#### Puerto Rico & Hurricane Maria





February 2018

### Introductions



- Matthew Caesar, FEMA RX Planning Branch Chief
- Justin Craven, FEMA RX Planner





## Puerto Rico - 2017

#### **Historic Federal Response**



Largest air mission in FEMA's history	Fixed-Wings 1,008 Rotary-Wings 1,328
Largest commodity mission in FEMA history	61.14 + million liters of water, 54.01 + million meals and continuing
Largest power mission for the 249th Engineer Battalion on U.S. soil	1,013 generators installed
One of, if not the, largest disaster medical response missions ever	38,037 patients cared for
One of, if not the, largest disaster housing missions in FEMA history	

The largest sea-bridge operation of federal disaster aid in FEMA history

Longest sustained air mission of food and water in FEMA history



# Challenges



- Continual situational awareness requirement
- Isolated communities
- Logistics
- Lack of:
  - All communications and connectivity
    - Situational awareness
  - Access and transportation
    - Distribution capability
  - Fuel
  - Water
  - Food
  - Power
  - Sewer services/water treatment



# Planning



**FEMA** 

- Huge personnel footprint with a lack of transportation options and general resources necessitated calculated and coordinated actions
- Many complex missions across multiple functional areas required considerable coordination to be effective and efficient
- Task forces
- Resource allocation
- Specific power restoration priorities would have been extremely helpful (an RRAP could have been useful)

# Logistics



- Insufficient transportation bandwidth
- Prioritization
- Enable the private sector
  - Include the private sector in prioritization of goods and services
- Reception, staging, onward movement and integration (RSOI)
- Billeting



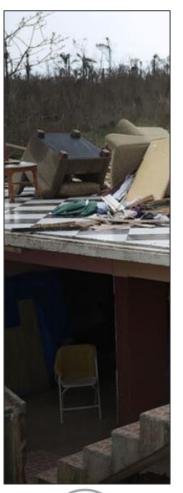
# Operations



- Concept of operations
- Operational coordination
  - DoD
- State prioritization information required for all initial missions (beyond 40 days)
- Initially assumption based
- Task forces
- Air operations



## Best Practices and Lessons Learned



- Many FEMA RX personnel deployed to PR
- Formal After Action Report (AAR) forthcoming
- RX very interested in the AAR for Puerto Rico







# FEMA

#### Puerto Rico

#### **By The Numbers**

Commodities	
Water	
Potable Water	16.18 million gallons
Bottled Water	61.14 million liters
Meals	
Total Meals Delivered	54.01 million

Power - Generators	
Generators Installed	1,013

Debris Cleared	
Debris Cleared by Municipalities (17 of 23)	1,961,066 CY
Debris Cleared by USACE	1,926,639 CY
Total Debris Cleared	3,887,705 CY

Disaster Unemployment Assistance	
Approved	4,207
Amount Disbursed	\$2,525,895

\*As of January 10, 2018

Housing, Public Assistance and SBA	
Individual and Households Program Maria	
Total Registrations	1,095,028
Total Dollars Approved	\$894,160,377.17
Public Assistance Maria	
Total Dollars Obligated	\$491,959,411.13
Small Business Administration	
Applications Received	51,984
Total Dollars Approved	\$459.13 million

Number of Federal Civilian Employees and Military Personnel	
FEMA Only	2,690
Department of Defense	1,493
Surge Force	43
Local Hires	1,687
Total	5,913

FEMA Temporary Roofing	
Self Help Tarps	125,981

Blue Roof Mission	
Rights of Entry	77,062
Installed	35,955