

CASE STUDY

Forest Improvement and Fuel Reduction Project Tracking

CHALLENGE

The California Department of Forestry and Fire Protection (CAL FIRE) was in need of a central portal for data collection and management that would systematically distribute information across forest improvement, fuels reduction, and fire prevention programs. CAL FIRE is responsible for tracking both private and public lands by managing the response tasks and fire planning.

SOLUTION

CAL FIRE contracted with VESTRA to add additional functionality to CAL FIRE'S CalMAPPER web application and to upgrade the original application. CalMAPPER is an acronym and stands for CAL FIRE Management Activity Project Planning and Event Reporter. Using Esri geodatabases, the application enables CAL FIRE to monitor the effectiveness of various activities throughout the state.

The CalMAPPER web application is used to track and manage fuel reduction and forest improvement projects through the incorporation of GIS data layers and associated tabular data. The map services utilized by CalMAPPER are provided via ArcGIS for Server, and all data is stored within an Oracle database.

The GIS component of the application facilitates mapping and monitoring past projects and planning of future program activities that are readily available to emergency responders and resource management staff. The application allows planners to visualize and delineate spatial extents to their projects, while validating against established constraints such as land usage regulations and hydrological or environmental concerns.

CalMAPPER is a forest improvement and fuel reduction project activity tracking database that CAL FIRE uses to record fuel reduction efforts within the units. It records funding information (source, amount, grant IDs, etc.), treatment activity information (start/end dates, executing agency, costs, etc.), along with spatial representations of the treatments.

BENEFIT

CalMAPPER is an internal app that enhances CAL FIRE's ability to centrally manage and distribute data. This application is a valuable tool that CAL FIRE's employees and stakeholders are able to use to review how the state's funds are being distributed.

It contains GIS and tabular information. The goal is to improve project tracking and fiscal reporting, and to support emergency response, planning, and assessment.