Catastrophic Incident Search and Rescue Lessons from the 2013 Colorado Floods

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Catastrophic Incident
Search and Rescue Lessons
From the Colorado Floods

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FEMA US&R White IST
Speakers

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- The speakers have no potential conflicts of interest to disclose.
Presentation

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Oso, Washington Land Slide
March 22, 2014
18 inches in September

A year’s worth of rain in just a few days.
1000 year flood

- 18 inches of Rain in 3 days
- 1500 homes destroyed
- 17,500 damaged
- 8 confirmed deaths
- Over 1800 persons unaccounted for
- 11,700 evacuated
- 2000 square miles affected
- 17 counties
First Responders

- Well Trained and equipped
- Conducted hundreds of harrowing rescues
- Overwhelmed with rising water on 12th
- Lost access, communications and facilities
- Called for help early
Most survivors are saved by first responders after a hasty search.
Massive damage to infrastructure
Homes and people isolated
No way in or out
County Response

- **County EOC** opened early
- All Hazards Type 3 IMT activated early
- Recognized they needed help
- Requested Type 2 IMT Requested Federal assistance
- Established single unified ICP to support individual commands
State Response

• Sent liaisons to each County
• Declared state of Emergency
• Requested disaster declaration
• Activated CONG
  – Air, ground and security forces
  – 400 personnel
  – 36 vehicles
• CO-TF 1 US&R Type 1 team
Federal Response

- Presidential Major Disaster Declaration
- Fort Carson responded under immediate Response Authority
  - Air
- FEMA Activated National US&R System
  - NE-TF₁
  - UT-TF₁
  - White IST
  - MO-TF₁
  - NV-TF₁
Unified Command, Boulder

- **Rocky Mountain** Type 2 IMT
- **FEMA** White IST
- DCO (Army & CONG)
- **Boulder County Sheriff**
- Emergency Management
  - State & County
- **FEMA**
  - Deputy FCO
  - IMAT
Unified Command, Larimer

- Rocky Mountain type 2 IMT A
- FEMA White IST
- DOD/CONG
- Sheriff
- County EOC
- State EOC
- FEMA Region
Incident Objectives

• Minimize risk to responders and public
• Provide operational and logistical support to individual commands in affected area
• Prioritize, direct and supervise all SAR operations
• Support distribution of food and water
• Coordinate and manage all aviation resources
Largest Air Rescue Since Katrina

- 21 military aircraft
- 2776 evacuated by airlift
- 70 plus hoist rescues
- Hundreds of sorties
- No accidents
Turnback goals from the authority having jurisdiction are part of the delegation of authority to the incident management team. They provide clear objectives, but must be achievable. Reporting percentage of completion helps to communicate the amount of time and resources needed to accomplish the goals.

TURNBACK GOALS

1. All routes clear and passable (5%)
2. All trapped are successfully evacuated (25%)
3. Structures cleared (15%)
4. Identify all damaged structures (5%)
5. All drainages checked and cleared (0%)
6. Debris piles mitigated of hazardous materials and/or HR (0%)
All available routes passable

Click for link to picture.
All trapped persons are out
Some refused to leave
1162 identified as Staying in Place
3288 structures cleared
All river valleys searched
Debris piles searched
All human remains recovered
2776 evacuated by air and ground
“Never Again”

Source unknown.
Hurricane Katrina, Day 1

Photo credit: Jocelyn Augustino/FEMA.
http://www.fema.gov/media-library-data/2aa8f567-0c95-46c8-babo-54b02e6e3b45/14549.jpg
The Catastrophic Incident Search and Rescue Addendum to the National Search and Rescue Manual directs procedures to be used for the delivery of survivors.
Delivery of Survivors

Rescue

→

Lily Pad

→

Place of Safety
Place of Safety

- Rescue operations are considered to terminate
- The lives of survivors are no longer threatened
- Basic human needs (food, shelter, and medical needs) can be met
- Transportation arrangement can be made for the survivor’s next or final destination
Lily Pad

- **Interim Stopping Point**
  - Account for survivors
  - Provide basic needs
  - Transport to a place of safety

- The SMC is responsible to arrange and coordinate the use of lily pads and places of safety with appropriate authorities.

- Utilize pre-event time to identify and prepare lily pads and places of safety.
Survivor Registration

Reasons to Register

Emergency Medical Service


Water, Snacks, and Blankets

Companion Animals

Outbound Transportation

Supporting Functions

• ESF-1 - Transportation
• ESF-2 - Communications
• ESF-6 - Mass Care, Emergency Assistance, Housing and Human Services
• ESF-7 - Logistics Management and Resource Support
• ESF-8 - Public Health and Medical Services
• ESF-13 - Public Safety and Security
Organization

- Group supervisor
- Ambulance (ground)
- Law enforcement
- Animal control
- Radio communicator
- Buses (transportation & sheltering)
- Scribes
- Fuel tender
- Mass Care Manager (Food, Water, Blankets)
Registration

• By Family Unit
  – Date, Time and location of Registration
  – Means of arrival
  – Pre-incident address
  – Are all occupants of that address accounted for?
  – Destination
  – Means of onward travel
  – For each individual
    • Name
    • Age
    • Gender
Documentation by US&R

• Type of Structure

• Damaged to structure

• Survivor status
  – Evacuated
  – Shelter in place

• HM

• HR
Data Collection

- Geo Reference using GPS
- Apps did not work
- Paper records problematic

US&R standard used

- Users
  - Searchers and Search managers
  - Recovery planners
  - Politicians
  - Infrastructure owners
Why was this a Success?

- Professional, qualified leadership
- Unified Command established on 13th
- Clear tasking and common set of goals
- Motivated, well trained responders
- Attitude of cooperation and collaboration
- EGOS left at the door
Summary

- Recognized you need help and ask for it early
- Establish relationships now
- Leverage strengths others bring
- Deal with issues quickly
- Remove problem personalities
- Understand the reality of disasters
- PIO’s/ JICS are essential
- Military and NGB are great resources
- US&R and USFS are all hazards resources, use them
- Complex incidents need Experienced IMT’s / IST’s
- **IF you have a dog in the fight, you need to be represented in the UC organization**
- Politicians and elected officials need to become involved in planning and exercises
- Unified Command Works!!!!!!
Questions?