

NWSFO SLC FIRE WEATHER 2003 ANNUAL REPORT

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PREPARED BY FWX PROGRAM LEADER:

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2003 FWX Season Summary:

The season started off strong in the spring as the majority of the fire weather district had experienced much below normal snowfall during the 2002-03 winter season. Snow totals from the winter of 2002-03 ranged from 68 percent to 90 percent of normal throughout the district. Two distinct peaks are seen in the number of spot forecast requests that were filled during the fire season. The first was a peak in wildfire spots during the month of July. It is no surprise that this correlated well with July 2003 being the hottest month ever recorded in Salt Lake City weather history. Also, most weather observing stations ended up with less than half the normal precipitation during the month of July. After July, there was a relative "break" in activity in August and the first part of September as higher relative humidity readings and spotty wetting rains seemed to help somewhat. The second peak in fire activity occurred in late September and October as relative humidity values again plummeted and the general drought continued. Once again, almost every weather station in Utah received 50% or less of the normal precipitation for October. The 2003 fire season ended rather abruptly on Halloween as the pacific jet stream shifted south allowing a series of cold storms to move across Utah.

Large fires that required IMET support in 2003 were the Bulldog, Farmington and the Cascade II.

2003

TOTAL NUMBER OF WILDFIRES IN SLC FWX DISTRICT.....1,404

TOTAL ACRES BLACK DUE TO WILDFIRES IN SLC FWX DISTRICT...112,142

2002

TOTAL NUMBER OF WILDFIRES IN SLC FWX DISTRICT.....1,136

TOTAL ACRES BLACK DUE TO WILDFIRES IN SLC FWX DISTRICT...118,981

Red Flag Warning Verification (by fwx zone) for 2003:

152 Total Red Flag Warnings issued for SLC District (252 in 2002):

105 Warnings Verified	(1 Dry lightning, 104 Non lightning)
47 Warnings Not Verified	(0 Dry lightning, 46 Non lightning)
9 Missed Warnings	(0 Dry lightning, 9 Non lightning)

Average Lead Time was 8.7 hours **2002 Average Lead Time 6.92 hours**

PROBABILITY OF DETECTION

POD Dry lightning 1.00

POD Non lightning .92

POD All Events .92 2002 POD .95

CRITICAL SUCCESS INDEX

CSI Dry Lightning 1.00

CSI Non lightning .65

CSI All Events .65 2002 CSI .70

FALSE ALARM RATIO

FAR Dry lightning .00

FAR Non lightning .31

FAR All Events .31 2002 FAR .27

Fire Weather Watches:

63 Fire Weather Watches issued for SLC District.

38 Watches preceded a verified Red Flag Event

Average Watch Lead Time was 21.5 hours _

Spot Forecast Numbers for 2003:

TOTAL SPOTS ISSUED: 529
Prescribed Burns: 274
Wildfires: 249
Other: 6 (3 Search and Rescue, 2 Forest Project, 1 Spray Project)

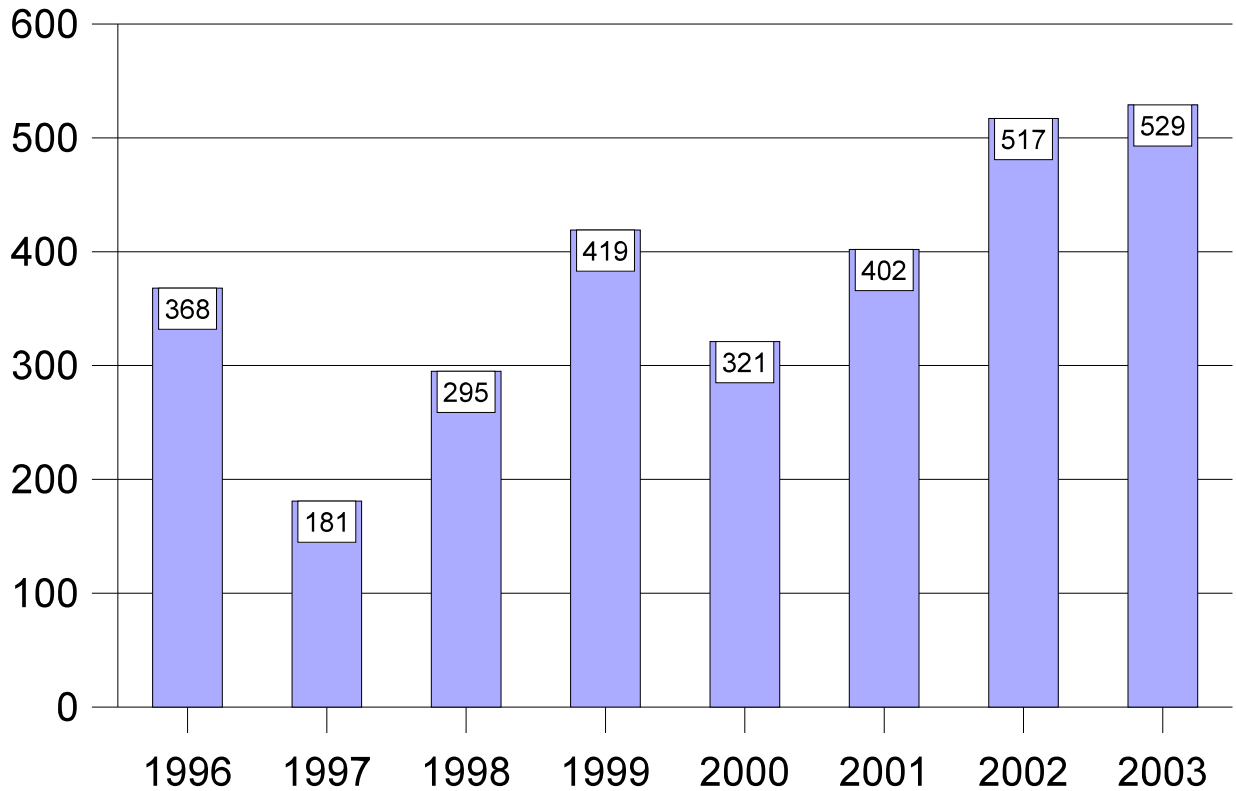
TOTAL NUMBER OF PRESCRIBED BURNS IN 2003.....43

TOTAL ACRES BURNED (PRESCRIBED) IN 2003.....30,802

8 YEAR TOTAL NUMBER OF SPOTS: 3032

8 YEAR ANNUAL AVERAGE SPOTS: 379

NUMBER OF SPOT FORECASTS SINCE 1996



NWSFO SLC IMET dispatches in 2003:

Total of 45 days of IMET out of the office

(does not include 1-2 days of r&r upon returning from dispatch)

IMET Brenchley served 45 days on 4 wildfire dispatches this year:

1. Bulldog Fire (7/10-7/20, Hanksville, UT)
2. Crazy Horse Fire (8/13-8/27, Condon, MT)
3. Beaver Lake Complex (9/01-9/11, Lolo, MT)
4. Cascade II Fire (9/24-10/01, Midway, UT)

NWSFO SLC FWX training/coordination activities in 2003:

1. Participated in IMET Workshop in March
2. Participated in Great Basin FWX AOP Meeting in April in Las Vegas.
3. Trained and certified all WFO forecasters as Fire Weather Forecasters (spring 2003)

FWX program goals in 2004:

1. Increased outreach activities across the CWA.
 - Meeting with customers at dispatches.
 - Address any concerns of customers.
 - Teach S-290 and other fire weather courses where needed.
2. Continued transition to IFPS-based Fire Weather Products.
 - Transition to IFPS-based Spot Forecast program.
 - Explore other web based fire planning tools.
3. Increase Lead Time and decrease False Alarms for Red Flag Warnings.

2003 SALT LAKE FIRE WEATHER DISTRICT FORECAST PRODUCT STATISTICS:

M O N T H	Routine FWX Zone forecasts Issued	Smoke Management Forecasts Issued	Formal Spot Forecasts Issued	Spot Forecasts for Prescribed Burns	Spot Forecasts for Wildfires
JAN	0	0	4	4	0
FEB	0	0	5	5	0
MAR	0	0	11	11	0
APR	0	0	48	47	1
MAY	62	31	32	30	2
JUN	60	30	51	20	31
JUL	62	31	111	1	110
AUG	62	31	51	1	50
SEP	60	30	56*	41	12
OCT	44	27	114*	70	43
NOV	0	0	12*	10	0
DEC	0	0	34	34	0
TOTAL	350	180	529*	274	249

* "Other" spot forecasts included.