Mountain Area Safety Taskforce

Independent Mountain Area Safety Taskforce (MAST) organizations are active in San Bernardino, Riverside, and San Diego (Forest Area Safety Taskforce—FAST) Counties. The MAST organizations are composed of government agencies, private companies, and volunteer organizations concerned with public safety in the mountain areas of their respective jurisdictions. Two county MAST organizations (Riverside and San Bernardino) joined forces to coordinate their response to the San Bernardino-San Jacinto Mountain area vegetation mortality emergency at the regional level. Recently they were joined by San Diego County.

MAST Objectives

While each county-level MAST organization has its own county specific concerns, the joint efforts are rooted in a common intention to reduce the current regionwide risk of major fires and to minimize impacts on mountain communities should a fire occur. A five-point action plan has been initiated by the MAST organizations as follows:

- Assure public safety—Develop evacuation plans, clear potentially hazardous trees from routes into and out of the mountains, and provide emergency planning and hazard mitigation information to the public.
- Obtain funds—Work with local, state, and federal legislators to obtain funds to combat the problem.
- Reduce fuel and create fuel breaks—Plan and organize the removal of dead standing trees, reduction of fuel on the ground, and creation of defensible space around developed areas and homes.
- Develop options—Develop commercial use or disposal options for waste wood products.
- Identify and develop plans—Ensure long-term forest sustainability.



Dead trees north of Lake Arrowhead (Gerco Hoogeweg, November 2003)

MAST Geographic Information System Lab

The MAST GIS lab is part of ESRI's Center for Innovative GIS Technology (CIGT). The MAST lab is anchored by ESRI of Redlands, California. ESRI has provided the following support:

- Team coordination
- Computer facilities with geographic information system (GIS) software and data
- System design and database development expertise
- System implementation services
- A centralized Web site (www.calmast.org) for fire prevention information
- Tracking and prioritization of wildfire and fuel reduction activities
- General mapping support



The MAST GIS database is a centralized integrated database that contains all key data sets to support the vegetation mortality effort in the San Bernardino National Forest. Each MAST organization has free access to the database and contributes updated data from its organization.

The MAST GIS lab continues to provide leadership in the development of a tree cutting prioritization model that facilitated ranking and scheduling of tree cutting activities by Southern California Edison, the California Department of Forestry and Fire Protection (Riverside, CA), and the San Bernardino County Fire Department.

The MAST GIS lab also quantified the vegetation mortality problem and calculated that there were more than 13 million dead trees in the San Bernardino National Forest as of November 2003. The lab will continue to update these numbers as the vegetation mortality progresses and also while fuel reduction activities reduce the number of dead trees in the forest.



By using the Forest Inventory Analysis database, dead tree density and the total number of dead trees were calculated. It has been estimated that more than 13 million dead trees are present in the San Bernardino National Forest.



The MAST GIS database is a centralized database that contains data from many different agencies and organizations.

Other private organizations that have donated and continue to provide their considerable expertise, materials, and equipment to this Web site development effort are

- Hewlett-Packard (www.hp.com) providing computer equipment
- Digital Globe (www.digitalglobe.com) providing satellite imagery
- Southern California Edison (www.sce.com) providing data and expertise
- Geographic Data Technology, Inc. (www.geographic.com), providing data
- EarthData (www.earthdata.com) providing postfire satellite imagery and digital elevation models of the burned areas in Southern California

For more information

MAST Web site: www.calmast.org

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