

# **Assembly Coastal New Jersey Evacuation Task Force**

## **FINAL REPORT**

**May 2008**



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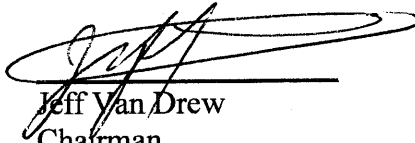
**New Jersey State Legislature**  
**ASSEMBLY COASTAL NEW JERSEY EVACUATION**  
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May 23, 2008

Honorable Joseph J. Roberts, Jr.  
Speaker of the General Assembly

Speaker Roberts:

The Assembly Coastal New Jersey Evacuation Task Force, created by Assembly Resolution No. 146 to examine and assess the evacuation plans of seven coastal counties in New Jersey, hereby respectfully submits its final report in compliance with the provisions of the enabling legislation.

  
Jeff Van Drew  
Chairman



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May 23, 2008


Honorable Joseph J. Roberts, Jr.  
Speaker of the General Assembly

Speaker Roberts:

I am pleased to transmit with this letter the final report of the Assembly Coastal New Jersey Evacuation Task Force. The task force was created to examine and assess current plans and proposals to effectuate a coordinated evacuation of coastal communities in Monmouth, Ocean, Atlantic, Cape May, Cumberland, Middlesex, and Salem counties in a time of emergency.

This report represents a comprehensive review of issues related to the safety and security of the citizens of this State when coordinating an evacuation of New Jersey's coast. After considering the testimony presented during the five public hearings, the task force is proposing a number of recommendations to improve the level of preparedness of New Jersey's coastal counties prior to an evacuation. These recommendations touch upon a number of issues, varying from topics such as highway infrastructure improvements to shelter management procedures.

I would like to thank each of the task force members for the time and effort that they dedicated to assisting the task force in its proceedings. Also, a special thanks goes out to all of the witnesses who took the time to appear before the task force to contribute their thoughts and ideas for improving coastal evacuation.

  
Jeff Van Drew  
Chairman

**ASSEMBLY COASTAL NEW JERSEY EVACUATION TASK FORCE**

**MEMBERS**

Jeff Van Drew, Chairman  
Brian E. Rumpf, Vice Chairman  
Vincent J. Jones, Atlantic County OEM  
Mariana Leckner, Private Citizen  
Francis J. McCall, Cape May County OEM  
Gary McTighe, Monmouth County OEM  
Sheriff William Polhemus represented by Undersheriff Wayne R. Rupert, Ocean County OEM  
Joseph C. Sever, Cumberland County OEM  
Joseph Simmons, Private Citizen  
Carl Wentzell, Salem County OEM  
Rory R. Zach, Middlesex County OEM

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## I. INTRODUCTION

On August 28, 2005, Hurricane Katrina struck the southern coast of the United States killing more than 1,800 people, and causing more than \$81 billion in structural damage. Less than one month later, Hurricane Rita made landfall on the United States Gulf Coast causing \$11.3 billion in damage and ultimately leading to the evacuation of approximately 2.7 million people.

The devastation caused by these hurricanes has drawn national attention to the importance of emergency response preparedness and its role in effectively evacuating citizens during a natural disaster. As a result, emergency response teams in many coastal states have begun to reassess the adequacy and effectiveness of current evacuation plans. This reevaluation has been critical to coastal communities which are more vulnerable to damage caused by hurricanes, as well as nor'easters.

In response to growing concern over this potential threat in the State of New Jersey, on January 30, 2007 the General Assembly approved Assembly Resolution No. 146, which established the Coastal Assembly Evacuation Task Force. The task force was charged with examining and assessing current plans and proposals to effectuate a coordinated evacuation of seven coastal counties in the State of New Jersey. Those counties included Monmouth, Ocean, Atlantic, Cape May, Cumberland, Middlesex, and Salem.

Pursuant to the resolution, the task force was specifically directed to investigate the following topics: the adequacy of current evacuation plans; the availability and utilization of public transportation for mass evacuation; the adequacy of training and preparedness, particularly of the county emergency management coordinator and appropriate support staff; methods for coordinating a multi-county evacuation; and options for sheltering evacuees.

The Assembly Coastal Evacuation Task Force was comprised of 11 members. Assembly Speaker Joseph J. Roberts appointed then Assemblyman Jeff Van Drew and Assemblyman Brian E. Rumpf as legislative members to the task force.<sup>1</sup> Also appointed were the following emergency management coordinators of the seven counties included in the resolution: Gary McTighe, Monmouth County; Wayne Rupert, Ocean County; Vincent Jones, Atlantic County; Francis McCall, Cape May County; Joseph Sever, Cumberland County; Rory Zach, Middlesex County; and Carl Wentzell, Salem County. Finally, two members of the general public, Mariana Leckner and Joseph Simmons, were also appointed to the task force.

Over the course of eight months, the task force held a total of five meetings in separate coastal counties throughout the State. The locations and dates of the meetings were: May 31, 2007 Cape May County, Administrative Building; August 6, 2007 Atlantic County, Canale Training Center; October 4, 2007 Cumberland County, Office of Emergency Management; October 9, 2007 Ocean County, St. Francis Community

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<sup>1</sup> Jeff Van Drew has since been elected as a member of the New Jersey State Senate.

Center; and December 20, 2007 Monmouth County, Monmouth County Library. In addition, members of the task force were provided with a tour of the Regional Operations Intelligence Center (ROIC) in West Trenton by the New Jersey State Police.

At each meeting, members of the task force heard testimony from and engaged in open dialogue with representatives from every level of government, as well as members of the general public, law enforcement officials, emergency management specialists and members of the scientific and academic community. The issues raised during testimony serve as the basis for the recommendations provided in this report.

## II. EXECUTIVE SUMMARY

This executive summary briefly outlines the findings of the New Jersey Assembly Coastal Evacuation Task Force resulting from the testimony presented during the five public hearings. Following each finding is the task force's recommendation. The findings and recommendations are not intended to be in order of priority.

**1. FINDING:** There is a need to foster greater public awareness of the threat posed by both hurricanes and nor'easters. Increased public awareness of these storms through outreach programs is essential to informing the public of the critical need to prepare for such disasters, and to evacuate if necessary. In order to encourage public awareness, it is necessary to implement a comprehensive education plan in the State.

**RECOMMENDATION:** The task force recommends that detailed legislation be introduced to establish an annual coastal evacuation public awareness campaign.

**2. FINDING:** There is a need for greater interoperability between government entities when implementing an evacuation plan. While coordination between county offices of emergency management and the New Jersey Office of Emergency Management is highly commendable, testimony revealed that it is essential to formalize evacuation plans among various levels of government.

**RECOMMENDATION:** Legislation should be enacted establishing a regional planning team within the New Jersey State Police. The legislation should mandate that the team work in coordination with all county and municipal offices of emergency management to ensure consistency of State and local coastal evacuation and emergency operation plans.

**3. FINDING:** According to a study conducted by the New Jersey Office of Emergency Management, a Garden State Parkway/Atlantic City Expressway lane reversal strategy would greatly benefit evacuation times from the State's southern coast.

**RECOMMENDATION:** The task force recognizes the need for a Garden State Parkway/Atlantic City Expressway lane reversal strategy, and recommends that the findings of the study be implemented into the current emergency management strategy. The task force further recommends that the New Jersey Office of Emergency Management study the potential benefits of implementing a similar reverse lane strategy on Route 287 in Middlesex County.



**4. FINDING:** There is a need for a statutory mandate to prohibit the towing or transportation of boats or trailers during an evacuation when a lane reversal plan is being implemented. Testimony revealed that during a hurricane evacuation, powerful wind conditions may cause a towed trailer or boat to collide with other vehicles.

**RECOMMENDATION:** Legislation should be enacted to prohibit the towing or transportation of boats or trailers during an evacuation when a lane reversal plan is being implemented.

**5. FINDING:** The State of New Jersey does not have a plan to evacuate, shelter or sustain the families of emergency response personnel during an evacuation.

**RECOMMENDATION:** Legislation should be enacted that establishes an evacuation plan for the families of emergency responders in the State of New Jersey.

**6. FINDING:** There is a lack of adequate long-term shelter locations throughout the State. In addition, many schools in the State cannot serve as adequate shelters since they are incapable of properly having an emergency power generator connected to their exterior.

**RECOMMENDATION:** Legislation should be introduced to establish a commission, under the authority of the New Jersey Office of Emergency Management, to investigate and determine what locations may be pre-identified as long term shelters for evacuees who are displaced from their residences for extended periods of time. The commission should be required to investigate whether it is feasible to require that all newly constructed schools be built in accordance with guidelines ensuring that these schools are easily converted into shelters.

**7. FINDING:** Although hospitals or nursing homes in the State are required to have evacuation plans, in certain instances, Statewide plans currently do not exist to evacuate and re-locate individuals with medical needs.

**RECOMMENDATION:** An overall review of evacuation, re-location and shelter of hospitalized individuals and nursing home residents in the State of New Jersey should be conducted.

**8. FINDING:** Practical considerations such as hygiene, allergies and lack of space prevent most shelters from housing pets during an emergency. This is an important issue given that many pet owners will refuse to accept placement into a shelter if their pets are not permitted.

**RECOMMENDATION:** It is necessary to implement a Statewide plan to develop shelters that are able to accommodate pets. This plan potentially could be based on programs that have been already been established by certain counties.

**9. FINDING:** Spontaneous shelters otherwise known as "pop-up shelters" are sometimes established by members of the public without the knowledge of emergency management coordinators. A partial solution to this issue may be to provide additional training in shelter management as part of the required curriculum for volunteer members of The Community Emergency Response Team (CERT) who would be trained to maintain contact with emergency management coordinators. More importantly,



additional CERT volunteers trained in shelter protocol may relieve some of the burden placed on full-time emergency responders.

**RECOMMENDATION:** The task force recommends that greater emphasis be placed on shelter management for New Jersey CERT volunteers.

**10. FINDING:** There is a need for a uniform definition of a "special needs individual" that may be used by the State, as well as in county and local governments. According to testimony, there are differing definitions as to who is considered to have special needs and, thus, the programs for which people may be eligible in varying municipalities.

**RECOMMENDATION:** Legislation should be enacted establishing a uniform statutory definition of "special needs" population that is based on the current definition utilized by the New Jersey Special Needs Advisory Panel.

**11. FINDING:** New Jersey is working to implement a pilot program dedicated to evacuating people with "special needs." In August of 2006, the New Jersey Office of Homeland Security and Preparedness in partnership with the New Jersey Special Needs Advisory Panel instituted a pilot project involving a demographic study, an outreach and communications plan, a shelter analysis, technical guidance review and deployment of technology applications. The pilot program is currently being conducted in the counties of Atlantic, Cape May, Monmouth and Ocean.

**RECOMMENDATION:** The task force recommends that the State continue to monitor this pilot program so that, if proven successful, it may be implemented in other coastal counties and possibly throughout the State of New Jersey.

**12. FINDING:** In preparing for a future evacuation it is necessary to identify all critical infrastructure in order to determine which buildings will be in need of back-up power generators should a power outage occur. This process of "pre-identifying" critical infrastructure must start on the county level, and be passed on to the State Office of Emergency Management. The State Police are in the process of pre-identifying all critical infrastructures in the State.

**RECOMMENDATION:** The task force recommends that the State Police continue to pre-identify critical infrastructure in consultation with the New Jersey Office of Emergency Management and county emergency management coordinators in the State.

**13. FINDING:** Operated by the United States Geological Survey (USGS), the Tidal Telemetry System may be used as an electronic notification system by emergency management coordinators to monitor flooding throughout the State, and to forecast flooding in coastal areas. While the system is a critical instrument used by emergency management coordinators, it is in need of a permanent source of funding to maintain operations.

**RECOMMENDATION:** Legislation should be enacted to establish a permanent source of funding for the Tidal Telemetry System, as it is a critical tool used for emergency response.

**14. FINDING:** Expansion of current highways leading to and from the coast would further assist a coordinated evacuation if an emergency were to occur.

**RECOMMENDATION:** The task force recommends that a special advisory commission be established under the authority of the New Jersey Office of Emergency Management. The commission should be composed of experts in emergency management, construction, architecture and transportation. The purpose of the commission should be to investigate the feasibility of implementing coastal infrastructure improvements over the next 15 years which may assist in emergency evacuation of the coast.

### **III. DISCUSSION**

During the task force meetings, numerous issues were raised with regard to coastal evacuation in the State of New Jersey. Main topics discussed included: educating the public; interoperability of government entities; lane reversal as a means of coastal evacuation; evacuating family members of emergency responders; adequacy and availability of emergency shelters; evacuation of "special needs" individuals; adequacy and availability of essential materials; and long term infrastructure improvements.

#### **A. EDUCATING THE PUBLIC**

One of the primary topics of discussion before the task force was the need to foster greater public awareness of the threat posed by both hurricanes and nor'easters.<sup>2</sup> Outreach programs are essential to informing the public of the critical need to prepare for such disasters, and to evacuate if necessary. According to testimony provided by the Federal Emergency Management Agency (FEMA), one of the many barriers faced by emergency responders in evacuating citizens during a hurricane is public complacency. This complacency, however, may be overcome through a comprehensive public education plan provided by the State of New Jersey.

The task force finds that in order to encourage public awareness, it is necessary to implement a comprehensive education plan in the State. The primary goal of this plan should include providing preparation-oriented guidance to individuals who are likely to be affected by a major catastrophe. Topics included in this plan should relate not only to hurricane awareness, but also nor'easters which have the potential to cause extensive damage to the coast line throughout the year.

The task force, therefore, recommends that detailed legislation be introduced to establish an annual coastal evacuation public awareness campaign.

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<sup>2</sup> According to the Institute of Marine and Coastal Sciences at Rutgers University, a hurricane is a region-specific term for a tropical cyclone with winds that reach 74 mph. Nor'easters differ in that they form in the mid-latitudes, have lower wind speeds that rarely exceed 60 mph, and are spread out over a greater area than hurricanes. Dr. David Robinson, the New Jersey State Climatologist and Chairman of the Rutgers University Geography Department, testified that nor'easters are threatening to New Jersey's coast given that they can occur at any time during a twelve month period and tend to have a longer duration than hurricanes.

## **B. INTEROPERABILITY OF GOVERNMENT ENTITIES**

Considerable testimony was presented regarding the need for greater interoperability between government entities when implementing an evacuation plan. While coordination between county emergency management offices and the New Jersey Office of Emergency Management (NJOEM) is highly commendable, testimony revealed that it is essential to formalize evacuation plans among various levels of government. Formalization through "memorandums of understanding" and statutory codification may strengthen regional evacuation planning and coordination among the various counties, as well as promote greater interoperability between State and local emergency responders.

At the final meeting, the task force heard testimony regarding simulated evacuation exercises conducted by the New Jersey State Police in coordination with participating counties. In addition, the State Police submitted a report to the task force that summarized the findings of an evacuation exercise conducted in Atlantic, Cape May, Ocean, Monmouth, and Burlington counties. According to the report, the purpose of the exercise was to evaluate preparedness concepts, policies, procedures, and capabilities during a hurricane. While the exercise revealed strengths in the individual evacuation plans of the participating counties, the report stated that there was a need for greater coordination between county regional evacuation plans. One of the primary recommendations of the report was to convene a State regional planning team to develop a comprehensive plan that would serve to synchronize all local coastal evacuation strategies. The report also recommended that the specific responsibilities of the State Police and the Regional Operations Intelligence Center (ROIC) be defined in the comprehensive plan.

The task force fully endorses the recommendation that a regional planning team be established in the New Jersey State Police. The task force recommends that this team be established by legislation, and be mandated to work in coordination with all county and municipal offices of emergency management to ensure consistency of State and local evacuation and emergency operation plans. Pursuant to the legislation, emergency plans that prove to be inconsistent should undergo revision. The task force further recommends that the regional planning team be required to report its progress to the Governor on a biannual basis.

## **C. LANE REVERSAL AS A MEANS OF COASTAL EVACUATION**

### *Implementation of a lane reversal plan*

The task force heard testimony referring to the use of "contraflow" or "lane reversal" as a means of evacuating coastal areas. Generally, the terminology "contraflow" or "lane reversal" refers to plans that reverse the flow of traffic in lanes that are normally only configured for travel in one direction. A lane reversal plan results in all traffic traveling in the same direction in all lanes of a highway in order to expedite evacuation.

An important memorandum regarding lane reversal was issued to the task force by the New Jersey Office of Emergency Management (NJOEM). Entitled *New Jersey Garden State Parkway-Atlantic City Expressway Lane Reversal*, the memorandum outlines the feasibility and potential evacuation clearance time benefits of a reverse lane strategy for the Garden State Parkway and Atlantic City Expressway.

According to background provided in the technical memorandum, the NJOEM is currently the custodian of four official lane reversal plans to assist in reducing the evacuation transit times on specific roadway segments. The memorandum stipulates that these plans were developed as a measure of "last resort" in response to hurricanes as well as other emergency events. Current reverse lane plans cover the following major roadway segments:

- Route 47 / Route 347
- Atlantic City Expressway
- Route 72
- Interstate 195

The primary finding of the study concluded that the addition of a Garden State Parkway/Atlantic City Expressway lane reversal strategy would greatly benefit evacuation times from the State's southern coast.<sup>3</sup> According to the study, utilization of the lane reversal strategy during high tourist occupancy would effectively reduce evacuation clearance times in Atlantic and Ocean counties by approximately 12 hours during a worse-case-scenario storm.

The task force recognizes the need for a Garden State Parkway/Atlantic City Expressway lane reversal strategy, and fully endorses the findings of the study released by the NJOEM. The task force recommends that the findings of the study be implemented into a current emergency management strategy. The task force further recommends that the New Jersey Office of Emergency Management study the potential benefits of developing a similar reverse lane strategy on Route 287 in Middlesex County.

#### Use of boats and trailers during lane reversal evacuation

During the course of testimony, several potential safety initiatives were raised that would assist emergency responders in facilitating a lane reversal program. One initiative discussed was the need to establish guidelines to be followed during a reverse lane evacuation. Specifically, it was recommended that legislation be enacted to prohibit the towing or transportation of boats or trailers during an evacuation when a lane reversal plan is being implemented. Testimony revealed that during a hurricane evacuation, powerful wind conditions may cause a towed trailer or boat to collide with other vehicles.

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<sup>3</sup> A full list of the study's recommendations are included in *New Jersey Garden State Parkway-Atlantic City Expressway Lane Reversal*, October 2007.



The task force, therefore, recommends that legislation be introduced to prohibit the towing or transportation of boats or trailers during an evacuation when a lane reversal plan is being implemented.

#### **D. EVACUATION PLAN FOR THE FAMILY MEMBERS OF EMERGENCY RESPONDERS**

The task force heard testimony regarding the need to implement an evacuation plan for the families of emergency responders. During a full scale evacuation, emergency responders who reside in locations that are subject to evacuation often play a dual role as both rescuer and victim. In many instances, responders that assist the general population during an evacuation have family members that must also be evacuated from coastal areas. According to testimony, the State of New Jersey does not currently have a plan that addresses the evacuation or shelter of the families of emergency response personnel during a crisis.

The task force recognizes that emergency responders serve the State commendably during an evacuation, while often sacrificing immeasurably. The task force recommends that a program be implemented in the State of New Jersey to establish an evacuation plan for the families of emergency responders.

#### **E. ADEQUACY AND AVAILABILITY OF EMERGENCY SHELTERS**

A recurring issue raised during the course of testimony was the adequacy and availability of emergency shelters. Much of the testimony centered on the need to improve emergency shelters during a natural disaster, and to create a uniform procedure for sheltering individuals with special needs, as well as sheltering of pets. The following concerns regarding the sheltering of evacuees were raised:

##### *Utilization of long term shelters and schools during a time of emergency*

A key element of emergency planning involves the identification of adequate shelter locations prior to a natural disaster. The Department of Human Services (DHS) has been working in coordination with the Department of Community Affairs (DCA) as well as the Red Cross to develop guidelines and standards for emergency management officials to use in identifying safe, decent and secure sites that could become shelters during a disaster. It is the goal of DHS to compile a complete list of emergency shelters throughout New Jersey that could accommodate disaster evacuees.

According to testimony provided by a representative from DHS, however, there is currently a lack of adequate long-term shelter locations throughout the State. These long-term shelters become essential when evacuees must be housed for an undetermined period of time. A spokesperson with DHS testified that "[a]fter Katrina, although we tried our best to provide assistance to Katrina victims and see if we could move a few of them into the State of New Jersey, the best we could offer them was 80 spots in Perth Amboy."

In addition, the spokesperson further testified that the utilization of public schools as shelters has become an issue in this State. The spokesperson speculated that currently many schools cannot serve as adequate shelters since they are incapable of properly having an emergency power generator connected to the exterior of these buildings. In order to remedy this issue, many schools would have to be retrofitted to receive the necessary electricity should a power outage occur.

DHS has recommended that this issue may be solved, in part, by mandating that all newly constructed schools be built in accordance with guidelines to ensure that schools are easily converted into shelters. DHS has further recommended that all public schools be required to offer their services as shelters, or in the case that the school construction does not allow for an adequate shelter, that the school be designated as a shelter "of-last-resort."

The task force recommends that research be conducted by a legislatively established commission, under the authority and supervision of the New Jersey Office of Emergency Management, to determine what locations may be pre-identified as long term shelters for evacuees who are displaced from their residences for extended periods of time due to damage caused by any natural disaster. The task force believes that further investigation is necessary to determine whether a program can be implemented to retrofit schools so that they may serve as adequate shelters. In addition, under the proposed legislation, the commission should investigate the feasibility of requiring that all newly constructed schools be built in accordance with guidelines ensuring that these schools are easily converted into shelters.

#### *Sheltering and evacuation of hospitalized individuals*

The task force heard testimony regarding the obstacles encountered when attempting to implement a shelter plan for individuals with "special needs." While this report discusses issues regarding "special needs" individuals in greater detail below, it is important to note that in general, the American Red Cross is unable to provide shelter to hospitalized individuals due to the physical limitations of most shelters. A member of the task force also commented that although hospitals or nursing homes in the State are required to have evacuation plans, in certain instances Statewide plans currently do not exist to evacuate and re-locate hospitalized individuals.

In light of this issue, the task force recommends that an overall review of evacuation, re-location and shelter of hospitalized individuals be conducted in the State of New Jersey.

#### *Sheltering of pets during an emergency*

As demonstrated by the thousands of pets that were abandoned or displaced after hurricane Katrina, the sheltering of animals in the aftermath of a natural disaster is an increasingly important issue. According to testimony, however, the American



Red Cross is currently unable to provide sheltering for pets during a time of emergency. It is the official policy of the American Red Cross to only accept "service animals," such as seeing-eye dogs, that assist people with disabilities.

A spokesperson for the American Red Cross indicated that practical considerations such as hygiene, allergies and lack of space prevent the organization from housing pets. The spokesperson further testified that pet safety is a planning element that should be taken into consideration.

It is noteworthy, however, that the New Jersey Office of Emergency Management (NJOEM) lists a number of pet friendly hotels that may be used during an evacuation. The NJOEM also provides instructions that pet owners should follow in anticipation of an emergency.

Members of the task force indicated that certain counties have begun to establish their own independent programs to protect both pets and livestock. For instance, Ocean County has established the HELP (Help in Emergencies for Livestock and Pets) program. Under the program, when a disaster occurs members of HELP will report to the scene of an emergency to shelter or care for affected animals.

The task force recommends that a Statewide plan to develop shelters to accommodate pets be implemented in New Jersey. There is potential that this plan could be based on programs that have already been established by certain counties.

*Certifying Members of Community Emergency Response Team (CERT) with shelter training*

A representative with DHS testified that during past evacuations the department, as well as other emergency management entities, have had difficulty in identifying "pop-up" shelters. These are spontaneous shelters established by members of the public without the knowledge of emergency management coordinators. Because emergency response teams are unaware of these shelters, they are unable to provide assistance or supplies during an evacuation.

A partial solution to this issue may be to provide additional training in shelter management as part of the required curriculum for members of the Community Emergency Response Team (CERT). CERT is a federal program that certifies people in disaster preparedness and trains them in basic disaster response skills. CERT volunteers use this training to assist people in their neighborhood or workplace following an event when professional responders are not immediately available. A CERT program has been implemented in the State of New Jersey under the authority of the New Jersey State Police.

If shelter management is given greater priority under the CERT program, it may potentially reduce these "pop-up" shelters since more members of the public would be trained in maintaining contact with emergency management personnel. More

importantly, additional volunteers trained in shelter protocol would relieve some of the burden placed on full-time emergency responders.

The task force recommends that members of CERT be required to receive additional training in shelter management.

## **F. EVACUATION OF INDIVIDUALS WITH "SPECIAL NEEDS"**

### Defining "special needs"

The task force heard testimony regarding the obstacles encountered when attempting to implement an evacuation plan for individuals with "special needs." The need for a uniform definition of who is a "special needs" individual was brought to the attention of the task force.

It appears that there are conflicting definitions as to who is considered to be a person with special needs. During the course of testimony a spokesperson for the American Red Cross stated: "In some agencies, a special needs person includes someone who is simply blind or simply deaf. In other agencies, you're not special needs until you're on a ventilator and have to be moved by somebody else."

It should be noted that the New Jersey Special Needs Advisory Panel has defined people with special needs as individuals who have a physical or mental disability and/or medical care needs who, after exhausting all other resources (family, neighbors, public transportation, etc.) still need assistance for evacuation and/or sheltering before, during, and possibly after a disaster or emergency. In addition, the Special Needs Advisory Panel has acknowledged that there may be other groups that require special assistance, such as low-income or homeless persons, and individuals who are public transit dependent.

Consequently, the task force recommends that the State of New Jersey establish a uniform statutory definition of "special needs" population that may be utilized when establishing evacuation programs. There is potential that this definition could be based on the current definition established by the New Jersey Special Needs Advisory Panel.

### Registration program for individuals with "special needs"

Members of the task force heard separate testimony regarding existing barriers encountered when attempting to identify individuals in the community who have "special needs." It is important to identify individuals with "special needs" prior to an emergency so that necessary precautions can be taken to ensure that they receive special assistance during an evacuation.

Various counties have instituted programs where "special needs" individuals register with the county office of emergency management. In many instances, however, individuals who are in need of special assistance during an evacuation choose not to

register with emergency management coordinators. As a result, coordinators are unaware of those members of the "special needs" community until after an evacuation has commenced.

According to testimony, it appears that this failure to register is largely due to apprehension among "special needs" individuals to have their personal information, as well their particular condition, included in a registry. Government outreach and education efforts might well be the best way to dispel these concerns.

Currently, New Jersey is working to implement a pilot program that includes an outreach plan for people with "special needs." In August 2006, the New Jersey Office of Homeland Security and Preparedness, in partnership with the New Jersey Special Needs Advisory Panel, instituted a pilot project including a demographic study, an outreach and communications plan, a shelter analysis, technical guidance review and deployment of technology applications. The pilot program is being conducted in Atlantic, Cape May, Monmouth and Ocean counties.

This pilot program is funded by the New Jersey Office of Homeland Security and Preparedness and is being conducted by Delta Development Group, Inc. of Mechanicsburg, Pennsylvania. Representatives from Delta Development Group spoke to the task force about the pilot program. The primary goals of the program are to increase special needs awareness and planning within the community, and to effectively register individuals with special needs. Ultimately, this will improve pre-disaster planning and day-of-response evacuation and sheltering.

The program's inception was on May 26, 2007. Less than four months later, the New Jersey Special Needs Advisory Panel reported that Delta Development had already completed a demographic study. The September 2007 report stated that:

A host server location has been determined for the deployment of Delta's Total Visibility Software application at [www.registerready.nj.gov](http://www.registerready.nj.gov). Template registry communications and marketing materials are under development. The shelter analysis and technical review portion of the project is ongoing and will be delivered 1<sup>st</sup> quarter of 2008.

The task force fully recognizes the central role that this pilot program could play in "special needs" evacuation planning in the four coastal counties where it is being tested, and to the entire State. The task force recommends that the State continue to monitor this pilot program so that, if proven successful, it may be implemented in other coastal counties and possibly throughout the State of New Jersey.

## G. ADEQUACY AND AVAILABILITY OF ESSENTIAL MATERIALS

### Pre-identification of emergency back-up generators for critical infrastructure

Representatives with the Federal Emergency Management Agency (FEMA) provided testimony to the task force regarding the need to identify critical infrastructure throughout the State prior to an evacuation. FEMA currently defines critical infrastructures as the "people, physical assets, and communication/cyber systems that are indispensably necessary for national security, economic stability, and public safety."

According to testimony, it is necessary to identify all critical infrastructures prior to an evacuation in order to determine which buildings, such as hospitals or shelters, may be in need of a back-up power generator should a power outage occur. This process of pre-identifying critical infrastructure must start on the county level, and be passed on to the State Office of Emergency Management. Representatives with FEMA stressed that it is important not only to determine which structures in the State will potentially need back-up power generators, but also to determine what types of generators are needed.

This process of pre-identification becomes imperative when a power outage occurs during a major evacuation, and the State must request back-up generators from FEMA or from other states through the Emergency Management Assistance Compact (EMAC).<sup>4</sup> According to testimony, the New Jersey State Police are in the process of identifying many of the infrastructures that may be in need of additional power during a natural disaster.

The task force recognizes the importance of pre-identifying critical infrastructure and for documenting what infrastructure may be in need of back-up power generators. The task force recommends that the State Police continue to pre-identify critical infrastructure in consultation with the county emergency management coordinators in the State.

### The Tidal Telemetry System operated by the U.S. Geological Survey

On two separate occasions, representatives with the United States Geological Survey (USGS) provided testimony describing the Tidal Telemetry System, which is operated along the coast of the State. The Tidal Telemetry System supplies comprehensive, real-time tide level and meteorological data for the most flood-prone areas on the shore of New Jersey.

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<sup>4</sup> According to the New Jersey Office of Emergency Management web site, New Jersey became a member of the Emergency Management Assistance Compact (EMAC) on October 4, 2001. The site states that "EMAC is a mutual aid agreement and partnership between states that allows them to assist one another during disasters, establish a legal foundation for aid, and offers a way to provide fast and flexible resource assistance."

Essentially, the Tidal Telemetry System may be used as an electronic notification system by emergency management coordinators to monitor flooding throughout the State, and to forecast flooding in coastal areas. As stated in literature provided by the USGS, "[t]imely evacuation depends on well-defined emergency evacuation plans used in conjunction with accurate flood forecasting and up to the minute (real-time) tide-level information."

Operation of the Tidal Telemetry System is partially funded by the federal government. Funding for the remaining costs of the operation of the system was provided by the New Jersey Department of Transportation (NJDOT). Unfortunately, due to State fiscal constraints, the NJDOT was unable to continue to provide its share of funding for the operation of the system (\$250,000). Currently, the New Jersey Office of Homeland Security and State Preparedness has provided temporary stop gap funding for the system's operation until June 2008. The system, however, is in dire need of a permanent source of funding to continue to operate in this State. Lack of permanent funding for the system will ultimately lead to its shutdown.

Members of the task force articulated that this Tidal Telemetry System is critical to their performance as emergency management coordinators, and that it is used "constantly." As one member of the task force expressed, the lack of funding for the system is a "serious concern for all of us, because we rely heavily on those gauges."

The task force recommends that legislation be introduced to establish a permanent source of funding for the Tidal Telemetry System, as it is a critical flood warning tool.

## **H. LONG TERM INFRASTRUCTURAL IMPROVEMENTS**

The task force discussed several infrastructure improvements that would expand the roads and highways that provide access to the State's coast. The task force believes that the expansion of current highways leading to and from the coast will further assist a coordinated evacuation if an emergency were to occur.

At the center of the evacuation problem is the fact that New Jersey's coastal population incurs a massive temporary influx of vacationers, seasonal workers, and tourists during the summer months. The problem is compounded by the fact that this population increase coincides with hurricane season, which normally runs from June 1 through November 30. It is the task force's belief that the roads, highways, and bridges leading to the coast of New Jersey should undergo structural modifications and expansion in order to enable the population to quickly evacuate during a severe storm. For example, infrastructure improvements submitted to the task force included initiatives such as widening Route 72 in Ocean County and Route 9 in Cape May County by expanding the existing shoulders, and the replacement of existing bridges in Atlantic County.

During a hurricane or nor'easter, certain roads on the coast of New Jersey are also highly susceptible to flooding. A coordinated evacuation is not feasible when roads become impassible due to severe flooding. The task force believes that structural



improvements are necessary to prevent flooding on certain roads throughout the State, in order to further facilitate a coastal evacuation.

The task force, however, fully acknowledges that highway expansion is a significant undertaking that deserves extensive deliberation on behalf of the State. Highway and other infrastructure improvements are both costly and time consuming. It is the task force's intention that the above suggested infrastructure improvements are accepted as recommendations for future consideration.

The task force, therefore, recommends that a special advisory commission be established under the authority of the New Jersey Office of Emergency Management. The commission should be composed of both experts in emergency management, as well as representatives with expertise in construction, architectural and transportation issues. The purpose of the commission should be to investigate the feasibility of implementing coastal infrastructure improvements over the next 15 years that may assist in emergency evacuation of the coast. These infrastructure modifications should include projects such as road expansion, bridge improvements, and flood prevention.



[First Reprint]  
**ASSEMBLY RESOLUTION No. 146**

**STATE OF NEW JERSEY**  
**212th LEGISLATURE**

INTRODUCED FEBRUARY 27, 2006

**Sponsored by:**

Assemblyman JEFF VAN DREW  
District 1 (Cape May, Atlantic and Cumberland)  
Assemblyman NELSON T. ALBANO  
District 1 (Cape May, Atlantic and Cumberland)  
Assemblyman CHRISTOPHER J. CONNORS  
District 9 (Atlantic, Burlington and Ocean)  
Assemblyman BRIAN E. RUMPF  
District 9 (Atlantic, Burlington and Ocean)

**Co-Sponsored by:**

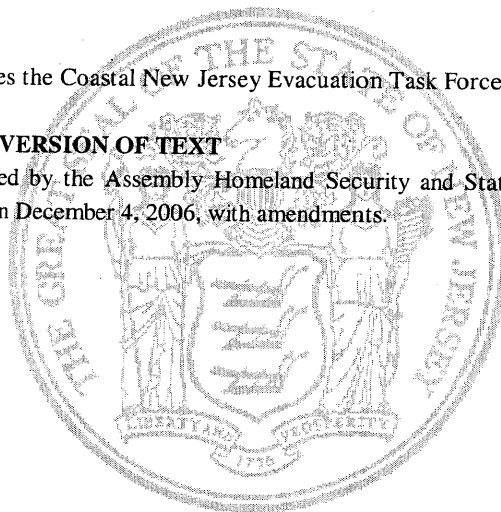
Assemblymen Connors, Vas and Chivukula

**SYNOPSIS**

Establishes the Coastal New Jersey Evacuation Task Force.

**CURRENT VERSION OF TEXT**

As reported by the Assembly Homeland Security and State Preparedness Committee on December 4, 2006, with amendments.



(Sponsorship Updated As Of: 1/30/2007)

AR146 [1R] VAN DREW, ALBANO

2

1 AN ASSEMBLY RESOLUTION establishing a task force to examine  
2 coordinated efforts to evacuate certain coastal communities in  
3 southeastern New Jersey.

4  
5 WHEREAS, In August 2005 Hurricane Katrina, perhaps the largest  
6 hurricane of its strength ever recorded, displaced an estimated 1.5  
7 million people; and

8 WHEREAS, The inability to effectuate a timely and effective  
9 evacuation created massive chaos and added to the death total and  
10 magnitude of human suffering; and

11 WHEREAS, In September 2005, Hurricane Rita hit the Gulf Coast  
12 causing the evacuation of approximately 2.7 million people creating  
13 miles of bumper to bumper traffic and depleted gas tanks; and

14 WHEREAS, New Jersey, with its miles of shorelines and dense  
15 population, has an urgent need for an effective and efficient  
16 evacuation plan; now, therefore,

17  
18 BE IT RESOLVED by the General Assembly of the State of New  
19 Jersey:

20  
21 1. There is established a task force, to be known as the "Coastal  
22 '[Southeastern]' New Jersey Evacuation Task Force," to examine  
23 and assess current plans and proposals to effectuate a coordinated  
24 evacuation of coastal communities in Monmouth, Ocean, Atlantic,  
25 Cape May, Cumberland 'Middlesex,' and Salem counties in a time  
26 of emergency. The task force shall review issues including, but not  
27 limited to:

- 28 a. the adequacy of current evacuation plans;  
29 b. the availability and utilization of public transportation for  
30 mass evacuation;  
31 c. the adequacy of training and preparedness, particularly of  
32 the county emergency management coordinator and appropriate  
33 support staff;  
34 d. methods for coordinating a multi county evacuation; and  
35 e. options for sheltering evacuees.

36  
37 2. The task force shall consist of '[10] 11' members appointed  
38 as follows:

- 39 a. Two members of the General Assembly to be appointed by  
40 the Speaker of the General Assembly from '[a district] districts'  
41 which '[represents] represent' a coastal area in either Monmouth,  
42 Ocean, Atlantic, Cape May, Cumberland 'Middlesex' or Salem  
43 county, no more than one of whom shall be a member of the same  
44 political party;

EXPLANATION - Matter enclosed in bold-faced brackets [thus] in the above bill is  
not enacted and is intended to be omitted in the law.

Matter underlined thus is new matter.

Matter enclosed in superscript numerals has been adopted as follows:

<sup>1</sup>Assembly AHS committee amendments adopted December 4, 2006.

AR146 [1R] VAN DREW, ALBANO

3

1       b. Two public members, to be appointed by the Speaker of the  
2 General Assembly, who by training or experience have knowledge  
3 of emergency management procedures<sup>1</sup> and '[;]'

4       c. The emergency management coordinator from each of the  
5 following counties: Monmouth, Ocean, Atlantic, Cape May,  
6 Cumberland 'Middlesex,' and Salem.

7  
8       3. The task force shall organize as soon as possible after the  
9 appointment of its members, but in no case later than 60 days after  
10 the enactment of this act. From among themselves, the members  
11 shall select a chairperson and a vice chairperson. The members also  
12 shall appoint a secretary, who need not be a member of the task  
13 force.

14       Any vacancy in the task force shall be filled by appointment in  
15 the same manner as the original appointment was made.

16       The members of the task force shall serve without compensation,  
17 but may be reimbursed for necessary expenses incurred in the  
18 performance of their duties. Any reimbursement of members shall  
19 be within the limits of funds appropriated or otherwise made  
20 available to the task force for its purposes.

21  
22       4. The task force shall be entitled to call to its assistance and  
23 shall avail itself of the services of the employees of any State,  
24 county or municipal department, board, bureau, commission or  
25 agency as it may require and as may be available to it for its  
26 purposes. The task force shall further be entitled to employ counsel  
27 and stenographic and clerical assistance and incur traveling and  
28 other miscellaneous expenses as it may deem necessary to perform  
29 its duties, within the limits of funds appropriated or otherwise made  
30 available for its purposes.

31  
32       5. The task force may conduct public hearings in furtherance of  
33 its general purposes at such place or places as it shall designate, at  
34 which it may request the appearance of officials of any federal,  
35 State, or interstate department, board, bureau, commission, agency,  
36 or authority and solicit the testimony of interested groups and the  
37 general public.

38  
39       6. The task force shall report its progress to the Speaker of the  
40 General Assembly no later than 120 days after its organization and  
41 shall report its final findings and recommendations, including any  
42 legislative proposals it may wish to make, to the Speaker of the  
43 General Assembly no later than the first day of the thirteenth month  
44 following its organization.

ASSEMBLY HOMELAND SECURITY AND STATE  
PREPAREDNESS COMMITTEE

STATEMENT TO

**ASSEMBLY RESOLUTION No. 146**

with committee amendments

**STATE OF NEW JERSEY**

DATED: DECEMBER 4, 2006

The Assembly Homeland Security and State Preparedness Committee reports favorably and with committee amendments Assembly Resolution Bill No.146.

Assembly Resolution No. 146, as amended, establishes the Coastal New Jersey Evacuation Task Force, to examine and assess current plans and proposals to effectuate a coordinated evacuation of coastal communities in Monmouth, Ocean, Atlantic, Cape May, Cumberland, Middlesex, and Salem counties in a time of emergency.

The task force is to consist of 11 members appointed as follows: two members of the General Assembly from districts which represent a coastal area in either Monmouth, Ocean, Atlantic, Cape May, Cumberland, Middlesex or Salem county, no more than one of whom shall be a member of the same political party; two members of the public appointed by the Speaker of the General Assembly; and the emergency management coordinators from Monmouth, Ocean, Atlantic, Cape May, Cumberland, Middlesex, and Salem counties.

Among the topics and issues the task force is to study are: the adequacy of current evacuation plans; the availability and utilization of public transportation for mass evacuation; the adequacy of training and preparedness, particularly of the county emergency management coordinator and appropriate support staff; methods for coordinating a multi county evacuation; and options for sheltering evacuees.

COMMITTEE AMENDMENTS

The Committee amended the bill to change the name of the task force and to include Middlesex County in the evacuation study and add the emergency management coordinator from Middlesex as a task force member.

# **ASSEMBLY RESOLUTION No. 146**

## **STATE OF NEW JERSEY**

### **212th LEGISLATURE**

INTRODUCED FEBRUARY 27, 2006

**Sponsored by:**

**Assemblyman JEFF VAN DREW**

**District 1 (Cape May, Atlantic and Cumberland)**

**Assemblyman NELSON T. ALBANO**

**District 1 (Cape May, Atlantic and Cumberland)**

**Assemblyman CHRISTOPHER J. CONNORS**

**District 9 (Atlantic, Burlington and Ocean)**

**Assemblyman BRIAN E. RUMPF**

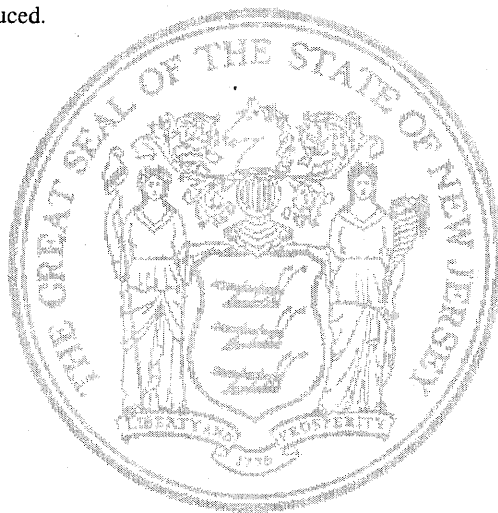
**District 9 (Atlantic, Burlington and Ocean)**

**SYNOPSIS**

Establishes the Coastal Southeastern New Jersey Evacuation Task Force.

**CURRENT VERSION OF TEXT**

As introduced.



(Sponsorship Updated As Of: 12/5/2006)

AR146 VAN DREW, ALBANO

2

1 AN ASSEMBLY RESOLUTION establishing a task force to examine  
2 coordinated efforts to evacuate certain coastal communities in  
3 southeastern New Jersey.

4  
5 WHEREAS, In August 2005 Hurricane Katrina, perhaps the largest  
6 hurricane of its strength ever recorded, displaced an estimated 1.5  
7 million people; and

8 WHEREAS, The inability to effectuate a timely and effective  
9 evacuation created massive chaos and added to the death total and  
10 magnitude of human suffering; and

11 WHEREAS, In September 2005, Hurricane Rita hit the Gulf Coast  
12 causing the evacuation of approximately 2.7 million people creating  
13 miles of bumper to bumper traffic and depleted gas tanks; and

14 WHEREAS, New Jersey, with its miles of shorelines and dense  
15 population, has an urgent need for an effective and efficient  
16 evacuation plan; now, therefore,

17  
18 BE IT RESOLVED by the General Assembly of the State of New  
19 Jersey:

20  
21 1. There is established a task force, to be known as the "Coastal  
22 Southeastern New Jersey Evacuation Task Force," to examine and  
23 assess current plans and proposals, to effectuate a coordinated  
24 evacuation of coastal communities in Monmouth, Ocean, Atlantic,  
25 Cape May, Cumberland and Salem counties in a time of emergency.  
26 The task force shall review issues including, but not limited to:  
27 a. the adequacy of current evacuation plans;  
28 b. the availability and utilization of public transportation for  
29 mass evacuation;  
30 c. the adequacy of training and preparedness, particularly of the  
31 county emergency management coordinator and appropriate support  
32 staff;  
33 d. methods for coordinating a multi county evacuation; and  
34 e. options for sheltering evacuees.

35  
36 2. The task force shall consist of 10 members appointed as  
37 follows:

38 a. Two members of the General Assembly to be appointed by  
39 the Speaker of the General Assembly from a district which  
40 represents a coastal area in either Monmouth, Ocean, Atlantic, Cape  
41 May, Cumberland or Salem county, no more than one of whom  
42 shall be a member of the same political party;

43 b. Two public members, to be appointed by the Speaker of the  
44 General Assembly, who by training or experience have knowledge  
45 of emergency management procedures and;

46 c. The emergency management coordinator from each of the  
47 following counties: Monmouth, Ocean, Atlantic, Cape May,  
48 Cumberland and Salem.



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1       3. The task force shall organize as soon as possible after the  
2 appointment of its members, but in no case later than 60 days after  
3 the enactment of this act. From among themselves, the members  
4 shall select a chairperson and a vice chairperson. The members also  
5 shall appoint a secretary, who need not be a member of the task  
6 force.

7       Any vacancy in the task force shall be filled by appointment in  
8 the same manner as the original appointment was made.

9       The members of the task force shall serve without compensation,  
10 but may be reimbursed for necessary expenses incurred in the  
11 performance of their duties. Any reimbursement of members shall  
12 be within the limits of funds appropriated or otherwise made  
13 available to the task force for its purposes.

14

15       4. The task force shall be entitled to call to its assistance and  
16 shall avail itself of the services of the employees of any State,  
17 county or municipal department, board, bureau, commission or  
18 agency as it may require and as may be available to it for its  
19 purposes. The task force shall further be entitled to employ counsel  
20 and stenographic and clerical assistance and incur traveling and  
21 other miscellaneous expenses as it may deem necessary to perform  
22 its duties, within the limits of funds appropriated or otherwise made  
23 available for its purposes.

24

25       5. The task force may conduct public hearings in furtherance of  
26 its general purposes at such place or places as it shall designate, at  
27 which it may request the appearance of officials of any federal,  
28 State, or interstate department, board, bureau, commission, agency,  
29 or authority and solicit the testimony of interested groups and the  
30 general public.

31

32       6. The task force shall report its progress to the Speaker of the  
33 General Assembly no later than 120 days after its organization and  
34 shall report its final findings and recommendations, including any  
35 legislative proposals it may wish to make, to the Speaker of the  
36 General Assembly no later than the first day of the thirteenth month  
37 following its organization.

38

39

40

STATEMENT

41

42       This Assembly resolution establishes the Coastal Southeastern  
43 New Jersey Evacuation Task Force, to examine and assess current  
44 plans and proposals to effectuate a coordinated evacuation of  
45 coastal communities in Monmouth, Ocean, Atlantic, Cape May,  
46 Cumberland and Salem counties in a time of emergency.

47       The task force is to consist of 10 members appointed as follows:  
48 two members of the General Assembly from a district which

AR146 VAN DREW, ALBANO

4

1 represents a coastal area in either Monmouth, Ocean, Atlantic, Cape  
2 May, Cumberland or Salem county, no more than one of whom  
3 shall be a member of the same political party; two members of the  
4 public appointed by the Speaker of the General Assembly; and the  
5 emergency management coordinators from Monmouth, Ocean,  
6 Atlantic, Cape May, Cumberland and Salem counties.  
7 Among the topics and issues the task force is to study are: the  
8 adequacy of current evacuation plans; the availability and  
9 utilization of public transportation for mass evacuation; the  
10 adequacy of training and preparedness, particularly of the county  
11 emergency management coordinator and appropriate support staff;  
12 methods for coordinating a multi county evacuation; and options for  
13 sheltering evacuees.



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