



Office of the State Fire Marshal  
**2008 Annual Report**





*OFFICE OF THE STATE FIRE MARSHAL*

**Arnold Schwarzenegger**  
**Governor**

**Mike Chrisman**  
**Secretary for Natural Resources**  
**The Natural Resources Agency**

**Del Walters**  
**Director**  
**California Department of Forestry and Fire Protection**  
**CAL FIRE**

**Kate Dargan**  
**State Fire Marshal**  
**California Department of Forestry and Fire Protection**  
**CAL FIRE**

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*OFFICE OF THE STATE FIRE MARSHAL*

The Office of the State Fire Marshal (OSFM) is the Fire Prevention component of CAL FIRE and the California Fire Service. State Fire Marshal Kate Dargan leads a team of fire service professionals who have dedicated their careers to protecting the people of California. In 2008 Chief Dargan worked closely with then CAL FIRE Director Ruben Grijalva. Beginning in February 2009, the collaboration continues with CAL FIRE Director Del Walters.

The OSFM staff assures that the structures where people live and work in California are built and maintained to the latest fire safety standards. They inspect thousands of products and service providers to make sure the customer obtains the quality and safety they are paying for.

The law enforcement officers investigate and charge those who deliberately, or through negligence, set fires to California's structures and wildlands.

The OSFM oversees the use of fireworks in our state by certifying Safe and Sane fireworks, and by arresting those who traffic in dangerous and illegal fireworks.

When fire and explosives are used on Hollywood movie sets, the OSFM is there too. Trained inspectors assure that this important industry stays in the California economy and operates safely for the actors and production people on the set.

OSFM staff work with emergency responders and public safety planners within California and around the U.S. in developing and enhancing the laws, codes and ordinances which local governments must enforce every day. We play an important role in networking and alliance building among our many stakeholders.

The OSFM was established in 1923 and remains a small but powerful department in California state service. The 161 employees operate within a budget of approximately \$27 million. State headquarters and North Region office is in downtown Sacramento. The South Region office is in Monrovia. OSFM staff is also strategically placed around the state in various CAL FIRE offices to provide the people of California with the best possible fire safety service.

## State Fire Marshal Kate Dargan



For the past several years the CAL FIRE Office of the State Fire Marshal has published an Annual Report that details those key programs and accomplishments that we have focused on the previous year. These successes are in large part determined by the goals we have set for ourselves at the beginning of the year in our Annual Work Plan. In the best of all management worlds our Annual Report would be a checked off list of the "To Do's" from our Work Plan. Of course, much like our own lives, unexpected events and new priorities pop up, however we meet our goals slowly but surely.

For 2008 our top priorities included:

**National Fire Service Leadership** - California is the largest state in the U.S. and our fire safety issues often lead the country both in scope and application. We actively support our responsibility to participate at a national level in fire prevention concept development, wildland-urban interface fire mitigation, firefighter training and certification, national model building and fire code development, and firefighter safety.

**Wildland-Urban Interface Building Standards (WUIBS)** - This is a multi-year plan and 2008 was focused on working directly with 210 cities and 56 counties on developing their Local Fire Hazard Severity Zone Maps. We are diligent in developing tools to support good local risk management and planning as well as easy implementation of the new building codes. We are now finalizing those maps for local adoption and will be focusing our 2009 efforts on updating our Wildland Firesafe Planning Handbook and continuing our developing of the WUIBS Products Handbook.

**State Fire Training Blueprint 2020 Strategic Plan Improvements:** Another long-term improvement program, State Fire Training has been making steady progress over this past year implementing the key provisions of our strategic plan. Core competencies for Fire Company Officers, Fire Marshals and Fire Chief Officers have been revised and a shift in business practices for firefighter training will result in more frequent updates to firefighter classes. Under the leadership of Retired State Fire Marshal Ronny Coleman, our State Training and Education Advisory Committee has done outstanding work the past two years bringing Blueprint 2020 to life.

**Fireworks Safety:** After passage of a Governor-sponsored bill (SB 839) supporting enhanced fireworks enforcement, I appointed a standing committee of

stakeholders including the fire service, fireworks industry, fireworks specialists, and local government to develop a 5-year implementation plan for more fireworks education, enhanced local enforcement efforts during the 4th of July holiday, and improved disposal services.

We also were pleased to announce the full appointment of the State Board of Fire Services. This 17-member Board sits as the advisory board to the OSFM and is comprised of the SFM, the CAL FIRE Deputy Director of Fire Protection Programs, the CAL EMA Secretary (previously the Director of OES), fire service labor organizations, and Governor-appointed representatives of fire service organizations, the insurance industry and local government. The SFM sits as the Chair and the Vice-Chair rotates upon vote. Currently the Vice-Chair is Battalion Chief Mike Esparza, the representative for California State Firefighter's Association. This group will be undergoing a strategic planning process over this next year to develop consensus about planning and recommendations for statewide fire service issues.

As we close 2008 and begin our planning process anew for 2009/10, we are focusing on the top two fire safety initiatives - Residential Fire Sprinklers and Wildland-Urban Interface Fire Prevention. Both are under active policy development within the OSFM and we are inviting our partners and stakeholders to sit down with us to develop operational implementation programs for these two public safety goals.

To all of you who have answered the call this past year for work groups, task forces, Standing Committee assignments, or just plain advice, thank you. The OSFM is a small, lean organization but our reach is large and this is because so many fire service partners give generously of their time, travel, and experience. And if you ever had a desire to get involved - even in a small way - we would welcome you and can use your knowledge.

Serving both the fire service and the public,



## Assistant State Fire Marshal Tonya L. Hoover



This Annual Report is just one way in which we at the Office of the State Fire Marshal reach out and connect with the public we serve and our brothers and sisters in the fire service. As we begin work on our Two Year Plan for 2009-2010, each program has significant accomplishments from 2008 to share.

**State Fire Training** completed several projects and increased the number of participants in the state fire training system. Training Officer and Fire/Arson Investigator were among the new courses approved for implementation. Regional training centers and local academies were accredited.

The **Fire and Life Safety Division** completed the release of photovoltaic guidelines. The division also continues to chair several important task force groups and they are heavily committed to the Residential Fire Sprinkler Water Supply workgroup.

The **Fire Engineering Division** worked closely with local fire departments in several important fraud cases. This division also completed and posted the Wildland Urban Interface (WUI) Handbook.

The **Codes and Regulations Division** completed its annual adoption cycle with important regulation and code "clean up", and continued to move critical regulations forward.

The **Wildland Fire Engineering Division** was very busy with legislative analysis and the start of developing comprehensive defensible space training to be used by the fire service, building departments and the insurance industry.

The **Fire and Resources Assessment Program** marked 2008 with the adoption of the state-wide fire hazard severity zone mapping project.

The **Pipeline Safety Division** once again earned excellent marks in their 2008 Audit by the Federal Government. Pipeline incidents have significantly dropped over the years and we believe this is due to the extraordinary collaboration between this Division and the pipeline industry.

I opened this message talking about reaching out, connecting and sharing. Each program within the OSFM has a direct impact on every aspect of the fire service. To our partners and volunteers that help us move our mission forward, THANK YOU for your time and dedication. Be safe.

A handwritten signature in black ink that reads "Tonya L. Hoover". The signature is written in a cursive, flowing style.

## State Board of Fire Services



The California State Board of Fire Services (SBFS) is a 17-member **advisory board to the California State Fire Marshal**. The Board is comprised of representatives of fire service labor, fire districts, volunteer firefighters, city and county government, Office of Emergency Services, and the insurance industry. The Board is chaired by the California State Fire Marshal.

The Board provides a forum for addressing fire protection and prevention issues of statewide concern; develops technical and performance standards for training of fire service personnel; accredits curriculum; establishes policy for the certification system of the California Fire Service; advises the State Fire Marshal on dissemination of regulations; and sits as an appeals board on the application of California State Fire Marshal regulations.

### Members of the SBFS 2008

**Kate Dargan** – Chair  
State Fire Marshal

**Michael D. Esparza** - Vice Chair  
California State Firefighters Association

**Richard Blanco**  
Fire District

**Steve Brown**  
California Fire Chiefs Association

**Jerry Davies**  
Insurance Industry

**P. Michael Freeman**  
Metropolitan Fire Chiefs Association

**David Gillotte**  
International Association of Fire Fighters

**Robert Magee**  
City Government

**Ken McLean**  
CAL FIRE

**Michael Nelson**  
County Government

**Lou Paulson**  
California Professional Firefighters

**Henry Renteria**  
Governor's Office of Emergency Services

**Dan Terry**  
Fire Fighter Joint Apprenticeship Program

**Michael S. Williams** - Volunteer Firefighter  
California State Firefighters Association

**John J. Winder**  
CDF Firefighters

**Glenn Ziemer**  
Fire Districts Association

**Vacant** – Fire Service Labor



**Chief Dargan swears in new members to the SBFS in 2008.**



**The Chief Fire Officer Certification Training Standards** were passed by the Board in 2008 using the National Fire Protection Association (NFPA) 1021 Standard for Fire Officer Professional Qualifications 2003 Edition as the base document. With the caveat that the Emergency Medical Services portion will be brought back before the board, the motion was passed unanimously.

**In 2008, the Board passed Instructor Requirements for the Ethical Leadership in the Classroom (ELIC) Course.** The requirements were amended to require the following:

- 1) Minimum of five (5) years full time, paid experience in a California fire department as a firefighter.
- 2) Held the rank of chief officer for a minimum of two (2) years.
- 3) Minimum of five (5) years experience with State Fire Training as a registered instructor in good standing.
- 4) Taught a minimum of three (3) certification classes within the last five (5) years.

An overview of the updated required materials for **Training Instructor 1A, 1B and 1C** were passed unanimously.

**Several local academies were approved for re-accreditation in 2008.** The following fire academies passed rigorous inspection and were deemed to meet or exceed the standards of State Fire Training:

- El Camino College, Inglewood
- Crafton Hills College, Yucaipa
- Sierra College, Roseville
- Santa Ana College
- Riverside Community College
- Modesto College



**Ice rescue training at the Lake Tahoe Basin Fire Academy**

The State Board of Fire Services is an important advisory group to the SFM. This group assists in moving forward the important fire service issues that impact the safety of our emergency responders, residents, and visitors in California.

# State Fire Training Division

## Division Chief Mike Richwine



State Fire Training (SFT) administers the statewide certification and course delivery system in cooperation with accredited academies and registered instructors. As the statutory lead agency for fire service training they work in collaboration with fire service organizations and stakeholders to provide the highest level of quality fire service training and education.

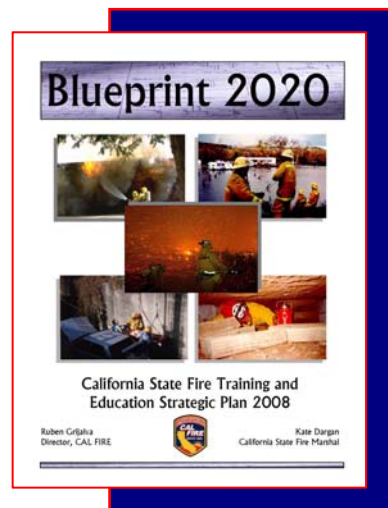
In 2008, SFT approved over **2,200 courses** and **43,800 students** completed SFT training courses statewide. Over **4,000 certifications** were issued to qualified applicants in the California Fire Service Training and Education System (CFSTES) and **186 new fire instructors** were added to the instructor registry.

In June of 2008, the State Board of Fire Services approved a recommendation that the State Fire Marshal adopt and implement the **California State Fire Training and Education Strategic Plan 2008, Blueprint 2020**. The plan establishes five goals:

- Quality Improvement
- National Professional Development Model
- Capstone Testing
- SFT Business Processes and Training Delivery
- California Public Safety Institute

The 2020 will direct the future of fire service training, education and certification through innovation, technology and partnerships with all who participate in the professional development of tomorrow's firefighters.

In 2008, SFT began implementing immediate and mid-range action items to support the goals established in the 2020, including the publication of SFT regulations in **Title 19, California Code of Regulations** and a revised fee schedule to support additional training staff in the field.



The staff will soon be implementing a **State Fire Training Quality Improvement Plan, 2009 Edition** to evaluate SFT courses, facilities and instructors in the field to provide feedback to instructors and follow-up on complaints involving SFT courses. The document is available at: <http://osfm.fire.ca.gov/training/training.php>

The year 2008 also saw the development of several projects including, but not limited to, the Community Risk Officer Certification Training Standards and Course Outlines, Fire Prevention 1A and 1B Bridge Course to address the newly adopted fire code, Driver Operator 1A and 1B revisions, and the new Training Officer Certification Training Standard and Training Instructor 1A-1C courses.

Through the efforts of the Statewide Training and Education Advisory Committee (STEAC) and Allan Hancock College, the eight Fire Officer courses were delivered in an online hybrid format as a beta-test to determine if SFT courses can be delivered in this format. The beta test analysis report was approved by STEAC and will be presented to the State Board of Fire Services in 2009.



## California Fire Service Training and Education System

The California Fire Service Training and Education System (CFSTES) coordinates development, delivery, and administration of training for the California fire service. Through the years, CFSTES has become synonymous with CERTIFICATION.

### Objective

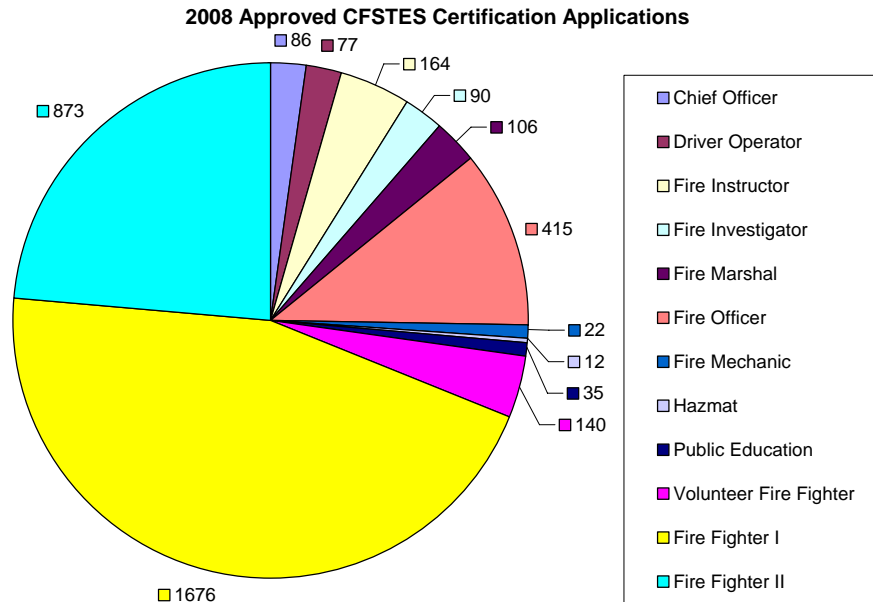
The objective of CFSTES is to provide a single statewide focus for fire service training in California. General functions of the System include:

- Implementing State Fire Marshal standards and requirements
- Managing curriculum development
- Accrediting courses leading to certification
- Approving standardized training programs for local and regional delivery
- Administering the certification system
- Publishing certification training standards, instructor guides, student manuals, and related support materials



Some of the CFSTES functions require direct control, such as certification and accreditation. However, for the most part, CFSTES' role is one of facilitating, coordinating, and assisting in the development and delivery of standardized in-service and specialty training for the California fire service.

**In 2008, 1,029 CFSTES certification classes were delivered statewide to 18,105 students, 4,741 professional certifications were issued among 12 different certification types.**



## Fire Service Training and Education Program

The SFM administers the Fire Service Training and Education Program (FSTEP).

**FSTEP** is designed to provide both volunteer and career firefighters with hands-on training in firefighting, vehicle extrication, rescue, emergency vehicle operations, pump operations, and the Incident Command System. Registered instructors may tailor a class to meet a department's specific needs. Graduates receive a California State Fire Marshal's certificate of completion. FSTEP is also the term used for the training programs available from State Fire Training that do not lead toward certification.



**In 2008, 1,219 FSTEP classes were delivered to 25,374 students.**



## Statewide Training and Education Advisory Committee (STEAC)

STEAC's mission is to serve as a policy review committee for the State Fire Marshal and provide final review of all State Fire Training course curricula. In 2008, the committee made recommendations to the SFM on the following:

- Voted to adopt Fire and Emergency Services Instructor, 7<sup>th</sup> Edition, International Fire Service Training Association (IFSTA) as the curriculum for the new Instructor courses
- Voted to allow the expansion of Rapid Intervention Crew Tactics from a 16-hour course to a 40-hour course
- Voted to extend the on-line hybrid beta test delivery at Alan Hancock college through the summer of 2008
- Voted for the creation of a sub-committee to STEAC from a variety of affected agencies to work through the difficulties associated with acquired structures for Fire Control 3 live burns and air quality restrictions
- Voted to initiate discussions with the National Professional Board (Pro Board) and the International Fire Service Accreditation Congress (IFSAC) to explore attaining national and/or international accreditation
- Approved the accreditation of nine institutions as Regional Training Programs or Local Academies.



## Curriculum Development



Curriculum Development is a collaborative effort of the fire service, approved instructors and State Fire Training.

Several significant curriculum projects were initiated in 2008.

**Fire Apparatus Driver/Operator 1A and 1B** curricula was updated to reflect the information in IFSTA's updated Pumping Apparatus Driver/Operator Handbook, Second Edition and the current edition of the California Commercial Drivers Handbook.

**Training Instructor 1A: Cognitive Lesson Delivery** - The format for this course changed from the development of manipulative lesson plans to the adaptation and delivering of existing cognitive lesson plans.

**Training Instructor 1B: Psychomotor Lesson Delivery** - The format for this course changed from the development of technical lesson plans to the adaptation and delivery of existing psychomotor lesson plans.

**Training Instructor 1C: Developing Instructional Techniques** - The format for this course includes developing and delivering both a cognitive and a psychomotor lesson plan.



All three Training Instructor courses use a textbook and a student supplement. The required textbook is the **seventh** edition of IFSTA's Fire and Emergency Services Instructor. The student supplement is published by State Fire Training.

**Master Instructor Update** course was developed to provide SFT's current Master Instructors with the new Training Instructor 1A-1C courses.



**Fire Prevention 1A and 1B Bridge** curricula were developed to reflect current CFC requirements. Both courses still use parallel textbooks and a student supplement. The textbooks required are the **2007** edition of the California Fire Code (CFC) published by the California Building Standards Commission (CBSC) and the **sixth** edition of IFSTA's Fire Inspection and Code Enforcement. The student supplement is published by State Fire Training.

**Community Risk Officer Certification Training Standards (CTS)** were developed using the National Fire Protection Association (NFPA) 1035 Standard for Professional Qualifications for Public Fire and Life Safety Educator 2005 Edition as the base document. The CTS covers the training requirements for an upcoming certification track that will replace the Public Education Officer I certification. This new track will include Community Risk Educator, Community Risk Specialist, and Community Risk Officer.

## Accredited Regional/Local Academies

In the past year State Fire Training has accredited nine institutions. The Ben Clark Training Center (Riverside Community College), Modesto Junior College, and Mt. San Antonio Community College have all been re-accredited as Accredited Regional Training Programs (ARTP). The San Jose Fire Department has been re-accredited as a Local Academy.



**New to State Fire Training** as local Accredited Academies, are the Los Angeles County Fire Department and the San Pasqual Reservation Fire Department.

In 2008, SFT issued **55** initial EMT certifications and re-certified **1,256** fire service personnel.

## Emergency Medical Technician (EMT) I Program

The EMT-I training and certification program is an Emergency Medical Services Authority (EMSA)-approved statewide program specifically for fire service personnel. This year, SFT adopted Brady's Emergency Care 11<sup>th</sup> Edition as the course curriculum as it meets the current U.S. Department of Transportation's Basic National Standard Curriculum. Currently **259 instructors** are registered to deliver both basic and refresher courses throughout the state. In 2008, **26** basic courses were conducted, and **67** refresher classes were held for a total of **2,025** students.



## EMT Instructor Orientation

SFT held an Emergency Medical Technician (EMT) Instructor Orientation course at Monterey Peninsula College in October. The course is designed to teach potential instructors how to work within the State Fire Training system. Valuable information on Title 22 EMT training regulations, SFT instructor conduct expectations, and pitfalls to avoid are shared in this comprehensive 3-day course. Potential instructors can also receive hands-on assistance in completing their instructor application.



## Regional Instructor Orientations

**Sixteen** Regional Instructor Orientations were delivered to **442 participants** in 2008. Presented by State Fire Training staff, the classes were hosted by various fire departments and community colleges. This one-day workshop is required for fire service personnel interested in teaching State Fire Training classes.

## Peer Assessment for Credential Evaluation (PACE) II

The Peer Assessment for Credential Evaluation (PACE II) was restructured in April 2008.

The new process empowers SFT staff to review instructor applications as they are received. If the applicant disputes the outcome of this review, he or she may submit an appeal to the Division Chief. The PACE II work group now reviews appeals quarterly. They agree upon a recommendation of approval or denial, and provide the recommendation to the Division Chief who will make the final decision.

In 2008, 555 applications were submitted listing 2,187 different subjects for review.



A total of **186 new instructors** were registered to begin teaching State Fire Training courses.



## State Fire Training Regulations



For several decades State Fire Training has documented business practices for instructors, classes, curriculum development and required materials for each class in several documents commonly known throughout California by our registered instructors, academies, and fire departments as the “SFT Procedures Manual,” “Course Information and Required Materials Manual,” and the “Curriculum Development Guidelines.”

In January 2008, the Office of the State Fire Marshal submitted a rulemaking package that incorporates each of these documents into regulations. These regulations, found in **Title 19 California Code of Regulations** begin at Section 1980.00 and end at section 1990.13 and were registered with the Secretary of State on September 6, 2008.

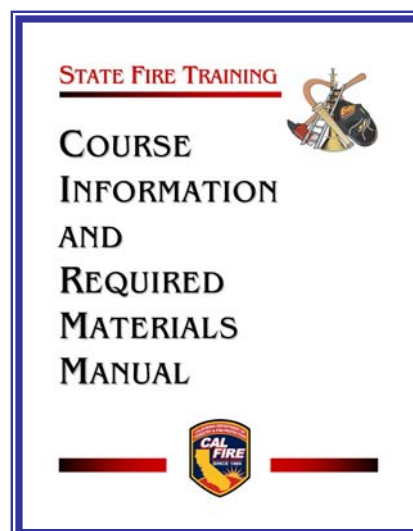
This regulatory package gives the State Fire Marshal’s Office the authority to enforce the procedures outlined in each of the incorporated documents. It also provides stability to the State Fire Training system in that any changes to procedures, classes, instructor requirements, fees or accreditation has to go through the same public rulemaking process.

## Course Information and Required Materials Manual

This valuable manual presents the following information for all of State Fire Training's CFSTES and FSTEP classes: the complete course title, minimum number of hours, who the course is designed for, a course description, any prerequisites, applicable certification track, maximum class size, student/instructor ratios, and any restrictions that the course may have.

In addition, the manual identifies the required student and instructor documents, and the vendors that sell the materials. When available, the SFT approved course outline is also included. The Course Information and Required Materials Manual is available to download online:

<http://osfm.fire.ca.gov/training/pdf/CIARM.pdf>

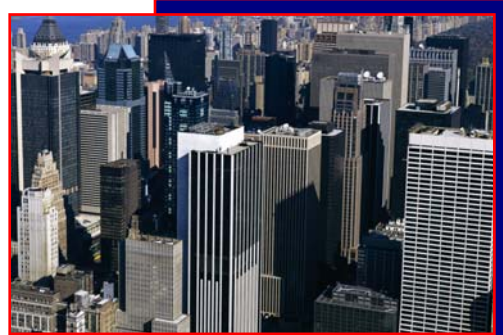


# Fire and Life Safety

Division Chief North Vickie Sakamoto

Division Chief South Ernie Paez

The Fire and Life Safety (FLS) Division is responsible for more than **25,000 state owned and leased buildings** including state office buildings, high rise structures, correctional facilities, state hospitals, CSU Campuses, Cal Trans Airspace and Fair complexes. The Deputy State Fire Marshals (DSFMs) are Building and Fire Officials. They **review building plans and perform on-site inspections** through all phases of construction, plus give final approval before the structure can be occupied.



FLS is the Authority Having Jurisdiction (AHJ) for cities and counties that do not have a paid Fire Chief.

FLS works closely **with local fire jurisdictions** and other state agencies on a variety of fire safety issues. The deputies often provide local fire inspectors with training on building and fire codes.



DSFMs coordinate and inspect such special events as concerts, pyrotechnics and fireworks shows.

FLS staff provides **Code Interpretations** for projects statewide.

## In 2008, 10 DSFMs in Southern Region

- performed 361 plan reviews just for California State Universities
- oversaw 37 active construction projects valued from \$10 to \$100 million each and inspected 8,834 buildings.

DSFMs are required to know everything that goes into a building from the underground water mains to the roof, from the blueprints to the final occupancy. To complete such multi-faceted assignments, a DSFM must have a broad knowledge base including construction, inspections, regulations, laws, fireworks, special effects, and fire behavior.



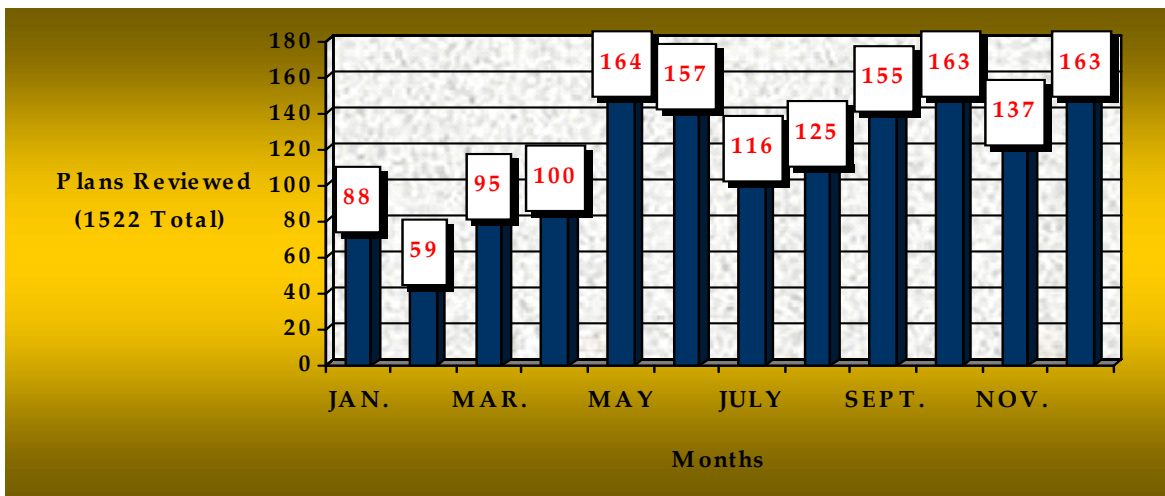
**FLS North** is responsible for 42 counties with headquarters in Sacramento.

**FLS South** is responsible for 16 counties with headquarters in Monrovia.

Deputy State Fire Marshals are strategically located in CAL FIRE offices around the state to ensure that structures are built and maintained to the standards of the California Building Code (Title 24) and the California Code of Regulations (Title 19).



## ■ 2008 PLAN REVIEWS- FIRE &amp; LIFE SAFETY, NORTH



## Solar Power

### Good for the Environment - Safe for Firefighters



The OSFM established a task force to tackle two issues connected to solar power:

- 1) Address firefighter safety on roofs with solar photovoltaic systems.
- 2) Provide guidelines on the installation of solar photovoltaic systems for residential and commercial buildings to use consistently throughout the state.

The task force finished their work in April 2008 with the publication of the **Final Draft Solar Photovoltaic Installation Guideline**.

<http://osfm.fire.ca.gov/training/photovoltaics.php>

## Some of the Projects Completed by Fire and Life Safety in 2008



Usona Fire Station Occupancy granted 4/18/2008.



Twain Harte Fire Station  
Occupancy granted 10/27/2008.



Public corridor of  
Fresno County Court



Tanimura & Antie Family  
Memorial Library at CSU  
Monterey Bay  
Occupancy Granted 11/24/2008.



Cal Trans Headquarters,  
Marysville, CA.

## Fire Engineering Division

### Division Chief Ben Ho

The Fire Engineering Division protects the people of California by evaluating and regulating fire safety equipment and appliances, overseeing the use of **hazardous materials and the suitability of building products** used in construction, and regulating fire extinguishing systems and appliances.

Statutory authority provides for the adoption of California State Fire Marshal Regulations found in Title 19 of the California Code of Regulations. The Fire Engineering Division implements these responsibilities with **various licensing programs** (Fire Extinguishers, Automatic Extinguishing Systems, Flame Retardant Fabrics and Chemicals, Vapor Recovery and the Building Materials Listing Program), and the evaluation of building products, materials and appliances. This division also includes two other programs outside of Title 19: Hazardous Materials/Hazardous Waste Management and the Fire Safe Cigarette program.

Fire Engineering provides necessary in-depth technical support and research relating to Fire Engineering's programs, the fire service service, CAL FIRE units and all OSFM Divisions as well as technical support to the public, state and local building officials, businesses, manufacturers, contractors, and designers.

**We are the technical hub of the OSFM. We provide technical information to our stakeholders daily.**

**Division Chief  
Ben Ho**

## Building Materials Listing Program

Within this program, building materials are evaluated to determine conformance with minimum fire and life safety standards. Those that are approved are entered into the listing service where customers may confirm their compliance. Recently, the program took on the responsibility to approve product/materials for use in Chapter 7A, of the 2007 California Building Code. The **listing service** provides a valuable resource to OSFM plan review and inspection staff, architects, engineers, local fire and building officials and other State agencies. The program **approved 290 new and existing applications and renewed 2769 listings in 2008.**



## Automatic Fire Extinguishing Systems Program



This program is responsible for the licensing of companies that inspect, test, service and maintain automatic fire extinguishing systems such as automatic fire sprinklers, commercial kitchen cooking hood/duct systems, etc. They review applications and proctor examinations, issue licenses and certificates, conduct inspections and investigations. The program **approved, processed and renewed 69 Type A Licenses in 2008.**

## Portable Fire Extinguishers Program

This program is responsible for the licensing of companies and individuals who inspect and/or service portable fire extinguishers. They review applications and proctor examinations, issue licenses and certificates, conduct inspections and investigations. Staff **approved, processed and renewed 524 Company and 2345 Individual licenses in 2008.**



## Flame Retardant Chemicals and Fabrics Program



This program is responsible for the certification and approval of flame retardant chemicals, fabrics and decorative materials sold and used in California. Additionally, the OSFM is responsible for licensing companies and individuals who apply fire retardant chemicals, such as those in the drapery and Christmas tree industries. Fire Engineering staff review applications, proctor examinations, and issue licenses and certificates.

They register flame retardant chemicals and fabrics that have been subjected to laboratory testing and satisfactorily demonstrated their flame-retardant capabilities. In 2008, the program **processed and approved 100 chemicals, 440 fabrics, 131 General Applicators and 398 Limited Applicators.**

## Vapor Recovery Program

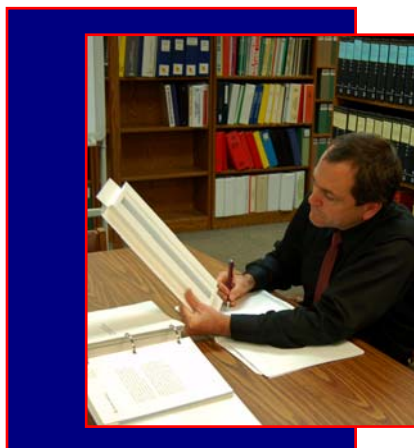
The OSFM is responsible for evaluating and certifying vapor recovery systems and components manufactured to control vapor by-products from gasoline fuel tanks. The purpose of the program is to assist the California Air Resources Board (CARB) in maintaining minimum standards for the prevention of fire and/or explosion resulting from unsafe vapor recovery systems or components (e.g., processors, nozzles, valves, swivels, hoses, etc.). The OSFM is the only agency responsible for determining whether any vapor recovery system or component poses a greater-than-normal fire hazard. Fire Engineering staff developed procedures for certifying Phase II equipment for alternative fuels. **The program processed and approved 17 applications in 2008.**



## Certified Unified Program Agency (CUPA)

The Fire Engineering Division is responsible for the oversight of Certified Unified Program Agency (CUPA) elements pertaining to the California Fire Code and to manage and regulate hazardous waste and hazardous materials as required in the California Health and Safety Code. The program is a partner with the Governor's Office of Emergency Services (OES), Department of Toxic Substance Control (DTSC), State Water Resources Control Board (SWRCB) and the California Environmental Protection Agency (Cal/EPA). **In 2008, the program conducted 10 local environmental health department and fire agency CUPA evaluations, participated in 32 conferences, hearings and workshops with local and state stakeholders.**

## Enforcement Program



The Fire Engineering Division is responsible for the enforcement of licensing, listings and certifications. Staff performs regular inspections and investigations related to Fire Engineering's programs. The Enforcement Program works with local District Attorneys, fire departments, law enforcement, other state agencies and the California State Contractors' Licensing Board (CSLB). **The program responded to 121 complaints, and conducted 44 investigations and 91 inspections in 2008.**



## Laboratory Accreditation



The Office of the State Fire Marshal (OSFM) has accredited more than 30 laboratories to perform tests on various products using OSFM adopted and/or nationally recognized standards. These tests range from the examination of portable fire extinguishers to complete full-scale tests of fire resistive walls and/or ceiling-floor assemblies. Tests conducted by laboratories must be accurate and dependable, since the results determine the fire resistance approval of a product. Improperly tested products can have disastrous effects on the safety of individuals

using them or within a building where they are installed should a fire occur. Laboratories wishing accreditation must be inspected by OSFM-approved staff. Inspections include the evaluation of specific test equipment and laboratory personnel. This accreditation process ensures that all products submitted to the OSFM for evaluation have been tested by qualified people, using accurately calibrated and constructed equipment.

## Fire Safe Cigarette Program

This program is responsible for enforcing the law that requires cigarette products for sale in California to meet specified testing and performance standards, meet package marking requirements, and have written certification that has been filed with the OSFM. The program **processed and certified 48 applications in 2008.**



*The following are typical services provided by Fire Engineering's programs:*

- *Review, approve and list fire alarm and fire safety products*
- *Review and approve Wildland Urban Interface (WUI) products*
- *Provide technical assistance to the public, state and local fire officials, building officials, businesses, manufacturers, contractors, designers, builders, and CAL FIRE units*
- *Review, approve and certify flame-retardant fabrics and chemicals*
- *Review, approve and certify petroleum vapor recovery equipment*
- *Provide licensing for fire extinguisher and flame retardant applicators*
- *Conduct inspections and investigations for all programs.*

## Wildland Fire Prevention Engineering

### Staff Chief Ernylee Chamlee

The 2007 adoption of the Wildland Urban Interface Building Standards (WUIBS) was landmark in the state's history for wildland fire prevention. It was a pivotal time for California, as a group of diverse individuals and organizations came together and worked through a tough set of building and fire code decisions and successfully recommended them forward to the California Building Standards Commission.

In 2008, the OSFM and our partners in fire prevention focused on the implementation of the **ignition resistant building standards**.

The new codes recognize the SFM's position that protecting houses in California's wildlands requires a two-pronged approach: Build ignition resistant structures, and create defensible space around the structures.

**Wildfires have always posed a threat to homes and businesses** in California's wildland urban interface. The southern California fire sieges of 2003 and 2007, the Angora Fire at Lake Tahoe, and last year's lightning fires in northern California have held the attention of the public, the legislature, and insurance companies.

The Office of the State Fire Marshal is dedicated to a firesafe future for California's structures.



*From the LIFE magazine archive early 1950s: then "Senator Richard M. Nixon on roof of his home in Yorba Linda, putting out fires caused by brush blaze."*

## Wildland Urban Interface Building Standards (WUIBS)

**How to build firesafe structures in California**, was the focus of a series of workshops conducted around the state in 2008. Steve Quarles, Ph.D., University of California Berkley Cooperative Extension led the OSFM WUIBS training efforts and was supported by fire and building officials.

## Defensible Space Training

The OSFM is developing a new series of classes which will be available in early to midyear 2009 for fire officials, building officials, insurance companies, and private contractors. The classes will include the new regulations which went into effect January 1, 2009, and an overview of ignition resistant building standards.

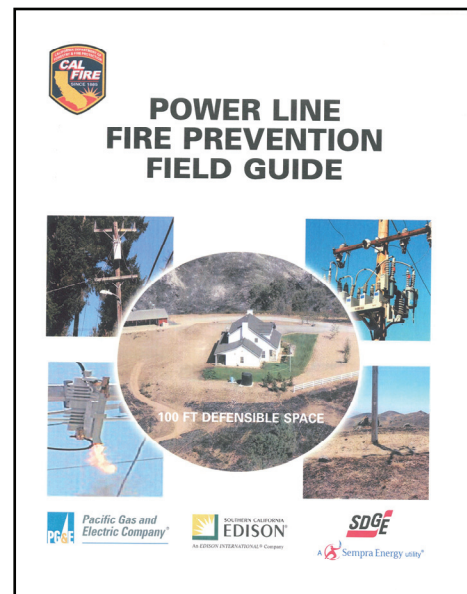
**Senate Bill 1595** (Kehoe) changed the language of the Public Resources Code (PRC) and Government Code (GC) regarding defensible space requirements around structures in all State Responsibility Areas (SRA) and Very High Fire Hazard Severity Zones (VHFHSZ) within Local Responsibility Areas (LRA). The bill amended Sections 51175, 51177, 51178, 51182, 51183, and 51189 of the Government Code, and Sections 4202 and 4291 of the Public Resources Code. It was signed into law on September 27, 2008 and went into effect January 1, 2009.



## Power Line Guide

The 2001 Power Line Fire Prevention Field Guide has been updated. It will provide information and guidance to the personnel of fire service agencies and electrical operators for minimum uniform application within the areas of their respective jurisdiction and franchise responsibilities. The Guide is not to be used as a substitute for proper training, but as a reference for personnel already familiar with the subject.

The new guide will be available in early 2009 through CAL FIRE - fire prevention offices and the major California public utility offices.



## Code Development and Analysis



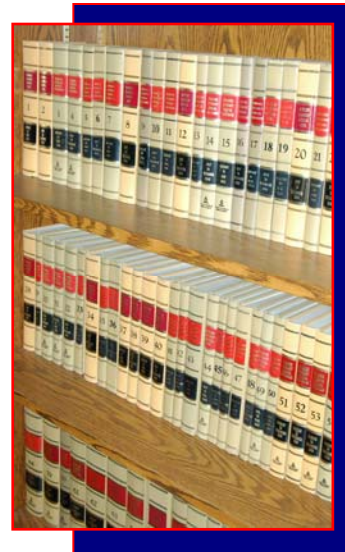
The Code Development and Analysis (CDA) Division prepares the California State Fire Marshal's fire and life safety regulations and building standards for review and adoption into the **California Code of Regulations (CCR) Titles 19 and/or Title 24**. The CDA Division also reviews all of California's regulations relating to fire and life safety for relevancy, necessity, conflict, duplication and/or overlap.

### Statutory Scheme and Authority

The office fosters, promotes and develops ways and means of protecting life and property against fire and panic. The OSFM is the state agency responsible for developing building standards to implement the State's fire and life safety policies and goals. The OSFM enforces regulations and building standards along with local enforcing agencies and other state agencies. The CDA Division works to create compromise and consensus among various individuals and groups involved in development of the state's codes related to fire and life safety.

### State Fire and Building Codes – Title 24

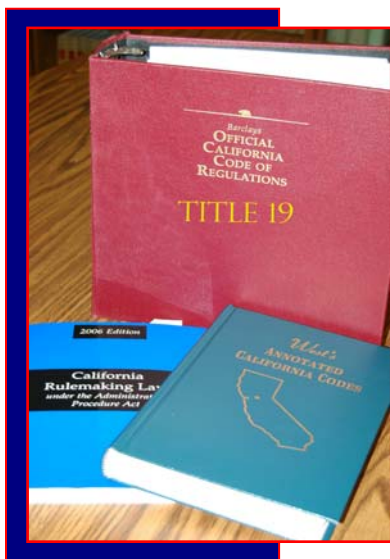
The OSFM is responsible for promulgating regulations that promote fire and life safety for inclusion into the State Building Codes including the **California Building Code, California Fire Code, California Electrical Code, California Mechanical Code, California Plumbing Code, and California Historical Building Code**. These documents are also referred to as **California Code of Regulations, Title 24**. The process incorporates a great deal of public participation and is guided by the State Building Standards Law.



The OSFM develops building standards affecting several industries. As a result of the multi-faceted nature of fire protection, the OSFM works with local government, fire officials, building officials, and the private sector to develop **fire and life safety building standards** addressing: roof coverings, fire alarm systems, motion picture production facilities, hazardous materials, and organized camps. The OSFM also regulates the adoption of building standards in assembly, institutional, educational, and residential buildings as well as high-rises and any building containing State employees.

## Public Safety – Title 19

The OSFM is responsible for regulations contained in California Code of Regulations, Title 19. These regulations (sometimes referred to as “non-building standards”) promote fire and panic safety, apply throughout the State and are enforced by the local Fire Chief. Regulations contained in Title 19 govern the maintenance of OSFM-regulated buildings and fire protection systems in all buildings in the State. Regulations adopted by the OSFM for inclusion in Title 19 undergo an adoption process similar to that used for building standards. **Public participation is always the rule.**



The CDA Division **supports the other divisions of the OSFM and the 21 CAL FIRE field units** in many ways. In 2008, several areas in the California Code of Regulations Title 19 were developed and published which affected OSFM statewide programs and local officials. **The CDA Division interprets and clarifies the law to help those who enforce it.**

The CDA Division **published codes** for portable fire extinguisher fee increases, State Fire Training policies and procedures and fees, automatic extinguishing systems forms, gasoline fuel containers listings, automatic fire suppression systems Type L (limited) license for in-house personnel, licensing time frames, and more.

The CDA Division is working with the Fire Prevention Officers Association to create an “inspector friendly” **fire code book**, incorporating enforcement provisions of Title 19 for local enforcement agencies.

The CDA Division also provides **consulting assistance to other state agencies’ regulations** on the Department of Water Resources Committee for FloodSAFE buildings. Staff participated in the first public workshops on flood threats and code revisions in January 2009.

The CDA Division also provides **assistance to local fire authorities** in the interpretation and application of the 2007 California Building Standards Codes that became effective January 1, 2008.

## Access Task Force

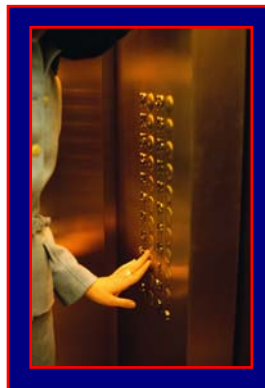


Throughout 2008, the CDA Division worked with the Access Task Force to perform a major rewrite of the Emergency Planning and Information provisions of the California Code of Regulations. Those regulations are now in the works to make California buildings safer for persons with disabilities.

## Implementation of the 2007 California Building Standards Codes

California's first partnership with the International Building and Fire Codes became effective **January 1, 2008** with the publication of the 2007 California Building Standards Codes. During this past year, the OSFM has been working to revise certain elements of the 2007 California Building Code (CBC) and 2007 California Fire Code (CFC). These proposed modifications and amendments correct omissions, complete tasks originally sought, and further augment the initial adoption of the 2007 California Codes.

The OSFM has taken extraordinary measures to ensure that this package represents the best in fire and life safety considerations, stakeholder involvement and economic considerations. Special focus this year was made to **research laboratories, elevators, smoke and heat vents and high-rise buildings.**



The State Fire Marshal successfully proposed new regulations to the International Code Council (ICC) International Building Code regarding how **roof assemblies** are classified and proposals to the ICC-International Wildland-Urban Interface Code relating to Ignition-Resistant Construction.



The CDA Division also worked with the Department of Housing and Community Development in their adoption of SFM regulations for materials and construction methods for exterior wildfire exposure as it pertains to **mobile homes** and manufactured homes located in certain fire hazard severity zones.

**We have a positive affect on everybody who lives, works in or visits California everyday. The map on the backside of the hotel door, that's us.**

**Kevin Reinertson  
Code Development and Analysis**

# Pipeline Safety Division

## Division Chief Bob Gorham

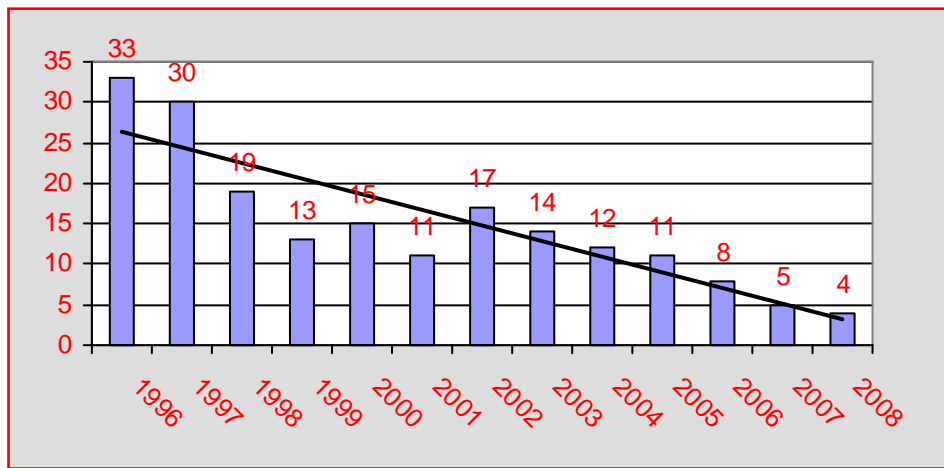
The State Fire Marshal is directly responsible for regulating the safety of approximately **5,700 miles** of hazardous liquid transportation pipelines within California. The Pipeline Safety Division (PSD) consists of engineers, analytical staff, and clerical support located in both Northern and Southern California. The Division is mandated by State law to exercise **exclusive safety regulatory and enforcement authority** over intrastate hazardous liquid pipelines and also acts as an agent of the federal Office of Pipeline Safety in the inspection of more than 1200 miles of interstate pipelines stretching from the oil platforms off of the Santa Barbara Coastline to the Sierra Nevada Mountain Range.



Pipeline Infrastructure under SFM Regulation	
Operators	52
Pipelines	779
Pipeline facilities	349
Breakout tanks	712
Miles of Intrastate pipelines	4455
Miles of Interstate pipelines	1244
Counties with pipelines	31
Higher Risk Pipelines	11
Miles of Higher Risk Pipelines	166

## Pipeline Leaks at All Time Low! Again!

The PSD investigated 4 pipeline incidents in 2008. This is the lowest number of leaks on pipelines located in public rights-of-way in California since recording began in 1985.





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

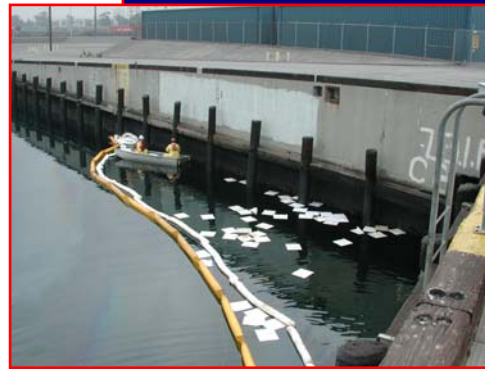
In accordance with federal law, no State may regulate hazardous liquid pipelines unless their program is certified by the US Department of Transportation's (USDOT) Office of Pipeline Safety. The California State Fire Marshal's program has been certified since 1981. This certification assures that the program complies with minimum federal standards for inspector qualifications, program procedures, documentation and recordkeeping, inspector training, and code enforcement. A **detailed program audit** is conducted by USDOT each year and the State Fire Marshal receives a rating based upon set program standards. In 2008, the California State Fire Marshal's program received a rating of **100%**.



### When Incidents Happen



**Encroachment over Pipeline**



**Crude Oil Leak**

The State Fire Marshal is notified by the pipeline operator through the **California Office of Emergency Services** of all pipeline spills or threatened releases. Each report is investigated and a field response is implemented whenever needed.

### Pipeline User Fees Increased in 2008

The PSD is a specially funded program relying primarily on pipeline operator fees and federal grant reimbursements. In 2008, the fees were increased for the first time since 1987, from \$1 million to \$3.2 million annually.

## The California Pipeline Mapping System

To fulfill its mission of assuring the protection of people and environment of California, the Office of the State Fire Marshal must have access to accurate information concerning the location of jurisdictional pipelines.

To accomplish these goals, the OSFM administers the California Pipeline Mapping System. This system was developed as a joint effort of the California State Fire Marshal, federal Office of Pipeline Safety, and the pipeline industry. It is a fully-featured geographic information system [GIS] database containing the locations and selected attributes of all interstate and intrastate hazardous liquid pipelines operating onshore and offshore in California.

SFM Pipeline Mapping staff responded to **1000 pipeline location requests** from property developers, school districts, and the public, in 2008.



## Inspection Staff

Currently six pipeline safety engineers are responsible for conducting inspections of the 52 pipeline companies operating in California.

A new pipeline engineer is required to attend and pass a dozen or more classes sponsored by the Pipeline and Hazardous Material Safety Administration (PHMSA) in Oklahoma City. This technical training takes a period of **3-5 years** to complete. Only after completion of these courses can an inspector be fully qualified to conduct inspections on his/her own.

**Approximately 300 tests were performed in 2008 to ensure the safety of hazardous liquid pipelines in California.**

**In 2008 the six pipeline safety engineers:**

- spent 200 days performing standard inspections,
- 101 days conducting construction inspections,
- 51 days on accident investigations and 22 days providing training to pipeline operators,
- issued 82 violations and assessed \$20,000 in civil penalties.

## Abandoned pipeline archive

The PSD Lakewood office maintains a library of maps, data and records on more than **2,500 miles of abandoned pipelines** in the state. Each operator must notify and provide a record of the status of each pipeline that they own. They must obtain PSD approval of the method that they use to take a pipeline out of service or to abandon it. The data are often accessed by local agencies to determine status and ownership of abandoned pipelines in their jurisdiction.



## Hazardous Liquid Pipeline Seminar



**Bob Gorham and the Pipeline Safety Staff** hosted a seminar on April 2 & 3, 2008 in Del Mar. Presentations were made to the pipeline industry, local and state government personnel, and others regarding federal and state regulations pertaining to the safe operation and maintenance of **hazardous liquid pipelines**. With over 180 attendees, this was the largest attendance in 20 years. Presentations are available for viewing and downloading at: <http://osfm.fire.ca.gov/pipeline/pipeline.php>



**I have never worked with a more dedicated group of employees that consistently put public service ahead of their own concerns.**

**Division Chief  
Bob Gorham**



# Law Enforcement

Staff Chief Tom Hoffman



## Civil Cost Recovery Unit

When fires are caused, either deliberately, through negligence, or as a result of a violation of law, CAL FIRE has the responsibility to file civil actions against the responsible individuals and/or corporate business entities. It is the policy of the Department to actively and aggressively pursue those cases where fire suppression cost recovery will enhance the fire prevention mission of the Department and to hold those parties responsible for their negligence and/or violation of law.



Beginning **July 1, 2008**, the Legislature and Governor Schwarzenegger approved funding for a **Civil Cost Recovery Unit**. The new Civil Cost Recovery program authorized the hiring of 14 limited term personnel. The staff will be located in Sacramento and at CAL FIRE Region Offices.

This unit has a very specific message: ***If you cause a fire by violating a law, or are found to be negligent, you may be held responsible to reimburse the State of California for fire suppression costs.***

CAL FIRE expects to return to the State’s General Fund ten dollars for every dollar spent. This is not a new responsibility. CAL FIRE has been doing civil cost recovery for many years at a level commensurate with staff abilities and time. Past collections have ranged from a few hundred dollars to over \$10 million. Currently, there are many cases waiting to be pursued, some with multi-million dollar values. The State Fire Marshal has stated that she expects the Civil Cost Recovery Unit to add an enhanced dimension to the total CAL FIRE mission.



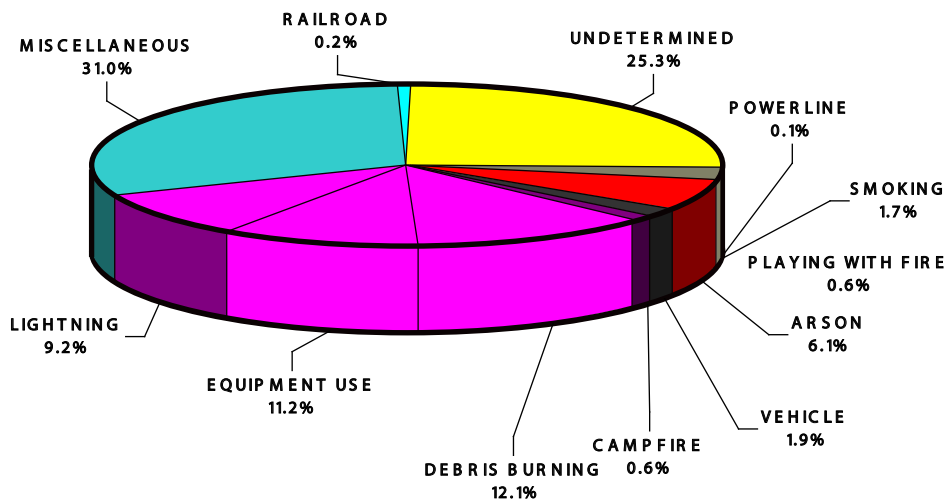


**CAL FIRE Officers made 89 Felony arrests and issued 234 Misdemeanor citations in 2008.**

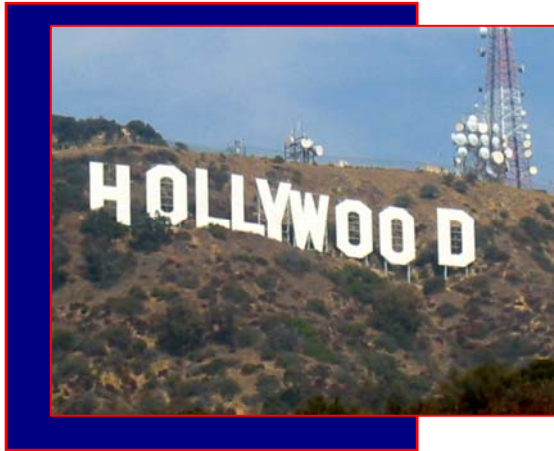
### Serial Arsonist Arrested

On November 26, 2008, after a five week jury trial, a serial arsonist was found guilty on **12 counts of arson** to forest land, and sentenced to **40 years in state prison**. The final disposition was the result of over five years and countless hours of hard work by CAL FIRE investigators. Because of these officers, one of California's most dangerous arsonists is now behind bars.

**PERCENT OF FIRES BY CAUSE STATEWIDE - 2008**



## Motion Picture Entertainment Unit

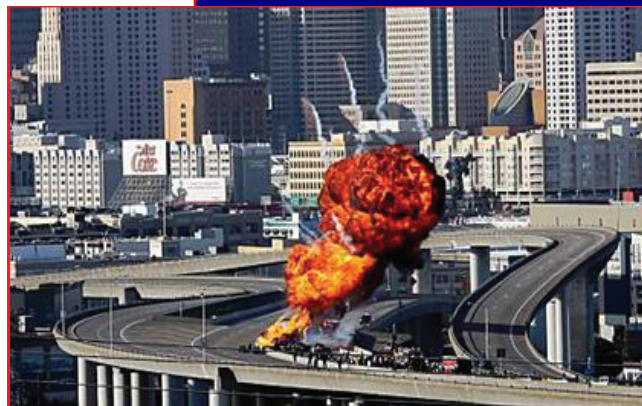


The Motion Picture/Entertainment Unit (MPE) serves as the liaison to the Motion Picture Industry and the California Fire Service. The Unit is under the direction of the Law Enforcement Division of the OSFM and is located in the Monrovia Office.

The unit is responsible for the development and delivery of a fire safety program where pyrotechnics and special effects are used in the television and motion picture industry.

### Key components of the MPE Unit include:

- Fire Safety Officer (FSO) training to local fire departments, studios' safety personnel, **stunt performers**, special effects operators, and other government agencies. This training is conducted statewide with the assistance of local fire service and the California Film Commission (CFC).
- Inspecting filming locations and permitting special effects activities on all State-owned and operated properties. The unit also reviews the filming permits issued by the CFC for fire and life safety requirements.
- Support for licensed pyrotechnic operators. This includes licensing upgrades and review of license applications for: pyrotechnic operator, special effects first and second-class, theatrical, and performer. The MPE Unit also conducts oral and practical exams.
- Regulatory development and review of issues relating to the motion picture and entertainment industry, working with local fire service in developing local codes and interpreting existing codes and regulations.



**The streets of San Francisco became a Hollywood set with the oversight of a Deputy State Fire Marshal.**

- Technical support to local governmental agencies in the development of standardized fire protection and life safety requirements for the motion picture industry throughout the State.
- Work closely with the CFC and the 58 Film Liaisons in California, Statewide (FLICS). Partner with groups such as the Motion Picture Association of America, Stuntmen Association, Location Managers, Screen Actors Guild, Alliance of Motion Picture and Television Producers, and Studios to retain the motion picture industry in California.

**In 2008, the Motion Picture/Entertainment Unit issued the following:**

- 37 pyrotechnic special effects permits on State property
- 48 open flame special effects permits on State property
- 12 tent permits used for motion pictures on State Property
- 612 fireworks customs releases for fireworks shipments traveling through California and out of State
- 208 fireworks customs releases for fireworks shipments traveling inside California
- Reviewed over 600 filming permits from the CFC for safety issues
- Conducted three **motion picture fire safety officer classes** in Los Angeles County and certified over 400 people as motion picture fire safety officers.



## Fireworks

The State Fire Marshal is responsible for protecting the people and property of California from harm due to fireworks. California's Fireworks Law, passed in 1938, established the Office of the State Fire Marshal (OSFM) as the **only fireworks classification authority** in California. Fireworks are classified through laboratory analysis, field examinations and test firing. As part of the program, the OSFM requires the licensing of all pyrotechnic operators, fireworks manufacturers, importer-exporters, wholesalers, retailers, and public display companies. Pyrotechnic operators who discharge fireworks at public displays or launch high powered and experimental rockets, must also pass a written examination and provide proof of experience.



California prohibits the possession of fireworks classified as “dangerous” in the Health and Safety Code. Dangerous fireworks include firecrackers, M-80s, cherry bombs, roman candles and the like. **Anything that explodes or flies through the air is prohibited.**

## Enforcing Dangerous Fireworks Laws

The OFSM has the responsibility of confiscating and disposing of illegal dangerous fireworks that are seized by the department's law enforcement staff and local fire and law enforcement personnel.

Criminals frequently attempt to bring illegal fireworks into California, often selling them out of the back of a truck or car. OSFM law enforcement officers seize tons of illegal fireworks every year at checkpoints placed strategically around the state. The offender is arrested and their product is confiscated and eventually destroyed.

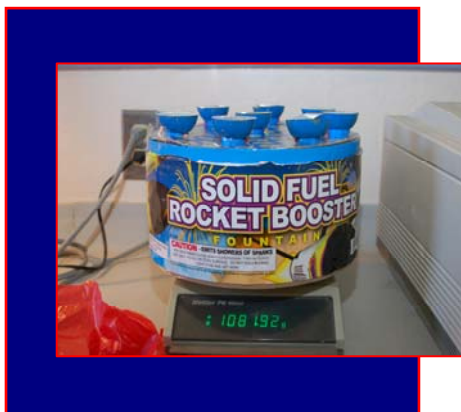






Managing and incinerating these explosives is a dangerous and expensive job. It requires highly trained personnel at properly secured locations. Disposal work is handled by the **Arson and Bomb Unit** of the OSFM. FBI-certified bomb technicians have the training and skills necessary to perform this task safely. The department has a procedure for the reporting of seized dangerous fireworks. As of December 31, 2008, approximately **40,500 pounds** were picked up for disposal by department personnel.

**Safe and Sane** fireworks are legal and must be approved by the State Fire Marshal. The "Safe and Sane" seal must appear on every package of Safe and Sane fireworks sold for private use. They are considered safe if used according to directions and with adult supervision. Every year the OSFM evaluates new Safe and Sane products which must be approved before they may be sold in California.



The OSFM also evaluates other pyrotechnic devices intended for consumer use such as party poppers, snap caps, model rocket motors, emergency signaling devices and agriculture/wildlife devices.

## Fireworks Licensing Program

- At the end of 2008 there were 1,512 active licenses in 13 different license classifications.
- In 2008, the OSFM approved 3313 permits for retail sales of Safe and Sane Fireworks.



# The Fire Plan

## Staff Chief Wayne Mitchell

In November of 2008, State Fire Marshal Kate Dargan along with the Institute for Business and Home Safety (IBHS) co-hosted a **National Fire Safety – Property Insurance Wildfire Summit** in Tampa, Florida. This summit brought together the insurance industry, the fire service and research professionals. The goal: “To develop specific ideas on ways to advance the planning, research and mitigation aspects of public safety during wildfire conflagrations.”



From this timely conference, came renewed commitment to **multi-agency teamwork** and a long list of projects pertaining to Research, Public Education and Building Codes, all based on the best science available to predict fire behavior, reduce losses and save lives.

The Fire Plan staff collaborates with professionals around the nation to lessen the damage caused by fire. They compile information about fire behavior; on-going influences (such as weather patterns) which affect fire activity; the values that are threatened; and most importantly, what works to limit the devastation that wildfire causes. Fire science is changing, and this staff keeps up with the latest technology. They use this data to assist the CAL FIRE field units in implementing their fire plans at the local level.

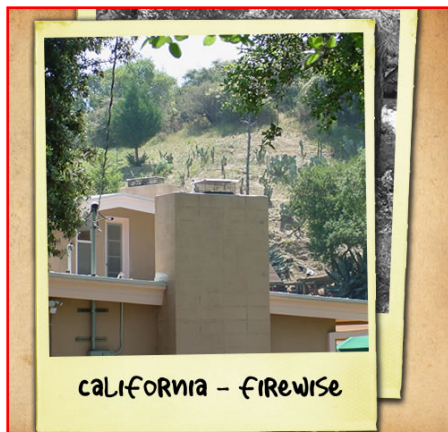
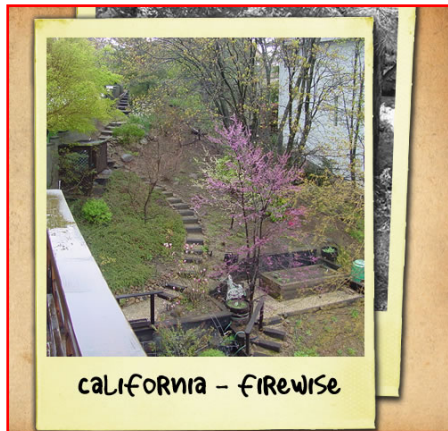


**The real work is done in the field. We assist and support from Sacramento. But the locals make the Fire Plan work.**

**Staff Chief  
Wayne Mitchell**

## Firewise Communities

The Office of the State Fire Marshal supports the work of the National Firewise Communities Program defined as follows:



***The National Firewise Communities Program is a multi-agency effort designed to reach beyond the fire service by involving homeowners, community leaders, planners, developers, and others in the effort to protect people, property, and natural resources from the risk of wildland fire - before a fire starts. The Firewise Communities approach emphasizes community responsibility for planning in the design of a safe community as well as effective emergency response, and individual responsibility for safer home construction and design, landscaping, and maintenance.***

***The national Firewise Communities Program is intended to serve as a resource for agencies, tribes, organizations, fire departments, and communities across the U.S. who are working toward a common goal: to reduce loss of lives, property, and resources to wildland fire by building and maintaining communities in a way that is compatible with our natural surroundings.***

In 2008, Fire Plan staff attended the National Workshop for Firewise State Liaisons in San Diego. Also, several California Fire Safe Council volunteers attended the National "Backyards and Beyond" Firewise conference in Tampa, Florida.

The list of Firewise communities in California continued to grow in 2008. There are now 31 California communities that have been recognized or have applied for recognition. Special thanks to the Sierra Forest Legacy and Fire Safe Councils for their work in assisting community groups with a Firewise assessment, developing a community Firewise Plan, and seeking national recognition.

For further information on Firewise Communities visit [www.firewise.org](http://www.firewise.org)

## California All Incident Reporting System

Every fire has its own special characteristics and lessons learned. By collecting information such as causes, types and locations of fires, numbers of fires in a particular area, damages and casualties, fire agencies can become more effective, and their firefighters safer.



California fire departments report statistical information on all fires (wildland and structure) medical aid incidents, and hazardous materials incidents to the OSFM through the California All Incident Reporting System (CAIRS). CAIRS complies with the National Fire Incident Reporting System (NFIRS) 5.0 format developed by the United States Fire Administration (USFA) in partnership with the National Fire Information Council (NFIC). It is designed as an all-incident reporting system to capture the full range of fire service incident types.

U.S. Fire  
Administration



FEMA

The data collected are used for compiling and analyzing summaries of statewide fire incident reports and includes numbers of fires, along with causes, types and locations of fires, as well as fire service and civilian casualties. Additionally, ad hoc reports, showing various relationships between fire causes, effects, contributing factors, etc., are compiled and available to the public at <http://www.osfm.fire.ca.gov/cairs/cairsnfirsreports.php>

## Benefits of CAIRS Reporting:

**“Fighting Fires with Facts”** Fire agencies use this valuable information to plan their training and risk-reduction programs, thereby making their firefighters safer and more effective. They can use the information to support budget requests by comparing their own districts to others with similar responsibilities. Local agencies use the data to target their resources and education programs, while State fire service managers develop and support fire safety codes and ordinances, guide legislation, and set training standards. At the federal level, CAIRS information is used to identify consumer product failures, support federal legislation, develop national codes and standards, and guide allocation of federal funds.

Additionally, under the U.S. Department of Homeland Security – Assistance to Firefighters Grant Program (AFGP), eligibility for grant funds can be tied directly to participation in this reporting system <http://www.usfa.dhs.gov/fireservice/grants>.

In California, the established NFIRS reporting channel is through CAIRS. For assistance in reporting, contact Kirsti Fong at (916) 445-8435 or [kirsti.fong@fire.ca.gov](mailto:kirsti.fong@fire.ca.gov).

“Frequently Asked Questions” regarding CAIRS are updated and posted at <http://www.osfm.fire.ca.gov/cairs/cairs.php>



## Data and Correlated Trends in California Fire Service:

As of January 15, 2009, CAIRS data reported to OSFM for 2008 included information on more than 1.4 million incidents submitted by approximately 48% of the 981 reporting fire entities throughout the State. This information is used to identify the current fire trends in California, as reported through CAIRS.

<b>All Fires Reported In CAIRS/NFIRS For 2008</b>							
<b>Incident Type</b>	<b>Number of Incidents</b>	<b>Property Losses</b>	<b>Contents Losses</b>	<b>Fire Service Injuries</b>	<b>Fire Service Deaths</b>	<b>Civilian Injuries</b>	<b>Civilian Deaths</b>
Structure Fire	17,233	399,026,828	138,612,348	122	0	282	51
Fire in Mobile Property used as Fixed Structure	558	6,854,778	2,776,561	1	0	6	6
Vehicle Fire	12,847	105,217,273	24,860,193	5	0	30	32
Natural Vegetation Fire (excludes crops/plants)	13,498	714,516,463	217,260,796	26	0	8	4
Outside Rubbish Fire	11,379	3,798,457	1,391,836	3	0	6	0
Special Outside Fire (includes outside fires with definable value)	2,221	85,019,644	429,165,071	1	0	14	2
Cultivated Vegetation, Crop Fire	478	3,619,383	4,619,986	2	0	1	0
Fire, Other	1,974	4,870,580	2,716,126	1	0	8	1
<b>2008 Total</b>	<b>60,188</b>	<b>\$1,322,923,406</b>	<b>\$821,402,917</b>	<b>161</b>	<b>0</b>	<b>355</b>	<b>96</b>

<b>2008 Summary of Responses</b>		
<b>Incident Type</b>	<b>Incident Count</b>	
Fire (Incident Types 100-173)	60,188	4.3%
Overpressure Rupture, Explosion, Overheat, No Fire (200-251)	2,325	0.2%
Rescue and Emergency Medical Service Incident (300-381)	1,010,719	71.9%
Hazardous Condition, No Fire (400-482)	31,841	2.3%
Service Call (500-571)	81,081	5.8%
Good Intent Call (600-672)	99,772	7.1%
False Alarm and False Call (700-751)	112,367	8.0%
Severe Weather and Natural Disaster (800-815)	1,108	0.1%
Special Incident Type (900-911)	5,370	0.4%
<b>2008 Total (as of 01/15/09)</b>	<b>1,404,771</b>	

\*These data represent local and state incidents within California as reported through the California All Incident Reporting System (CAIRS). Federal statistics are not included.

The data contained in these reports come from the OSFM's CAIRS data warehouse. Property and contents loss figures, if included herein, are estimates only. These emergency incident statistics, including injury and death counts, are based upon information submitted to the OSFM by participating California fire departments. Please note that apparent variations in incident counts and associated losses shown in these reports may be solely due to fluctuations in the amount of data submitted to the OSFM. Incoming data are validated against logical limits for the data element. OSFM does not verify the accuracy of individual data elements.



**The information collected by CAIRS is used to support live fire training such as this class in Lake Tahoe.**

## Fire and Resource Assessment Program

### Research Manager Dean Cromwell

The Fire and Resource Assessment Program (FRAP) collects, analyzes and publishes information pertaining to fire and land management in California. Their maps and data bases provide guidance for land stewardship, emergency response and long-term planning for public safety.

**The program provides information that is essential to planning for wildfire and other analyses critical to CAL FIRE and stakeholders.**

**Research Manager  
Dean Cromwell**

## Insect and Drought-Related Tree Mortality in Southern California Forests

In 2008, FRAP worked with the Southern Operations Center (SOPS), CAL FIRE units and other agencies to monitor tree mortality and track dead tree removal in Southern California. Estimates of new mortality have been based on 2007 and 2008 aerial imagery. (<http://frap.fire.ca.gov/projects/mast/index.html>).

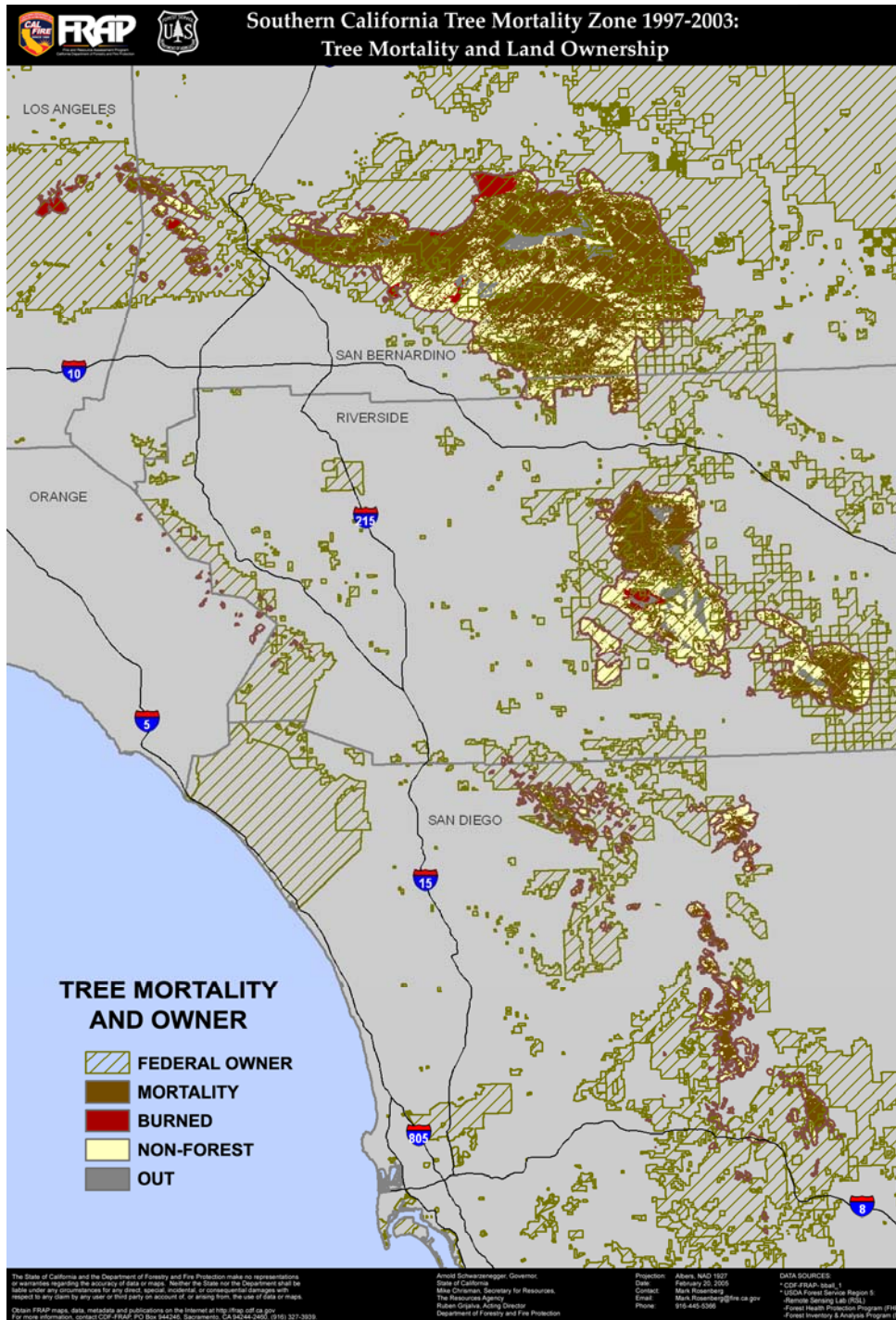
This project was created in response to the large-scale insect outbreaks in the **dry forests of Southern California**. From 2001 through 2004, bark beetles of several species attacked drought-weakened trees in epidemic proportions, leading to millions of dead trees and large areas of dead and dying forests. In 2003, the Governor made an Emergency Declaration, which is still in effect today. The dead trees have presented many challenges to nearby residents and to government administrators at levels from local to national. Dead trees greatly increase the risk of catastrophic wildfire. And if they fall, they threaten structures and the electrical grid. Hazard tree removal and mitigation have therefore been a top priority for many agencies.



[http://frap.fire.ca.gov/projects/mast/reports/FULL\\_REPORT\\_6.14.06.pdf](http://frap.fire.ca.gov/projects/mast/reports/FULL_REPORT_6.14.06.pdf)

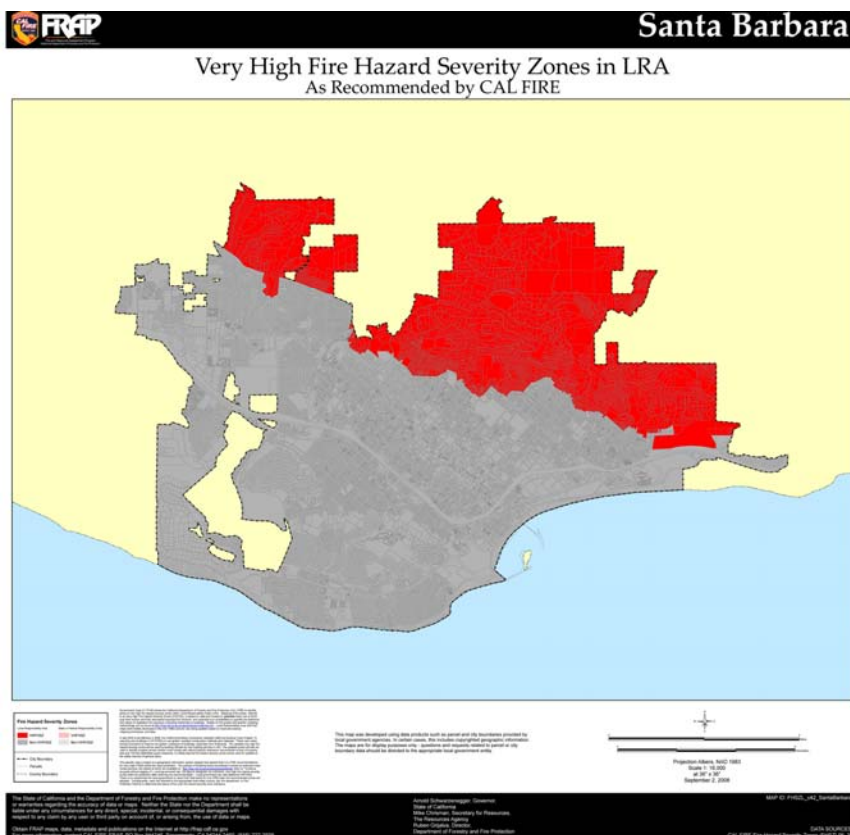


FRAP monitors the devastating insect infestation in Southern California's forests, by regularly updating and posting maps such as this.



## Fire Hazard Severity Zones in Local Responsibility Areas

Staff continued to work on Very High Fire Hazard Severity Zone (FHSZ) recommendations for Local Responsibility Areas. Very High FHSZ recommendations are made by the Director to cities and counties for lands at high hazard for wildfire, especially from ember-driven fires. Cities and counties then enact local ordinances to put the zones in place, together with other areas that the local jurisdiction may want to add. Over 200 cities and some counties have or will receive Very High FHSZ recommendations such as the one represented below for the City of Santa Barbara.



The Very High FHSZ boundaries are significant because the California Building Standards Commission adopted the Wildland-Urban Interface Codes in late 2005. New building standards for ignition-resistant construction are tied to these zones.



## CAL FIRE Climate Team

California faces substantial environmental and **climate change** impacts across many sectors. For example, increases in the frequency and severity of wildfires are expected. Challenges to forest health and wildlife populations will occur. California has an aggressive approach to dealing with climate change that involves many agencies, including CAL FIRE.

FRAP provides analysis support to the CAL FIRE Climate Team as they develop and implement strategies for climate change. Approaches involve both mitigation and adaptation. Mitigation focuses on trying to reduce the amount of **green house gases** in the atmosphere through such activities as reforestation, forest management and fuel reduction to lessen the **risk of severe wildfire**. Adaptation involves making changes to deal with the impacts of climate change, such as increasing fire suppression resources, clearing around structures, and requiring ignition-resistant construction.

FRAP scientists examine how much carbon is stored in trees and where wildfire threat is the greatest. They help create workable approaches for forest management, reforestation and urban forestry.



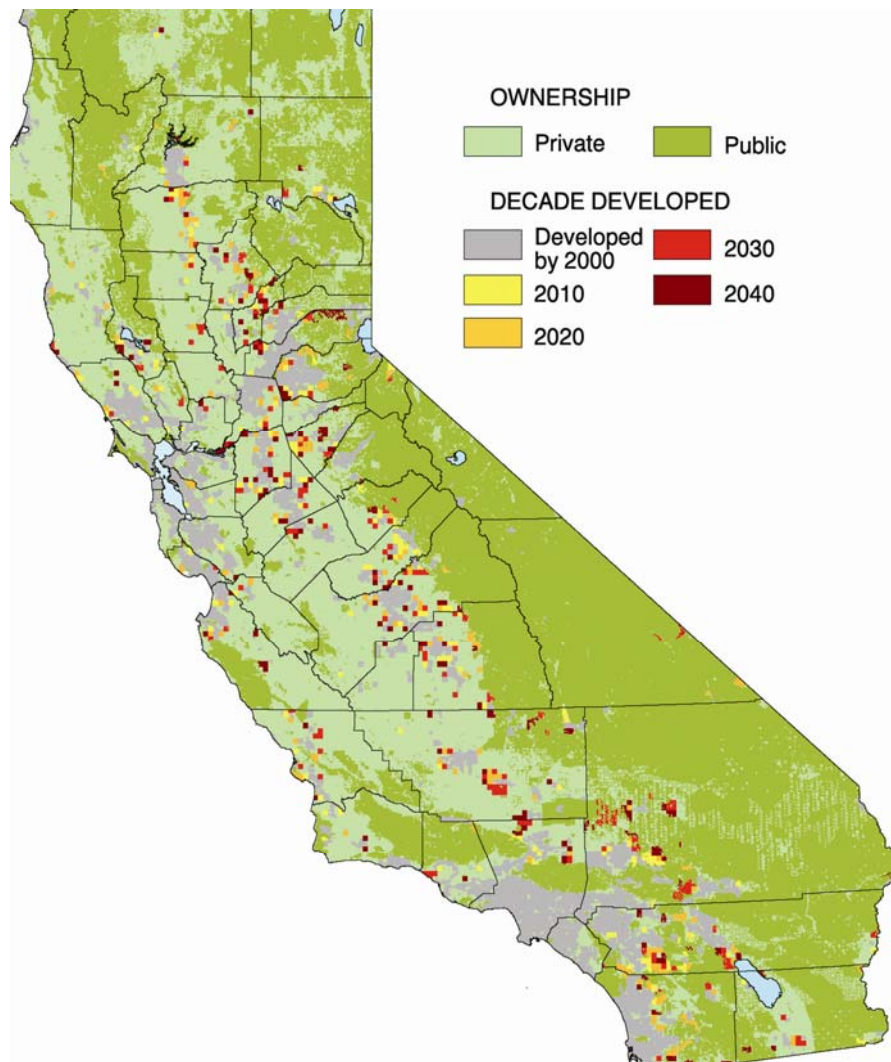
## Assessment

FRAP is developing a new forest and range assessment for 2010; as they are required by statute to periodically produce an analysis of California's forest and range resources. Topics include the status of development in forest and rangelands, the economic impact of various industries and fire threat to the Wildland Urban Interface. The last assessment was produced in 2003. Based on this document, the Board of Forestry and Fire Protection adopted a Policy Statement and Strategic Program that contains a number of policies related to climate change.

The recent Federal Farm Bill also requires an assessment be developed by each state for its forest resources. Among the themes that must be covered are impacts of climate change, fire threat, and urban forestry. Much emphasis is being placed on interaction with federal, state, and local agencies. Outreach is being planned to stakeholders such as Fire Safe Councils and communities with wildfire protection plans, so that their concerns and input may be considered.

**Among many other things,  
FRAP is a big data library...we  
try to keep it current and  
useful.**

**Research Manager  
Dean Cromwell**



## Supporting CAL FIRE Units

FRAP data and maps are available to all CAL FIRE units to support their local fire plans, to implement codes and ordinances while complying with the law, and plan for emergency response. Information is also maintained on areas where the State has financial responsibility for fire protection, plus a host of other fire and resource-related material.



## ***OFFICE OF THE STATE FIRE MARSHAL***

**The Mission of the State Fire Marshal is to protect life and property through the development and application of fire prevention engineering, education and enforcement.**

**Office of the State Fire Marshal**  
**<http://osfm.fire.ca.gov>**