RELATED TERMS

- Firestorms
- Technical Support Unit

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- Fire

Emergency Management: Assigning Permanent Geographic Information Systems and Information Technology Staff to Emergency Operations Centers

SUMMARY

Emergency managers should consider assigning permanent Geographic Information Systems (GIS) and Information Technology (IT) staff to the Technical Support Unit of an Emergency Operations Center (EOC). This can help ensure that EOC personnel have continuous access to geospatial resources when responding to a large-scale incident.

DESCRIPTION

The Cedar, Paradise, and Otay firestorms began on October 25, 2003, in San Diego County, California. The firestorms lasted for 8 days, burning a total of 383,269 acres of land and destroying 2,453 residential structures, 22 commercial properties, and 763 outbuildings. A total of 5,754 emergency responders, including firefighters, law enforcement officers, emergency medical services responders, border patrol agents, and local government personnel responded to the firestorms. Law enforcement officers evacuated 10,000 to 15,000 residents from areas affected by and most likely to be in the path of the firestorms. Responders and volunteers also evacuated approximately 3,000 large animals, including horses and livestock, and 500 small animals from these areas. The firestorms resulted in 17 fatalities, including 1 firefighter.

San Diego County officials activated the county's EOC on October 26, 2003, to coordinate field emergency response activities. A Technical Support Unit consisting of GIS and IT volunteers provided geospatial and technical support to the EOC personnel for the duration of the incident. The GIS and IT volunteers included staff from the San Diego County Department of Public Works, the Department of Planning and Land Use, and the private sector. The GIS and IT volunteers developed several geospatial maps that outlined the firestorms' geographic boundaries as the firestorms progressed through the county.

GIS is a computer system capable of capturing, storing, analyzing, and displaying geographically referenced information in a Web-based digital format. For more information, please visit *Lessons Learned Information Sharing*'s GIS Resource Center.

The GIS and IT volunteers were present at the EOC on an *ad hoc* basis only. San Diego County did not have a formal system in place for assigning GIS and IT personnel to the EOC as this was the first time the county activated its EOC for such a large-scale incident. San Diego County officials realized that a lack of permanent GIS and IT staff in the EOC could have caused significant problems

For more information on how to equip EOCs with GIS, please review the *Lessons Learned Information Sharing* Lesson Learned document: Emergency Management: Providing Geographic Information Systems and Information Technology Resources to Emergency Operations Centers.

given the need for geospatial mapping during this incident. The San Diego County EOC after-action report recommended establishing provisions for permanent staffing of GIS and IT personnel in the Technical Support Unit of the San Diego County EOC for future incidents. Accordingly, San Diego County's Office of Emergency Services now has rosters of GIS and IT personnel that will report to the EOC upon activation.

Emergency planners should consider assigning permanent GIS and IT staff to the Technical Support Unit of an EOC. This can help ensure that EOC personnel have continuous geospatial mapping support when responding to a large-scale incident.

CITATION

Amabile, Tom. Senior Emergency Services Coordinator, San Diego County Office of Emergency Services. Interview with *Lessons Learned Information Sharing*, 28 Jun 2007.

San Diego County Office of Emergency Services. *San Diego County After-Action Report: Firestorms 2003.* 2006.
https://www.llis.dhs.gov/member/MIPTadmin/Documents/getfile.cfm?id=9052

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