EXHIBIT 10
DATE 2-2-07
HB 282

Climate Montana Office

MONTANA CLIMATE TREND SYNOPSIS 1950-2005

Climate Montana Office
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2 February 2007

Average annual air temperature has increased about 1deg

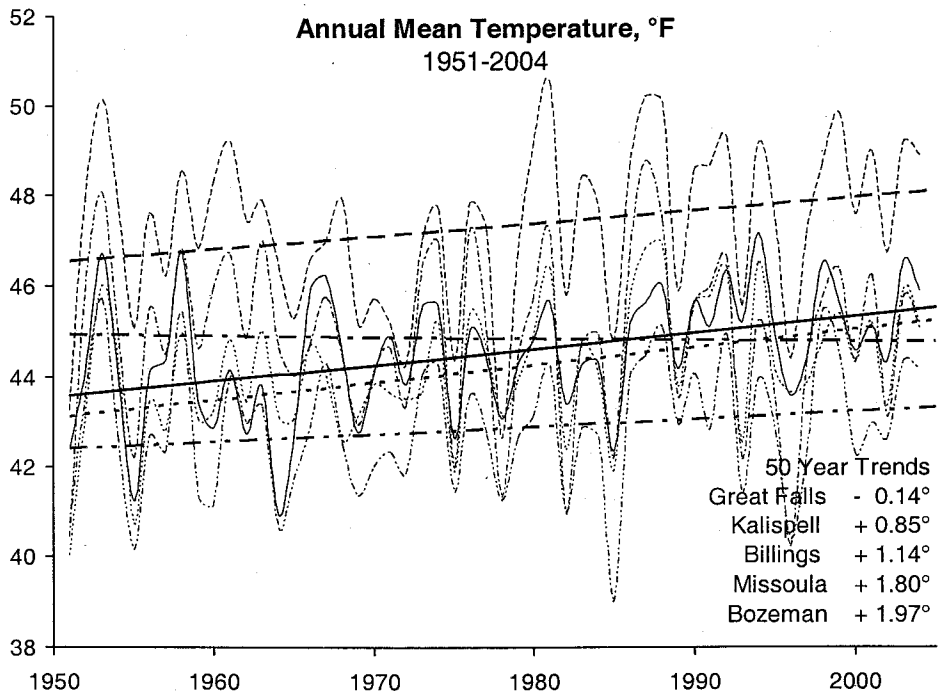
The frost-free growing season length is about 12 days longer than in 1950

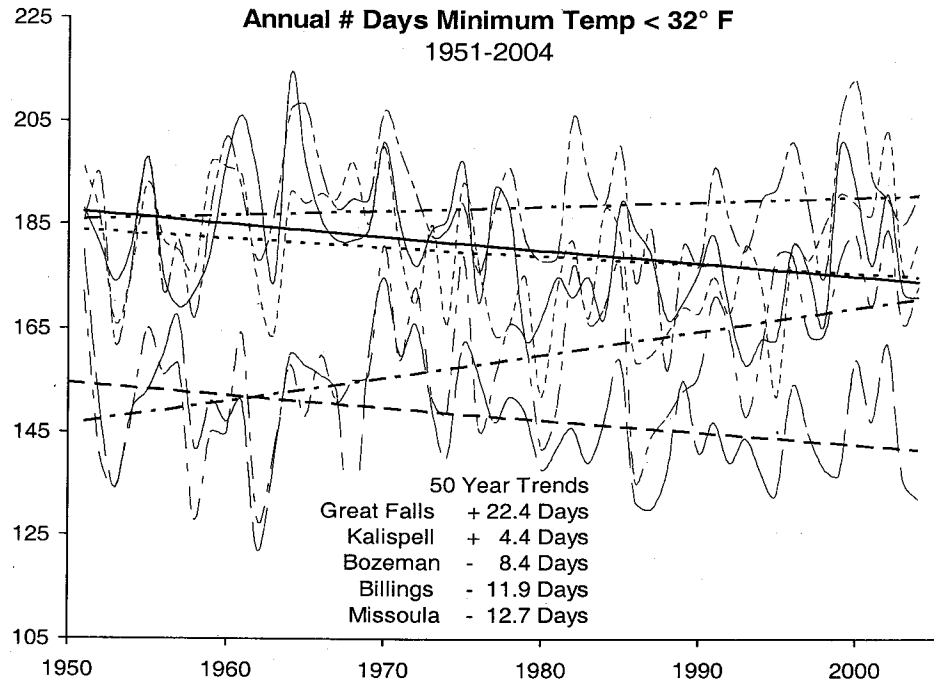
The annual precipitation trend is mixed, from + 1 to – 2 inches change.

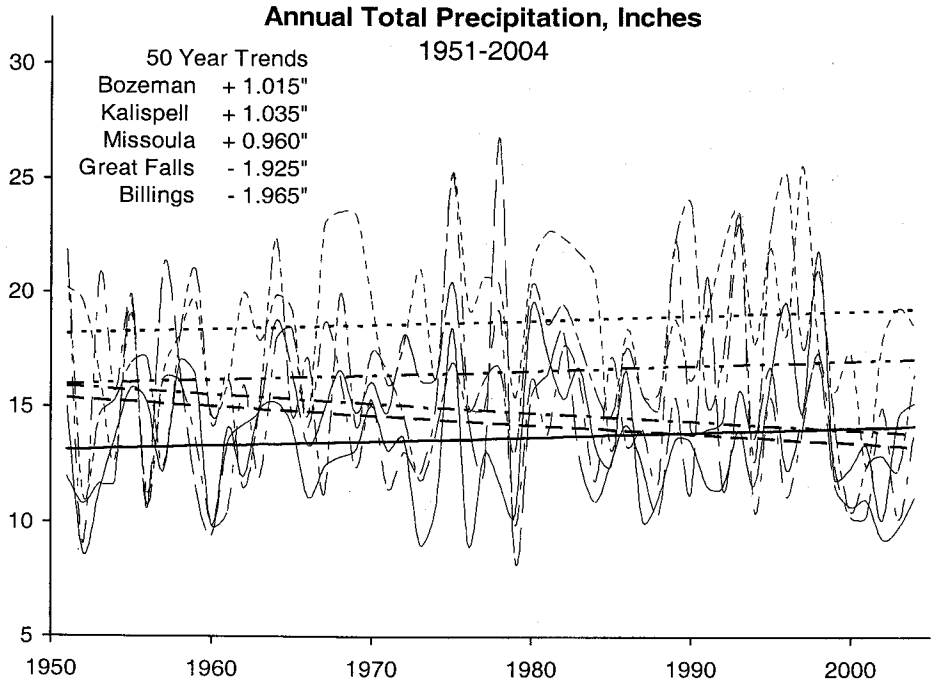
Annual snowfall has decreased by 6 to 22 inches

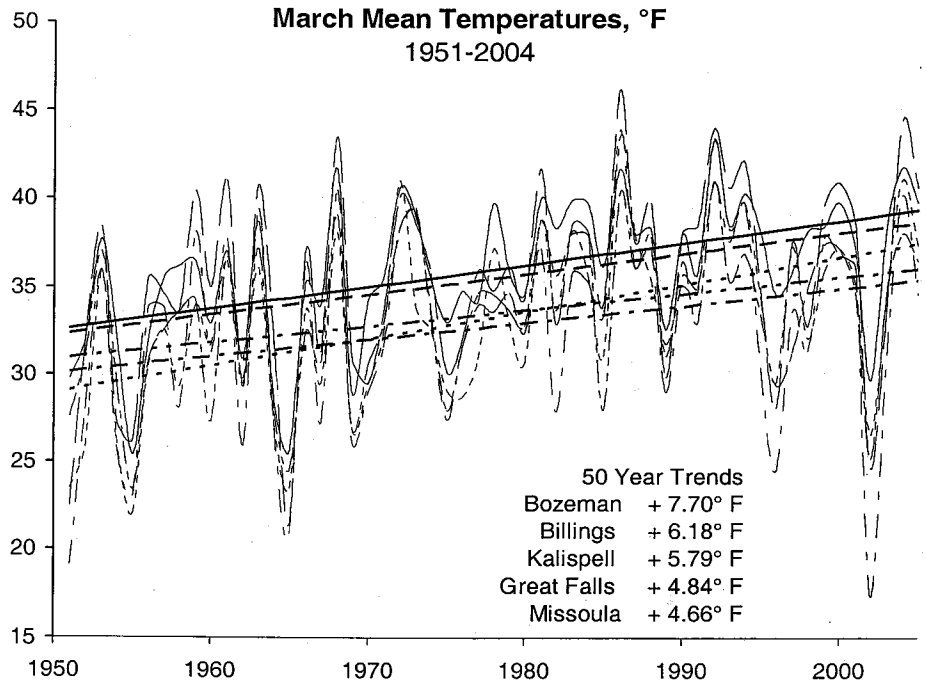
Snowmelt is occurring 2-3 weeks earlier than in 1950.

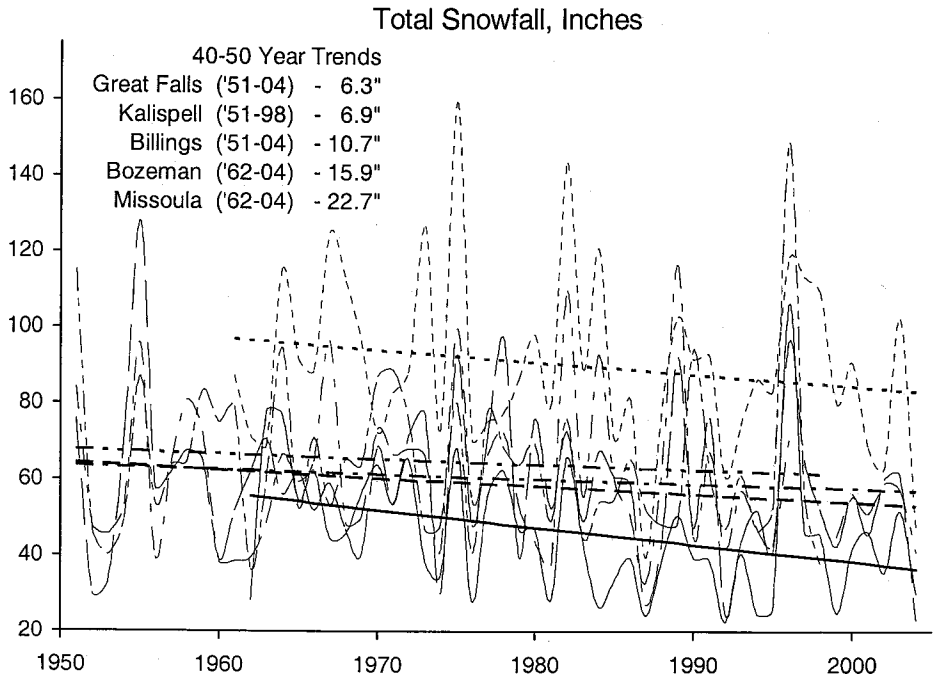
Wildfires greater than 1000 acres have increased six-fold in the last 40 years.

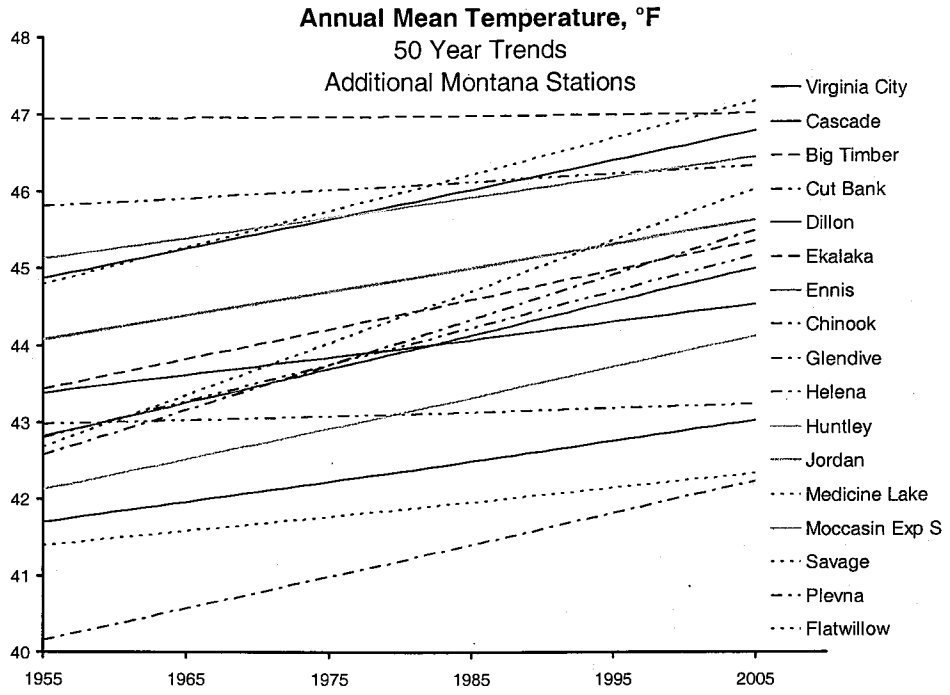


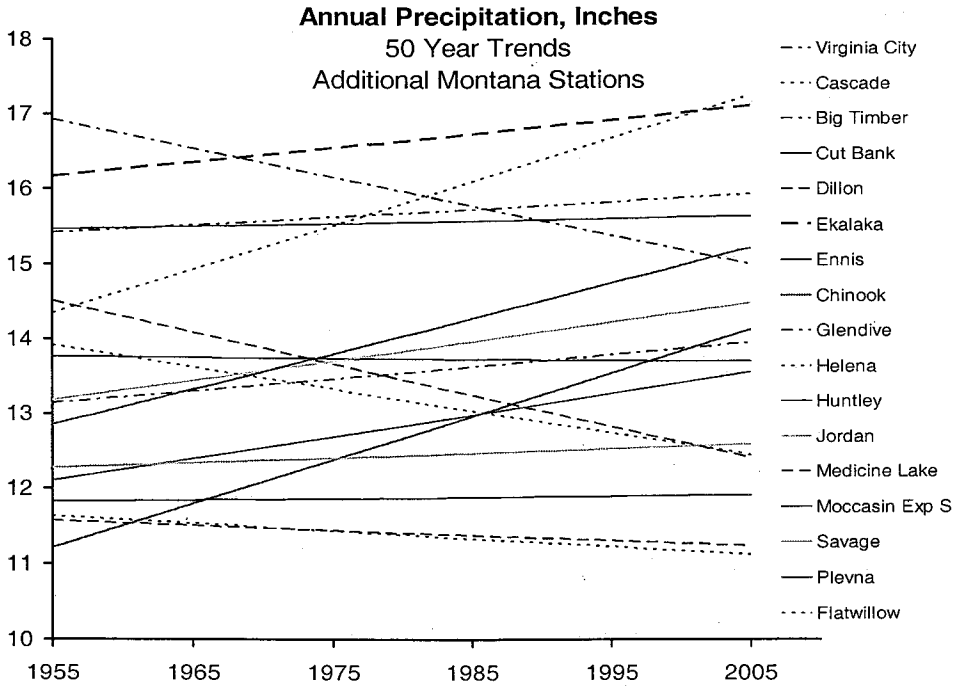

Annual # Days Minimum Temp < 32° F
1951-2004
225
205
185
165
145
125
105
1950
1960
1970
1980
1990
2000
50 Year Trends
Great Falls + 22.4 Days
Kalispell + 4.4 Days
Bozeman - 8.4 Days
Billings - 11.9 Days
Missoula - 12.7 Days


Annual Total Precipitation, Inches
1951-2004
50 Year Trends
Bozeman + 1.015"
Kalispell + 1.035"
Missoula + 0.960"
Great Falls - 1.925"
Billings - 1.965"
30
25
20
15
10
5
1950
1960
1970
1980
1990
2000


March Mean Temperatures, °F
1951-2004
50
45
40
35
30
25
20
15
1950
1960
1970
1980
1990
2000
50 Year Trends
Bozeman + 7.70° F
Billings + 6.18° F
Kalispell + 5.79° F
Great Falls + 4.84° F
Missoula + 4.66° F


Total Snowfall, Inches
40-50 Year Trends
Great Falls ('51-04) - 6.3"
Kalispell ('51-98) - 6.9"
Billings ('51-04) - 10.7"
Bozeman ('62-04) - 15.9"
Missoula ('62-04) - 22.7"
160
140
120
100
80
60
40
20
1950
1960
1970
1980
1990
2000


Annual Mean Temperature, °F
50 Year Trends
Additional Montana Stations
48
47
46
45
44
43
42
41
40
1955
1965
1975
1985
1995
2005
Virginia City
Cascade
Big Timber
Cut Bank
Dillon
Ekalaka
Ennis
Chinook
Glendive
Helena
Huntley
Jordan
Medicine Lake
Moccasin Exp S
Savage
Plevna
Flatwillow


Annual Precipitation, Inches
50 Year Trends
Additional Montana Stations
18
17
16
15
14
13
12
11
10
1955
1965
1975
1985
1995
2005
Virginia City
Cascade
Big Timber
Cut Bank
Dillon
Ekalaka
Ennis
Chinook
Glendive
Helena
Huntley
Jordan
Medicine Lake
Moccasin Exp S
Savage
Plevna
Flatwillow