



- North**
- There is Above Normal risk for large fires across much of North Ops in 2009.
  - Dry spring leading to annual grasses curing 3 to 5 weeks earlier than average.
  - Below normal precipitation and snowpack have put ERC increases and 1000-hr FM decreases 3 to 5 weeks ahead of average pace.
  - Herbaceous species generally greening up sooner, and reaching lower peak values, than average.
  - Spring prescribed burning season may locally be shortened.

- South**
- Central Coast and Central Coast Interior areas are at Above Normal risk for large fires.
  - Lower than normal 1000-hour fuel moisture levels currently exist in South Ops.
  - Normal grass growth exists in Southern California desert and foothill areas.
  - A normal start to the fire season is expected.
  - Long-term drought likely to intensify and increase in area.

# EXECUTIVE SUMMARY

This preliminary outlook is a product of the National Seasonal Assessment Workshop held April 14-16, 2009 in Boulder, CO. The interagency workshop brought together subject matter experts from climatology, fire weather meteorology, fuels, fire behavior, and fire danger. The outlook is based on past developments, current conditions, trends, and predictions for the next five months (May through September).

Objectives of the Executive Summary are to:

- Provide a prognosis of 2009 wildland fire potential in California, based on fuel conditions and available climate forecasts.
- Highlight concerns and key implications for management.
- Provide supporting documentation regarding weather and fuels information.
- Provide the framework for comprehensive final North Ops and South Ops outlooks to be done in June.

This executive summary should aid California wildland fire managers in 2009 fire season preparedness, and add preliminary insight. More detailed fire season outlooks, for both North and South Ops, will be available during June. Those documents will give increased detail regarding all aspects of the coming fire season, and will have higher confidence levels. In addition to this outlook, the GACC Predictive Service Units at Riverside and Redding will continue to issue detailed monthly assessments of fire weather and fire danger.

## **2009 FIRE SEASON OVERVIEW:**

### **South:**

Despite fair amounts of precipitation in the winter months of December to mid-March, the long term drought of the past three years persists, and it is expected to intensify. The late winter and early spring rains have brought a normal crop of seasonal grasses to the foothills and desert areas. Live fuel moisture values at lower elevations are running near average across the inland areas, but the coastal region, especially north of Point Conception, are seeing much drier conditions. Snow pack over the Sierra Nevada is only about 70 percent of normal, compared to about 90 percent of normal from last year. Therefore, due to the drier than normal fuels and prolonged drought conditions, much of the area from the coast to the western edge of the San Joaquin Valley north of Point Conception will be in the Above Normal category this summer. The remainder of the region is likely see a Normal potential for large fires through September.

**North:** Due largely to the ongoing drought, the 2009 fire season potential for much of northern CA in 2009 is expected to fall into the upper third of the historical distribution, i.e. Above Normal. Those areas not Above Normal are forecast to be Normal. PSAs with mainly annual grasses will see another earlier than average start to the fire season, due to the early curing of those grass crops. This could lead to large fires beginning in early May. The snowpack has already receded to the 4500-6000' elevation band, and by early June it is expected to remain at only the highest elevations. We expect the typical scenario of large fire potential progressing from lower to higher elevations, but on an earlier than average pace for both regimes. At this time, lightning activity is forecast to be near to possibly a little above average in 2009.

**Statewide Fuels Discussion:** Fuel conditions are similar to 2008. **In the South**, winter precipitation started in December, but January was very dry. Rains resumed for February into March, resulting in slight improvement of persistent drought conditions, but currently moderate to severe drought conditions still exist in the Central Coast and Central Coast Interior. This is expected to intensify and spread southeast to other areas. Slightly below normal but evenly distributed rainfall has resulted in a normal grass crop in the desert and foothills. Large dead fuel moistures are below normal, and near record low levels in some areas. Slightly below average snow-water equivalent/ snowpack is moderating the onset of seasonal drying. Curing of relatively abundant fine fuels is progressing at the lower elevations. **In the North**, herbaceous fuels at lower elevations are greening up and curing earlier than normal. By July 1, energy release component (ERC) should be approaching the 90<sup>th</sup> percentile and 1000-hour fuel moisture approaching the lowest 10<sup>th</sup> percentile (4 to 6 weeks ahead of normal and similar to 2008) in most PSAs at lower elevations. Drought-stressed vegetation, including bug kill, contributes to the fuel load in the eastern PSAs. Standing dead fuels as well as downed heavy fuels, in areas burned last year, will also add to the fuel load. Fine fuels are recovering in the burned areas as well.

### **Weather and May-September Forecast:**

**South:** Currently, La Nina is diminishing as sea surface temperature anomalies over the equatorial Pacific slowly warm. This trend is expected to continue over the next few months, with neutral conditions expected this summer. This trend is very similar to what occurred last year and it appears that similar weather conditions can be expected across southern and central California again this summer. Although there will be some variation in short-term weather patterns, overall the large scale features are expected to be similar to last year. The only exception is that the Monsoon over the southwest U.S. is expected to be more active than normal this summer, which could lead to more lightning activity for the mountains and deserts of southern and central CA. This of course will depend on how much of a westward shift the Monsoon takes, which is uncertain at this time. Typically, South Ops experiences three to four lightning episodes a year, which each last from four to five days. Forecast Confidence= 60%

**North:** The cool season was again drier than normal across nearly all of northern CA; the only exception being a tiny area in the northwest corner of the state. A four to five week period that for some areas centered on February and other areas on March, turned out to be the only consistently wet period of the winter. While the latest weak La Nina episode has already peaked, it may still produce some effects on northern CA weather during the first half of the fire season. To date, April has been on the drier side of normal, and the latest 90-day forecast from CPC (May through July) indicates a continuation of at-or-below normal precipitation. Snowpack at the beginning of April ranged from 60-85% across most of northern CA. Temperatures for spring (April through June) are forecast to average close to normal, possibly climbing to above normal in July. The most widespread and/or critical dry lightning events normally occur in late July or August, but as 2008 showed, they can come as early as June. As we head into fire season 2009, prior years that might serve as climate analogs include 1994 and 2008. Forecast Confidence = 60%

**Team Members at Boulder workshop:**

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