Inside the OSFM Year in Review:

- Message from the State Fire Marshal
- State Fire Training Division
- Fire & Life Safety Division
- Pipeline Safety Division
- Code Development & Analysis Division
- Fire Engineering / Arson-Bomb Division
- Planning & Risk Analysis Division
- State Board of Fire Services

Message From the State Fire Marshal

CAL FIRE-Office of the State Fire Marshal (OSFM) is proud to release the 2014 “Year In Review”. This report is an opportunity for the OSFM to share the year’s activities, challenges, and accomplishments.

2014 was marked as the year of growth. The OSFM saw increased staffing in the fire/life safety division and within the Arson-Bomb Unit of Fire Engineering while adding program management and oversight in the Land Use Planning program of the Planning Risk Analysis Division. Many of these positions are filled as part of budget proposals from years ago as well as the State’s increased construction activities and those long term effects. This growth has not been seen in over 15 years.

Each program has seen increased activities. Whether it’s the continued focus of State Fire Training to modernize and strengthen the California fire service’s training model, or the increased activity in environmental policy through building materials, unique and fast pace state construction projects, increased involvement of the fire service in land use planning, and the implementation of a state-wide grant program the OSFM continues our interaction. This ‘Year In Review’ document provides an insight to the continuous activities and involvement of CAL FIRE-OSFM in the efforts to strengthen fire prevention and support the California fire service.

Many of the projects, workgroups, task forces, and program implementation are successful with the collective and collaborative efforts of our stakeholders. To all of you, thank you for your continued support and efforts to make California a fire safe State!

Be safe!

TONYA L. HOOVER
State Fire Marshal
State Fire Training Division
Mike Richwine, Assistant State Fire Marshal

State Fire Training (SFT) administers the California Fire Service Training and Education System (CFSTES) and Fire Service Training Education Program (FSTEP) in cooperation with accredited academies 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 quality fire service training and education.

Statewide Training and Education Committee Summary
A wide range of fire service stakeholders are represented on the Statewide Training and Education Advisory Committee (STEAC). The primary mission of 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 fire training issues and provides final review of all SFM training standards and curricula. Significant STEAC recommendations and approvals in 2014 were:

- Approval of Standards and Curriculum for Fire Fighter I, II, Company Officer, Chief Fire Officer, Executive Chief Fire Officer, Instructor I, II, III, Community Risk Educator, Community Risk Specialist and Community Risk Officer
- Accreditation of Merritt College and Fresno City College and Reaccreditation of Bakersfield College, Sierra College, Los Angeles Fire Department, and El Camino College,
- Trench Rescue Technician Training Curriculum

Fire Service Training and Education Program (FSTEP)
The Office of the State Fire Marshal administers the FSTEP and makes available the courses on a voluntary basis to fire departments. 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 approximately 1766 FSTEP classes were delivered to 29,011 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:
State Fire Training Division

California Fire Service Training and Education System (CFSTES)
The CFSTES coordinates development, delivery and administration of training for the California fire service. CFSTES has become synonymous with certification. In 2014, there was approximately 1129 CFSTES certification classes were delivered statewide to 15,047 students; with a total of 1,614 professional certifications issued among various certification tracks. In addition, approximately 2,482 Fire Fighter I, II and Volunteer Fire Fighter certifications were issued.

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 2014, 207 new instructor applications were approved. 12 Regional Instructor Orientation courses (RIO) were held with approximately 341 students attending and 19 Ethics courses were held with approximately 296 students attending. Both of these courses are required by SFT in order to be approved as a Registered Instructor.

The Instructor Update Course (IUC) must be completed by all Registered Instructors in order to maintain their eligibility to teach State Fire Training courses. 9 IUC courses were administered with 634 students completing the course.

New Curriculum
2014 marked the second year of updating State Fire Training (SFT) Certifications and the associated curriculum. This was a continued effort to align professional development within California Fire Services to national standards and applicable federal and state laws/regulations as directed by the State Board of Fire Services (SBFS). To this effort, SFT continued its partnership with the College of Continuing Education at California State University – Sacramento which assisted with logistics, editing, and document production.

We are proud to announce the following certifications were completed this year:

- Company Officer (replacing Fire Officer) and is in alignment with NFPA Officer I and II
- Chief Fire Officer (replacing Chief Officer) and is in alignment with NFPA Officer III
- Executive Chief Fire Officer is a new certification level and is in alignment with NFPA Officer IV
- Instructor I, II, and III (replacing Fire Instructor I, II and Master Instructor) and are in in alignment with NFPA Instructor I, II, and III
- Community Risk Educator, Specialist, and Officer (replacing Public Education Officer) and are in in alignment with NFPA

Implementation plans, Certification Training Standards, Course Plans, task books and the task book application for Company Officer and Instructor I & II can be found at http://osfm.fire.ca.gov/training/resources.php. The information for the remainder of the new certifications will soon be added to the SFT website under the Resources tab.

SFT will continue updating Certification programs as well as Fire Service Training and Education Program (FSTEP) courses. The programs to be reviewed/reviced in 2015 are:

- Emergency Vehicle Technician I, II, III Certification
- Plans Examiner Certification
- Fire Apparatus Driver/Operator Certification
- Instructor 2A, 2B, 2C Courses
- Vehicle Extrication Course
- Command of Major Fires
State Fire Training Division

- Command of Special Operations
- Command of High Rise Incidents
- Command of Rapid Intervention Crew Deployment

National Recognition Update
Throughout the year SFT staff placed an emphasis on stakeholder outreach to insure that the California Fire Service understands the implications of National Recognition and the proposed implementation of certification examinations for Fire Fighter I. Presentations were made to over 20 statewide associations and local fire chief and training officer associations. In addition, considerable emphasis was placed on working closely with the California Fire Technology Directors Association, representing our Accredited Regional Training Programs (ARTP), and representatives from our Accredited Local Academies (ALA).

Staff members also attended the annual National Board on Fire Service Professional Qualifications (Pro Board) Training Conference in February 2014. During this conference, valuable insight was gained to assist SFT in achieving accreditation and program implementation. SFT will be seeking internal approval to move forward with accreditation from the International Fire Service Accreditation Congress (IFSAC) and Pro Board. If approved by STEAC and SBFS, staff will move forward with preparation and submittal of applications and self-assessment documents to IFSAC and Pro Board. Peer review site visits by both organizations with final approval anticipated prior to the end of 2015. Implementation and roll out of certification examinations for Fire Fighter I and IFSAC and Pro Board Certification on a statewide basis will occur during 2016.

Fire Academy Accreditation
With an eye on the SFT becoming accredited by IFSAC and Pro Board community colleges and fire department training centers are completing State Fire Training (SFT) accreditation process as well. SFT staff members are diligently working to get all Accredited Regional Training Programs and Accredited Local Academies accreditation up-to-date by June 30, 2015 in preparation for the IFSAC and Pro Board site visit to be scheduled sometime in mid-2015.

In 2014, Merritt College and Fresno City College became accredited by the OSFM. Bakersfield, El Camino, Oxnard, Santa Rosa and Sierra Colleges all completed their reaccreditation. The Los Angeles Fire Department and Fremont Fire Department were also reaccredited as Accredited Local Academies.

State Fire Training is Reaching Out
Do you want to stay up with all of the latest changes to State Fire Training Curriculum and Certifications, instructor requirements and other important changes taking place? Follow us on Twitter https://twitter.com/SFTnews4u or sign up for ENEWS Subscription Service http://osfm.fire.ca.gov/subscription.php.
FIELD OPERATIONS

2014 has been a year of great growth for the Fire and Life Safety Division. With the May approval of a Budget Change Proposal (BCP) to support multiple capital outlay projects from California Department of Corrections and Rehabilitation, Judicial Council of California and The Board of State and Community Corrections, we have added 14 Deputy State Fire Marshal positions, 1 Associate Governmental Program Analyst and 1 MST position.

This year we proudly saw the promotion of Deputies Wendy Collins, Sandy Margullis, Spencer Meyer and Fred Paesano to the rank of Supervisor; and Deputies Christine Fowler, Gary Blumenthal, Michael Slocum, Aaron Greer, and George Mavrikis were promoted to Grade III Deputies.

The 2014 Fire and Life Safety regular workload summary is as follows:

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<th>Description</th>
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<td>TOTALS</td>
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In addition to our regular workload, multiple capital projects from CDCR, AOC and BSCC have substantially added to our Plan Review bins and are beginning the transition to the field for construction.

- Alameda County, East County Hall of Justice – This 13 courtroom, 148,031 square foot project is in construction with a current expected completion date of early 2017. The current authorized project budget is $147,684,000.
- Butte County, Chico Courthouse – This 5 courtroom, 67,443 square foot project is in construction with a current expected completion date of mid-2015. The current authorized project budget is $65,064,000.
- Kings County Superior Courthouse – This 12 courtroom, 144,460 square foot project is in construction with a current expected completion date of mid-2015.
- Madera County Superior Courthouse – This 10 courtroom, 115,804 square foot project is in construction with a current expected completion date of mid-2015.
- New Santa Clara Family Justice Center – This 20 courtroom, 233,906 square foot project is in construction with a current expected completion date of early 2016. The current authorized project budget is $233,026,000.
- New Yuba County Courthouse – This 7 courtroom, 73,853 square foot project is in construction with a current expected completion sometime in late 2015. The current authorized project budget is $65,834,000.
- Riverside County Banning Justice Center – This 6 courtroom, 68,584 square foot project is in construction with a current expected completion date of early 2015.
- San Diego County Superior Courthouse – This 23 story high-rise, 71 courtroom, 704,000 square foot project is in construction with a current expected completion date of late 2016.
- San Joaquin County Courthouse – This 30 courtroom, 310,443 square foot project is in construction with a current expected completion date of late 2016. The current authorized project budget is $272,939,000.
Fire & Life Safety Division

- Yolo County Courthouse – This 14 courtroom, 163,066 square foot project is in construction with a current expected completion date of mid-2015. The current authorized project budget $161,452,000.
- CSP Sacramento – Projects at this facility consist of roof repair, completed in January 2015; construction of a new building, due for completion in early 2016; and the addition of a new fire pump, due for completion at the end of 2015; all with an estimated budget of $1,126,000.
- Mule Creek State Prison – Projects at this facility consist of multiple new prison living facilities, due for completion in early 2016 and a new generator system and substation, due for completion in late 2015; all with an estimated budget of $627,500,000.
- San Jose State University – High Rise residential dorm facility, due for completion in 2017.
- Doyle Drive Tunnels, Post North & Battery North and South – Scheduled for completion mid-year 2015.
- CSU San Diego Zura Renovation – 8 story residential dorm facility, 140,000 square feet being completely reconstructed, projected to be complete by August 2015.
- San Luis Obispo County Women’s Jail – This two phase 198 bed addition and medical program building, 46,340 square foot project with Phase I currently in construction and a current expected completion date of 8-19-2016. The current authorized project budget is $29,165,882.
- CSU Channel Islands - Sierra Hall Science Complex 3-story 3-building classroom and lab use; 66,499 sq. ft. 60% complete as of Jan 1, 2015. Estimated completion late fall 2015.
- CSU Channel Islands - Santa Rosa Village Phase III student housing 600-bed residential occupancy with an anticipated completion date of late 2016.
- CSU Northridge - University Park Apartments Phase II Student Housing 385-bed 3 building residential occupancies currently in construction with an estimated completion in late 2016.
- CSU Northridge - Extended Learning Center – This is a new 3-story conference center with mixed use assembly, classroom and office spaces currently in construction with no estimated completion date.
- CDCR Los Angeles - New healthcare clinics for Alpha and Bravo yards are currently in construction with no estimated completion date.
- CDCR/Ventura Youth Correctional Facility – This project will renovate 12 existing housing units to include the complete replacement of facility-wide fire alarm system and network with an anticipated completion date of 2016.

We are anticipating that 2015 will be another year of great growth with the filling of 12 vacancies by mid-year and additional capital projects completed within the Plan Review Section.

High Speed Rail

Fire and Life Safety staff is currently engaged with the California High Speed Rail Authority in an effort to provide planning and oversight for implementation of the Governor’s rail project. The California High-Speed Rail Authority is responsible for planning, designing, building and operation of the first high-speed rail system in the nation. California high-speed rail will connect the mega-regions of the state, contribute to economic development and a cleaner environment, create jobs and preserve agricultural and protected lands. By 2029, the system is expected to run from San Francisco to the Los Angeles basin in under three hours at speeds capable of over 200 miles per hour. The system will eventually extend to Sacramento and San Diego, totaling 800 miles with up to 24 stations. In addition, the Authority is working with regional partners to implement a state-wide rail modernization plan that will invest billions of dollars in local and regional rail lines to meet the state’s 21st century transportation needs.
Fire & Life Safety Division

Plan Review
The staff of the plan review unit conducted over 1,800 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 over $3.4 billion in construction costs.

A comparison was conducted between last year (2013) and this year (2014). An increase of over 400 plans reviewed and 2 billion dollar upturn in construction value from the previous year was observed.

<table>
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<th>AGENCY</th>
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<tr>
<td>TOTALS</td>
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**2014 Noteworthy Plan Review Projects:** Mule Creek Infill Complex, $350,000,000.00; The Superior Court of California County of San Joaquin, New 13 story courthouse, $204,000,000.00; Santa Clara Family Justice Center, New Courthouse-Fire Sprinklers/Standpipe Pump $179,000,000.00; R.J. Donovan San Diego Infill Facility, $168,000,000.00; James A Musick Phase 1 expansion, $120,000,000.00; South Campus Plaza, Five floor student residential building over a single story concrete retail podium, $35,782,137.00; Student Health and Counseling Center, Medical Office Building $21,600,000.00, New Madera Courthouse $100,207,921, New Hanford Superior Court $124,329,000, New 22 story $555,000,000.00 San Diego Superior Courthouse San Luis Obispo County Juvenile Hall – This 20 bed addition/support spaces, 23,416 square foot project is in construction with a current expected completion date of 7-5-2016. The current authorized project budget is $15,277,000.

Plan Review Triage
In effort to better meet our customer demands and provide a quality plan review we have added a plan review page to our website. On this page we provide information explaining our over the counter review system, pertinent forms, and provide guidelines that may be helpful to individuals submitting plans and other documents. We also initiated the Triage process in an effort to streamline and expedite our plan review process. When a submittal is received at OSFM for review a Triage assessment is initiated within 72 hours. If all required information is provided on the submittal, it is then put in our plan review process. If critical information is found lacking the submittal, the plans will be returned. The Triage process is not a plan review,
Emergency Response Operations
In addition to field operations and plan review, 2014 year required the Fire and Life Safety Division to respond to numerous natural disasters. The Division’s responsibility to ensure the stability and usability of state occupied structures after a catastrophic event, through damage assessment.

The Fire and Life Safety Division also has responsibility for assisting the State’s mutual response to emergencies and act as a liaison between the regional and local governments.

On Sunday, August 24, 2014, Northern California was hit by a magnitude 6.0 earthquake that occurred just outside of Napa. The Napa Earthquake caused extensive damage to governmental structures, infrastructure, commercial buildings, and residential structures in Napa and Solano Counties. The OSFM Emergency Operations Center (EOC) was activated that morning to provide emergency evaluation of State-occupied facilities and to support field operations. OSFM Damage Assessment Teams consisting of Deputy State Fire Marshals (from both northern and southern California) were dispatched to conduct hazard inspections of State-occupied structures within the earthquake-affected areas and worked with other state response agencies and departments. Also, the City of Napa requested assistance from OSFM to conduct and support the City’s damage assessment efforts with additional Fire and Life Safety teams organized to fulfill the City’s request.

The seventeen Deputy State Fire Marshals assigned to the Damage Assessment Team conducted hazard inspections of 398 state facilities and 1,747 local structures for a total of 2,185 hazard inspections completed in five days.
The Boles Incident

Deputies from the Fire and Life Safety Division responded to the Boles Incident in Weed on September 15, 2014 to assist with the Damage Inspection (DINS) team efforts. To take advantage of the skill sets of the assigned staff, six two-person DINS teams were organized utilizing a Deputy Fire Marshal paired with a Field Observer were paired to conduct the damage inspections for the commercial as well as the residential structures impacted by the fire. This incident was also the first to use Mobile electronic devices (Phone or mobile pad, iOS or Android) to speed up the data collection and validation process, enabling the DINS leads to view the data being collected in real time on a secure web service that would provide quick data validation and dynamic re-tasking of DINS teams in the field. The teams identification of the various construction types and fire protection for the commercial properties along with the Field Observer’s knowledge of fire behavior assisted the rapid completion of the large number of damaged or destroyed properties on this incident. The fire destroyed 157 homes and damaged 4 in addition to destroying 8 commercial properties and damaging 3.

Tunnel Emergency Drill

A joint emergency response drill was conducted in December to ensure the functional performance of all fire and life safety systems and to provide training for the first responders at Devil’s Slide (Tom Lantos Memorial Tunnels). Participants included OSFM, CAL FIRE, CHP, CALTRANS, North County Fire Department, Pacifica Fire Department and San Mateo County Sheriff’s Department.
The OSFM Pipeline Safety Division regulates the safety of approximately 4,700 miles of intrastate Hazardous liquid transportation 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 OSFM maintains Geographic Information System (GIS)-based maps of all regulated pipelines in California. The program has been a certified state agent for the federal government since 1984. Since January 1, 2013, the program has focused its inspection duties on California’s intrastate hazardous liquid pipelines after ending its interstate agent agreement with the federal government’s Pipeline and Hazardous Materials Safety Administration (PHMSA). This focused action provides more inspection time on intrastate pipelines and assist those operators with meeting and exceeding safety requirements.

CAL FIRE-OSFM Pipeline Safety Division continues to keep a pulse on the transportation of petrochemical products throughout California in 2014. With a dedicated staff of pipeline engineers, Program continued to provide essential safety inspections. The following chart illustrates type of inspection services necessary to ensure the safe operation of the State’s hazardous liquid pipelines.
Pipeline Safety Division

Last year, there were 23 hazardous liquid pipeline accidents in California. That is up from 15 in 2013 - a 53% increase. Out of the 23 accidents that occurred in 2014, 13 were classified as "significant", spilling over 2,500 barrels of petroleum and amassing over $5.8 million in damages. Also trending upward were the number of violations and civil penalties that the Pipeline Safety Division assessed to various pipeline operators.

![2012 Pipeline leak incident]
Pipeline Safety Division

El Real Facility Release

On January 12, 2014, a release of approximately 186 barrels of crude oil occurred at the Plains All American Pipeline Companies (PAAPL) El Real Facility in Wilmington, California. The over-pressurization of the station’s piping which ultimately ruptured the expansion joint bellows on Tank #1- 16 inch diameter suction line, damaged pressure relief lines and sprayed oil onto the side of the adjacent Displacement Oil (DO) tank shell, releasing crude product inside the tank’s paved containment basin. No injuries occurred and no waterways were impacted due to this release.

The “root” cause of the failure was operator error and the contributing factors of the release were over pressurization of a suction line caused by an improper valve alignment. Operational procedures are being revised to mandate the use of double isolation valves during lineups. Incident details were distributed to other operators as a prevention and awareness measure. Engineering recommendations advised installing a check valve in the piping system configuration to segregate the high and low pressure piping systems.

Los Angeles Pump Station Release

On May 15, 2014, at approximately 0025 hours, Plains All American Pipeline, L.P. (PAAPL) had a release of crude oil at their Los Angeles (“LA”) Pump Station. PAAPL’s intrastate pipelines (Lines 2000 (CSFM #: 0830A - 0987) and 63 (CSFM #: 0830D - 0125)) converge at this pump station. The released crude oil impacted most of the pipeline station and did escape the station impacting an adjacent

2014 Pipeline Statistics

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<td>INCINCORRECT OPERATION</td>
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<td>MATERIAL/WELD/EQUIP failure</td>
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<td>OTHER OUTSIDE FORCE DAMAGE</td>
<td>23</td>
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<tr>
<td>Grand Total</td>
<td>23</td>
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</tbody>
</table>

(1 Barrel = 42 U.S. Gallons)
Pipeline Safety Division

business, street, and some parked cars. The released oil flowed approximately 200 yards down an adjacent street. The LA City Fire Department was on site quickly and contained the spill by constructing a sand berm preventing the flow of crude oil form getting into the LA River. Failure of mainline ball valve bonnet screws caused crude oil to be released through the valve body. No storm drains or waterways were impacted. No injuries occurred. 331 barrels of crude oil was released and 280 barrels were recovered.

The primary cause of this incident was determined to be tensile fatigue of cap screws that attached valve 2518 stem gland to the valve body. Based on engineering calculations, the cap screws appear to have been sufficient to support the loads on the valve arising from internal pressure and actuator torque and furthermore no material defects regarding the mechanical properties were observed in the failed cap screws examined. The failed ball valve was replaced with a gate valve.

Projected Crude-by-Rail Deliveries to California

According to estimates by State energy officials, crude oil imports by rail will increase from 1% of total California oil imports in 2013 to 25% of imports by 2016. Most of the increase is due to a sharp rise of imports from Canada and North Dakota in the Bakken shale formation.

OSFM responded to this projected influx of crude oil rail cars into California by issuing an information bulletin advising the fire service of the dangers that are associated with the transportation of Bakken Oil.

Oil by Rail

The Office of the State Fire Marshal has been working closely with the state Interagency Working Group on Oil by Rail Safety in an effort to prepare state and local emergency responders for the dramatic increase in shipments of oil by railroad in California communities.

The Office of the State Fire Marshal issued an information bulletin advising the fire service of the dangers that are associated with the transportation of more flammable Bakken Oil.
"We are advising the fire service to treat all crude oil spills, whether they are from rail car or pipeline, with the understanding that the flammability of the oil may be higher than they have traditionally encountered. Also, we encourage you during your annual meetings with the hazardous liquid pipeline operators to discuss if they are shipping Bakken Oil." Source:

-California State Fire Marshal - Information Bulletin 14-001

Pipeline Safety Seminars

Each year the Office of the State Fire Marshal (OSFM) Pipeline Safety Division hosts a free Pipeline Safety Seminar for the industry, government agencies, and other interested parties. These seminars provided by the OSFM are intended to increase the awareness and understanding of California and federal regulations associated with hazardous liquid pipelines. This year, in an effort to make pipeline safety training more geographically accessible, OSFM presented the seminar at three different locations – Concord, Bakersfield, and Long Beach. We also shortened the program to one-day thus eliminating the need for overnight lodging and set the agenda starting and ending times to allow for commuting. They were attended by members of the pipeline industry along with State and local agencies. The presentations at the seminars covered a variety of pipeline safety topics. David Mulligan and Huy Nguyen of the Department of Transportation’s federal Pipeline and Hazardous Materials Safety Administration (PHMSA) presented information relating to the PHMSA Community Assistance and Technical Services program and discussed Integrity Management Programs facts and regulations. OSFM Pipeline Safety Division Chief, Bob Gorham, covered facility piping regulations. Edward “Buzz” Fant, Director of Compliance Codes and Standards, from Kinder Morgan presented information on the Damage Prevention Toolbox. The toolbox is a collection of damage prevention shared learnings and practices from various hazardous liquid transmission pipeline operators. Representatives from the California Department of Fish and Wildlife spoke on the Lake or Streambed Alteration Program and provided information to help pipeline operators navigate the permitting process. Pipeline Safety Engineer's, Dan Le, Xuan Nguyen, and Tom Williams presented on the Pressure Testing Requirements in California. Finally, Gary Shepherd, from Shepherd Risk and Safety Advocates, presented valuable information on safe trench operations.

CAL FIRE-OSFM is committed to providing a strong pipeline safety program that helps ensure a safe environment to California’s citizens, visitors, emergency responders and environment.
California continues to be a leader in the fire and life safety profession. Our fire and building officials are considered part of the nation’s best; speaking with considerable experience. The Office of the State Fire Marshal’s (OSFM) regulations and building standards process, proposals and adoptions continue this reputation. The inclusive process allows for change and continued improvement of our building community with a continued balanced focus on fire and panic safety.

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 (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) Title 19 (Public Safety regulations) and Title 24 (California Building Standards Code). 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.

Throughout the years, the State Fire Marshal has been given the responsibility of developing building standards affecting many industries. Because of the multi-faceted nature of fire protection, the OSFM has worked 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.

Supplement to 2013 California Building Standards Code Rulemaking Cycle
In accordance with Health and Safety Code 13108, 13110, 13143, 13143.6, and 13211, the OSFM proposed certain amendments and building standards for the interim supplement to California Code of Regulations (CCR), Title 24, the 2013 California Building Standards Codes. The California Building Standards Commission took action to approve and adopt the OSFM proposals at their July 22, 2014 hearing. The following are some of the key items in the supplement:

- Incorporation and correlation of NFPA 2 Hydrogen Technologies Code into the California Codes.
- Correlation of regulations regarding smoke alarms and statutory changes made by SB 1394 (2012) and SB 745 (2013)
- Clarification and editorial modifications for photovoltaic solar systems.
- Clarification and coordination of residential fire sprinkler systems, antifreeze and NFPA 13D including modifications to the referenced standards.
- Smoke and heat removal systems for Group F-1 and S-1 occupancies.
- Clarification and coordination of residential fire sprinkler backflow requirements of the model code.
- Correction and coordination of emergency voice/alarm communication system for schools.
- Clarification of Group I-2.1 occupancy provisions and editorial corrections.
- Adoption of NFPA 502 for state projects.

Publication of supplement was made January 1, 2015 with an effective date July 1, 2015. For additional information please visit the 2013 Intervening Code Cycle webpage.

Adoption of NFPA 2 Hydrogen Technologies Code
July 2014 California became the first state jurisdiction in the nation to adopt and approve the 2011 edition of National Fire Protection Association 2 (NFPA 2 Hydrogen Technologies Code). NFPA 2 is a science based code that provides fundamental safeguards for the generation, installation, storage, piping, use and handling of hydrogen in compressed gas or liquid form. It has undergone intense industry scrutiny and engineering peer review through the rigorous NFPA adoption process.
Code Development & Analysis Division

The adoption of NFPA 2 is part of a larger effort by the State to implement Executive Order B-16-2012 issued to "encourage the development and success of zero-emission vehicles." The Governor's Executive Order directs State government to meet a series of milestones toward a long-term target of 1.5 million ZEVs on California's roadways by 2025.

For additional information please see OSFM Information Bulletin 14-010 and Governor's Office of Planning Research – Zero-Emission Vehicles in California

Emergency rulemaking that delayed the effective date for certain fire classification requirements for roof mounted photovoltaic panels/modules [systems]

On April 23, 2014, the California Building Standards Commission filed with the Secretary of State an emergency rulemaking change on behalf of the Office of the State Fire Marshal. This emergency rulemaking delayed the effective date for certain fire classification requirements for roof mounted photovoltaic panels/modules [systems] contained in California Code of Regulations (CCR), Title 24, Part 2, known as the 2013 California Building Code (CBC) and Part 2.5, the California Residential Code (CRC).

The OSFM was informed by industry that there was an insufficient supply of Class A, Class B or Class C fire rated photovoltaic panels/modules [systems] that have been tested and listed to newly established standards contained UL 1703; this could cause a demand issue. This circumstance may have prohibited the permitting of projects to install solar photovoltaic systems on roofs, which in turn curtail efforts to meet current sustainability goals. The emergency regulations delayed the effective date to January 1, 2015 for the application of fire classification provisions for solar photovoltaic systems on roofs as contained in UL 1703 standard to provide suitable time for the testing and listing of photovoltaic panels/modules [systems] to meet the current UL 1703 standard.

It was important to note that in the absence of a PV system fire rating, it may seem appropriate to substitute the PV module fire classification rating in order to achieve the desired result (preservation of the roof assembly’s original fire classification). However, simply using the PV module fire classification rating may not provide the desired result in most cases. For additional information please see OSFM Information Bulletin 14-002 Addendum and Information Bulletin 14-011. Also please visit Governor’s Office of Planning Research – Renewable Energy in California which provides additional information relating to the California Solar Permitting Guidebook, Second Edition and other solar programs.

Flammability Standards for Building Insulation Materials Working Group (AB127)

Legislation was passed in 2013 that added Section 13108.1 to the Health and Safety Code (AB 127, Skinner Fire safety: fire retardants: building insulation), that requires the State Fire Marshal, to review the flammability standards for building insulation materials, including whether the flammability standards for some insulation materials can only be met with the addition of chemical flame retardants.

The State Fire Marshal convened a Flammability Standards for Building Insulation Working Group (Working Group) in January 2014 to review published data and technical information, examine peer reviewed scientific studies and information, and propose recommendations to State Fire Marshal. The Working Group concluded work on the report and recommendations in December and has forwarded the report the State Fire Marshal. Recommendations could include alternatives to current requirements in the California Building Standards Code that would maintain fire safety of buildings, building occupants, and first responders while allowing for the use of insulation materials without added flame retardant chemicals.

Throughout the process, consensus was difficult on a number of important issues. This report illustrates those issues and competing perspectives. The Working Group developed several recommendations for the State Fire Marshal to consideration:

1. Perform proof of concept testing for the proposed Wall Assemblies, Floor-Ceiling Assemblies, Crawl Space Assemblies, and Attic Assemblies Proposed Performance Tests.
2. Proof of concept testing should be designed so that adequate and usable data can be obtained from the Proposed Performance Tests.
Code Development & Analysis Division

3. After the proof of concept testing, form a second smaller workgroup composed of fire service operations personal, fire marshals, representation from the initial Working Group, technical experts and interested parties to review the test data and develop additional recommendations.

For additional information please visit the Flammability Standards for Building Insulation Materials Working Group webpage

Public Safety – Title 19 California Code of Regulations
In 2014, additional sections of the California Code of Regulations (CCR), Title 19 were developed and published; these sections affected statewide programs, local fire and building officials, the public and industry. Working with the California Fire Chiefs Association (Cal Chiefs), Fire Prevention Officers Sections the OSFM revised regulations that further incorporated enforcement provisions of CCR, Title 19 for inclusion into the 2013 California Fire Code for local enforcement agencies. This effort created a more “inspector friendly” fire code. Also, the OSFM developed and adopted CCR, Title 19 regulations for the following:

Smoke Alarms – 10 Year Battery (Approved by OAL 6/24/2014, Effective 7/1/2014)
Final Text of Regulations / Express Terms (ET)

Final Text of Regulations / Express Terms (ET)
Forms

OSFM and the other agencies began the pre-rulemaking activities for the 2016 California Building Standards Codes, California Code of Regulations, Title 24 consisting of the following proposed national model codes:

- 2015 International Building Code (IBC)
- 2015 International Fire Code (IFC)
- 2015 International Residential Code (IRC)
- 2014 National Electrical Code (NEC)
- 2015 Uniform Mechanical Code (UMC)
- 2015 Uniform Plumbing Code (UPC)
- 2015 International Existing Building Code (limited portions)

Workshops, stakeholder meetings and hearings held by the OSFM, the Building Standards Commission and other state agencies are expected throughout 2015. If you would like to be on the OSFM stakeholders list please email kevin.reinertson@fire.ca.gov

Other Significant Division Activities

- Division staff participated again on Governor’s Office of Planning and Research reconvened Solar Permitting Task Force to update and revise the Guidebook developed in 2012 to include recently adopted SFM regulations.
  Governor’s Office of Planning Research – Renewable Energy in California
  Governor’s Office of Planning Research – California Solar Permitting Guidebook

- Division staff continued to participate with other state agencies, stakeholders and the California Fuel Cell Partnership in the development of regulations, training, and outreach for the Governor’s Zero Emission Vehicle (ZEVs) plan (Executive Order B-16-2012).
  Governor’s Office of Planning Research – Zero-Emission Vehicles in California
  Governor’s Office of Planning Research – Zero-Emission Vehicles in California: Community Readiness Guidebook
Code Development & Analysis Division

Statutes and Regulations Class
The OSFM revised the “Statutes and Regulations” class. This two-day course is provided by OSFM staff for fire prevention personnel, building officials and related design professionals to assist with an understanding of laws and regulations that effect fire and life safety enforcement in California and who are concerned on a day to day basis with:

- The scope and authority of local departments relative to fire and life safety Statutes and Regulations
- The review of Health and Safety Codes that relate to inspection responsibilities
- The continuing need for awareness of State Fire Safety Laws and Regulations on local fire jurisdictions
- The correct understanding and use of modifications to model Building and Fire Codes
- The applicability and content of CCR Title 19
- Relevant fire and life safety information not found in other Building and Fire Codes or code classes

Class instructors: Kevin Reinertson, Division Chief, Code Development and Analysis Division; Ernie Paez, Division Chief, Fire and Life Safety Division South; and Steve Guarino, Division Chief, Fire and Life Safety Division North, of the OSFM. Classes have been hosted by Cal Chiefs, Northern and Southern Fire Prevention Officers Section, City of Los Angeles and held in locations throughout California.

OSFM Certified Unified Program Agency “CUPA” Program
CUPA Evaluations
Of the 83 Certified Unified Program Agencies in the state, 30 CUPAs were evaluated in 2014. The OSFM “CUPA” staff participated in 14 CUPA evaluations and issued a total of at least 23 “deficiencies” to 10 CUPAs. OSFM’s evaluations were focused on the CUPA’s implementation of the two program elements under the Unified Program: fire code hazardous materials management plan (HMMP) and hazardous materials inventory statement (HMIS), and the Aboveground Petroleum Storage Act (APSA). A deficiency is issued to a CUPA if they do not implement the Unified Program as required by each Unified Program statute or regulation. Of the CUPAs that were evaluated in 2014, six CUPAs were rated as “meet or exceed” program performance standards; 12 CUPAs were rated as “satisfactory with some improvement needed;” one CUPA was rated as “unsatisfactory with improvements needed;” and there are 11 remaining CUPAs that have not yet been given their final ratings.

Aboveground Petroleum Storage Act (APSA)
Committee/Workgroups
The APSA Advisory Committee has continued to meet quarterly. Advisory Committee meeting minutes can be viewed and downloaded from the CAL FIRE - OSFM website.

The subgroups, APSA Regulations Workgroup and Tanks in Underground Areas Group, met at least once a month in 2014. The APSA Regulations Workgroup has continued to develop and discuss the proposed APSA Program regulations (California Code of Regulations, Title 19, Chapter 15); this Workgroup is close to completing their task on the proposed regulations. The Tanks in Underground Areas Group continued to develop and discuss specific requirements for tanks in underground areas, as well as propose language for adoption in the California Fire Code.

APSA State Surcharge
Beginning fiscal year 2014/2015, the Unified Program State Surcharge increased to include a $26.00 assessment on each tank facility regulated under the APSA Program, which was based on OSFM’s recommendation to CalEPA (as described in the November 2013 OSFM “Issue Paper: Unified Program State Surcharge for the APSA Program”). The new APSA state surcharge will cover the necessary and reasonable costs incurred by the OSFM to maintain and oversee the APSA Program.

In April 2014, CalEPA submitted the public notice on the new APSA state surcharge to the Office of Administrative Law. The 30-day public comment period was scheduled from April 25 through May 24, 2014. CalEPA did not
receive any comments. In June, 2014, CalEPA submitted the final publication on the APSA state surcharge in the California Notice of Register.

Information for the general public, regulated community, and the Unified Program Agencies regarding the APSA state surcharge was developed and posted on the OSFM APSA Program website.

*Memorandum of Agreement (MOA) between the Division of Oil, Gas, and Geothermal Resources (DOGGR) and OSFM*

The 1998 MOA between the Department of Conservation's DOGGR and OSFM (regarding each agency's authority on tanks and pipelines) was updated to incorporate the APSA Program information. The MOA was approved and signed by the Director of the Department of Conservation and the State Fire Marshal (on June 2, 2014, and May 20, 2014, respectively).

*Recycled USTs-ASTs*

Information Bulletin 14-005, “Underground Fuel Storage Tanks Prohibited for Use as Aboveground Fuel Storage Tanks,” was issued on July 25, 2014. This important Information Bulletin was developed to inform and advise the public on the prohibited use of converted steel underground tanks as aboveground tanks for storage of flammable or combustible liquids.

*Tier II Qualified Facility Spill Prevention, Control, and Countermeasure (SPCC) Plan Template*

The Tier II Qualified Facility Spill Prevention, Control, and Countermeasure (SPCC) Plan template, which was originally developed by the APSA Working Group in 2010, was revised by OSFM CUPA staff (requested by US Environmental Protection Agency Region IX) to incorporate additional federal SPCC requirements. This SPCC Plan template may be utilized by Tier II qualified facilities in lieu of having to hire a Professional Engineer to prepare and certify an SPCC Plan. US EPA Region IX requested additional review of the template by US EPA in Washington, DC. Once the review of US EPA DC is complete in 2015, OSFM expects to incorporate their comments and post this on the APSA Program website.

*APSA Frequently Asked Questions*

The APSA Frequently Asked Questions document was revised by the OSFM CUPA staff, using many of the recommendations from various members of the APSA Advisory Committee, APSA Regulations Workgroup, and the APSA Working Group. This document was originally developed by the APSA Working Group in 2009 and revised in 2011. OSFM expects to finalize this document first quarter of 2015 and have it posted on the APSA Program website.

*APSA Violation Library*

The APSA Violation library, which is incorporated in CERS (California Environmental Reporting System), was identified by OSFM CUPA staff and other stakeholders, for revision. The purpose was to provide easier use, consistency with the sequence of the federal SPCC rule, and incorporate other items deemed necessary. OSFM CUPA staff started revising the APSA violation library. OSFM expects to revise the APSA violation library and submit the revision request to CalEPA by September, 2015. The APSA violation library will require further revision if and when the APSA regulations are adopted.

*APSA Training*

The OSFM CUPA staff participated in the CUPA Conference Committee, particularly in coordinating the APSA track sessions. All OSFM CUPA staff attended the CUPA Conference in Burlingame in February, 2014.

OSFM CUPA staff issued 65 certificates to Unified Program Agency staff/inspectors. Certificates are issued after CUPA staff/inspectors take the APSA online inspector training and passing the exam. The online training and exam are maintained by the San Diego County CUPA.
Code Development & Analysis Division

Hazardous Materials Management Plan (HMMP) Hazardous Materials Inventory Statements (HMIS)

Senate Bill 483 (Jackson, Stats. 2013, Ch. 419), which was chaptered into law on September 28, 2013, and became effective January 1, 2014, revised the hazardous materials business plan (HMBP) law and certain sections of the Health and Safety Code pertaining to the HMMP-HMIS requirements. The HMBP law affects the fire code HMMI-HMIS requirements. Also, since the 2013 edition of the California Fire Code became effective on January 1, 2014, the HMMP-HMIS manual was updated and posted on the HMMP-HMIS website.

Senate Bill 1261 (Jackson, Stats. 2014, Ch. 715), which was chaptered into law on September 28, 2014, made additional revisions to the HMBP law. The HMMP-HMIS manual will require additional update for posting on the web.

Due to the various changes with the hazardous materials business plan law, the CUPA Forum Board requested the OSFM to look into aligning the fire code HMMP-HMIS with that of the HMBP requirements. In response to the CUPA Forum Board, the OSFM acknowledged that the fire code HMMP-HMIS requirements could be amended for consistency with the HMBP law. A workgroup to better align the HMMP-HMIS requirements with the HMBP law will be established in early 2015.

Additional information sources:
For more information regarding fire and building codes and/or concerning fire and panic safety, visit the OSFM website: www.osfm.fire.ca.gov
To review all codes and or other proposed regulations, visit the California Building Standards Commissions web site or the Office of Administrative Law web site.

Fire Engineering / Arson Bomb Division

Paul Eck, Division Chief

In 2014, Paul Eck was appointed as the Chief for the Fire Engineering and Arson & Bomb Division. He has served as the department’s Law Enforcement Legal Officer, as a Police Academy Instructor, a litigator for the department, as well as other capacities within the department. Prior to joining the CAL FIRE family, Paul's legal career focused on insurance fraud prosecution, including arson suspected insurance claims.

Overall Mission
The Fire Engineering Division (Division) has the overall responsibility to administer licensing programs, approve, certify and list, fire safety products for Office of the State Fire Marshal (OSFM) stakeholders. The Building Materials Listing, Fireworks, Vapor Recovery, Fire Safe Cigarette and Flame Retardant Programs all deal with the approval of products used throughout California. The Division also administers licensing and technician certification through the Fire Extinguisher, Automatic Extinguishing System, Fireworks, Motion Picture and Flame Retardant Programs. The Arson & Bomb Unit provides investigative and law enforcement capabilities to the Division and the OSFM as a whole.

The Division plays a vital role in the OSFM’s overall mission. We are responsible for developing and implementing programs and policies that prevent or reduce the magnitude of emergency occurrences, such as loss of property and life, personal injury or environmental damage. The Division utilizes the “Three E’s” of fire prevention (Education, Engineering and Enforcement) to meet these goals.

Education
In fulfillment of the Education aspect of the Fire Prevention Mission, the Division served the public by conducting the following:

•Outdoor Public Display Classes
•Fire Safety Officer Classes
•Fireworks Proximate Audience Classes
Fire Engineering / Arson Bomb Division

Additional Education opportunities are planned for 2015, including a Fire Extinguisher outreach to K-12 students and Senior Centers.

Engineering
The Engineering aspect of the Division was very active in 2014 with the Division adding hundreds of new licenses, listings, and certificates, conducted hundreds of inspections and evaluations and proctored approximately 2,000 exams throughout California while maintaining excellent communication and strong working relationships with the fire service, law enforcement, industry representatives, building officials, and other state and local government agencies.

<table>
<thead>
<tr>
<th>TYPE</th>
<th>FIREWORKS</th>
<th>FLAME RETARDANT CHEMICALS AND FABRICS</th>
<th>PORTABLE FIRE EXTINGUISHER</th>
<th>AUTOMATIC EXTINGUISHING SYSTEMS</th>
<th>BUILDING MATERIALS LISTING</th>
</tr>
</thead>
<tbody>
<tr>
<td>RENEWAL</td>
<td>1473 operators 116 companies</td>
<td>113 chemical 498 fabric 319 limited 124 general</td>
<td>507 concerns 2147 Certificate of Registration (C-of-R)</td>
<td>66 concerns 234 limited 1460 WFP</td>
<td>3420 listings</td>
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<tr>
<td>APPROVAL</td>
<td>42 safe &amp; sane devices</td>
<td>18 fabric</td>
<td>18 concerns 262 C-of-R</td>
<td>9 concerns 115 limited</td>
<td>499 listings</td>
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<tr>
<td>PERMIT</td>
<td>77 public displays 40 special effect, open flame 100 California Film Commission (filming on state property)</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LICENSE</td>
<td>38 new 9 upgrade</td>
<td>20 general 18 limited</td>
<td>1703 fire pump 542 concerns</td>
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<td></td>
</tr>
</tbody>
</table>

Enforcement
The Division’s enforcement activities increased in 2014 due to the reactivation of the Arson and Bomb Investigation Unit. The following is a summary of the Division’s enforcement activity during 2014:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Complaints Received</td>
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</tr>
<tr>
<td>Cease &amp; Desist Notices</td>
<td>10</td>
</tr>
<tr>
<td>Investigations</td>
<td>34</td>
</tr>
<tr>
<td>Disciplinary Actions</td>
<td>4</td>
</tr>
<tr>
<td>Inspections</td>
<td>240</td>
</tr>
</tbody>
</table>

Highlights of 2014 include:

Assembly Bill (AB 433 (Gordon) was signed on September 27, 2013 by Governor Brown and chaptered into law. This new law allows the Office State Fire Marshal to develop regulations to certify technicians that install, test and maintain fire suppression systems. The State Fire Marshal’s Automatic Extinguishing Systems Advisory Committee developed a proposal for the State Fire Marshal (SFM) that determined that there was a need to certify these technicians. The SFM estimates that this program will license over 8,000 new technicians.
Office of the

STATE FIRE MARSHAL
2014 YEAR IN REVIEW

Fire Engineering / Arson Bomb Division

- A Portable Fire Extinguisher Regulations package was developed on the issue of fire extinguisher exchanges, to address concerns regarding the swapping of dissimilar fire extinguishers rather than providing regular annual maintenance. The regulations did not make it out to public comment during 2014; however, we expect it to be out for public comment early 2015, with implementation mid-year.


- In 2014 the Fireworks Program received fireworks seizure reports totaling 201,430 pounds from fire and law enforcement agencies. Together with a backlog of fireworks carried over from previous years, the statewide total of fireworks to be destroyed is currently 384,108 pounds. We have been successful in securing a 2015 fireworks disposal contract that is again based on out of state destruction. The 2015 contract will ship approximately 220,000 pounds of fireworks out of state for destruction. The contract effectively utilizes $1.5 million allocated for fireworks destruction. To improve the availability of information to the fire service and law enforcement, the Fireworks Program issued demand letters and notices to fireworks industry stakeholders, as authorized by the Health and Safety Code.

- The Motion Picture & Entertainment Safety Program plays a primary role between the California fire service and the motion picture and television industry. The Program liaison works with local film commissions, the State Film Commission, and the film and entertainment industry providing training, special investigations, inspections, and on-location technical assistance and provides technical interpretation of SFM laws and regulations relating to the use of pyrotechnic special effects. To promote safety on the set, enforcement consistency and a high level of cooperation between the film maker and Fire Safety Officer (FSO), we conducted two FSO and one Close Proximate Audience classed last year.

- The Arson & Bomb Investigation Unit has been reactivated with a focus on complementing the capabilities of the CAL FIRE Prevention Program. The ABI Unit has begun actively recruiting law enforcement and fire prevention officers to ensure the safety of the public, as well as assist and provide fire investigation and explosives training to local jurisdictions. In 2014 the ABI Unit was active in fireworks interdiction operations and arson investigations. In the latter part of 2014 the ABI Unit became an official partner in the Youth Firesetter Program.

Planning and Risk Analysis Division

Dave Shew, Staff Chief

The Planning and Risk Analysis Division (formally known as PRA) incorporates several units important to fire prevention and all risk analysis throughout the state of California.

Fire Plan

In 2014 the OSFM was proud to welcome Fire Plan / CAIRS Chief David Shew to the Acting Chief for the Fire Plan program until he was formally appointed to this position in May.

The Fire Plan Program under the leadership of Chief Shew is responsible for many aspects of wildland pre-fire engineering and land use planning as well as monitoring, implementation, and reporting on the 2010 Strategic Fire Plan for California, training and facilitating the completion of Unit Fire Plans, and training and facilitating review and reporting on State Responsibility Area (SRA) and Direct Protection Area (DPA) boundaries. All of these areas were active in 2014.

The Strategic Fire Plan lays out a vision for dealing with wildfire in California. The vision is to foster 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.” See the following website for detailed information http://cdfdata.fire.ca.gov/pub/fireplan/fpupload/fppdf668.pdf. To move towards this vision, the Strategic Fire Plan
Planning and Risk Analysis Division

establishes a series of goals and objects that cover all phases of the wildfire cycle – before, during and after. Goals for “before” include such things as sound mapping of fire hazards and risks, well-planned communities with surrounding fire resistant landscapes, buildings with defensible space and that are constructed of fire resistant materials. “During” means such items as coordination of agency suppression forces, maximizing safety of firefighters, residents and the public, and bringing fires under control as possible and appropriate. “After” goals include such approaches as post-fire assessment and other ways of learning from fires that have burned.

Numerous objectives are established for each goal. To help monitor reaching these objectives, each CAL FIRE Unit and Contract County prepares a Unit Fire Plan. These plans follow a consistent format that includes information about the unit, collaboration, values and communities at risk and pre-fire management strategies. Part of the strategies section is a description of fire prevention and vegetation management programs, as well as a description of projects and general priorities. Based on training done at the end of 2013, every CAL FIRE Unit and Contract County updated their fire plan for 2014. Similarly, all Units and Contract Counties will prepare an updated plan for 2015. Training was completed for the 2014 plans in November 2013. Unit fire plans can be found on the CAL FIRE website at http://cdfdata.fire.ca.gov/fire_er/fpp_planning_plans.

OSFM Fire Plan staff provides quarterly or other periodic reports to the State Board of Forestry and Fire Protection (Board) on activities under the Strategic Fire Plan. This Board is appointed by the Governor and is responsible for policies and many regulations that affect CAL FIRE, including such topics as defensible space and other activities around structures.

A more detailed report of Fire Plan accomplishments is given annually to the Board. The report was provided to the full Board in October 2014. The primary focus of the 2014 report focused on the impacts of drought and climate change on wildfire activities and forest health. To address these impacts, augmented funding has been provided from the Legislature to increase prevention activities throughout the State. These activities included increased staffing to provide defensible space inspections and education to the public, and improved interaction with local Fire Safe Councils and Firewise Communities to reduce fire risk to the public. Additional prevention projects were funded in all CAL FIRE Units and Contract Counties to perform more fuel reduction projects, education programs, and community planning in order to address the increased risks of fire to communities throughout the State. All these activities were accomplished through a high level of cooperation with all branches of CAL FIRE, including operational personnel and resource management activities. It is through these coordinated efforts that improvements are realized.

OSFM Fire Plan also coordinates and supports the review and adjustment of SRA boundaries and related DPA. Public Resources Code 4125 requires the Board to review the areas identified as SRA every five years, with 2015 being the next regular review cycle. In preparation for this review, CAL FIRE began a detailed SRA Boundary Review in the summer of 2014 at the local Unit and Contract County level. Recommendations for changes to the SRA Boundary will be provided to the Board for approval in early 2015, with an expected implementation date of July 1, 2015. Additional information regarding the 2015 SRA Review can be found at http://bofdata.fire.ca.gov/board_committees/resource_protection_committee/.

Another component within Planning and Risk Analysis is Pre Fire Engineering for wildland fire issues. This branch captures statewide prevention statistics, such as the number of defensible space inspections being conducted, as well as fire investigations and fire cause and origin. Deputy Chief Matt Lee currently oversees this program, and is closely tied to CAL FIRE’s Law Enforcement Branch and Code Development with OSFM. In 2014 the program started efforts to develop a new statewide electronic data collection program to capture inspection records, with the goal of having a more global dataset of pre fire information. Coupled with this, a more robust post fire damage inspection process was implemented during 2014, which resulted in more precise assessments of fire damage to structures and infrastructure. The combination of both pre and post fire information will lead to better analysis of prevention tools for both fire resistant construction methods and defensible space landscape improvements. This program is also involved with helping develop new fire safety guidelines for windmill structures and other mechanical infrastructures.

The newest component of the PRA Division is the Land Use Planning (LUP) section. This section was created through Senate Bill 1241 in 2012, and began implementation during 2014. Deputy Chief Pete Munoa was brought to OSFM to identify program guidelines, and has coordinated efforts with the Board to hire staff around the State to implement these guidelines, and has coordinated efforts with the Board to hire staff around the State to implement these guidelines. The focus and long term goal of the LUP section is to help local jurisdictions incorporate increased fire safety measures into their Safety Ele
Planning and Risk Analysis Division

-ments within local General Plans. The Governor’s Office of Planning and Research (OPR) has worked closely with staff from both the Board and LUP to prepare the statewide guidelines that will be used by local Planning Departments. By the end of 2014, LUP staff was in place and training provided to assist these employees to begin interaction with their local government partners. Continued implementation will continue at a more rapid pace during 2015.

California All Incident Reporting System (CAIRS)

The U.S. Fire Administration keeps the nationwide fire department incident reporting system, known as the National Fire Incident Reporting System (NFIRS). The California system collects all incident information from all California fire departments and provides this information to the NFIRS. Of the approximately 1000 fire departments throughout California, around 500 of these departments report their incidents to CAIRS. With CAL FIRE among those, almost 1.5 million incidents a year are recorded in CAIRS and provided to the national databases. This makes California the 2nd largest provider by number of incidents in the nation, closely following Florida.

The collected data is used to conduct research on any area of fire department responses as well as use findings to review the safety of the public, firefighters, products and review codes and standards AND publish those findings. The data is also used for National and Regional Assessments such as West Wide Risk Assessment and Cohesive Strategy. In addition, these statistics are utilized to determine where federal and state money are allocated.

For CAL FIRE reporting, the CAIRS staff prepares an annual report of wildland fire activity each year. This is called the Redbook, which has been published annually since 1942. The Redbook contains statistics and charts, generated primarily from information within the incident reports that have been completed by CAL FIRE. CAL FIRE’s 2013 Redbook can be found at: [http://www.fire.ca.gov/fire_protection/fire_protection_fire_info_redbooks.php](http://www.fire.ca.gov/fire_protection/fire_protection_fire_info_redbooks.php) with the 2014 Redbook release expected in early 2015. Improvements in the data and number of fire departments reporting to CAIRS have been made in the last several years. More complete estimates are now possible. For example, based on CAL FIRE statistics in the Redbook (prepared in 2014 to summarize 2013), seven percent (7%) of the wildland fires were caused by natural causes, but burned only one percent (1%) of the total acres. Ninety three percent (93%) of wildland fire causes are human-related but burned ninety nine percent (99%) of the total acres. The Redbook also shows a twenty percent (20%) increase in wildland fire ignitions overall, most likely exacerbated by the drought, however the total amount of acreage burned decreased by eleven percent (11%). Debris burning continues to be shown as the primary cause for human-related wildland fires. With improved fire cause attribution, it is now known that seventy two percent (72%) of the debris-burning caused fires were residential, and forty seven percent (47%) of those fires had no permit to burn. These statistics can be used by CAL FIRE Units and Contract counties to direct placement and focus of their resources.

Requests for statistical data are on the increase, not only from jurisdictions and agencies in California, but also from researchers throughout the United States and other countries. The CAIRS program is being recognized as one of the leading repositories of statistical reporting of fire department information around the world. Within California, the drought has also increased the number of requests for statistics. CAIRS was a primary participant in a weekly report created for the CAL FIRE Director, Agency Secretaries, and the Governor’s Office.

In a related endeavor, Kirsti Fong, the OSFM CAIRS Program Analyst, remains involved with the National Wildland Fire Data Reporting Initiative as well as working closely with the National Association of State Fire Marshals in their project to increase incident reporting and its accuracy. These initiatives are aimed to develop ways to consolidate and improve wildland fire data and increase the knowledge base concerning all data. Because CAL FIRE is the only wildland fire agency in California that is using NFIRS to report wildland fire activity, CAL FIRE’s involvement in the wildland fire reporting strategy is critical.
State Responsibility Area Fire Prevention Fee (SRAFPF)

In May 2014, program was proud to announce the appointment of Staff Chief Sam Walker to oversee the SRAFPF Program. Chief Walker provided the leadership to move the program into the next phase.

In August 2014, the (SRAFPF) Program launched a grant program intended to return $9.5 million in SRA Fees back to local control throughout the 31.5 million acres of the SRA in the State of California.
Planning and Risk Analysis Division

This is the first step in helping CAL FIRE to meet the grant requirements of the Public Resources Code (for grant funding associated with the SRAFPF). The $9.5 million in funding is expected to be used for local fire prevention programs that focus on fire education, fire planning and fuel treatment that reduce risk to habitable structures and associated infrastructure from drought related wildfires in the SRA.

The process for grants awarding, which began in August 2014 and will be completed in April 2015, included public outreach through eleven (11) public presentations; presentations were made across the state, from San Diego in the south to Redding and Eureka in the north. Other outreach included access to a webpage on the CAL FIRE website with access to the electronic forms made available. Applications for these grants were designed in a two-step process. The initial Concept Proposal phase provided an overhead view of the proposed project, while the second step was a Project Application in which the applicant provided a detailed description of the project and its goals, objectives, budget and deliverables. The remaining steps include the awarding of the grants in March of 2015 and administering the grants until completion in early 2017.

The public response to the availability of the grant program has been overwhelming and very positive. CAL FIRE staff is looking forward to having the SRAFPF Grant Program provide opportunities for positive outcomes in preventing wildfires and reducing the risk to habitable structures in the SRA across the state.

State Board of Fire Services

The State Board of Fire Services (SBFS) is comprised of 16 individuals representing local and county government, fire service labor and fire service organizations. The membership is appointed by the Governor.

The board provides the state level forum for addressing fire protection/prevention issues of statewide concern; develops technical and performance standards for training of fire service personnel; accredits curriculum; establishes policy for the Certification System for the California Fire Service; advises the State Fire Marshal on promulgation of regulations; and sits as an Appeals Board on the application of SFM regulations. The SBFS is a standing committee. (Membership is established in §13140.5, Health and Safety Code.)

The Board welcomed a new member in 2014. Governor Brown appointed Mr. Frank Lima to the SBFS on September 24, 2014. Mr. Lima represents the California Labor Federation.

For more information on the State Board of Fire Service, go to: http://osfm.fire.ca.gov/boardfireservices/boardfireservices.php.