

UF | IFAS

UNIVERSITY of FLORIDA

North Florida Research and Education Center

2014

**Natural Disaster/Hurricane
Emergency Preparedness Plan**

**University of Florida/IFAS
North Florida Research and Education Center**

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HURRICANE: KNOW THE TERMS

Familiarize yourself with these terms to help identify a hurricane hazard:

TROPICAL DEPRESSION

An organized system of clouds and thunderstorms with a defined surface circulation and maximum sustained winds of 38 MPH (33 knots) or less. Sustained winds are defined as one-minute average wind measured at about 33 ft (10 meters) above the surface.

TROPICAL STORM

An organized system of strong thunderstorms with a defined surface circulation and maximum sustained winds of 39–73 MPH (34–63 knots).

HURRICANE

An intense tropical weather system of strong thunderstorms with a well-defined surface circulation and maximum sustained winds of 74 MPH (64 knots) or higher.

STORM SURGE

A dome of water pushed onshore by hurricane and tropical storm winds. Storm surges can reach 25 feet high and be 50–1000 miles wide.

STORM TIDE

A combination of storm surge and the normal tide (i.e., a 15-foot storm surge combined with a 2-foot normal high tide over the mean sea level created a 17-foot storm tide).

HURRICANE/TROPICAL STORM WATCH

Hurricane/tropical storm conditions are possible in the specified area, usually within 36 hours. Tune in to NOAA Weather Radio, commercial radio, or television for information.

HURRICANE/TROPICAL STORM WARNING

Hurricane/tropical storm conditions are expected in the specified area, usually within 24 hours.

SHORT TERM WATCHES AND WARNINGS

These warnings provide detailed information about specific hurricane threats, such as flash floods and tornadoes.

NATURAL DISASTER/HURRICANE EMERGENCY PREPAREDNESS PLAN

IMPLEMENTATION

The NFREC Center Director will make a determination about the center closures in response to natural disasters and hurricanes. The Center Director will communicate information about center closures to center faculty members and farm and office management according to the notification plan or a phone tree. The information in this booklet provides guidelines for preparing for and protecting life and property at NFREC.

The Farm Manager or Coordinator of Research Programs at each location will be the initial contacts at each center.

Mr. Jim Bob Baxter - Marianna Farm,
Mr. David Thomas - Marianna Beef Unit Mr. John Allen Smith - Quincy

BUILDING EMERGENCY COORDINATOR (BEC)

A Building Emergency Coordinator (BEC) and alternate are designated for each Center/Farm area. The BEC at each unit will appoint Team Leaders for carrying out duties associated with preparations for hurricanes or natural disasters.

Quincy -	John Allen Smith (BEC)	(850) 545-2095
	Tom Bizzle (Alt.)	(850) 997-5937 or (850) 509-0752
	Dr. Nick Comerford	(850) 879-0846
Marianna - (Farm)	Jim Bob Baxter (BEC)	(850) 592-8801 or (850) 526-6901
	Ray Morgan (Alt.)	(850) 209-2042 or (850) 569-2170
	Dr. Nick Comerford	(850) 879-0846
Marianna - (Beef Unit)	David Thomas (BEC)	(334) 522-4646 or (850) 693-0309
	Don Jones	(850) 209-3555
	Dr. Nick Comerford	(850) 879-0846
	Cole Wood	(850) 227-4887

PLAN OF ACTION

When a natural disaster is imminent, and the nature of the disaster is known, appropriate actions will be taken as outlined in the IFAS Contingency Plan for Responding to Natural Disasters as set forth in 1993 guidelines and as follows:

This unit will communicate with employees and administrators at Gainesville and protect our property. All unit employees will be informed of our plan, needs, and their role in carrying out the plan.

This unit will join a network for disaster preparedness and response in this community, which would involve USDA and Civil Defense agencies and other organizations/agencies participating in joint programs.

If a hurricane or other disaster is predicted for the weekend or holiday, the Center Director may activate this preparedness plan to be in effect during the weekend or holiday.

If a natural disaster occurs during the non-working hours every effort will be made to place a recording on the main campus line at each Center to assist personnel in knowing the status of the Center and whether to report to work at the next appointed time (numbers are listed below). As always, use your best judgment in the event of flooding, downed trees, or other events that may pose a danger to you. It will be your responsibility to make an effort to contact your supervisor. Be sure you have contact numbers to keep in touch.

Quincy – 850-875-7100 ext. 0 Marianna – 850-394-9124 ext. 100

When A Natural Disaster Is Imminent, The Following Actions Should Be Taken:

- Each unit should determine the whereabouts of all employees and reiterate emergency assignments and means of communication.
- Notify Center administration by calling 850-875-7100 ext. 0. Familiarize yourself with the guidelines in this booklet in order to prepare for natural disasters and hurricanes.
- Notify IFAS Facilities Planning and Operations (Mr. Kevin Heineka at 352-392-6488 about the imminent situation.
- Secure buildings, facilities, equipment, farm animals, and test data.
- After the disaster has occurred and within 24 hours, determine the status of all employees and facilities, implement plan of action and carry out programs and services as needed; begin to prioritize and make repairs on facilities. Report status of employees and unit to appropriate Center administrators. Contact IFAS Facilities Planning and Operations about needs for repairs and assistance.

Hurricane Watch/High Wind Watch

- This condition is declared for an area when there is a threat of hurricane conditions within 24 to 36 hours. When a hurricane watch is declared, the Building Emergency Coordinator (BEC) should review the plan and ensure that all persons affected are briefed.

Hurricane Warning/High Wind Warning

- This condition is declared when hurricane conditions are expected within 24 hours. Hurricane conditions include winds of 74 miles per hour (64 knots) or greater.

DOS AND DON'TS

➤ **DOs:**

- Plan ahead; plan what you will need to do at work and at home to prepare for the storm.
- Stay calm; listen to weather and emergency radios.
- Backup computer hard drives and software, shut down computers and protect.
- Store software and data disks in a dry place at shoulder level like the top drawer of a filing cabinet.
- Valuable items in your office should be moved and secured away from windows.
- Lock windows and close blinds.
- Make sure vehicles have adequate fuel. Fill up those with 3/4 tank or less.
- Park vehicles in a safe location away from trees and in areas not prone to flooding.
- Unplug electrical equipment such as computers, printers, clocks, radios, etc.
- Cover large valuables with plastic for protection.
- If caught in a building, stay inside, away from windows and near the center of the building.
- Use battery flashlights and lanterns. Don't use any open flames for lighting.
- Leave for your home or designated safety area well before the hurricane hits.
- If you have laboratory spaces, prepare those as well.

➤ **DON'Ts**

- Don't panic!
- Don't call 911 or other emergency numbers for general or non-emergency information.
- Don't go outside during the storm.
- Don't work with electrical equipment during the storm.

PROTECTING FACILITIES AND PROPERTY

MARIANNA

HURRICANE

- **Vehicles:** Vehicles should be fully fueled following announcement of a hurricane watch/high wind watch for the area. Each primary user or user group is responsible for accomplishing this task. In the event a hurricane warning is issued, all vehicles covered by this plan shall be parked in a secure location designated by the BEC.
- **Area Surrounding Buildings:** A general survey should be conducted around each building following announcement of a hurricane watch for area. Loose items should be brought inside or secured to prevent loss or damage by wind.
David Thomas, Ray Morgan and Ray Jordan are responsible for securing all buildings, equipment and rolling stock.
- **Computer and Data Systems:** A full backup of the computer system should be conducted in the event a hurricane watch is issued. Backed up information should be stored in two separate locations. If necessary other computer related defensive actions deemed appropriate will be implemented.
- **Laboratory and General Office Areas (See Office and Administration Areas Checklist Page 13):** When a hurricane warning is issued, individual offices and work areas should be checked and storm readied. Close and lock all windows. Turn off and unplug all electrical equipment. Computers and other electrical equipment should be moved away from windows. Disconnect computers from data lines. Principal investigators will be responsible for preparation of their spaces.
Tina Gwin and Gina Arnett will be responsible for securing the administrative areas. After completion if there are known absences in a group, other group members should storm ready the work area for those absent. Following completion of all assigned duties, leave NFREC –Marianna immediately.

FREEZE

- The Research Coordinator will be responsible to protect all greenhouse projects and field crops. Protect exposed valves, i.e., backflow prevention and other valves that are exposed and which cannot be drained. The Research Coordinator can request assistance from the Farm Supervisor.
- Protect exposed water lines on all buildings, pump stations, and equipment.
- Check heating units in greenhouses to insure proper operation.
- Check fuel supplies for heating units and proper amount or anti-freeze in all radiators.

FLOOD

- Protect all openings to major buildings with sand bags. All able employees will be requested to assist in this task.
- Insure the existing drainage structures are open and functional.
- Move all important equipment and documents out of flood zones.
- Shut down all unnecessary electrical panels.
- Move all vehicles to highest elevation.

TORNADO

Immediately seek predetermined shelter. If time permits, do the following:

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- Shut down all unnecessary electrical panels
- Disconnect and close valves that dispense fuel

- Protect irrigation pumps (electrical, gas or diesel)
- Anchor or move trailers and unsecured materials (lumber, farm supplies) to shelter
- Move motor vehicles to shelter; if vehicles must remain in open, park closely together in line formation
- Move sensitive equipment away from doors and window

PROTECTING FACILITIES AND PROPERTY

QUINCY

HURRICANE

- **Vehicles:** Vehicles should be fully fueled following announcement of a hurricane watch/high wind watch for the area. Each primary user or user group is responsible for accomplishing this task. In the event a hurricane warning is issued, all vehicles covered by this plan shall be parked in a secure location designated by the BEC.
- **Area Surrounding Buildings:** A general survey should be conducted around each building following announcement of a hurricane watch for area. Loose items should be brought inside or secured to prevent loss or damage by wind. Tom Bizzle, Shannon Darby, Jimmy James, Lee Carter, Richard Brumbley, Roosevelt Gordon Jr. and Tom Batey are responsible for securing all buildings, equipment and rolling stock.
- **Computer and Data Systems:** A full backup of the computer system should be conducted in the event a hurricane watch is issued. Backed up information should be stored in two separate locations. If necessary other computer related defensive actions deemed appropriate will be implemented.
- **Laboratory and General Office Areas (See Office and Administration Areas Checklist Page 13):** When a hurricane warning is issued, individual offices and work areas should be checked and storm readied. Close and lock all windows. Turn off and unplug all electrical equipment. Computers and other electrical equipment should be moved away from windows. Disconnect computers from data lines. Principal investigators will be responsible for preparation of their spaces. Donna Durgin and Vicky Morris will be responsible for securing the administrative areas. After completion if there are known absences in a group, other group members should storm ready the work area for those absent. Following completion of all assigned duties, leave NFREC-Quincy immediately.

FREEZE

- The Research Coordinator will be responsible to protect all greenhouse projects and field crops. Protect exposed valves, i.e., backflow prevention and other valves that are exposed and which cannot be drained. The Research Coordinator can request assistance from the Farm Supervisor.
- Protect exposed water lines on all buildings, pump stations, and equipment.
- Check heating units in greenhouses to insure proper operation.
- Check fuel supplies for heating units and proper amount or anti-freeze in all radiators.

FLOOD

- Protect all openings to major buildings with sand bags. All able employees will be requested to assist in this task.
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TORNADO

Immediately seek predetermined shelter. If time permits, do the following:

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- Shut down all unnecessary electrical panels
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- Protect irrigation pumps (electrical, gas or diesel)
- Anchor or move trailers and unsecured materials (lumber, farm supplies) to shelter
- Move motor vehicles to shelter; if vehicles must remain in open, park closely together in line formation
- Move sensitive equipment away from doors and window

OFFICE AND ADMINISTRATION AREAS CHECKLIST

<input checked="" type="checkbox"/>	Action/Task	Location	Staff Responsible		Notes
			Primary	Alternate	
	Cover and secure vulnerable equipment with plastic.				
	When possible, move equipment and other valuable items into interior areas of the building away from windows. Tag moved equipment with department contact information for easy identification and retrieval.				
	In areas subject to flooding, relocate equipment and other valuable items to a higher floor or elevate. Tag moved equipment with department contact information for easy identification and retrieval.				
	Remove or secure equipment from outdoor and rooftop locations.				
	Clear refrigerators and freezers of items that could spoil if power is lost, but leave appliance plugged in.				
	Place important records and files in cabinets and cover with plastic.				
	Close and latch (or secure with tape if needed) filing cabinets and cupboards.				
	Back-up electronic data and store in multiple locations.				
	Follow IT provider instructions for				

	computer equipment preparations.				
	Clear desktops, tables and exposed horizontal surfaces of materials subject to damage.				
	Place telephone in desk drawer if the cord is long enough. Do not unplug telephones.				
	Take personal possessions home. UF is not responsible for personal items damaged.				
	Secure windows and close blinds.				
	Change voice mail to indicate UF closure.		All		
	Close and lock all doors, including office doors, before leaving.				

LABORATORY PREPARATIONS FOR NATURAL DIASTER

Quincy and Marianna

Hurricanes are dangerous storms and can threaten the safety and operation of research laboratories. Plans should be developed well in advance to insure the protection of valuable research equipment, samples, and data. Once a hurricane watch is issued, these plans should be implemented in your research areas in preparation for the hurricane.

When a **hurricane watch** is issued, make necessary preparations to suspend ongoing experiments involving biological materials, radioactive agents, and hazardous chemicals. Secure equipment and materials. When a **hurricane warning** is issued, implement activities to suspend operations in the laboratory. Plan to **shut operations down within three hours of initial hurricane warning**. Don't count on the availability of power or water after onset of event and for several days following. Here are some tips to help prepare for natural disasters:

- Always keep chemical/radioactive materials in your inventory to a minimum. Dispose of hazardous wastes and old materials routinely to minimize chemical loading in your facility.
- Consider turning down refrigerators and freezers to the lowest practical settings. Fill dewars and cryogen reservoirs for sample storage and critical equipment.
- Due to the possibility of power outages, volatile toxic materials should not be stored in fume hoods or the open room but in tightly sealed break-resistant containers.
- Remove any equipment or supplies stored or mounted in outdoor or rooftop locations once a watch or warning is announced (based on ease of removal and set-up).
- Laboratories with outside windows should develop a secure area for the storage of water reactive chemicals, radioactive materials, and bio hazardous agents. Ideally materials with significant potential hazard should be moved to interior rooms (solvent stills containing reactive metal, glove boxes containing air re-actives, etc.).
- If dry ice will be needed pre- or post-incident, document vendor information, payment method and delivery or pick-up options. Note: dry-ice should not be transported in a closed vehicle for safety of the occupants.
- Collect notebooks and secure samples/data as practical for colleagues in travel status or unable to reach the lab.
- Check emergency phone numbers. Update emergency notification lists on lab doors. You may consider temporarily posting an expanded list with all lab personnel phone, pager, and cellular phone numbers if the University is to be closed.
- Maintain a supply of plastic waterproof containers to store reactive chemicals, lab notes, research documentation, computer disks, and any other materials that you cannot afford to have damaged.
- Plan in advance how to ensure the protection of valuable research equipment, samples and data. Contact appropriate work management center (PPD, IFAS Facilities) if planning to use portable generator to determine appropriate and safe use, connection and fueling. Note, portable generators are normally not provided by work management centers.
- Maintain a stock of critical supplies to prevent disruptions.
- Let Center Administration know if essential persons will need to remain in your building, be prepared to provide names, location, and contact numbers so they can be checked on periodically throughout the event.

Remember, you must take responsibility to protect your own laboratory. Plan ahead and implement your plan as soon as a hurricane watch is issued.

Departments are responsible for taking protective actions in their own laboratories. This checklist is designed to identify suggested tasks and assignment of responsibilities for preparing laboratory areas. Not all items are appropriate for all areas. Departments and researchers should add actions specific to their individual laboratories if needed.

When impacts from tropical weather are possible, consider necessary preparations to suspend ongoing experiments involving biological materials, radioactive agents and hazardous chemicals. When UF suspends normal operations, postpone operations in the laboratory, secure equipment and complete the checklist.

Note: personnel should not stay in the laboratory during a storm if UF has suspended normal operations.

LABORATORY AND RESEARCH AREAS CHECKLIST

<input checked="" type="checkbox"/>	Action/Task	Location	Staff Responsible		Notes
			Primary	Alternate	
	Turn down refrigerators and freezers to the lowest practical settings and plug into emergency power where available. Red outlets typically designate emergency power.				
	Place recording maximum/minimum thermometers in refrigerators and freezers containing temperature critical supplies and samples.				
	Plug incubators into emergency power outlets if you must maintain cultures in vitro.				
	Cover and secure or seal vulnerable equipment with plastic.				
	Remove or secure equipment from outdoor and rooftop locations.				
	Ensure arrangements have been made for the care and feeding of laboratory animals. Follow recommended actions of UF Animal Care Services.				
	In areas subject to flooding, relocate or elevate equipment, chemicals, wastes and other important items from the floor to prevent damage.				

<input checked="" type="checkbox"/>	Action/Task	Location	Staff Responsible		Notes
			Primary	Alternate	
	Secure radioactive isotopes, biohazardous agents, recombinant materials and hazardous chemicals to prevent breakage and release.				
	Fill dewars and cryogen reservoirs for sample storage and/or critical equipment.				
	Over-pack reactive chemicals in plastic, waterproof containers.				
	Remove regulators and cap gas cylinders, except for CO2 needed to maintain cell cultures. Ensure all cylinders are secure.				
	Autoclave or inactivate infectious or rDNA waste.				
	Due to the possibility of power outages, store volatile, toxic materials in tightly sealed, break-resistant containers rather than fume hoods or open room.				
	Protect valuable files, research samples and notebooks in place or move to a safer location.				
	Protect notebooks and secure samples/data as necessary for colleagues unable to reach the lab.				

<input checked="" type="checkbox"/>	Action/Task	Location	Staff Responsible		Notes
			Primary	Alternate	
	Update emergency contact information including notification list on lab door. Add and expand temporary contact information if staying at a different location during storm.				
	Close and latch (or secure with tape if needed) filing cabinets and cupboards.				
	Back-up electronic data and store in multiple locations.				
	Follow IT provider instructions for computer equipment preparations.				
	Close and lock all doors and windows before leaving.				

POST HURRICANE PROCEDURES

Immediately after the disaster and as soon as safely possible, the Primary and Alternate Building Emergency Coordinators and Damage Control Teams should return to the Center. BECs should check in, make a damage survey, and report the conditions of their buildings to the Center Director and the IFAS Facilities Planning and Operations **Mr. Kevin Heineka at (352) 392-6488**.

Issues pertaining to personnel should be reported to the Center Director and to IFAS Office of Personnel Affairs **Mary Ann Morgan at (352) 392-4777**.

After the disaster and within 24 hours, each employee must call in, if possible, to let them know of the employee's situation.

EFFECTIVE COMMUNITY RESPONSE TO DISASTER: A COMMUNITY APPROACH TO DISASTER PREPAREDNESS AND RESPONSE

M.A. Brennan

This paper is part of a series of discussions on the impact of community action in response to natural and other disasters.

INTRODUCTION

The dramatic and tragic events of Hurricane Katrina and the 2005 hurricane season have highlighted the need for coordinated community based volunteer efforts to prepare for, and respond to, natural and other disasters. The recent disasters in the Gulf States underscores the problems and shortcomings associated with coordinating outside logistics and show a clear need for local volunteers to serve as the first line of response to such catastrophes. For example, this was most obvious in the first weeks after Hurricane Katrina, where volunteers and active community residents were the rescuers, caretakers, and in many cases, the final comforting companions to the dying. They were the first, and often the only, line of response that would exist for weeks. Government officials have immediately called on local citizens to volunteer their time, money, and sweat equity in addressing these massive and unprecedented natural disasters.

Such disasters are likely to occur again. The routine threats from hurricanes, tornados, flooding, and other natural disasters to the southeastern US and elsewhere are well documented and predicted. In particular, given the trend of increased storm intensity, the likelihood of the impending threat of severe hurricanes (Category 4 or 5) requires careful crisis and emergency planning strategies. Similarly, the possibility of terrorism remains an ever present threat.

When disasters do occur, citizen groups and coordinated efforts of local volunteers can respond to lessen the impacts and "build back better." Local residents will be the first responders. However, the process of organizing local residents must take place before, during, and after such catastrophic events occur (Berke et al., 1993). This factsheet identifies and suggests methods for linking local organizations, recruiting volunteers, and implementing coordinated action plans prior to, and after, the impact of natural disasters.

IMPORTANCE AND ROLE OF COMMUNITY IN DISASTER PREPARATION AND RECOVERY

In recent years considerably more emphasis has been placed on the role of community in disaster recovery and on the importance of local knowledge, action, participation, and control in determining the nature of disaster response.

It is logical that the community should be the first line of defense in preparing and responding in the event of disaster. Local residents and groups are in a position to best identify their immediate needs, coordinate preparations, supplement official response efforts, implement emergency response programs, and contribute to local decision making for future events. Similarly, local communities can provide a sense of connection, and decrease the isolation and abandonment that is often felt among residents in times of disaster. Such capacity for providing these community services does not always exist, but can be cultivated and should be encouraged and empowered.

In all communities, a variety of groups exist with diverse skills and abilities combined with personal and professional experiences that are essential to successful preparation and response to disasters (Independent Sector, 2001). Included are resident groups with needed professional and trade skills for damage control and assessment (engineers, environmental scientists, architects, contractors, and skilled laborers); disaster

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preparedness and response training (VFW, retired military/national guard/police); medical, psychological and

social service delivery experience (health practitioners, counselors, religious/civic groups); and long time residents who have witnessed previous responses to natural disasters.

Effective community responses connect these diverse groups and develop action plans to meet common needs. Successfully linking local organizations, citizens, and leaders provides a strong network for local citizens and groups to become actively involved in local preparedness and response efforts. To be most effective, this process of capacity building must take place before disasters occur, and continue during and after such catastrophic events. Extension and other change agents can help facilitate this process.

THE ROLE OF EXTENSION IN COMMUNITY RESPONSES TO DISASTER

To facilitate such citizen involvement, training at a variety of levels is useful. First, community development/civic engagement training should be the cornerstone of all community based disaster response programs. Such trainings provided by Extension and other community development educators would provide an understanding and framework for including broad based local representation into long-term emergency response and other local efforts. These trainings should include skill development such as asset mapping, assessing local power structures, needs assessments, conflict resolution skills, management methods, and community profile development. Such training would also inform active citizens that their involvement is essential to local development well beyond times of disaster.

Similarly, more general grassroots mobilizations can plan for, respond to, and rebuild in the aftermath of disaster. Included would be active efforts to bring together diverse local groups, the formation of local groups for planning, establishment of formal long-term visioning and goal setting for disaster preparation/recovery, and recruitment of experienced local citizens to take direct action. Similarly, the establishment of alliances between local groups could set the stage for a more effective sharing of resources and responsibilities during times of crisis. Such alliances can include the identification of organizations or individuals to serve as liaisons between local grassroots efforts and more formal structures (state and federal response organizations, military/national guard, emergence response agencies). Extension programming and trainings can be a valuable resource in facilitating all of these activities and skills.

WAYS COMMUNITY VOLUNTEERS CAN HELP

An organized community and volunteer response can help in a number of ways before, during, and immediately after the recent disasters. They are able to:

- coordinate a more successful evacuation and transportation effort;
- provide some structure and order instead of chaos;
- aide in organizing resources for distribution before and after disasters;
- decrease the isolation and sense of abandonment that quickly engulfs disaster victims in the affected areas; and contribute to local connections and interaction that signals the development of community.

CONCLUSION

Local volunteers and community level action is essential to effective natural disaster preparation and response. They are particularly important because citizens are in many cases the first responders and have the greatest chance to save lives and provide support in the hours and days immediately after disaster occurrences. Certainly, an effective community response would have diminished some of the suffering and loss that occurred during and after the recent disasters.

Community and volunteer coordinators have an obligation to help facilitate community organization and preparation to aid fellow citizens it times of such great need. The only thing that is certain in these times is that
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local residents will be the first people capable of responding. In these disaster settings, local volunteers and community organizations are presented with an unprecedented opportunity to make a measurable impact on

local well-being. The quality and extent of this response may hold the key to minimizing disaster effects, maintaining order, increasing hope, and maximizing recovery efforts.

In the end, facilitating local involvement in disaster preparedness and response is about far more than the provision of basic and logistical needs. It ensures that local voices are heard, local struggles are recognized, and the dignity of local people is respected. With this capacity established, local citizens can respond and recover in a manner that improves local life. The response and rebuilding process will belong to the front line of disaster responders---community volunteers---who will reinvest in their communities.