Hurricane- Tropical (and other severe) Storm Preparation Plan Rutgers the State University of New Jersey Haskin Shellfish Research Laboratory (HSRL) Haskin Cape Shore Laboratory NJ Aquaculture Innovation Center (AIC) Cape May Fisheries Communication Center (FCC)

July 15, 2015

The Haskin Laboratory Director, in consultation with Cape Shore, NJ AIC and FCC Directors as well as campus-based administrators, is responsible for the enactment of procedures to protect property and staff before, during, and after tropical weather events. Senior technical, maintenance, administrative and IT staff are expected to participate in decisions about courses of action in consultation with Principle Investigators as needed at each facility. The administrative office at HSRL will monitor weather reports on the internet, television, radio and vhf NOAA radio as most appropriate and keep all personnel up to date. Communication with campus-based administrators, including the NJAES Director for Research, and the Director of the Rutgers Department of Risk Management & Insurance is encouraged during the formulation and enactment of local plans.

Before hurricane season and whenever a severe storm is forecast

- test generators (main HSRL generator done monthly) and check fuel supplies
- review generator start procedure and power transfer with selected staff
- establish regular fuel delivery method for the large generator in case of extended power outage
- purchase plastic sheeting and packaging tape
- assess chemical waste storage inventory and arrange for off site transport
- update lab cell phone list
- determine alternate locations for HSRL residents
- determine alternate land locations for boats docking at HSRL (State Police-Hayleyville or DEP Bureau of Shellfisheries lot on Buckshutem)
- determine alternate locations for HSRL vehicles and who will have keys (see above)

Preparations for weather events will vary according to the severity and timing of the storm. The typical chronology of actions as a storm approaches is as follows:

- monitor official sources of information about impending threats (e.g. NWS Hurricane Center)
- arrange discussions with the key consultants listed above
- schedule meetings for all staff to evaluate threat and discuss plans for preparation (usually about 48 hrs before anticipated landfall)
- inform campus offices about status and plan
- implement action plans below starting with Level 1 (minimal response)
- complete preparations and communicate expectations for employee departure and return times

Level 1 preparation: low to medium surge and wind threat

- backup computer files with plan to carry set offsite
- initiate plan to move dormitory residents for the night
- remove or secure all extraneous items from dock, decks, parking lots
- prepare outbuildings: lift all vulnerable equipment, tools, supplies and potential contaminants above anticipated flood level
- prepare boat(s): secure vests and other light materials that could blow around; pull drain plugs out of boats (so accumulated rain does not stress trailers), tilt motors down
- turn power off to boat-fueling pump (HSRL in carpenter shop), leave rest alone
- seawater labs/cold rooms—Alert science staff of possible power outages.
- evaluate -80 freezer, freezers in Room 137, any other -20 freezer needs re: generator plug needed freezers into generator receptacles as possible (see generator circuits in Appendix)
- fire protection—although dorm has sprinklers and water storage tanks they would probably not work if power out but we must evacuate residents anyway—room 137, the carpentry shop and its attic, and the mechanical room all are on a pressure storage tank and sprinkler system so they would work in power outage.
- inspect roof of main building for loose material and clean debris from around all drains and scuppers
- place plastic sheets over analytical equipment and computer equipment that could be ruined by a leaky ceiling (individual researchers may want to cover file cabinets)
- test generator
- gas up vehicles
- remind staff to charge up flashlights, cell phones, etc. and to purchase batteries for necessary items, make sure vhf radios or other walkie talkies are functional
- review the checklist and cell phone numbers below and take a copy of this document with you (see Appendices for checklist and phone numbers)

Level 2 preparation: medium to high surge and wind threat

- move boats and trucks to designated spot; coordinate parking to take advantage of lee and avoid trees; block wheels and use ropes/anchors to secure trailers as needed, pull drain plugs (so accumulated rain doesn't stress trailer), tilt motors down
- move out all dormitory residents
- secure computers and other important equipment from all window-facing offices and labs;
- cover or move paper files, books, other materials that could be ruined by window blowouts, rain penetration, and leaking ceilings
- shut down seawater pumps and bring inside if possible
- if shut down, initiate plans for preservation of wetlab experiments
- empty kitchen refrigerators of perishable foods
- fill coolers with all available ice in morning and again at end of day
- Lock facilities upon departure

Other considerations:

- Please do not implement Level 2 activities unless the need to do so is announced
- Personal items (e.g. boats, books, cameras, wall art) are not insured on the state policy so it might be best to bring them home
- For insurance purposes, request permission to remove any University equipment (e.g. laptop, other computer equipment) from the site during an event
- Have Lab staff directory and emergency contact information available for communications from off-site; bring a hard copy home with you
- Participate in personnel check-in system in the event of a major event so that return/recovery actions and personal assistance at homes can be coordinated
- If there is a mandatory evacuation, access to the Lab is prohibited until the governor lifts the order; coordinate needs to return to the site with the Director who will coordinate timing with authorities
- Use of boats (before normal operations are resumed) must be coordinated with the Director and other staff as listed above.

Recognizing conditions, situations, possessions, and personnel change, this is considered a living document that is subject to change at the discretion of the HSRL Director or campus-based university authorities. Suggestions for modifying this plan are always encouraged.

Generator at HSRL is not automated and is currently inadequate. Decisions on what will be powered will be made based on best knowledge of existing needs at the time of a storm. A small portable generator is available.

No generator power exists at Cape Shore, the AIC or the FCC in Cape May, but there is a small portable generator at HSRL

HSRL & Cape Shore are supplied with bottled water.

APPENDICES ON FOLLOWING PAGES

APPENDIX 1—STORM PREP CHECKLIST

Chain of command at Bivalve: HSRL Director \rightarrow Field Researcher \rightarrow Sr. Maintenance Mechanic \rightarrow Administrative Assistant \rightarrow IT Specialist

Chain of command at Cape Shore: Cape Shore Director \rightarrow Principal Investigators \rightarrow Field Technician \rightarrow Sr. Maintenance Mechanic \rightarrow Administrative Assistant \rightarrow IT Specialist

Chain of command at NJ AIC: AIC Director \rightarrow Manager \rightarrow Operations Manager \rightarrow Principal Investigators \rightarrow Sr Laboratory Technician \rightarrow Sr. Maintenance Mechanic \rightarrow Administrative Assistant \rightarrow IT Specialist

Chain of command at FCC: FCC Director \rightarrow Sr. Maintenance Mechanic \rightarrow Administrative Assistant \rightarrow IT Specialist

Update and distribute cell phone list. Locate or purchase flashlights (and batteries), packing tape, plastic sheeting Check generators and fuel supply Review generator start and associated procedures with staff Plug freezers into generator receptacles as possible Inspect roof-clear debris from around drains, etc. Turn off boat-fueling pump (inside carpenter shop) but not the rest. All lab personnel work outside together to stow and secure all loose items All lab personnel work in boatshed together to stow items about 3 feet off floor Alert lab residents to pack belongings and determine where they will stay All those with experiments in wetlab (or elsewhere) should plan for power outage. Arrange for removal of lab boats and trucks to State Police barracks (Haleyville-Port Norris) or DEP Shellfisheries office (Buckshutem Rd) Backup all important computer files Cover all computers and important equipment with plastic sheeting. Clean out refrigerators Fill all possible coolers with ice Inform NJAES and Risk Management of plans Meet with all staff to finalize plans

APPENDIX 2 - PHONE LIST - EMERGENCY AGENCIES - HASKIN SHELLFISH LAB

IN CASE OF EMERGENCY CALL 9-1-1

Fire Department

Port Norris Fire Company 6858 Brown St Port Norris, NJ 08349 (856) 785-1313

First Aid

Millville Rescue Squad 600 Cedar Street Millville, NJ 08332 **Dispatch Control Center** (24 hour) (856) 825-5063 ex. 519 **Fax for dispatch control** (856) 825-8584

Local Police

NJ State Police, Port Norris Station 8861 Highland Ave. Port Norris, NJ 08349 (856) 785-0036 non-emergency - Dispatch (856) 785-0035

Marine Police

Bivalve Station 2669 Ogden Ave. Port Norris, NJ 08349 (856) 785-1330

Hospital

SJH Regional Medical Center 1505 West Sherman Vineland, NJ 08360 856-641-8000

APPENDIX 3 - PHONE LIST - EMERGENCY AGENCIES - CAPE SHORE LAB

IN CASE OF EMERGENCY CALL 9-1-1

Fire Department

Green Creek Volunteer Fire Department 14 Bay Shore Rd Green Creek, NJ 08219 (609) 886 -3427

First Aid

Lower Township Rescue Squad 101 Georgia Avenue Villas, NJ (609) 889 -5142 (609) 886 -9251

Local Police

Lower Township Police Department 405 Breakwater Road Cape May, NJ 08204 (609) 884 -9500

Marine Police

North Wildwood Station 113 W 26th Avenue North Wildwood, NJ (609) 522 -0393

Hospital

Cape Regional Medical Center 2 Stone Harbor Blvd. Cape May Courthouse, NJ 08210 856-641-8000

APPENDIX 4 - PHONE LIST - EMERGENCY AGENCIES -AQUACULTURE INNOVATION CENTER & FISHERIES COOPERATIVE CENTER

IN CASE OF EMERGENCY CALL 9-1-1

Fire Department

Cape May Fire Department 712 Franklin Street Cape May NJ 08204 (609) 884 -9512

First Aid

Lower Township Rescue Squad 101 Georgia Avenue Villas, NJ (609) 889 -5142 (609) 886 -9251

Local Police

Cape May Police Department 643 Washington Street Cape May, NJ 08204 (609) 884 -9500

Marine Police

North Wildwood Station 113 W 26th Avenue North Wildwood, NJ (609) 522 -0393

Hospital

Cape Regional Medical Center 2 Stone Harbor Blvd. Cape May Courthouse, NJ 08210 856-641-8000

APPENDIX 5 - PHONE LIST - HSRL and associated Rutgers Departments

Bradley I. Hillman, Dir. for Research NJ Agricultural Experiment Station Rutgers, The State University of NJ 88 Lipman Drive New Brunswick, NJ 08901 Office: 848-932-3777 e-mail: <u>hillman@aesop.rutgers.edu</u> e-mail2: bihillman@gmail.com James A. Breeding, Director Dept. of Risk Management & Insurance Rutgers, The State University of NJ Administrative Services Building III 3 Rutgers Plaza New Brunswick, NJ 08901-8559 Office: +1-848-932-7300 Ext. 23005 Direct Dial-848-932-3005 e-mail: james.breeding@rutgers.edu Web: http://riskmanagement.rutgers.edu

APPENDIX 6 - GENERATOR CIRCUITS at HSRL

CIRCUITS SUPPLIED BY EMERGENCY GENERATOR AT HSRL (15 KVA)

PANEL Light Panel-A (LP-A)	LOCATION Janitor Closet	CIRCUIT 1 2 3 4	SERVICE Lobby lights Admin. Office - Base receptacle, outer walls-older receptacles Library lights and receptacle, Emergency Lights (Library and Lobby) Dorm lighting - Bedroom area, Kitchen, Emergency lights
New Electrical-Lower (NE-L)	Mechanical Room	1/3 2 4 5 6 7 8 9 10 11/13 12/14 15 16 17 18/20 19 21 22 23 24/26 25/27 28 29 30 31 32/34/36 33 35 37/39/41 28/40/42	CompressorCold Room 203 Wet Lab- East and South Wall Receptacles (try these for freezers) Generator Crank Case Heater Room 120 2-hood lab (interior wall) Receptacle Generator ShedLighting and Receptacle for Charger Spare Generator Fuel Lift Pump Fan Coil UnitCold Rooms 202 and 203 Fume Hood- Room 122 Room 118, 208volt wall receptacle (can plug in -80 freezer) Compressor Cold Rooms 204 & 205 Spare Spare FCUCold Rooms 204 and 205 Emergency Lighting Panel LP-A- Front End Water Treament- Domestic Fresh Water Heat Tapes - Salt Water and Fresh Water Lines below Wet Lab Mechanical RoomFire Alarm Panel Mechanical RoomReceptacle below NE-L(try this for Rm 137 freezers) Domestic Fresh Water Well Pump Cold Room Atrium (Rm 202)Compressor Domestic Water Circulator pump, Hot Water Heat Exchange Partial lighting Algal CultureRoom 205 Spare Seawater System Control Panel Sewer Lift Pumps Dock Lights Heat Tapes-Pier piping (Seawater and Freshwater) HVAC Circulator Pump (Circ Pump 3) Seawater Circulator Pump (abilled loop)
New Electrical-Upper (NE-U)	Mechanical Room	1 2 3 4 5 6 7 8 9 10 11 12	Heat Tapes-Well Riser Spare Lights- Wet Lab, Shop, MechRm, Cold Rm Atrium (202) Lights- Cold Rms (203,204,205) Main Computer Closet Fume Hood- Histo Lab Room 120-Center Bench Receptacle Fume Hood B- Analytical Lab (120) Domestic Hot Water Loop Circulator Pump Fume Hood B- Analytical Lab (120) Exterior Lights Room 118 lights