

Western Great Basin 2002 Fire Season Overview

Weather and Fuels

For the fourth year in a row, Nevada entered the fire season with a precipitation deficit. NOAA's U.S. Drought Monitor classified the state as being in varying stages of drought for the entire fire season, with indices ranging from moderate to severe in the north and severe to extreme in the south. Winter temperatures for most of the state were near normal, but along the Sierra Front the average temperature was up to four degrees above normal for the same period.

As winter ended, the load of residual fuels was lighter and more matted than in previous years. With winter precipitation and snow pack lacking in most areas, germination in the grasses occurred later this year and the growing period to formation of seed heads was shorter; both of these factors resulted in less growth in the fine fuels.

Warmer than normal temperatures in spring and early summer served to accelerate the curing and drying process of all fuels. Live vegetation in central and southern Nevada was showing stress from drought conditions as early as the end of May. The Energy Release Component (ERC) Index and the 1,000-hour fuel values both verified the dry conditions as they exceeded the 97th percentile, and in some cases the 10 year maximum values, in late June and early July. This trend continued off and on into August, then the values dropped back toward normal.

Despite the extreme conditions of the woody fuels, the absence of a high, continuous bed of fine fuels was a definite factor in moderating the number of large fires. A persistent southwest flow in the upper atmosphere did not allow the usual monsoonal thunderstorm activity to occur over the state in July and August. Except for one system which brought widespread lightning from July 12-14, most storms tended to be more localized and produced fewer ignitions. This year's thunderstorms also tended to be wetter, resulting from a series of low pressure systems in the southwest flow; this helped to limit fire spread and allowed for more successful initial attack.

Large Fire Activity

With heavy fire activity occurring throughout the West, even fewer resources were available for repositioning and active fires than in previous years. Despite this, initial attack efforts were successful 96% of the time, with only 4% of the fires reaching 300+ acres in size.

All but six of this year's large fires were lightning caused. The first three large fires of the year began on June 1st on Ely BLM land. The next spurt in large fire activity occurred from July 12-14, when dry lightning touched off numerous large fires throughout the state; roughly one-half of the large fires and acres burned for the year resulted from these storms. The last large fire of the season was contained on September 30th. By that date, 31 large fires had burned a total of 81,586 acres (all agencies plus private). This compares to an average of 63 large fires occurring each year from 1997 to 2001. As is generally the case, large fires made up the majority of the total acreage burned; in 2002, large fires accounted for 95% of the total acres burned.

Large fire workload by dispatch center was as follows:

<u>Dispatch Center</u>	<u># of Large Fires</u>	<u># of Acres Burned</u>
Elko Interagency Dispatch Center	4	2,464
Central Nevada Interagency Dispatch Center	7	14,517
Sierra Front Interagency Dispatch Center	8	40,024
Ely Interagency Communication Center	10	19,541
Las Vegas Interagency Communication Center	2	5,040

Incident Management Teams

The total number of Incident Management Team (IMT) assignments within the Western Great Basin Area in 2002 remained consistent with team usage in the 2001 season. In all, 4 Type 1 IMTs were ordered, 7 Type 2 IMT assignments occurred, and 6 Type 3 IMTs were assigned within the Area. Whereas all but 2 of the orders in 2001 were for Type 2 IMTs, the 2002 season showed increased utilization of Type 1 and 3 IMTs. Teams from outside of the Great Basin filled 4 of these assignments (for a total of 31 days).

Western Great Basin incidents with Incident Management Teams assigned can be broken down as follows:

<u>Agency</u>	<u># of Large Fires</u>	<u># of Team Assignments</u>
Bureau of Land Management (BLM)	22	6
U.S. Forest Service (USFS)	8	11
Department of Energy (DOE)	1	0

Historical Comparison

Of the last five years, the 1998 season is mostly closely correlated with the 2002 fire occurrence statistics. Although the number of fires was slightly higher in 2002, the total acreage burned and number of large fires was roughly the same as in the 1998 season. At 783, the total number of fires was 78% of the 5-year average of 1,009 fires, while the total of 86,079 acres burned was 13% of the 5-year average of 671,227 acres¹.

¹ The 2002 occurrence statistics include 12 Wildland Fire Use incidents for a total of 8,528 acres.