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Colorado Springs


CS4950/5950
Homeland Security & Cybersecurity

Disaster Assets

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Lesson 37
Disaster Assets

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1
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1

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Disaster Assets

This module examines what happens in the worst-case scenario precipitated by cyber-attack.



2
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2

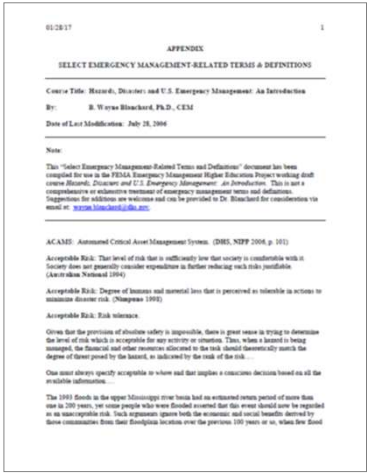


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Disaster Assets Terminology

- **Disaster** is a natural calamity.
- **Catastrophe** is a manmade calamity.
- **Technical disaster** is an accidental calamity.
- **There is no general agreement on what constitutes a disaster or catastrophe.**



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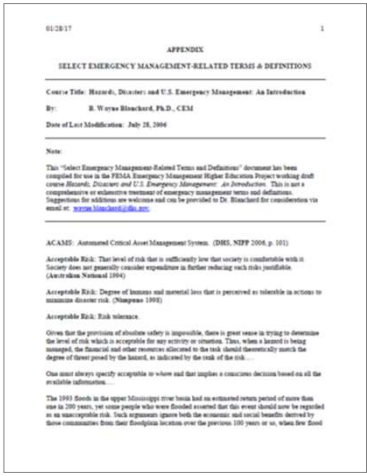


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Disaster Assets More Terminology...

- **Threats** generally refer to hostile human agents.
- **Hazards** generally refer to calamitous agents devoid of hostile intent; i.e., natural or technical disasters.



4
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4


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Recall that all disasters advance through four general stages:

1. **Prevent**
2. **Protect**
3. **Respond**
4. **Recover**



5
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5

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- Before a disaster, **Prevention Actions** are taken to reduce the chances of encountering an incident, or mitigating the consequences of future encounters.
- **Protective Actions** are taken to reduce or eliminate a particular threat or hazard.
- After a disaster, **Response Actions** are taken to save lives and protect property.
- **Recovery Actions** seek to alleviate social disruptions caused by the disaster as quickly as possible following the incident.



6
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6

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In this lesson, we examine what assets are available to **Respond** to disaster precipitated by cyber-attack.



7
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7

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Across the nation, **the same assets and procedures** are ready to respond to domestic catastrophic destruction whether precipitated by man or nature.



8
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8



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All Disasters Are Local

- Recall that **public safety** is a shared responsibility between State and Local government to **protect citizens from crimes and disasters**.
- State and Local taxes pay for emergency response assets.**

Federal



State



Local



9

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9



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Emergency Service Disciplines

- Law Enforcement.** Maintain law & order and protect public from harm.
- Fire & Emergency Services.** Minimize loss of life and property from fire, medical, and other incidents.
- Emergency Medical Services.** Deliver on-scene medical treatment and rapid transport to medical facilities.
- Emergency Management.** Plan, prepare, and direct large-scale emergency responses.
- Public Works.** Assess and repair damage to critical infrastructure.



First Responders

10

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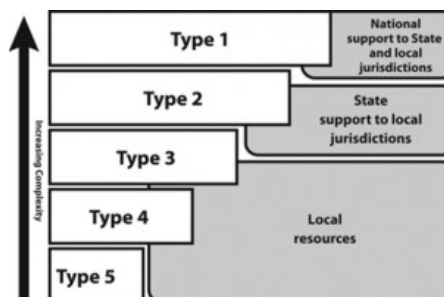
10



Disaster Assets

Response Size & Complexity

- The number and type of assets needed to respond depends on incident size and complexity.
- Type 4 & 5** incidents are the smallest, most common, typically resolved by assets from a single jurisdiction.
- Type 3** incidents are larger and require assets from multiple jurisdictions.
- Type 2** incidents are complex and may need specialized State assets.
- Type 1** incidents are the most complex and may require Federal assets.



11

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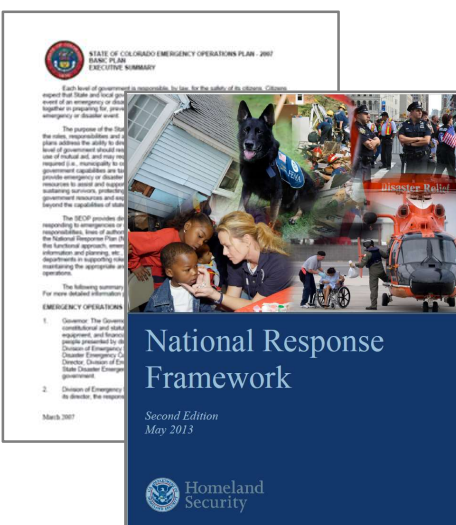
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Disaster Assets

Requesting Assets

- Procedures for requesting assets from neighboring jurisdictions and the State are detailed in corresponding **Emergency Operations Plans (EOP)**.
- Procedures for requesting Federal assets are detailed in the **National Response Framework (NRF)**.



12

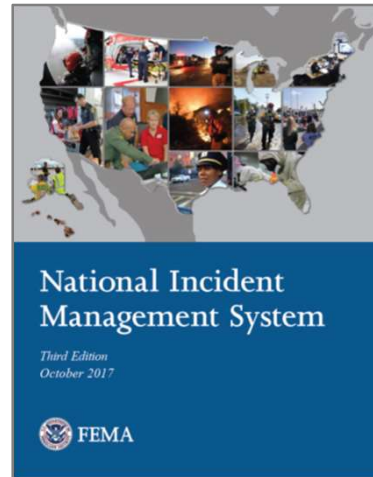
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12



Disaster Assets Integrating Assets

- Integrating different assets into a cohesive response is facilitated by the **National Incident Management System (NIMS)**.
- NIMS is NOT mandatory, but to qualify for FEMA grants, First Responders must be certified as NIMS compliant.
- NIMS is predicated on the Incident Command System developed in response to 1970s California wildfires.



13

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13



Disaster Assets Incident Command System

- The **Incident Commander** is in charge of on-scene response.
- The **Incident Action Plan (IAP)**, verbal or written, directs response actions and priorities.
- The **Incident Command** is a flexible and scalable organization structure capable of facilitating command and control for incidents of any size and complexity.



14

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14



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State Assets

- **State Police.** Governor can direct State Police to augment municipal & county law enforcement.
- **Medical Reserve Corps.** Governor can activate county-based volunteer medical units.
- **Department of Corrections.** Governor can draw on prison volunteers for emergency labor pool.
- **National Guard.** Air and Army Guard assets can augment law enforcement and support mass care, mass casualty, and mass evacuation operations.



15

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15



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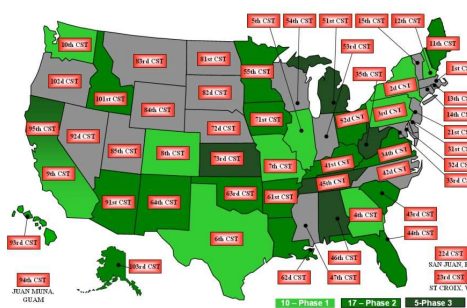
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State National Guard

- **WMD-CST.** Each of the 54 States and Territories is assigned a National Guard **Weapons of Mass Destruction Civil Support Team (WMD-CST)** capable of responding to chemical, biological, radiological, and nuclear incidents.
- **EMAC.** States and Territories can call on each other for additional National Guard support under provisions of the **Emergency Management Assistance Compact**, which is how Hurricane Katrina in 2005 resulted in the largest deployment of military forces in the US since the Civil War.



WMD CST Locations
(Weapons of Mass Destruction Civil Support Teams)



16

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16



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Federal Assets

- Federal emergency assets are requested according to the **National Response Framework (NRF)**.
- The NRF has organized Federal assets into **15 Emergency Support Functions (ESFs)**.
- Each ESF has one-or-more **Primary** and **Coordinating** agencies responsible for preparing and delivering the requested capability.
- All responding Federal assets work at the direction of the on-scene Incident Commander.**

Emergency Support Function	ESF Coordinator (C) or Primary Agency (P)
ESF-1 Transportation	Department of Transportation (C/P)
ESF-2 Communications	DHS National Communications System (C/P) DHS FEMA (P)
ESF-3 Public Works and Engineering	Department of Defense/U.S. Army Corps of Engineers (C/P) DHS FEMA (P)
ESF-4 Firefighting	Department of Agriculture/Forest Service (C/P)
ESF-5 Emergency Management	DHS FEMA (C/P)
ESF-6 Mass Care, Emergency Assistance, Housing, and Human Services	DHS FEMA (C/P)
ESF-7 Logistics Management and Resource Support	General Services Administration (C/P)
ESF-8 Public Health and Medical Services	Department of Health and Human Services (C/P)
ESF-9 Search and Rescue	DHS FEMA (C/P) Department of Defense/U.S. Air Force (P) DHS U.S. Coast Guard (P) Department of Interior/National Park Service (P)
ESF-10 Oil and Hazardous Materials Response	Environmental Protection Agency (C/P) DHS U.S. Coast Guard (P)
ESF-11 Agriculture and Natural Resources	Department of Agriculture (C/P) Department of Interior (P)
ESF-12 Energy	Department of Energy (C/P)
ESF-13 Public Safety and Security	Department of Justice (C/P) DHS FEMA (C/P) DHS (P)
ESF-14 Long-Term Community Recovery	Department of Agriculture (P) Department of Housing and Urban Development (P) Small Business Administration (P)
ESF-15 External Affairs	DHS (C) DHS FEMA (P)

Source: National Response Framework, Emergency Support Function Annex

17

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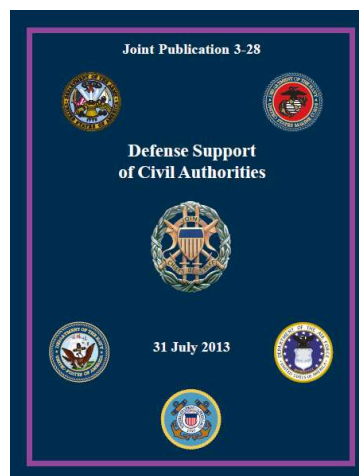
17



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Department of Defense

- DoD is the designated "Backup" agency for every ESF.
- Requests for DoD support must be approved by SecDef.
- When authorized, DoD conducts **Defense Support of Civil Authorities (DSCA)**.
- Like all responding assets, DoD forces work for the Incident Commander.
- DoD active duty military (i.e., "Title 10") forces are prohibited by 1878 law, **Posse Comitatus**, from conducting law enforcement missions; National Guard (i.e., "Title 32") are exempt.



18

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18



Disaster Assets

Cost Reimbursement

- **ALL DISASTER SUPPORT MUST BE REIMBURSED!**
- Meant to ensure that jurisdictions don't shirk their responsibility.
- State and Local reimbursement are determined by pre-arranged **Mutual Aid Agreements (MAAs)**.
- **Federal reimbursement is set by agencies, but may be reduced up to 75% by FEMA.**



19

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19



Disaster Assets

National Preparedness Goal

- Borrowing assets following disaster is slow and expensive.
- The **National Preparedness Goal** seeks to reduce reliance on borrowed assets by building State & Local emergency response capacity.
- The **Threat and Hazard Identification and Risk Assessment (THIRA)** program manifests the **National Preparedness System** States must follow to qualify for FEMA annual **Homeland Security Grant Programs (HSGPs)**.



20

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20

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Conclusion

Questions?



21

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