



Preparing for the 2019 Hurricane Season: Applying Lessons from Hurricanes Irma and Michael

FOR THE

#GATORGOOD

Angie B. Lindsey



FAMILY, YOUTH AND COMMUNITY SCIENCES
the science of helping people. together.



Center for
Public Issues Education



In Our Time Together

- UF/IFAS Extension
- EDEN
- Background
 - Irma
 - Michael
- Lessons Learned
- Moving to Best Management Practices (BMP)
- Resources & Moving Forward



UF/IFAS Extension

- Administered by University of Florida Institute of Food and Agricultural Sciences
- Offices in each of Florida's 67 counties and Seminole Tribe
- Programs Include agriculture production, water, natural resources & environment, energy, youth development, community development, family & consumer sciences
 - Supported by thousands of faculty members, scientists, educators, administrative staff, and volunteers



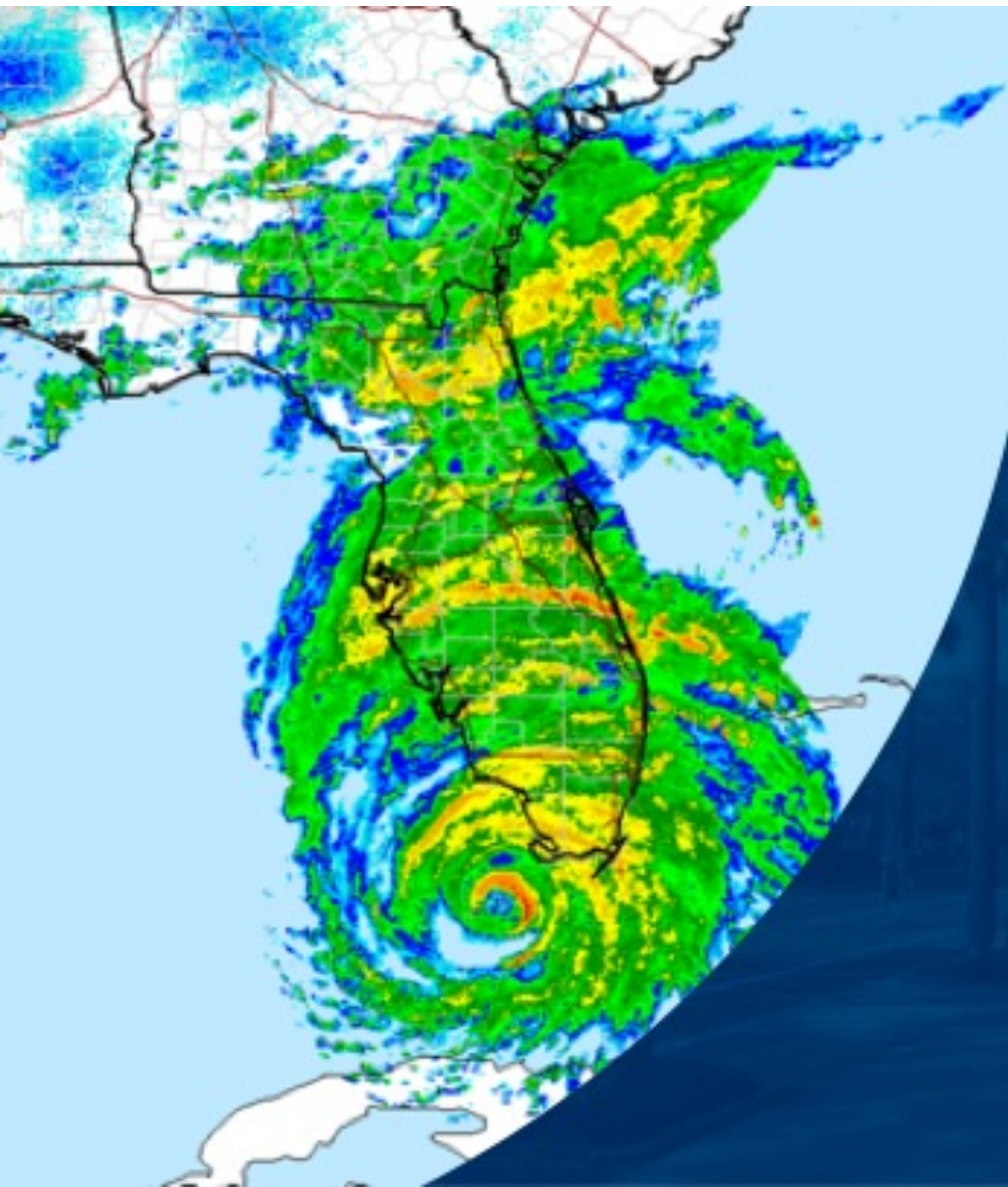
What is EDEN?



- **Extension Disaster Education Network**
- A Network
- Developed from lessons learned from 1993 Midwest Floods
- ***Mission:*** To reduce the impact of disasters through research-based education
 - Linking w/federal, state & local agencies/orgs
 - Anticipating future disaster education needs
 - Providing timely, credible info.
 - Networking



Background



Hurricane IRMA September 2017



Hurricane IRMA

- Landfall twice on 9/10/2017
- Category 4 Hurricane – Keys; Category 3 at Marco Island
- Measured wind speeds 120-142 mph
- Second most powerful storm in velocity & duration
- Hurricane winds covered 80 miles; tropical storm winds 400 miles
- 32 of Florida's rivers and creeks flooded
- 18 tornados
- 7,000 shelters
- 54 counties ordered evacuation orders (6.5 million evacuated)
- 6.7 million homes w/out power (64% of state)
- 84 related deaths
- \$60 Billion in costs – one of costliest storms in country

IFAS Extension Efforts Pre, During, and Post IRMA



Information,
information,
information



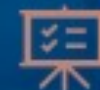
Working in Emergency
Operations Centers (EOC)
and assisting with
community needs



Emergency Support
Function (ESF) #17 &
working with state and
county governments



Daily phone calls with
IFAS Leadership Team



Meeting needs for
info./supplies/etc. at
County Extension offices



Providing support for
County Faculty and
communities



Development of
GroupMe text for
Extension family



Needs/Gaps form for
areas



Agriculture & Natural
Resources Assessments
and Reporting







Hurricane Michael

- Made landfall on October 10, 2018
- Mexico Beach, FL (east of Panama City)
- Maximum sustained winds of 160 mph
- Strongest hurricane on record to make landfall in FL Panhandle
- 4th most powerful hurricane to hit US
- Damage from wind and storm surge
- Recently upgraded to a Category 5 Hurricane
- 43 Deaths











UF/IFAS Work

- Personally Impacted 84 Faculty and Staff & their families across 11 County Extension Offices
- Including 2 Research Education Centers (REC) in Marianna and Quincy
- Representative at Emergency Support Function 17 Incident Command Post
- UF/IFAS assisted with State Agriculture Response Team (SART) distribution
- Four county offices served as distribution points for SART
- County offices were used as Point of Distribution for FEMA
- Five county offices set-up as FEMA Disaster Recovery Centers (DRC)
- Agriculture assessments
- Worked closely with FL Dept. of Ag (FDACS) & other SART partners to meet gaps/needs

Lessons Learned

- Collaboration in Blue Skies
- Update materials and SOPs
- Reporting assessments protocol
- Current technology is essential; Important to be up to date
- Planning is a year round necessity and great investment
- More staff should be considered "essential"
- Daily communication is key
- Extension needs to define its "niche"
- Development of Disaster Teams
- Partnership with Volunteer Florida
- SOP for internal communication SOP for helping our own IFAS family members
- Paper County Maps
- Mental health needs internal & external
- Having a central location in unaffected areas
- Short and easy to read documents

AFTER DISASTER STRIKES — GETTING FINANCIAL RELIEF —

1. **File for Unemployment Insurance**
If you are unemployed or have lost your job, you may be eligible for unemployment insurance benefits. Contact your state's unemployment agency for more information.
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UF IFAS Solutions



UF IFAS

BLOGS

UF/IFAS BLOGS

Category: Disaster Preparation

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UF IFAS Solutions @UF_IFAS · 10 Oct 2018

#HurricaneMichael is now a highly dangerous category 4 #hurricane. Take precautions to keep your home and family safe with expert resources from #UFFAS. #michael disaster.ifas.ufl.edu

UF IFAS Solutions

Information Pre & Post Storm

UF IFAS
UNIVERSITY OF FLORIDA

BLOGS

Home UF IFAS in the News Blogging Directory Blog IFAS

HURRICANE IRMA UPDATES

Hurricane Irma Updates

Citrus growers with questions about hurricane recovery practices are encouraged to call the
UF/IFAS Citrus Growers' Hotline (863-956-8811)

EDEN
Reducing the Impact of Disasters through Education

Directory Resources Login State Information Search

Educate Explore Engage
Resource Catalog, Courses, Webinars, and Exercises EDEN Notes, Disaster Programs, and Events Join and Connect with the Network

Home Educate Resource Dashboard

Resource Dashboard

What are you looking for?

Sort By Date Sort By Title Clear Selection

Water Requirements and Safety for Cattle Following a Disaster

Two-page fact sheet on how to provide safe water to cattle after a disaster, such as, flooding. Includes information on how to disinfect and calculate trough capacity.

View Resource

Refine Your Results

Asset Type
Core Competency
Recent
Institution
Mission Area
Program Area
State
Target Audience

6

2017
UF/IFAS EXTENSION
DISASTER HANDBOOK

Icons representing various disaster types: fire, flood, wind, and building damage.



Moving from Lessons Learned to Best Management Practices Curriculum

Best Management Practices – *Methods or techniques found to be the most effective and practical means in achieving an objective (such as preventing or minimizing pollution) while making the optimum use of the firm's resources. (Business Dictionary)*

Developing Curriculum, Providing TOOLS, & education to implement Best Management Practices in all counties based upon some of the Lessons Learned

Current FL EDEN Initiatives “In The Works”



Development of Continuation of Operations Plans (COOP) at state, district, and county levels



Mental Health First Aid Trainings throughout the state for Extension faculty & staff and public



Development and updating of tools for Extension faculty and staff



Research to determine how to best help Extension faculty & staff and communities



Development of reporting/assessments best management practices



Collaborate with state & county emergency management & other community partners



Photo by Kenneth Wiley, FEMA

Disaster Response & Recovery Mental Health First Aid Training

This training was designed to provide emergency responders, UF/IFAS extension agents, Florida State Agricultural Response Teams (SART) team members and partners, first and direct Responders, Florida Department of Agriculture & Consumer Services (FDACS) employees and community members who are active in natural disasters with the skills needed to address mental health needs and issues following disasters. The aim is to create mental health awareness and encourage proactive and informed decision making in individuals before, during, and after disasters. Seven total trainings will be held throughout Florida.

Marion County April 23-24
Osceola County April 30-May 1
Pinellas County June 4-5
Charlotte County June 19-20
More trainings to come.

Learn more
and register at
piecenter.com



Center for
Public Issues Education

FYCS



UF/IFAS Extension Wakulla County COOP

FLORIDA EDEN

All Employees

Les Harrison, CED	Phone Number, Email
Samantha Kennedy	Phone Number, Email
Rachel Pienta	Phone Number, Email
Sherry Balchuck	Phone Number, Email
Brandy Jones	Phone Number, Email

Leadership Succession

CED: Les Harrison
First Successor: Samantha Kennedy
Second Successor: Rachel Pienta
Third Successor: Brandy Jones

Essential Functions by Program Area

Agriculture Program Area: Les Harrison

1. ESF-17 Animal Protection
2. Maintain/Restore Communication with Ag/Hort. Clientele.
3. Conduct Standardized Damage Assessments/Coordinate with USDA FSA

4-H Program Area: Rachel Pienta

Alternate: Les Harrison, Second Alternate: Samantha Kennedy

1. Secure/Assess Damage to Project Equipment/Infrastructure in Office, School or Club Locations
2. Maintain/Restore Communication with 4-H Clientele
3. Coordinate with Volunteer Leaders to re-establish 4-H Activities

FCS Program Area: Samantha Kennedy

Alternate: Les Harrison, Second Alternate: Rachel Pienta

1. Food & Water Safety
2. Maintain/Restore Communication with FCS Clientele.

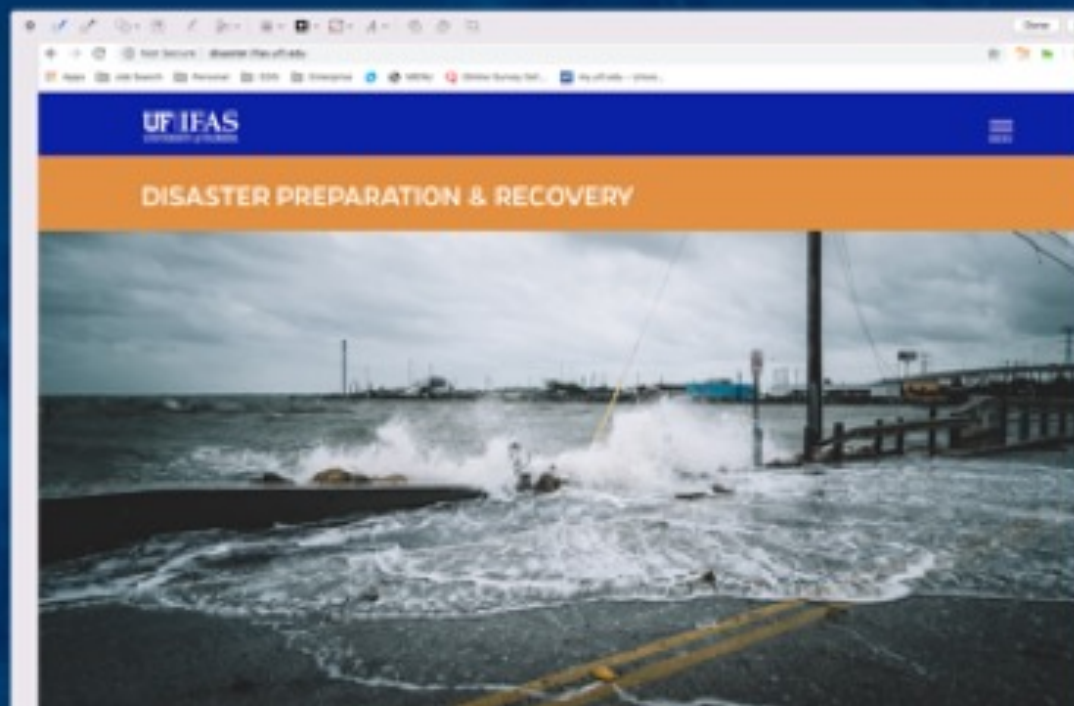
Natural Resources Program Area: Les Harrison

Alternate: Eric Lovestrand, Phone Number

1. Coordinate Standardized Damage Assessments/Coordinate with USDA FSA
2. Maintain/Restore Communication with Ag/Hort. Clientele.

IFAS Resources

- Local & State
 - Emergency Management
 - Collaborate & Coordinate with county & city EOC & emergency management teams
 - Local Programs & Outreach
 - Local outputs
- IFAS
 - EDIS – Electronic Data Info Source (edis.ifas.ufl.edu)
 - Disaster Preparation and Recovery (disaster.ifas.ufl.edu)



External Resources & Tools



- FEMA – Independent Study Program
- Center for Disease Control (CDC) Ready.gov
- Nonprofit Organizations – Red Cross, Salvation Army, etc.
- EDEN Website
- Land Grant Universities & State Extension
- Local County & Community Resources
- Media



Thank You!
Questions?
Angie B. Lindsey
Cell: 904-509-3518
ablindsey@ufl.edu