

Office of the

# STATE FIRE MARSHAL 2011 YEAR IN REVIEW

## Inside the CAL FIRE - OSFM

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## MESSAGE FROM THE CHIEF

Over the past several years CAL FIRE - Office of the State Fire Marshal (OSFM) has provided an overview of its programs and their accomplishments throughout the year. Once again, I am proud to provide our stakeholders with the *2011 Year in Review*. This document shares the many successes of the OSFM and helps illustrate the far reaching impact each program has on the citizens and fire service of California. Each program area has continued to move forward, striving to meet the needs of our partners, and promoting fire and life safety. This forward motion would not be possible without the continued support and assistance from all of our stakeholders both inside and outside the fire service.



State Fire Marshal  
Tonya L. Hoover

Sharing of information is a key focus for the OSFM. The Code Development and Analysis Division (with Steve Hart and Bruce Lecair volunteering) covered thousands of miles from the northern to southern border of the state providing free educational sessions centered on the states' adoption and implementation of residential fire sprinklers. These sessions brought together a wide variety of disciplines that included fire service, building departments, builders, realtors, and water purveyors just to name a few. The education and outreach piece was not lost on other programs. Over a 12-month period, State Fire Training conducted a record number of Regional Instructor Orientations (RIO) to address the changes in the registration of Instructors. The staff went beyond the call of duty to help bridge the gap and increase awareness of changes within State Fire Training. Our other programs traveled throughout the state, providing information on care facilities, pipeline safety, fire equipment listing and licensing updates, regulatory changes, and wildland fire prevention.

I believe that the *2011 Year in Review* report will speak to our commitment to serve the citizens of California, work collectively and cooperatively with our stakeholders, and continue to provide a fire safe environment for those that live, work, and visit this great State. With the collective energies of fire prevention, training, and operations, we will continue to reduce the risk within our communities while helping to keep our emergency responders safe.

Lastly, I would like to personally thank each of our stakeholders for their support and dedication over this last year. I am proud to have been officially appointed as the State Fire Marshal and I look forward to serving the Administration, the citizens, and each of you. Enjoy reading the OSFM, *Year in Review*

Be safe!

TONYA L. HOOVER  
State Fire Marshal

## Code Development and Analysis

**Kevin Reinertson, Division Chief**

California is a leader in the fire and life safety profession. Our fire and building officials are the nation's best; speaking with considerable experience. The Office of the State Fire Marshal regulations and building standards process, proposals and adoptions continue this reputation. The inclusive process allows for change and continued improvement of our building community.

The OSFM fosters, promotes and develops ways and means of protecting life and property against fire and panic in many ways, including the adoption and implementation of regulations. The Code Development and Analysis Division prepares the California State Fire Marshal's fire and life safety regulations and building standards for review and adoption into the California Code of Regulations (CCR) Titles 19 and 24. The Division reviews all of California's regulations relating to fire and life safety for relevancy, necessity, conflict, duplication and/or overlap. It also works to create compromise/consensus among various individuals and groups involved in development and the promulgation of the State's codes related to fire and life safety.

### **Public Safety – Title 19**

In 2011, several sections of the CCR, Title 19 were developed and published; these sections affected statewide programs and local fire officials. Working with the California Fire Chiefs Association, Fire Prevention Officers Section the OSFM revised regulations that incorporated enforcement provisions of CCR, Title 19 into the 2010 California Fire Code for local enforcement agencies. This effort created a more "inspector friendly" fire code. Also, the OSFM revised various existing CCR, Title 19 regulations correcting outdated sections and occupancy groups, provided editorial modifications and referenced standards. Additional regulations and revisions included standards for waste containers, fire alarms, portable fire extinguisher service vehicle markings, and listing of carbon monoxide devices.

### **State Fire and Building Codes – Title 24**

With the 2010 California Building Standards Code becoming effective of January 1, 2011, the OSFM continues to foster and develop building standards to meet California's fire safety needs in the built environment. The OSFM promulgated standards for the interim supplement to the 2010 California Fire, Building and Residential Code that included:

- Amending provisions necessary to address limitations and/or inadequacies of the adopted reference model code regulations relating to exit access travel distance and firefighter operations/safety in large Group F-1 and S-1 occupancies.
- Completion of final regulations for antifreeze solutions in fire sprinkler systems that correlate with several NFPA Tentative Interim Amendments (TIA) and further made permanent existing emergency regulations.
- Making amendments that provided further clarification, correction and consistency with other SFM regulations or statutes.
- Making modifications to elevator standards shunt trip and correlation with CCR, Title 8, Division 1, Division of Occupation Safety and Health (DOSH) Elevator Safety Orders for user and firefighter operations/safety.
- Reprinting and providing modification of various provisions of California Code of Regulations, Title 19, Division 1 in the California Fire Code.

### **Automatic Fire Sprinkler Systems for One- and Two-Family Dwellings**

A key component in the 2010 California Residential Code adoption was the provisions for residential fire sprinklers in all new one-and two-family dwellings and townhouse construction statewide. For many years,

**Continued on next page**

## Code Development and Analysis (continued)

installation of fire sprinkler systems has only been required in office buildings and multi-family dwellings (i.e. apartments). These sprinkler systems are a proven method of saving lives and extinguish fires.

Throughout 2011, the OSFM continued efforts to educate builders, designers, installers and enforcing agencies about residential fire sprinklers through; information bulletins, code interpretations, outreach and training classes, and fact sheets to avoid conflict and unnecessary obstacles. The OSFM created the California Fire Sprinkler Coalition, a voluntary coalition dedicated to promoting home fire sprinklers through education and outreach and providing an additional resource for information about home fire sprinklers. Many local government fire and building officials, water purveyors, and private sector venues have had success in implementing residential fire sprinkler requirements and have provided additional education and training avenues throughout the state this past year.

### Information Sources:

For more information regarding fire and building codes and/or concerning fire and panic safety, visit the State Fire Marshal website [www.osfm.fire.ca.gov](http://www.osfm.fire.ca.gov)

To review all codes effective January 2011, visit the California Building Standards Commissions web site [www.bsc.ca.gov](http://www.bsc.ca.gov) or the Office of Administrative Law web site [www.oal.ca.gov](http://www.oal.ca.gov)

## Fire Engineering

**Ben Ho, Division Chief**

The OSFM Fire Engineering Division administers licensing programs and performs engineering functions affecting consumer services, product evaluation, approval, and listing. The division provides this service to the fire alarm, fireworks, fire extinguisher, and flame retardant industries. In 2011, the Division issued several hundred licenses, listings, and certificates, conducted hundreds of inspections and evaluations and proctored approximately 2,000 exams throughout California. Program staff in all areas maintained excellent communication and continued strong working relationships with the fire service, industry representatives, building officials, and other state and local government agencies.

TYPE	FIREWORKS	FLAME RETARDANT CHEMICALS AND FABRICS	PORTABLE FIRE EXTINGUISHER	AUTOMATIC EXTINGUISHING SYSTEMS	BUILDING MATERIALS LISTING
RENEWAL	1492 operators	111 chemical 496 fabric 122 limited 296 general	497 concerns 2038 Certificate of Registration (CofR)	65 concerns 135 limited	2623 listings
APPROVAL	25 safe & sane devices	15 fabric	16 concerns 252 CofR	9 concerns 113 limited	736 listings
PERMIT	65 public displays				
LICENSE	46 new 5 upgrade	20 general 12 limited		799 fire pump	

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## Fire Engineering (Continued)

In addition, the Division oversees several State Fire Marshal Advisory Committees. The goal of these committees are to foster communication between the OSFM, representatives of industry, public, and the fire service regarding proposed regulations, current activities and future program actions. In 2011, these committees worked on several regulations packages including carbon monoxide detectors, fire extinguisher, safe and sane fireworks, and flame retardant. Staff also participated in several taskforces, workgroups and projects focusing on smoke alarm effectiveness, fire protection water discharge, carbon monoxide implementation, fireworks disposal, illegal fireworks enforcement, above ground storage tanks, fire extinguisher enforcement, and Certified Unified Program Agency (CUPA) evaluations. A detailed description of taskforces, workgroups and projects are expanded below and further information can be found on the OSFM webpage.

- **Smoke Alarm Task Force**—The OSFM convened this group to address the effectiveness of smoke detection technologies used in residential occupancies including ionization, photoelectric, and other technologies, complying with OSFM listing standards. Currently, the Division has the responsibility to implement the task force recommendations; the Fire Alarm Advisory Committee also participates in this process.

- **Water Discharge for Fire Protection Task Force**—This group was convened in response to a request by the National Fire Sprinkler Association to review and develop a guideline for the discharging of water from fire protection systems. The purpose of the Task Force was to develop a set of Best Management Practices (BMP) for Contractors State License Board licensed contractors, OSFM licensed companies, and the fire service, to discharge water from fire protection systems and to provide guidance regarding the practices to control possible contamination of California waters when maintaining fire suppression systems. The BMP has been completed and is currently posted on the OSFM web site and has been sent to other state agencies and interested stakeholders.



- **Carbon Monoxide Poisoning Prevention Act**—Senate Bill (SB) 183 required the placement of carbon monoxide (CO) devices in all dwelling units; and requires that the presence or absence of these devices must be disclosed when residential real estate is transferred. This law also required CO devices to be listed by the OSFM prior to marketing and sale in California. Staff worked with the public, fire and building officials, industry, design, and other organizations regarding the implementation of this law. The Building Materials Listing Program has listed several CO devices in time for the effective date of this law. Staff has been assisting all stakeholders regarding this law. The Division posted a list of approved CO devices and a Frequently Asked Questions (FAQS) on the OSFM web site.
- **Enforcement Legislation**—Assembly Bill (AB) 1773, Health and Safety Code section 13184.4 allows the OSFM to levy a fine on licensed fire extinguisher and fire extinguishing system service technicians or companies, and fireworks/pyrotechnic operators issued by the OSFM as infractions, rather than suspend their license or certification. In 2011, the OSFM Fire Engineering Division settled four cases in lieu of suspension because of the passage of AB 1773. In addition, the enforcement program completed 70 investigations and 147 inspections.

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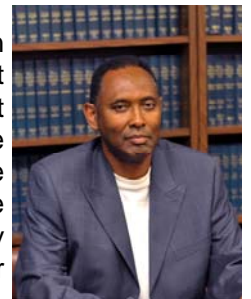
## Fire Engineering (Continued)

- Wildland Urban Interface (WUI) Product Approval—The Division worked with manufacturers to move all OSFM WUI approved products into the Building Material Listings. The project was completed within the timeframe originally provided to the industry and the listings are posted on the OSFM web page.
- Examinations—The Division proctored approximately 2,000 exams (fire extinguisher, automatic extinguishing systems, flame retardant, fireworks, special effects, etc.) throughout California. They continue to work with our stakeholders to improve the exam process.



One major change within the Division was the realignment of the Arson and Bomb Investigation Unit (ABI) to the Fire Engineering Division. The ABI Unit's primary functions are to conduct fire and post blast explosion investigations on state occupied properties; assist local government with fire investigations; and sort, classify and dispose of dangerous and illegal fireworks seized by local fire and law enforcement agencies.

The SFM Motion Picture and Entertainment Unit (MPE) was created in July 1987 in response to the motion picture and television industry's concerns about inconsistent enforcement of regulations and to ensure film safety throughout the State. The Unit also provides approval for pyrotechnics and other special effect permits for State properties. This year, Deputy State Fire Marshal Al Adams was recognized by the California On-Location Awards™ (COLA), honoring his dedication and service to the motion picture and television industry. The COLA is the premier awards ceremony saluting location professionals, production companies, and public employees for professional excellence while working on location in the State of California.



Maintaining a good working relationship with fire alarm industry is very important to the division. This year, the California Automatic Fire Alarm Association (CAFAA) presented Division Chief Ben Ho with the Art G. Kane Memorial Award. This award, established in 1987, honors those persons that have dedicated themselves to the ideals of what the CAFAA stands for and for their dedication and service to the fire alarm industry. This is the first time in CAFAA history that this award was presented to a government official.

## Fire and Life Safety

**Ernie Paez, Division Chief**

The Fire and Life Safety Division (FLS) is responsible for applying and enforcing State law and regulations relating to fire and panic safety as mandated by the California Health and Safety Code. The Fire and Life Safety Division is the authority having jurisdiction for State-owned and occupied buildings/facilities; and are responsible for plan review, inspections, code interpretations, training and education, and providing assistance to local fire authorities. The ability to conduct such activities falls to a small group of dedicated individuals. In 2011 staffing levels included two Division Chiefs, six supervisors, four staff support positions, and 21 Deputy State Fire Marshals ranging from Grade B to Specialists. These 33 positions (with position authority for 47) are responsible for over 1.5 billion square feet of buildings throughout the State.

In 2011, FLS conducted approximately 8,122 hours of inspection services on State-owned and occupied buildings/facilities throughout the State. A change in law (Trial Courts Facilities Act of 2002) (Senate Bill 1732; Statue 2002, Chapter 1082) in 2011 shifted the governance of California's courthouses from the counties to the State thus the OSFM has added 128 Superior courthouses to the program's inventory statewide. Currently, there are 322 court facilities awaiting title transfer.

The Fire and Life Safety Division worked on a steady amount of new construction projects statewide with the Department of General Services, California State Universities, California Department of Corrections and Rehabilitation and the Department of Mental Health. North and South division staff conducted approximately 8,687 hours of inspection on new construction, tenant improvements, and remodel fire prevention/construction activities. Statewide, FLS staff has closed out 171 construction projects with 201 remaining open. Staff conducted approximately 1,557 plan reviews; these included preliminary design review, "over-the-counter" review, back check reviews of previous submitted design and construction plans, fire protection systems (automatic sprinklers, special systems, and fire alarm) and associated construction documents with an estimated value of six billion dollars in construction costs. Also included in the FLS workload was the review of 215 plans for potential state leased properties located throughout the State.

The Division is also responsible for responding to fire incidents at State facilities. Deputy State Fire Marshals conduct and assist with fire cause and origin. Deputies responded to over 126 fire incidents at State facilities and requested a CAL FIRE Unit Investigator to assist with eight of these incidents due to their nature. This investigation partnership strengthens fire prevention throughout the State by providing cross training and education, collecting data, and building the foundation for codes and standards adopted and implemented.

Program staff are actively involved in other areas of fire and panic safety activities. During 2011, the FLS program oversaw the OSFM code interpretation process. Each interpretation required a detailed review of State law and regulations, and the base model code document. The CAL FIRE—OSFM received 31 requests for code interpretation, nine were posted as official OSFM interpretations and the remaining were determined to be code application questions handled by staff.

The Fire and Life Safety Division strives to keep engaged and aware of challenges and issues associated with the program. In order to do this, the Division staff, Supervisors, and Division Chiefs participated or chaired important committees formed within the office to deal with issues relating to high-rise regulations, I-3 occupancy (prisons and state hospitals) regulations, smoke alarms, and residential care facilities.

# STATE FIRE MARSHAL

## 2011 YEAR IN REVIEW

### Pipeline Safety

**Bob Gorham, Division Chief**

In 1981, the California Legislature established the Hazardous Liquid Pipeline Safety Act which states, "the OSFM shall exercise exclusive safety regulatory and enforcement authority over intrastate hazardous liquid pipelines." Also, the OSFM through an authorized agreement with the United States Secretary of Transportation, may act as the agent for the United States Secretary of Transportation to implement the federal Hazardous Liquid Pipeline Safety Act and federal pipeline safety regulations to those portions of interstate pipelines located within this State. This is necessary to obtain annual federal certification of interstate pipelines.

The OSFM regulates the safety of approximately 4,500 miles of intrastate hazardous liquid transportation pipelines and acts as an agent of the federal Office of Pipeline Safety concerning the inspection of 1188 miles of interstate pipelines. The Pipeline Safety Division consists of engineers, analytical staff, and clerical support located in northern, central and southern California. Pipeline Safety staff inspect pipeline operators to ensure compliance with federal and state pipeline safety laws and regulations. The Division is also responsible for the investigation of all spills, ruptures, fires, or pipeline incidents for cause and determination of probable violations.

The Division is pleased to report there were no significant hazardous pipeline leaks in California in 2011 resulting in deaths or injuries.

#### Pipeline Statistics for Calendar Year 2011

Intrastate Operators	47
Interstate Operators	9
Pipeline Facilities	349
Breakout Tanks	712
Mileage of Intrastate Pipelines	4506
Mileage of Interstate Pipelines	1188
Staff Inspection Days	522
Violations Issued	40
Civil Penalties Assessed	\$85,000
Civil Penalties Collected	\$23,400
Number of Pipeline Spills	22
Amount Spilled (Barrels)	316
Dollar amount of Damages	\$4,931,133

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# STATE FIRE MARSHAL

## 2011 YEAR IN REVIEW

### Pipeline Safety (Continued)

#### Pipeline Leak Causes

Incident Cause Type	ALL REPORTED					Total
	2007	2008	2009	2010	2011	
All Other Causes	2	1		1	1	5
Corrosion	10	9	8	5	8	40
Excavation Damage	1	2	1	1	3	8
Incorrect Operation	5	5	2			12
Material/Weld/Equip Failure	13	13	7	7	10	50
Natural Force Damage	1		1			2
<b>Grand Total</b>	<b>32</b>	<b>30</b>	<b>19</b>	<b>14</b>	<b>22</b>	<b>117</b>

Hazardous Pipeline leaks in California – 5 year chart  
Source: PHMSA

The unfortunate 2010 San Bruno natural gas pipeline explosion and fire provided a lesson of the importance in establishing cooperative relationships with the operators and the emergency responder community. Many discussions, workshops and meetings were held both locally and nationally to address how best to provide emergency responders with hazardous liquid and natural gas pipeline locations, emergency contacts, training and resources to handle any pipeline emergency in their community. The Pipeline Safety Division hosted a federal pipeline safety regulations training seminar in May 2011 and several pipeline right of way workshops. More than 200 pipeline operator personnel attended these events. The Pipeline Safety Advisory Committee met twice in 2011 discussing regulations and providing guidance on emergency responder training and pipeline operator communications. Maintaining a strong relationship between hazardous liquid operators and the emergency responder community has always been and will continue to be a primary focus of the Pipeline Safety Division.

#### Pipeline Safety Program Rated A+ by Federal Office of Pipeline Safety

In accordance with federal law, no State may regulate hazardous liquid pipelines unless their program is certified by the U.S. Department of Transportation's Pipeline and Hazardous Materials Safety Administration (PHMSA). The OSFM program has been certified since 1984. This certification assures that the program complies with minimum federal standards for inspector qualifications, program procedures, documentation, recordkeeping, inspector training, and code enforcement. A detailed program audit is conducted by PHMSA each year and the State Fire Marshal receives a rating based upon set program standards. In 2011, the Office of the State Fire Marshal's program received a rating of 100%.





## **Planning and Wildland Fire Prevention**

**Dean Cromwell, Chief**

The Planning and Wildland Fire Prevention Program is multidimensional and the programs are interdependent. This program has four components: Planning and Risk Analysis; Investigations and Enforcement; Wildland Fire Prevention Engineering; and Civil Cost Recovery.



*Cooperative fuelbreak - a result of community planning efforts*

### **Planning and Risk Assessment**

In general, fire planning is a method by which steps can be taken in advance to reduce the costs and losses of wildland fires. Many programs within CAL FIRE contribute to the planning functions, but within Planning and Risk Assessment the two key programs are: 1) Fire Plan; and 2) the Fire and Resource Assessment Program (FRAP).

Under Fire Plan, the State Board of Forestry and Fire Protection, in cooperation with CAL FIRE, adopted a new Strategic Fire Plan (Plan) in 2010. The Plan's vision is for "a natural environment that is more resilient and man-made assets which are more resistant to the occurrence and effects of wildland fire through local, state, federal and private partnerships". Goals and objectives to achieve the vision are delineated in the Plan.

For 2011, significant accomplishments under the Plan have been:

- Development of a new planning framework that is more consistent with those used at the local level
- Construction and testing of a database named CAL FIRE Management Activity Project and Event Reporter (Cal MAPPER) that will lead to more standardized and efficient reporting
- Creation of a Fire Plan website to educate field staff and the public in components of the planning documents
- Development and web-posting of new local fire plans for all of the CAL FIRE Units and Contract Counties

Fire Plan and FRAP staff worked together to develop an information gathering system using GIS called CalMAPPER. This important tool brings the department's records from several different resource management and fuels reduction programs into a common database framework. It has a spatial GIS component that facilitates mapping and monitoring of past projects, assists in planning future program activities, and is readily available to emergency responders and environmental planners. Spatial information in particular, can assist program managers and reviewers by putting all CAL FIRE activities, as well as other pertinent

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**STATE FIRE MARSHAL  
2011 YEAR IN REVIEW****Planning and Wildland Fire Prevention (Continued)**

data (e.g. wildfire perimeters, statewide roads, topography, vegetation), together for better understanding of the combined effects on natural, infrastructure, and fiscal resources. A common framework will increase coordination and effectiveness across programs within CAL FIRE to support the department's mission and goals.

In 2010, CAL FIRE published a new Forest and Range Assessment (Assessment) prepared by FRAP. The study contains twenty-two high priority landscapes displayed spatially where high value assets overlap with high risk to those assets. Within most of these landscapes, wildfire is one of the major threats to high value assets. The Priority Landscapes are available for public viewing at <http://frap.cdf.ca.gov/assessment2010/mapper.html>. During 2011, information in the Assessment has been used to improve regional and local wildfire planning efforts. For example, it has been the basis of a number of local CAL FIRE Unit Fire Plans. In some cases federal grants are being focused on addressing issues specific to high priority landscapes. Information from the Assessment was incorporated into the Statewide Hazard Mitigation Plan adopted by the California Emergency Management Agency (Cal EMA) and approved by the Federal Emergency Management Agency and gives California a sound basis for federal grants applications.

FRAP has continued to develop recommendations for Very High Fire Hazard Severity Zones (FHSZ) by the Director of CAL FIRE to local jurisdictions. This is done pursuant to Government Code requirements. In 2011, CAL FIRE completed updating recommendations for Very High FHSZ for all cities with the exception of Los Angeles County. This is significant because the adoption of the zones by local government links to the application of building standards.

FRAP is involved with local cities in other ways. There is a growing recognition of the potential for urban forestry and other urban greening to contribute to the environmental, social, and economic health of communities. In response to this need, FRAP has worked with the Urban and Community Forestry (U&CF) Program and collaborated in several projects during the past year. Early in 2011, FRAP helped design the U&CF "Urban Fact Sheet" to provide information to stakeholders interested in urban forestry. This informative sheet highlights why urban forestry is important, and is based partially on findings found in "Impacts of Urban Forestry on California's Economy in 2009." This study was conducted by staff at Clemson University under contract to FRAP. Findings from this work depicted that in 2009 the California urban forestry industry:

- Supported about 60,000 jobs, and \$3.3 billion of individual income.
- Added about \$3.5 billion in value to the Gross State Product
- Resulted in \$819 million of State, Local, and Federal taxes.

Recently, staff at Clemson University updated the report to compare the 2009 economic impacts with those reported in 1992. The findings show that direct sales have increased 70 percent, direct employment is up 47 percent, and value added to the GSP has increased 13 percent. The data suggests that the urban forestry industry grew between 1992 and 2009.

Additional urban forestry contract work is being conducted to calculate the monetary value of benefits provided. FRAP recently contracted with the USDA Forest Service Pacific Southwest Research Station to conduct an Urban Forest Inventory and Assessment Project in San Jose, California. This research will provide data and information regarding benefits provided by the San Jose urban forests and will create a framework model that can be utilized by communities as funding allows.

**Investigations and Enforcement**

At the core of the Planning and Wildland Fire Prevention Program are wildland fire investigations. In order to provide mitigation in fire prevention and public safety, the origin and cause of a fire must first be determined. Whether the nature of the mitigation is related to education, engineering or enforcement;

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## Planning and Wildland Fire Prevention (Continued)

Fire prevention techniques and programs would not be effective without the collection and tracking of specific cause information gained from thorough investigations.

As part of investigations, CAL FIRE uses specialized training and skills to: determine the origin and cause of fires; preserve, collect and photograph evidence; sketch the scene; and interview victims/witnesses. If the fire cause dictates that enforcement actions must be taken, as in the case of criminal prosecution, investigators must then interrogate suspects, prepare and administer search warrants, apprehend and arrest suspects and compile the extensive case reports required in court cases.

CAL FIRE utilizes peace officers to enforce State forest and fire laws. The officers are trained and certified in accordance with the California Commission on Peace Officer Standards and Training (POST). The enforcement responsibilities within the prevention program include: fire investigations, citation administration, and criminal/civil case management.

In 2011 CAL FIRE Peace Officers:

- Made 80 arson related arrests which entail hundreds of hours of investigation and case preparation
- Issued over 3,000 citations for Public Resource Code (PRC) and Health & Safety Code (HSC) violations related to forest and fire laws
- Worked with local cooperators during the Fourth of July holiday and throughout the year to confiscate approximately 90,000 pounds of illegal and dangerous fireworks



*Fire Prevention Officers conducting an origin and cause investigation*

### Wildland Fire Prevention Engineering

Fire prevention engineering focuses on actions to reduce fire hazards and risks. Such actions can change the fire environment by removing or reducing the heat source, modifying or reducing the fuels and modifying behaviors that would allow a heat source to contact ignitable fuels. This past year the Wildland Fire Prevention Engineering Program focused on four major projects:

- Revised the Fire Prevention Field Guides utilized by field inspectors and private firms (utilities, railroads, and the timber industry) to ensure a thorough understanding of the statutory requirements as well as needed steps to reduce wildfire risk.
- Assisted the Board with revisions to the defensible space regulations in Title 14, providing guidance for implementation of PRC 4291.
- Worked with the Board on revisions to the Title 14 regulation which exempts specific trees from the PRC 4293 powerline clearance requirements. The draft is completed.
- Researched and coordinated replies to various California Public Utilities Commission (CPUC) proposals. Most notable was the response to the CPUC proposed decision to adopt regulations to reduce the fire hazards associated with overhead power-line facilities. The proposed decision was a product of three years of workshops following the conflagrations of 2007.



*Fire Prevention Chief conducting a defensible space inspection*

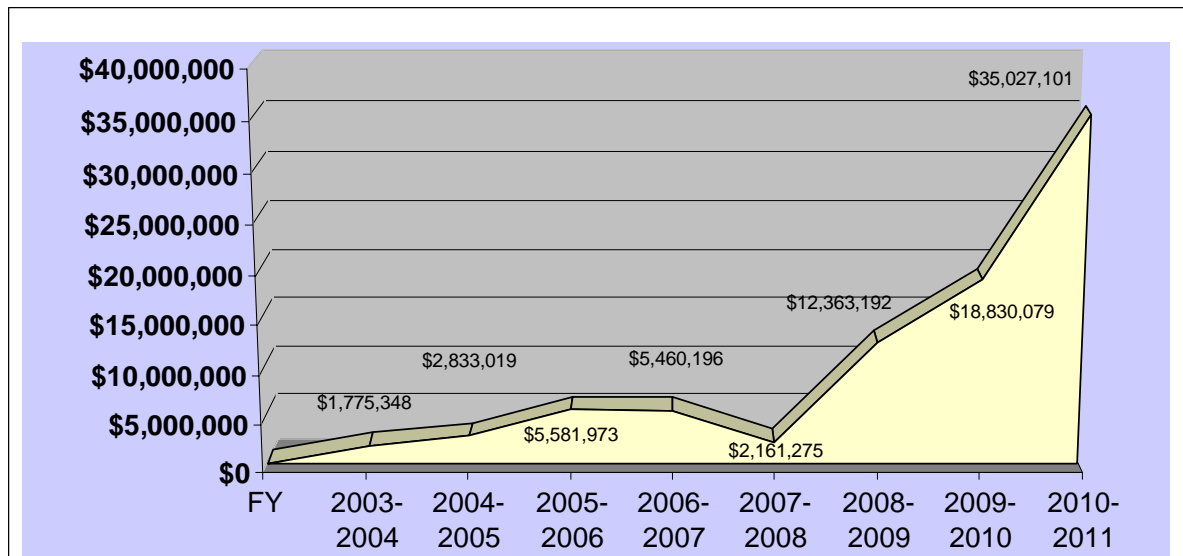
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## Planning and Wildland Fire Prevention (Continued)

### Civil Cost Recovery

Wildland fires cost California taxpayers millions of dollars every year. In 2008, CAL FIRE established a Civil Cost Recovery Program pursuant to authority granted by the Legislature to recover suppression costs when a fire investigation reveals that a party caused the fire negligently, or in violation of law. This serves the State in two ways: by assigning fire suppression costs to culpable parties rather than the taxpayers at large; and as a deterrent to carelessness that can result in destructive fires. Since the program's inception, 61 major cases have been resolved with a total recovery estimated at \$67 million. To date, the program has returned over \$61 million to the State General Fund.

**Civil Cost Recovery Reimbursements - 2003 to present**



Fiscal Year 2010/2011 has been the largest recovery year to date primarily due to the settlement of a single case (The Witch/Guejito Fire). Recovery of funds included:

- Settling twenty-one cases this year with recovery in excess of \$35 million which, net of program costs, led to the deposit of about \$34 million into the General Fund in FY 2010/2011.
- Collecting an anticipated additional \$15.7 million which will be reimbursed to the Federal Government for recovery from fires which have been declared eligible for Fire Management Assistance Grant funding.

In 2011, the Planning and Wildland Fire Prevention Program continued to provide detailed analysis, enforcement, and education in the efforts to reduce the impact on fire on the valuable resources and people of California. CAL FIRE is committed to providing a multidimensional and interdependent fire prevention program that helps protect California citizens, visitors, and the environment. Efforts will continue to find innovative ways to provide information to the public and to form partnerships that will help to increase public awareness of the potential dangers from wildfires.

**STATE FIRE MARSHAL  
2011 YEAR IN REVIEW**

## State Fire Training

Mike Richwine, Division Chief

State Fire Training (SFT) administers the California Fire Service Training and Education System (CFSTES) in cooperation with accredited Regional Training Programs and registered instructors. As the statutory lead agency for regional and local fire service training, SFT collaborates with fire service organizations and stakeholders to provide the highest level of quality fire service training and education.

### Statewide Training and Education Committee (STEAC) Summary

Fire service stakeholders are represented on the STEAC. The primary mission of the STEAC is to serve as a policy review committee for the State Board of Fire Services (SBFS) and the State Fire Marshal (SFM). The committee serves as a clearinghouse for the fire training issues and provides final review of all SFM training standards and curricula. Significant STEAC recommendations in 2011 were:

- New Accredited Regional Training Program (ARTP) at Miramar College
- Reaccredited Rio Hondo as an ARTP
- Emergency Vehicle Technician new Certification Training Standards
- Center for Public Safety Fire Chief Certification Memorandum of Understanding (MOU) with the OSFM
- Capstone Testing Taskbook in lieu of Capstone written exam approved
- Rapid Intervention Crew Operations Course approved for delivery
- Courage to Be Safe Fire Service Training and Education Program (FSTEP) course development
- Rope Rescue Technician FSTEP course development
- RS 2/Structural Collapse Technician FSTEP course development
- Mission Alignment project

Blueprint 2020 is the State Fire Training strategic plan with five goals that guide our efforts. In 2011, the STEAC approved a proposal for a focus group to evaluate the five goals and address the current curriculum workload. During the five year review of Blueprint 2020 six strategic directives were developed. The ultimate purpose of this effort is to create a future model for State Fire Training that is in alignment with the Blueprint 2020 goals. Actual implementation of the strategic directives will be identified during the planning process commencing in 2012.

A subcommittee of the STEAC was created in 2011 to review The Center for Public Safety Excellence (CPSE) Chief Fire Officer Designation and SFM Fire Chief Certification for reciprocity. This process will allow fire chief candidates to go through a single agency process to receive recognition from each organization. In the future, candidates for Fire Chief will be able to use their CPSE Chief Officer Designation as reciprocity when applying for SFM Certification and vice versa.

### California Fire Service Training and Education System (CFSTES)

The CFSTES coordinates development, delivery and administration of training for the California fire service. The CFSTES has become synonymous with certification. In 2011 there were 1,044 CFSTES certification classes delivered statewide to 14,626 students; with a total of 4,021 professional certifications issued among twelve certification types.

This past year, two candidates successfully completed the requirements for certification as Fire Chief. Chief Randy Bruegman, Anaheim Fire Department and Chief Greg Granados, Aerojet Fire Services, were recommended for certifications by the Peer Assessment for Chief Executive Committee (PACE IV). State Fire Marshal Tonya Hoover recognized the achievements of Chief Bruegman and Chief Granados with the awarding of the traditional Certified Fire Chief collar brass.

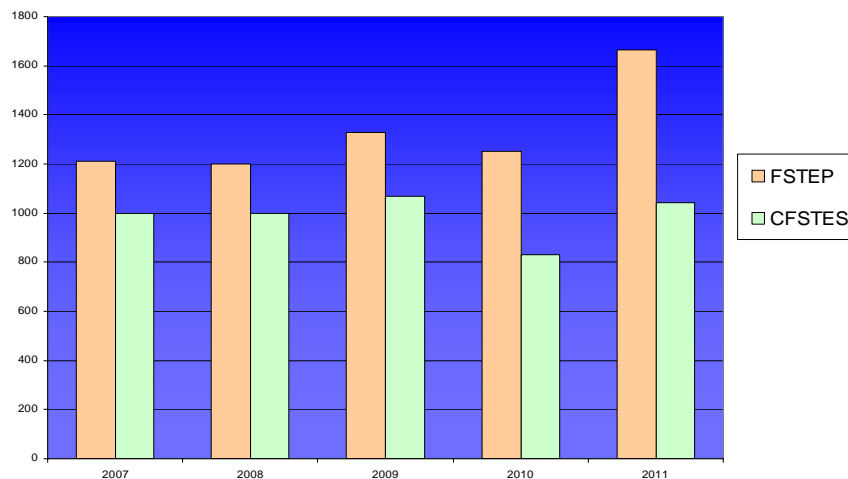
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## State Fire Training (continued)

### Fire Service Training and Education Program (FSTEP)

The OSFM administers the FSTEP and makes available the fire service training and education programs on a voluntary basis to fire departments. The FSTEP is designed to provide both volunteer and career firefighters with hands-on training in fighting fire, vehicle extrication, rescue emergency vehicle operations, pump operations, and the Incident Command Systems. This past year 1,666 FSTEP classes were delivered to 22,535 students.

Training Trends for the total number of State Fire Training approved CFSTES and FSTEP classes for the last five years are represented in the table below:



### Instructor Registration

Course work, experience, rank and validation by the Fire Chief are the general requirements to qualify as a Registered Instructor for State Fire Training. Applicants' qualifications are reviewed internally according to the requirements listed in the SFT Procedures Manual. In 2011, over 760 new instructor applications were registered, far exceeding the yearly average of 250 new instructors. The spike in new instructor registration is attributed to the expiration of Fire Instructor 1A and 1B as required course work. Beginning 2012, the course work for a registered instructor will be Training Instructor 1A, 1B and 1C.

### Accredited Rescue Training Sites

In cooperation with California Emergency Management Agency, Fire and Rescue Branch, and Registered Senior Instructors, SFT staff conducted site review and approval for Confined Space Rescue Technician, Rescue Systems 1 and 2 training sites. In 2011, Rio Hondo was approved as a Rescue Systems 2 and Confined Space Rescue Technician training site. All Rescue Training Sites are listed on the State Fire Training webpage.

State Fire Training is committed to assisting the California Fire Service through strengthening fire service training and education. This effort can only be accomplished through our continued strong partnerships. State Fire Training will continue to strive to adapt to the needs and currencies of today's fire service.