

UNITED STATES DEPARTMENT OF THE INTERIOR

BUREAU OF LAND MANAGEMENT

Office of Fire and Aviation
3833 South Development Avenue
Boise, Idaho 83705

March 23, 2000

In Reply Refer To:
9210 (FA-130) P

EMS Transmission 3/24/2000
Information Bulletin No. OF&A 2000-020

To: State Directors
From: Director, Office of Fire and Aviation
Subject: National Severity Briefing

Bureau policy requires the fire program managers to monitor fire season severity predictions and to develop a strategy to manage the situation in a safe and effective manner. Early analysis indicates that the 2000 fire season may be well above our average. For this reason we have scheduled a fire severity briefing for March 31, 2000. The meeting will be held in the National Interagency Coordination Center's conference room, National Interagency Fire Center, Boise, Idaho. The briefing will begin at 1:00 p.m.

The objectives of the meeting are to brief key line officers and fire management program leaders on the projected fire danger, identify key indicators to monitor, and action plan to mitigate, the forecasted danger.

You or your staff's participation is very important to the success of this meeting. Please prepare a short fire severity assessment for your State and be prepared to present it. (See *Standards for Fire Operations*, Chapter 7, Preparedness.)

We have a very aggressive schedule so please plan your schedule to spend the night of March 31 in Boise.

The following topics will be discussed:

**National Severity Briefing
NIFC, Boise**

Severity Briefing

- Opening Remarks Ron Dunton
- Weather Briefing National Weather Service
- National Fire Severity Assessment Bob Clark
- National Fire Danger Projections National Interagency
Coordination Center
- Fire Danger and Season Severity Report States
and Current Activity

Current Initiatives Briefing:

- Great Basin Ecosystem Restoration Initiative Bob Abbey
- Department of Interior “Cohesive Strategy:
Reducing Risks Associated with Wildland Fire”

Signed by:
Ron Dunton
Acting Director, Office of Fire and Aviation

Authenticated by:
Pat Lewis
Supervisory Mgmt. Asst.

- 1 - Attachment
- 1 - National Fire Severity Assessment (2 pp.)

2000 Fire Season Crystal Ball

March 22, 2000

by Dr. Bob Clark, Joint Fire Science Program Manager

***CAUTION:** Forecasts, predictions, and projections are modeled. Historic events under similar conditions, General Circulation Models (GCMs), El Nino/Southern Oscillation models, ocean-atmosphere coupled models, and similar tools are used to model the future. Short term forecasts tend to be quite good, but projections further and further into the future get less and less precise. Some models are by necessity very general; for example, several GCMs use “pixels” on the order of 100 x 100 miles because of the huge computing power required to run models that are more complex and require more input. Therefore, attempting to use these models for “local” scenarios is a misapplication of the model. Also, like other computing programs, even the best models will perform poorly if poor quality data are used (GIGO). Even so, such models are good at predicting general trends and some models are “accurate” 70-75 percent of the time. It is best to use longer range forecasts as general planning tools and not expect them to tell you months in advance precisely when and where a lightning storm will occur.*

One thing is certain: we are currently under the influence of a cold (La Nina) event in the Pacific Ocean. Sea Surface Temperatures (SSTs) which were 4 degrees C below average in February have warmed somewhat, but the cold pool remains. Current modeling efforts, and history, indicate that the southern tier of States frequently experiences below average precipitation during cold events. Based on recent data from NOAA, NASA, the Western Regional Climate Center, wildland fire/fuels managers, the National Drought Center, the National Climate Prediction Center, and other sources, it appears that we can cautiously “forecast” three categories of potential for the upcoming fire season: Sure thing, maybe, and perhaps not.

Sure Thing

The Southwest (extreme southern CA, southern and eastern AZ, most of NM, and most of the Southeast from TX to GA and southern TN south to central FL. These areas are currently under various stages of drought, have 1000-hr TL fuels in single digits, and precipitation adequate to normalize the situation is not forecast. The saving grace may be that much of this area has been in drought conditions for some time and the 1-hr fuels may not develop sufficiently to carry fire in some areas. Bottom line: normal number of starts but the larger fires are likely to occur in areas of heavier fuels (mid- and high elevation ecosystems). Ringer: La Nina is expected to wane by early summer. The switch from a cold episode to normal SSTs may affect the timing and/or occurrence of the monsoons.

Maybe

Alaska, Hawaii, the Midwest, and parts of the Northeast. The eastern half of the Hawaiian chain is in severe drought. Alaska is expected to remain cool and dry until summer. Much of the Midwest is already experiencing fires; recent fires in the Dakotas have burned large acreages and

caused serious injuries to firefighters. This activity will probably continue (including eastern MT) until spring greenup is far enough along to override the effect of carryover fuels. Bottom line: the Midwest and Northeast, which normally have bimodal fire seasons (spring and fall), are likely to have above average activity until mid-May. Ringer: La Nina will influence whether AK and HI squeak by or get nailed. If La Nina wanes by May, both AK and HI are likely to get wetting rains in time to minimize the severity of the fire season.

Perhaps Not

Current indications are that the Pacific Northwest (including northern CA), Northern Rockies, and higher elevations of the Central Rockies are likely to experience average to below average fire seasons. In addition to approximately normal winter and spring precipitation, there is adequate snowpack to keep upper elevation fuels above moistures of extinction until mid-July. Fire season in these areas is likely to be short and late.

What ifs:

1) Transition of SSTs from the current cold episode to a neutral condition are forecast to occur in early summer. There also tends to be a lag period from the time when SSTs are normal until weather actually returns to normal. Thus, if La Nina breaks down earlier, the SW monsoons are likely to be approximately normal. If not, it could be a long, hot, dry summer in the SW. Central and northern FL and most of GA are likely to be in the same boat.

2) If La Nina breaks down and sufficient energy from the SW exists to influence the normally dominant "Great Basin High," the northern Great Basin could experience above normal incidence of lightning.

Bottom line to the 2000 fire season in the West: The **Pacific Northwest** is expected to be wetter and warmer than normal through May, then return to normal conditions in June. The **Northern Rockies** should have approximately normal temperature and precipitation throughout the fire season. The **Southwest** should remain drier than normal until June and warmer than normal throughout the summer. The **Great Basin** is on the bubble; the eastern Great Basin should be drier than normal until July and warmer than normal all summer. The western Great Basin is "iffy" on both counts. The Central Rockies are likely to have temperatures above normal until July, then return to normal temperatures and rainfall.