

**Dauphin Island Sea Lab**  
**Hurricane Emergency Preparedness Plan**

Revision: June 2006

DISL Executive Director: **Dr. John Valentine**

**Date:** August 2012

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**1.0 PURPOSE**

The Sea Lab, by virtue of its exposed location, is vulnerable to damage from a number of catastrophic events, most notably, hurricanes. This plan is intended to provide guidance and information to DISL personnel in preparing the Sea Lab for a hurricane.

**2.0 GENERAL INFORMATION**

*Condition 1*  
*Normal conditions*

<b>Person Responsible</b>	<b>Required Action</b>
Executive Director	Establish an Emergency Control Team (ECT) of the individuals listed in Condition 1. The ECT will be under the direction of the Executive Director of DISL to coordinate information and emergency response for the Emergency Preparedness Plan.
Chair, University Programs	Make preparation to safeguard academic and classroom equipment including microscopes, academic field gear and instrumentation and academic records.  Make preparations to safeguard records and equipment with individual Principal Investigators/Program Managers.  Schedule evacuation shelter for Summer School students.
Chair, Discovery Hall Programs	Make preparations to safeguard records and equipment. Assign personnel responsible for transporting Summer School students to evacuation shelter.  Make preparations to safeguard The Estuarium - animals and facility.

Business Manager	Make preparations to safeguard business records and equipment.
Technical Support	Make preparations to safeguard records, vessels, and equipment
Weather Center Coordinator	Make preparations to safeguard weather station equipment, associated equipment and records.
Maintenance Supervisor	Make preparations to safeguard records and equipment. Verify inventory of emergency supplies and equipment and certify emergency generators are in good operating condition.
Vessel Supervisor	Make preparations to safeguard records and equipment. Tentatively schedule anchorage for boats if evacuation is necessary.
Computer Support	Make preparations to safeguard office computers and DISL business, research, weather and other historical data.
Librarian	Make preparations to safeguard books, records and equipment.
Cafeteria Supervisor	Make preparations to safeguard records and equipment.

### 3.0 DEFINITIONS

**Gale Warnings:** A Gale warning, for winds reaching 39-45 mph or a whole gale warning, for winds reaching 55-73 mph, may be issued for areas adjacent to that which is expected to get the full impact of a hurricane.

**Hurricane Watch:** A hurricane watch is issued 72 hours prior to expected landfall. This designation does not indicate immediate danger but serves to caution residents in the area that they should listen to radio or television for further advisories. Safety precautions taking more than 18 to 24 hours to fulfill should be started.

**Hurricane Warning:** A warning is issued 24 hours prior to expected landfall. This warning is issued when it is expected that an area will feel the dangerous effects of the hurricane (i.e., winds of 74 mph and higher or a combination of dangerously high water, very rough seas, and winds 60 mph and higher). All precautions should be taken immediately. It should be noted that the high winds, heavy rain, and high waves occur 200-300 miles outward from the center of the hurricane.



## Hurricane Categories

**Category 1.** Winds of 74 to 95 miles per hour. Damage primarily to shrubbery, trees, foliage, and mobile homes. No real wind damage to other structures. Some damage to poorly constructed signs. Low-lying coastal roads inundated, minor pier damage, some small craft in exposed anchorage torn from moorings.

**Category 2.** Winds of 96 to 110 miles per hour. Considerable damage to shrubbery and tree foliage; some trees blown down. Major damage to exposed mobile homes. Extensive damage to poorly constructed signs. Some damage to roofing materials of buildings; some window and door damage. No major wind damage to buildings. Considerable damage could occur to piers. Marinas flooded. Small craft may be torn from moorings.

**Category 3.** Winds of 111 to 130 miles per hour. Foliage torn from trees; large trees blown down. Practically all poorly constructed signs blown down. Some damage to roofing materials of buildings; some window and door damage. Some structural damage to small buildings. Mobile homes destroyed. Serious flooding at coast and many smaller structures near coast destroyed; larger structures near coast damaged by battering waves and floating debris.

**Category 4.** Winds of 131 to 155 miles per hour. Many shrubs and trees are blown down and most street signs are damaged. Extensive damage to roofing materials, windows, and doors. Complete failure of roofs on many small residences. Complete destruction of mobile homes. Major damage to lower floors of structures near shore due to flooding and battering by waves and floating debris. Major erosion of beaches.

**Category 5.** Winds greater than 155 miles per hour. Shrubs and trees are blown down; considerable damage to roofs of buildings and all signs are damaged or destroyed. There would be very severe and extensive damage to windows and doors. Complete failure of roofs on many residences and industrial buildings. Extensive shattering of glass in windows and doors would occur. Some complete building failures. Small buildings overturned or blown away. Complete destruction of mobile homes.

## Hurricane Evacuation Zones

Mobile	
<b>Zone I</b> South of Interstate 10	<b>Zone II</b> North of Interstate 10 East of Interstate 65 East of US 43
<b>Zone III</b> North of Interstate 10 South of US 98 West of Interstate 65	<b>Zone IV</b> North of US 98 West of Interstate 65 West of US 43
Baldwin	
<b>Category 1-2 Zone</b> South of Intercoastal Waterway	<b>Category 3 Zone</b> South of US Highway 98
<b>Category 4 Zone</b> South of US Highway 90	<b>Category 5 Zone</b> South of Interstate 10

Incorporated Municipal Boundaries

AEMA 2006

Hurricane Routes and County Zones 2006-05-18-0857 A  
Produced by Michael A. Vashook, GIS Coordinator  
Projection: UTM NAD 83 Zone 16N

## Hurricane Conditions:

The following system of hurricane conditions will enable the staff of the DISL to take steps that will increase the degree of readiness according to a pre-planned sequence as a hurricane approaches. When a hurricane condition is announced, the following steps will be taken immediately.

The five hurricane conditions are:

- Condition 1:** Normal condition for June 1 to November 30.
- Condition 2:** Hurricane in the Gulf of Mexico.
- Condition 3:** Hurricane Watch.
- Condition 4:** Hurricane Warning.
- Condition 5:** Winds of 65 mph or greater expected within 12 hrs.

Any change in the hurricane condition status or the decision to close the laboratory will be announced by the Executive Director as early as possible to permit orderly evacuation of personnel, vehicles, and boats and preparation and protection of property.

### **Condition 2**

#### *Hurricane in the Gulf of Mexico*

<b>Person Responsible</b>	<b>Action Required</b>
Maintenance Supervisor	Make a final inventory of equipment and supplies.
Vessel Supervisor	Make sure that qualified operators are assigned and available to move boats to hurricane anchorage.
Chair, University Programs	If Summer School is in session, reaffirm arrangements for student evacuation to prearranged location(s). Prepare a sign in/sign out sheet that lists the names of all who will be evacuated.

### **Condition 3**

#### *Hurricane Watch*

Emergency Control Team	ECT will supply all faculty, staff and students with hurricane information including evacuation routes and shelters.
Maintenance Supervisor	Operational checks of key equipment. Lab fuel tanks will be topped off for later use.

### **Condition 4**

#### *Hurricane Warning*

<b>Executive Director</b>	Give the order to secure and evacuate.
<b>Emergency Control Team</b>	If evacuation is called during off duty hours, notify all personnel to report to the DISL immediately to secure the facility. Establish contact with appropriate state, county and local agencies.
<b>Chair, University Programs</b>	Supervise evacuation of students by designated personnel.

## **4.0 PROCEDURES : ACTION TO BE TAKEN**

### **Summer School Students - (Discovery Hall, College, Teacher Workshops)**

Upon determining an evacuation is required, Summer School students will be given a specific time limit to pack all belongings. They will be requested to go to the east side parking lot of the dorms. The students will meet with their dorm monitors, counselors, and/or instructors. Discovery Hall students will have their name checked off on the sign in/sign out sheets as they enter the assigned evacuation vehicles. DHP students with private vehicles will be allowed to drive said vehicles with an adult counselor/teacher present in a caravan behind the Discovery Hall evacuation bus. College students and Teacher Workshop students are allowed to evacuate in their personal vehicles after signing out with the dorm monitors. The college and Teacher Workshop students may leave to go to another shelter and/or home upon signing the evacuation sheet with their name, intended destination, and time of departure.

### **4.1 Safety Procedures for buildings and outdoor research sites:**

Outdoor research sites on the laboratory grounds will be secured by moving them indoors if possible, latching down or, when appropriate, by filling large tanks, etc., with water to anchor them.

Maintenance personnel will secure all doors and windows and loose gear, making room for any gear normally kept outside that must be moved indoors for protection. Where appropriate and possible, gear subject to water damage will be stored on tables, shelves, or on dunnage off the floor.

Emergency generators will be checked for fuel supply, oil, etc. The Maintenance Supervisor will make certain that they are in operational order before leaving.

All laboratory personnel are requested to unplug all equipment that is not essential for their operations in the respective areas before leaving.

Lock all buildings and storage sheds after securing all outside furniture and equipment that may become projectiles or be carried away by wind.

Where possible, vulnerable equipment with the potential to be damaged by flood waters will be moved to designated second story areas. All equipment susceptible to rain water damage will be covered.

Library shelves will be covered with protective plastic drop cloths.

#### **4.2 Final Actions before vacating premises by the Emergency Control Team**

1. Verify all DISL faculty, guests, students and staff have been evacuated.
2. Insure all records and equipment left on the premises have been protected.
3. Notify local fire/police, and Mobile County Emergency Management Agency that the premises are vacated and leave.
4. Emergency Control Team will log out leaving destination information and emergency telephone numbers.

#### **5.0 POST-HURRICANE CAMPUS IMPACT/RETURN INFORMATION**

A satellite phone has been acquired to complement cell phone communications between the Laboratory and the Executive Director. Following hurricane impact DISL will post an 800 number on the front page of the website that will be used to give daily information to faculty, staff, and students on the conditions of the Lab and other pertinent details concerning returning to the campus

#### **6.0 SAFETY PROCEDURES UPON RETURNING AFTER A HURRICANE**

The Executive Director or his designated representative will determine when it is safe to return to the Sea Lab. Employees of the Sea Lab will be notified when it is safe to return by their supervisor or a member of the Emergency Control Team. This decision will be based on information received by the Executive Director from local civil defense and emergency management authorities.

Maintenance personnel will thoroughly inspect each building and the facilities structural and service systems and declare each building safe before other DISL personnel are allowed to return.

All Principal Investigators/Program Managers and Department Supervisors are responsible for inspecting their respective areas closely, itemizing all necessary repairs and returning their equipment, etc. to the proper place.

Electrical shorts, downed power lines, fallen limbs, damaged buildings, snakes, rats, etc. are the major hazards at this time. **Be Alert!** Do not drink from the public water supply until notified by the officials of the Dauphin Island Water and Sewer Authority that the water supply is approved for drinking.