

ON PARALLEL TRACKS: THE WILDLAND FIRE AND EMERGENCY MANAGEMENT COMMUNITIES



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The emergency management community, including the Federal Emergency Management Agency (FEMA) and corresponding State and local government agencies, has borrowed heavily from the wildland fire community in recent years. FEMA has enthusiastically adopted and promoted the Incident Command System (ICS) as “the model tool for command, control, and coordination” for emergency and disaster management” (FEMA 1998).

ICS defines the roles and responsibilities of incident personnel and provides operating procedures for the management and direction of emergency response and other func-

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tions (NFPA 2002). Standing inter-agency incident management teams (IMTs) are beginning to appear in nonfire, State, and local government settings. The teams allow agencies to quickly pool staff and expertise and seamlessly respond to large incidents that are beyond the scope of individual organizations.

The use of wildland fire IMTs for nonfire emergencies—old news in some States—is quickly spreading. Years ago, few IMTs or hand crews might have thought that they would be involved in nonfire incidents—

until the 9/11 terrorist strikes and the Columbia space shuttle disaster shocked the nation. For many, these events stretched the definition of what “all-risk” means.

To most wildland fire professionals, emergency management is still a somewhat nebulous concept involving large natural disasters, such as hurricanes and earthquakes. However, just as the emergency management community has adopted valuable techniques from the wildland fire community, wildland fire managers can learn from the expertise of FEMA and its State and local counterparts. This article offers an introduction to the emergency management community.

Basic Concepts

All wildland fire managers should know a few basic emergency management concepts so they can interact effectively with partners in the emergency management community. In emergency management parlance, all incidents are classified as either emergencies or disasters. These terms have rough parallels to wildland fire incident complexity levels (table 1), and they also have strict legal definitions related to qualifying for Federal disaster assistance under the Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 USC 5121, et seq.).

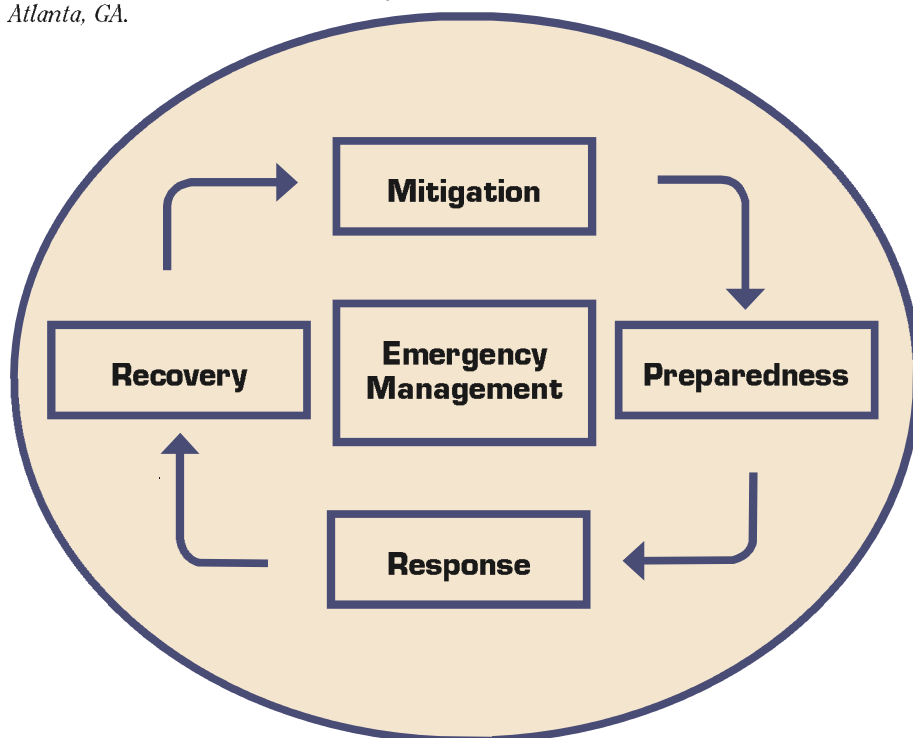


Figure 1—The comprehensive emergency management cycle (adapted from Godschalk 1991).

The comprehensive emergency management (CEM) model is a cycle of four phases (fig. 1), with each phase being equally important:

1. **Mitigation:** Taking sustained actions to reduce or eliminate long-term risk to people and property from hazards and their effects.
2. **Preparedness:** Building the emergency management function to respond effectively to, and recover from, any hazard.
3. **Response:** Conducting emergency

operations to save lives and property by taking action to reduce the hazard to acceptable levels (or eliminate it entirely).

4. **Recovery:** Rebuilding communities so that individuals, businesses, and governments (as well as ecosystems) can function on their own, return to normal, and protect against future hazards (FEMA 2003a).

Ideally, each CEM phase progresses smoothly to the next phase, overlapping with some of its characteristics. A true CEM program takes into

account all the hazards that could face a community and then establishes priorities. Careful analysis and planning ensure that mitigation efforts for different hazards are complementary. The program also emphasizes the importance of mitigation by integrating mitigation activities into the other phases, when possible.

Federal Emergency Management Agency

FEMA, formerly an independent agency, is now a bureau within the

Table 1—Comparison of the National Wildfire Coordinating Group's wildland fire incident complexity levels and the Federal Emergency Management Agency's incident classifications.

Wildland Fire Incident Complexity Levels	FEMA Incident Classification Levels
Type 1 Incidents <ul style="list-style-type: none"> • Total incident personnel often in excess of 1,000, or 500 per operational period • All command and general staff positions are filled • Number of divisions/groups may require establishment of branches 	Major Disaster Any natural catastrophe that causes damage of sufficient severity and magnitude to warrant major disaster assistance.
Type 2 Incidents <ul style="list-style-type: none"> • Large numbers of resources • Multiple operational periods • Written Incident Action Plan • Most or all command and general staff positions are activated • Well-developed logistical support 	Disaster A dangerous event that causes significant human and economic loss and demands a crisis response beyond the scope of local and State resources. Disasters are distinguished from emergencies by the greater level of response required.
Type 3 Extended Attack Incidents <ul style="list-style-type: none"> • Firefighting resources vary from several single resources to several task force/strike teams • Expected to be controlled/contained in first operational period • Generally no written Incident Action Plan • Some command and general staff positions may be filled • Staging areas and possibly a small Base may be used 	Emergency A dangerous event that normally can be handled at the local level
Type 4 & 5 Initial Attack Incidents <ul style="list-style-type: none"> • Firefighting resources vary from one to a few single resources • Normally limited to one operational period • Normally does not require a written Incident Action Plan • Incident commander performs all command and general staff functions 	

Department of Homeland Security. It is the lead agency for emergency management in the United States. The U.S. Fire Administration, part of FEMA, is to structural fire what the National Wildfire Coordinating Group is to wildland fire.

Functioning as a coordinating agency, FEMA directs the mobilization of resources from other agencies in response to specific disaster needs. FEMA relies on contracted private sector resources, resources from other government agencies, and a pool of disaster reservists to rapidly create a response organization tailored to an emergent disaster.

FEMA sponsors networks of specialized resources, such as urban search and rescue teams and disaster medical assistance teams, drawn from the staffs of various agencies and deployed in response to specific disaster needs. FEMA also sponsors disaster management response teams that are similar to the wildland fire community's type 1 and type 2 IMTs and area command organizations (FEMA 2002).

At FEMA's National Emergency Training Center in Emmitsburg, MD, the Emergency Management Institute and the National Fire Academy sponsor extensive, high-quality training curricula delivered in classroom and distance-learning formats (see sidebar).

State and Local Agencies

By law, each State and territory maintains an agency corresponding to FEMA, with emergency management responsibility at the State level. The size and capability of each agency varies with the population and needs of each State. Emergency management organizations also exist within tribal governments.

Similarly, each county or equivalent

municipal level and many large cities have emergency management agencies or offices within their jurisdictions. These range from one-person operations to large, well-staffed and well-funded organizations. At a minimum, some official will have collateral responsibility for emergency management functions within a local government.

State and local emergency management agencies ultimately report to their respective executive officials. Although there is no direct command-and-control relationship with FEMA, a cooperative, voluntary relationship based on mutually shared

professional practices and the need to share resources exists.

Federal Response Plan

The Federal Response Plan is the mechanism through which FEMA issues mission assignments to Federal agency resources for federally declared disasters (table 2) (FEMA 2003b). The Federal Response Plan is the world's largest mutual aid agreement. The wildland fire community is primarily interested in Emergency Support Function 4 (firefighting), although it also plays supporting roles in several other functions. State agencies have mechanisms mirroring the Federal Response Plan for their own mission assignments.

The Professional Development Series—An Emergency Management Primer

FEMA's Emergency Management Institute offers a certificate program in emergency management fundamentals free to all members of the emergency management community. The program consists of seven courses that can be taken in a classroom or through independent study. Upon completion of all modules, FEMA and your State's emergency management agency will award a Professional Development Series certificate, suitable for framing.

The courses, in recommended order of completion, are:

- IS-230, Principles of Emergency Management
- IS-235, Emergency Planning
- IS-242, Effective Communication
- IS-241, Decision Making and Problem Solving
- IS-240, Leadership and Influence
- IS-244, Developing and Managing Volunteers
- IS-139, Exercise Design

Course materials are available for downloading in Adobe Acrobat (.pdf) or Microsoft Word (.doc) files at <http://training.fema.gov/EMIWeb/PDS>. Hard copies of course materials are no longer provided by the Emergency Management Institute. Final exams are taken online.

Some of the above courses are also available in 2- and 3-day classroom versions offered by State emergency management agencies' training sections. Links to the State EM agencies are at <http://www.fema.gov/fema/statedr.shtm>.

Table 2—Emergency support functions (ESFs) identified under the Federal Response.

Emergency Support Function	Activity	Lead Agency
ESF-1	Transportation	U.S. Dept. of Transportation (DOT)
ESF-2	Communications	Federal Emergency Management Agency (FEMA)
ESF-3	Public Works and Engineering	U.S. Army Corps of Engineers
ESF-4	Fire Fighting	USDA Forest Service
ESF-5	Information and Planning	Federal Emergency Management Agency (FEMA)
ESF-6	Mass Care	American Red Cross
ESF-7	Resource Support	General Services Administration (GSA)
ESF-8	Health and Medical Services	U.S. Public Health Service (USPHS)
ESF-9	Urban Search and Rescue	Federal Emergency Management Agency (FEMA)
ESF-10	Hazardous Materials	Environmental Protection Agency (EPA)
ESF-11	Food	USDA Food and Nutrition Service
ESF-12	Energy	U.S. Dept. of Energy (DOE)

The wildland fire community interacts with the emergency management community at every government level. The most common interaction is at the local level, because most large wildland/urban interface fire incidents involve local emergency management authorities, especially when an evacuation is ordered.

Interaction outside ongoing incidents is also becoming common, particularly with the large number of hazardous fuels mitigation projects as a result of the National Fire Plan.

For successful mitigation planning, interaction with the emergency management community at local and State levels is critical.

Wildland Fire Emergencies

When wildland fires threaten life and property, they become emergencies that must be managed. A wildland fire operations chief pressed into service on a flood incident will quickly see the parallels. For example, temporary levees must be anchored to high ground,

just as firelines must have a secure anchor point. The overriding emphasis on safety is common to all emergency operations.

However, wildland fire management is not always an emergency situation. The wildland fire profession includes an ecosystem management component absent in other emergency management disciplines. A prescribed hurricane is impossible, but prescribed fire is a routine management practice with a variety of purposes.

Nevertheless, seeing our wildland fire community as part of the larger family of emergency management disciplines can help us function in all aspects of the interagency hazard management community. The emergency components of wildland fire management—wildfire mitigation, prevention, and suppression—fit neatly into the CEM model (fig. 2).

Parallel Track

During the wildland fire community's history of interagency cooperation in the wildland/urban interface, our primary focus has been on preparedness and response. As a community, however, we are also beginning to take a more cooperative approach to aspects of mitigation and recovery.

The wildland fire and emergency management communities have made significant progress toward common goals. However, staying on a parallel track with the larger emergency management community will require continued commitment in all phases of emergency management. Understanding how the emergency management community functions, and our role in that community, will help us better manage ecosystems and protect communities.

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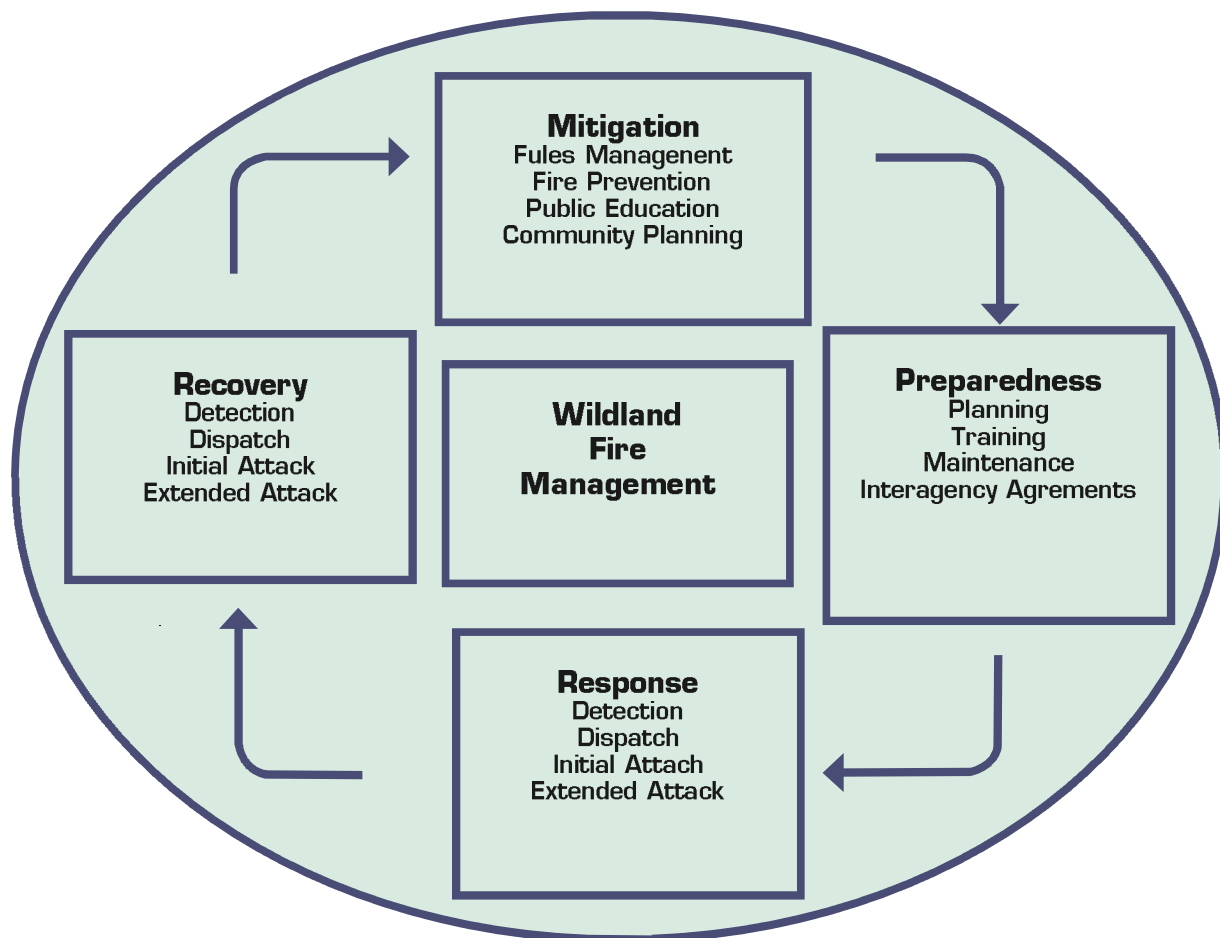


Figure 2—Wildland fire management in the context of the comprehensive emergency management cycle. BAER = burned area emergency rehabilitation.