.85	14.85	14.85	14.85	14.85	14.85
39	9.93	6.57	28.08	6.48	6.48	6.48	6.48	6.48	6.48	6.48
40	10.85	7.25	32.96	7.06	7.06	7.06	7.06	7.06	7.06	7.06
41	8.57	5.55	19.92	5.45	5.45	5.45	5.45	5.45	5.45	5.45

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SANTA ROSA COUNTY

AVERAGE HURRICANE STRUCTURAL LOSS (XXX) BY LOSS ZONE

SCENARIO A

AVERAGE PERCENTAGE LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	2.10	1.20	0.60	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2	2.90	1.80	1.10	1.70	1.70	1.70	1.70	1.70	1.70	1.70
3	2.90	1.80	1.10	1.70	1.70	1.70	1.70	1.70	1.70	1.70
4	2.70	1.70	1.00	1.60	1.60	1.60	1.60	1.60	1.60	1.60
5	2.66	1.66	0.96	1.56	1.56	1.56	1.56	1.56	1.56	1.56
6	2.60	1.60	0.90	1.56	1.56	1.56	1.56	1.56	1.56	1.56
7	2.65	1.66	0.96	1.57	1.57	1.57	1.57	1.57	1.57	1.57
8	2.01	1.18	0.54	1.07	1.07	1.07	1.07	1.07	1.07	1.07
9	2.90	1.80	1.10	1.70	1.70	1.70	1.70	1.70	1.70	1.70
10	2.90	1.30	1.10	1.70	1.70	1.70	1.70	1.70	1.70	1.70
11	2.80	1.75	1.05	1.65	1.65	1.65	1.65	1.65	1.65	1.65
13	2.78	1.73	1.03	1.63	1.63	1.63	1.63	1.63	1.63	1.63
14	2.61	1.61	0.91	1.51	1.51	1.51	1.51	1.51	1.51	1.51
15	2.67	1.67	0.97	1.58	1.58	1.58	1.58	1.58	1.58	1.58
16	2.66	1.66	0.96	1.60	1.60	1.60	1.60	1.60	1.60	1.60
17	2.60	1.60	0.90	1.60	1.60	1.60	1.60	1.60	1.60	1.60
18	2.20	1.33	0.63	1.20	1.20	1.20	1.20	1.20	1.20	1.20
19	1.97	1.17	0.49	0.99	0.99	0.99	0.99	0.99	0.99	0.99
20	2.27	1.36	0.69	1.29	1.29	1.29	1.29	1.29	1.29	1.29
21	2.60	1.60	0.90	1.52	1.52	1.52	1.52	1.52	1.52	1.52
22	2.60	1.60	0.90	1.50	1.50	1.50	1.50	1.50	1.50	1.50
23	2.22	1.32	0.66	1.22	1.22	1.22	1.22	1.22	1.22	1.22
24	1.72	1.09	0.52	0.82	0.82	0.82	0.82	0.82	0.82	0.82
25	2.10	1.36	0.73	1.12	1.12	1.12	1.12	1.12	1.12	1.12
26	1.61	1.20	0.69	0.71	0.71	0.71	0.71	0.71	0.71	0.71
27	2.28	1.40	0.70	1.28	1.28	1.28	1.28	1.28	1.28	1.28

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SANTA ROSA COUNTY

AVERAGE HURRICANE STRUCTURAL LOSS (XXX) BY LOSS ZONE

SCENARIO B

AVERAGE PERCENTAGE LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	6.65	3.93	5.78	3.09	2.68	2.95	2.95	2.95	2.95	2.95
2	6.86	4.31	8.13	4.34	3.29	3.60	3.60	3.60	3.60	3.60
3	5.42	3.50	6.69	3.50	3.20	3.25	3.25	3.25	3.25	3.25
4	7.35	4.33	7.53	4.48	3.00	3.38	3.38	3.38	3.38	3.38
5	4.76	3.03	4.63	3.05	2.64	2.72	2.72	2.72	2.72	2.72
6	5.82	3.68	5.83	3.82	2.84	3.04	3.04	3.04	3.04	3.04
7	5.51	3.33	5.48	3.43	2.73	2.87	2.87	2.87	2.87	2.87
8	3.36	2.10	1.90	2.00	2.00	2.00	2.00	2.00	2.00	2.00
9	4.90	3.20	6.20	3.10	3.10	3.10	3.10	3.10	3.10	3.10
10	4.90	3.20	6.20	3.10	3.10	3.10	3.10	3.10	3.10	3.10
11	5.48	3.40	6.03	3.30	2.80	3.05	3.05	3.05	3.05	3.05
13	4.53	2.90	5.13	2.80	2.80	2.80	2.80	2.80	2.80	2.80
14	4.00	2.60	3.70	2.50	2.50	2.50	2.50	2.50	2.50	2.50
15	4.00	2.60	3.70	2.50	2.50	2.50	2.50	2.50	2.50	2.50
16	4.56	2.81	4.50	2.78	2.57	2.61	2.61	2.61	2.61	2.61
17	4.00	2.60	3.70	2.50	2.50	2.50	2.50	2.50	2.50	2.50
18	3.60	2.27	2.43	2.17	2.17	2.17	2.17	2.17	2.17	2.17
19	3.35	2.08	1.84	1.95	1.97	1.97	1.97	1.97	1.97	1.97
20	3.64	2.35	3.10	2.11	2.21	2.21	2.21	2.21	2.21	2.21
21	4.00	2.60	3.70	2.50	2.50	2.50	2.50	2.50	2.50	2.50
22	4.00	2.60	3.70	2.50	2.50	2.50	2.50	2.50	2.50	2.50
23	3.58	2.32	3.09	2.03	2.17	2.17	2.17	2.17	2.17	2.17
24	2.99	1.85	1.49	1.64	1.72	1.72	1.72	1.72	1.72	1.72
25	3.52	2.19	2.41	2.09	2.09	2.09	2.09	2.09	2.09	2.09
26	2.73	1.71	1.03	1.61	1.61	1.61	1.61	1.61	1.61	1.61
27	3.23	2.30	2.75	2.24	2.24	2.24	2.24	2.24	2.24	2.24

STRUCTURE CODES

SR -- SINGLE UNIT RESIDENTIAL
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HC -- HEALTH CARE
GI -- GOVERNMENT AND INSTITUTIONAL

SANTA ROSA COUNTY

AVERAGE HURRICANE STRUCTURAL LOSS (XXX) BY LOSS ZONE

SCENARIO C

AVERAGE PERCENTAGE LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	12.60	7.13	22.63	4.75	4.65	4.83	4.83	4.83	4.83	4.83
2	20.80	12.38	36.16	13.95	8.13	8.86	8.86	8.86	8.86	8.86
3	13.28	8.12	27.12	7.55	6.53	6.69	6.69	6.69	6.69	6.69
4	14.73	8.58	24.40	8.95	5.98	6.33	6.33	6.33	6.33	6.33
5	6.80	4.40	12.30	4.30	4.30	4.30	4.30	4.30	4.30	4.30
6	4.74	3.03	5.17	2.93	2.93	2.93	2.93	2.93	2.93	2.93
7	7.02	4.33	8.84	4.79	3.56	3.69	3.69	3.69	3.69	3.69
8	5.33	3.41	6.50	3.38	3.18	3.21	3.21	3.21	3.21	3.21
9	8.68	4.72	11.58	4.93	3.86	3.94	3.94	3.94	3.94	3.94
10	8.90	5.80	22.00	5.70	5.70	5.70	5.70	5.70	5.70	5.70
11	16.43	9.45	29.30	10.08	6.70	6.85	6.85	6.85	6.85	6.85
13	8.10	5.25	18.08	5.15	5.15	5.15	5.15	5.15	5.15	5.15
14	6.26	4.05	10.51	3.95	3.95	3.95	3.95	3.95	3.95	3.95
15	6.32	4.09	10.69	3.99	3.99	3.99	3.99	3.99	3.99	3.99
16	4.96	3.19	6.09	3.09	3.09	3.09	3.09	3.09	3.09	3.09
17	4.70	3.00	5.00	2.90	2.90	2.90	2.90	2.90	2.90	2.90
18	4.97	3.20	6.13	3.10	3.10	3.10	3.10	3.10	3.10	3.10
19	5.06	3.27	6.55	3.17	3.17	3.17	3.17	3.17	3.17	3.17
20	4.73	3.02	5.12	2.92	2.92	2.92	2.92	2.92	2.92	2.92
21	4.86	3.12	5.68	3.02	3.02	3.02	3.02	3.02	3.02	3.02
22	4.70	3.00	5.00	2.90	2.90	2.90	2.90	2.90	2.90	2.90
23	4.70	3.00	5.00	2.90	2.90	2.90	2.90	2.90	2.90	2.90
24	4.38	2.76	4.23	2.66	2.66	2.66	2.66	2.66	2.66	2.66
25	4.23	2.65	3.98	2.55	2.55	2.55	2.55	2.55	2.55	2.55
26	3.86	2.36	2.88	2.30	2.30	2.30	2.30	2.30	2.30	2.30
27	4.49	2.83	4.66	2.72	2.72	2.72	2.72	2.72	2.72	2.72

STRUCTURE CODES

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SANTA ROSA COUNTY

AVERAGE HURRICANE STRUCTURAL LOSS (%%%) BY LOSS ZONE

SCENARIO D

AVERAGE PERCENTAGE LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	10.25	6.73	22.98	6.98	6.25	6.38	6.38	6.38	6.38	6.38
2	13.31	8.50	26.04	9.05	6.78	7.15	7.15	7.15	7.15	7.15
3	9.82	6.48	22.78	6.57	6.19	6.23	6.23	6.23	6.23	6.23
4	18.00	10.73	31.58	11.80	7.68	8.25	8.25	8.25	8.25	8.25
5	8.38	5.20	13.85	4.71	4.58	4.61	4.61	4.61	4.61	4.61
6	9.52	5.70	13.96	6.07	4.48	4.65	4.65	4.65	4.65	4.65
7	14.40	8.61	26.07	9.44	6.69	6.93	6.93	6.93	6.93	6.93
8	7.33	4.76	13.73	4.85	4.55	4.60	4.60	4.60	4.60	4.60
9	11.26	7.18	24.15	7.71	6.44	6.61	6.61	6.61	6.61	6.61
10	9.00	6.00	22.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
11	11.88	7.65	24.93	8.13	7.18	7.90	7.90	7.90	7.90	7.90
13	8.40	5.58	19.45	5.55	5.55	5.55	5.55	5.55	5.55	5.55
14	6.60	4.30	11.80	4.20	4.20	4.20	4.20	4.20	4.20	4.20
15	6.56	4.27	11.64	4.17	4.17	4.17	4.17	4.17	4.17	4.17
16	9.74	6.14	20.06	6.32	5.61	5.01	5.01	5.01	5.01	5.01
17	6.10	3.90	10.00	3.80	3.80	3.80	3.80	3.80	3.80	3.80
18	7.23	4.63	14.00	4.60	4.60	4.60	4.60	4.60	4.60	4.60
19	7.48	4.81	15.09	4.80	4.80	4.80	4.80	4.80	4.80	4.80
20	6.34	4.06	10.86	3.97	3.97	3.97	3.97	3.97	3.97	3.97
21	6.30	4.06	10.72	3.96	3.96	3.96	3.96	3.96	3.96	3.96
22	6.10	3.90	10.00	3.80	3.80	3.80	3.80	3.80	3.80	3.80
23	6.10	3.90	10.00	3.80	3.80	3.80	3.80	3.80	3.80	3.80
24	5.81	3.80	8.70	3.76	3.76	3.76	3.76	3.76	3.76	3.76
25	5.30	3.44	7.16	3.39	3.39	3.39	3.39	3.39	3.39	3.39
26	4.51	2.76	5.46	2.74	2.74	2.74	2.74	2.74	2.74	2.74
27	5.54	3.55	8.46	3.55	3.55	3.55	3.55	3.55	3.55	3.55

STRUCTURE CODES

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SANTA ROSA COUNTY

AVERAGE HURRICANE STRUCTURAL LOSS (XXX) BY LOSS ZONE

SCENARIO E

AVERAGE PERCENTAGE LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	33.23	22.78	100.00	23.28	20.15	20.30	20.30	20.30	20.30	20.30
2	64.55	46.73	100.00	47.75	38.54	39.05	39.05	39.05	39.05	39.05
3	42.20	34.00	100.00	34.50	34.50	34.50	34.50	34.50	34.50	34.50
4	36.80	28.70	100.00	29.08	29.08	29.08	29.08	29.08	29.08	29.08
5	31.04	23.35	100.00	23.69	23.51	23.58	23.58	23.58	23.58	23.58
6	32.41	23.98	100.00	24.50	23.76	23.89	23.89	23.89	23.39	23.89
7	35.17	27.24	100.00	27.63	27.53	27.57	27.57	27.57	27.57	27.57
8	25.80	18.79	100.00	18.90	18.90	18.90	18.90	18.90	18.90	18.90
9	44.96	35.58	100.00	36.58	35.13	35.29	35.29	35.29	35.29	35.29
10	43.22	34.58	100.00	35.16	34.70	34.73	34.73	34.73	34.73	34.73
11	39.35	31.25	100.00	31.70	31.70	31.70	31.70	31.70	31.70	31.70
13	37.93	29.93	100.00	30.35	30.35	30.35	30.35	30.35	30.35	30.35
14	30.80	23.20	100.00	23.50	23.50	23.50	23.50	23.50	23.50	23.50
15	30.80	23.20	100.00	23.50	23.50	23.50	23.50	23.50	23.50	23.50
16	34.46	26.61	100.00	26.97	26.97	26.97	26.97	26.97	26.97	26.97
17	30.80	23.20	100.00	23.50	23.50	23.50	23.50	23.50	23.50	23.50
18	27.47	20.20	100.00	20.37	20.37	20.37	20.37	20.37	20.37	20.37
19	25.44	18.42	100.00	18.51	18.51	18.51	18.51	18.51	18.51	18.51
20	27.23	20.16	100.00	20.34	20.34	20.34	20.34	20.34	20.34	20.34
21	30.80	23.20	100.00	23.50	23.50	23.50	23.50	23.50	23.50	23.50
22	30.80	23.20	100.00	23.50	23.50	23.50	23.50	23.50	23.50	23.50
23	26.56	19.62	100.00	19.78	19.78	19.78	19.78	19.78	19.78	19.78
24	20.23	14.33	90.22	14.33	14.33	14.33	14.33	14.33	14.33	14.33
25	23.78	17.20	91.47	17.29	17.29	17.29	17.29	17.29	17.29	17.29
26	16.97	11.75	71.83	11.71	11.71	11.71	11.71	11.71	11.71	11.71
27	24.68	17.84	98.54	17.43	17.43	17.43	17.43	17.43	17.43	17.43

STRUCTURE CODES

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OKALOOSA COUNTY

AVERAGE HURRICANE STRUCTURAL LOSS (XXX) BY LOSS ZONE

SCENARIO A

AVERAGE PERCENTAGE LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	45.70	25.40	100.00	23.40	9.30	8.10	8.10	8.10	8.10	8.10
3	2.90	1.80	1.10	1.70	1.70	1.70	1.70	1.70	1.70	1.70
4	2.90	1.80	1.10	1.70	1.70	1.70	1.70	1.70	1.70	1.70
5	2.90	1.80	1.10	1.70	1.70	1.70	1.70	1.70	1.70	1.70
7	2.90	1.80	1.10	1.70	1.70	1.70	1.70	1.70	1.70	1.70
8	2.90	1.80	1.10	1.70	1.70	1.70	1.70	1.70	1.70	1.70
10	2.90	1.80	1.10	1.70	1.70	1.70	1.70	1.70	1.70	1.70
11	2.90	1.80	1.10	1.70	1.70	1.70	1.70	1.70	1.70	1.70
12	2.90	1.80	1.10	1.70	1.70	1.70	1.70	1.70	1.70	1.70
14	2.90	1.80	1.10	1.70	1.70	1.70	1.70	1.70	1.70	1.70
15	2.90	1.80	1.10	1.70	1.70	1.70	1.70	1.70	1.70	1.70
16	2.90	1.80	1.10	1.70	1.70	1.70	1.70	1.70	1.70	1.70
17	2.90	1.80	1.10	1.70	1.70	1.70	1.70	1.70	1.70	1.70
18	2.70	1.70	1.00	1.60	1.60	1.60	1.60	1.60	1.60	1.60
19	2.90	1.80	1.10	1.70	1.70	1.70	1.70	1.70	1.70	1.70
20	2.90	1.80	1.10	1.70	1.70	1.70	1.70	1.70	1.70	1.70
21	2.88	1.79	1.09	1.69	1.69	1.69	1.69	1.69	1.69	1.69
22	2.90	1.80	1.10	1.70	1.70	1.70	1.70	1.70	1.70	1.70
23	2.59	1.67	0.90	1.49	1.49	1.49	1.49	1.49	1.49	1.49
24	2.04	1.18	0.59	1.06	1.06	1.06	1.06	1.06	1.06	1.06
25	2.30	1.43	0.73	1.27	1.27	1.27	1.27	1.27	1.27	1.27
26	1.61	0.80	0.35	0.70	0.70	0.70	0.70	0.70	0.70	0.70
27	2.24	1.36	0.68	1.24	1.24	1.24	1.24	1.24	1.24	1.24
28	2.25	1.35	0.68	1.23	1.23	1.23	1.23	1.23	1.23	1.23

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OKALOOSA COUNTY

AVERAGE HURRICANE STRUCTURAL LOSS (%%%) BY LOSS ZONE

SCENARIO B

AVERAGE PERCENTAGE LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	71.30	39.80	100.00	39.70	14.80	13.80	13.80	13.80	13.80	13.80
3	4.90	3.20	6.20	3.10	3.10	3.10	3.10	3.10	3.10	3.10
4	4.90	3.20	6.20	3.10	3.10	3.10	3.10	3.10	3.10	3.10
5	4.90	3.20	6.20	3.10	3.10	3.10	3.10	3.10	3.10	3.10
7	4.90	3.20	6.20	3.10	3.10	3.10	3.10	3.10	3.10	3.10
8	5.38	6.08	13.73	6.75	4.20	4.38	4.38	4.38	4.38	4.38
10	4.90	3.20	6.20	3.10	3.10	3.10	3.10	3.10	3.10	3.10
11	4.90	3.20	6.20	3.10	3.10	3.10	3.10	3.10	3.10	3.10
12	4.90	3.20	6.20	3.10	3.10	3.10	3.10	3.10	3.10	3.10
14	4.90	3.20	6.20	3.10	3.10	3.10	3.10	3.10	3.10	3.10
15	4.90	3.20	6.20	3.10	3.10	3.10	3.10	3.10	3.10	3.10
16	4.90	3.20	6.20	3.10	3.10	3.10	3.10	3.10	3.10	3.10
17	4.90	3.20	6.20	3.10	3.10	3.10	3.10	3.10	3.10	3.10
18	4.30	2.60	4.40	2.50	2.50	2.50	2.50	2.50	2.50	2.50
19	9.20	5.40	12.00	6.03	3.93	4.20	4.20	4.20	4.20	4.20
20	4.90	3.20	6.20	3.10	3.10	3.10	3.10	3.10	3.10	3.10
21	4.85	3.15	6.05	3.05	3.05	3.05	3.05	3.05	3.05	3.05
22	4.90	3.20	6.20	3.10	3.10	3.10	3.10	3.10	3.10	3.10
23	4.05	2.60	3.82	2.50	2.50	2.50	2.50	2.50	2.50	2.50
24	4.04	2.58	3.74	2.48	2.48	2.48	2.48	2.48	2.48	2.48
25	3.97	2.53	3.47	2.43	2.43	2.43	2.43	2.43	2.43	2.43
26	2.98	2.29	2.72	2.27	2.27	2.27	2.27	2.27	2.27	2.27
27	3.64	2.41	3.07	2.32	2.32	2.32	2.32	2.32	2.32	2.32
28	2.32	2.20	2.51	2.20	2.20	2.20	2.20	2.20	2.20	2.20

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OKALOOSA COUNTY

AVERAGE HURRICANE STRUCTURAL LOSS (XXX) BY LOSS ZONE

SCENARIO C

AVERAGE PERCENTAGE LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	78.20	52.10	100.00	52.10	19.90	18.30	18.30	18.30	18.30	18.30
3	9.00	6.00	22.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
4	9.00	6.00	22.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
5	9.00	6.00	22.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
7	9.00	6.00	22.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
8	15.83	9.53	30.00	10.00	7.20	7.30	7.30	7.30	7.30	7.30
10	9.00	6.00	22.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
11	9.00	6.00	22.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
12	9.00	6.00	22.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
14	9.00	6.00	22.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
15	9.00	6.00	22.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
16	9.00	6.00	22.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
17	9.00	6.00	22.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
18	8.00	5.00	17.00	5.00	5.00	5.00	5.00	5.00	5.00	5.00
19	14.70	8.83	28.25	9.70	7.08	7.23	7.23	7.23	7.23	7.23
20	9.00	6.00	22.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
21	8.92	5.92	21.58	5.92	5.92	5.92	5.92	5.92	5.92	5.92
22	9.00	6.00	22.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00
23	6.34	4.17	12.86	4.17	4.17	4.17	4.17	4.17	4.17	4.17
24	6.35	4.18	12.53	4.18	4.18	4.18	4.18	4.18	4.18	4.18
25	6.00	4.00	11.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
26	5.42	3.42	8.48	3.42	3.42	3.42	3.42	3.42	3.42	3.42
27	5.86	3.84	9.53	3.84	3.84	3.84	3.84	3.84	3.84	3.84
28	5.01	3.01	8.01	3.01	3.01	3.01	3.01	3.01	3.01	3.01

STRUCTURE CODES

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OKALOOSA COUNTY

AVERAGE HURRICANE STRUCTURAL LOSS (%%%) BY LOSS ZONE

SCENARIO D

AVERAGE PERCENTAGE LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	85.70	84.80	100.00	84.80	32.50	24.20	24.20	24.20	24.20	24.20
3	15.50	10.50	61.80	10.10	10.10	10.10	10.10	10.10	10.10	10.10
4	15.50	10.50	61.80	10.10	10.10	10.10	10.10	10.10	10.10	10.10
5	15.50	10.50	61.80	10.10	10.10	10.10	10.10	10.10	10.10	10.10
7	15.50	10.50	61.80	10.10	10.10	10.10	10.10	10.10	10.10	10.10
8	23.95	14.80	67.55	15.05	11.58	11.75	11.75	11.75	11.75	11.75
10	15.50	10.50	61.80	10.10	10.10	10.10	10.10	10.10	10.10	10.10
11	15.50	10.50	61.80	10.10	10.10	10.10	10.10	10.10	10.10	10.10
12	15.50	10.10	61.80	10.10	10.10	10.10	10.10	10.10	10.10	10.10
14	15.50	10.50	61.80	10.10	10.10	10.10	10.10	10.10	10.10	10.10
15	15.50	10.50	61.80	10.10	10.10	10.10	10.10	10.10	10.10	10.10
16	15.50	10.50	61.80	10.10	10.10	10.10	10.10	10.10	10.10	10.10
17	15.50	10.50	61.80	10.10	10.10	10.10	10.10	10.10	10.10	10.10
18	13.50	9.00	45.00	8.90	8.90	8.90	8.90	8.90	8.90	8.90
19	15.50	10.20	61.80	10.10	10.10	10.10	10.10	10.10	10.10	10.10
20	15.50	10.50	61.80	10.10	10.10	10.10	10.10	10.10	10.10	10.10
21	15.33	10.38	60.40	10.00	10.00	10.00	10.00	10.00	10.00	10.00
22	15.50	10.50	61.80	10.10	10.10	10.10	10.10	10.10	10.10	10.10
23	11.43	7.59	34.24	7.41	7.41	7.41	7.41	7.41	7.41	7.41
24	11.23	7.44	33.24	7.26	7.26	7.26	7.26	7.26	7.26	7.26
25	10.40	6.83	29.00	6.67	6.67	6.67	6.67	6.67	6.67	6.67
26	8.76	5.68	19.72	5.57	5.57	5.57	5.57	5.57	5.57	5.57
27	9.48	6.15	24.74	6.03	6.03	6.03	6.03	6.03	6.03	6.03
28	8.32	5.39	20.09	5.01	5.01	5.01	5.01	5.01	5.01	5.01

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OKALOOSA COUNTY

AVERAGE HURRICANE STRUCTURAL LOSS (%%%) BY LOSS ZONE

SCENARIO E

AVERAGE PERCENTAGE LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	89.20	77.50	100.00	31.40	47.00	43.80	43.80	43.80	43.80	43.80
3	42.00	33.80	100.00	34.10	34.10	34.10	34.10	34.10	34.10	34.10
4	42.00	33.80	100.00	34.10	34.10	34.10	34.10	34.10	34.10	34.10
5	44.42	35.13	100.00	35.75	34.58	32.02	32.02	32.02	32.02	32.02
7	42.00	33.80	10.00	34.10	34.10	34.10	34.10	34.10	34.10	34.10
8	53.68	46.05	55.00	40.60	29.10	36.45	36.45	36.45	36.45	36.45
10	42.00	33.80	100.00	34.10	34.10	34.10	34.10	34.10	34.10	34.10
11	42.00	33.80	10.00	34.10	34.10	34.10	34.10	34.10	34.10	34.10
12	42.00	33.80	100.00	34.10	34.10	34.10	34.10	34.10	34.10	34.10
14	42.00	33.80	10.00	34.10	34.10	34.10	34.10	34.10	34.10	34.10
15	42.00	33.80	10.00	34.10	34.10	34.10	34.10	34.10	34.10	34.10
16	42.00	33.80	100.00	34.10	34.10	34.10	34.10	34.10	34.10	34.10
17	42.00	33.80	10.00	34.10	34.10	34.10	34.10	34.10	34.10	34.10
18	36.00	28.00	100.00	29.00	29.00	29.00	29.00	29.00	29.00	29.00
19	50.13	38.43	100.00	38.70	35.48	35.63	35.63	35.63	35.63	35.63
20	45.48	34.28	100.00	36.34	34.76	34.88	34.88	34.88	34.88	34.88
21	42.95	33.52	100.00	34.61	33.95	34.00	34.00	34.00	34.00	34.00
22	42.00	33.80	100.00	34.10	34.10	34.10	34.10	34.10	34.10	34.10
23	32.69	23.36	100.00	24.45	24.45	24.45	24.45	24.45	24.45	24.45
24	31.06	22.71	99.41	23.26	23.26	23.26	23.26	23.26	23.26	23.26
25	27.33	19.67	93.33	20.07	20.07	20.07	20.07	20.07	20.07	20.07
26	19.01	13.02	82.22	13.03	13.03	13.03	13.03	13.03	13.03	13.03
27	19.59	13.79	83.65	13.94	13.94	13.94	13.94	13.94	13.94	13.94
28	15.01	10.01	65.13	10.01	10.01	10.01	10.01	10.01	10.01	10.01

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WALTON COUNTY

AVERAGE HURRICANE STRUCTURAL LOSS (%%%) BY LOSS ZONE

SCENARIO A

AVERAGE PERCENTAGE LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	19.78	11.15	43.47	10.60	4.60	4.30	4.30	4.30	4.30	4.30
2	2.82	1.76	1.06	1.66	1.66	1.66	1.66	1.66	1.66	1.66
3	2.86	1.78	1.15	1.71	1.63	1.64	1.64	1.64	1.64	1.64
4	2.70	1.70	1.00	1.60	1.60	1.60	1.60	1.60	1.60	1.60
5	2.70	1.70	1.00	1.60	1.60	1.60	1.60	1.60	1.60	1.60
6	3.61	2.19	2.84	2.06	1.81	1.79	1.79	1.79	1.79	1.79
7	2.75	1.73	1.03	1.63	1.63	1.63	1.63	1.63	1.63	1.63
8	2.65	1.65	1.00	1.55	1.55	1.55	1.55	1.55	1.55	1.55
9	2.70	1.70	1.00	1.60	1.60	1.60	1.60	1.60	1.60	1.60
10	2.70	1.70	1.00	1.60	1.60	1.60	1.60	1.60	1.60	1.60
11	2.70	1.70	1.00	1.60	1.60	1.60	1.60	1.60	1.60	1.60
12	2.90	1.80	1.10	1.70	1.70	1.70	1.70	1.70	1.70	1.70
13	2.53	1.59	0.91	1.48	1.48	1.48	1.48	1.48	1.48	1.48
14	2.53	1.55	0.92	1.45	1.45	1.45	1.45	1.45	1.45	1.45
15	2.63	1.63	1.00	1.53	1.53	1.53	1.53	1.53	1.53	1.53
16	2.33	1.40	0.79	1.30	1.30	1.30	1.30	1.30	1.30	1.30
17	2.55	1.57	0.95	1.47	1.47	1.47	1.47	1.47	1.47	1.47
18	1.81	1.25	0.69	1.09	1.09	1.09	1.09	1.09	1.09	1.09
19	1.85	1.17	0.59	1.13	1.13	1.13	1.13	1.13	1.13	1.13
20	2.31	1.40	0.71	1.30	1.30	1.30	1.30	1.30	1.30	1.30
21	2.06	1.19	0.58	1.09	1.09	1.09	1.09	1.09	1.09	1.09

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WALTON COUNTY

AVERAGE HURRICANE STRUCTURAL LOSS (%%%) BY LOSS ZONE

SCENARIO B

AVERAGE PERCENTAGE LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	35.17	19.50	51.35	19.85	8.03	7.76	7.76	7.76	7.76	7.76
2	5.64	3.54	6.20	3.65	3.03	3.17	3.17	3.17	3.17	3.17
3	4.18	2.54	3.02	2.64	2.31	2.36	2.36	2.36	2.36	2.36
4	7.08	4.27	7.32	4.55	3.08	3.38	3.38	3.38	3.38	3.38
5	4.90	3.20	6.20	3.10	3.10	3.10	3.10	3.10	3.10	3.10
6	6.36	3.99	8.91	3.92	3.27	3.27	3.27	3.27	3.27	3.27
7	3.93	2.45	3.43	2.43	2.43	2.43	2.43	2.43	2.43	2.43
8	3.94	2.55	3.83	2.49	2.49	2.49	2.49	2.49	2.49	2.49
9	3.60	2.20	2.50	2.20	2.20	2.20	2.20	2.20	2.20	2.20
10	5.34	3.19	4.58	3.36	2.51	2.70	2.70	2.70	2.70	2.70
11	4.90	3.20	6.20	3.10	3.10	3.10	3.10	3.10	3.10	3.10
12	4.90	3.20	6.20	3.10	3.10	3.10	3.10	3.10	3.10	3.10
13	3.34	2.03	1.89	1.99	1.99	1.99	1.99	1.99	1.99	1.99
14	3.31	1.99	1.73	1.96	1.96	1.96	1.96	1.96	1.96	1.96
15	3.01	1.82	1.30	1.75	1.75	1.75	1.75	1.75	1.75	1.75
16	2.81	1.74	1.11	1.65	1.65	1.65	1.65	1.65	1.65	1.65
17	2.80	1.70	1.00	1.60	1.60	1.60	1.60	1.60	1.60	1.60
18	3.05	1.89	1.25	1.79	1.79	1.79	1.79	1.79	1.79	1.79
19	2.79	1.70	0.97	1.60	1.60	1.60	1.60	1.60	1.60	1.60
20	2.76	1.70	0.99	1.60	1.60	1.60	1.60	1.60	1.60	1.60
21	2.72	1.70	1.00	1.60	1.60	1.60	1.60	1.60	1.60	1.60

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WALTON COUNTY

AVERAGE HURRICANE STRUCTURAL LOSS (XXX) BY LOSS ZONE

SCENARIO C

AVERAGE PERCENTAGE LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	36.42	23.00	55.43	22.91	10.81	10.24	10.24	10.24	10.24	10.24
2	8.87	5.68	21.83	5.58	5.58	5.58	5.58	5.58	5.58	5.58
3	7.95	5.14	17.13	5.04	5.04	5.04	5.04	5.04	5.04	5.04
4	8.30	5.37	18.67	5.27	5.27	5.27	5.27	5.27	5.27	5.27
5	8.90	5.70	22.00	5.60	5.60	5.60	5.60	5.60	5.60	5.60
6	11.92	7.44	26.18	7.34	6.12	6.08	6.08	6.08	6.08	6.08
7	8.23	5.33	18.25	5.23	5.23	5.23	5.23	5.23	5.23	5.23
8	7.51	4.87	14.94	4.77	4.77	4.77	4.77	4.77	4.77	4.77
9	8.00	5.20	17.00	5.10	5.10	5.10	5.10	5.10	5.10	5.10
10	8.00	5.20	17.00	5.10	5.10	5.10	5.10	5.10	5.10	5.10
11	8.90	5.70	22.00	5.60	5.60	5.60	5.60	5.60	5.60	5.60
12	8.90	5.70	22.00	5.60	5.60	5.60	5.60	5.60	5.60	5.60
13	6.56	4.21	11.68	4.11	4.11	4.11	4.11	4.11	4.11	4.11
14	6.56	4.12	11.68	4.11	4.11	4.11	4.11	4.11	4.11	4.11
15	5.82	3.70	9.34	3.60	3.60	3.60	3.60	3.60	3.60	3.60
16	5.41	3.44	7.66	3.34	3.34	3.34	3.34	3.34	3.34	3.34
17	5.45	3.43	8.33	3.33	3.33	3.33	3.33	3.33	3.33	3.33
18	5.68	3.59	8.95	3.49	3.49	3.49	3.49	3.49	3.49	3.49
19	5.28	3.31	7.68	3.22	3.22	3.22	3.22	3.22	3.22	3.22
20	5.34	3.38	7.62	3.28	3.28	3.28	3.28	3.28	3.28	3.28
21	5.12	3.25	6.69	2.96	2.96	2.96	2.96	2.96	2.96	2.96

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WALTON COUNTY

AVERAGE HURRICANE STRUCTURAL LOSS (XXX) BY LOSS ZONE

SCENARIO D

AVERAGE PERCENTAGE LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	48.90	33.47	81.84	33.18	17.05	16.54	16.54	16.54	16.54	16.54
2	15.43	10.45	61.22	10.06	10.06	10.06	10.06	10.06	10.06	10.06
3	13.44	8.99	46.31	8.79	8.79	8.79	8.79	8.79	8.79	8.79
4	14.17	9.50	50.60	9.30	9.30	9.30	9.30	9.30	9.30	9.30
5	15.50	10.50	61.80	10.10	10.10	10.10	10.10	10.10	10.10	10.10
6	17.69	11.95	63.20	11.55	10.54	10.48	10.48	10.48	10.48	10.48
7	14.00	9.38	49.20	9.20	9.20	9.20	9.20	9.20	9.20	9.20
8	12.28	8.17	38.43	8.02	8.02	8.02	8.02	8.02	8.02	8.02
9	13.50	9.00	45.00	8.90	8.90	8.90	8.90	8.90	8.90	8.90
10	13.50	9.00	45.00	8.90	8.90	8.90	8.90	8.90	8.90	8.90
11	15.50	10.50	61.80	10.10	10.10	10.10	10.10	10.10	10.10	10.10
12	15.50	10.50	61.80	10.10	10.10	10.10	10.10	10.10	10.10	10.10
13	10.75	7.07	31.12	6.91	6.91	6.91	6.91	6.91	6.91	6.91
14	10.55	6.94	29.29	6.77	6.77	6.77	6.77	6.77	6.77	6.77
15	9.74	6.32	25.70	6.19	6.19	6.19	6.19	6.19	6.19	6.19
16	9.35	6.02	23.75	5.91	5.91	5.91	5.91	5.91	5.91	5.91
17	9.20	5.90	23.00	5.80	5.80	5.80	5.80	5.80	5.80	5.80
18	9.15	5.88	22.88	5.78	5.78	5.78	5.78	5.78	5.78	5.78
19	8.42	5.50	20.68	5.40	5.40	5.40	5.40	5.40	5.40	5.40
20	8.75	5.65	21.51	5.47	5.47	5.47	5.47	5.47	5.47	5.47
21	8.24	5.25	18.66	5.14	5.14	5.14	5.14	5.14	5.14	5.14

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WALTON COUNTY

AVERAGE HURRICANE STRUCTURAL LOSS (%%%) BY LOSS ZONE

SCENARIO E

AVERAGE PERCENTAGE LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	60.58	52.64	100.00	52.84	36.27	33.80	33.80	33.80	33.80	33.80
2	48.11	34.79	100.00	36.52	32.71	33.10	33.10	33.10	33.10	33.10
3	31.28	21.66	100.00	21.96	21.52	21.57	21.57	21.57	21.57	21.57
4	42.35	31.44	81.25	32.24	29.59	29.73	29.73	29.73	29.73	29.73
5	57.30	42.00	100.00	44.50	37.50	38.00	38.00	38.00	38.00	38.00
6	40.77	30.11	100.00	30.53	28.74	28.53	28.53	28.53	28.53	28.53
7	30.10	22.48	100.00	22.78	22.78	22.78	22.78	22.78	22.78	22.78
8	25.85	18.81	99.52	18.86	18.86	18.86	18.86	18.86	18.86	18.86
9	32.80	25.00	100.00	25.40	25.40	25.40	25.40	25.40	25.40	25.40
10	36.15	26.88	100.00	27.46	26.03	26.09	26.09	26.09	26.09	26.09
11	43.00	34.00	100.00	34.50	34.50	34.50	34.50	34.50	34.50	34.50
12	43.00	34.00	100.00	34.50	34.50	34.50	34.50	34.50	34.50	34.50
13	30.46	23.04	100.00	23.36	23.36	23.36	23.36	23.36	23.36	23.36
14	21.62	15.51	93.10	15.48	15.48	15.48	15.48	15.48	15.48	15.48
15	27.14	20.05	100.00	20.24	20.24	20.24	20.24	20.24	20.24	20.24
16	20.16	14.39	81.89	14.38	14.38	14.38	14.38	14.38	14.38	14.38
17	25.70	18.70	100.00	18.80	18.80	18.80	18.80	18.80	18.80	18.80
18	26.88	19.78	100.00	19.93	19.93	19.93	19.93	19.93	19.93	19.93
19	23.62	17.09	100.00	17.10	17.10	17.10	17.10	17.10	17.10	17.10
20	24.56	17.82	100.00	17.87	17.87	17.87	17.87	17.87	17.87	17.87
21	20.46	14.57	86.16	14.54	14.54	14.54	14.54	14.54	14.54	14.54

STRUCTURE CODES

SR -- SINGLE UNIT RESIDENTIAL
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HC -- HEALTH CARE
GI -- GOVERNMENT AND INSTITUTIONAL

BAY COUNTY

AVERAGE HURRICANE STRUCTURAL LOSS (XXX) BY LOSS ZONE

SCENARIO A

AVERAGE PERCENTAGE LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	53.40	28.30	100.00	28.30	9.60	9.70	9.70	9.70	9.70	9.70
2	2.90	1.80	1.10	1.70	1.70	1.70	1.70	1.70	1.70	1.70
3	22.19	12.15	39.67	12.00	4.81	4.68	4.68	4.68	4.68	4.68
4	25.14	13.65	41.75	14.09	5.43	5.41	5.41	5.41	5.41	5.41
5	11.32	6.23	17.58	6.13	3.03	2.90	2.90	2.90	2.90	2.90
6	9.96	5.80	9.41	6.70	3.20	3.70	3.70	3.70	3.70	3.70
7	6.15	3.98	4.81	3.93	2.43	2.62	2.62	2.62	2.62	2.62
8	6.96	4.10	5.74	4.60	2.50	2.80	2.80	2.80	2.80	2.80
9	5.58	3.32	4.18	3.62	2.22	2.42	2.42	2.42	2.42	2.42
10	2.90	1.80	1.10	1.70	1.70	1.70	1.70	1.70	1.70	1.70
11	2.90	1.80	1.10	1.70	1.70	1.70	1.70	1.70	1.70	1.70
12	2.83	1.73	1.03	1.63	1.63	1.63	1.63	1.63	1.63	1.63
13	2.80	1.70	1.00	1.60	1.60	1.60	1.60	1.60	1.60	1.60
14	5.78	3.26	5.82	3.17	2.07	2.08	2.08	2.08	2.08	2.08
15	2.80	1.70	1.00	1.60	1.60	1.60	1.60	1.60	1.60	1.60
16	8.93	5.23	8.07	5.99	2.99	3.41	3.41	3.41	3.41	3.41
17	7.42	4.35	6.57	4.88	2.65	2.97	2.97	2.97	2.97	2.97
18	3.91	2.37	2.33	2.41	1.91	1.99	1.99	1.99	1.99	1.99
19	2.90	1.80	1.10	1.70	1.70	1.70	1.70	1.70	1.70	1.70
20	7.68	4.49	6.69	5.12	2.59	2.95	2.95	2.95	2.95	2.95
21	2.70	1.70	1.00	1.60	1.60	1.60	1.60	1.60	1.60	1.60
22	2.71	1.67	1.03	1.57	1.57	1.57	1.57	1.57	1.57	1.57
23	2.90	1.80	1.10	1.70	1.70	1.70	1.70	1.70	1.70	1.70
24	2.86	1.78	1.08	1.68	1.68	1.68	1.68	1.68	1.68	1.68
25	2.90	1.80	1.10	1.70	1.70	1.70	1.70	1.70	1.70	1.70
26	2.90	1.80	1.10	1.70	1.70	1.70	1.70	1.70	1.70	1.70
27	2.90	1.80	1.10	1.70	1.70	1.70	1.70	1.70	1.70	1.70
28	2.80	1.75	1.05	1.65	1.65	1.65	1.65	1.65	1.65	1.65
29	2.90	1.80	1.10	1.70	1.70	1.70	1.70	1.70	1.70	1.70
30	2.70	1.70	1.00	1.60	1.60	1.60	1.60	1.60	1.60	1.60
31	2.70	1.70	1.00	1.60	1.60	1.60	1.60	1.60	1.60	1.60
32	2.70	1.70	1.00	1.60	1.60	1.60	1.60	1.60	1.60	1.60
33	2.70	1.70	1.00	1.60	1.60	1.60	1.60	1.60	1.60	1.60
34	2.65	1.65	1.01	1.55	1.55	1.55	1.55	1.55	1.55	1.55
35	2.48	1.54	1.00	1.44	1.44	1.44	1.44	1.44	1.44	1.44
36	2.59	1.60	1.00	1.50	1.50	1.50	1.50	1.50	1.50	1.50
37	2.82	1.74	1.16	1.66	1.60	1.61	1.61	1.61	1.61	1.61
38	3.01	1.86	1.25	1.78	1.71	1.72	1.72	1.72	1.72	1.72

STRUCTURE CODES

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BAY COUNTY

AVERAGE HURRICANE STRUCTURAL LOSS (%%%) BY LOSS ZONE

SCENARIO B

AVERAGE PERCENTAGE LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	65.40	35.00	100.00	35.00	12.50	11.80	11.80	11.80	11.80	11.80
2	28.40	14.70	35.00	17.50	7.10	7.80	7.80	7.80	7.80	7.80
3	37.39	20.21	52.93	21.56	8.43	8.64	8.64	8.64	8.64	8.64
4	27.81	15.44	39.87	15.51	6.65	6.52	6.52	6.52	6.52	6.52
5	15.58	8.92	21.42	8.83	4.35	4.33	4.33	4.33	4.33	4.33
6	19.83	10.66	25.26	11.73	5.55	5.97	5.97	5.97	5.97	5.97
7	20.13	10.32	25.53	11.81	5.61	6.00	6.00	6.00	6.00	6.00
8	15.62	8.48	19.04	9.14	4.54	4.78	4.78	4.78	4.78	4.78
9	12.82	7.05	15.34	7.52	4.07	4.25	4.25	4.25	4.25	4.25
10	14.06	7.56	16.64	8.62	4.46	4.74	4.74	4.74	4.74	4.74
11	20.43	10.73	24.80	12.57	5.63	6.10	6.10	6.10	6.10	6.10
12	20.85	11.13	26.26	12.17	5.66	6.10	6.10	6.10	6.10	6.10
13	33.30	17.40	42.70	19.30	7.80	8.60	8.60	8.60	8.60	8.60
14	16.62	9.05	21.35	9.55	4.84	5.04	5.04	5.04	5.04	5.04
15	33.30	17.40	42.70	19.30	7.80	8.60	8.60	8.60	8.60	8.60
16	21.01	11.23	26.66	12.44	5.70	6.16	6.16	6.16	6.16	6.16
17	7.50	4.43	9.14	4.50	3.46	3.53	3.53	3.53	3.53	3.53
18	7.90	4.90	15.67	4.81	3.49	3.59	3.59	3.59	3.59	3.59
19	4.90	3.10	5.70	3.00	3.00	3.00	3.00	3.00	3.00	3.00
20	24.81	13.12	31.52	14.56	6.79	7.26	7.26	7.26	7.26	7.26
21	4.10	2.60	3.60	2.50	2.50	2.50	2.50	2.50	2.50	2.50
22	9.47	5.36	11.11	5.60	3.64	3.75	3.75	3.75	3.75	3.75
23	4.70	3.00	5.00	2.90	2.90	2.90	2.90	2.90	2.90	2.90
24	4.64	2.96	4.84	2.86	2.86	2.86	2.86	2.86	2.86	2.86
25	4.60	2.90	4.70	2.80	2.80	2.80	2.80	2.80	2.80	2.80
26	9.28	5.18	10.52	5.66	3.58	3.72	3.72	3.72	3.72	3.72
27	4.50	2.80	4.40	2.70	2.70	2.70	2.70	2.70	2.70	2.70
28	4.30	2.70	4.00	2.60	2.60	2.60	2.60	2.60	2.60	2.60
29	4.50	2.80	4.40	2.70	2.70	2.70	2.70	2.70	2.70	2.70
30	4.10	2.60	3.60	2.50	2.50	2.50	2.50	2.50	2.50	2.50
31	4.10	2.60	3.60	2.50	2.50	2.50	2.50	2.50	2.50	2.50
32	4.10	2.60	3.60	2.50	2.50	2.50	2.50	2.50	2.50	2.50
33	4.10	2.60	3.60	2.50	2.50	2.50	2.50	2.50	2.50	2.50
34	4.47	2.81	4.36	2.71	2.71	2.71	2.71	2.71	2.71	2.71
35	4.13	2.59	3.64	2.49	2.49	2.49	2.49	2.49	2.49	2.49
36	4.29	2.70	4.15	2.60	2.60	2.60	2.60	2.60	2.60	2.60
37	4.49	2.79	4.26	2.70	2.70	2.70	2.70	2.70	2.70	2.70
38	4.85	3.06	5.53	2.96	2.96	2.96	2.96	2.96	2.96	2.96

STRUCTURE CODES

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BAY COUNTY

AVERAGE HURRICANE STRUCTURAL LOSS (%%%) BY LOSS ZONE

SCENARIO C

AVERAGE PERCENTAGE LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	72.40	43.50	100.00	43.40	17.00	16.00	16.00	16.00	16.00	16.00
2	20.40	12.50	33.70	14.10	7.80	8.90	8.90	8.90	8.90	8.90
3	38.53	21.45	58.98	22.74	10.73	10.94	10.94	10.94	10.94	10.94
4	29.98	17.45	50.36	17.35	9.16	8.92	8.92	8.92	8.92	8.92
5	19.13	11.37	35.00	11.25	7.33	7.23	7.23	7.23	7.23	7.23
6	24.84	13.81	39.26	15.57	8.57	9.02	9.02	9.02	9.02	9.02
7	19.08	10.95	33.52	11.65	7.38	7.66	7.66	7.66	7.66	7.66
8	25.34	14.22	40.72	15.26	8.42	8.90	8.90	8.90	8.90	8.90
9	19.86	11.38	34.48	12.04	7.48	7.80	7.80	7.80	7.80	7.80
10	13.84	8.60	27.00	9.10	6.50	7.02	7.02	7.02	7.02	7.02
11	16.57	10.23	29.80	11.27	7.07	7.80	7.80	7.80	7.80	7.80
12	23.73	13.42	38.70	14.37	8.14	8.62	8.62	8.62	8.62	8.62
13	36.30	19.90	53.20	21.70	10.30	11.10	11.10	11.10	11.10	11.10
14	20.69	12.10	35.76	12.56	7.65	7.83	7.83	7.83	7.83	7.83
15	36.30	19.90	53.20	21.70	10.30	11.10	11.10	11.10	11.10	11.10
16	21.93	12.21	35.29	13.71	8.06	8.34	8.34	8.34	8.34	8.34
17	11.39	6.99	24.84	7.06	6.03	6.10	6.10	6.10	6.10	6.10
18	12.29	7.60	30.47	7.46	6.19	6.23	6.23	6.23	6.23	6.23
19	8.90	5.70	22.00	5.60	5.60	5.60	5.60	5.60	5.60	5.60
20	27.34	15.06	39.64	16.33	8.10	8.64	8.64	8.64	8.64	8.64
21	8.90	5.70	22.00	5.60	5.60	5.60	5.60	5.60	5.60	5.60
22	13.00	7.74	24.25	8.02	6.10	6.23	6.23	6.23	6.23	6.23
23	8.90	5.70	22.00	5.60	5.60	5.60	5.60	5.60	5.60	5.60
24	8.90	5.70	22.00	5.60	5.60	5.60	5.60	5.60	5.60	5.60
25	8.90	5.70	22.00	5.60	5.60	5.60	5.60	5.60	5.60	5.60
26	11.20	7.06	24.34	7.30	6.04	6.26	6.26	6.26	6.26	6.26
27	8.90	5.70	22.00	5.60	5.60	5.60	5.60	5.60	5.60	5.60
28	8.90	5.70	22.00	5.60	5.60	5.60	5.60	5.60	5.60	5.60
29	8.90	5.70	22.00	5.60	5.60	5.60	5.60	5.60	5.60	5.60
30	8.90	5.70	22.00	5.60	5.60	5.60	5.60	5.60	5.60	5.60
31	8.90	5.70	22.00	5.60	5.60	5.60	5.60	5.60	5.60	5.60
32	8.90	5.70	22.00	5.60	5.60	5.60	5.60	5.60	5.60	5.60
33	8.90	5.70	22.00	5.60	5.60	5.60	5.60	5.60	5.60	5.60
34	8.27	5.30	18.55	5.25	5.25	5.25	5.25	5.25	5.25	5.25
35	6.93	4.48	12.57	4.38	4.38	4.38	4.38	4.38	4.38	4.38
36	6.97	4.50	12.80	4.40	4.40	4.40	4.40	4.40	4.40	4.40
37	8.34	5.26	16.11	5.26	4.92	4.94	4.94	4.94	4.94	4.94
38	8.76	5.61	21.22	5.52	5.52	5.52	5.52	5.52	5.52	5.52

STRUCTURE CODES

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BAY COUNTY

AVERAGE HURRICANE STRUCTURAL LOSS (%%%) BY LOSS ZONE

SCENARIO D

AVERAGE PERCENTAGE LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	74.50	47.20	100.00	47.20	18.00	16.60	16.60	16.60	16.60	16.60
2	52.80	28.50	76.90	29.40	12.90	13.80	13.80	13.80	13.80	13.80
3	48.49	28.86	70.34	29.13	12.71	12.89	12.89	12.89	12.89	12.89
4	42.06	25.25	64.55	25.19	11.49	10.97	10.97	10.97	10.97	10.97
5	20.15	12.93	35.00	12.85	7.78	7.55	7.55	7.55	7.55	7.55
6	50.10	27.25	73.89	27.96	12.33	13.56	13.56	13.56	13.56	13.56
7	25.75	14.43	43.00	14.68	8.33	8.68	8.68	8.68	8.68	8.68
8	38.26	20.24	54.76	20.48	9.26	9.74	9.74	9.74	9.74	9.74
9	28.22	15.18	42.64	15.36	7.88	8.20	8.20	8.20	8.20	8.20
10	26.58	14.86	44.36	15.20	8.60	8.96	8.96	8.96	8.96	8.96
11	38.27	20.93	58.93	21.53	10.53	11.13	11.13	11.13	11.13	11.13
12	33.59	32.10	52.83	18.97	9.59	10.10	10.10	10.10	10.10	10.10
13	52.60	28.30	76.30	29.20	12.60	13.50	13.50	13.50	13.50	13.50
14	25.48	14.72	41.91	14.92	8.32	8.51	8.51	8.51	8.51	8.51
15	52.60	28.30	76.30	29.20	12.60	13.50	13.50	13.50	13.50	13.50
16	36.91	20.63	61.90	21.00	10.21	11.30	11.30	11.30	11.30	11.30
17	12.88	7.76	26.96	7.75	6.25	6.33	6.33	6.33	6.33	6.33
18	24.36	13.79	44.29	13.71	8.03	7.89	7.89	7.89	7.89	7.89
19	8.90	5.70	22.00	5.60	5.60	5.60	5.60	5.60	5.60	5.60
20	44.69	23.86	64.48	23.93	10.50	11.08	11.08	11.08	11.08	11.08
21	7.00	4.10	13.00	4.40	4.40	4.40	4.40	4.40	4.40	4.40
22	10.25	20.37	21.43	6.34	5.53	5.58	5.58	5.58	5.58	5.58
23	9.00	58.00	23.00	5.80	5.80	5.80	5.80	5.80	5.80	5.80
24	8.80	47.44	21.80	5.64	5.64	5.64	5.64	5.64	5.64	5.64
25	9.10	31.90	23.00	5.80	5.80	5.80	5.80	5.80	5.80	5.80
26	17.92	10.34	33.78	10.52	7.22	7.40	7.40	7.40	7.40	7.40
27	9.20	5.80	23.00	5.80	5.80	5.80	5.80	5.80	5.80	5.80
28	8.03	4.93	17.75	5.05	5.05	5.05	5.05	5.05	5.05	5.05
29	8.90	5.70	22.00	5.60	5.60	5.60	5.60	5.60	5.60	5.60
30	7.00	4.10	13.00	4.40	4.40	4.40	4.40	4.40	4.40	4.40
31	7.00	4.10	13.00	4.40	4.40	4.40	4.40	4.40	4.40	4.40
32	7.00	4.10	13.00	4.40	4.40	4.40	4.40	4.40	4.40	4.40
33	7.00	4.10	13.00	4.40	4.40	4.40	4.40	4.40	4.40	4.40
34	7.77	7.92	16.75	4.93	4.93	4.93	4.93	4.93	4.93	4.93
35	6.76	4.24	12.20	3.08	3.08	3.08	3.08	3.08	3.08	3.08
36	7.04	4.20	13.18	4.42	4.42	4.42	4.42	4.42	4.42	4.42
37	9.19	5.51	17.86	5.60	5.03	5.06	5.06	5.06	5.06	5.06
38	8.76	5.61	21.22	5.51	5.51	5.51	5.51	5.51	5.51	5.51

STRUCTURE CODES

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BAY COUNTY

AVERAGE HURRICANE STRUCTURAL LOSS (%%%) BY LOSS ZONE

SCENARIO E

AVERAGE PERCENTAGE LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	78.40	58.80	100.00	58.90	28.90	28.40	28.40	28.40	28.40	28.40
2	74.20	45.10	100.00	42.70	26.50	26.50	25.50	26.50	26.50	26.50
3	75.61	56.84	100.00	55.72	41.24	41.09	41.09	41.09	41.09	41.09
4	77.15	61.89	100.00	61.42	42.90	41.54	41.54	41.54	41.54	41.54
5	50.98	45.83	100.00	45.83	38.25	36.77	36.77	36.77	36.77	36.77
6	81.97	57.18	100.00	55.32	41.05	41.89	41.89	41.89	41.89	41.89
7	79.32	55.65	100.00	54.74	40.62	41.42	41.42	41.42	41.42	41.42
8	64.96	40.56	100.00	41.36	28.40	28.64	28.64	28.64	28.64	28.64
9	51.32	35.32	100.00	34.52	28.04	23.04	28.04	28.04	28.04	28.04
10	48.98	32.90	100.00	32.18	24.38	25.22	25.02	25.22	25.22	25.22
11	57.47	36.07	100.00	34.50	23.70	23.70	23.03	23.70	23.70	23.70
12	55.97	35.04	99.93	33.29	22.89	23.50	23.50	23.50	23.50	23.50
13	78.50	46.60	100.00	43.30	24.70	25.80	25.80	25.80	25.80	25.80
14	35.92	24.52	100.00	24.45	18.28	19.22	19.22	19.22	19.22	19.22
15	27.10	19.10	100.00	19.50	16.60	17.70	17.70	17.70	17.70	17.70
16	63.19	46.63	100.00	46.29	38.39	39.03	39.03	39.03	39.03	39.03
17	54.89	41.75	100.00	42.17	37.18	37.37	37.37	37.37	37.37	37.37
18	60.20	46.91	100.00	46.91	38.59	38.23	38.23	38.23	38.23	38.23
19	51.57	39.76	100.00	44.77	36.63	36.84	36.84	36.84	36.34	36.84
20	68.23	45.27	100.00	43.77	31.05	31.79	31.79	31.79	31.79	31.79
21	30.40	22.60	100.00	22.80	22.80	22.80	22.80	22.80	22.80	22.80
22	25.20	17.65	91.02	17.47	16.56	16.62	16.62	16.62	16.62	16.62
23	29.50	22.00	100.00	22.10	22.10	22.10	22.10	22.10	22.10	22.10
24	28.60	21.24	100.00	21.34	21.34	21.34	21.34	21.34	21.34	21.34
25	26.75	20.00	100.00	20.10	20.10	20.10	20.10	20.10	20.10	20.10
26	36.24	24.74	85.18	23.44	20.44	20.44	20.24	20.44	20.44	20.44
27	24.00	18.00	100.00	18.10	18.10	18.10	18.10	18.10	18.10	18.10
28	31.95	24.55	100.00	24.68	24.68	24.68	24.68	24.68	24.68	24.68
29	43.00	35.00	100.00	35.00	35.00	35.00	35.00	35.00	35.00	35.00
30	33.30	23.68	100.00	24.73	23.38	23.48	23.48	23.48	23.48	23.48
31	30.40	22.60	100.00	22.80	22.80	22.80	22.80	22.80	22.80	22.80
32	30.40	22.60	100.00	22.80	22.80	22.80	22.80	22.80	22.80	22.80
33	36.20	24.77	100.00	26.67	23.97	24.17	24.17	24.17	24.17	24.17
34	21.79	15.59	90.79	15.57	15.57	15.57	15.57	15.57	15.57	15.57
35	17.47	12.22	75.34	12.12	12.12	12.12	12.12	12.12	12.12	12.12
36	20.53	14.64	96.88	14.56	14.56	14.56	14.56	14.56	14.56	14.56
37	33.25	25.25	100.00	24.92	24.38	24.41	24.41	24.41	24.41	24.41
38	42.16	34.16	100.00	34.05	34.05	34.05	34.05	34.05	34.05	34.05

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HOLMES COUNTY

AVERAGE HURRICANE STRUCTURAL LOSS (XXX) BY LOSS ZONE

SCENARIO A

AVERAGE PERCENTAGE LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	2.02	1.14	10.02	1.04	1.04	1.04	1.04	1.04	1.04	1.04
2	2.14	1.24	0.68	1.16	1.16	1.16	1.16	1.16	1.16	1.16

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HOLMES COUNTY

AVERAGE HURRICANE STRUCTURAL LOSS (XXX) BY LOSS ZONE

SCENARIO B

AVERAGE PERCENTAGE LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	2.25	1.35	0.81	1.24	1.24	1.24	1.24	1.24	1.24	1.24
2	2.20	1.30	0.72	1.20	1.20	1.20	1.20	1.20	1.20	1.20

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HOLMES COUNTY

AVERAGE HURRICANE STRUCTURAL LOSS (%%%) BY LOSS ZONE

SCENARIO C

AVERAGE PERCENTAGE LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	3.59	2.20	2.41	2.10	2.10	2.10	2.10	2.10	2.10	2.10
2	3.58	2.26	2.64	2.16	2.16	2.16	2.16	2.16	2.16	2.16

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HOLMES COUNTY

AVERAGE HURRICANE STRUCTURAL LOSS (%%%) BY LOSS ZONE

SCENARIO D

AVERAGE PERCENTAGE LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	15.48	10.73	62.71	10.56	10.56	10.56	10.56	10.56	10.56	10.56
2	12.39	8.52	41.37	8.48	8.48	8.48	8.48	8.48	8.48	8.48

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HOLMES COUNTY

AVERAGE HURRICANE STRUCTURAL LOSS (%%%) BY LOSS ZONE

SCENARIO E

AVERAGE PERCENTAGE LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	24.79	18.01	98.45	18.02	18.02	18.02	18.02	18.02	18.02	18.02
2	21.16	14.95	88.66	14.82	14.82	14.82	14.82	14.82	14.82	14.82

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WASHINGTON COUNTY

AVERAGE HURRICANE STRUCTURAL LOSS (XXX) BY LOSS ZONE

SCENARIO A

AVERAGE PERCENTAGE LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	2.80	1.70	1.00	1.50	1.50	1.50	1.50	1.50	1.50	1.50
2	2.50	1.60	0.90	1.50	1.50	1.50	1.50	1.50	1.50	1.50
3	2.65	1.61	0.93	1.51	1.51	1.51	1.51	1.51	1.51	1.51
4	2.21	1.33	0.73	1.23	1.23	1.23	1.23	1.23	1.23	1.23

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WASHINGTON COUNTY

AVERAGE HURRICANE STRUCTURAL LOSS (XXX) BY LOSS ZONE

SCENARIO B

AVERAGE PERCENTAGE LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	3.50	2.10	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
2	3.63	2.29	2.60	2.19	2.19	2.19	2.19	2.19	2.19	2.19
3	3.47	2.11	2.05	2.01	2.01	2.01	2.01	2.01	2.01	2.01
4	3.18	1.99	1.62	1.89	1.89	1.89	1.89	1.89	1.89	1.89

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WASHINGTON COUNTY

AVERAGE HURRICANE STRUCTURAL LOSS (%%%) BY LOSS ZONE

SCENARIO C

AVERAGE PERCENTAGE LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	6.40	4.20	11.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
2	6.93	4.55	12.80	4.35	4.35	4.35	4.35	4.35	4.35	4.35
3	5.27	3.37	7.62	3.27	3.27	3.27	3.27	3.27	3.27	3.27
4	4.85	3.15	6.16	3.05	3.05	3.05	3.05	3.05	3.05	3.05

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WASHINGTON COUNTY

AVERAGE HURRICANE STRUCTURAL LOSS (XXX) BY LOSS ZONE

SCENARIO D

AVERAGE PERCENTAGE LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	4.70	3.00	5.00	2.90	2.90	2.90	2.90	2.90	2.90	2.90
2	6.03	3.45	7.71	3.31	3.31	3.31	3.31	3.31	3.31	3.31
3	4.86	3.08	5.98	2.98	2.98	2.98	2.98	2.98	2.98	2.98
4	5.40	3.40	8.20	3.30	3.30	3.30	3.30	3.30	3.30	3.30

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WASHINGTON COUNTY

AVERAGE HURRICANE STRUCTURAL LOSS (XXX) BY LOSS ZONE

SCENARIO E

AVERAGE PERCENTAGE LOSS BY STRUCTURE TYPE

HURRICANE LOSS ZONE	SR	MR	MH	C	I	PU	AG	PT	HC	GI
1	37.00	29.00	100.00	30.00	30.00	30.00	30.00	30.00	30.00	30.00
2	28.37	20.49	100.00	21.09	21.09	21.09	21.09	21.09	21.09	21.09
3	21.81	15.21	90.55	15.20	15.20	15.20	15.20	15.20	15.20	15.20
4	14.39	9.77	56.62	9.77	9.77	9.77	9.77	9.77	9.77	9.77

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