The Impact of Flood Insurance on Development in Ocean City, Maryland

Ву

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The Impact of Flood Insurance on Development in Ocean City, Maryland

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Abstract

Ocean City, Maryland witnessed a period of development that began in the early 1960s and ended in the 1980s concurrent to the passing, adoption, and implementation of the National Flood Insurance Program. Although the development happened at the same time as the passage and upcoming of the NFIP in Ocean City, a causal relationship cannot be determined between the two. People did not necessarily buy condominiums strictly because they could now have government subsidized flood insurance. Even though all of Ocean City, Maryland was in a flood plain, it seemed that people might have been purchasing their condominiums because they wanted to own a piece of beachfront property. Tourism and recreation were also contributing factors to the development boom of this period. It cannot be proven that they were buying simply because they could rebuild cheaply with government help. Oral histories, government documents, and newspaper articles of the period suggest that the nature of the relationship may actually be the reverse. Many people in large cities such as Baltimore, Maryland and Washington, D.C. had the financial luxury of affording beachfront/oceanside property.

Section I: Introduction

For as far back as there are written records, human civilizations have experienced flooding. In ancient Mesopotamia, the Sumerians dealt with ferocious flooding so extraordinary that they believed it must be controlled by gods and goddesses. *The Epic of Gilgamesh* described the flooding as perceived by the Sumerians, "the rampant flood which no man can oppose, which shakes the heavens and causes earth to tremble, in an appalling blanket folds mother and child, beats down the cranebrake's full luxuriant greenery, and drowns the harvest in its time of ripeness."

Ocean City, Maryland is, of course, not ancient Mesopotamia; however, the one characteristic that the two places share is the threat of flood damage. In ancient Mesopotamia, the Sumerians feared that their crops might be damaged from the ravenous floods. In Ocean City, floods threaten a man-made skyline of high-rise condominiums, beach homes, and businesses. Many families in Maryland and in the surrounding area travel to Ocean City to vacation each year. In the summer of 2005, the average population each day was estimated to be 322,308.² Children spend an entire year looking forward to sitting on the smooth white sand under the warm sunlight. They cannot wait to dip their toes into the ice cold waves on a warm day in June, July, or August and eat Thrasher's French Fries and Fisher's popcorn along the Ocean City Boardwalk. The seaside amusement parks only add to the excitement.

Since 1930, the population of Ocean City has increased consistently. Both the number of year-round visitors and seasonal visitors has increased. The year-round

population has only seen a dramatic increase in recent years. Year-round residents, non-resident property owners, overnight visitors, and seasonal workers are the different groups that make up the population of Ocean City. Because there is a limited availability of the data on seasonal visitors, especially of people who travel to the resort for day or overnight trips, the population is usually divided into year-round residents and seasonal visitors.³

From 1930-1970, the year-round population of Ocean City increased by only 547 new residents, from 946 to 1,493 people. In the 1950s, the population even declined, as residents from the town moved to the mainland so that they could sell or rent their island properties. In the 1960s, the population began to increase again, because the northern section of the peninsula was annexed into the township and more development ensued. From 1970 to 2005, the year-round population has increased dramatically from 1,493 to 8,187. The year-round population growth in the 1970s and 1980s occurred in past because more household economies could be supported by the summer trade and the expansion of public facilities.⁴

The threat of a disastrous storm is never too distant from the shores of Ocean City. During major storms in the past, severe flooding occurred in Ocean City, particularly in 1933 and 1962. As we will see, these were the two most significant storms in Ocean City's history. In 1968, six years after the Storm of 1962 hit the entire East Coast of the United States, the federal government passed the National Flood Insurance Act. The 1962 Storm was not the only impetus for the act; the National Flood Insurance Act had already been in the making for several years prior to 1962. In fact, development in Ocean City in the late 1960s and early 1970s was not directly dependent on the

National Flood Insurance Act, passed in 1968. Development would have occurred in Ocean City, with or without the passage of the National Flood Insurance Act.

Some people believe that the National Flood Insurance Program encouraged people to develop in natural coastal areas. In the case of the National Flood Insurance Program, the government actually had to force residents to protect themselves by purchasing flood insurance. When people were given a choice to purchase the insurance through the Flood Program, in many instances they chose not to. To ensure that home buyers were protected against the risk of flooding, the federal government required mortgage borrowers to purchase flood insurance when the property was located in flood prone areas. There are cases where officials and residents tried to circumvent national flood policies. The irony of the National Flood Insurance Program is that the government was trying to protect the taxpayers from having to foot the bill for flood damage, which occurred frequently throughout the history of the United States. The government was actually powerless to control development, especially where citizens had the opportunity to make a profit in areas that were flood prone. Not only was the government unable to stop development, but also in many cases they were blamed for it.

The development that began in the early 1960s and ended in the 1980s occurred during the passing of the NFIP and its adoption in Ocean City. Although the development happened at the same time as the passage and upcoming of the NFIP in Ocean City, a causal relationship cannot be determined between the two. People would have flood insurance as they purchased their new homes and condominiums; however, in Ocean City, Maryland people did not necessarily buy condominiums strictly because they could now have government subsidized flood insurance. Even though all of Ocean City,

Maryland was in a flood plain, it seemed that people might have been purchasing their condominiums because they wanted to own their own piece of beachfront property. It cannot be proven that they were buying simply because they could rebuild cheaply with government help.

Today, two years after Hurricane Katrina hit the Gulf Coast of the United States, one frequently hears about flood insurance, flooding, hurricanes, and other natural disasters. It is important to realize that Ocean City, a place that many Marylanders hold dear, has always been and will always be at risk for severe flood damage. Although many people love Ocean City and continue to live and vacation there, one must understand the potential dangers that can occur on a natural barrier peninsula. Section II of this thesis will discuss the national and local context for flood concerns prior to the passage of the National Flood Insurance Act of 1968. Section III describes the passage of the National Flood Insurance Act and Ocean City's entrance into the federal program. In Section IV and V, we will see that Ocean City entered into an era of building high-rise and luxury condominiums prior to 1968. The great era of Ocean City's development occurred in the 1970s and early 1980s. At one point, Ocean City was almost removed from the National Flood Insurance Program, only to be saved by the efforts of the late Mayor, Harry Kelly. By the end of the 1970s and early 1980s, environmentalists began to fear the effects that building and development would have on the barrier peninsula.

Section II: National and Local Context Prior to 1968

Throughout the 1900s, many natural disasters occurred in the United States. A major catastrophe that struck the Mississippi River Valley in the 1920s was perhaps the

most famous example of many that forced Congress to accept that there was a need in the United States for a national policy to deal with floods and flood damage. In 1927, notorious floods ravaged the Mississippi River Valley. The Red Cross estimated that 246 deaths occurred in these floods. That estimate did not include many African American farmers who lived in the Mississippi River Delta. The number of deaths was most likely a great deal higher than 246.⁵ Major floods also occurred in the same Missouri County in 1908, 1909, 1915, and 1922. It was estimated that 10,000 acres were submerged in water during the 1927 flood. These acres were in the "triangle of death," located between the Mississippi and Missouri Rivers. Almost half of the land in St. Charles County, Missouri was located within the flood plain. A flood plain is an area that will most likely flood at some point if it had not already.⁶

Tremendous crop damage usually occurred here along with the flooding. The crop damage was always an economic nightmare. The triangle was almost entirely flat with runoff from one-fourth of the United States draining into the area. The runoff came from places as far away as Chicago and Montana. The floods in the Mississippi River Valley are noteworthy because of the higher death tolls and economic crop losses that are associated with past flooding in the region.⁷

Flood insurance was also on the minds of national leaders in the 1930s. In 1936, the federal government passed the Flood Control Act. This Act allowed the national government to build dams and levees to help prevent flood damage. Disaster assistance was available at that time to help flood victims. Even though the government spent billions of dollars on flood control projects and in disaster assistance, flood hazards continued to rise. The money spent on disaster assistance to aid flood victims also

increased.⁸ Throughout the 1920s, 1930s, and 1940s, flood relief as well as other natural disasters, was generally handled by congressional appropriation of funds. Even as early as 1913, after a bloody second half century in the 1800s due to hurricanes, Congress recognized that funds would have to always be allotted for flood control.⁹

Development could change the entire character of a large area of land. As houses appeared and the wilderness disappeared, local and national officials were concerned that more flood problems might arise. Families that were victims of flood damage often forgot their painful memories after a few generations. New residents often moved to areas that had previous exposure to flooding many years before. Flood control measures were more likely to encourage development and occupancy in the flood plains. Traditionally, land that had been considered flood prone was less expensive to purchase. Because of this, people that could not afford to buy elsewhere purchased homes in the flood plain. However, this was not the case in coastal areas and resort towns such as Ocean City, Maryland. People were often attracted to coastal areas for recreational activities and natural beauty. By the 1960s the federal government and local officials understood that people continued to build homes on flood-periled lands based on their past experience with flood policy. These people expected that in the case of flooding they would be structurally compensated by the federal government. Prior to the passage of the National Flood Insurance Act, when a flood occurred the federal government handed out disaster relief on a case-by-case basis. Victor Gerdes, author of the article "Insuring the Flood Peril" in the Journal of Insurance in 1963, believed that flood relief would continue to encourage development in flood prone areas unless federal policies

regulated the situation.¹⁰ We can see this is happening today in the areas of the Gulf Coast where many people are rebuilding in the wake of Hurricane Katrina.

In the early 1900s, some private insurance companies did write flood insurance policies. One example of this was the Globe and Rutgers Fire Insurance Company. In 1927, they provided coverage to the people in the Mississippi River Valley including New Orleans. After the major river flood in 1927, the company discontinued writing the policies because the risk was deemed too hazardous. Even with charging higher rates, the Globe and Rutgers Fire Insurance Company still could not justify providing policies: "the Company has been writing policies on \$5 per 100 basis for four months where the entire house and property were insured for full value. However, even at that rate the company decided to stop taking any more business and notified its agents to that affect." In New Jersey in 1944, summer homes were ripped off their foundations due to hurricane-driven winds. In this case, the companies did not stop providing coverage; instead, they claimed that the storm damage was not covered in their policies. Hurricane insurance did not cover these losses because "limitations to the standard coverage endorsements of ordinary fire insurance contracts specifically eliminated such losses." 12

Insurance companies were hesitant to write private flood insurance. The dilemma in writing flood insurance was that in the case of flooding, extensive damage was almost certain. There was always catastrophic nature associated with flood damage and most people were unwilling or unable to pay the high premiums that were required to make the insurance self-sustaining. Private insurance companies were not thrilled by the idea that those most susceptible to flood damage would be willing to purchase the insurance but that others, who may only be slightly susceptible, were usually not. In his article in 1963

Gerdes suggested that, "Inhabitants of tropical isles are not likely to invest in snow shovels and those far removed from alluvian deposits are likely to show little interest in flood coverage." ¹³

One concern for beginning a national flood insurance scheme was there would have to be a head-start reserve fund to pay for catastrophic losses at the beginning of such a program. Private insurance companies were at liberty to refuse to write flood insurance without providing any reason at all. Most private insurers by the 1960s had already spent a considerable amount of time and money in travel, research, consultation, and engineering studies. Their research often led them to option out of providing and writing flood insurance policies. Ironically, the private insurance companies also did not like the idea of the federal government entering their arena to help in this situation either. If a federal insurance program would be profitable, the private insurance companies were afraid that they might then have trouble entering the field after it was already handled by the federal government.¹⁴

Congressional representatives who came from areas prone to flood devastation were the main advocates of the creation of a Federal Insurance Program. These representatives banded together, regardless of their political beliefs, to ask government assistance to help the flood victims in their constituencies. The representatives who were not in flood susceptible areas had very little concern for the establishment of a national flood insurance program. Because the federal government had experience in providing insurance for crop and war damage, some representatives believed that the federal government would naturally be able to provide flood insurance as well. According to Victor Gerdes:

It has been precisely on the federal level that there has been some recognition that any

comprehensive plan for meeting the flood risk must embrace flood control, flood relief, zoning and land use, as well as an amalgam of disciplines, including legal, geographical, public assistance and welfare, engineering, sociological, economics, technological, financial, political, statistical, actuarial, and insurance.¹⁵

Gerdes believed that extensive research and planning on the federal level was necessary for a successful national flood policy.

Flooding was consistently a problem in the river valleys of the Mid-West between 1945 and 1952. In 1951 there was flooding in the Missouri River Valley of a catastrophic nature. President Harry S. Truman, a native Missourian, proposed an appropriation of \$400,000,000 to aid flood victims. In one response, the *New York Times* editorialized that it was important to help fellow Americans; but that, Congress also needed to examine how the country was to deal with flooding over the long term:

Neither the nation as a whole, nor, least of all, the people of the Missouri River Valley, can afford to allow the emotions aroused by the flood to plunge us without thinking into unwise and unnecessary programs that might turn out to be mere palliatives rather than preventatives. A sudden spate of dam building, for instance, is certainly not now called for. The President himself observed that "in the long run, of course, the greatest need is for the prevention of floods through carefully planned and coordinated programs of conservation and water control." We would suggest that this is really the best form of insurance against a repetition of the recent disaster. The more push the President can give to proposals for a comprehensive treatment of the needs of the river basin as a unit the better it will be for the Missouri Valley and for the nation — and the less likely we are to have another million dollar flood. ¹⁶

The writer of this editorial was not only concerned with money from the federal government going towards flood victims in the Mid-West but also for flooding that affected victims all over the country.

On October 24, 1951, Truman signed the H.J. Res. 341, or the Flood Rehabilitation Act of 1952 into effect. This act provided for \$113 million dollars to help flood-devastated areas in Missouri and Kansas. The money was needed to help restore farms, homes, and businesses. Truman wanted Congress to provide more help in the flood-devastated area earlier in 1951. Most of the funds in the bill, or \$90 million of the

\$113 million, were to be used as loans to help rehabilitate the area. Truman was very worried that money would not be enough to help small wage earners and farmers who might not be able to qualify for the loans. Truman wanted to recommend a program of grants to help these people; however, these were not included in the bill. At this time, the bill did not yet include any provisions for a federal flood insurance program. Upon signing the act Truman declared:

I am particularly disappointed that this bill includes no provision for making a start toward a satisfactory system of flood insurance. Because insurance protection against flood losses is not virtually unobtainable from private insurance companies, I recommended a system whereby the government would establish a reinsurance fund, which should make it possible for private companies to write flood insurance at reasonable rates, it is quite possible to reduce the risks and rates by a nationwide pooling system. Until such system is developed and put into effect, we shall continue to face the danger that floods may wipe out overnight the savings that homeowners, farmers, and businessmen have slowly accumulated over a period of years. ¹⁷

Four years later, President Dwight D. Eisenhower signed the Flood Insurance Act of 1956, a law that clearly reflected Truman's thinking on flood insurance. This Act established a Federal Flood Insurance Administration. After nine months however, the program failed because Congress did not appropriate the necessary amount of funds to keep the program in existence.¹⁸

The Flood Insurance Act of 1956 was greeted by skepticism from early on which is probably why it died after only nine months. Many state representatives, especially those in northeastern states, felt that they were not consulted on the law itself or on its implementation. The program was supposed to be available by the spring of 1957. Policyholders would pay premiums that covered 60 percent of the cost and federal and state governments would each pay 20 percent. According to an article in the *New York Times*, the states wanted to have a say in the laws and zoning, especially if they were expected to pay 20 percent of the premiums.¹⁹

Even though the Flood Insurance Act of 1956 was not successful, the issue of flood insurance remained on the national agenda. In a 1964 article titled "The Floodplain and the Seashore" from The Geographical Review, Ian Burton and Robert W. Kates stated their concern that the United States was about to embark on a very expensive program to protect against major storms and flooding. They voiced the concern that despite flood control measures and the vast amount of money spent on flood control, annual damage because of flooding continued to rise. In 1960 the Chief of the Army Corps of Engineers believed, "the present rate of expenditure protection will 'just about keep up with the increase in flood damage that may be anticipated by 1980 as a result of floodplain development over the next two decades." ²⁰ Burton and Kates suggested that the problem of flooding was only going to grow worse as more people occupied flood prone areas. They predicted that more than one million dollars in storm damage would be spent from 1960-1980. Their concern was that money would be spent without any assurance that storm damage would be reduced. In fact, scientists predicted that the damage would increase by the 1980s due to sea-level fluctuations.²¹

The Burton and Kates article noted the devastating 1962 Coastal Storm that affected Ocean City, Maryland, as well as the rest of the East Coast. They were concerned about the increase of sound structures that were built to replace their storm-damaged counterparts particularly from Cape May, New Jersey to Barnegat Light, New Jersey. They interviewed a number of property owners and managers within this flood-prone coastal area. Their conclusion was that most of these interviewees did not have an awareness of the dangers of flooding. They were aware, however, of the major damage that could result from storms such as the 1962 storm. Similarly, awareness of the

potential for storm damage did not stop the community in Ocean City from building their resort bigger and better than ever after the same 1962 storm.

Ocean City and the 1962 Storm

On the day of the 1962 storm, residents of Ocean City declared to the *Salisbury Times* that it had been worse than a hurricane. Citizens of the town who had lived through past hurricanes also described the storm as such a turning point. One evacuee, Lester Wise of Cape Isle of Wight, was interviewed by phone from Buckingham Elementary School. Wise said, "the storm was the worst we've ever had. No comparison to anything we had before...I'm glad I'm in the life insurance business and not in the property insurance business." Wise was the assistant manager at People's Life Insurance Company in Pocomoke City.

In the aftermath of the storm, some Ocean City residents even tried to have a good laugh at some of their survival stories from the storm. William and Beryl Dryden of the Eastern Shore wrote a book of humorous storm stories called *The Tides of March*. In order to accumulate their storm stories, the Drydens sent surveys to all households in the areas struck by the horrific Northeaster. In one story, two women who shared a home left behind jewelry and fur coats. However, they packed income tax records because they were too scared to go to jail for tax evasion. Another woman floated to safety on two picture windows when she found herself in the midst of swirling debris. When one man returned to his flooded home he commented that, "it is harder to dump seventy-five gallons of unused water than to draw it." These stories captured the attitude of citizens and probably officials too in Ocean City. Despite the hazards, death, and destruction of

property from the flooding and wind, people were still willing to rebuild in Ocean City, even though there was the ultimate possibility of another storm. They were also willing to rebuild, despite the fact that it was not cheap to pay for private flood insurance. As we can see from Ocean City today, town residents made good on their word and they did rebuild to make the stretch of land from the Inlet to the Delaware line improved and better than ever.

Twenty years later *The Salisbury Times* did another article on the March 1962 storm. In the article, Ken Terrell interviewed Councilman George Feeley. Feeley remembered that during the storm he and his wife Sally refused to follow the evacuation order. They had evacuated five times previously for storms that did not end in devastation. According to the article, "the couple's determination to stay gave them a front row seat during what may have been the most devastating storm to strike Ocean City and the rest of the Delmarva Coast in this century. Only the Hurricane of 1933, which split the resort from neighboring Assateague Island, has rivaled the fury whipped up by Mother Nature 20 years ago this weekend."25 By 1982, Feeley had become a council member in town. He said that by the time he and his wife recognized the danger that they were in, refrigerators were floating around them on the street and their carport had collapsed on their car. The first floor of their home filled with water and they had to retreat to the second floor to spend the night. 26 From this follow-up story 20 years after the storm, it would appear that the storm was as severe as the residents claimed on the day of the storm. Former Mayor Roland "Fish" Powell also lived through the 1962 Storm. According to the former Mayor, a born and bred Ocean City native, prior to 1962 no one had seen a storm in Ocean City with such magnitude. In the Storm, many

buildings were destroyed, and those buildings that were not built on pilings were torn to pieces.²⁷

During the March 1962 Storm the tides rose to five feet over normal in Ocean City and caused millions of dollars in damage. Ocean City was very hard hit from the inlet to the "gold coast" at the north end of town. The "gold coast" was the newer area of town that consisted of high-rise and luxury condominiums. Ocean City was completely cut off from communications with the main land. Chincoteague Island was also isolated from communication and damage at Wallops Island alone where NASA was located was estimated to be in the millions. Property damage in Ocean City was very extensive:

Along the Maryland Coast, there were smashed beach houses, flooded poultry houses filled with thousands of dead birds, and debris from fallen limbs and service lines. High winds whipped rain and snow throughout the afternoon and night. Tides were estimated at five feet above normal. Many people were saying the storm was worse than the 1933 hurricane which cut the inlet through Ocean City... There were reports and rumors that a new inlet had been cut through in North Ocean City, but it could not be confirmed this morning.²⁸

As we know from Ocean City today the inlet that appeared to cut through North Ocean City on the day of the 1962 Storm was not a permanent fixture.

The Red Cross set up an emergency shelter for Ocean City residents at the Buckingham Elementary School. Entire families went to the shelter including wives, husbands, children, and the elderly. At least five families reported seeing their homes vanish into the ocean. The police and Coast Guard assisted in the mass evacuation operation. It was estimated that the winter population at the time in Ocean City was between 900-1,000 people. Everyone was asked and encouraged to evacuate. People awaiting evacuation waved clothing and other articles at the amphibious duck rescue vehicle that transported the evacuees to buses on to the other side of the Sinepuxent Bridge.²⁹ By Thursday, March 8, 1962, at least nine people were dead and coast areas

including Ocean City were still isolated from the mainland. There were millions of dollars in property damage estimated from Lewes, Delaware to Chincoteague, Virginia. As the storm damage grew, *The Salisbury Times* reported that the wintry storm was the worst of modern times. Of the nine victims of the storm, six children drowned and one man died of a heart attack from the shock of the storm.³⁰

An editorial on Thursday, March 8, 1962 suggested only one day after the storm that Ocean City would most likely rebuild again:

Ocean City seems to thrive on disasters. The great storm of August 1933, in which the ocean and bay met, brought the resort one of its greatest assets, the Inlet. And since then Ocean City has borne the brunt of hurricanes only to rebuild, bigger and better than ever. This week's storm, however; exceeds all disasters that have ever struck the resort. The boardwalk has been ripped up for blocks, carried away by the waves and smashing everything in its path, Motels have been demolished, leveled. Almost every building on the resort island is damaged by four foot tides that swept through the streets. Ocean City has undergone a crushing blow. Perhaps the boardwalk won't be restored in time for the traditional Easter Parade. But there are more than two full months before the Ocean City season gets in full swing. And, knowing the folks of Ocean City we know that by the time the first vacationer arrives to bask in the sand Ocean City will be restored, not the same, but bigger and better than ever.³¹

Without any regard to the death and destruction of property that could occur from one single storm, this editorial is a premonition of the development that was about to occur in the late 1960s and 1970s in Ocean City.

A few days after the 1962 Storm state highway officials were given \$500,000 and 1,500 prisoners to begin to help with the clean-up mission in Ocean City. Worcester County was declared a disaster area and loans for rehabilitation were available at a rate of three percent over a twenty-year period. President John F. Kennedy declared the Mid-Atlantic coast of the United States a disaster section. Governor Millard Tawes of Maryland, after flying over Ocean City by helicopter, said that, "It was the most destructive tide and flood I've ever seen...it is a terrible sight to behold." So many people wanted to view the destruction that police had to bar spectators from the resort.

Property owners were allowed to enter with a valid identification and a pass from the police. Members of the National Guard were on duty with loaded weapons to protect destroyed properties from scavengers.³³

Prior to the March 1962 Storm, there were plans for a bridge to be built linking Assateague Island to the mainland. The 1962 Storm led many people to begin to have major doubts about development on Assateague. The historian Dean Kotlowski described the damages on Assateague because of the 1962 Storm:

Over three days, the 'Ash Wednesday' storm, one of the worst nor'easters in memory, pounded the coastline from Virginia to Long Island. In as many as five places, the Atlantic Ocean swept across Assateague and into Chincoteague Bay, wiped out dunes, overran swamps with sand, and demolished 'all but a dozen of the island's forty buildings.' The storm obliterated the only paved road on Assateague – now described as both 'sinking and migrating toward the west.' 34

Just as the storm caused large amounts of damage in Ocean City, it also destroyed nearly what little development had been undertaken on Assateague Island. The devastation of the development on Assateague paved the way for the current National Seashore.

By March 10, 1962, property damage was estimated at \$7.5 million dollars in Worcester County alone. In the storm, thirty homes and fifteen businesses were destroyed and 200 more were damaged.³⁵ Many people lost fortunes and major investments from property damage. Private insurance did exist to cover property loss from water but many did not have it because the rates were prohibitive. Most people had insurance to protect against wind, fire, and theft. The Irvin Family lost their entire apartment building in the storm. Irvin told *The Salisbury Times* that he and his wife had nothing left. Their entire life savings was invested in their property. The income that the Irvin family lived off came from their rentals during the summer months.³⁶

On March 14, 1962, a Worcester County building code went into effect in the surrounding areas of Ocean City. The code affected Ocean City proper, North Ocean City (the area that would soon become known as condominium row), Ocean Bay City, Isle of Wight, Fenwick, and Assateague Island. The areas outside of Ocean City Proper were still considered a part of Worcester County. According to the *Salisbury Times*, "The measure regulates the design, construction, reconstruction, razing, demolition, moving, or removing of buildings and other structures. It was put into force to protect the health, welfare, and public convenience of the residents."

After the storm, new rules and regulations were passed by the county regarding foundations. Foundations of new buildings would have to be built on cement pilings.

The pilings would have to be built so that water could run underneath the buildings during a bad storm. The buildings are still built on these cement pilings even today.

According to Mayor "Fish" Powell, there was four feet of sand on Coastal Highway after the storm. In an interview Mayor Powell reminisced about the '62 storm, "to have four feet of sand, there had to be four feet of water on the highway at one point." Mayor Powell remembered that it was not just Ocean City, Maryland. There was complete devastation from New York to Florida because of this storm. The Mayor also recalled that the State Government was very efficient in helping to restore the Town of Ocean City after the storm.

In order for Ocean City to be rebuilt after the storm of 1962, a great deal of funding was required. Representative Thomas F. Johnson introduced a measure that asked a \$500,000 grant to rebuild the town of Ocean City and the beach. Johnson wanted to meet with other federal officials to discuss implementation of the Federal Flood

Insurance Act of 1956 which as previously noted was revoked after nine months due to lack of government funding. Johnson also desired to meet with members of the Army Corps of Engineers to discuss beach damage and what could be done in the future.

Discussion of building a seawall was also to take place in a meeting with federal and Army Corp officials.⁴¹

The Army Corps of Engineers sought legislation that would prevent the leveling of sand dunes for construction of homes and businesses. Dr. Johan Groot, a Delaware geologist, thought that the oceanfront might be receding from six inches to a foot every 100 years. In his inspection after the Storm of 1962, Groot found stumps left over from the forests of the pre-historic past. The stumps were exposed by the violent winds and tides. Groot believed the exposition could be a part of the changing of the shoreline that took place over a hundred-year period. However, the problem was that storms that strip away all of the dunes would accelerate erosion. In such storms, the dunes were stripped away and the gentle slopes of beach disappeared, causing faster erosion. According to Groot, long-range planning was necessary for Ocean City, Rehoboth Beach, and Assateague to remain in future generations. 42

By mid-April of 1962, Ocean City was already well on the way toward rehabilitation. It was expected that the usual Memorial Day crowd would return to their usual lodging accommodations and restaurants. Mayor Hugh T. Cropper thought that most vacationers would hardly be able to believe that a few weeks before almost all of Ocean City was under water and almost destroyed. A new boardwalk was built from Division to 26th Street. At 9th Street, a popular teenage hangout, all of the stores and refreshment stands were newly renovated. By summertime, the beach was expected to be

firm, clean, and bigger than ever before. Thanks to dredging efforts, a sandbar that existed 150 yards from the city resulted in the buildup of new sand. The Inlet and Sinepuxent Bay were ready for the action of anglers and boaters. The Army Corp of Engineers settled on the dredging of two breaches, one adjacent to the Inlet and one mile south, near Assateague. The dredging was to be completed by May 15, 1962. One year after the 1962 Storm two articles appeared in *The Washington Post*. The first was a small article simply stating that President Kennedy approved an additional \$2.35 million for Maryland, Kentucky, and North Carolina. Immediately after the storm in 1962, Maryland received \$1,900,000 for storm rebuilding.

In 1963 on Assateague Island, Secretary of the Interior Stewart L. Udall declared the barrier island unsafe for development. The island was declared unsafe because of erosion and vulnerability to storms. After the Storm of 1962, only 18 of 50 cottages on Assateague remained on the beach. It was ironic that officials were now concerned with and against development on Assateague due to the laws of Mother Nature; yet, officials and locals alike saw no problem with giving over \$2 million to re-build Ocean City. The locals were willing to rebuild both Assateague and Ocean City; however, the government was against any structural redevelopment on Assateague, preferring instead to institute a phased approach.

Section III: The Passage of the 1968 National Flood Insurance Program and Ocean City's Entrance into the Program

In 1968, the National Flood Insurance Act was passed after many years of the government approaching the flood dilemma from a structural perspective. The usual

approach of Congress had been to build levees, dams, and other water control devices and structures. Even with the structures, disasters still occurred. The National Flood
Insurance Program was a new approach on the part of Congress. The program provided federally subsidized flood insurance to people that lived in areas that the government considered flood-prone. In order to qualify for the subsidized insurance the communities had to pass government-approved laws to regulate land use within the flood plain. In places like St. Charles, Missouri where river flooding was inevitable, the program thrived. Although structural measures provided a level of protection, the insurance was important because in some cases floods still occurred in areas where there was structural protection. Sometimes, people still lost homes and valuables even when structural measures were in place. 46

When a community entered into the National Flood Insurance Program, they were first under the "emergency phase." In the emergency phase, the community had to pass laws that protected the floodplain from unwise land use and development. In return, the residents of the community received heavily subsidized flood insurance. However, after the emergency phase, the community had to move into the regular phase. The rules in the regular phase were stringent, and individuals and businesses in the flood-prone areas were required to pay higher premiums. In order to calculate the rates, the Army Corp of Engineers was sent into the community by the federal government to draw maps of the areas that might be damaged in a "100 year flood." Federal guidelines stated that the term "100 year flood" meant that in flood-prone areas a flood had a one percent chance of occurring in any given year. According to Ted Steinberg, author of *Acts of God: the Unnatural History of Natural Disaster in America*, the term is misleading because, "it

makes you think it's something only grandchildren will have to worry about."⁴⁷ In fact, the same chance of flooding (one percent) exists within one single community each year. Rate determination was difficult for flood insurance because historical studies on flood loss did not show a cyclical pattern. In some locations, such as in St. Charles, Missouri, floods occurred predictably every year. In other areas floods only occurred once in awhile, or even only once in recorded time. The use of the flood plain and changes that occurred in the land made the flood predictions for rate determination even more difficult. ⁴⁸

Prior to the 1968 passage of the National Flood Insurance Program, the federal government usually responded to flood disasters on a case-by-case basis. In the 1960s Congress worked to re-define Federal Policy and approaches to flood disasters. The Southeast Hurricane Disaster Relief Act was passed in 1965 in response to Hurricane Betsy, which caused considerable flood damage in the Gulf States. In the act, flood victims were provided some disaster relief and a feasibility study of a national flood insurance program was authorized. The report that was produced after the study was called "Insurance and Other Programs for Financial Assistance to Flood Victims."

In 1966, House Document 465 offered a perspective from the Bureau of the Budget Task Force in Federal Flood Control to the President of the United States. House Document 465 was titled "A Unified National Program for Managing Flood Losses." One intention of the document was to improve the basic knowledge of the population on flood hazards. The Bureau wanted to coordinate and plan new developments in the flood plain, provide technical services, establish a national program for flood insurance and adjust federal flood control policy to the changing needs of the country. On the first page

of House Document 465, President Johnson expressed his concerns about flooding in a letter to the Speaker of the House John W. McCormack:

On many occasions, I have expressed my concern for the need to manage wisely America's water resources. For all our people, this country's inland streams and coastal waters are a source of well-being, both material and spiritual. But they are also a source of great personal hardship. Despite our flood control achievements in the past 20 years, which have averted an untold number of disasters, our river system and coastal waters are still dangerous friends. They still cost us, every year, more than a billion dollars of our wealth. 50

The National Flood Insurance Act of 1968 followed House Document 465.

House Document 465 provided the main structure for the 1968 Act. The goals of the 1968 Act included: indemnification for individuals for flood losses through insurance, reduction of future flood losses through better management of the flood plain, and reduction of federal expenditures on disasters such as flooding. The goal of the Federal Government in regard to flood policy was to become better prepared for national disasters. They wanted citizens who did lose their property in a flood loss to be compensated, but not at the expense of every taxpayer in America for every disaster. They believed that if development in flood prone areas were properly regulated, then the amount of property destroyed in major floods would dwindle. Clearly, federal officials were becoming increasingly concerned about the amount of money being spent by the government in flooding disasters. There was one key provision contained in Section 1315 of the Act:

After December 31, 1971, no new flood insurance coverage shall be provided under this Chapter in any area (or subdivision thereof) unless an appropriate public body shall have adopted adequate land use control measures (with effective enforcement provisions) which the Director finds are consistent with the Comprehensive Criteria for land management and use under Section 4102 of this title.⁵¹

In order to enter into the Flood Insurance Program, the community had to adopt floodplain management regulation that met or exceeded the government's floodplain

management criteria. The National Flood Insurance Program (NFIP) also strove to map and identify all floodplains in the United States. If the floodplain were mapped, then people might become more aware of the hazards associated with flooding. The maps also provided data to help the NFIP determine rates for insurance.⁵²

Congress realized very early in the history of the NFIP that existing structures in the floodplain would have to be subsidized by the federal government to insure. If the premiums were not subsidized, then insuring these properties would have been extremely expensive. Many of the buildings that already existed in the flood prone areas were built by individuals who were not informed of the flood hazards associated with their property or simply were not concerned with them. The NFIP called these buildings "Pre-FIRM" or pre-Flood Insurance Rate Map. The Flood Insurance Rate Maps were developed by the Army Corps of Engineers and had to be approved by each local community. The pre-FIRM buildings were built prior to the formal assessment of flood risk in the community. ⁵³

Constructions built after the adoption of the community's FIRM map would have to comply with the regulated flood plain ordinance. Existing structures also needed to be improved in exchange for the government to subsidize the premium. According to Mayor Fish Powell, such improvements would have included the construction of buildings on cement slabs. Prior to the new government regulations, a flood could undermine the way buildings were constructed. The builders would dig a ditch, pour the cement, and it was assumed that the steel would hold firm.

After the initial Flood Insurance Rate Map was approved by the local community, full actuarial rates reflecting the true flood risk would be charged. Unfortunately for the

federal government, communities were not quick to join the National Flood Insurance Program. When Tropical Storm Agnes hit the East Coast in 1972, very few property owners were insured by the NFIP. The subsidizing of the existing buildings was not enough of an incentive for communities to join the NFIP. Communities did not want to be directed as to where they could and could not settle by the federal government. They also did not like that their constituents would have to pay increased premiums for their flood insurance once they were more settled into the NFIP. During Tropical Storm Agnes, there was extensive riverine and coastal flooding on the East Coast. At the time, there were only 95,000 policies in effect from 2,200 enrolled communities in the entire United States.⁵⁶

Because of all the disaster assistance given after Tropical Storm Agnes, Congress passed the Flood Disaster Protection Act of 1973. This Act would not allow federal agencies to provide financial assistance for the construction of buildings in a community that did not participate in the NFIP by July 1, 1975. The Federal Agencies were also prohibited from providing disaster assistance in certain flood plains. Regulated lenders had to require flood insurance on grants and loans on new construction in Special Flood Hazard Areas. These areas are land within the floodplain that has a one percent or greater chance of flooding in any given year. This requirement was called the Mandatory Flood Insurance Purchase Requirement. Because of this requirement, many more communities joined the NFIP in the years following Tropical Storm Agnes. By 1977, 15,000 communities had joined the NFIP. This was a huge increase since 1973 when only 2,200 participated. In addition, by 1977, 900,000 more policies were in force than in December of 1973.⁵⁷

The creators of the National Flood Insurance Program thought that eventually with time and natural forces pre-FIRM structures would be eliminated. However, due to modern building techniques, some of these structures have lasted much longer than expected. The number of structures has decreased, just not as fast as the original creators thought. Severe floods, natural attrition, redevelopment, acquisition of flood damaged structures, and flood control projects have contributed to the decrease in Pre-FIRM structures. 58

The National Flood Insurance Act was funded by the National Flood Insurance Fund, established by the Treasury in the original 1968 Act. The premiums collected by the NFIP were deposited into the fund and losses as well as operating expenses were paid out of the fund. The program could also borrow up to \$1.5 billion from the Treasury. However, they had to repay what they borrowed from the Treasury with interest. Until 1986, Congress appropriated the money for salaries, program expenses, the cost for mapping, and floodplain management. Congress made the NFIP pay these expenses out of premiums from 1987-1990. In 1991, the NFIP began to charge a \$25 fee to all policies to pay for these expenses. ⁵⁹

Today, the NFIP consists of three major parts: identification and mapping of the flood prone communities, requirement of the adoption and enforcement of floodplain management requirements, and the provision of flood insurance. The Mandatory Purchase Requirement, the Community Rating System, and the Flood Mitigation Assistance Program also played important roles in the NFIP. As previously discussed, because of the mandatory purchase requirement all homeowners who wished to take out a loan to pay the mortgage on a home in the flood plain would be required by law to

purchase flood insurance. However, if you were financially able to purchase a home without acquiring a loan, then you were able to circumvent the NFIP. The Community Rating System (CRS) is still a major part of the NFIP today. The CRS is a program that communities may participate in voluntarily. It recognizes communities that go above the minimum requirements for the NFIP. If communities go beyond the requirements, then they are rewarded with a discount on their premium rates. The CRS has three goals: to reduce flood losses, to facilitate accurate insurance rating, and to promote the awareness of flood insurance. CRS rates communities on a scale of 1-9, with nine being the highest score. Ocean City is ranked as a Class 7 since October of 2006. The citizens of Ocean City receive a 15% reduction on their flood insurance premiums. The Flood Mitigation and Assistance Program (FMA) is an important part of the NFIP now, but it was not authorized until 1994. The goal of FMA is to help states and local communities plan for flood mitigation and to implement measures to reduce further flood loss. The funds from the program are used in helping to prevent disaster.

In 1979, the Federal Emergency Management Agency (FEMA) was established. FEMA was required to report to the President of the United States. The mission of FEMA was to "lead America to prepare for, prevent, respond to, and recover from disaster." At this time, the NFIP was moved from being under the direction of HUD to being under the umbrella of the FEMA. With the founding of FEMA, it was identified that one responsibility of the director was to continue the identification and mapping of the flood prone areas of the U.S. The flood risk was to be determined in all flood prone areas. From 1968 until 2002, it cost the NFIP over \$1.5 billion to map 19,200 communities. It was estimated that the flood maps were used 15 million times annually

for establishment of regulation in the flood plain, calculation of premiums, or to figure out whether flood insurance must be acquired in conjunction with the purchase of a mortgage.⁶⁴

Prior to FEMA, HUD was in charge of the administration of the NFIP. HUD called on a panel of experts to advocate a standard that could be used as a basis for risk assessment, insurance rating, and flood plain management. The group of experts recommended what was known as a "100 year flood." The term "100 year flood" meant that each flood plain had a one percent chance or greater of flooding each year during a 100-year period. This standard could be exceeded in a single year. Statistically, most properties had a one in four chance of having a flood during the duration of a 30-year mortgage. 65

Special Flood Hazard Areas (SFHAs) were determined by analyzing storm surge, wind direction, wind speed, wave heights, and other factors. Areas along coasts were determined by FEMA to be A-zones or V-zones. V-zones were the most hazardous coastal areas because they were subject to high winds and higher wave velocities than other areas. Areas were considered V-zones when they could support at least a three-foot wave height. A-zones were coastal areas that were landward of the V-zone. A-zones could be subjected to storm surge and waves; however, the waves would be less than three feet in height. FIRM maps indicated where both A-zones and V-zones within the community were located.⁶⁶

The entire peninsula of Ocean City, Maryland is located within an A-zone or a V-zone. The areas of land closest to the Atlantic Ocean are located within V-zones while the areas of land from the middle of the peninsula to the coastal bays are A-zones.⁶⁷

Ocean City entered into the NFIP officially on June 18, 1971 after a rough copy of the FIRM was established in July of 1970. The community finally approved the initial FIRM on December 19, 1975.⁶⁸ Former Mayor "Fish" Powell was a member of the Ocean City Council in 1971. At that time, the Council was trying to establish a beach building line. One the local subdivision charts the buildings were to be constructed away from the ocean. The Council passed ordinances at this time that would require the new constructions to be built at a certain height and dune line. Mayor Powell saw the NFIP as a beneficial program that would allow for the cooperation of many states to help protect their citizens against flood losses. He believed that the Mandatory Purchase Requirement was essential at the time because it made mortgages safer. According to Mayor Powell, "Ocean City's entrance into the National Flood Insurance Program was smooth; because of the 1962 Storm, Ocean City had already been focused on their building practices for the previous nine years." 69

During the early 1970s, the first Comprehensive Plan for Development in Ocean City was implemented. It began in 1967 and was completed in 1969 when Ocean City began to experience a rise in population. Other than a zoning ordinance in 1946, this was the first major attempt towards a town-wide Comprehensive Plan. Over the two years prior to the completion of the Plan, seven reports were submitted: background of planning (studies of population, economics, land use, and physiography), a general land use plan, traffic and transportation, community facilities, (including studies of needs for utilities, recreational facilities, and public buildings), the Capital Improvements Program (evaluation of financial resources and priority list of improvements that needed to be made), recommendations for revisions to zoning regulations and zoning district maps,

and finally, recommendations for revisions to subdivision regulations.⁷⁰ Mayor Powell recalled that the *Comprehensive Plan* was really the start of the Ocean City Planning and Zoning Department. New professionals were hired into the city government between the years of 1970-1972. The first full-time City Engineer was hired at this time and the Zoning Appeals Board came into existence. According to Mayor Powell, Harlem Bartholomew and Associates called on Ocean City regularly while there were creating the Comprehensive Plan and he fondly remembered the high quality of their speakers and advisors.⁷¹

Town officials and City Council members revised the Town Code of Ocean City in 1972. In this edition, the code was updated with building codes that had been passed since the 1962 Storm. Laws were officially established for building lines, erosion and sediment control, flood damage control, and foundation regulations and requirements. Building limit lines were established for the "restoration and maintenance of the beach and protection of oceanfront properties from storm water surges and for the protection of the public health, safety and general welfare, there is hereby adopted and established an oceanfront building limit." Building activity and construction east of the building limit line was absolutely prohibited.

The section on Article II in Chapter 36 of the Ocean City 1972 Code defined a dune and dune setback line. A dune was defined as:

Any naturally occurring or man-made accumulations of sand in ridges or mounds landward of the beach. "Dune" includes primary dune ridges, as well as man-made dunes where they exist. Formations of sand immediately adjacent to the beach that are stabilized by retaining structures such as but not limited to fencing, planted vegetation, and other measures are considered to be "dunes," regardless of the degree of modification of the "dune" by wind or wave action or disturbances by development. 73

Dunes were maintained to help prevent erosion and to control sediment from migrating.

The dune setback line was established to ensure that sand would be maintained and

developed properly. It was also protection from hurricanes and storms. Moving and disturbing any soil or sediment close to the dunes required submittal of plans to the Worcester County Soil Conservation District. The plans had to be reviewed and approved. The Worcester County Soil Conservation District might impose recommendations prior to the construction. In addition, in construction, all measures possible had to be taken to ensure that dunes and soil were not disturbed.⁷⁴

In building and construction, the Town of Ocean City required certain flood control measures. In any V-zone in town, an elevation of 16.5 feet above sea level was required for all buildings. Outside of the V-zones, buildings had to be elevated three feet above the base flood elevation. In all construction, elevation had to be such that drainage water could flow freely to streets and alleyways. All new construction had to have the lowest floor, including basements, be elevated. Fully enclosed areas under the casement could only be used for the parking of vehicles or building storage. Even if the area underneath of the building was fully enclosed, at least two openings had to be provided to allow for the drainage of floodwaters.⁷⁵

In 2001, Ocean City developed its first Hazard Mitigation Plan. This plan was developed because of the increasing population and because of the planning requirements that were necessary in the event of a disaster where federal assistance might be needed. The Federal Stafford Disaster Relief Act, the Flood Mitigation Assistance Program (part of the NFIP), the Maryland Hazard Mitigation Grant Program, and the Comprehensive Flood Management Grant Program all required Ocean City to have a Hazard Mitigation Plan. The goals of the Hazard Mitigation Plan were to assess potential disaster

possibilities in Ocean City, to establish policies that would help to eliminate loss in future disasters, and to promote long-term solutions to repetitive loss issues.⁷⁶

An important section in the Hazard Mitigation Plan was a section that was designated to the identification of flood prone locations in Ocean City. As previously mentioned, the FIRM or Flood Insurance Rate Maps showed the locations of the 100-year flood plain in Ocean City. All of Ocean City existed in A-zones or V-zones. FEMA also had a system for developing Repetitive Loss Properties. A Repetitive Loss Property was defined as a property that experienced two or more flood losses, with claims of \$1,000 or more during a ten-year period. Identifying and mapping the locations of these properties was important because it helped to highlight where the more flood prone areas of Ocean City were located. It also helped to assist in preventing more property damage from occurring any more in the same locations.⁷⁷

In 2001 when the Hazard Mitigation Plan was developed for Ocean City, there were 7,000 buildings in town. Of those 7,000 in 2001, only 1,700 stood since before 1971. These buildings were considered Pre-FIRM. The other 5,300 buildings were built after the official FIRM map for Ocean City was developed. Many buildings were destroyed and re-built after the 1962 storm. In the case of flood insurance, it was not just necessary for the building to be insured but also the personal property within the building. This was important because of the number of condominium units in Ocean City. There were actually more housing units than buildings. There were 26,317 housing units compared to 7,000 buildings. All of these buildings were located within the flood plain and were susceptible to flood damage. ⁷⁸

There were important natural areas located within the Town of Ocean City that provided beneficial functions in regard to flooding. The first important line of defense of property during a storm was the beach, including the dunes. The Town believed that preserving the beach and dunes were major priorities in preventing flood issues.

Wetlands on the bayside were also important because they provided storage for rising waters. Habitats for fish and wildlife were important because they also provided open space for flood protection.⁷⁹

Prior to the entrance of the Town of Ocean City into the National Flood Insurance Program in 1968, development plans began for new construction in Ocean Pines. Ocean Pines was an area of Worcester County just across the bay from the Town of Ocean City. The importance of this was that Ocean Pines would become a community of permanent year-round residents. Ocean Pines was planned to be built in the Jenkins Neck section of Worcester County. The subdivision was divided into 10,000 residential lots, very different from the 1,000 that usually resided in Ocean City proper during the winter. In addition to the development in Ocean Pines, a bridge was also going to be built in the same area over the St. Martin's River connecting Ocean Pines directly to Ocean City. Rolling For the Ocean Pines Development was the beginning of large-scale construction that would occur in or near Ocean City during the late 1960s and early 1970s.

For one seeking to understand the context of construction prior to the late 1960s and early 1970s, the case of Carolyn Cummings proves instructive. Cummings is a member of the Worcester County Planning Commission. Ms. Cummings has been in Ocean City since the 1960s. She once owned an amusement park and a convenience store. She is presently owner of a campground in West Ocean City. Because her

business was always seasonal, she found herself becoming involved in politics during the winter months. In 1990, she was appointed to the Planning Commission and she has been on the Maryland Coastal Bays Program Board of Directors since 1996. In an interview, Ms. Cummings described what Ocean City was like before the grand time of new construction in the late 1960s and early 1970s. In those years in Ocean City, Ms. Cummings remembered that there were many waterfront shacks on the beach. She explained to me, "These were shacks that the owners probably wouldn't have cared much if it were washed away. There were also many squatters in those years. The squatters were people who would come and camp on land and in shacks that they did not own." The shacks were hardly more than one room and the owners of the properties often thought that they acquired land that was not of any value. As we will see in the next section, Ocean City began to change from this picture in the late 1960s and early 1970s when major construction projects began. Major construction occurred not only in Worcester County in Ocean Pines, but also on the peninsula of Ocean City.

Section IV: The 1970s in Ocean City - A Wave of Major Development

The 1970s was a time for major development in the town of Ocean City. Many Marylanders that were children in the late 1970s and 1980s can remember vacationing in the newly built "condominium row" in North Ocean City. One of the landmark high rises in North Ocean City was the Carousel Resort owned by Bobby Baker. Baker was very well known in society circles around Washington, D.C. He worked as a Senate page and a secretary to the Senate Majority under Lyndon Johnson. In his position, he marshaled votes and handled campaign funds. Among the Washington circles he was referred to as

"Lyndon's boy." Baker was well known for his holdings in real estate, including his flashiest in Ocean City, the Carousel. The Carousel opened officially on July 22, 1962. Although it was constructed six years earlier than the other high rises at condominium row, it set the precedent for North Ocean City. 83

In 1968, six years after the Carousel was built, James B. Caine constructed a summerhouse directly on the public beach just north of the Carousel resort. Many people in Ocean City, including Mr. Baker, were in opposition to the swank summer home. They did not like that the house projected further out onto the beach than the Carousel itself. They also did not like that the summerhouse would obstruct the view from the Carousel's dining room. Mr. Baker called the summerhouse, "an eyesore for the whole Maryland beach."84 Mr. James B. Caine, a major developer in town, believed that the \$50,000 beach house would be able to withstand the raging waves and wind that sometimes struck the beach during storms. Even Baker believed that no building should sit directly on the beach as the summerhouse did. At the same time in 1968, Ocean City had not yet entered into the National Flood Insurance Program and there were no laws prohibiting Mr. Caine from building directly on the beach. Caine owned the property up to the dune line and had a special permit from the Town of Ocean City to build the summerhouse on the beach. The major controversy stirred by the summerhouse was that the town always controlled the beach of Ocean City until the building line or "high water mark." Thus, the beach where the summerhouse was built was considered by most to be public beach. 85 Today, the summerhouse no longer exists; however, it stirred quite a controversy between Mr. Caine and Mr. Baker.

Caine did not only stir controversy in town with his summerhouse on the beach, but also with his new 100-acre development that was eventually built at 117th Street. In order to build at this location, Caine intended to fill the land with dredged material from Assawoman Bay to construct the foundations. Conservationists worried that filling the land would result in a destruction of the natural wildlife balances of the Assawoman Bay. The mayor, Hugh Cropper, supported Caine's development because he was looking forward to the tax revenues that would be brought to Ocean City by the new development. The Chesapeake Bay Affairs Commission and the Department of Game and Inland Fish claimed, "Such a project will use and destroy such a large area of public owned bottom and marshland."

Fill earth, the product from the bay that would be used to develop the land, was also to be used at Caine Keys, built in 1970. Caine justified his actions by explaining the tax revenues that would be brought to the city because of the development. He explained the situation at Caine Keys, "Before we went there, the place was just a marsh, where taxes to the county were never more than \$100 a year. Now 500 lots are available for home sellers. They would add a million or more to the tax basis of Ocean City." Caine intended to dredge earth from the bottom of Assawoman Bay and fill a bulkhead section that was a former marsh. He asked the Army Corps of Engineers and the State Board of Public Works to secure the dredge and fill for his new development. Caine promised to build water and sewer lines and to construct streets.

As the potential for more people to vacation and reside in Ocean City grew, especially with so many new housing developments such as Caine Keys, the concern for hurricanes and other major disasters rose as well. Prior to Ocean City's passing of the

NFIP, scientists were aware that hurricanes would be begin to have a greater effect on the Delmarva coast. An article was published in the *Baltimore Evening Sun* on July 23, 1968 about the change brought by hurricanes to the inlets of Delmarva. Scientists became concerned that if a hurricane did hit Delmarva directly, devastating damage could be done to these beaches and resorts that would cost millions. The hurricanes and other storms that did cause damage on the coast were known to create new inlets and destroy old ones.⁸⁹ The concern of the scientists was that if a major hurricane hit, then the repair bill and lost property would be astronomical, especially in light of so much recent development.

The most famous example of inlet formation in Ocean City occurred on August 22 and 23 of 1933. The storm caused an estimated \$30-40,000,000 worth of damages in Maryland and \$700,000 in Worcester County alone. Fortunately, in Ocean City no lives were lost in the 1933 storm. Damage along the boardwalk was minimal and businesspersons in the resort felt the formation of the Inlet was the most fortunate thing that could happen to Ocean City. The Inlet would allow direct sea access for commercial anglers. The new Inlet was twelve feet deep and 200 feet wide. The entire barrier island was sliced in half separating Fenwick Island, Delaware and Ocean City, Maryland from Assateague Island.

While some developers might ignore the warning, according to E.H. Volkes, an average of one hurricane per year with a direct or fringe effect touched the Maryland Shores. Volkes said that Maryland felt seventy-four cyclonic storms in the past seventy-five years prior to 1967. The scientists did believe that Maryland's coast was situated just so, that it was often fortunate enough to escape frequent extreme damage and loss of

life. However, that was not to say that it might not happen. As seen in Section II, the March 1962 Northeaster did have a devastating effect on Ocean City. ⁹² It seemed ironic that even though scientists predicted a jump in storm activity in the 1970s, expanded development was already begun in the late 1960s in Ocean City.

August of 1968 was the thirty-fifth anniversary of the 1933 hurricane that carved the Inlet of Ocean City. Aged twenty-three at the time, Mayor Cropper could remember the Storm of 1933. He blamed the carving of the Inlet on the evening tide. Mayor Cropper also said that the storm was really more like a northeaster than a hurricane. In the Storm of 1933:

The angry ocean swept over the beach, carrying with it a couple of small hotels. And as it sliced through the beach to meet the bay it swept away fishing huts, boats, the old railroad bridge, and eventually the highway bridge. This left Ocean City isolated with no means of getting to and from the island except by boat.⁹³

To the Mayor's recollection, no death resulted from the storm; however, he confirmed that the damage in Ocean City and on the rest of Delmarva was extensive. The Mayor believed that it was the inlet that made Ocean City the White Marlin Capital of the world. The result of the formation of the inlet was that Ocean City would become an even bigger resort and a gathering place for sport anglers. Again, we see no concern here for the potential death and injury that could have occurred in such a violent storm. It was inevitable that such storms as the Storm of 1933 might happen again.

In the fall of 1968, Ocean City again suffered damage in the resort areas. This time the damage was caused by hurricane force winds. Damaged signs, destroyed roofs from apartment buildings and motels, overturned trailers, broken windows with flying debris of shingles and siding resulted from seventy-five to eighty mph winds. Mayor Cropper said that this was "'the worst wind off the ocean in my memory." According

to Mayor Cropper Ocean City had experienced stronger winds from past hurricanes, but not from the east or northeast in his time. Fortunately, since the wind came at low tide, water was not blown into the city. Otherwise, extensive flood damage may have also occurred. The damage that occurred was located north of 48th Street. This should have been another reminder, in addition to the 1962 Storm to local residents and developers of the damage that could result from Mother Nature to buildings and property in Ocean City.

Despite the warning signs, development in Ocean City proceeded unfettered. By 1970, Bobby Baker's Carousel Resort began to receive competition from other high rises. In that year, the Caliban Corporation built a 14-story building at 100th Street called the High Point. The building cost an estimated \$8,000,000 to construct and contained 104 apartments. The apartments ranged from small efficiencies to two-story penthouse suites at the top. The building was the tallest on the Eastern Shore in 1970 and could be seen by motorists from miles away. The Caliban Corporation built a second similar construction, so that the two buildings formed a "U" shape facing the ocean. Eventually, the buildings became known as The High Point North and The High Point South. Owners of apartments in the buildings had amenities such as a 14-sided pool, beach storage closets on the ground level, sauna baths, electric heat, and some units even had fireplaces. The foundation of the construction was built on a series of heavy concrete pilings, driven deep into the subsoil. The building was also built of masonry construction. 97

Members of the local community in Ocean City were beginning to have concerns about the construction of high rises to the north end of town. In April of 1970, a movement gathered to oppose "the uncontrolled growth and spread of the popular Hi-

Rise buildings." The citizens were afraid that North Ocean City would begin to resemble Miami and experience the same types of problems. Local residents in Ocean City were concerned about the "shadows" that would be given off by the constructions in the middle and end of the afternoon on beautiful beach days. The sun on public beach would be blocked by the shadows from the buildings. Citizens wanted the Mayor and City Council to impose tighter controls on where the hi-rises could be constructed. Citizens also asked height limits to be imposed when necessary. It is not to say that these concerned citizens did not want new development. They wanted some of the older buildings in town to be replaced with newer structures, just not high-rise condominiums. Citizens wanted the new buildings to be restricted to only four or five stories and for hirises to only be allowed in certain zoned areas in North Ocean City. ⁹⁹ It would seem that concern for storm and flood damage of the new constructions should also be an issue, especially in light of the storm damage in the 1960; however, the largest concern of the citizens in this case was that the buildings might block the sun on public beaches.

Another article in the *Maryland Coast Press* cited Ocean City as being classified nationally with resorts such as Miami and Atlantic City because of the sudden wave of excessive development. According to the article, Ocean City was considered a "horrible example of unplanned sprawl, a commercial kaleidoscope...we are now 'a good example of the disappearance of natural beaches near populous areas." The article justified the classification as stating that Ocean City had become a factory. Many of the real estate developers lived in other states and built luxury resort homes in Ocean City. The article said that town officials only accelerated the problem. "The city 'fathers' fill in a few potholes in the street or pass a few ordinances, and they have done their part. Every

winter we are ecstatic as figures are published on how much money is being spent for new constructions."¹⁰¹ The article seemed to imply that the officials let the development occur because they were pleased with the money that was entering the public coffers.

Although this article may have been true in one aspect or another, some local business people and politicians believed that development was coming to Ocean City during those years no matter what. According to Mayor Powell, the development seemed to have begun as early as 1960. By 1970, the development arrived in full force and it was not just about the money that was gained for the town. People wanted land on the shore. They lived in Baltimore and in Washington, D.C. and they could afford it. Mayor Powell believed, "developers were building what the people were buying and could afford." On Assateague Island, prior to the 1962 storm many houses had already been built. After the homes were destroyed in 1962, the federal government made the island a national seashore. 102 After the 1962 Storm, people realized that Assateague Island probably would not sustain development because the federal government would not help them to rebuild. Assateague may have been viewed differently than Ocean City by the federal government because it had been broken away from the mainland since 1933. In the 1960s, development on Assateague had just begun. Citizens were already embedded in their homes and livelihoods in Ocean City and they were not willing to leave them. Although those living on Assateague wanted to rebuild their homes, the federal government saw Assateague as "untouched" compared to Ocean City.

Vasco Calcara, owner of Trattoria Lombardis Restaurant on 94th Street in Ocean City, would agree with the Mayor's statement. Calcara arrived in Ocean City from Italy in 1962. According to Calcara, the development had already begun to occur prior to his

arrival. In an interview, Calcara said, "in the 45 years that I have been here in my business, more and more people come every summer from Baltimore and Washington, D.C." He knows many of his customers that come every summer to the restaurant and meets new ones each summer. To these people, Calcara says Ocean City has become their home away from home. He believes that they have all wanted to acquire their own little pieces. 104

To prepare for such vast development in town, a bridge was going to be built from the mainland across the St. Martin's River and Sinepuxent Bay into the northern part of Ocean City. By 1970, the bridge was fully under construction. For two spans of bridge and highway approaches it cost the State Roads Commission \$12,000,000. The first bridge span ran from Route 113 across the St. Martin's River and the second span ran from the Isle of Wight into Ocean City. By building better access highways into Ocean City from the mainland, development on the barrier island was only encouraged.

Some locals seemed to capitalize and stir excitement over Ocean City's becoming the "Miami of the North." On July 8, 1971, Maryanne Montague wrote an article for the *Eastern Shore Times* about the newest development. She praised the economic opportunity that would be brought by the commercial development. She also thought that the newer section of North Ocean City would place the town into the limelight as one of the best resorts on the East Coast, as well as in the nation. She also praised the reconditioning of many buildings and properties in Old Ocean City:

Dependent greatly upon the economy and availability of funds, much lies in store for the oldest areas of Ocean City, involving land from the Inlet to 15th Street, within the next ten years. This is where Ocean City began and this area will undergo the greatest change of all areas. It is the most stable land and contains the finest beach area in the entire town. It is the potential gold coast area of the entire East Coast and the future area of large, elaborate sky-rise vacationing and business facilities of the period 1975-1982. Old Ocean City will, by 1985 be new Ocean City the most fabulous Resort area north of Miami Beach. The changes which have occurred in the past several years in Ocean City and which are taking place today and in the immediate future are many and

varied, but that which will take place from 1975 to 1982 will dwarf all, transposing Ocean City into the limelight as one of the top, if not the top, resorts in the nation. 1066

The extensive growth in Ocean City was also occurring in other areas such as Virginia Beach and Galveston, Texas. In an article titled, "Congress and the Coast," written in the *Environment*, Rutherford Platt referred to Ocean City, Maryland as a "condominium canyon." Platt does note that such "condominium canyons" are meant for second homes and rental investments. 107

With so many people acquiring second homes and condominiums on the shore, conveniently in 1972, the National Weather Service claimed to have greatly improved the warning systems for major storms. The Weather Director, George C. Cressman, claimed that there was the probability that such a storm would occur every twenty years; however, the risk always existed year after year. Cressman believed that the flooding that accompanied the Northeaster of March 1962 was actually worse than most that occurred in a hurricane. Usually in a hurricane, the storm surge continued for up to five high tides. The repetitive tidal action weakened many of the shoreline structures. Some buildings collapsed due to serious structural damages. Some of the older summer cottages were completely washed away in the Storm of 1962.

The National Weather Service claimed that with new improvements in warning systems, such damages might be predicted. One improvement was the Storm Reconnaissance Program. In this program, the National Weather Service, along with the support of NOAA, the Air Force, and the Coast Guard worked together to observe critical parts of the ocean off the East Coast. These agencies used satellites, reconnaissance aircraft, and giant ships at sea to monitor conditions. Before this program, it was very difficult for the federal and local governments to determine weather conditions in the

ocean off the nation's coasts. In addition, on the Coast Guard "Ship H," stationed off the coast of Chincoteague, Virginia, weather watching radar was installed. Observation of weather helped to better predict the height of storm surges, as well as to provide resorts with warning time in such storms. Although such storm warnings might indeed prevent loss of life during storms, it would seem questionable how much property damage might actually be prevented, especially to beach front real estate. The new warnings would be able to save lives but it still did not mean that people were going to be more concerned about the damages that could be done to property close to the beach. Most likely, developers would continue to build their ocean front condominiums and consider this new improvement in weather observation an extra safety measure. With the new system, condominium owners might have enough warning to be able to board their windows and lift their belongings higher in the event of a storm.

Ted Steinberg also discussed storm observation and its relevance to warning systems in his book *Acts of God*. Even though improvements have been made with warning systems, the National Weather Service and National Oceanic Atmospheric Administration (NOAA) are still not always perfect. On March 27, 1994, 100 parishioners were killed at the Goshen United Methodist Church in Piedmont, Alabama. The parishioners were killed in a tornado because of the glitches in the storm warning system in Piedmont. When this particular disaster occurred in 1994, NOAA's Weather Radio, the system that provided instantaneous weather alerts, only covered three-fourths of the country. Many rural areas were beyond forty miles of the transmitters and could not receive the warnings in time. The National Weather Service offices were also known to be chronically short staffed.¹⁰⁹ Property owners that are so close to the seashore are

still relying on warning systems such as the National Weather Service to help warn them of a major disaster. It is not to say that what happened in Piedmont might not happen in Ocean City with a flooding event. Even if people evacuate, they still may not have enough time to save their property.

As early as 1973, the state became concerned about the development in Ocean City. A bill (HB 41) was introduced in the state legislature that would "give the state the last word and through the Board of Public Works on any development or construction within 900 feet of mean high tide in the resort." Baltimore County Delegate John S. Arnick, Chairman of the House Environmental Committee, explained the concern, "'somebody has got to put some control over development in Ocean City. We are giving more and more consideration to state wide protection of critical areas...and the ocean shoreline should be looked at as an area of state concern." Those who spoke in opposition to the bill from Ocean City included: Del. Russell O. Hickman, Dale Cathell, Harry Connelly, Victoria Rinaldi, Robert Fryer, Robert Brown, and William Miller. Those who spoke against the bill were all residents and active members of the business community in Ocean City. Arnick planned to let this particular bill die if his land use control bill was supported. The land use bill proposed by Arnick was in competition with land use control measures called for by the Senate President. 112 Although those in the state may have been concerned about development in Ocean City, it appeared that Arnick was using this bill as a game of politics to gain support for his land use bill.

At the rate that development occurred in Ocean City in the 1970s, by 1973, it seemed to the Ocean City building inspector Brady Bounds that only a few more years remained for completely new buildings to be constructed in town. To formulate an

idea on the amount of growth that occurred in Ocean City between the years of 1950 and 1970, one can see the change from numbers of housing units provided by the Town of Ocean City in the 2006 Comprehensive Plan. From 1950-1959, 961 new housing units were built. From 1960-1969, 2,127 new units were constructed. Finally, we can see a huge jump in the 1970s. From 1970-1979, 9,407 new housing units were built. 114 Bounds suspected that by the end of the 1970s developers would have to construct new buildings that would replace existing structures. As we could see from the data provided by the Comprehensive Plan, construction was at a high in the 1970s. In the past, most apartment buildings were owned by one individual. In the 1970s, condominium buildings in which many different owners purchased units in the same buildings became much more prevalent. Even though federal, state, and city officials were concerned about the development level in Ocean City; many builders still felt the desire to construct new buildings. Because of so much development that occurred in previous years, builders now had to apply for more permits and go through more trouble to obtain them. Noise restrictions were also now in effect for construction during the summer months. 115

According to Mr. Brady Bounds, West Ocean City, the area connected to the peninsula by the Route 50 bridge downtown, would be the next part of town that would rapidly become developed. Bounds noted that property values in West Ocean City were steadily rising and he thought that construction would begin to occur as soon as problems concerning sewer and solid waste removal were resolved. Bounds believed that new jobs would be created in the area in the way of maintenance and other condominium attendant positions. However, Bounds made it clear that those people would not be able to live in the new, expensive buildings. The issue of lower cost housing would have to be

addressed. The developers as well as the new condominium owners did not seem to be concerned about storm damage of any sort to their newly built constructions. If more people were moving to Ocean City for year-round employment and to reside in lower cost housing, then storm damage to property should have become a broader, more important issue. People in Ocean City did not seemed to be concerned about the "what if" factor of another 1962 storm. Not only would owners of the new luxurious condominiums be affected by such a storm, but also all of those who moved to Ocean City for the job opportunities provide by the new condominium industry. If those people would be forced to live in lower cost housing, than surely the shoddy, lower cost housing would be affected by a future storm of the same scale as the 1962 Storm.

Two years after Ocean City entered into the National Flood Insurance Program, they faced suspension according to the *Eastern Shore Times*. The Department of Housing and Urban Development (HUD) informed the town that Ocean City was not adhering to the established guidelines required by the NFIP. As a result, if Ocean City did not agree to comply with the established guidelines, then they would be suspended from the NFIP. In addition, if the Town of Ocean City did not comply with the proposed guidelines for new buildings, they would also face the loss of federal disaster relief funds. Because the federal and state government spent millions of dollars to be rebuild Ocean City after the March 1962 Storm, they were insistent that the resort follow the established guidelines. If Ocean City did not follow the established guidelines, the government was not going to offer the funds to rebuild in the event of another destructive storm. The Town of Ocean City was having a real problem meeting the guideline of the 11-foot building mark, required by the National Flood Insurance Program. This was because many of the

buildings in the downtown area were older and it would be difficult for those property owners to raise entire buildings. This guideline proposed that all new buildings constructed in Ocean City must be 11-feet above the mean low-water mark. Mayor Harry Kelly met with officials in Washington, D.C. and asked them to re-evaluate the guidelines that were expected.¹¹⁷

Because of the Mayor's meeting, HUD agreed to bend the guidelines to 10 feet. The Mayor wanted the City Council to agree to the 10 feet height. Several of the Councilmen including Granville Trimper and E. Newt Cropper did not want to agree to the 10 feet. They felt that this was too much of a hardship on property owners. The Councilmen were concerned that all new buildings along the bay would now have to be built on stilts. However, HUD agreed to allow some variances to be granted on an individual basis. The City Planning and Zoning Appeals Board would be allowed to grant the variances on a case-by-case basis. The Planning and Zoning Appeals Board would also implement the 10-foot limit. If too many variances were granted, then HUD would assume control of the administration of granting variances. It was not mentioned in the article exactly how many variances would be considered too many. According to Mayor Kelly, "the federal agency would periodically monitor those exceptions to the 10-foot requirement, and if the exceptions were too frequent or appeared unjustified, HUD may assume administration of the variances."

The granting of variances raised the possibility of corruption. A situation where the granting of variances did become a problem was in the towns of Portage de Sioux and West Alton in Missouri. In these two towns, the National Flood Insurance Program was essentially a death sentence. The entire town of Portage was built between two and

eighteen feet below sea level. In 1982, FEMA conducted an investigation to see if local officials were really enforcing the correct regulations. In half of the cases where property owners sought to build below the 100-year flood line, the county's Board of Adjustment of Appeals granted variances. Because the Board granted so many variances, FEMA threatened to drop Portage from the NFIP. The Chairman of the Board was a farmer, Herbert Meyer. Meyer owned land in the flood plain. Meyer who was in charge of implementing the law claimed, "I don't believe in the flood program at all." When in the process of granting variances, the board ignored what was constituted as land at risk of 100-year flood. To decide whether or not to grant a variance Meyer asked the property owner if their land flooded in 1973. According to Steinberg, "if it didn't go under in 1973 it was good enough for them, and the variance was granted." Meyer and his board undermined the standard of protection and continued to receive federal money.

After a 5-2 vote in July of 1973, the Ocean City Mayor and City Council passed the flood ordinance that would restore Ocean City's status in the NFIP. The measure also assured that Ocean City would be eligible for federal disaster relief in the case of another major storm. If the city did not pass the ordinance, then Ocean City would have been ineligible for the NFIP as of January 1, 1974. The new ordinance required that all construction be built 11-feet high off the ground or above the mean low water mark. The Planning and Zoning Appeals Board would grant some exceptions. Mayor Kelly was afraid if the City Council did not pass the ordinance, then Ocean City would have been unaided in the case of a major storm such as the Storm of March 1962. After Hurricane Agnes in 1972, the federal government did refuse disaster aid to several towns in

Pennsylvania that did not participate in the NFIP. According to Mayor Kelly, 900 policies had been issued for the town of Ocean City by 1974. 121

Former Mayor "Fish" Powell remembered the issue between Mayor Kelly and HUD. "From what I can recall, Mayor Kelly had just become Mayor a few years earlier in about 1970. To my recollection, they simply disagreed on regulation negotiation."¹²² Mayor Powell was on the City Council at the time and said that after negotiations between Mayor Kelly and HUD that the disagreements were resolved. 123 Worcester County Planning Commissioner Carolyn Cummings vividly remembered the issue. According to Ms. Cummings, "the disagreement involved space underneath of the buildings. The space under the buildings that were raised 11 feet off of the ground was not supposed to be 'usable.'"124 The space was supposed to be used as a parking lot so that in the event of a floodwater could still flow underneath. Ms. Cummings recalled that some condominium buildings began to enclose spaces and place washers, dryers, extra bedrooms, gyms, and bars underneath their buildings. She believed that what really put Ocean City in jeopardy with the National Flood Insurance Program was the buildings that would not allow water to flow underneath because they were enclosed. Ocean City had to stop allowing such enclosures. 125

In December 1974, soon after the Mayor and City Council signed the ordinance to keep Ocean City in the National Flood Insurance Program, Ocean City experienced the worst storm since the 1962 March Northeaster. A storm hit the resort producing 60-knot winds and rain that flooded the lower sections of town. The Mayor did not think the storm was strong enough to warrant evacuation; however, there was still some damage that occurred. At high tide the water pushed under the boardwalk and onto the streets.

At 27th Street, two sections of the boardwalk were ripped apart. Due to the storm, the peninsula lost seven feet of sand in the natural process of erosion. The worst beach erosion took place at 12th, 13th, and 14th Streets. At this area, the peninsula turned toward the North. It was here that much of the sand was either washed into the ocean or out towards the street. According to Mayor Kelly, it would cost \$5,000 to clean up the mess from the storm and another \$5,000 to repair the missing section of the boardwalk. Most of the property damage in the resort consisted of broken windows and missing shingle from rooftops.¹²⁶

In the same month, an appraiser from Baltimore, Mr. Ronald Lipman, completed a study on sales progress in the resort. According to Lipman, Ocean City was reaping profits from rental housing and room revenues. In his study, he also said that the town was becoming more of a year-round community and resort. The study showed that 3,500 middle and luxury units were completed or under construction in twenty-four complexes. Of the 3,500 units, 360 were already sold and 1,842 were available for purchase. Lipman believed that the total units yet to be sold were 2,500. An additional 840 units were under contract. Lipman explained that because of the glut of condominiums available, the market was beginning to change:

The research study says that speculative buyers, hoping to 'hold' apartments for rapid appreciations in price, after making small down payments, gave an inflated picture of Ocean City's market potential. 'More and more speculators moved into the market place and ballooned sales figures to a level that was absolutely astonishing,' says Lipman. Land values also zoomed. 'What had sold for \$1,500 to \$2,500 per front foot went to a high of over \$6,000 per front foot within a period of 30-36 months,' on the beach. There has been a 40 to 50 percent drop from the highs of 1973, the study notes, of land value trends. Discounts offered on original sales prices to move probably range from 5 to 20 percent, says the appraisal study. 'Because prices have been reduced to levels close to and in some cases, below developers cost, it would appear that, for those interested in acquiring an ocean front condominium in Ocean City, now is the appropriate time to do so. 127

Lipman thought that this was a sign that Ocean City was beginning to recover from its over-built rash of development.¹²⁸ Even if people were not moving permanently to the beach to live in newly purchased luxury condominiums, they probably still intended for their properties to be vacation/rental investment.

Construction men that worked on the high-rise condominiums in North Ocean City began to refer to the condominiums as a long row of "white elephants." A few of the high rises including the Ramada Inn suffered a series of construction problems along the way causing completion to take much longer than expected. 129 Although the article did not mention it, an oil embargo was going on in the United States during 1973 that could have possible had an effect on the long row of "white elephants" in Ocean City. The price of oil greatly increased from 1973-1974. People can remember long lines at gas stations and economic depression. 130 According to Michael T. Klare, author of Blood and Oil, "the OPEC oil-price hike caused economic havoc in the United States." 131 After construction, in Ocean City of such complexes as the Sea Watch, Pyramid, Golden Sands, English Towers, Capri, Aquarius, and Atlantis – all built in the early 1970s – construction worker Jack Hickle predicted that there would never again be such a building boon in Ocean City. Many businesses in Ocean City including restaurants and shops received a great deal of business from the numerous constructions workers in town. It was predicted that as construction workers competed their jobs and moved home, and condominiums lay vacant, that many businesses would suffer. 132 As we enter into another major wave of development in Ocean City today, we can tell that the businesses did not ultimately suffer as the constructions of condominium row were completed.

As known from the status of Ocean City today, Mr. Hickle was not correct in his prediction that Ocean City would never again experience such a building boom.

Development today is again occurring and former Mayor Powell is not sure that is a good thing. According to Powell, this time around too many condominiums have been built.

The condominiums are sitting idle and they are not selling. The former Mayor compared today with the 1970s and claimed that in the 70s the condominiums were built and eventually all sold. He is not sure if that will be the case today. 133

As the middle of the 1970s faded into the early 1980s in Ocean City environmentalists continued to fear the consequences of so much building. Ilia Feher, head of the Worcester County Environmental Trust, believed that so much construction, especially of high-rises, motels, and hotels, "violated good ecological sense." Fehrer provided this response when her opinion was asked regarding the latest bulldozing activities in the wake of erosion caused by a treacherous storm. She did not believe such vast structures should be built on barrier islands. Fehrer did believe that the bulldozing was inevitable if the town was going to combat erosion. In 1981, the National Marine Fisheries Service and Department of Interior were concerned about the damage that bulldozing caused to marine life. Both environmentalists and the government were concerned that development may also begin to occur on Assateague Island south of Ocean City during the later 1980s. Assateague Island remained relatively untouched. The government bought more rights to insure that safeguards would protect Assateague. Environmental interest groups were in the process of purchasing land on Assateague to ensure that it would not be developed. Fehrer was insistent that because of the havoc that could be wrecked by nature, barrier islands should remain untouched. 135

The 1970s brought tremendous development in Ocean City, development that began in the early 1960s. During that time, Ocean City developed into the image that we can see today. Ocean Pines began to develop and the Rt. 90 Bridge was constructed. Although the NFIP came into effect in Ocean City in 1971, according to former Mayor "Fish" Powell and business owner Vasco Calcara development was already well underway prior to its passage. Some in the town thought that it was fortunate that Ocean City did choose to enter into the NFIP because there were several smaller-scale storms that occurred in Ocean City after the major Northeaster of March 1962. Even after almost being forced out of the NFIP in 1973, Ocean City chose to enforce the guidelines required by HUD to remain enrolled in the program. Some did fight the development in Ocean City but not for the reasons one might expect, as when locals protested the shadows from the high rises that blocked the public beach on summer afternoons. In the 1980s development continued to slow and the great era of building "condominium row" was finally completed.

Section V: The 1980s: An End of an Era

Just as it was the end of an age for high rises in Ocean City, MD in the early 1980s, it was also the end of an era for dam building in the American Midwest. When we consider the legacy that dam building left behind in the West, then we can envision such a legacy for Ocean City in regard to the high rises. The problem with the dam building in the West was that a construction of a dam such as the Auburn Dam would have to hold 2,400,000 acre feet of water; however, it might deliver only two or three hundred thousand acre feet a year. The dam would cost the federal government two billion dollars

to build in the late 1980s and early 1990s. The Hoover Dam captures 30 million acre-feet of water and delivers nine or ten million acre-feet per year. The Hoover Dam was finished in 1936 for \$48 million. Marc Reisner, author of *Cadillac Desert*, explained the problem of the constructing the Auburn Dam but also the problem of dam building in general, "If you are the Bureau of Reclamation, you are left trying to justify a dam that would yield 3 percent of Hoover's water, and perhaps 8 percent of its power, and cost ten times more in uninflated dollars. You also have to explain why you are building a gigantic dam next door to a presumably active earthquake fault." Obviously, the same point can be made in regard to Ocean City. Gigantic high-rise buildings were being constructed on the barrier peninsula, along side the Atlantic Ocean. Local officials saw the wrath of damage that can result from a large storm after the experience of the March 1962 Northeaster. Buildings that were replaced in the 1960s following the Storm of 1962 and the high rise buildings of "condominium row" built in the late 1960s and early 1970s would also be much more expensive to replace now after a major flooding disaster.

By the time President Reagan was in office in the early 1980s, feelings about the dams and NFIP were changing in the country. By the 1980s, the federal government stopped subsidizing the building of dams. In the days of the 1930s, members of the United States Congress cheerfully voted for each other's dam projects. According to Reisner in the 1980s:

But today, when a clutch of visionaries representing Utah water districts troops into the U.S. Capitol lobby for some new tax-payer financed dam, they get the same response... It's conceivable – Congress might find a little money for the project, if the local sponsors agree to pay, let us say, one-half of the cost up front. That is how water projects that are a matter of life or death become projects a region can't live without. 137

When Congress stopped subsidizing dam building, dams were no longer built.

New rules regarding the NFIP were to take effect on October 1, 1981. The rules were part of an attempt to reduce the rising cost of the NFIP. Property owners, who bought properties or already owned them on barrier islands, would have to pay much higher rates for the federally subsidized insurance. If owners decided to build on coastal property that was already damaged by a storm, they would also have to pay much higher rates. One billion dollars in claims were paid out to coastal and waterfront property owners in the first twelve years of the NFIP up to 1980 and these new regulations hoped to change this. 138

The Reagan Administration was concerned that the subsidized flood insurance in coastal areas was costing Congress much more than intended when the Plan was established in 1968. According to John W. McConnell, the acting director of the Federal Emergency Management Agency (that took over NFIP from HUD in 1979):

'It has become clear that the flood insurance rates for new construction in such coastal areas are too low'...He said that when premiums do not reflect the flooding risk in coastal areas, development is encouraged and tax payers who pay for losses in the insurance program are burdened.¹³⁹

Congress also attempted to stop development in barrier island areas that at the time already remained untouched. They wanted to stop issuing policies for any new development in these places. Atlantic City, Ocean City, Fire Island, Miami Beach, and Sanibel Island were a few of the barrier developments with which Congress was concerned. They did not want any new development on barrier islands beyond what already existed in these towns. 140

The already established communities would not be affected by the rules; however, federal flood insurance would be denied to any new or rebuilt properties on undeveloped barrier islands. Places that would be affected by this did not include Ocean City. The

Gardiners and Shelter Islands in Georgia and Lover's Key and Dog Island in Florida were affected by this. The original intention of Congress was to provide subsidized flood coverage to people in flood prone areas. They also wanted to save the federal government money in the end when damaging storms occurred. They did not intend the NFIP to encourage development in flood prone areas. Although in Ocean City development was already on the horizon prior to the National Flood Insurance Program, the availability of the NFIP allowed people to be more willing to open themselves up to such risk:

The gates were opened. Since 1969, thousands of homes and businesses have been built on inland flood plains and along the coasts, with taxpayer-subsidized cheap flood insurance. On many Atlantic and Gulf Coast barrier islands, hurricanes and major storms have destroyed beach houses and commercial buildings three or four times. Each time they have been rebuilt on the same sites and each time they have qualified for insurance at subsidized rates. ¹⁴¹

Although this article implies that the National Flood Insurance Program caused much of the development on the East Coast, it does not ring completely true in Ocean City. From local newspaper articles, the experience of Mayor "Fish" Powell, and the early development attempts of Assateague Island, development had already started and was occurring simultaneously during the development of the NFIP. Mr. Vasco Calcara, owner of Trattoria Lombardi's on 94th Street, also confirmed from his experience that development was well underway when he arrived in Ocean City forty-six summers ago in 1962. The Carousel, one of the most famous high rises in North Ocean City, opened its doors in 1968, the year the NFIP was finally established. Bobby Baker's Carousel was the first in a long line of development projects in Ocean City in those years. The National Flood Insurance Program was actually unpopular because it potentially limited development in Ocean City at a time when people from Baltimore and Washington had the money and they were willing to spend it on beach homes and luxury condominiums.

Ocean City has not yet seen another storm as damaging as the March 1962 Northeaster. The town has yet to see how much damage and wave action that the buildings in condominium row can withstand. Jeffery Peters, author of a series of Articles in the *Baltimore Evening Sun* in 1985 raised the same question. Peters suggested that Ocean City officials and developers placed their faith in current stronger construction and tough building regulations. In his article, Peter made the point that even in 1985, 25 years after the 1962 storm, it was still undetermined how the high-rises would hold up in a similar storm. Even today, in 2007, no such storm has been as treacherous as the 1962 Storm. According to Peters, the buildings many appear strong, but the sand underneath still provide a tenuous foundation. 142 The buildings may or may not fall in another storm of such magnitude. The NFIP may have made it easier and more cost effective to buy condominiums in these high rises; however, as seen with Baker's Carousel, the high-rises were still coming to Ocean City. Marylanders and people from Washington, D.C. still wanted their small slice of sand and sun no matter what the risk cost them. According to Mayor Powell, "the people who were on vacation wanted to be close to water. They were willing to invest and they did invest. At that time, new people with new money laid their money on the line. They could afford it."143

The United States Geological Survey was concerned in the early 1980s about additional storms that might hit Ocean City. According to the U.S. Geological Survey, the population of Fenwick Island tripled and property values increased ten times between 1962 and 1980. Although millions of dollars were invested in storm protection and to stabilize the shoreline, the U.S. Geological Survey believed that these barrier islands could still be vulnerable to storm hazards and erosion.¹⁴⁴ The same report also suggested

that the Delmarva Peninsula might even be more vulnerable to storms in the future than it was in 1962. The heaviest development in the town of Ocean City was actually closest to the sea, which was a concern for the U.S. Geological Survey. The area of Condominium Row in North Ocean City was actually one of the hardest hit areas by the 1962 Storm. It was also noted in the report that sea-level rise and storm surge force barrier islands to migrate towards the mainland.¹⁴⁵

In 1985, with some luck, Ocean City dodged the bullet of Hurricane Gloria, five years after the report issued by the U.S. Geological Survey. Even though the hurricane did not hit Ocean City directly, severe damage was still inflicted on the boardwalk in Ocean City between 5th and 27th Streets. A few buildings had structural damage because of the storm. The beach lost up to 700,000 cubic yards of sand that migrated into town streets. Damage was estimated to equal \$12 million.¹⁴⁶

According to Jeffrey W. Peters, author of a series of articles in the *Baltimore Evening Sun* mentioned above, "the resort is at war with the waves that created it." In the 1980s, it was becoming very apparent that the beach that lined the coast of Ocean City was becoming smaller. Officials now had to worry about a \$1.5 billion dollar development that existed along the coast. Unless long-term steps were constantly taken to prevent the Atlantic Ocean from ravishing the coastline, it was predicted that nature would again re-arrange the island's geography just as easily as it was created. Even as early as the 1980s, a dramatic sea-level rise was predicted in the next century. The Ocean City beach was retreating about two feet per year or 200 feet per century. If the sea level did rise as predicted, then the beach would actually begin to retreat much quicker than two feet per year. The most devastating blows to both beaches and buildings are usually

caused by hurricanes and northeasters. Orrin Pilkey, a professor of Geology at Duke University, suggested the fundamental truth, "you can have beaches or buildings, but you can't have both." 147

An article in the Audobon in March of 1989, also suggested that the sea and people were on a collision course due to the result of major development on the Maryland Coast. The article suggested that the developers, who constructed so many condominiums and hotels, must not have known any better or they would not have developed such structures on a barrier island. 148 The truth of the matter was that the developers were probably not concerned with such issues. Everybody at this time in Ocean City seemed too concerned about the money to be made. Even the local government liked the idea of the property taxes as we saw with the development of Caine Keys. According to the article, "Fenwick is a perfect example of what developers do to barrier islands and what barrier islands do to developments. Its history shows how building begins slowly and then snowballs; how huge amounts of money - all of it tax dollars – is committed to saving towns built on shifting sands."149 Since attracting the first developers in the late 1800s, it took about 90 years for Ocean City's skyline to become a landmark. A gathering place for vacation has turned into a year-round community that has certainly grown in recent years. 150

There remains no proven causal relationship between the development boom of the late 1960s and early 1970s and the National Flood Insurance Program. Developers saw the forced participation in the NFIP as an impediment to construction. Meanwhile, tourism, vacation, and the desire to own oceanfront property all fueled development. While it would seem that the purchase of this type of property was an investment, it was

and still is a risk, especially since no one seems to know exactly what might happen if another storm occurred on the same scale of the 1962 Northeaster. Again today, Ocean City is facing another major wave of development. It can only be hoped that with the sea level rise predictions that the new owners remain lucky and continue to dodge storms with the intensity of the 1962 Northeaster.

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