

GALVESTON DISTRICT EMERGENCY OPERATIONS; AN OVERVIEW OF EMERGENCY OPERATIONS AND SILVER JACKET PROGRAM OPPORTUNITIES



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RESILIENCY BEFORE, DURING AND AFTER A DISASTER

Alicia Rea
Director of Emergency Management/Security
February 11, 2021



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FEMA



Big Sioux River, SD
2019



Public Law 84-99

Flood Control Act of 1941

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During emergencies, USACE **SUPPLEMENTS** when States / Locals exceed capacity; USACE is **NOT IN-CHARGE**.

.....

Disaster Preparation, Emergency Operations,
Rehabilitation, Water Assistance,
Advance Measures, Hazard Mitigation



Project Operation



Technical Assistance
/ Sandbag
Preparation



Emergency Levee
Repair / Construction



Channel Dredging

Civil Works Authorities

Reservoir Operations
Dam / Lock Operations
CW Authorizations / Appropriations



2020
Jacob Javits Center, New
York City

Stafford Act

National Response Framework (NRF)

Disaster Preparation

Coordinating Agency ESF #3

.....

Public Works and Engineering

Primary Agency ESF #3

Support Agency ESF #6, ESF #9, ESF #14

.....

- 5 Permanent / 60 Credentialed ESF3 members
- 35+ Pre-Scripted Mission Assignments (PSMAs)
- 29 Planning and Response Teams (PRT)
- Advance Contracting Initiatives (ACI)
- Subject Matter Experts (SMEs)
- 19 Deployable Tactical Operations Systems (DTOS)

.....

National Disaster Recovery Framework (NDRF)

.....



Temporary
Power



Debris
Management



Temporary
Housing



Critical
Public
Facilities



Temporary
Roofing
"Blue Roofs"



Runway Repair, Afghanistan
2006

Domestic Support to NORTHCOM / ARNORTH

DODD 3025.18 – Defense Support of Civil Authorities (DSCA)

.....

Overseas Contingency Operations

Iraq / Afghanistan + CIV – MIL Engagement

Field Force Engineering

Support to Military Contingency Operations

LNOs to GCCs / ASCCs / OFAs

Forward Engineer Support Teams (FEST)

FEST-Advance (FEST-A) = 8 PAX (2 MIL / 6 CIV)

Contingency Real Estate Support Teams (CREST) = 4 PAX

Environmental Support Teams (ENVST) = 4 PAX

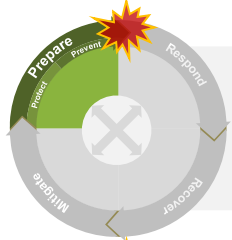
USACE Reach-back / Tele-Engineering

11 Basecamp Development Teams (BDT)

USACE Reach-back Operations Center (UROC)



USACE “ALL HAZARDS” LINES OF EFFORT

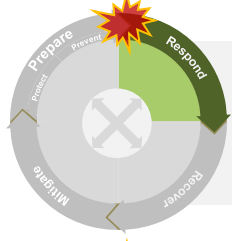
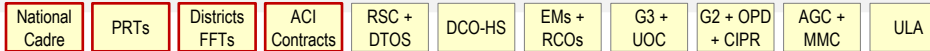


PREPARE for All-Hazards Contingencies

USACE: PL 84-99 [CAT 100 + 500] + National Emergency Preparedness Program (NEPP) + USACE Civil Authorities

FEMA: PPD-8 and PPD-21 Preparedness Programs

DOD: Defense Support to Civil Authorities (DSCA)

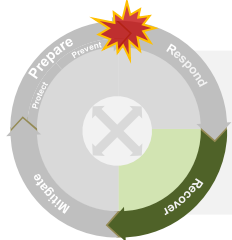
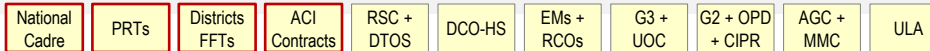


RESPOND to All-Hazards Contingencies

USACE: PL 84-99 [CAT 200] + USACE Civil Authorities + NRF Emergency Support Function 3 (Public Works and Engineering)

FEMA: Stafford Act + National Disaster Response Framework (NRF) + ESFLG

DOD: Defense Support to Civil Authorities (DSCA)

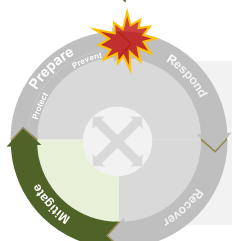


RECOVER from All-Hazards Contingencies

USACE: IS-RSF + NDRF + PL84-99 [CAT 300] / USACE Rehabilitation and Inspection Program (RIP)

FEMA: National Disaster Recovery Framework (NDRF) + RSFLG

DOD: Defense Support to Civil Authorities (DSCA)

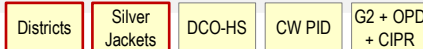


MITIGATE the Risks of All-Hazards Contingencies

USACE: PL 84-99 [CAT 400 + 600] + USACE CW Flood Risk Management Business Line + FPMS + PAS + USACE Civil Authorities

FEMA: National Mitigation Framework (NMF) + National Mitigation Investment Strategy + MITFLG + FIFM-TF

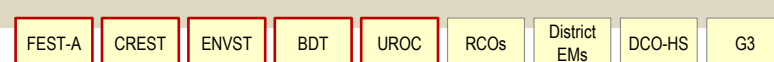
DOD: Defense Support to Civil Authorities (DSCA)



Support **MILITARY CONTINGENCY OPERATIONS**

Domestic Support of Civil Authorities (DSCA)

Military Contingency Operations – Field Force Engineering (FFE)



Save Lives

Protect Property

Increase
National Resilience

Public Infrastructure
Whole of Nation (WON) Efforts

Reduced Risk

Threat – Vulnerability – Consequence

Secure the Republic

Project National Power

Diplomatic – Information – Military – Economic

Protect the Environment



PUBLIC LAW 84-99 AUTHORITIES/ACTIVITIES



•Supplemental to State and Local efforts as well as Tribal requests.

- **Disaster Preparation**
- **Emergency Operations**
- **Rehabilitation**
- **Emergency Water Assistance**
- **Advance Measures**
- **Hazard Mitigation**
 - Direct support:
 - Sandbags
 - Pumps
 - Other flood fight supplies
 - Technical Assistance
 - Contract efforts

**Preparedness funding is
budgeted annually.
HQUSACE Provides Funding
for all other
PL 84-99 Activities on
Request
from Major Subordinate
Commands
for Each Specific Event**







EMERGENCY MANAGEMENT EXPERIENCE



USACE IN THE NATIONAL RESPONSE FRAMEWORK



Temporary Emergency Power



Debris Management



Temporary Roofing



Urban Search and Rescue



Critical Public Facilities and Temporary Housing

ESF3# Cadre
National Cadre
Team Leaders
Assistant Team
Leaders
Functional Cadres



PLACEHOLDER: CPF IN EAST TEXAS



QUESTIONS?



2/11/21

GALVESTON DISTRICT SILVER JACKETS PROGRAM

Ryan Schwartzengraber
Emergency Management Specialist
Galveston District
Date: 11 February 2021



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SILVER JACKETS IS...

- An interagency team that coordinates and collaborates to manage and reduce flood risk.
- State-level implementation of USACE National Flood Risk Management Program.



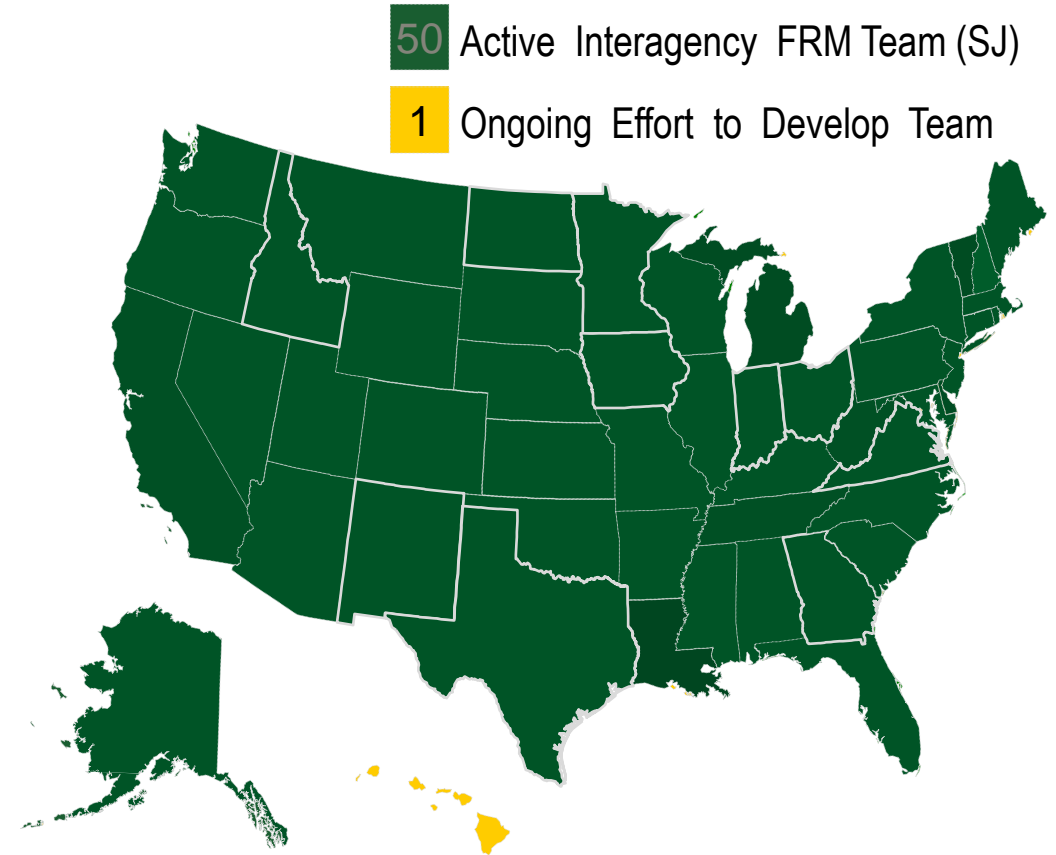
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SILVER JACKETS TEAMS AND GOALS

Partners

- State-Led (Voice of our ~~Customers~~)
 - States set priorities for Interagency Federal support
 - Primarily flood hazard focused
- Interagency Method of Delivery (MOD)
 - Collaboration across agencies/levels of government
 - Universal /Tailorable for all Agencies/Programs
 - Leverage resources: talent, data, funding
- Life-Cycle Risk Management
- Watershed Perspective
 - State teams facilitate
 - regional, state-to-state
 - flood risk management



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MULTIPLE AGENCY RESOURCES



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USGS U.S. Geological Survey	26

The BUZZ Special Edition

August 2014

IN SUPPORT OF AN INTERAGENCY APPROACH

Welcome to our Special Edition of the Silver Jackets Newsletter. This edition has been prepared to provide a reference of federal agency programs, resources and training opportunities that interagency Silver Jackets teams can leverage to achieve their flood risk management goals. The contributing agencies have provided the following information to increase awareness among participating agencies:

- Agency mission statement
- Example of an interagency flood risk management project
- Programs, services and other resources summary tables
- Key agency websites
- Agency contact information

This Special Edition is also intended to support interagency project discussions at the August 2014 Interagency Flood Risk Management Project Workshop in Southbridge, MA and follow-up meetings. Discussions during the workshop will center on how to enhance interagency collaboration, leverage agency resources, and improve project success.

We hope that this consolidated information will be useful and serve as a catalyst to increase coordination and collaboration among state and federal agencies. Increased coordination can help direct limited resources to where they are most beneficial, while improving the combined efficiency and effectiveness of agencies.

At a Glance Summary Table

Agency	When Can Agency Provide Assistance?			
	Preparation	Response	Mitigation	Recovery
DOT	✓	✓	✓	✓
EPA	✓		✓	✓
FEMA	✓	✓	✓	✓
HUD	✓		✓	✓
NOAA CSC/OCRM	✓		✓	✓
NOAA NWS	✓	✓	✓	✓
NRCS			✓	✓
USACE	✓	✓	✓	✓
USGS	✓	✓	✓	✓



FEMA



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WHAT CAN SILVER JACKETS DO FOR YOU?

ACTIVITIES ARE FUNDED BY VARIOUS AGENCY PROGRAMS

PREPARATION / TRAINING

- *Inundation Forecast Mapping*
- *High Water Mark Training*
- *Tabletop Exercises*
- *Community Rating System*
- *Joint Levee Safety Communication*

MITIGATION

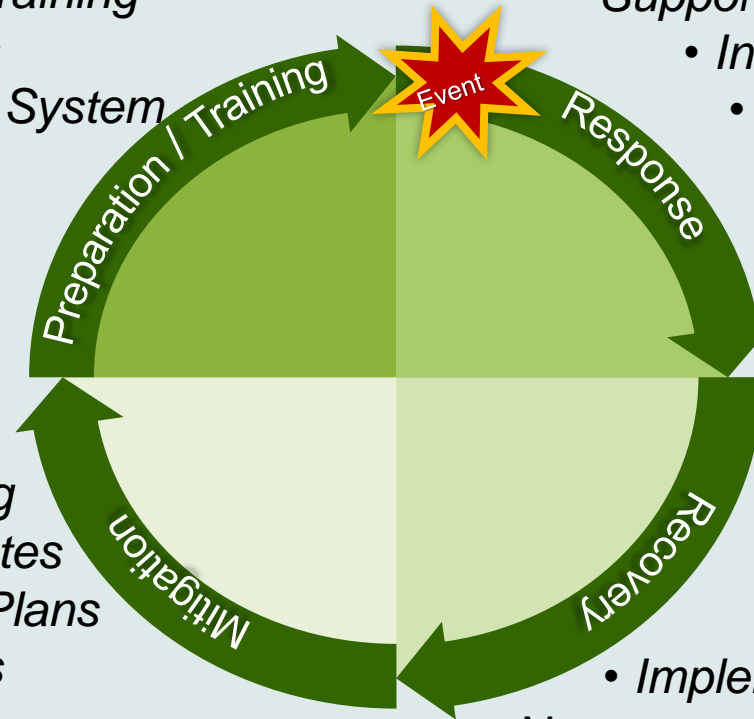
- *Evacuation Plans*
- *Inundation Mapping*
- *HAZUS Data Updates*
- *Hazard Mitigation Plans Updates and Actions*
- *Buy-Outs*
- *Interim Risk Reduction Measures for Leveed Areas*
- *Flood Insurance Rate Maps*
- *Watershed Assessments*

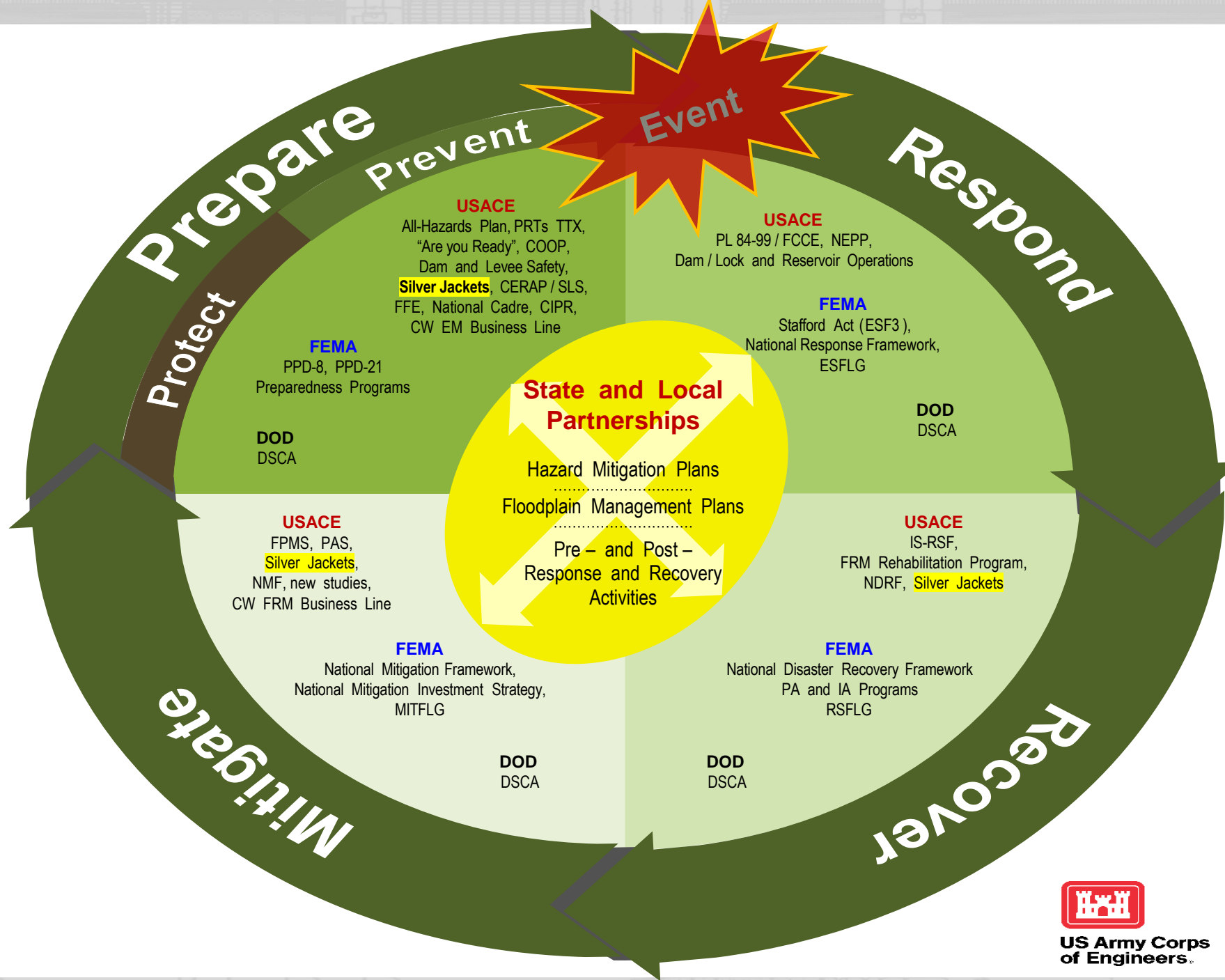
RESPONSE

- *Emergency Support Function Support*
- *Inter-state Basin Coordination*
- *Real-Time Inundation Maps*
- *Emergency Action Plans*
- *Flood Warning Systems*

RECOVERY

- *Nonstructural Measures*
- *Lee/Irene HMGP*
- *Flood Risk Mgt. Training & Education*
- *Implement Nonstructural Measures*
- *Nonstructural Flood Risk Mgt. Workshops*
- *National Disaster Recovery Framework Infrastructure Systems Recovery Support Function*





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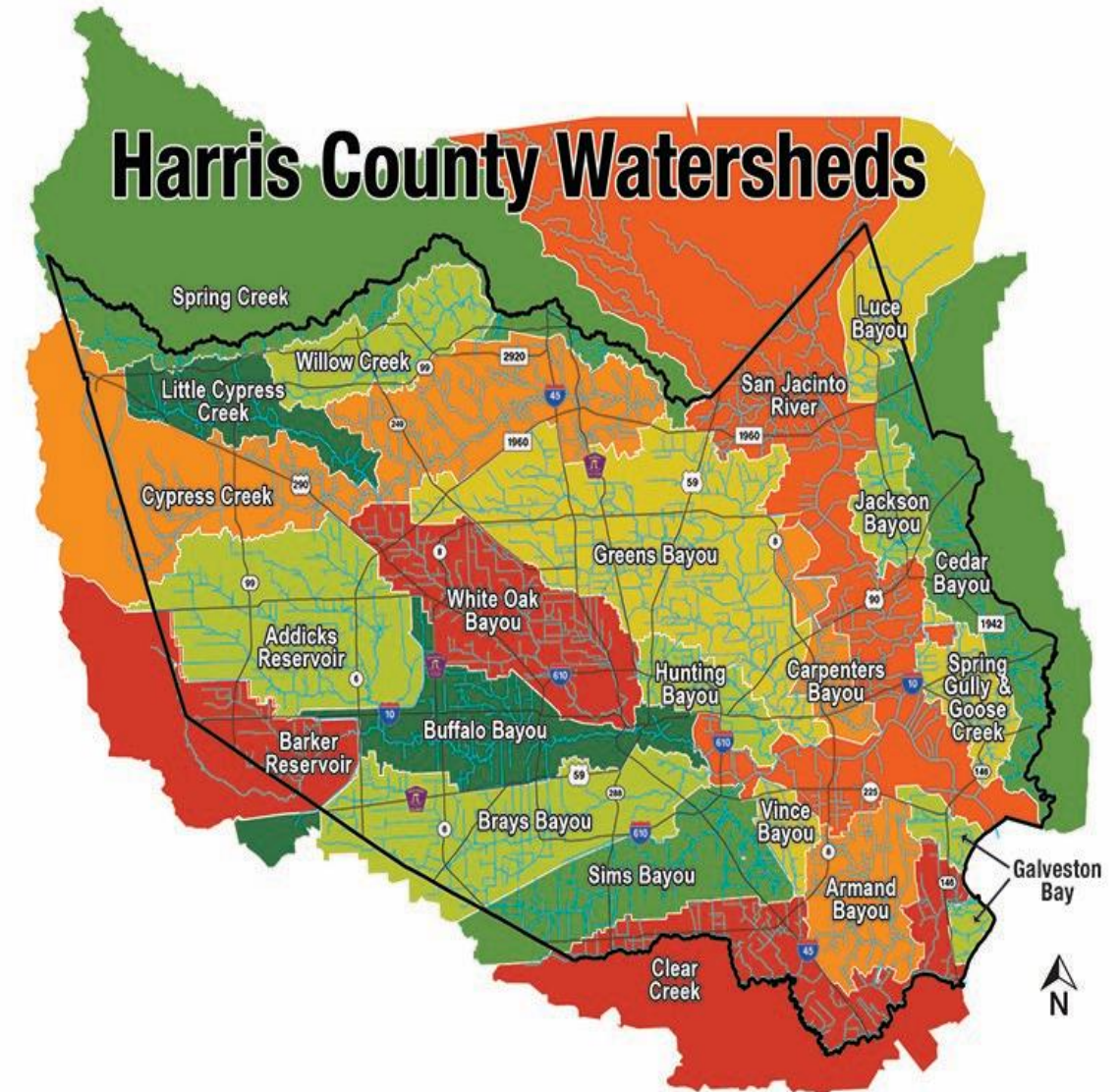


Harris County Flood Control District (HCFCF) Flood Forecasting Project

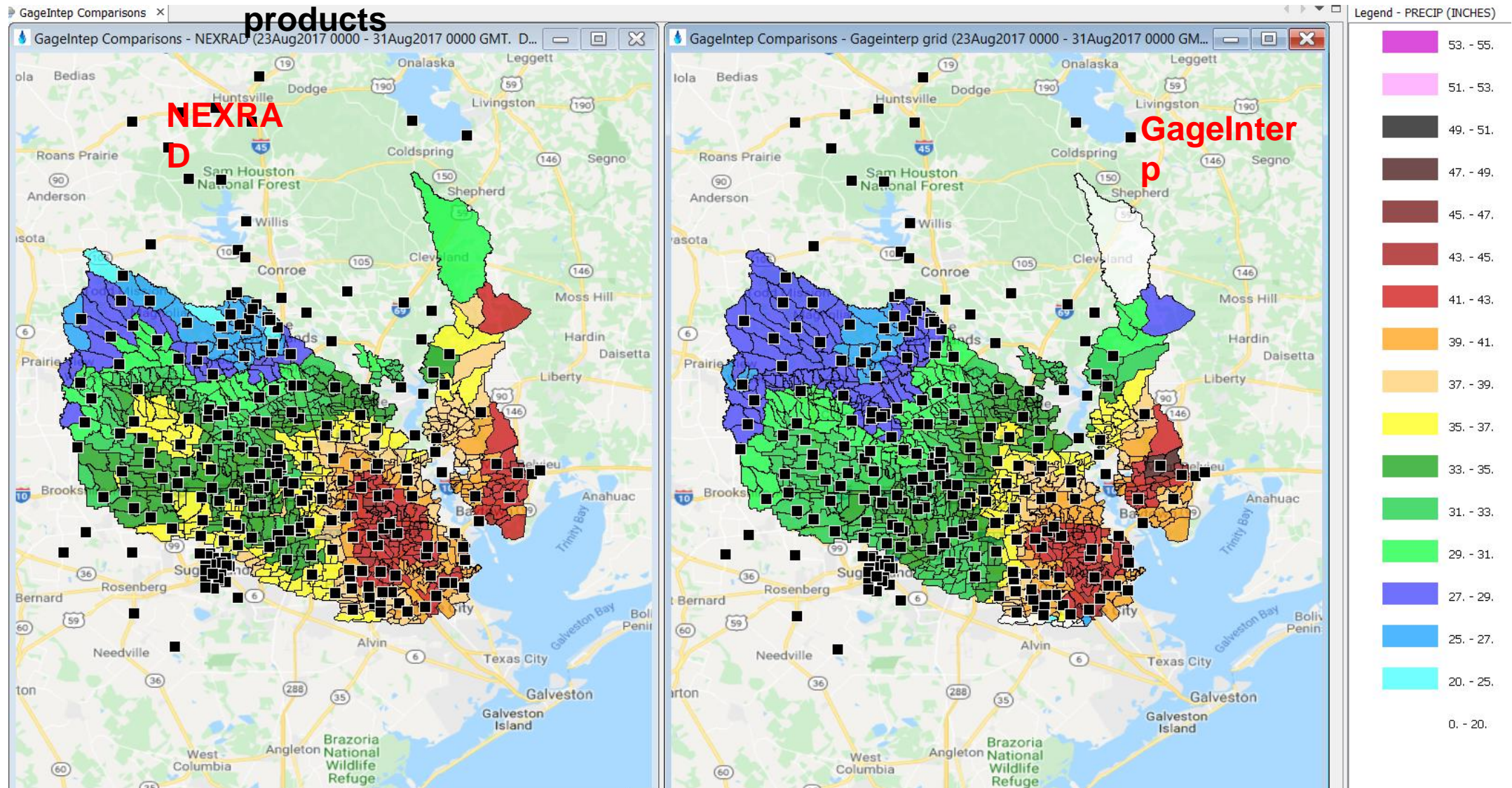
Texas Silver Jackets Study- Phase 2

Objectives: Improving flood forecasting capabilities on Harris County's twenty-two watersheds by applying Hydrologic Engineering Center's Real-Time Simulation (HEC-RTS) software to provide observations, model predictions and other ancillary information to facilitate flood forecast planning during emergency operations

- ❖ High Resolution precipitation product development (GageInterp software implementations)
- ❖ Interactive Dashboard for sharing flood hazard information (HEC-RTS Dashboard enhancement and prototype ArcGIS Dashboard development)
- ❖ Automated report generations compiling model results
- ❖ Technical support for operational HEC-RTS implementation



Improved high spatial and temporal resolution precipitation



High resolution GageInterp precipitation products comparison against NEXRAD datasets for time period of August 23 to August 30, 2017 (Hurricane Harvey event)



CURRENT GALVESTON PROJECTS



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TX STATE HAZARD MITIGATION PLAN

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Purpose:

- The purpose of the Updated Hazard Mitigation Plan is to reduce the risk to life safety. TDEM has requested that USACE provide input for flood, hurricane, drought, and erosion risk analysis as part of their update efforts such that mitigation strategies can be identified and implemented. The entire Texas Silver Jackets team will participate in the Risk and Vulnerability Analysis for the Texas State Hazard Mitigation Plan. This will primarily affect the areas of flood, hurricane, drought, and erosion risk for the state's update to their Hazard Mitigation Plan. Goal is to create a more robust State Hazard Mitigation Plan that will leverage resources from Federal, State, and Local agencies. As the State of Texas has had several significant events in the last few years, this update will not only provide the necessary inter-agency coordination, but also strengthen relationships with the state in the event of future emergency response efforts.

Status:

- Ongoing – Completion date is TBD

Process:

- This effort will be lead by TDEM , USACE, and FEMA since these agencies have the most expertise in risk analysis. This effort will require input from four different USACE districts (SWG, SWF, SWT, and SPA). The final product will be input into the TxFRAT (Texas Flood Resiliency Activity Tracker) database, which is a current Texas Silver Jackets project.



TEXAS FLOOD RESILIENCE OUTREACH

22

Purpose:

- Through this workshop process, five communities will produce action plans that identify land use, development, and related strategies that can reduce the vulnerability of property and residents to future flood impacts. The workshop and action planning process will help increase awareness of risk to flooding events and to address future flood mitigation planning efforts.
- Information provided in these workshops will provide communities with additional tools to assess impacts of current risk and develop mitigation measures. The workshops and actions plans will help increase awareness of nonstructural areas of improvement, such as adoption of green infrastructure in flood mitigation plans, and infrastructure needs or funding needs to upgrade pump stations, widening tributaries, and improve drainage.

Status:

- Ongoing – Completion date is TBD

Process:

- Communities will evaluate the strengths and weaknesses of their recovery and mitigation policies and process, and identify actions to increase community capacity and preparedness. After the workshops, the specified partners for that team will create a report based on discussions during the workshops and give the communities an idea of where they need to start to address their issues.



PROPOSED PROJECTS



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FLOOD FORECASTING SYSTEM EVALUATION FOR CITY OF CORPUS CHRISTI

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Purpose:

- Create a tool to provide more accurate and timely flood level forecasts and projected inundation mapping in the watershed of Nueces River for emergency managers, first responders, public officials, and the public to make better informed decisions in order to reduce the risk to the public and property damage.
- This project purpose directly addresses three of the goals outlined in Section 3, Hazard Mitigation Strategy, of the Texas Hazard Mitigation Plan. Goal 1 - Reduce or eliminate hazardous conditions that may cause loss of life; Goal 2 - Reduce or eliminate hazardous conditions that may inflict injuries; and Goal 3 - Reduce or eliminate hazardous conditions that can cause property damages.

Status:

- Not Started

Process:

- A prototype flood forecasting system was developed by driving hydrologic modeling (HEC-RTS) with various precipitation products for flow estimation, and then using the estimation to establish rating curves for stage hydrograph generation. High temporal resolution (15 min) precipitation products including Multi-Radar Multi-Sensor (NWS-MRMS), Gage-Adjusted Radar-Rainfall (Vieux-GARR) and gridded precipitation product were developed. Jython scripts were written to create a prototype RTS Dashboard for displaying relevant flood forecast information to facilitate flood forecast planning during emergency operations.



FOR MORE INFORMATION



<http://silverjackets.nfrmp.us/>

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