

**COMPREHENSIVE EMERGENCY MANAGEMENT PLAN  
2002**

*Indian River County*



*Emergency Management Division*

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**RESOLUTION 2002 - \_\_\_\_**

*A RESOLUTION OF INDIAN RIVER COUNTY, FLORIDA,  
BY AND THROUGH ITS BOARD OF COUNTY COMMISSIONERS  
ADOPTING A COMPREHENSIVE EMERGENCY MANAGEMENT PLAN FOR  
INDIAN RIVER COUNTY*

**WHEREAS**, Chapter 252, Florida Statutes, Disaster Preparedness Act, establishes a Division of Emergency Management (**DIVISION**) and prescribes the powers and responsibilities thereof; and

**WHEREAS**, Chapter 252, F.S., assigns to the Board of County Commissioners responsibility for disaster mitigation, preparedness, response, and recovery; and

**WHEREAS**, Chapter 252, F.S., requires each county to develop a county emergency management plan and program that is coordinated and consistent with the state comprehensive emergency management plan and program; and

**NOW, THEREFORE, BE IT RESOLVED BY THE BOARD OF COUNTY COMMISSIONERS OF INDIAN RIVER COUNTY, FLORIDA**, that the 2002 **INDIAN RIVER COUNTY COMPREHENSIVE EMERGENCY MANAGEMENT PLAN (CEMP)**, as approved by the **DIVISION**, is hereby adopted. The resolution was moved for adoption by Commissioner \_\_\_\_\_, and the motion was seconded by Commissioner \_\_\_\_\_, and, upon being put to a vote, the vote was as follows:

<b>Chairman</b>	Ruth M. Stanbridge
<b>Vice-Chairman</b>	John W. Tippin
<b>Commissioner</b>	Fran B. Adams
<b>Commissioner</b>	Caroline D. Ginn
<b>Commissioner</b>	Kenneth R. Macht

The Chairman thereupon declared the resolution duly passed and adopted this day of \_\_\_\_\_, 2002.

**BOARD OF COUNTY COMMISSIONERS  
INDIAN RIVER COUNTY, FLORIDA**

**BY** \_\_\_\_\_  
Ruth M. Stanbridge, Chairman

**Attest:**

\_\_\_\_\_  
Jeffrey K. Barton, Clerk

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## EXECUTIVE SUMMARY

The Indian River County Comprehensive Emergency Management Plan (CEMP) is an operations oriented document authorized by the Board of County Commissioners and is in accordance with Chapter 252, Florida Statutes. The CEMP establishes the framework for an effective system to ensure that Indian River County will be adequately prepared to deal with the occurrence of emergencies and disasters. The plan outlines the roles and responsibilities of the state agencies, special districts, local governments and volunteer organizations. The CEMP unites the efforts of these groups for a comprehensive approach to reduce the County's vulnerability to a host of identified hazards.

This plan is structured to parallel federal activities set forth in the "Federal Response Plan" and state activities in the State "Comprehensive Emergency Plan" as well as describing how other resources will be coordinated to supplement County resources and response.

The CEMP is divided into three sections:

1. **The Basic Plan** section outlines the concept of operations, direction and control, and identifies responsibilities of all agencies and resources mobilized by the County in recovering from a disaster.
2. **The Response** section presents the County's strategy for disaster response. It outlines the Emergency Support Function (ESF) concept taken from the Federal Response Plan. Each ESF, at a minimum, contains a concept of operations and the responsibilities of the primary and support agencies that will respond to local government requests.
3. **The Recovery** section provides for the rapid and orderly start of rehabilitation and restoration of persons and property affected by a disaster.

Following Hurricane Andrew, recommendations from the "Governor's Disaster Planning and Response Review Committee Report" (The Lewis Report), guided revisions that were made to Chapter 252, F.S. The Basic Plan contains a planning strategy section that describes initiatives that are currently underway to ensure that the mandates of the law become operational.

This plan replaces the Florida Nuclear Civil Protection Plan and the Florida Peacetime Emergency Plan. It does not supplant the Hazardous Materials Plan, which is not an operations-oriented document, nor the Florida Radiological Emergency Management Plan for Nuclear Power Plants, which was developed for response to radiological incidents under separate state and federal statutory authorities. However, this plan may be used to supplement the Florida Radiological Emergency Management Plan for Nuclear Power Plants, in order to provide a comprehensive response.

# THE INDIAN RIVER COUNTY COMPREHENSIVE EMERGENCY MANAGEMENT PLAN

## BASIC PLAN

### I. INTRODUCTION

Chapter 252, Florida Statutes (State Emergency Management Act), requires the preparation and maintenance of this document, the Indian River County Comprehensive Emergency Management Plan (CEMP). The CEMP must be integrated into and coordinated with emergency management plans and programs of the state and federal government. The CEMP also establishes a framework through which Indian River County may prepare for, respond to, recover from, and mitigate the impacts of a wide variety of disasters that could adversely affect the health, safety and/or general welfare of the residents of Indian River County.

The CEMP is operations-oriented, and addresses coordinated local and regional evacuation, shelter, post-disaster response and recovery; rapid deployment and pre-deployment of resources; communications and warning systems; training exercises to determine the ability of local government to respond to emergencies; and clearly defined responsibilities for County departments through an Emergency Support Function (ESF) approach to planning and operations.

The CEMP describes the basic strategies, assumptions and mechanisms through which the County will mobilize resources and conduct activities to guide and support local emergency management efforts through response and recovery. To facilitate effective intergovernmental operations, the CEMP adopts a functional approach that groups the type of assistance to be provided under ESFs to address the functional needs of the County. Each ESF is headed by a lead agency, which has been selected based on its authorities, resources, and capabilities in the functional area. The ESFs serve as the primary mechanism through which outside assistance to Indian River County is managed. State assistance will be provided under the overall coordination authority of the State Coordinating Officer (SCO) representing the Florida Division of Emergency Management (FDEM), Department of Community Affairs (DCA), on behalf of the Governor.

#### A. PURPOSE

The plan establishes a framework for an effective system of comprehensive emergency management enabling the Indian River County Board of County Commissioners to discharge its statutory responsibility for providing direction and control during the period of any emergency.

The purpose of the plan is to:

1. Reduce the vulnerability of people and communities of this county to damage, injury, and loss of life and property resulting from natural, technological or manmade emergencies, catastrophes, or hostile military or paramilitary action.
2. Prepare for prompt and efficient response and recovery to protect lives and property affected by emergencies.
3. Respond to emergencies using all systems, plans and resources necessary to preserve the health, safety and welfare of persons affected by the emergency.
4. Recover from emergencies by providing for the rapid and orderly start of restoration and rehabilitation of persons and property affected by emergencies.
5. Provide an emergency management system embodying all aspects of pre-emergency preparedness and post-emergency response, recovery, and mitigation.
6. Assist in anticipation, recognition, appraisal, prevention, and mitigation of emergencies that may be caused or aggravated by inadequate planning for, and regulation of, public and private facilities and land use.

B. SCOPE

This plan is county-wide in scope and is supported by the five municipalities. The scope of this plan is to accomplish the following:

1. Establishes fundamental policies, program strategies, and assumptions;
2. Establishes a concept of operations spanning the direction and control of an emergency from initial monitoring through post-disaster response and recovery;
3. Defines an interagency coordination mechanism to facilitate delivery of immediate county assistance, and County direction and control of response and recovery assistance from other counties, states, and the federal government;
4. Assigns specific functional responsibilities to appropriate County departments and agencies, as well as private sector groups and volunteer organizations;

5. Addresses the various types of emergencies (more specifically described in Section II-A, Hazard Analysis) which are likely to occur, from county emergency, to minor, major, or catastrophic disasters; and
6. Identifies actions that County response and recovery organizations will take, in coordination with county and federal counterparts as appropriate.

C. METHODOLOGY

1. The Emergency Management staff carefully analyzed Florida's Comprehensive Emergency Management Plan to assure the county's plan was consistent with and supportive of the state plan in both format and content. To conform with the compliance criteria, the following actions were taken:
  - a. All ESF primary and support agencies were identified, including public, private and volunteer.
  - b. All agencies were assembled. All agencies provided input and support in the construction of the plan.
  - c. A series of meetings was held to assure local participation in the planning process.
  - d. All involved departments demonstrated their support in the planning process, not by letter, but by their personal participation in planning meetings.
  - e. All agencies reviewed the final draft of the plan and accepted the responsibilities assigned to them by the plan.
  - f. Rosters of orientation seminars on concepts of operations or plan procedures are not attached to or an integral part of this formal plan; however, they are kept on file in the office of Emergency Management.
  - g. A signed receipt is maintained for all recipients of the CEMP. The distribution list is attached to this document and identified as Figure 1.

**Figure 1**

<b>CEMP DISTRIBUTION LIST</b>	
<b>AGENCY</b>	<b>DIVISION</b>
<b>INDIAN RIVER COUNTY</b>	<b>ATTORNEY'S OFFICE</b> <b>BOARD OF COUNTY COMMISSIONERS</b> <b>BUILDINGS &amp; GROUNDS</b> <b>BUILDING DIVISION</b> <b>CLERK OF COURT</b> <b>COMMUNITY DEVELOPMENT</b> <b>COUNTY ADMINISTRATOR</b> <b>DEPARTMENT OF EMERGENCY SERVICES</b> Animal Control Emergency Management Emergency Medical Services Fire Services Med-1 Station Radiological <b>ELECTION'S OFFICE</b> <b>ENGINEERING DEPARTMENT</b> <b>ENVIRONMENTAL HEALTH</b> <b>GENERAL SERVICES</b> <b>OFFICE OF MANAGEMENT &amp; BUDGET</b> <b>PARKS DIVISION</b> <b>PERSONNEL DIVISION</b> <b>PROPERTY APPRAISER'S OFFICE</b> <b>PUBLIC HEALTH UNIT</b> <b>PUBLIC WORKS</b> <b>PURCHASING</b> <b>RECREATION</b> <b>RISK MANAGEMENT</b> <b>ROAD &amp; BRIDGE</b> <b>SCHOOL BOARD</b> Facilities Manager Superintendent Transportation Director <b>SHERIFF'S OFFICE</b> <b>SOLID WASTE DISPOSAL DISTRICT</b> <b>TAX COLLECTOR</b> <b>TELECOMMUNICATIONS</b> <b>TRAFFIC ENGINEERING</b> <b>UTILITIES</b>
<b>FELLSMERE, CITY OF</b>	<b>MAYOR</b> <b>POLICE CHIEF</b>
<b>INDIAN RIVER MEMORIAL HOSPITAL</b>	<b>RISK MANAGER</b>
<b>INDIAN RIVER SHORES, TOWN OF</b>	<b>MAYOR</b> <b>PUBLIC SAFETY CHIEF</b> <b>TOWN MANAGER</b>
<b>ORCHID, TOWN OF</b>	<b>MAYOR</b> <b>TOWN MANAGER</b>
<b>SEBASTIAN, CITY OF</b>	<b>CITY MANAGER</b> <b>EMERGENCY MANAGEMENT</b> <b>MAYOR</b> <b>POLICE CHIEF</b>
<b>SEBASTIAN INLET STATE PARK</b>	<b>PARK MANAGER</b>
<b>SEBASTIAN RIVER MEDICAL CENTER</b>	<b>ADMINISTRATIVE OFFICES</b>
<b>VERO BEACH, CITY OF</b>	<b>MAYOR</b> <b>POLICE CHIEF</b>

- h. All future amendments to this plan will be made in addendum form to recipients of the plan.
- 2. This document has been approved by the Indian River County Board of County Commissioners and a current signed resolution can be found in the Compendium of Authorities (Appendix C). Their approval establishes this plan as official policy for all participating departments/agencies.

## II. SITUATION

This section of the CEMP provides a description of the potential hazard considerations, geographic characteristics, demographics, economic profile and emergency management support facilities for Indian River County. Additionally, there are several planning assumptions that were considered in the planning process. For a complete vulnerability assessment, see the Indian River County Local Mitigation Strategy.

### A. HAZARD ANALYSIS

Communities in Indian River County are vulnerable to three classifications of hazards: natural, technological, and societal as identified below. A chart depicting the hazard vulnerability by jurisdiction and population centers is included in the county's Local Mitigation Strategy.

#### 1. **Natural Hazards**

##### a. Hurricanes/Tropical Storms

Hurricanes are tropical cyclones with winds that exceed 74 mph and circulate counter-clockwise about their centers in the Northern Hemisphere. They are formed from simple thunderstorms; however, these thunderstorms can only grow to hurricane strength with favorable conditions in the ocean and atmosphere. The heat and moisture from this warm water are ultimately the source of energy for hurricanes, which weaken rapidly when they travel over land or colder ocean waters (University of Illinois).

When a hurricane threatens the coast, advisories are issued by the National Hurricane center. The storm's current location and intensity are described along with its projected path. Advisories are issued at 6-hour intervals: 5:00 a.m., 11:00 a.m., 5:00 p.m. and 11:00 p.m., Eastern Time.

In addition to the advisories, the National Hurricane Center may issue a hurricane watch or warning. A hurricane watch

indicates that hurricane conditions are a possibility and may threaten the area within 36 hours. A hurricane warning is issued when winds of at least 74 mph are expected in the area within 24 hours.

Advisories and hurricane watches and warnings will frequently refer to the category of the storm. Hurricanes are classified using the Saffir-Simpson scale as follows:

- Category 1: Winds 74 to 95 mph
- Category 2: Winds 96 to 110 mph
- Category 3: Winds 111 to 130 mph
- Category 4: Winds 131 to 155 mph
- Category 5: Winds exceeding 155 mph

On average, 1.6 hurricanes strike the U.S. every year and cause \$1.2 billion in damages. Severe (category 3, 4 or 5 on the Saffir-Simpson scale) strike the U.S. on the average of one every 5.75 years. Experts sometimes disagree on the annual cost; however, all sources agree that Hurricane Andrew is the most costly recent hurricane event to affect the U.S. Most sources report that the cost of Hurricane Andrew exceeded \$25 billion (National Climatic Data Center, 1998).

High winds, storm surge, powerful waves, torrential rain, tornadoes, and high tide combined give hurricanes the potential to create mass devastation and huge losses to property. The greatest threat to life and property associated with a hurricane or tropical storm is storm surge. Storm surge is a large dome of water often 50 to 100 miles wide that sweeps across the coastline near where a hurricane made landfall. The surge of high water, topped by waves, can be extremely destructive to coastal regions, even if they are protected by vegetation-topped dunes. The stronger the hurricane and the shallower the offshore water, the higher the surge will be. In addition, if the storm surge arrives at the same time as the high tide, the surge height will be even greater (National Oceanic and Atmospheric Administration).

High winds associated with hurricanes can be the source of great destruction. The wind alone can lead to flying debris, including tree limbs and branches, signs, roofing, and metal siding, all of which move through the air like missiles. High

winds also can destroy poorly constructed buildings and mobile homes. Once wind and rain has penetrated the secure envelope of a structure (doors, windows, garage doors, and roofs), the chances of the structure surviving the hurricane greatly diminish.

Tornadoes and torrential rainfall add to the life-threatening and damaging effects of a hurricane. Six to 12 inches of rain or more can fall on an area as the storm passes, causing flooding and flash floods. Tornadoes produced by hurricanes occur most frequently in rain bands well away from the center of the hurricane. Damage from a tornado results from the high wind velocity and wind-blown debris.

Crop damage is another powerful effect of hurricanes and tropical storms. Recently, Tropical Storm Mitch dropped as much as 10 inches of rain in some south Florida areas, which resulted in approximately \$20 million in crop damage in Palm Beach County alone (The Associated Press, 1998). According to the 1997 Florida Statistical Abstract, of Indian River County's 311,112 total land acreage, 174,673 acres are farmland. With 54% of its land area being farmed, Indian River County is particularly vulnerable to crop damage resulting from the wind and rain from hurricanes and tropical storms.

Florida is the most vulnerable state in the nation to the impacts of tropical storms. The topography of south central Florida makes it particularly vulnerable to the effects of hurricanes and tropical storms; this area is primarily a flat, low-lying plain. The potential for property damage and human casualties is increased by the rapid growth of the county, particularly in the most vulnerable areas along the shoreline, combined with complacency by hurricane infrequency.

b. Flooding

Riverine flooding occurs when the flow of rainwater runoff exceeds the carrying capacities of the natural drainage systems. During extended periods of heavy rainfall, certain low-lying neighborhoods within the county are subject to considerable flood damage and isolation caused by the inability of natural and mechanical drainage systems to effectively remove the water. Heavy rainfalls can cause considerable damage to the county infrastructure of roadbeds, bridges, drainage systems and the water supply.

The buildup of uncontrolled sediment contributes to the problem of inadequate drainage in natural and mechanical drainage systems. When a storm produces an overwhelming amount of stormwater runoff, the accumulation of loose sediment causes flooding by clogging the drainage systems.

In comparison to riverine flooding, coastal flooding is usually the result of a severe weather system such as a tropical storm or hurricane. The damaging effects of coastal floods are caused by a combination of storm surge, wind, rain, erosion, and battering by debris. All coastal property and inhabitants are subject to severe damage and loss of like resulting from floods caused by hurricane associated storm surge. Some coastal property, road arteries, and bridge approaches are subject to severe flooding caused by rare astronomical tides as well.

In Indian River County, several variations of flood hazards occur due to the different effects of severe thunderstorms, hurricanes, seasonal rains, and other weather related conditions. For the majority of the county, the primary causes of flooding are hurricanes or tropical storms. However, the county's low-lying topography, combined with its subtropical climate, makes it vulnerable to riverine flooding.

c. Severe Thunderstorms and Lightning

A severe thunderstorm is defined as a thunderstorm containing one or more of the following phenomena: hail 3/4 inch or greater, winds gusting in excess of 57.5 mph, and/or a tornado (National Oceanic and Atmospheric Administration, National Weather Service, 1994). Severe weather can include lightning, tornadoes, damaging straight-line winds, and large hail. Most individual thunderstorms only last several minutes; however, some can last several hours.

Long-lived thunderstorms are called supercell thunderstorms. A supercell is a thunderstorm that has a persistent rotating updraft. This rotation maintains the energy release of the thunderstorm over a much longer time than typical, pulse-type thunderstorms which occur in the summer months. Supercell thunderstorms are responsible for producing the majority of severe weather, such as large hail and tornadoes (National Oceanic and Atmospheric Administration). Downbursts are also occasionally associated with severe thunderstorms. A downburst is a strong downdraft resulting in an outward burst of damaging winds on or near the ground. Downburst winds can produce damage similar to a strong tornado. Although usually associated with thunderstorms, downbursts can occur with showers too weak to produce thunder (National Oceanic and Atmospheric Administration). Strong squall lines can also produce widespread severe weather, primarily very strong winds and/or microbursts.

When a severe thunderstorm approaches, the National Weather Service will issue an advisory. According to the National Oceanic and Atmospheric Administration NWS (1994) two possible advisories are as follows:

- Severe Thunderstorm Watch:  
Conditions are favorable for the development of severe thunderstorms.
- Severe Thunderstorm Warning:  
Severe weather is imminent or occurring in the area.

(1) Lightning

Perhaps the most dangerous and costly effect of thunderstorms is lightning. As a thunderstorm grows, electrical charges build up within the cloud. Oppositely charged particles gather at the ground below. The attraction between positive and negative charges quickly grows strong enough to overcome the air's resistance to electrical flow. Racing toward each other, the charges connect and complete the electrical circuit. Charge then surges upward from the ground at nearly one-third the speed of light and produces a bright flash of lightning (Cappella, 1997).

On average, more people are killed by lightning than any other weather event. Florida leads the nation in lightning related deaths and injuries (National Lightning Safety Institute). Most lightning strike fatalities occur in June, July and August. Florida also has the most strikes, about 12 strikes per square kilometer per year in some places (National Lightning Safety Institute). Nationwide, lightning-related economic losses amount to more than \$5 billion per year, and the airline industry alone loses approximately \$2 billion a year in operating costs and passenger delays from lightning (National Lightning Safety Institute).

d. Wildfire/Urban Interface Zone

The recent wildfires that burned throughout Florida, specifically central Florida, are examples of the increasing wildfire threat which results from the Wildland/Urban Interface. The Wildland/Urban Interface is defined as the area where structures and other human development meet with undeveloped wildland or vegetative fuels (Federal Emergency Management Agency, 1996). As residential areas expand into relatively untouched wildlands, people living in these communities are increasingly threatened by forest fires.

There are three different classes of wildland fires: surface, ground, and crown. A surface fire is the most common type and burns along the floor of a forest, moving slowly and killing or damaging trees. A ground fire is usually started by lightning and burns on or below the forest floor. Crown fires spread rapidly by wind and move quickly by jumping along the tops of trees.

Rural and large tracts of unimproved lands are susceptible to brush and forest fires capable of threatening life, safety, and property loss in adjacent developed areas if not effectively controlled. Wildfires are caused by numerous sources including arson, smoker carelessness, individuals burning debris, equipment throwing sparks, and children playing with matches. However, the largest number of fires is caused by lightning strikes and coincides with the height of the thunderstorm season. A major wildland fire can leave a large amount of scorched and barren land, and these areas may not return to pre-fire conditions for decades. If the wildland fire destroys the ground cover, other potential hazards may develop (e.g., erosion) (Federal Emergency Management Agency, 1998).

However, some plant and animal communities in south central Florida have come to depend on frequent lightning-ignited wildfires for their continued existence. Many threatened and endangered species depend on the periodic burning of defense scrub. Fire suppression and landscape fragmentation have disrupted this natural cycle, but prescribed burns provide the missing link.

Structures in the Wildland/Urban Interface zone are vulnerable to ignition by three different ways: radiation, convection, and firebrands (National Wildland/Urban Interface Fire Protection Program). Radiating heat from a wildfire can cause ignition by exposure to the structure. The chances of ignition increase as the size of the flames increases, surface areas exposed to flames increases, length of exposure time increases, and distance between the structure and the flames decreases.

Another source of ignition by wildfire is convection. Ignition of a structure by convection requires the flame to come in contact with the structure. Contact with the convection column is generally not hot enough to ignite a structure. Clearing to prevent flame contact with the structure must include any materials capable of producing even small flames. Wind will tilt the flame and the convection column uphill, increasing the chance of igniting a structure.

Firebrands also pose a threat to structures in the Wildland/Urban Interface zone. A firebrand is a piece of burning material that detaches from a fire due to strong convection drafts in the burning area. They can be carried a long distance (around 1 mile) by fire drafts and winds. The change of these firebrands igniting a structure depends on the size of the firebrand, how long it burns after contact, and the materials, design and construction of the structure.

One-third of Indian River County's total land is protected by the Division of Forestry and/or federal fire control personnel; however, due to limited state and federal resources, the Indian River County Emergency Services Fire Division responds to most wildfires and is supported by the Florida Division of Forestry. Most wildfires in the county occur in Florida's dry season, from January through May.

(1) Muck Fires

A muck fire is a fire that consumes all the organic material of the forest floor and also burns into the underlying soil. It differs from a surface fire by being invulnerable to winds. If the fire gets deep into the ground, it could smoulder for several years. In a surface fire, the flames are visible and burning is accelerated by wind; whereas, in a muck fire wind is not generally a serious factor (Canadian Soil Information System, 1996).

Muck fires are not a frequent threat to Florida. However, during a drought in the 1980's fires in the Everglades consumed the rich, dried out muck that had once been the bottom of the swamp. These fires burned deep into the ground and required alternative fire-fighting techniques to extinguish them.

e. Tornado

A tornado is a violent windstorm characterized by a twisting, funnel-shaped cloud extending to the ground. It is generated by a thunderstorm or hurricane when cool air overrides a layer of warm air, forcing the warm air to rise rapidly. The most common type of tornado, the relatively weak and short-lived type, occurs in the warm season with June being the peak month. The strongest, most deadly tornadoes occur in the cool season, from December through April (Florida Department of Community Affairs, 1998). Occasional wind storms accompanied by tornadoes, such as the winter storm of 1993, are also widespread and destructive.

The damage from a tornado is a result of the high wind velocity and wind-blown debris. Florida's average is 54 tornadoes annually since 1959, causing an average of two fatalities and 69 injuries each year (Florida Department of Community Affairs, 1998). Indian River County's vulnerability to tornadoes is compounded by the high concentration of mobile home residents in large mobile home communities.

The National Weather Service issues two types of alerts:

- A Tornado Watch means that conditions are favorable for tornadoes to develop; and
- A Tornado Warning means that a tornado has actually been sighted.

f. Extreme Temperatures

(1) Freezing Temperatures

Florida has experienced many severe freezes that have resulted in the loss of the majority of winter crops. Freezes pose a major hazard to the agriculture industry in Indian River County and are a significant threat to its economic vitality. According to the Department of Agriculture and Consumer Services, moderate freezes occur every one to two years in the state. Severe freezes may be expected on an average of once every 15 to 20 years (Florida Department of Community Affairs, 1998). Since December 1889, there have been at least 22 recorded severe freezes (Florida Department of Community Affairs); the most recent being in 1996, when a Presidential Disaster Declaration was issued for crop losses exceeding \$90 billion. During this event, there was extensive loss of citrus trees throughout the state and the majority have not been replanted.

Freezing conditions primarily affect agriculture and homeless indigents. When conditions are predicted to be below freezing, shelters may be opened.

(2) Extreme Heat

Temperatures that remain 10°F or more above the average high temperature for a region and last for several weeks are defined as extreme heat (Federal Emergency Management Agency, 1996). Humid conditions, which add to the discomfort of high temperatures, occur when an area of high atmospheric pressure traps hazy, damp air near the ground. The highest temperature ever recorded in the state was on June 29, 1931 at 103°F in Monticello at an elevation of 207 ft (NCDC, 1996). In a normal year, approximately 175 Americans die of extreme heat. However, in 1995 the death toll was 1,021 (National Oceanic Atmospheric Administration, 1997).

Human bodies dissipate heat in one of three ways: by varying the rate and depth of blood circulation; by losing

water through the skin and sweat glands; and by panting. As the blood is heated to above 98.6°F, the heart begins to pump more blood, blood vessels dilate to accommodate the increased flow, and the bundles of tiny capillaries penetrating through the upper layers of skin are put into operation. The body's blood is circulated closer to the surface, and excess heat is released into the cooler atmosphere. At the same time, water diffuses through the skin as perspiration. The skin handles about 90% of the body's heat dissipating function (Darling).

Heat disorders generally have to do with a reduction or collapse of the body's ability to cool itself by circulatory changes and sweating, or a chemical (salt) imbalance caused by too much sweating. When the body cannot cool itself, or when it cannot compensate for fluids and salt lost through perspiration, the temperature of the body's inner core begins to rise and heat-related illness may develop. Studies indicate that, other things being equal, the severity of heat disorders tends to increase with age. Heat cramps in a 17-year-old may be heat exhaustion in someone 40, and heat stroke in a person over 60 (Darling).

When the temperature gets extremely high, the National Weather Service has increased its efforts to alert the general public as well as the appropriate authorities by issuing Special Weather Statements. Residents should heed these warnings to prevent heat related medical complications. As a result of the latest research findings, the National Weather Service has devised the "Heat Index" (HI). The HI, given in degrees Fahrenheit, is an accurate measure of how hot it really feels when relative humidity is added to the actual air temperature. The National Weather Service will initiate alert procedures when the HI is expected to exceed 105°F for a least two consecutive days. Possible heat disorders related to the corresponding HI are listed below (Darling).

- **Heat Index of 130°F or Higher:**  
Heatstroke/sunstroke highly likely with continued exposure
- **Heat Index of 105°F-130°F:**

Sunstroke, heat cramps, and heat exhaustion likely and heatstroke possible with prolonged exposure and/or physical activity

- **Heat Index of 90°F-105°F:**

Sunstroke, heat cramps, and heat exhaustion with prolonged exposure and/or physical activity

- **Heat Index of 80°F-90°F:**

Fatigue possible with prolonged exposure and/or physical activity

g. Erosion

(1) Soil Erosion

Soil erosion is the deterioration of soil by the physical movement of soil particles from a given site. Wind, water, animals, and the use of tools by man may all be reasons for erosion. The two most powerful erosion agents are wind and water but in most cases these are damaging only after man, animals, insects, diseases, or fire have removed or depleted natural vegetation. Accelerated erosion caused by human activity is the most serious form of soil erosion, and can occur so rapidly that surface soil may sometimes be blown or washed away down to the bedrock.

Undisturbed by man, soil is usually covered by shrubs and trees, dead and decaying leaves, or a thick mat of grass. Whatever the vegetation, it protects the soil when rain falls or wind blows. Root systems of plants hold soil together. Even in drought, the roots of native grasses, which extend several feet into the ground, help tie down the soil and keep it from blowing away. With its covering of vegetation stripped away, soil is vulnerable to damage. Whether the plant cover is disturbed by cultivation, grazing, deforestation, burning, or bulldozing, once the soil is bare to the erosive action of wind and water, the slow rate of natural erosion is greatly increased. Losses of soil take place much faster than new soil can be created. With the destruction of soil structure, eroded land is even more susceptible to erosion.

The occurrence of erosion has greatly increased,

usually at a rate at which soils cannot be sustained by natural soil regeneration. This is because of the activities of modern development and population growth, particularly agricultural intensification. It is also in the field of agriculture that most efforts have been made to conserve soils, with mixed success (Union of International Associations).

Particles scattered by erosion can also cause problems elsewhere. Stormwater drainage systems, both natural and mechanical, are frequently clogged by loose sediment. If drainage systems are not cleared of uncontrolled sediment on a regular basis, they lose function.

## (2) Beach Erosion

Wind, waves, and longshore currents are the driving forces behind coastal erosion. This removal and deposition of sand permanently changes beach shape and structure (Sea Grant Haznet, 1998). Most beaches, if left along to natural processes, experience natural shoreline retreat. As houses, highways, seawalls, and other structures are constructed on or close to the beach, the natural shoreline retreat processes are interrupted. The beach jams up against these man-made obstacles and narrows considerably as the built-up structures prevent the beach from moving naturally inland. When buildings are constructed close to the shoreline, coastal property soon becomes threatened by erosion.

The need for shore protection often results in "hardening" the coast with a structure such as a seawall or revetment.

A seawall is a large concrete wall designed to protect buildings or other man-made structures from beach erosion. A revetment is a cheaper option constructed with "rip rap" such as large boulders, concrete rubble, or even old tires. Although these structures may serve to protect beachfront property for a while, the resulting disruption of the natural coastal processes has serious consequences for all beaches in the area. Seawalls

inhibit the natural ability of the beach to adjust its slope to the ever changing ocean wave conditions. Large waves wash up against the seawall and rebound back out to sea carrying large quantities of beach sand with them. With each storm the beach narrows, sand is lost to deeper water, and the longshore current scours the base of the wall. Eventually, large waves impact the seawall with such force that a bigger structure becomes necessary to continue to resist the forces of the ocean (Pilkey and Dixon, 1996).

#### h. Agricultural Pest and Disease

Florida is among the top three agriculture-producing states in the nation. Agriculture generates farm cash receipts of nearly \$6 billion annually, of which citrus and vegetable crops contribute more than 40%. The industry is susceptible to many hazards including freezes, droughts, and exotic pests or diseases. Agricultural crops are grown throughout the state and every region is vulnerable to the effects of an exotic pest or disease infestation. As a result, Florida uses the second highest volume of pesticides in the nation.

Agriculture and citrus production play a key role in the Indian River County economy; 54% of the county is farmland. The 1992 Census of Agriculture from the U.S. Department of Commerce valued Indian River County farms at \$625 million with an annual production market value of \$145 million. The main threats to the Indian River County agriculture industry are 1) citrus canker, 2) Mediterranean fruit fly (medfly), 3) Sugarcane pests, and 4) Tomato Yellow Leaf Curl Virus (TYLCV).

##### (1) Citrus Canker

Citrus canker has been found in Dade County and the potential for its spread to other counties is high. Citrus canker is a bacterial disease of citrus that causes premature leaf and fruit drop. It affects all types of citrus, including oranges, sour oranges, grapefruit, tangerines, lemons and limes. Symptoms found on leaves and fruit are brown, raised lesions surrounded by an oily, water-soaked areas and a yellow ring or halo

(Florida Department of Agriculture and Consumer Services).

There is no known chemical compound that will destroy the citrus canker bacteria. In order to eradicate the disease, infected trees must be cut down and disposed of properly. It is a highly contagious disease that can be spread rapidly by windborne rain, lawnmowers and other landscaping equipment, animals and birds, people carrying the infection on their hands or clothing, and moving infected or exposed plants or plant parts (Florida Department of Agriculture and Consumer Services).

(2) Mediterranean Fruit Fly (Medfly)

Another threat to Indian River County's agriculture industry is the medfly. It is one of the world's most destructive pests and infests more than 250 different plants that are important for U.S. food producers, homeowners, and wildlife. It is considered the greatest pest threat to Florida's \$1.5 billion citrus crop, as well as endangering many other economically significant crops (Florida Department of Agriculture and Consumer Services). For example, a medfly outbreak in 1997 cost an estimated \$26 million to eradicate (Florida Department of Community Affairs, 1998).

If a long-term or widespread medfly infestation was to occur, Florida growers would not be permitted to ship numerous fruit and vegetable crops to many foreign and domestic markets. The movement of fruits and vegetables, even within the state, would be disrupted which could lead to higher prices in the supermarket. Costly post-harvest treatment of fruits and vegetables to meet quarantine restrictions of domestic and foreign markets would also be required. If the medfly is not eradicated in Florida, on-going pesticide treatments by homeowners and commercial growers will be necessary.

Adult medflies are up to 1/4" long, black with yellow abdomens, and have yellow marks on their thoraxes. Their wings are banded with yellow. The female Medfly damages produce by laying eggs in the host fruit or vegetable. The resulting larvae feed on the pulp,

rendering the produce unfit for human consumption. In addition to citrus, medflies will feed on hundreds of other commercial backyard fruit and vegetable crops. Because medflies are not strong fliers, the pest is spread by the transport of larval-infested fruit. The major threats come from travelers, the U.S. mail, and commercial fruit smugglers. Several steps have been taken to prevent new infestations. State and federal officials are working with postal authorities to develop ways to inspect packages suspected of carrying infested fruit. In addition, public education efforts carrying the message, "Don't Spread Med" are being expanded (Florida Department of Agriculture and Consumer Services).

(3) Sugarcane Pests

Changes in sugarcane agriculture, including new disease and insect pests, have seriously impacted the quality of cane and juice delivered to the mill for processing. These changing developments affect the level of sucrose, purity, fiber, and color of cane resulting in a loss of sugar and decrease in the quantity and quality of sugar produced (Legendre et. al, 1998).

(4) Tomato Yellow Leaf Curl Virus (TYLCY)

The Tomato Yellow Leaf Curt Virus is believed to have entered the state in Dade County sometime in early 1997 (Florida Department of Agriculture and Consumer Services, 1997). Symptoms vary among tomato types, but in general leaves produced shortly after infection are reduced in size, distorted, cupped inward or downward, and have a yellow mottle. Fewer than one in 10 flowers will produce fruit after TYLCV infection, severely reducing yields.

The virus is transmitted by adult silverleaf whiteflies. Although frequent applications of pesticides help to decrease whitefly populations and suppress the spread of TYLCV, virus management through whitefly control is not possible in years where whitefly populations are high. Fortunately, the virus is not transmitted through seed or casual contact with infected plants.

i. Drought

Drought is a normal, recurrent feature of climate, although many perceive it as a rare and random event. In fact, each year some part of the U.S. has severe or extreme drought. Although it has many definitions, drought originates from a deficiency of precipitation over an extended period of time, usually a season or more (National Drought Mitigation Center, 1998). It produces a complex web of impacts that spans many sectors of the economy and reaches well beyond the area producing physical drought. This complexity exists because water is essential to our ability to produce goods and provide services (National Drought Mitigation Center, 1998).

A few examples of direct impacts of drought are reduced crop, rangeland, and forest productivity; increased fire hazard; reduced water levels; increased livestock and wildlife mortality rates; and damage to wildlife and fish habitat. Social impacts include public safety, health, conflicts between water users, reduced quality of life, and inequities in the distribution of impacts and disaster relief. Income loss is another indicator used in assessing the impacts of drought; reduced income for farmers has a ripple effect throughout the region's economy (National Drought Mitigation Center, 1998).

The web of impacts is so diffuse that it is very difficult to come up with financial estimates of damages. However, the Federal Emergency Management Agency (FEMA) estimates \$6-\$8 billion in losses as the annual average (Federal Emergency Management Agency, 1995). The worst drought in recent history occurred in 1987-1989, and the NCDC reports the estimated cost as \$40 billion (National Drought Mitigation Center, 1998).

In Indian River County, the primary sources of water are deep wells for utility systems and shallow wells for rural areas. Excess water from an interconnected series of lakes, rivers, canals and marshes flows either north to the St. Johns River or east to the Indian River Lagoon. When this cycle is disrupted by periods of drought, one of the potentially most damaging effects is substantial crop loss in the western agricultural areas

of the county. In addition to obvious losses in yields in both crop and livestock production, drought in Indian River County is associated with increases in insect infestations, plant disease, and wind erosion. The incidence of forest fires increases substantially during extended droughts, which in turn places both human and wildlife populations at higher levels of risk.

The St. Johns River Water Management District and County staff manage the county's water resources. Complementing the District's water management efforts during periods of critical water shortage, a countywide, uniform, forceful, contingency plan is in place to effectively restrict the use of water.

j. Pandemic Outbreak/Epidemic

Infectious diseases emerging throughout history have included some of the most feared plagues of the past. New infections continue to emerge today, while many of the old plagues are still with us. As demonstrated by influenza epidemics, under suitable circumstances, a new infection first appearing anywhere in the world could travel across entire continents within days or weeks (Morse, 1996). Due to the potential of complex health and medical conditions that can threaten the general population, Florida's vulnerability to an epidemic is continually being monitored. With millions of tourists arriving and departing the state annually, disease and disease exposure (airborne, vector, and ingestion) are constantly evaluated and analyzed (Florida Department of Community Affairs, 1998).

Primarily as a result of the entrance of undocumented aliens into south Florida, and the large number of small wildlife, previously controlled or eradicated diseases have surfaced. Health officials closely monitor this potential threat to the public health. The emphasis upon preventive medical measures such as school inoculation, pet licensing, rodent/insect eradication, water purification, sanitary waste disposal, health inspections, and public health education, mitigate this potential disaster.

Another potential threat to south Florida's population is food contamination. Frequent news stories document that *E-coli* and botulism breakouts throughout the country are not that

uncommon. Most recently, millions of pounds of possibly contaminated beef from the Hudson packing plant were seized by the Department of Agriculture and destroyed.

k. Seismic Hazards

(1) Dam/Levee Failure

Dam/levee failure poses a minor threat to population and property in Indian River County. All dams and levees are earthen structures and are state, regional, local, or privately controlled. The most significant risk related to dam/levee failure is flooding due to substantial rainfall and its eastward migration to final discharge in the Indian River Lagoon. Structural and non-structural techniques to slow and contain this runoff incorporate several drainage systems, some dating back to 1919. Rainfall in excess of designed capacities could cause erosion of constructed drainage facilities and flooding of many areas including primary roadway evacuation routes.

(2) Earthquakes

Although Florida is not usually considered to be a state subject to earthquakes, several minor shocks have occurred over time, but only one caused any damage (Zirbes, 1971).

- In January 1879, a shock occurred near St. Augustine that is reported to have knocked plaster from walls and articles from shelves. Similar effects were reported in Daytona Beach. The shock was felt in Tampa, throughout central Florida, and in Savannah, Georgia as well (Zirbes, 1971).
- In January 1880, another earthquake occurred. This time Cuba was the focal point. Shock waves were sent as far north as the town of Key West, Florida (Zirbes, 1971).
- In August 1886, Charleston, South Carolina was

the center of a shock that was felt throughout northern Florida. It rang church bells in St. Augustine and severely jolted other towns along sections of Florida's east coast.

Jacksonville residents felt many of the strong after shocks that occurred in September, October, and November, 1886 (Zirbes, 1971).

- In June 1893, Jacksonville experienced a minor shock that lasted about 10 seconds. Another earthquake occurred in October 1893, which also did not cause any damage (Zirbes, 1971).
- In November 1948, doors and windows rattled in Captiva Island, west of Ft. Myers. It was reportedly accompanied by sounds like distance heavy explosions (Zirbes, 1971).
- In November 1952, a slight tremor was felt in Quincy, a town located 20 miles northwest of Tallahassee. Windows and doors rattled, but no damage was reported (Zirbes, 1971).

(3) Sinkholes and Subsidence

Sinkholes are a common feature of Florida's landscape. They are lone one of many kinds of karst landforms, which include caves, disappearing streams, springs, and underground drainage systems, all of which occur in Florida. Karst is a generic term which refers to the characteristic terrain produced by erosional processes associated with the chemical weathering and dissolution of limestone or dolomite, the two most common carbonate rocks in Florida. Dissolution of carbonate rocks begins when they are exposed to acidic water. Most rainwater is slightly acidic and usually becomes more acidic as it moves through decaying plant debris. Limestones in Florida are porous, allowing the acidic water to percolate through them, dissolving some limestone and carrying it away in solution. Over time, this persistent erosion process has created extensive underground voids and drainage systems in much of the carbonate rocks throughout the state. Collapse of overlying sediments into the underground cavities produces sinkholes (Florida Geological Survey, 1998).

## 2. Technological Hazards

### a. Radiological Accidents

While an actual release of radioactive material is extremely unlikely and the immediate threat to life extremely low, vulnerability to a nuclear plant disaster could consist of long range health effects with temporary and permanent displacement of population from affected areas (Florida Department of Community Affairs, 1998). The potential danger from an accident at a nuclear power plant is exposure to radiation. This exposure could come from the release of radioactive material from the plant into the environment, usually characterized by a plume (cloud like) formation. The area the radioactive release may affect is determined by the amount released from the plant, wind direction and speed, and weather conditions (e.g., rain) which would quickly drive the radioactive material into the ground, hence causing increased deposition of radio nuclides.

Thirty of the 67 counties in the State of Florida are involved in preparedness planning for a commercial nuclear power plant emergency. Emergency Planning Zones (EPZ) have been designated for each power plant to enhance planning efforts for an emergency. An EPZ is comprised of two zones, the 10-mile plume exposure zone and the 50-mile ingestion exposure zone (Florida Community Affairs, 1998). Specific coordinating procedures for response to a General Emergency at a nuclear power plant have been prepared in the form of Standard Operating Procedures. These include Emergency Classification Levels which assist in notifying the public if a problem occurs at a plant. They are defined by four categories (Federal Emergency Management Agency, 1997):

- **Notification of Unusual Event** - The event poses no threat to plant employees, but emergency officials are notified. No action by the public is necessary.
- **Alert** - An event has occurred that could reduce the plant's level of safety, but back-up systems still work. Emergency agencies are notified and kept informed, but no action by the public is necessary.
- **Site Area Emergency** - The event involves major problems with the plant's safety and has progressed to the point that a release of some radioactivity into the air

or water is possible, but is not expected to exceed Environmental protection Agency Protective Action Guidelines (PAGs). Thus, no action by the public is necessary.

- **General Emergency** - The event has caused a loss of safety systems. If such an event occurs, radiation could be released that would penetrate the site boundary. State and local authorities will take action to protect the residents living near the plant. The alert and notification system will be sounded. People in the affected areas could be advised to evacuate, or in some situations, to shelter in place. When the sirens are sounded, radio and television alerts will have site-specific information and instructions.

The St. Lucie Nuclear Power Plant is located 12 miles southeast of the City of Ft. Pierce on Hutchinson Island in St. Lucie County. The facility contains two reactors and is owned and operated by the Florida Power & Light Corporation. Counties within the 50-mile EPZ include all or portion of St. Lucie, Martin, Glades, Osceola, Okeechobee, Brevard, Highlands, Palm Beach and Indian River.

b. Power Failure (outages)

In the U.S., from July 2 to August 10, 1996, the Western States Utility Power Grid reported widespread power outages that affected millions of customers in several western states and adjacent areas of Canada and Mexico. These problems resulted from a variety of related causes, including sagging lines due to hot weather, flashovers from transmission lines to nearby trees, and incorrect relay settings. According to the electric utility industry's trade association, the potential for such disturbances is expected to increase with the profound changes now sweeping the electric utility industry.

To address times when generating capacity is tight, or falls below consumer demand due to state or local emergencies, the Florida Electrical Emergency Contingency Plan was developed. Alerts have been created to give early warning of potential electricity shortfalls and bring utilities, emergency management officials, and the general public to a state of preparedness. The Contingency Plan has four stages (Florida

Reliability Coordinating Council):

- **Generating Capacity Advisory** - A Generating Capacity Advisory is primarily for information purposes. It starts utility tracking activities, and it initiates inter-utility and inter-agency communication. No action by the public is required. General information may be distributed to consumers to forewarn them of conditions if necessary.
- **Generating Capacity Alert** - A Generating Capacity Alert starts actions to increase reserves. Available emergency supply options will be explored. When reserves fall below the size of the largest generating unit in the state, loss of that size unit to an unexpected mechanical failure could lead to blackouts somewhere since insufficient backup is available.
- **Generating Capacity Emergency** - A Generating Capacity Emergency occurs when blackouts are inevitable somewhere in Florida. Every available means of balancing supply and demand will be exhausted. Rolling blackouts, manually activated by utilities, are a last resort to avoid system overload and possible equipment damage. Frequent status reports are provided to agencies and the media. The Division of Emergency Management will consider using the Emergency Alert System to inform citizens of events and to direct them to available shelters if conditions warrant. Recognizing the consequences of a loss of electricity, individual utility emergency plans include provisions for special facilities critical to the safety and welfare of citizens.
- **System Load Restoration** - System Load Restoration is instituted when rolling blackouts have been terminated and power supply is adequate. It is the recovery stage, and efforts are made to provide frequent system status reports.

c. Hazardous Materials Accidents

Hazardous materials accidents can occur anywhere there is a road, rail line, pipeline, or fixed facility storing hazardous

materials. Virtually the entire state is at risk to an unpredictable accident of some type. Most accidents are small spills and leaks, but some result in injuries, property damage, environmental contamination, and other consequences. These materials can be poisonous, corrosive, flammable, radioactive, or pose other hazards and are regulated by the Department of Transportation. However, out of approximately 1,663 hazardous materials incidents reported statewide in 1997, no known fatalities were reported, less than 4% resulted in injuries, and less than 6% resulted in evacuation (Florida Department of Community Affairs, 1998).

Emergencies involving hazardous materials can be expected to range from a minor accident with no off-site effects to a major accident that may result in an off-site release of hazardous or toxic materials. The overall objective of chemical emergency response planning and preparedness is to minimize exposure for a wide range of accidents that could produce off-site levels of contamination in excess of Levels of Concern established by the U.S. Environmental Protection Agency. Minimizing this exposure will reduce the consequences of an emergency to people in the area near to facilities which manufacture, store, or process hazardous materials (Treasure Coast Regional Planning Council).

A large volume of hazardous materials is transported to and through the county by railroad and highway, air, water, and pipeline daily. Within Indian River County, there are a number of both public and private fixed facilities which produce or use hazardous materials. Coordinating procedures for hazardous material response are found within the county's Emergency Plan for Hazardous Materials.

In addition to the county's Emergency Plan for Hazardous Materials, Local Emergency Planning Committee officials have prepared a plan for use in responding to and recovering from a release of hazardous or toxic materials. This plan addresses the range of potential emergency situations and the appropriate measures to be implemented to minimize exposure through inhalation, ingestion, or direct exposure (Treasure Coast Regional Planning Council).

Mishandling and improper disposal or storage of medical wastes and low-level radioactive projects from medical use are

also a hazard to Indian River County. For example, a few years ago an incident occurred in New Jersey when improper disposal of medical wastes resulted in some of the used projects ending up on Atlantic Ocean beaches.

d. Transportation System Accidents.

Florida has a large transportation network consisting of major highways, airports, marine ports, and passenger railroads. The heavily populated areas of Indian River County are particularly vulnerable to serious accidents which are capable of producing mass casualties. With the linear configuration of several major highways in Indian River County, such as interstate highways and the Florida Turnpike, major transportation accidents could occur in a relatively rural area, severely stressing the capabilities of local resources to respond effectively. A recent notorious example is the crash in the Everglades of Value Jet Flight 597 on May 11, 1996, which resulted in 109 fatalities and a cost of millions of dollars, severely taxing the financial and public safety resources of Dade County (Florida Department of Community Affairs, 1998). Similarly, a major transportation accident could involve a large number of tourists and visitors from other countries, given Florida's popularity as a vacation destination, further complicating the emergency response to such an event.

As a major industrial nation, the U.S. produces, distributes, and consumes large quantities of oil. Petroleum-based oil is used as a major power source to fuel factories and various modes of transportation, and in many everyday products, such as plastics, nylon, paints, tires, cosmetics, and detergents (Environmental Protection Agency, 1998). At every point in the production, distribution, and consumption process, oil is stored in tanks. With billions of gallons of oil being stored throughout the country, the potential for an oil spill is significant, and the effects of spilled oil can pose serious threats to the environment.

In addition to petroleum-based oil, the U.S. consumes millions of gallons of non-petroleum oils, such as silicone and mineral-based oils and animal and vegetable oils. Like petroleum products, these non-petroleum oils are often stored in tanks that have the potential to spill, causing environmental damages that are just as serious as those caused by petroleum-based

oils. To address the potential environmental threat posed by petroleum and non-petroleum oils, the U.S. Environmental protection Agency has established a program designed to prevent oil spills. The program has reduced the number of spills to less than 1% of the total volume handles each year (Environmental Protection Agency, 1998).

Indian River County has about 22 miles of Atlantic Ocean coastline that is subject to contamination caused by an oil spill. By Executive Order, the responsibility for preparing response plans for coastal oil spills is designated to the Department of Environmental Protection, Division of Florida Marine Patrol. The Florida Coastal Pollutant Spill Plan has been prepared to coordinate response procedures and recovery efforts after a spill. There are to active oil field regions in Florida: Escambia and Santa Rosa counties in the Panhandle, and Collier, Dade, Hendry, and Less counties in southwest Florida.

e. Wellfield Contamination

The development of wellfield protection programs is a major preventative approach for the protection of community drinking water supplies. Wellfield protection is a means of safeguarding public water supply wells by preventing contaminants from entering the area that contributes water to the well or wellfield over a period of time. Management plans are developed for the wellfield protection area that include inventorying potential sources of ground water contamination, monitoring for the presence of specific contaminants, and managing existing and proposed land and water uses that pose a threat to ground water quality.

Ground water is an essential natural resource. It is a source of drinking water for more than half of the U.S. population and more than 95% of the rural population (Browning). In addition, ground water is a support system for sensitive ecosystems, such as wetlands or wildlife habitats.

Between 1971 and 1985, there were 245 ground water related outbreaks of disease, resulting in more than 52,000 individuals being affected by associated illnesses (Browning). While most of these diseases were short-term digestive disorders caused by bacteria and viruses, hazardous chemicals found in wells nationwide also pose risks to public health.

The 1986 amendments to the federal Safe Drinking Water act require states to implement wellfield protection programs for public water wells. Prevention strategies include maintaining the isolation distances from potential contamination sources, reporting to the state violations of the isolation distance, and asking a local governmental unit to regulate these sources. Cleaning up contaminated ground water can be technically difficult, extremely expensive, and sometimes simply cannot be done. Contaminated ground water also affects the community by discouraging new businesses or residents from locating in that community.

f. Communications Failure

As society emerges from industrial production into the age of information, we are seeing new kinds of technological accidents/disasters. Recently, a communications failure occurred that was the worst in 37 years of satellite service. Some major problems with the telecommunications satellite Galaxy IV drastically affected 120 companies in the paging industry (Rubin, 1998). Radio and other forms of news broadcasts also were affected. The pager failure not only affected personal and business communications, but emergency management and medical personnel as well.

g. Military Ordnance from WWII

Unexploded military ordnance is a hazard unique to Indian River County. The former Fort Pierce Naval Amphibious Training Base was established in 1942. Training exercises were conducted on outlying areas of North and South Hutchinson Islands. Training at the base included testing of bombs, rockets and mines. Several explosive devices left over from these training missions have been found along the shores of Vero Beach and Ft. Pierce. Public exposure to unexploded ordnance could occur primarily as a result of three types of activities: Earth moving (building construction, pool construction, and major landscaping), recreational diving and use of beach areas - unexploded ordnance may wash ashore or be exposed after storms. Prior clean up operations have been coordinated by the Army Corps of Engineers (Jacksonville office).

### 3. Societal Hazards

#### a. Terrorism and Sabotage

##### (1) Terrorism

Terrorist attacks may take the form of induced dam or levee failures, the use of hazardous materials to injure or kill, or the use of biological weapons to create an epidemic. While there have not been any successful acts of terrorism committed in Florida in recent years, it is recognized that the state has many critical and high-profile facilities, high concentration of population, and other potentially attractive venues for terrorist activity that are inherently vulnerable to a variety of terrorist methods. Governmental/political, transportation, commercial, infrastructure, cultural, academic, research, military, athletic, and other activities and facilities constitute ideal targets for terrorist attacks which may cause catastrophic levels of property and environmental damage, injury, and loss of life. Furthermore, a variety of extremist groups are known to operate within Florida, and potential terrorist attacks have been investigated and averted in recent years (Florida Department of Community Affairs, 1998).

Acts of terrorism are also capable of creating disasters which threaten the safety of a large number of citizens. The U.S. has been relatively untouched by the storm of terrorist activities experienced in other parts of the world; however, in recent years, an increasing incidence of terrorism has been recorded in this nation.

The federal government has recognized that the U.S. has entered the post-Cold War era. As a result, federal planning guidelines regarding military threats are in transition. However, nuclear weapons continue to be a serious planning concern especially in areas surrounding military installations. The influx of undocumented aliens into south Florida from areas unfriendly to the interest of the U.S. are monitored by

those involved with the emergency management of government.

(2) Computer Accidents and Sabotage

The President's Commission on Critical Infrastructure Protection (PCCIP) recently reported that there is increasing threat that the U.S. could suffer something similar to an "Electronic Pearl Harbor" (Rubin, 1998). Networked information systems present new security challenges in addition to the benefits they offer. Long-term power outages could cause massive computer outages, with severe economic impacts such as loss of sales, credit checking, banking transactions, and ability to communicate and exchange information and data. "Today, the right command sent over a network to a power generating station's control computer could be just as effective as a backpack full of explosives, and the perpetrator would be harder to identify and apprehend," states the PCCIP report.

With the growth of a computer-literate population, increasing numbers of people possess the skills necessary to attempt such an attack. The resources to conduct a cyber attack are now easily accessible everywhere. A personal computer and an internet service provider anywhere in the world are enough to cause a great deal of harm. Threats include:

- Human error;
- Insider use of authorized access for unauthorized disruptive purposes;
- Recreational hackers - with or without hostile intent;
- Criminal activity - for financial gain, to steal information or services, or organized crime;
- Industrial espionage;
- Terrorism - including various disruptive operations; and
- National intelligence - information warfare, intended disruption of military operations.

The effects of such activities may take the form of disruption of air traffic controls, train switches, banking transfers, police investigations, commercial transactions, defense plans, power line controls, and

other essential functions. As the internet becomes more and more important, the loss of its services, whether by accident or intent, becomes a greater hardship for those relying on this new form of communication. Computer failures could affect emergency communications as well as routine civilian applications, such as telephone service, brokerage transactions, credit card payments, Social Security payments, pharmacy transactions, airline schedules, etc.

b. Civil Disturbance

As in any other area, Indian River County is subject to civil disturbances in the form of riots, mob violence, and a breakdown of law and order in a focalized area. Communities with racial mixtures, gang violence, and drug trafficking are increasingly aware of the need to plan for civil disturbance emergencies. Although they can occur at any time, civil disturbances are often preceded by periods of increased tension caused by questionable social and/or political events such as controversial jury trials or law enforcement actions (Florida Department of Community Affairs, 1998). These events may also be precipitated by any event involving large groups of people and/or special events occurring in the county (i.e., visiting dignitaries, L.A. Dodgers baseball game, etc.). Police services are responsible for the restoration of law and order in any specific area of the county.

c. Immigration Crisis

Florida's location as the nearest U.S. land mass bordering the Caribbean basin makes it a chosen point of entry for many migrants attempting to enter the country illegally. A major consequence of a mass arrival of illegal immigrants could be disruptive to the routine functioning of the impacted community, resulting in significant expenditures related to the situation. An example of this threat occurred in 1994, when the state responded to two mass migration incidents. In May 1994, there was an unexpected migration of approximately 100 Haitian refugees, while in August 1994, there was an influx of 700 Cubans (Florida Department of Community Affairs, 1998). These events are typically preceded by periods of increasing tension abroad, which can be detected and monitored.

Enforcement of immigration laws is a federal government responsibility. However, it is anticipated that joint jurisdictional support of any operation will be required from the state and local governments.

The Atlantic shore of Indian River County is the frequent scene of the arrival of undocumented aliens, usually Haitian or Cuban. The county has both the history and the potential for the unannounced arrival of a large number of aliens. Until relieved of the responsibility by the state and federal governments, Indian River County must be capable of providing mass refugee care to include shelter, food, water, transportation, medical, police protection, and other social services.

Figure 2. Indian River County hazard vulnerability by incorporated jurisdiction and population centers.

Hazard Category	Jurisdictions							Population Centers					County
	Town of Fellsmere	Town of Indian River Shores	Town of Orchid	City of Sebastian	City of Vero Beach	Unincorporated Orchid Island	South County Area	Route 60 Area	Wabasso Area	Vero Lake Estates	Western County	Overall Vulnerability	
<b>Natural Hazards</b>													
Flood	●	●	●	●	●	●	●	●	●	●	●	●	
Hurricane/Tropical storm	●	●	●	●	●	●	●	●	●	●	●	●	
Tornado	●	○	○	●	●	○	●	●	●	●	●	●	
Severe thunderstorm/Lightning	●	●	●	●	●	●	●	●	●	●	●	●	
Drought	●	○	○	●	●	○	●	●	○	○	○	●	
Temperature extremes	○	●	●	○	○	○	●	●	○	○	●	●	
Agricultural pest and disease	○	●	●	○	●	○	●	●	○	○	●	●	
Wildfire/urban interface zone	●	○	○	○	○	○	●	●	○	○	●	●	
Muck fires	○	○	○	○	○	○	○	○	○	○	○	○	
Soil/beach Erosion	○	●	●	○	●	●	○	○	○	○	○	●	
Epidemic	●	○	○	●	●	○	●	●	●	○	○	●	
Seismic hazards (sink holes/soils failure)	○	○	○	○	○	○	○	○	○	○	○	○	
<b>Technological Hazards</b>													
Hazardous materials accident	●	○	○	●	●	○	●	●	○	○	●	●	
Radiological accidents including nuclear power plant accidents	●	●	●	●	●	●	●	●	●	●	●	●	
Communications failure	○	○	○	○	○	○	○	○	○	○	○	○	
Transportation system accidents	○	○	○	●	●	○	●	●	○	○	○	○	

Hazard Category	Jurisdictions						Population Centers						County
	Town of Fellsmere	Town of Indian River Shores	Town of Orchid	City of Sebastian	City of Vero Beach	Unincorporated Orchid Island	South County Area	Route 60 Area	Wabasso Area	Vero Lake Estates	Western County	Overall Vulnerability	
Wellfield contamination	●	○	○	●	●	○	●	●	●	○	○	●	
Power failure (outages)	●	●	●	●	●	●	●	●	●	●	○	●	
Unexploded military ordnance	○	○	○	○	○	○	○	○	○	○	○	○	
<b>Societal Hazards</b>													
Civil disturbance	○	○	○	○	○	○	○	○	○	○	○	○	
Terrorism and sabotage	○	○	○	○	○	○	○	○	○	○	○	○	
Immigration crisis	○	○	○	○	○	○	○	○	○	○	○	○	

Unincorporated Hutchinson Island = Areas of the barrier not within city jurisdictions  
 South County Area = The area south of the City of Vero Beach and west of the Indian River (Both sides of U.S. 1)  
 Route 60 Area = Area west of the City of Vero Beach along Route 60 between the City and I-95  
 Wabasso Area = The area to the south of the City of Sebastian  
 Vero Lake Estates = The large development area west and south of the City of Sebastian  
 Western County = Area west of I-95

● = High, ● = Moderate, ○ = Low, and ○ = Very Low

## B. GEOGRAPHIC INFORMATION

Indian River County is located in southeast central Florida, along the Atlantic Ocean coast. The County has a total area of approximately 543 square miles (347,520 acres) of which 41.1 square miles (26,298 acres) are water, and 502 square miles (321,280 acres) are land area. Included in the land area are five (5) municipalities containing approximately 37.2 square miles (23,830 acres). Indian River County is about 33 miles wide from east to west and 22 miles long from north to south. In addition to the Atlantic Ocean on the east, the County is bounded by Brevard County on the north, St. Lucie County on the south and Okeechobee and Osceola Counties on the west.

The mainland topography of Indian River County is generally low in elevation, without significant deviation. However, two ridges parallel the coast, one about 1 mile inland from the Indian River with elevations up to 30 feet, the other about 10 miles inland with similar elevations. The coastal barrier islands have typical dune topography with dune elevations of about 15 feet.

In Indian River County, the average rainfall is approximately 55 inches per year. This rainfall is unevenly distributed, much of it occurring during the summer and early fall months. The drainage area of Indian River County is generally divided by the two geographic ridges that parallel the coast. Areas west of the inland ridge are relatively flat and drain westward to the St. John's Marsh, aided by extensive canals which have been constructed for agricultural use. The basin area between the ridges is generally low and relatively flat. Drainage of the northern portion of this basin area is provided by the South Prong of the St. Sebastian River and a network of manmade canals. The central and southern portions have essentially no natural watercourses. This area is drained by an extensive network of manmade canals and ditches that are interconnected and joined with Main Relief, North Relief, and South Relief Canals and that discharge into the Indian River.

The occurrence of floods is an important concern for communities with coasts subject to storm events, or for any community with waterbodies and waterways having flood hazard areas. A flood hazard is any land area that is susceptible to being inundated by water from any source. Flooding is a temporary condition of partial or complete inundation of normally dry land areas. Floods can occur throughout the Indian River County area anytime during the year; however, they are most frequent during the rainy season from May to October. The streams and canals in the low area between the parallel ridges, as well as those that discharge into the St. John's River, are subject to flooding from prolonged heavy rainfalls.

Low, swampy, inland areas are subject to flooding during wet periods and

coastal areas of the county are subject to storm surge flooding resulting from hurricane or tropical storm activity. Areas along the Indian River Lagoon may also experience flooding from storm surge caused by hurricane winds piling water against shorelines, causeways and bridges. A diagram of flood prone areas is attached to this document and identified as Figure 3.

Figure 3

Flood Prone Areas in Indian River County  
(Resource: Flood Insurance Rate Map #12061C0000, dated May 4, 1989)

Nearly two-thirds of the total land area is west of Interstate 95; however, more than 90% of the population resides in the eastern third of the County, and is vulnerable to the effects of both man-made and natural disasters. The City of Fellsmere is the only community in the western part of the County. The land along the western boundary of the County is used primarily for range and pasture land with few residential structures. To the east is the St. Johns marsh, a large freshwater marsh extending the entire length of the County. Included in this significant wetland is the 6,000 acre Blue Cypress Lake. The land between the marsh and I-95 is devoted primarily to agriculture, and subject to disaster caused by weather phenomena. Other than the City of Fellsmere in the north, there is little human settlement in this area.

The eastern portion of the County can be divided into two major areas: the mainland and the barrier island. The southern portion of the eastern mainland is the most highly developed area and contains the highest population concentration in the County. The central area of the mainland has experienced sparse development. Residential and commercial activities are concentrated along the U.S. 1 corridor. A chart depicting the existing land uses in the coastal area is attached to this document and identified as Figure 4.

Figure 4

<b>EXISTING LAND USES (1996*)</b>	
	<b>ACRES</b>
<b>A. RESIDENTIAL</b>	<b>34,634</b>
(1) Single family	13,289
(2) Multi-family	1,374
(3) Mobile homes	1,750
(4) Vacant residential	18,220
<b>B. COMMERCIAL</b>	<b>1,304</b>
<b>C. INDUSTRIAL</b>	<b>749</b>
<b>D. AGRICULTURAL</b>	<b>182,454</b>
<b>E. RECREATIONAL</b>	<b>3,084</b>
<b>F. CONSERVATION (PUBLICLY OWNED)</b>	<b>67,229</b>
<b>G. PUBLIC FACILITIES</b>	<b>4,946</b>
<b>H. OTHER</b>	<b>3,050</b>
<b>TOTAL UNINCORPORATED LAND AREA</b>	<b>297,450</b>

Source: \*Indian River County 2020 Comprehensive Plan

The northern mainland portion of the County contains Sebastian, the second largest city in population. Sometime in the near future, Sebastian is expected to become the largest city in the County. Agricultural uses in this area are confined to areas south of the city.

The barrier island can be characterized as three distinct areas. The northern third of the island is the least developed. Natural vegetation and citrus groves cover much of the area. The Town of Orchid, known for its high quality citrus, is located in this northern portion of the island. The Pelican Island Wildlife Refuge, the first in the nation, occupies several small islands in the Indian River lagoon as well as some wetland area on the barrier island. The northernmost tip of the island is occupied by the Sebastian Inlet Recreation Area. Portions along this part of the island are designated as undeveloped coastal barrier.

The island is approximately 22 miles long and averages in width from 100 feet to 1 1/2 miles. The average height above mean sea level is eight feet with highs of sixteen feet and lows of two feet above mean sea level. The island is accessible by four bridges that connect it to the mainland. One bridge, a two-lane, is located in St. Lucie County and provides access to the Island from the extreme South. Three bridges in Indian River County provide accessibility to the island:

- a two-lane bridge in the North county area (Wabasso)
- a four-lane (Merrill Barber Bridge) located in mid-county
- a four-lane (17th Street Bridge) also located in mid-county approximately ten (10) blocks South of the Barber Bridge

Orchid (Hutchinson) Island provides a land barrier to the mainland of any activity operated in the Atlantic Ocean for the entire coastal area of the County.

Indian River County is enriched with a diversity of upland and wetland ecological communities, varying in composition as the county extends from the Atlantic Ocean and Indian River Lagoon westward to the St. Johns Marsh and Blue Cypress Lake. A Soil Conservation Service (SCS) publication entitled "26 Ecological Communities of Florida" identifies at least thirteen different ecological communities within Indian River County.

The major ecological communities within Indian River County are identified as follows:

- South Florida Coastal Strand
- Sand Pine/Xeric Scrub
- South Florida Flatwoods
- Tropical/Coastal Hammocks
- Freshwater Wetlands
- Indian River Lagoon and Associated Estuarine Wetlands
- Nearshore Atlantic Ocean

Of particular concern are those ecological communities located in the eastern portion of the county, where development pressures conflict with the preservation of diminishing habitats. Tropical hammock communities and coastal scrub communities are examples of habitats found almost exclusively in Florida that are in danger of disappearing or being drastically reduced, along with their unique flora and fauna. A balance of natural system preservation and the rights of property owners to develop land is an important issue to be considered as county population and development growth continues.

#### C. DEMOGRAPHICS

With a 2000 total resident and seasonal population of 112,947, Indian River County ranks as one of the fastest growing counties in the state of Florida. The county is supported by an economy based primarily on tourism, light industry, and agriculture. Area wise, this provides approximately 208 persons per square mile throughout the entire county. However, the majority of the County's population resides within the eastern ten miles of the County, or approximately 600 persons per square mile. According to statistics prepared by the U.S. Census Bureau, State and County Quick Facts (2000), this County's population had a 25.2% increase between 1990 and 2000. A chart representing the population centers in the county is attached to this document and identified as Figure 5.

Additional statistics reveal that much of the immigrating population has produced a median age in the County that is nearly ten years greater than that of the median age of the United States.

Figure 5

<b>POPULATION CENTERS IN THE COUNTY (2000 Census)</b>	
<b>MUNICIPALITY</b>	<b>POPULATION</b>
Unincorporated County	71,660
Vero Beach	17,705
Sebastian	16,181
Fellsmere	3,813
Indian River Shores	3,448
Orchid	140
<b><i>Total County Population</i></b>	<b><i>112,947</i></b>
<b>Census Designated Places</b>	
Gifford	7,599
Wabasso	918
Roseland	1,775
Vero Beach South	20,362
Florida Ridge	15,217
South Beach	3,457
North Beach	243
Winter Beach	965
West Vero (S.R. 60 Corridor)	7,695
Wabasso Beach	1,075
Unallocated	12,354
<b>Total Unincorporated</b>	<b>71,660</b>

SOURCE: INDIAN RIVER COUNTY COMPREHENSIVE DEVELOPMENT REPORT JAN. 2002

INDIAN RIVER COUNTY POPULATION BY AGE GROUP				
0-14	15-24	25-44	45-64	65+
17,677	10,784	25,154	26,360	32,972

*SOURCE: INDIAN RIVER COUNTY COMPREHENSIVE DEVELOPMENT REPORT JAN. 2002*

These figures represent the total resident and seasonal populations which incorporates an inflation of residents during the tourist season.

Indian River County houses inmates in two locations. The Indian River County Jail currently houses federal inmates from Broward and Polk counties and has a maximum population of 453. The Indian River Correctional Institution is a Youthful Offender Program for offenders aged 14-24. The maximum inmate population is 472. More information on critical facilities can be found in a database maintained by the office of Emergency Management.

There are 33,186 single family residential units and 13,033 multi-family residential units in the County (*SOURCE: INDIAN RIVER COUNTY COMPREHENSIVE DEVELOPMENT REPORT JAN. 2002*). Additionally, there are approximately 6,800 mobile home/recreational vehicle dwellings in the County, many of which are situated in large mobile home villages. Approximately 85% of all the facilities listed above are located within ten miles of the east coast. A current inventory of mobile home parks is maintained on file in the office of Emergency Management.

Agricultural production and processing are an important component of the County's economy. The seasonal nature of citrus production has required the use of migrant labor during peak harvesting season (February/March). A survey conducted of the County Agricultural Extension, Florida Employment Service and the Department of Health and Rehabilitative Service provides estimates of 1,000 migrant farm laborers are used during the peak of the season. It has also been assumed that this figure will remain fairly constant in the future due to continued high demand for citrus products, stable production in the county, changes in technology, and the use of local labor. Census data gathered in 1990 suggests that approximately 6,081 citizens residing in Indian River County speak a language other than English.

The Atlantic beaches and the excellent climate in the County provide the basis for a year-round tourist industry. There are numerous hotels and motels in the County as well as retail and service establishments geared to serving the tourist trade. Seasonal population is composed of those persons who visit or reside in the county for a period of less than six months. This group includes tourists and other short-term and long-term visitors, many of whom congregate on the barrier island. The total projected seasonal population for Indian River County averages 24,685 (Source: Indian River County 2020 Comprehensive Plan).

D. PERSONS WITH SPECIAL NEEDS

In July of 1989, the Indian River County Department of Emergency Services formed a committee to address people with special medical needs. Since then, the goal of the Special Needs Shelter Program is to provide a safe place for persons requiring medical assistance to temporarily shelter during an evacuation from either a man-made or natural disaster, rather than inundating local hospitals with a large number of people that a specially equipped and staffed shelter could adequately handle. Candidates for the Special Needs Shelter are encouraged to register with our office in advance. The registration process is described in ESF #18 (Special Needs Care) attached to this document. Currently, we have approximately 600 registrants for the Special Needs Shelter.

## E. CLIMATOLOGY

Indian River County is affected by its coastal location. Thunderstorms average 80 days a year. Annually, 132 days have rainfall of at least .01 inches on the average, and there are 74 clear days, 159 partly cloudy days, and 132 cloudy days. Annually, we receive approximately 55 inches of rainfall. Sea breezes modify the climate of a narrow coastal belt a few miles wide. The sea breeze quickly reduces high afternoon temperatures and provides a flow of air when one would otherwise not exist.

The sea breeze is most prevalent in summer, when winds in the County average 9.4 mph. In addition, the mixing height (thickness of a layer of air resting on the ground surface, in which vigorous vertical mixing occurs) is thickest during the summer and thinnest in the winter.

High risk areas relative to hurricane and flood effects have been identified and designated based on elevation and proximity to coastal waters. Development density of any specific area has been considered in the allocation of shelter space. The vulnerability of nursing homes and congregate care centers to the adverse effect of severe weather, primarily based on elevation and construction, requires special consideration in evacuation plans.

The chief industries of the heavily populated east coast are light manufacturing, citrus production and processing, selected service trades, construction, aircraft manufacturing (Piper), real estate, wholesale and retail trade.

## F. ECONOMIC PROFILE

Indian River County has long been a popular resort area, attracting thousands of visitors and residents for our array of recreational and entertainment activities, and our lifestyle.

The county's population, which has grown steadily to about 113,000, is supported by an economy based primarily on tourism, light industry, and agriculture. Services account for over 32% of Indian River County's employment; retail trade, 22.78%; agriculture, forestry, and fishing, 10.9%; and government 12.54%.

Approximately 327,000 acres of Indian River County is devoted to agriculture, with the largest percentage in pastures and ranges, followed by citrus groves,

woodlands, row crops, and a variety of other uses. The county is at the center of the world famous Indian River Citrus District.

**Five largest employers in Indian River County and their approximate current level of employment (as of July 1997):**

<b>RANK</b>	<b>EMPLOYER</b>	<b>TYPE</b>	<b>EMPLOYEES</b>
1	School Dist. of Indian River Co.	Government	1,800
2	Indian River Memorial Hospital	Health Care	1,538
3	Indian River County	Government	1,464
4	The New Piper Aircraft	Transportation Equipment	1,349
5	Gracewood Fruit Packing	Agricultural Svcs.	800

*SOURCE: INDIAN RIVER COUNTY COMPREHENSIVE DEVELOPMENT REPORT JAN. 2002*

**Employment for Indian River County by Industry:**

<b>INDUSTRY CLASSIFICATION</b>	<b>EMPLOYEES</b>	<b>% OF TOTAL EMPLOYMENT</b>
Agriculture, Forestry & Fishing	3,795	10.09%
Construction	2,673	7.11%
Manufacturing	2,235	5.94%
Transportation, Communications, & Utilities	684	1.82%
Wholesale Trade	999	2.66%
Retail Trade	8,568	22.78%
Finance, Insurance, & Real Estate	1,726	4.59%
Services	12,118	32.21%
Public Administration	4,716	12.54%

*SOURCE: INDIAN RIVER COUNTY CHAMBER OF COMMERCE (1/14/02)*

The data collected for 2001 indicates that Indian River County's unemployment rate is 6.4%, slightly higher than the state average of 5.7%.

Indian River County's 1997 per capita income of \$34,997 is over 40% greater than that of the state average per capita income of \$24,799 (1999 BEBR) . The median housing value for Indian River County in 1993 was \$83,160.

Although the potential economic impact the county as a whole can expect to suffer from the impact of the hazards previously identified is limited, pre-planning is always emphasized. Recommendations for businesses on how to accelerate the recovery process and create disaster-resistant businesses and jobs remain a focus of our public outreach efforts.

G. EMERGENCY MANAGEMENT SUPPORT FACILITIES

1. **Critical Facilities** - Indian River County and its municipalities have identified all critical facilities required for an immediate emergency response following a major emergency/disaster event, and other facilities or areas necessary to support recovery operations. Several categories of critical facilities have been included. Specific details can be found in the Critical Facilities Inventory retained on file in the office of Emergency Management.

2. **Recovery Staging Areas**

a. Materials and Supplies

- (1) Barber Street Sports Complex -  
1115 Barber Street, Sebastian
- (2) Indian River County Fairgrounds -  
7900 58th Avenue, Wabasso
- (3) City of Vero Beach Municipal Airport -  
3400 Cherokee Drive, Vero Beach

b. Volunteers

- (1) Hobart Park  
5350 77th Avenue, Wabasso

c. Disaster Field Offices (DFOs)

Following a major or catastrophic disaster that exceeds the State's ability to respond, in which the Emergency or Major Disaster Declaration is granted by the President, federal assistance to disaster victims becomes available under three program areas: Individual Assistance, Public Assistance, and Hazard Mitigation. The administration of these programs is coordinated through a joint federal/state effort in a DFO, which is usually located in the impacted area. The following areas have been pre-determined to house DFOs:

- (1) Sebastian City Hall  
1225 Main Street, Sebastian
- (2) Fellsmere City Hall  
22 S. Cypress Street, Fellsmere
- (3) Indian River Co. Administration Bldg.  
1840 25th Street, Vero Beach
- (4) City of Vero Beach Community Center  
2266 14th Avenue, Vero Beach

d. Disaster Recovery Centers (DRCs)

Should the President authorize a Declaration of Disaster, Disaster Recovery Centers will open to provide the public access to apply for federal assistance funding. The centers will provide residents and businesses with information on available programs and assist applicants with completion of the necessary forms/documentation. The following locations have been designated as sites for Disaster Recovery Centers.

- (1) Indian River County Administration Bldg.  
1840 25th Street, Vero Beach
- (2) Sebastian City Hall  
1225 Main Street, Sebastian
- (3) Fellsmere City Hall  
22 South Cypress Street, Fellsmere
- (4) Indian River County Main Library  
1600 21st Street, Vero Beach
- (5) Indian River County North Library  
1001 C.R. 512, Sebastian
- (6) Vero Beach Police Department

1055 20th Street, Vero Beach

- (7) Indian River Shores City Hall  
6001 A1A, Indian River Shores
- (8) Town of Orchid City Hall  
10 Orchid Island Drive, Town of Orchid

e. Storage Depots

- (1) Barber Street Sports Complex -  
1115 Barber Street, Sebastian
- (2) Indian River County Fairgrounds -  
7900 58th Avenue, Wabasso
- (3) City of Vero Beach Municipal Airport -  
3400 Cherokee Drive, Vero Beach

3. Landing Zones have been identified and coordinated with the Florida National Guard.

a. The primary landing zone is located at:

- Vero Beach Municipal Airport  
Latitude 27° 39' 33"/Longitude 080° 25' 08"

b. The secondary landing zone is located at:

- Sebastian Airport  
Latitude 27° 48' 77"/Longitude 080° 29' 74"

The coordinates for these locations have been transmitted to the appropriate agencies.

## H. PLANNING ASSUMPTIONS

- 1. A disaster may occur with little or no warning and may escalate far more rapidly than the ability of any single local response organization to handle. The success of rapid response depends on:

- a. Multi-discipline, impact assessment teams;
  - b. Procedures to ensure quick and effective decision-making, such as pre-deployment and aggressive training of elected officials and responders on responsibilities and emergency assignments; and
  - c. Procedures to rapidly implement local mutual aid, state mutual aid and possibly federal assistance.
2. Effective hurricane preparedness requires continual public awareness and education programs, so that citizens will take appropriate advance action based upon the category of the hurricane expected.
3. Evacuation and shelter strategies must be based on citizen cooperation with staggered evacuation and best-available shelter options until the shelter deficit can be reduced.
4. A strategy based upon sheltering people with special needs that provides varying levels of care. The intent of the strategy is to establish minimum standards so that the general population and service providers will understand the level of care which can be reasonably expected at regular shelters. Persons needing greater care should be prompted to register for special assistance. Planning at the County and state level will depend on pre-identification of populations and determination of resource shortfalls and contingencies.
5. The Emergency Operations Center (EOC) will be activated and staffed with lead agencies that become a part of an ESF concept. The primary agency for each ESF will be responsible for coordinating the planning and response activities of their respective support agencies.

### III. **CONCEPT OF OPERATIONS**

#### A. LEVELS OF DISASTER

Chapter 252, Florida Statutes, requires each county to develop and maintain a County Emergency Management Plan (CEMP). This CEMP must contain provisions to ensure that the county is prepared for minor, major, and catastrophic disasters. Therefore, a resolution was passed by the Indian River County Board of County Commissioners adopting this county's CEMP. A signed copy of the resolution can be found as a preface to this document.

##### 1. Minor Disaster

Any disaster that is likely to be within the response capabilities of local government and results in only minimal need for state or federal assistance.

In accordance with this CEMP, this definition translates into a Level III or Level II activation of the EOC.

##### 2. Major Disaster

Any disaster that will likely exceed local capabilities and require a broad range of state and federal assistance.

In accordance with this CEMP, this definition translates into a Level II or Level I activation of the EOC. The SEOC will be notified, and potential state assistance will be coordinated.

##### 3. Catastrophic Disaster

Any disaster that will require massive state and federal assistance, including immediate military involvement.

In accordance with this CEMP, this definition translates into a Level I activation of the EOC. The SEOC will be notified and may be requested to pre-deploy to the EOC; potential federal assistance will involve response as well as recovery needs.

## B. ORGANIZATION

### 1. Normal Operations (Indian River County Government Structure)

Indian River County is part of the 19th Judicial District in Florida. There is an elected five member Board of County Commissioner's and five elected Constitutional Officers (Property Appraiser, Tax Collector, Supervisor of Elections, Sheriff and Clerk of the Circuit Court). Each commission member represents one of five districts, elected at large (Countywide) for staggered terms of four years. The Chairman and Vice-Chairman are elected by the Commission. A County Administrator is appointed by the Board and is responsible for administrative and fiscal control of the resources of the County.

The County Administrator's primary responsibility is to efficiently and effectively implement the goals and policies of the Board while meeting the needs of the citizens of Indian River County by providing an acceptable level of service and maintaining a solid financial position. The Administrator is directly responsible for all County departments except Constitutional Officers, the County Attorney, the BCC Executive Aide and their respective employees and staff.

### 2. Emergency Operations

Direction and control of all emergency management activities, remain under the Indian River County Board of County Commissioners at all times. The organization and staffing structure of the Indian River County Comprehensive Emergency Management Plan are tailored to meet the needs of specific emergencies and disasters. Organizational structure and identification of operational and support roles within the EOC, which depicts the total preparedness, response, recovery and mitigation system, can be found in the EOC Suggested Operating Procedures attached and identified as Appendix D.

3. Implementation of the concept of operations is carried out through the organizational structure described by the emergency support functions (ESFs). The organization is led by the Emergency Management Director, in consultation with the Board of County Commissioners. This organizational concept is compatible with the current concept implemented by FDEM and FEMA and is identified in the *EOC Suggested Operating Procedures*, attached to this document and identified as Appendix D.
4. The Emergency Management Director, or his designee, is responsible (subject to Board approval) for activating the plan and directing

preparedness, response, recovery and mitigation operations.

5. ESFs represent groupings of types of assistance activities that the County is likely to need from the State. For a complete listing of primary and secondary agencies and their respective ESFs, see the ESF Matrix attached to this document and identified as Figure 6. ESFs and lead agencies include:

**ESF #1 Transportation - Indian River County School Board  
Transportation Department**

To coordinate transportation systems and provide emergency transport of goods for other ESFs.

**ESF #2 Communications - Indian River County Department of  
Emergency Services, Emergency Management Division and  
Radiological Emergency Preparedness Division.**

To provide emergency radio and telephone communications services to organizations involved in the response and recovery operation and to support the private sector in restoration of the affected public grids.

**ESF #3 Public Works and Engineering - Indian River County  
Public Works Department**

To evaluate infrastructure damage and coordinate emergency debris clearing of essential roads. Will also coordinate emergency contracting, engineering services, and demolitions.

**ESF #4 Firefighting - Indian River County Department of  
Emergency Services, Fire Services Division**

To detect and suppress wildland, rural and urban fires. Also, to provide incident management teams to assist in command and control operations. Directs all search and rescue operations.

**ESF #5 Information and Planning - Indian River County  
Department of Emergency Services, Emergency Management  
Division**

To collect, analyze and disseminate critical information on emergency operations for decision-making purposes.

**ESF #6 Mass Care - American Red Cross - Indian River County  
Chapter**

To manage and coordinate shelters, feeding and first aid for disaster

victims.

**ESF #7 Resource Support - Indian River County Department of Emergency Services, Emergency Management Division**

To secure resources through mutual aid agreements, or procure resources for other ESFs as needed.

**ESF #8 Health & Medical Services - Indian River County Public Health Unit**

To identify health and medical needs, provide trained health and medical personnel, and to provide supplies and emergency facilities in the affected area, as well as in shelters.

**ESF #9 Urban Search and Rescue - Indian River County Department of Emergency Services, Fire Services Division and the Indian River County Sheriff's Office**

The Sheriff's Office is the lead agency responsible for coordinating and securing Search and Rescue (SAR) areas. The Fire Services Division is the lead agency for locating, extricating and providing emergency assistance to victims trapped in debris or wreckage created by the disaster.

**ESF #10 Hazardous Materials - Indian River County Environmental Health Department**

To provide inspection, containment, and cleanup of hazardous materials accidents or releases.

**ESF #11 Food and Water - Indian River County Department of Emergency Services, Emergency Management Division and the American Red Cross - Indian River County Chapter**

To coordinate with ESF #6 to identify the food and water needs of disaster victims, and to ensure that supplies of food and water (or vouchers to obtain them locally where possible) are provided.

**ESF #12 Energy and Utilities - Indian River County Utilities Department**

To coordinate and direct the restoration of water, sewer, electrical power, phone service, and fuel supplies.

**ESF #13 Military Support - Florida National Guard**

To coordinate RIAT assignments and National Guard resources to assist in the ESFs where needed.

**ESF #14 Public Information - Indian River County Department of Emergency Services, Emergency Management Division**

To establish and manage Joint Information Centers (JIC), and to coordinate the dissemination of all disaster-related information to the media and the general public.

**ESF #15 Volunteers and Donations - Indian River County Department of Emergency Services, Emergency Management Division**

To manage the receipt and distribution of donated goods and services to meet requests in the wake of a disaster.

**ESF #16 Law Enforcement and Security - Indian River County Sheriff's Office**

To provide armed escorts to emergency workers or transport caravans and security to emergency facilities, as well as general law enforcement services during an emergency.

**ESF #17 Animal Protection - Indian River County Department of Emergency Services, Animal Control Division and the Humane Society Vero Beach and Indian River County**

To coordinate and provide adequate shelter and care for animals.

**ESF #18 Special Needs Care - Indian River County Department of Emergency Services, Emergency Medical Services Division**

To coordinate and provide adequate shelter and care for citizens with non-hospital special medical needs.

**ESF #19 Emergency Medical Services - Indian River County Department of Emergency Services, Emergency Medical Services Division**

To coordinate and direct field medical operations for search and rescue, field hospitals, emergency response requests and transportation.

FIGURE 6-1

ESF MATRIX - PRIMARY AND SUPPORT AGENCIES

AGENCY	ESF 1	ESF 2	ESF 3	ESF 4	ESF 5	ESF 6	ESF 7	ESF 8	ESF 9	ESF 10	ESF 11	ESF 12	ESF 13	ESF 14	ESF 15	ESF 16	ESF 17	ESF 18	ESF 19
9-1-1 COMMUNICATIONS		S																	
ABLE HEALTH SERVICES																			S
AMERICAN RED CROSS - INDIAN RIVER CO. CHAPTER					S	P	S	S			P			S	S			S	
BELLSOUTH		S										S							
CIVIL AIR PATROL	S			S					S										
COMMUNICATIONS INT'L.		S																	
COUNCIL ON AGING	S																	S	
DISASTER MEDICAL SVCS								S											S
FEDERAL AVIATION ADMINISTRATION									S										
FELLSMERE, CITY OF							S												
Building Department			S																
Police Department				S					S	S						S	S		
Public Works			S					S		S		S							
FELLSMERE FARMS WATER CONTROL DISTRICT												S							
FLORIDA, STATE OF																			
Communications, Div. of		S																	
Department of Law Enforcement									S	S						S			
Fire Chiefs' Association				S					S										S
Forestry, Div. of				S															
Highway Patrol				S															
Marine Patrol				S					S										
National Guard	S			S		S	S	S	S	S	S	S	P			S			S
FLORIDA EMERGENCY PREPAREDNESS ASSOC.					S		S												
FLORIDA POWER & LIGHT												S							
HOME HEALTH CARE																			S
HUMANE SOCIETY																	P		
INDIAN RIVER COUNTY																			
Agricultural Extension																		S	
Animal Control								S										P	
BCC Office							S												
Building Department			S																
Community Development			S																
County Admin. Office					S		S												
Emergency Management		P			P		P			P	P	S		P	P				

AGENCY	ESF 1	ESF 2	ESF 3	ESF 4	ESF 5	ESF 6	ESF 7	ESF 8	ESF 9	ESF 10	ESF 11	ESF 12	ESF 13	ESF 14	ESF 15	ESF 16	ESF 17	ESF 18	ESF 19
Emergency Medical Services	S			S				S	S									P	P
Environmental Health			S							P							S		
Fire Services				P					P	S				S					S
General Services			S				S												
Office of Mgt. & Budget							S												
Personnel							S												
Property App. Office					S									S					
Public Health Unit					S	S		P	S		S	S		S				S	S
Public Works	S		P	S			S	S		S		S							
School District	P			S		S		S	S		S							S	
Sheriff's Office	S			S	S				P		S			S		P	S		
Solid Waste Disp. Dist.			S																
Telecommunications Div.												S							
Utilities			S	S				S				P							
<b>HOLMES REGIONAL MEDICAL CENTER FIRST FLIGHT</b>																			S
<b>INDIAN RIVER COUNTY VOLUNTEER AMBULANCE SERVICE</b>	S																		
<b>INDIAN RIVER FARMS WATER CONTROL DIST.</b>												S							
<b>INDIAN RIVER MEMORIAL HOSPITAL</b>								S										S	S
<b>INDIAN RIVER MOSQUITO CONTROL DISTRICT</b>								S											
<b>INDIAN RIVER SHORES, TOWN OF</b>							S												
Building Department			S																
Public Safety				S				S	S	S						S	S		S
Public Works								S				S							
<b>JOHN'S ISLAND SECURITY</b>									S										
<b>MEDICAL EXAMINER'S OFFICE</b>								S											
<b>ORCHID, TOWN OF</b>							S												
<b>RACES/ARES</b>		S																	
<b>ST. JOHNS WATER CONTROL DISTRICT</b>												S							
<b>SALVATION ARMY</b>						S	S	S			S				S			S	
<b>SEBASTIAN AIRPORT</b>							S												

AGENCY	ESF 1	ESF 2	ESF 3	ESF 4	ESF 5	ESF 6	ESF 7	ESF 8	ESF 9	ESF 10	ESF 11	ESF 12	ESF 13	ESF 14	ESF 15	ESF 16	ESF 17	ESF 18	ESF 19
<b>SEBASTIAN, CITY OF</b>							S												
Community Development			S																
Police Department				S					S	S						S	S		
Public Works			S					S		S		S							
<b>SEBASTIAN RIVER MEDICAL CENTER</b>								S										S	S
<b>TAMPA GENERAL HOSPITAL</b>																			S
<b>UNITED STATES</b>																			
Air Force													S						
Army	S					S	S	S				S	S						
Coast Guard	S			S					S										
Marine Corps													S						
Military Reserve Units													S						
Navy													S						
Patrick Air Force Base									S										
<b>VERO BEACH, CITY OF</b>																			
Airport	S																		
Customer Services		S												S					
Electric Power Resource										S		S							
Finance							S												
Human Resource							S								S				
Marina	S																		
Planning & Zoning			S																
Police Department				S				S	S	S						S	S		
Public Works & Eng.			S					S		S									
Purchasing							S												
Recreation	S																		
Solid Waste/GMS					S			S				S							
Transmission & Dist.																			
Water & Sewer								S				S							
<b>VOLUNTEER ACTION CTR.</b>															S				
<b>VETERINARY COMMUNITY</b>																	S		
<b>VNA/HOSPICE</b>																		S	

Figure 6-2

Figure 6-3

Figure 6-4

Figure 6-5

Figure 6-6

Figure 6-7

Figure 6-8

Figure 6-9

Figure 6-10

Figure 6-11

Figure 6-12

Figure 6-13

Figure 6-14

Figure 6-15

C. GENERAL

1. Local units of government call for assistance during events in which their own resource and response capabilities are overwhelmed. The County will provide assistance to municipalities within their borders, and then turn to the state for assistance when their capabilities are overwhelmed. The County and the state together determine whether inter-county mutual aid or direct state assistance is needed.
2. The EOC will be activated by the Emergency Management Director, or his designee, at any time a threat of danger to Indian River County becomes imminent. The EOC will then become the central command post for coordinating the operational, logistical and administrative support needs of response personnel located in the EOC or in the field.
  - a. The Primary EOC is located in the first floor conference room of the County Administration Building, located at 1840 25th Street, and will be the first choice for EOC operations.
  - b. The first alternate EOC will be the communications center of the Indian River County Sheriff's Office, located at 4055 41st Avenue. This site will be designated only if conditions threaten the primary location. The Emergency Management Director, or his designee, will make the decision to move to this location if it becomes necessary.
  - c. A second alternate EOC will be chosen given the existing conditions at the time.
4. The County must be able to respond quickly and effectively to developing events that may require the County to enact a Mutual Aid Agreement. When an event or potential event is first detected, the EOC initiates activation (monitoring). Communications are maintained between the County EOC and the SEOC; the county commissioners and Governor may be notified.
5. As County operations progress, the Emergency Management Director may advise the Board of County Commissioners to declare a local state of emergency and make a formal request for state assistance. The request is channeled through FDEM to the Governor's Office. At the same time, FDEM may recommend that the Governor declare a statewide emergency.
6. After impact of a major or catastrophic emergency, Rapid Impact Assessment Teams (RIATs) may be deployed at the request of the Emergency Management Director. These teams, under the auspices of the Florida National Guard (FNG) and ESF #13 (Military Support),

will be deployed via aircraft or land transport to augment local assessment of the immediate human needs (food, water, health/medical, housing), and the damage to infrastructure (transportation, communications and utility systems). The disaster assessment is used to identify those emergency actions that are necessary to preserve life and property in the impacted area. See Annex III of the CEMP for more information.

7. The County EOC serves as the central clearinghouse for information collection and coordination of response and recovery resources within the County, including the cities within the County. During a major or catastrophic emergency in Florida, un-impacted counties are also requested to activate their EOC. This system allows the SEOC to coordinate the delivery of intra-state mutual aid in an organized manner through the County network.

#### D. DIRECTION & CONTROL

1. Discussion of decision-making authority retained at county level:
  - a. The on-scene commander or commanders in an emergency response are local officials, usually a representative from emergency management, law enforcement, fire or EMS. Overall, local coordination and commitment authority for local assets is retained by local elected officials, and delegated to the County Emergency Management Director.
  - b. The Emergency Management Director is responsible for the activation and maintenance of the operational readiness of the EOC, directing county evacuation, opening shelters, requesting state assistance and all recovery activities within the county. County authorities, through the Emergency Management Director, may also activate mutual aid agreements with neighboring counties, and will coordinate mutual aid agreements between municipalities within the county.
2. Maintaining consistency with the Federal Emergency Management Agency and State Emergency Operations Center, the following are the levels of activation used by the County EOC:
  - a. Level I - Full Scale Activation:  
In a full scale activation, all lead and support agencies are notified. The EOC will be staffed by Emergency Management

personnel, volunteers and all ESFs.

b. Level II - Partial Activation of EOC:

This is a limited agency activation. All primary, or lead, ESF agencies are notified. The EOC will be staffed by Emergency Management personnel and necessary ESFs.

c. Level III - Monitoring Activation:

Typically a "monitoring" phase. Notification will be made to those agencies and ESFs who would need to take action as part of their everyday responsibilities.

3. Once the EOC has been activated by the Emergency Management Director, all Department of Emergency Services personnel will be recalled and placed on 12-hour shifts to ensure 24-hour staffing of the EOC and field operations. This arrangement will remain in effect until released by the Emergency Management Director.
4. Upon activation of the EOC, the use of EM 2000 software will be initiated. This software, also utilized by FDEM, is a sophisticated way of controlling and documenting the flow of information within the EOC. See Annex II -Support Functions, ESF #5 (Information and Planning) for more detailed information.
5. All mission requests and messages logged into EM2000 will be monitored and tracked by ESF #5. Situation Reports will be printed on a regular basis and forwarded to the Emergency Management Director for his/her review and dissemination.
6. The Emergency Management Director and/or the EOC Supervisor are responsible for developing and maintaining SOPs and checklists, which detail how assigned responsibilities will be implemented to support this plan.
7. Discussion of decision making authority of the SCO, GAR, Deputy SCO response, SERT leader, and SERT ESFs:
  - a. At the State level, decision-making authority and commitment of state assets is retained at the SEOC by the SERT Leader, or some other designee within the DCA. The SERT Leader may issue mission assignments to the lead agencies of the state ESFs. Mission assignments and mutual aid agreements, brokered by the state, are tracked in the SEOC by a staff

person reporting to the SERT Leader.

- b. In the event of federal assistance, a SCO will be appointed to interface directly with the federal government. Depending on the complexity of the event and the need to broaden span-of-control, the SCO may be supported and assisted by the GAR and Deputy SCOs for Response and Recovery. The Deputy SCOs are responsible for ensuring close coordination between federal and state representatives and anticipating the needs and conflicts in the operation as it progresses.

## 8. Discussion of Direction and Control for Evacuation

- a. The majority of evacuations are site specific and related to a specific public safety hazard; this type of evacuation is usually initiated by the first arriving public safety officer. County-wide evacuations greater than a minor incident in scope will be directed by the Emergency Management Director, or his designee. Planned evacuations with notice, such as would occur when hurricane warnings are announced, may be initiated following a decision by the Board of County Commissioners. In such cases, the evacuation will be coordinated and administered by the County officials using local government resources in accordance with County evacuation plans. Indian River County is a participant in the Statewide Mutual Aid Agreement for Catastrophic Response and Recovery to provide expanded resource capability. These agreements will be developed, coordinated and amended by the Emergency Management Director. During any county administered evacuation that does not require activation of the SEOC, state assistance may be provided under the various state agencies' normal statutory authority through coordination by FDEM.
- b. However, in the event of a multi-county, regional or interregional evacuation, the Governor or the GAR may issue an evacuation order in support of a local order. This decision will be made following consultation with the SCO, the Deputy SCO for Response, and the SERT leader and representatives of the impacted counties.
- c. All state assistance and support of such evacuations will be coordinated from the SEOC under the direction and control of the SERT Leader. Decisions on evacuation issues, such as lifting tolls on state toll facilities, locking down drawbridges,

deploying and pre-deploying personnel, determining regional evacuation routes, directing people caught on evacuation routes to safe shelter, ensuring the sufficiency of reasonably priced fuel, and addressing any emergency medical issues relative to evacuation. The following types of decisions will be made after coordination between the SERT Leader, the affected State ESF and the impacted counties.

9. Discussion of Direction and Control for Shelter

The decision of opening shelters is a responsibility of the Emergency Management Director. Should a request for assistance be made to the SEOC, it will be to support the local sheltering plan with assistance in staffing shelters; identifying additional shelters; and managing shelters with a shortfall of resources. The SEOC will coordinate through ESF #6 (Mass Care) any requests for assistance from other ESFs that will be needed to support multi-county, regional and interregional shelter operations.

- a. The SERT Leader, following discussions with the GAR, ESF #6 (Mass Care) and the representatives of the impacted counties, will provide information regarding the status of evacuation orders and the potential for shelter needs on a county, regional, inter- regional, and/or statewide basis.
- b. All state assistance and support of sheltering will be coordinated from the SEOC through ESF #6 (Mass Care), under the direction and control of the SERT Leader. Decisions on sheltering issues will be made after coordination between appropriate State ESFs, impacted counties and the SERT Leader.

10. Discussion of Relationship Between Primary and Support Agencies in the ESFs:

- a. An agency may be designated "the primary" for an ESF for a number of reasons. The agency may have a statutory responsibility to perform that function, or through its programmatic or regulatory responsibilities, the agency may have developed the necessary expertise to lead the ESF. In some agencies, a portion of the agency's mission is very similar to the mission of the ESF; therefore, the skills to respond in a disaster can be immediately translated from the daily business of that agency. Whatever the reason an agency is designated as the "primary" agency, that agency has the

necessary contacts and expertise to coordinate the activities of that support function. For a list of primary agencies and their respective emergency support functions, see the Primary Agency Listing attached to this document and identified as Figure 7.

- b. Upon activation of the EOC, the primary agencies for the ESFs will send a representative to the EOC to coordinate that ESF. It is up to the primary agency's discretion as to how many, if any at all, support agencies will accompany them at the EOC. Due to the limited space available in the EOC, the attendance of support agencies should be closely coordinated with the Emergency Management Director.

**FIGURE 7 - PRIMARY AGENCY LISTING**

<b>ESF #</b>	<b>FUNCTION NAME</b>	<b>PRIMARY AGENCY</b>	<b>PRIMARY STATE AGENCY</b>
1	TRANSPORTATION	I.R. Co. School Board Transportation Department	Department of Transportation
2	COMMUNICATIONS	I.R. Co. Department of Emergency Services - Emergency Management Division and Radiological Preparedness Division	Department of Management Services
3	PUBLIC WORKS AND ENG.	I.R. Co. Public Works Department	Department of Transportation
4	FIREFIGHTING	I.R. Co. Department of Emergency Services - Fire Services Division	Department of Insurance State Fire Marshal
5	INFORMATION AND PLANNING	I.R. Co. Department of Emergency Services - Emergency Management Division	Department of Community Affairs
6	MASS CARE	American Red Cross - Indian River County Chapter	Department of Business and Professional Regulation
7	RESOURCE SUPPORT	I.R. Co. Department of Emergency Services - Emergency Management Division	Department of Management Services
8	HEALTH AND MEDICAL	I.R. Co. Public Health Unit	Department of Health
9	URBAN SEARCH AND RESCUE	I.R. Co. Department of Emergency Services - Fire Services Division/I.R. CO. Sheriff's Office	Department of Insurance State Fire Marshal
10	HAZARDOUS MATERIALS	I.R. Co. Environmental Health	Department of Environmental Protection
11	FOOD AND WATER	American Red Cross - Indian River County Chapter	Department of Agriculture and Consumer Services
12	ENERGY AND UTILITIES	I.R. Co. Utilities Department	Public Service Commission - Department of Community Affairs
13	MILITARY SUPPORT	Florida National Guard	Department of Military Affairs
14	PUBLIC INFORMATION	I.R. Co. Department of Emergency Services - Emergency Management Division	Department of Community Affairs
15	VOLUNTEERS AND DONATIONS	I.R. Co. Department of Emergency Services - Emergency Management Division	Florida Commission on Community Service
16	LAW ENFORCEMENT AND SECURITY	I.R. Co. Sheriff's Office	Florida Department of Law Enforcement
17	ANIMAL PROTECTION	I.R. Co. Department of Emergency Services - Animal Control Division/Humane Society	Department of Agriculture and Consumer Services
18	SPECIAL NEEDS CARE	I.R. Co. Department of Emergency Services - Emergency Medical Services Division	Department of Health and Rehabilitative Services, State EMS
19	EMERGENCY MEDICAL SERVICES	I.R. Co. Department of Emergency Services - Emergency Medical Services Division	Department of Health and Rehabilitative Services, State EMS

- c. The primary agency for the ESF will be responsible for obtaining all information relating to ESF activities and requirements caused by the disaster and disaster response.

This information gathering will frequently require the lead agency to step outside traditional information gathering protocols.

- d. The County will respond to local requests for assistance through the ESF process. Within the EOC, requests for assistance will be tasked to the ESF for completion. The primary agency will be responsible for coordinating the delivery of that assistance to the disaster area.

#### 11. SERT Support Staff

- a. Upon activation of the SEOC, the FDEM becomes the support staff to the SERT. The SERT support staff is charged with ensuring that SEOC procedures for information management and decision making is timely and accurate.

#### 12. Discussion of Mission Assignments

- a. The SERT Leader, SCO, or Deputy SCO will issue mission assignments to the primary state agency for the ESF based on the local government's identified resource shortfall. Resource taskings to the state agencies will be accomplished through the ESFs on a mission assignment basis. The "tasking on a mission assignment basis" means that a local government resource shortfall will be addressed through assigning a mission to address the shortfall rather than tasking specific pieces of equipment or personnel.
- b. The primary state agency for that ESF will be responsible for identifying the particular resource or resources that will accomplish the mission and coordinate the delivery of that resource to the local government.

13. Discussion of Mutual Aid Agreements and Memoranda of Understanding

- a. Mutual aid agreements and memorandum of understandings are an essential component of emergency management planning, response and recovery activities. These agreements for reciprocal emergency aid and assistance, in case of emergencies, can increase resources and improve response and recovery efforts. The Emergency Management Director, or his designee, is responsible for the development and coordination of mutual aid agreements and memoranda of understanding. Documentation for billing will remain the same standards for both the role of assisting party and receiving party.
- b. Chapter 252, Florida Statutes, authorizes FDEM to make available any equipment, services, or facilities owned or organized by the state or its political subdivisions for use in the affected area, upon request by the Emergency Management Director. The FDEM is authorized to reinforce emergency management agencies in areas stricken by emergencies.
- c. The Statewide Mutual Aid Compact will have the participating political subdivision communicate requests for mutual aid through the FDEM; any responses from assisting parties will be directed from and coordinated by the FDEM. Municipalities will coordinate requests through the County Division of Emergency Management. This will ensure that the County and State are aware of and coordinates all resources that are mobilized.

DEM's coordination of mutual aid agreements is critical to the direction and control of the overall response and recovery efforts. Without DEM as the control point, severely impacted political subdivisions may not receive the type and amount of assistance needed if each political subdivision independently requests and executes agreements.

In accordance with Chapter 252, Florida Statutes, Florida also has mutual aid agreements and memorandum of understanding with other states and private organizations. These agreements provide additional resources for FDEM to have access to if needed.

The SERT support staff will monitor and coordinate all requests and executed agreements. Records will be maintained of agreement participants to effectively administer this activity.

14. Transition from EOC to the DFO EOC
  - a. A Presidential Disaster Declaration means that several federal aid programs will be implemented. The administration of the federal aid programs will be conducted from a DFO that FEMA will establish in the disaster area. The establishment of post-disaster aid programs is described as the start of the recovery phase.
  - b. The "response phase" and "recovery phase" of the disaster will, for a period of time, be occurring simultaneously. The "response phase" will be coordinated and conducted through the ESFs located at the EOC. The "recovery phase" will be coordinated and conducted at the EOC with a transition to the DFO as appropriate.

#### E. NOTIFICATION AND WARNING

1. The Indian River County Department of Emergency Services operates a 24-hour emergency communications center, either at the main office location during routine business hours, or at the Sheriff's Office during off-hours. The Department may receive initial warning of a disaster or pending disaster from the Emergency Satellite Communications System (ESATCOM), National Weather Service, a Nuclear Power Plant, the SEOC, municipal government, or the news media. If a determination that a disaster or emergency has occurred or is imminent, the emergency management staff will notify key personnel.

The primary communication system operative through the Department prior to, during, or after an emergency is the State of Florida's SUNCOM telephone network. SUNCOM is a commercial carrier telephone service operated by the State.

The ESATCOM System is a back-up dedicated voice and data system that links the office, through the State Warning Point, with each County Warning Point, the National Weather Service, National Hurricane Center, St. Lucie Nuclear Power Plant, Emergency Alert System Control Stations, South Florida Water Management District and the Department of Military Affairs.

When a determination has been made that inter-county resources will be required, appropriate DEM personnel will notify the ESF leaders from the required ESF. The ESF leaders will be responsible for alerting or notifying necessary personnel within their respective ESFs.

2. Approximately 1% of the general population is deaf and 8% are hearing impaired. According to the most recent demographic reports, there are approximately 2.5 million deaf and 20 million hearing-impaired persons residing in the United States. While it is uncertain how many deaf or hearing-impaired residents are in Indian River County, our office is prepared to handle these calls through the use of a Telecommunications Device for the Deaf (TDD). A TDD is a machine that can be connected to the telephone providing deaf and hard-of-hearing people with a way to use a telephone without an interpreter. TDD users type their messages on a standard typewriter keyboard which is read on a display by the receiver using compatible equipment. The Indian River County Department of Emergency Services' TDD telephone number is published in the BellSouth Text Telephone Directory annually. The County switchboard is also equipped with TDD equipment, thus facilitating a transfer of a caller, if necessary. Television stations also display information via trailers for the hearing impaired.

In order to broaden our capabilities with speaking with the non-english speaking communities of Indian River County, we subscribe to AT&T Language Line. They are the world's largest provider of 24-hour over-the-phone interpretation. In addition, we have several local residents who have offered their interpreter services. Either of these services would be available to non-english speaking callers. Additionally, public service announcements are also broadcast in Spanish.

3. Our office maintains a fax network for disseminating up-to-the-minute weather warnings, or other warnings, to all local law enforcement and governmental officials/organizations. We also have a transmitting device called a Plectron. The receiver is available for purchase. The transmitter sends audible messages through the Emergency Management repeater.
4. Cable TV interrupt service allows our office to interrupt currently broadcasting television programs with current weather warnings, or other warnings, pertaining to our immediate area.
5. Once the Emergency Operations Center is activated, the EOC will be

broadcasting live on the government access channel. These channels can be found on AT&T Cable channel 13 in the south county area, and channel 27 in the north county area.

6. An agreement was entered into with WSCF (91.9 FM) radio which allows emergency management staff access to broadcast equipment for informing Indian River County citizens of storm/disaster information such as **what protective actions to take, what the evacuation and re-entry plans are, and recovery information, including restoration of utilities.**
7. Amateur radio communications are provided by RACES/ARES volunteers, using equipment within the EOC. More specific information related to communications issues can be found in the description for ESF #2 (Communications), located in Annex I - Response Functions.
8. The primary EOC has auxiliary power provisions capable of sustaining operations for five days. The secondary EOC has auxiliary power provisions capable of sustaining operations for three days.
9. The Emergency Management Director, and his staff, will notify key officials and emergency related organizations of any significant emergency events that may promulgate the opening of the EOC.
10. The Emergency Management Director, and/or his designee, has the authority to activate the public warning system at any time an emergency event threatens persons or property.
11. Predetermined evacuation areas include the barrier island, low-lying areas, mobile/manufactured homes, sub-standard housing, RV parks and marinas. Initial notification will be through media resources and may be augmented by the use of bull horn announcements and door-to-door visits by public safety officers.

12. The County EOC will communicate with the SEOC on all activations, warnings and SITREPS by means of either ESATCOM, commercial telephone or radio frequency links.

F. Response Actions

1. General

- a. Activation of County Plan If a disaster threatens prior to the Governor's decision to issue an Executive Order or Proclamation of a State of Emergency, the Emergency Management Director, or his designee, may (subject to Board approval) activate this plan; this may be followed by a declaration of a local State of Emergency as outlined in County Ordinance 91-18. In this situation, the DEM will coordinate any emergency response actions that may be necessary for the immediate protection of life and property.

When an emergency or disaster has occurred or is imminent, the Governor may issue an Executive Order or Proclamation of a State of Emergency, activating the emergency response, recovery and mitigation aspects of state, local and inter-jurisdictional disaster plans that apply to the affected area. Such orders or proclamations are needed for the deployment and use of state personnel, supplies, equipment, materials and/or facilities that are available.

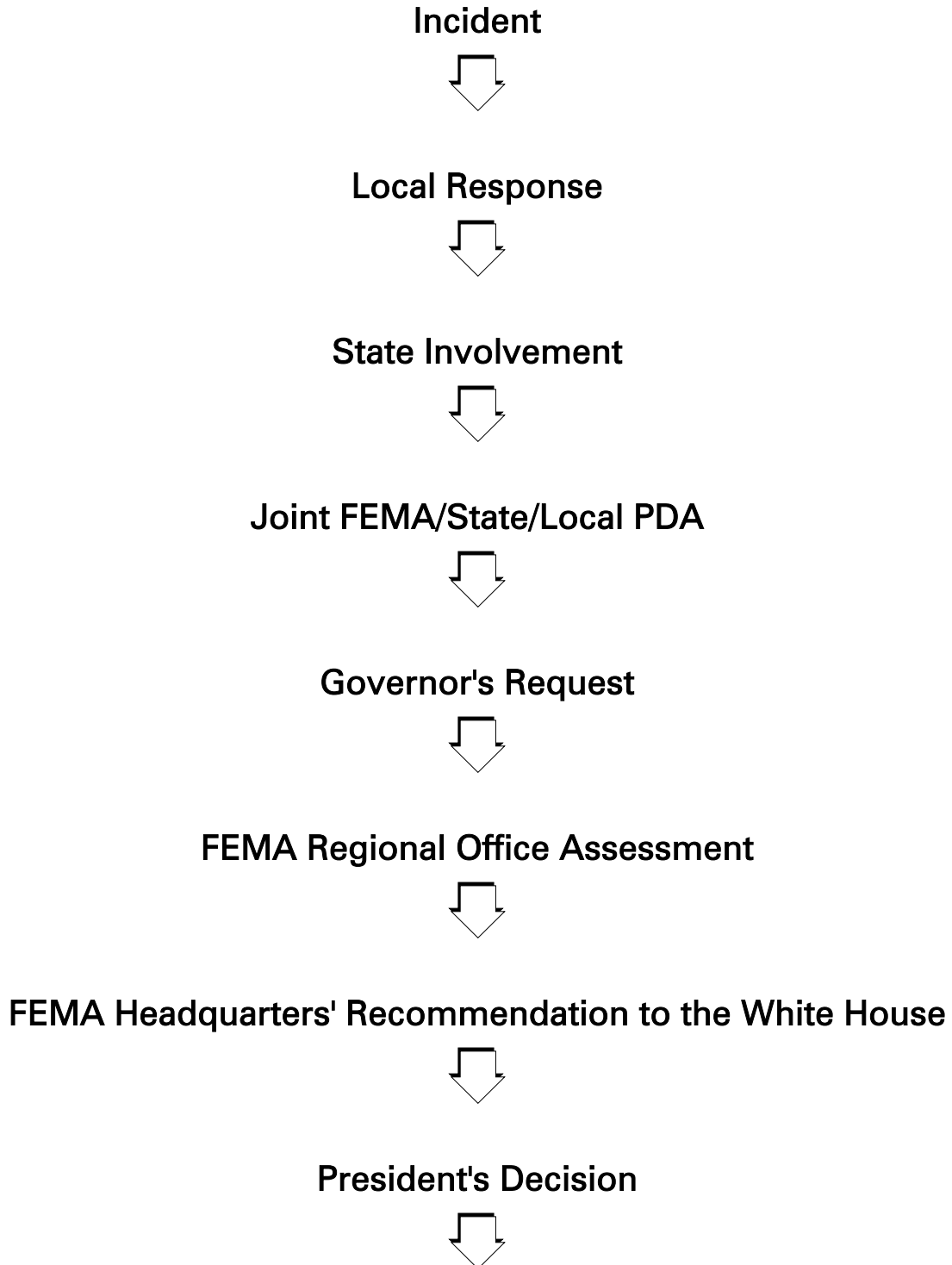
- b. Activation of EOC The EOC will be activated by the Emergency Management Director upon determination of a significant and immediate threat to life and property.
- c. School Closing The Emergency Management Director, or his designee, will establish direct communication with the Indian River County School District Superintendent. Together they will make the decision of when to close and re-open schools. The official announcement will be made by the Superintendent of Schools.
- d. Request for Federal and State Assistance When disaster effects become such that the resources of Indian River County and/or its municipalities are inadequate to fulfill the needs of the citizens, then aid and assistance may be requested from the State of Florida and the Federal Government. Such requests for State and Federal assistance will be made through the Indian River County Emergency Management Division to the Florida Division of Emergency Management. Assistance

required may be in the form of information, technical expertise or substantial financial, material or resource needs. A Declaration of State of Local Emergency is a prerequisite to receive State and Federal disaster assistance. A diagram depicting the declaration process is attached to this document and identified as Figure 8.

- e. When the County is under a warning or threatened by an impending disaster, emergency workers will be relieved in shifts to prepare their families and property. While no special provisions have been made for the safety and welfare of families of emergency workers, they have been encouraged to develop their own family disaster plan.
- f. The Emergency Management Director, or his designee, is responsible for establishing a liaison with the state response and recovery agencies and teams. ESFs will interface with State RIAT and RRTs to assist in the impact assessment and rescue/recovery operations. See Annex II - Recovery and Mitigation Actions, for more information.

FIGURE 8

# ***DECLARATION PROCESS***



2. Evacuation

- a. CLEARANCE TIMES (in hours) FOR INDIAN RIVER COUNTY. Established by the 1994 Treasure Coast Hurricane Evacuation Study:

<b>STORM SCENARIO</b>	<b>SUMMER SEASON</b>	<b>LATE FALL SEASON</b>
<u>Category 1-2 Hurricane:</u> Rapid Response Medium Response Long Response	5.50 hours 6.50 hours 9.50 hours	6.00 hours 7.00 hours 9.50 hours
<u>Category 3-5 Hurricane:</u> Rapid Response Medium Response Long Response	8.25 hours 9.00 hours 10.00 hours	8.75 hours 9.50 hours 10.50 hours

- b. As part of the public information program, evacuation information and routes are published annually in the local telephone directory, as well as in an annual supplement to the local newspapers, the *Press Journal* and the *Florida Today*. Evacuation information is attached to this document and identified as Figure 9.

Figure 9

- c. In July of 1989, the Indian River County Department of Emergency Services formed a committee to address people within Indian River County with Special Medical Needs. Since then, the goal of the Special Need's Shelter Program is to provide a safe place for persons requiring medical assistance to temporarily shelter during an evacuation from either a man-made or natural disaster, rather than inundating local hospitals with a large number of people that a specially equipped and staffed shelter could adequately handle.

Regular public shelters available under emergency conditions will accept anyone who is self-sufficient, and who needs no outside professional assistance in performing activities of daily living. Individuals not meeting the above criteria will either be referred to the special need's shelter or referred to an appropriate health care facility. The regular public shelters will have nursing personnel and volunteers to assist evacuees from the time of arrival at the shelter. Individuals with decreased mobility without medical problems will be provided for in a regular shelter.

Registration for evacuation assistance will be provided for anyone who requires assistance with evacuation during an emergency to either a regular public shelter or to the Special Need's Shelter. Individuals needing transportation need to register with the special need's program prior to the hurricane season.

Special Need's registrants have been separated and categorized to the level of assistance required. This includes evacuees requiring space in shelter only, transportation and space in shelter only, space in the special need's shelter only, transportation and space in the special need's shelter only and transportation to a local hospital only (if pre-admitted).

The focus of the Special Need's Shelter is the medical support and care of persons who require special care during an evacuation at a shelter, such as:

- People with minor health/medical conditions that require observation, assessment and maintenance;
- Elderly people dependent on others for daily assistance;

- People with chronic conditions who require assistance with activities of daily living;
- People with the frequent need for medications and/or vital sign readings, who are unable to do so without regular assistance;
- Individuals who need a life-support system requiring electricity;
- Individuals with restricted mobility in need of medical assistance.

As with any shelter, individuals who plan on utilizing the Special Need's facility must provide their own bedding, medications and supplies to the best of their ability. Supplies would include oxygen equipment, linens, pillows, blankets, chairs, medical supplies, medications, and any other personal items to make the stay as comfortable as possible. Drinking water and any non-perishable food items are also encouraged. Any special dietary foods required by a special care evacuee will be his/her responsibility. Assistance from the parking area into the Special Need's Shelter will be available.

Items such as emergency oxygen equipment, first aid supplies, and advanced life support medications and equipment will be provided by the Division of Emergency Medical Services.

The location of the Special Need's Shelter in Indian River County is the Sebastian River High School, 9001 90th Avenue, Sebastian. The facility, recently built, is designed for the handicapped, and has an adequate space capacity for the special need's citizens of our county.

Registration is required to allow entrance into the Special Need's Shelter. There are some limitations; specifically, those patients with high-risk pregnancy (within four weeks of delivery), unstable medical conditions, and citizens living in adult living facilities or nursing homes. Adult living facilities and nursing homes are mandated by the state to have alternate emergency evacuation plans in place for their residents.

- d. There are approximately seventy mobile home/recreational vehicle parks located within Indian River County. This figure equates to 6,699 dwellings, or a population of approximately 15,000 (15% of the total population). To ensure the safety and well being of mobile home residents during hurricane

conditions, these communities would be amongst the first to be issued an evacuation order. An inventory indicating the location and number of residents for each mobile home/RV park is maintained on file in the Emergency Management office.

- e. Approximately 10% of the Indian River County population are boat owners. A lack of hurricane experience has created a dilemma for boaters and the marine community. About 25% of hurricane fatalities result from boaters trying to secure vessels in deteriorating storm conditions. There are approximately thirteen commercial marinas within Indian River County with an approximate marine craft capacity of 917. Indian River County and the Florida Inland Navigation District, in cooperation with both public and private marine agencies, have developed a publication entitled *Hurricane Manual for Marine Interests in Indian River County*. This manual was developed to provide boaters and marina operators with updated and reliable information to help guide their actions and is distributed through our public presentations as well as being available at the Emergency Management office. An inventory indicating the location and number of boat slips for each marina is maintained on file in the Emergency Management office.
- f. There are three bridges in Indian River County, identified in Section II-B, that connect the barrier island to the mainland, neither of which are of the draw nor swing variety.

- g. The decision to re-enter evacuation areas will be based on a review of the information collected by the impact assessment teams and other organizations with damage assessment responsibilities to determine that conditions within the affected areas are safe for public access.

The number one response priority for re-entry will be mobilization and dispatch of search and rescue, as well as damage assessment teams into the impacted areas to search for survivors and provide assessments of the damage. These operations will be the first response elements programmed for re-entry and they will consist of representatives from law enforcement, fire, EMS, emergency management, public works, utility providers, property appraisers, building officials, American Red Cross, etc.

Re-entry by the general public will be approved by the Emergency Management Director and will be relayed to the public through ESF #14 (Public Information).

### 3. Sheltering

In the event of an evacuation, assistance will be coordinated from the EOC. There are twelve designated primary shelters (including the Special Need's Shelter) located within Indian River County, none of which are located in designated storm surge areas. A list of the American Red Cross primary shelters is attached to this document and identified as Figure 10.

The "Refuge of Last Resort" concept is currently not an approved nor condoned concept within Indian River County. Residents are expected to evacuate from the barrier islands, low-lying areas, sub-standard housing and mobile homes/RVs. However, once winds reach a sustained tropical force wind speed of 40 mph, all residents will be urged to get off of the roads and seek shelter in the nearest substantial building in a room without windows and structural reinforcement. Guidance on selecting safe rooms and taking precautionary measures are provided in public information materials.

The following initial actions will take place relative to sheltering:

- a. Notification to the SWP;
- b. Coordination of sheltering (i.e., communications, nursing, sanitation, food and security);
- c. Coordination of the activation and provision of mutual aid;
- d. Coordination with the SEOC for the opening of host shelters in areas not anticipated being in harm's way; and
- e. Coordination of the provision of additional resources (i.e., communications equipment and operators, nursing staff, administrative shelter and other support staff).

FIGURE 10

**AMERICAN RED CROSS  
PRIMARY SHELTERS**

Fellsmere Elementary School  
50 North Cypress Street  
Fellsmere, Florida 32948

Sebastian Elementary School  
400 County Road 512  
Sebastian, Florida 32958

Glendale Elementary School  
4940 8th Street  
Vero Beach, Florida 32960

Sebastian Rvr Mid. Jr. Hi. School  
9400 County Road 512  
Sebastian, Florida 32958  
J.A. Thompson Elementary School  
1110 18th Avenue, S.W.  
Vero Beach, Florida 32962

Oslo Middle School  
480 20th Avenue SW  
Vero Beach, Florida 32962

V.B.H.S. Freshman Learning Center  
1507 19th Street  
Vero Beach, Florida 32960

Gifford Middle Seven School  
2726 45th Street  
Gifford, Florida 32967

Highland Elementary School  
500 20th Street  
Vero Beach, Florida 32962

Pelican Island Elementary School  
1355 Schumann Drive  
Sebastian, Florida 32958

Vero Beach Senior High School  
1707 16th Street  
Vero Beach, Florida 32960

## G. Recovery Actions

The Recovery Phase will begin during the response phase and may encompass these general areas:

Damage assessment of the residential, government and business sectors for the purpose of administration of programs to restore them to their pre-disaster level of functioning; and

Administration of programs to mitigate the consequences of future disasters.

### 1. Initial Actions

- a. Monitor the disaster event and analyze available information regarding disaster conditions;
- b. Identify locations for the DFO and DRCs;
- c. Assemble and brief recovery staff;
- d. Place recovery support personnel on stand-by status, as necessary. Brief personnel on disaster conditions and potential for deployment; and
- e. Establish liaison with recovery staff in municipal EOCs.

### 2. Continuing Actions

- a. Maintain coordination with the state recovery staff;
- b. Establish and support the DFO as necessary;
- c. Maintain liaison with the SEOC and municipal EOCs to monitor disaster conditions; and
- d. Coordinate federal and state disaster assistance programs and make recommendations to the SCO regarding continued staffing.

## IV. RESPONSIBILITIES

### A. General

All County departments, constitutional officers, municipalities, and volunteer agencies are responsible for the following general items:

1. Develop the necessary functional annexes, appendices, standard operating procedures (SOPs) and checklists for the effective, efficient organization and performance of functions required to respond to and recover from an emergency or disaster event.
2. Designate and train essential personnel for specific assignments in the conduct of emergency operations. Provide instructions to personnel regarding agency staffing policy during an emergency or disaster event.
3. Protect and secure facilities, property and equipment under their control.
4. Maintain accurate records of emergency related expenditures (such as personnel, supplies, and equipment costs).
5. Provide staff, supplies and equipment (as required and available) in support of emergency response and recovery operations. Expedite required activities for return to normal conditions as soon as possible.
6. Preservation of Vital Records/Documents:

All County departments, constitutional officers, municipalities, and volunteer agencies of Indian River County must insure the preservation of vital records/documents deemed essential for continuing government functions and conducting post-disaster operations. The development of a disaster plan for vital records has strongly been encouraged to each department. The Department of Emergency Services has established a *Records Management Policies and Procedures* manual, dated May 1, 2001. The purpose of these policies and procedures is to establish standards for controlling, retaining, destroying and/or preserving public records to ensure compliance with the state and federal laws, regulations, and policies.

Damage to vital records/data (paper, computer hard drives, microfilm, etc.) is most often caused by fire, water, wind, and power interruption

or surges.

Vital records' disaster preparedness plans should include:

- a. Identification and documentation of the location of critical information.
- b. Standard backup procedures (duplicate copies; off-site storage, etc.).
- c. Prearranged resources (personnel) to assist in the resumption of data entry/retrieval.
- d. Prearranged resources to assist in recovery of damaged data/records.

B. Indian River County

The Emergency Management Director is responsible for:

1. Ensuring that the Division of Emergency Management provides the necessary revisions to this plan and that the plan is prepared, coordinated, published and distributed to the appropriate agencies.
2. Active leadership of an emergency management framework involving all government, private, and volunteer organizations which have a role in the success of comprehensive emergency management within the County.
3. Development and leadership of a broad-based public awareness, education, and information program designed to reach a majority of the citizens of the County, including citizens needing special media formats, such as TDD or non-English languages.
4. Active participation in discussions and negotiations with the state regarding policies and priorities to ensure that the work being done contributes to the improvement of emergency capabilities for the County.
5. Responsible execution of negotiated scopes of work for federal and state emergency management programs.
6. Support of the emergency management needs of all municipalities

within borders, and brokering of intra-county mutual aid agreements to render emergency assistance. When local requests for assistance exceed county resources, the County emergency management office will coordinate all efforts with the state and federal government in support of local disaster operations.

7. Establishment and monitoring of County mutual aid agreements within the County, with other counties and with the state.
8. Direction and control of a County response and recovery approach which is based on functional groups, involves broad participation from county organizations, and is compatible with the state and federal response and recovery organization and concept of operations.
9. Leadership and participation in programs or initiatives designed to avoid, reduce, and mitigate the effects of hazards through development and enforcement of policies, standards, and regulations.
10. Compliance of each ESF lead agency to be involved with the planning, response, recovery and mitigation of local emergencies. For specific details of their responsibilities see Annex I - Response Functions.
11. Coordinating how emergency response personnel will be tasked to deal with emergencies or disasters in Indian River County. At any such time that this Plan is activated (local emergency, minor, major or catastrophic disaster), the Emergency Management Director will be responsible for direction and control under the ultimate authority of the Indian River County Board of County Commissioners. For greater detail, see the EOC SOP attached to this document and identified as Appendix D.

C. Special Districts

Special districts are responsible for establishing liaisons with counties and with other state organizations to support emergency management capabilities within Florida. Special districts that involve inter-jurisdictional authority can provide resources and services to support other functionally related systems in time of disaster.

D. State of Florida

The Government of the State of Florida is responsible for:

1. Active leadership of an emergency management framework at the state level involving all government, private and volunteer organizations which have a role in the success of comprehensive emergency management within Florida.
2. Development and leadership of a broad-based public awareness, education and information program designed to reach a majority of the citizens of Florida, including citizens needing special media formats, such as braille or non-English languages.
3. Active participation in discussions and negotiations with other states and with the federal government regarding policies and priorities to ensure that the work being done contributes to the improvement of emergency capabilities for the nation.
4. Responsible execution of negotiated scopes of work for federal and state emergency management programs.
5. Support of the emergency management needs of all counties within Florida, and brokering of inter-county and inter-state mutual aid agreements to render emergency assistance. When requests for assistance exceed state resources, the state will contact other states for assistance, as well as FEMA.
6. Establishment and monitoring of state mutual aid agreements within the state, with other states and with FEMA.
7. Direction and control of a state response and recovery approach which is based on functional support groups, involves broad participation from state organizations, and is compatible with the federal response and recovery organization and concept of operations.
8. Leadership and participation in programs or initiatives designed to avoid, reduce and mitigate the effects of hazards through development and enforcement of policies, standards and regulations.

E. Federal Government

The federal government is responsible for:

1. Providing immediate emergency response on federally-owned or controlled property, such as military installations and federal prisons,

and notification of the Florida DEM.

2. Providing assistance, as requested by the State of Florida, under the lead agency's direction of FEMA, as specified in the Robert T. Stafford Act, Public Law 93-288.
3. Identifying and coordinating assistance under other federal statutory authorities.

## V. **FINANCIAL MANAGEMENT POLICY**

It is the intent of this policy to provide guidance for basic financial management to all departments and agencies responding under the provisions of the plan, to ensure that funds are provided expeditiously and that financial operations are conducted in accordance with appropriate policies, regulations and standards.

### A. Assumptions

1. Due to the nature of most emergency situations, finance operations will often be carried out within compressed time frames and other pressures, necessitating the use of non-routine procedures; this in no way lessens the requirement for sound financial management and accountability.
2. A Presidential disaster or emergency declaration will permit funding from the Federal Disaster Relief Fund under the provisions of the Stafford Act in addition to the financial resources initiated at the state and local levels.
3. The Federal Office of Management and Budget (OMB) and Congress will give rapid approval to a FEMA-prepared emergency budget request at a level sufficient to sustain a response operation for at least three weeks, with the opportunity to extend same if the situation warrants.

### B. Expenditure of Funds

Timely financial support of any extensive response activity could be crucial to saving lives and property. While innovative and expeditious means of procurement are called for during times of emergencies, it is still mandatory that good accounting principles and practices be employed in order to safeguard the use of public funds from the potential of fraud, waste and/or abuse.

1. A meeting will be conducted annually to familiarize each of the county departments with financial management procedures to be following during a disaster. Documentation is the most important item if reimbursement is expected. The county Office of Management and Budget will be responsible for the financial management of the unincorporated areas of the county. Each municipality is responsible for designating their own financial management practices.
2. In concert with federal and state guidelines, approval for expenditure of funds for response operations (facilities, equipment, supplies, services and other resources) will be given by officials of the primary and support agencies with concurrence with the Emergency Management Director. Each agency is responsible for establishing effective administrative controls of funds and segregation of duties for proper internal controls, and to ensure that actions taken and costs incurred are consistent with the missions identified in this plan.
3. Extreme care and attention to detail must be taken throughout the emergency response period to maintain logs, formal records, and file copies of all expenditures (including personnel time sheets) in order to provide clear and reasonable accountability and justification for future reimbursement requests. Reimbursement is NOT an automatic "given," so as much deliberative prudence as time and circumstances allow should be used.

Complete and accurate accounts of all emergency expenditures and obligations, including personnel and equipment costs, must be maintained. Despite the difficulty in maintaining such records in the stress of an emergency, accurate accounts are required to identify and document those funds which might be eligible for federal reimbursement under emergency or major disaster project applications and/or those funds for which no reimbursement will be requested. Each emergency event is unique. Therefore, the Emergency Management Director, and/or his designee will establish deadlines for data submission related to financial reimbursement.

It is the responsibility of the elected Board of County Commissioners to secure the public's safety. The Board of County Commissioners will appropriate all funds considered by the Board as necessary for mitigation, preparedness, response to and recovery from disasters.

4. All records relating to the allocation and disbursement of funds pertaining to activities and elements covered in this plan must be maintained, as applicable, in compliance with:
  - The Code of Federal Register - Title 44 Emergency

Management and Assistance (CFR 44); relevant Circulars and Federal Statutes, in a manner consistent with provisions of the Federal Stafford Act

- Chapter 215, Florida Statutes, pertaining to state financial matters and Chapter 252, Florida Statutes, relating specifically to emergency management powers and responsibilities; and
  - The policies and directives detailed in the County CEMP ESF #7 (Resource Support) Guidelines.
5. The county Office of Management and Budget will make every effort to minimize the expense to the county by exploring all available local and state funding sources available in a post-disaster situation.

## VI. **TRAINING, EXERCISE AND PUBLIC AWARENESS/EDUCATION**

For any Emergency Management program to be successful, training of individuals at all levels of government for their respective roles in the four phases of emergency management must be considered a high priority. This is especially important because of the relatively new concept of operations in the FRP. The ESF operational concept requires coordination at the federal, state and local levels of government to ensure that everyone involved in emergency activities is aware of their responsibilities when a disaster threatens or occurs. Also, it is important that each agency is knowledgeable of what other agencies can and cannot do under disaster conditions. To accomplish the goal of developing a well-trained cadre of responders around the state, the following strategic planning statements are offered:

### A. Training and Exercise

The Emergency Management Director will assign either the Emergency Management Coordinator or Radiological Analyst as the individual responsible for establishing and monitoring all Emergency Management training programs and exercises for which the county is responsible. The person assigned this task, in consultation with the Emergency Management Director, will establish and maintain an exercise schedule in a manner required by the Florida Division of Emergency Management. All appropriate county and municipal agency personnel, volunteer agency representatives and designated members from the private sector will be trained in the implementation of RRT and RIAT SOP's, to include guidance for the completion and disposition of financial reports.

Emergency Management training will include that required to keep all levels of local government at an acceptable level of readiness to respond to any disaster identified in the hazard vulnerable analysis contained within this Basic Plan. The training program will include appropriate officials of each municipality and all volunteers and volunteer agencies assigned responsibilities in the Comprehensive Emergency Management Plan.

The Emergency Management Coordinator will keep abreast of and request training from the state on all matters that relate to state and federal programs that would enhance the preparedness of Indian River County.

The Emergency Management staff will remain current with the highest training credentials possible. They will cooperate with and assist other county and municipal agencies in the conduct of exercises.

B. Exercise

A viable exercise program is an essential component of any effort to fully train emergency personnel for their duties and responsibilities when a disaster occurs. It is crucial that those individuals who are charged with responding to emergencies are required to "experience" a disaster under as realistic conditions as possible before any actual event. The purpose of exercising is to improve the preparedness posture of the organization(s) involved. This will result in the reduction of loss of life and property when a disaster occurs. In addition to county and municipal agencies, other agencies assigned responsibilities for the implementation of the CEMP will be invited and requested to participate in exercises. Indian River County will participate in all exercises requested by FDEM that are statewide or regional and involve inter-agency participation.

At the conclusion of each exercise, a critique will be conducted by the emergency management director, or his designee. During this critique, any shortcomings will be identified and steps will be taken by the emergency management director to correct the deficiencies and further refine the CEMP.

C. Public Awareness and Education

In order to better educate and inform the public of protective actions before a disaster occurs, public information is critical for saving lives and minimizing property damage. Certain responsibilities exist for public information when Emergency Management plans are implemented. Public actions may depend upon public information during the period before a disaster is imminent, in an actual or threatening emergency situation, and in the post-emergency recovery period.

Pre-disaster education programs serve to increase awareness of Emergency Management programs, educate the public on ways to protect life and property, and inform the public on the availability of further assistance and information.

1. The County Commission Chambers has been identified as the location for the mass media to gather. Regularly scheduled press conferences will be identified during an event.
2. The following radio and television stations have agreed to disseminate

emergency information and participate in the local public emergency notification system in accordance with the Region 10 Emergency Alert System (EAS) Plan:

a. RADIO STATIONS

- |                  |                   |
|------------------|-------------------|
| (1) WTTB 1490 AM | (5) WZZR 92.7 FM  |
| (2) WGYL 93.7 FM | (6) WAVW 101.7 FM |
| (3) WQCS 89.9 FM | (7) WAXE 1370 AM  |
| (4) WSCF 91.9 FM | (8) WQOL 103.7 FM |

b. TELEVISION STATIONS

- |                           |                           |
|---------------------------|---------------------------|
| (1) WPTV (NBC) Channel 5  | (4) WFLX (FOX) Channel 29 |
| (2) WPEC (CBS) Channel 12 | (5) WTVX (UPN) Channel 34 |
| (3) WPBF (ABC) Channel 25 |                           |

3. A series of Public Safety Announcements have been developed and is available to the PIO. These pre-scripted messages are maintained on file at the Department of Emergency Services.
4. A brochure entitled *Disaster Information for Indian River County* is published each year which identifies information about the hazards and vulnerability of our community, provides maps, evacuation zones, and other types of disaster preparedness information, to include high risk areas and evacuation routes. The brochures are distributed at public presentations and are available at the office of Emergency Management. These documents are also available in a Spanish version.
5. In addition to the aforementioned, our office, in cooperation with the Indian River County School District, has produced an 80-minute informational video tape entitled *Indian River County Department of Emergency Services' Guide to Hurricane Preparedness*. This video presentation is available free of charge at each of the county libraries and most of the video rental retail outlets. This video is targeted to those persons not in contact with traditional media. The brochures and media presentations are available for the information of seasonal and transient populations.
6. During an emergency, our office telephones will be staffed on a 24-hour basis until the emergency has been abated. The advertised telephone number for our office is (772) 567-8000 ext. 1444. In addition to this main phone line, additional phone lines will be established with the numbers broadcasted through the local media. For a 24-hour recorded weather update, citizens may call (772) 567-2129.
7. During any period of disaster in Indian River County, the government access cable channel will be broadcasting live from our Emergency

Operations Center. This capability, along with that of local radio station announcements, will extend the Emergency Management's public outreach capabilities both in response to and recovery from a disaster, including the location of Disaster Recovery Centers, Recovery Information Centers, and Disaster Legal Assistance and education on mitigation opportunities. AT&T Cablevision is the cable service provider for the Vero Beach area (Channel 13) and the north county area (Channel 27). Information will be broadcast 24-hours per day.

8. Indian River County currently has eleven public shelters. Since all shelters will not open at the same time, it is crucial for the public to monitor media reports for an opening in their area. Depending on the storm track and intensity, the number and location of shelter openings will vary. At a minimum, shelters will open in the north, central and south county area. Public shelter openings will be broadcast via local radio stations, television stations and the government access channels listed above.
9. Evacuation information, along with routes, is published annually in the Vero Beach telephone directory, as well as in a hurricane preparedness supplement issued by the *Press Journal* and the *Florida Today* just prior to each hurricane season (see Figure 9).
10. While the entire County is subject to a host of hazards (outlined in Section II-A), there are areas which are more vulnerable to particular hazards (i.e., ponding water from heavy rainfall is most likely to effect the low swampy inland areas and areas along streams and canals; storm surge is most likely to effect residents along the coastal areas and the Indian River Lagoon; severe freezes would economically damage the citrus industry). Therefore, the department's goal is to increase awareness of the pre-disaster education programs available to these areas.
11. Each year, the Emergency Management Division hosts a media day. Representatives from a variety of media outlets are invited to learn about emergency management procedures and the methods used to disseminate public information in an emergency. Press packets are distributed and tours are given of the EOC and designated media area. The purpose of this gathering is to strengthen relations with the media prior to an emergency event.
12. Twice annually, the Emergency Management Division offers an introductory hurricane meteorological class to familiarize government employees with the terminology and procedures surrounding a major weather event which may impact our county.

## VII. REFERENCES AND AUTHORITIES

This plan replaces the Indian River County Nuclear Civil Protection Plan and the Indian River County Peacetime Emergency Plan. It does not supplant the Hazardous Materials Plan, which is not an operations-oriented document, nor the Florida Radiological Emergency Management Plan for Nuclear Power Plants, which was developed for response to radiological incidents under separate state and federal statutory authorities. However, this plan will be used to supplement the REP plan, in order to provide a comprehensive response.

### A. Local

#### 1. Ordinances

##### a. ORDINANCE 91-17

An ordinance of Indian River County, Florida, designating the Chairman of the Board of County Commissioners, or in his/her absence, Vice-Chairman or Board designee, in this succession, as the official with authority to declare a State of Emergency in the event of natural or man-made disaster or the imminent threat thereof; authorizing such official to take certain emergency measures relating thereto; providing severability; and providing an effective date.

##### b. ORDINANCE 91-18

An ordinance of Indian River County, Florida, providing for the activation of the disaster emergency plans applicable to Indian River County and enumerating actions that may be taken during said emergency.

#### 2. Resolutions

##### a. RESOLUTION NO. 89-150

A resolution of Indian River County, Florida, by and through its Board of County Commissioners, continuing to recognize the Indian River County Emergency Management Services Department to act in accordance with the State Emergency Operations Plan and Program.

##### b. RESOLUTION NO. 91-55

A resolution of Indian River County, Florida, establishing a disaster emergency employee policy.

- c. A sample copy of a resolution for declaring a local State of Emergency can be found attached to this document and identified as Figure 11.

3. Miscellaneous

- a. Indian River County Emergency Medical Services Trauma Transport Protocol.
- b. Indian River County Comprehensive Growth Management Plan.
- c. Treasure Coast Hurricane Evacuation Study.
- d. Solid Waste Management Master Plan, Emergency Operations Standing Operating Procedures, dated July, 1994.
- e. Critical Facilities Inventory.
- f. Mobile Home Park Inventory.
- g. Marina Inventory.

B. Specific plans that supplement this CEMP that apply to unique situations are as follows:

1. *Coastal Oil Spill* - Federal Regional IV Oil & Hazardous Substances Regional Contingency Plan
2. *Hazardous Materials* - Indian River County Emergency Plan for Hazardous Materials
3. *Mass Immigration* - Indian River County Caribbean Refugee Plan
4. *Airports* - Vero Beach Municipal Airport Certification Manual: Aircraft and Airport Safety Plan, approved by the Federal Aviation Administration on January 3, 1997
5. *Nuclear Power Plants* - State of Florida Radiological Emergency Management Plan
6. *Ports/Marinas* - Indian River County Comprehensive Plan
7. *Emergency Notification* - Emergency Alert System Plan (Operational Area 10)
8. *Military Support* - Florida National Guard Operation Plan for Military

## Support to Civil Authorities

9. *Mitigation* - Indian River County Unified Local Mitigation Strategy
10. *Mitigation* - Indian River County Wildfire Mitigation Plan

Copies of these plans are maintained on file at the Emergency Management office.

## B. State

### 1. Statutes

- a. Chapter 252 - State Emergency Management Act. Chapter 252.38, Florida Statutes, delineates the emergency management responsibilities of political subdivisions in safeguarding the life and property of citizens and other persons within the political subdivision. Key points within the statutes include:
  - (1) Performing emergency management functions within the territorial limits of Indian River County and conduct those activities pursuant to §252.31--252.90, and in accordance with state and county emergency management plans and mutual aid agreements.
  - (2) Appointment of a Director who meets the minimum training and education qualifications established in the job description approved by the Board. The Director will be appointed to serve at the pleasure of the Board, subject to the Board's direction and control, in conformance with applicable resolutions, ordinances and laws. The Director has responsibility for the organizations, administration and operation of Indian River County Emergency Management division, subject only to the direction and control of the Board of County Commissioners and the County Administrator. The Director will coordinate emergency management activities, services and programs within the County and will serve as liaison to the Florida Division of Emergency Management and other local emergency management organizations.
  - (3) Establishment, as necessary, a primary and one or more secondary emergency operating centers (EOCs)

to provide continuity of government and direction and control of emergency operations.

- (4) Power to appropriate and expend funds; make contracts; obtain and distribute equipment, materials and supplies for emergency management purposes; provide for the health and safety of persons and property, including assistance to victims of any emergency; and direct and coordinate the development of emergency management plans and programs in accordance with the policies and plans set forth by federal and state emergency management agencies.
- (5) Reduction of vulnerability of people and communities of this county to damage, injury, and loss of life and property resulting from natural, technological, or manmade emergencies.
- (6) Preparation for prompt and efficient response and recovery to protect lives and property affected by emergencies.
- (7) Response to emergencies using all systems, plans, and resources necessary to preserve adequately the health, safety, and welfare of persons or property affected by the emergency.
- (8) Recovery from emergencies by providing for the rapid and orderly start of restoration and rehabilitation of persons and property affected by emergencies.
- (9) Authority to request state assistance or invoke emergency related mutual aid assistance by declaring a local state of emergency. The duration of the local state of emergency will be limited to seven days, and it may be extended as necessary in seven day increments. The County also has the power and authority to waive the procedures and formalities otherwise required of Indian River County by law, pertaining to:
  - a. Performance of public work and taking whatever prudent action is necessary to ensure the health, safety and welfare of the community;

- b. Entering into contracts and incurring obligations;
  - c. Employment of permanent and temporary workers;
  - d. Utilization of volunteers;
  - e. Rental of equipment;
  - f. Acquisition and distribution, with or without compensation, of supplies, materials and facilities; and
  - g. Appropriation and expenditure of public funds.
- (10) Charge and collect fees for the review of emergency management plans required of external agencies and institutions. The fees will be in accordance with the fee schedules established by the Florida Division of Emergency Management and as approved by the Indian River County Board of County Commissioners.
- (11) Coordination and development of a comprehensive emergency management plan and program that are consistent with the state comprehensive emergency management plan and program.
- (12) Provision of an emergency management system embodying all aspects of pre-emergency preparedness and post-emergency response, recovery, and mitigation.
- (13) Maintaining a registry of disabled persons in order to meet the special needs of persons who would need assistance during evacuations and sheltering because of physical or mental handicaps. The registry identifies those persons in need of assistance and assists in planning for resource allocation to meet those identified needs. The registry is updated annually.
- (14) Development and maintenance of a radiological emergency response plan in accordance with requirements of the United States Nuclear Regulatory Commission and the Federal Emergency Management

Agency.

- (15) Development and maintenance of an emergency plan for hazardous materials to safeguard the lives and property of the residents of our County against the threat of a hazardous materials incident.
  - (16) Participation from the Indian River County School Board, during a declared local state of emergency and upon the request of the Chairman, Indian River County Board of County Commissioners, by providing facilities and personnel to staff those facilities. Indian River County School Board will, when providing transportation assistance, coordinate the use of vehicles and personnel with Emergency Support Function (ESF) #2 (Transportation).
- b. Chapter 14, Florida Statutes, Governor.
  - c. Chapter 22, Florida Statutes, Emergency Continuity of Government.
  - d. Chapter 23, Part 1, Florida Statutes, The Florida Mutual Aid Act.
  - e. Chapter 125, County Government; Chapter 162, County or Municipal Code Enforcement; Chapter 166, Municipalities; and Chapter 553, Building Construction Standards.
  - f. Chapter 154, Florida Statutes, Public Health Facilities.
  - g. Chapter 161, Beach and Shore Preservation; Part III, Coastal Zone Preservation.
  - h. Chapter 162, Florida Statutes, County or Municipal Code Enforcement.
  - i. Chapter 163, Inter-governmental Programs; Part I, Miscellaneous Programs.
  - j. Chapter 166, Florida Statutes, Municipalities.
  - k. Chapter 187, State Comprehensive Plan.

- l. Chapter 215, Florida Statutes, Financial Matters.
- m. Chapter 216, Florida Statutes, Planning and Budgeting.
- n. Chapter 235, Florida Statutes, Educational Facilities.
- o. Chapter 245, Florida Statutes, Disposition of Dead Bodies.
- p. Chapter 250, Florida Statutes, Military Affairs.
- q. Chapter 284, Florida Statutes, State Risk Management and Safety Programs.
- r. Chapter 287, Florida Statutes, Procurement of Personal Property and Services.
- s. Chapter 376, Florida Statutes, Pollutant Discharge Prevention and Removal.
- t. Chapter 377, Florida Statutes, Energy Resources.
- u. Chapter 380, Land/Water Management.
- v. Chapter 388, Florida Statutes, Public Health.
- w. Chapter 401, Florida Statutes, Medical Telecommunications and Transportation.
- x. Chapter 403, Florida Statutes, Environmental Control.
- y. Chapter 404, Florida Statutes, Radiation.
- z. Chapter 442, Florida Statutes, Occupational Safety and Health.
- aa. Chapter 553, Florida Statutes, Building Construction Standards.
- ab. Chapter 581, Florida Statutes, Plant Industry.
- ac. Chapter 590, Florida Statutes, Forest Protection.
- ad. Chapter 633, Florida Statutes, Fire Prevention and Control.
- ae. Chapter 870, Florida Statutes, Riots, Affrays, Riots, and Unlawful Assemblies.

## 2. Administrative Rules

- a. Florida Department of Community Affairs Administrative Rule, Chapters 9G-6.
  - b. Florida Department of Community Affairs Administrative Rule, Chapters 9J-2 and 9J-5.
3. Executive Orders
- a. Executive Order 80-29 (Disaster Preparedness), dated April 14, 1980.
  - b. Executive Order 87-57 (State Emergency Response Commission), dated April 17, 1987; as updated by Executive Orders 98-153 and 98-155.
4. Miscellaneous
- a. State of Florida Comprehensive Emergency Management Plan.
  - b. Florida Airport Directory (published by the Florida Department of Transportation Aviation Office, Summer, 1996).

C. Federal

1. Public Laws
- a. Public Law 93-288, as amended, which provides authority for response assistance under the Federal Response Plan, and which empowers the President to direct any federal agency to utilize its authorities and resources in support of state and local assistance efforts.
  - b. Public Law 93-234, Flood Disaster Protection Act of 1973, as amended, provides insurance coverage for all types of buildings.
  - c. Public Law 99-499, Superfund Amendments and Re-authorization Act of 1986, which governs hazardous materials planning and right-to-know.
  - d. Public Law 101-615, Hazardous Materials Transportation Uniform Safety Act (H.M.T.U.S.A.), which provides funding to improve capability to respond to hazardous materials incidents.
  - e. Public Law 95-510, Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (C.E.R.C.L.A.) as

amended, which requires facilities to notify authorities of accidental releases of hazardous materials.

- f. Public Law 101-549, Clean Air Amendments of 1990, which provides for reductions in hazardous air pollutants and risk management planning requirements.
- g. Public Law 85-256, Price-Anderson Act, which provides for a system of compensating the public for harm caused by a nuclear accident.
- h. Public Law 84-99 (33 USC 701n), Flood Emergencies, authorizing an emergency fund for flood emergency preparation, flood fighting and rescue operations, or repair and restoration of flood control works threatened or destroyed by flood.
- i. Public Law 91-671, Food Stamps (Issuance) Act of 1964, in conjunction with Section 412 of the Stafford Act, relating to food stamp (issuance) distributions after a major disaster.
- j. Public Law 89-665 (16 USC 470 et seq), National Historic Preservation Act, relating to the preservation of historic resources damaged as a result of disasters.
- k. Stewart B. McKinney Homeless Assistance Act, (42 USC 11331-11352), Federal Emergency Management Flood and Shelter Program.
- l. National Flood Insurance Act of 1968, (42 USC 4001 et seq) as amended by the National Flood Insurance Reform Act of 1994.
- m. Reigel Community Development and Regulatory Improvement Act of 1994.
- n. Public Law 833-703, an amendment to the Atomic Energy Act of 1954.

## 2. Regulations

- a. 44 CFR Parts 59-76, National Flood Insurance Program and related programs.
- b. 44 CFR Part 13 (The Common Rule), Uniform Administrative Requirements for Grants and Cooperative Agreements.

- c. 44 CFR Part 206, Federal Disaster Assistance for Disasters Declared after November 23, 1988.
- d. 44 CFR Part 10, Environmental Considerations.
- e. 44 CFR Part 14, Audits of State and Local Governments.
- f. 44 CFR 350 of the Code of Federal Regulations.
- g. 50 CFR, Title 10 of the Code of Federal Regulations.

### 3. Executive Orders

- a. Executive Order 80-29 (Disaster Preparedness), dated April 14, 1980.
- b. Executive Order 87-57 (State Emergency Response Commission), dated April 17, 1987; as updated by Executive Orders 98-153 and 98-155.
- c. Executive Order 11988, Floodplain Management.
- d. Executive Order 11990, Protection of Wetlands.
- e. Executive Order 12657, Federal Emergency Management Assistance in Emergency Planning at Commercial Nuclear Power Plants.
- f. Executive Order 12656, Assignment of Emergency Preparedness Responsibilities.
- g. Executive Order 12241, Transferring review and concurrence responsibility for state plans from the NRC to FEMA.
- h. Presidential Decision Directive - 39, United States Policy on Counter Terrorism.
- i. Presidential Decision Directive - 62, United States Policy on Combating Terrorism.
- j. Presidential Decision Directive - 63, United States Policy on Protecting America's Critical Infrastructures.

### 4. Miscellaneous

- a. Federal Response Plan for Public Law 93-288, as amended; April 1992.

- b. Nuclear Regulation (NUREG) 0654/FEMA-REP-1, which provides federal guidance for development and review of Radiological Emergency Management Plans for Nuclear Power Plants.
- c. Flood Insurance Study - Indian River County, Florida and Incorporated Areas (FEMA - May 4, 1989)

E. Memoranda of Understanding/Agreements

1. Local

- a. The Statewide Mutual Aid Agreement between Indian River County and the State of Florida, Department of Community Affairs (July 31, 2000). The purpose of this Agreement is to provide a mechanism to expedite the assistance of other public agencies in response to catastrophic natural and manmade disasters. This Agreement also expedites the reimbursement process required to receive state and federal financial assistance during the recovery from such an event.

2. State

- a. Emergency Management Assistance Compact, 1996.
- b. Florida and Federal Emergency Management Agency Region IV, 1993.
- c. The Statewide Mutual Aid Agreement between Indian River County and the State of Florida, Department of Community Affairs (July 31, 2000).
- d. Florida and the American Red Cross, 1992.
- e. Florida and the Air Force Rescue Coordination Center (Inland Search/Rescue), as amended, 1995.
- f. Florida Division of Emergency Management and the Civil Air Patrol (Search/Rescue, Transport), 1992.
- g. Division of Emergency Management and Florida Power Corporation; Division of Emergency Management and Florida Power & Light Company; and Division of Emergency Management and Southern Nuclear Operating Company (Radiological Emergency Response Planning and Operations),

## Annual Agreements.

- h. Memorandum of Agreement between the Federal Emergency Management Agency, the State of Florida, and the City of Miami for Urban Search and Rescue, October 5, 1993.
- i. Building Officials Association of Florida and Division of Emergency Management, October 1994.
- j. National Weather Service and Division of Emergency Management, September 1994.
- k. Statement of Understanding between the Administration on Aging and the American National Red Cross (ARC), ARC 5067, June 1995.
- l. Statement of Understanding between the Salvation Army and the American Red Cross, August 1994.
- m. Statement of Understanding between the Volunteer Organizations Active in Disaster Agencies and other volunteer agencies.
- n. Statement of Understanding between the Federal Emergency Management Agency and the American Red Cross, January 1982.
- o. Memorandum of Understanding between the Centers for Disease Control, the United States Public Health Service of the Department of Health and Human Services, and the American Red Cross, December 1988.
- p. State of Florida Agreement between the American Red Cross and the Department of Health for use of the United States Department of Agriculture donated foods, September 1989.
- q. Memorandum of Understanding with the American Veterinary Medical Association Emergency Preparedness and Response Guide.
- r. Memorandum of Understanding with the State of North Carolina for Medivac Assistance for Monroe County.
- s. Southern Mutual Radiological Assistance Plan, Southern States Emergency Response Council.
- t. Memorandum of Understanding between Strategic

Metropolitan Assistance and Recovery Teams and the Florida Division of Emergency Management, February 14, 1997.

- u. Interstate Agreement During a Hurricane Threat or Other Events Florida Division of Emergency Management and Georgia Emergency Management Agency.

FIGURE 11

RESOLUTION 2002 - \_\_\_\_\_

INDIAN RIVER COUNTY RESOLUTION DECLARING  
STATE OF LOCAL EMERGENCY

**WHEREAS**, the National Hurricane Center recognizes the danger to coastal residents of Florida from Hurricane ENTER HURRICANE NAME HERE, by posting a hurricane ENTER WATCH OR WARNING HERE from ENTER SOUTHERN BOUNDARY LOCATION to ENTER NORTHERN BOUNDARY LOCATION; and

**WHEREAS**, Indian River County has high evacuation times to evacuate residents from the hazards of a hurricane; and

**WHEREAS**, the current forecast error of the National Hurricane Center does not allow for a confident prediction of the track of Hurricane ENTER HURRICANE NAME HERE at that point in time, coinciding with Indian River County's high evacuation times; and

**WHEREAS**, Hurricane ENTER HURRICANE NAME HERE has the potential for causing extensive damage to public utilities, public buildings, public communication systems, public streets and roads, public drainage systems, commercial and residential buildings and areas; and

**WHEREAS**, Section 252.38(3), Florida Statutes, provides authority for a political subdivision such as Indian River County to declare a State of Local Emergency and to waive the procedures and formalities otherwise required of political subdivisions by law pertaining to:

1. Performance of public work and taking whatever action is necessary to ensure the health, safety, and welfare of the community.
2. Entering into contracts.
3. Incurring obligations.
4. Employment of permanent and temporary workers.
5. Utilization of volunteer workers.
6. Rental of equipment.
7. Acquisition and distribution, with or without compensation of supplies, materials and facilities.
8. Appropriation and expenditure of public funds.

**NOW THEREFORE, BE IT RESOLVED** by the Board of County Commissioners of Indian River County, Florida, this ENTER DAY HERE day of ENTER MONTH HERE 2002, that:

1. Hurricane ENTER HURRICANE NAME HERE poses a serious threat to the lives and property of residents of Indian River County and that a State of Local Emergency shall be declared, effective immediately, for all of Indian River County, including, all unincorporated and incorporated areas.
  
2. The Board of County Commissioners hereby exercises its authority and waives the procedures and formalities required by law of a political subdivision, as provided in Chapter 252.38(6)(e), Florida Statutes.

The resolution was moved for adoption by Commissioner ENTER COMMISSIONER NAME HERE and the motion was seconded by Commissioner ENTER COMMISSIONER NAME HERE, and, upon being put to a vote, the vote was as follows:

<b>Chairman</b>	Ruth M. Stanbridge
<b>Vice-Chairman</b>	John W. Tippin
<b>Commissioner</b>	Fran B. Adams
<b>Commissioner</b>	Caroline D. Ginn
<b>Commissioner</b>	Kenneth R. Macht

The Chairman thereupon declared the resolution duly passed and adopted this ENTER DAY HERE day of ENTER MONTH HERE, 2002.

**BOARD OF COUNTY COMMISSIONERS  
INDIAN RIVER COUNTY, FLORIDA**

**BY** \_\_\_\_\_  
Ruth M. Stanbridge, Chairman

**Attest**

\_\_\_\_\_  
Jeffrey K. Barton, Clerk

## **ANNEX-I: RESPONSE FUNCTIONS**

