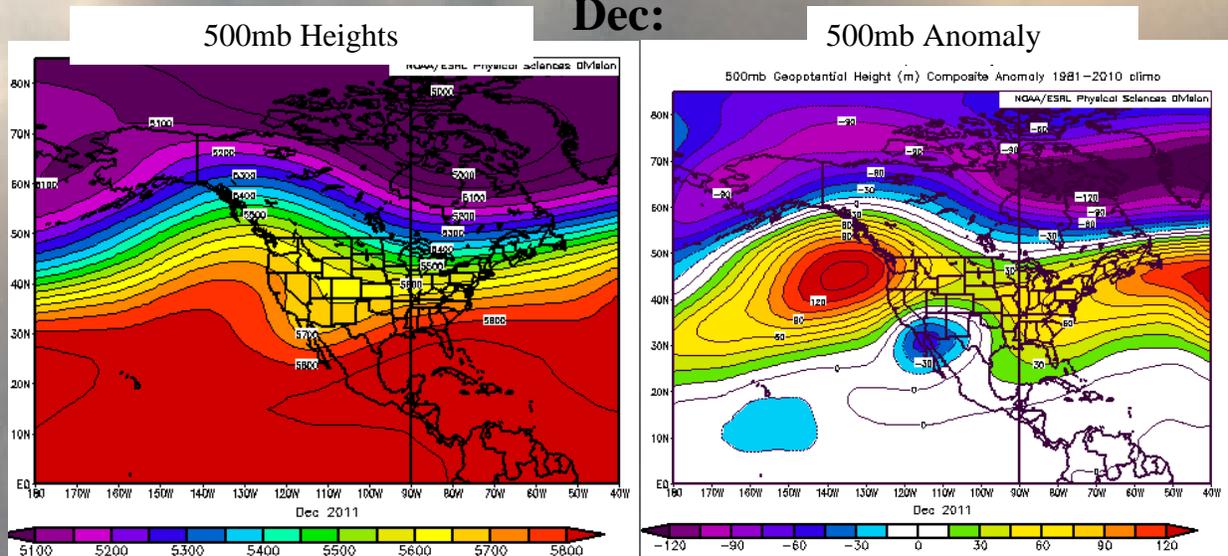


2012 NWS BOISE ANNUAL FIRE WEATHER REPORT



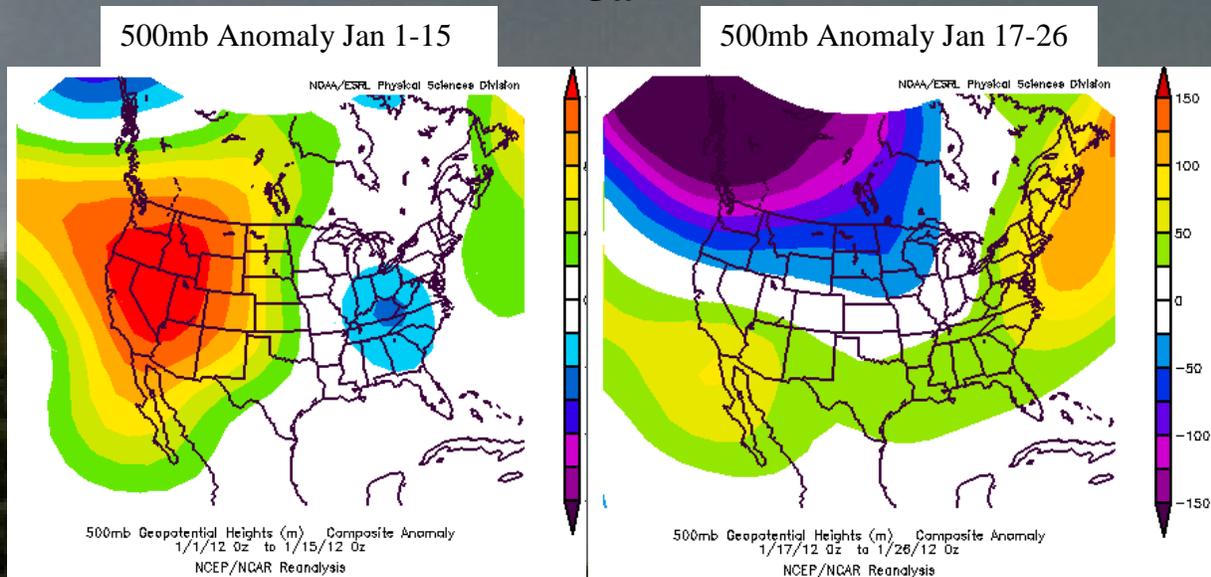
Highlights of the 2012 Fire Season:

Dec:



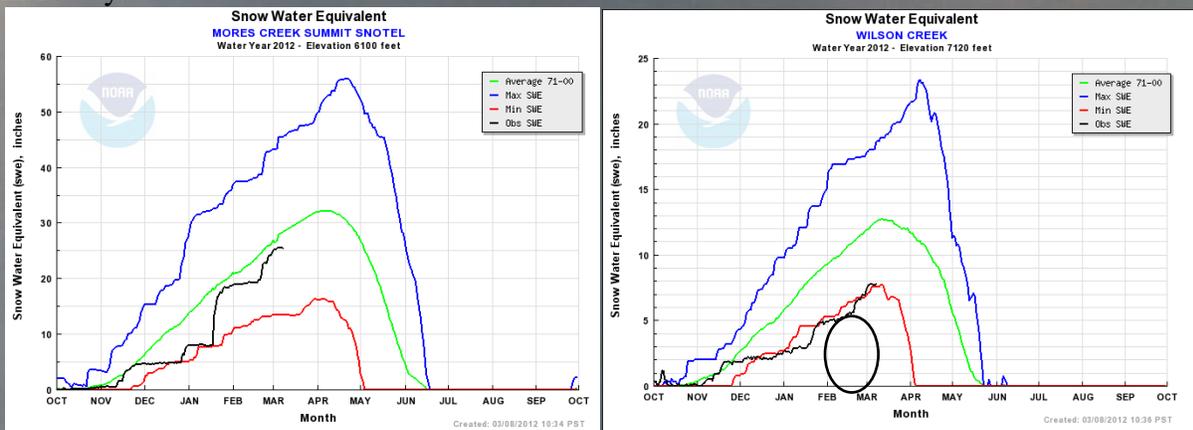
Stagnant weather prevailed over the region through the month of December with an upper ridge of high pressure. As a result, precipitation amounts were generally 20-50% of normal. Middle Fork Lodge in the west central mountains of Idaho had one of the higher amounts of precipitation but only 85% of normal. If it wasn't for the ridge briefly breaking down the end of the month, the precipitation amounts would have been dismal!

Jan



The month of January was one of the most interesting of the year. It had a little of everything and was definitely a story of two halves. The first half was record dry with a very strong upper ridge continuing in place over the region with high temperatures 5 to 10 degrees above normal. These temperature anomalies were common across a good part of the country...from Idaho to the Dakotas the Great Lakes and the Northeast states.

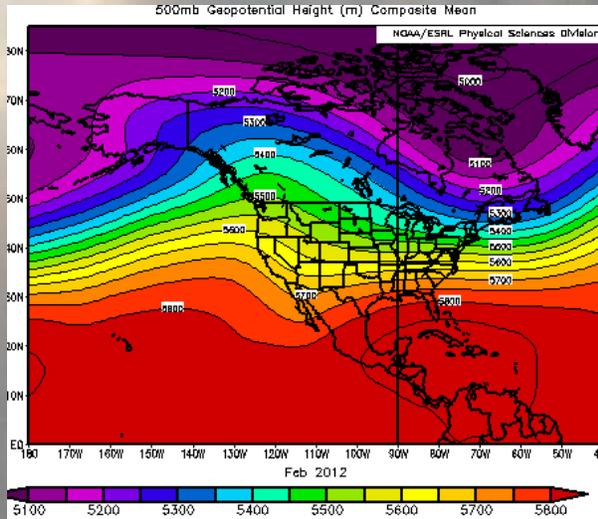
The second half was one of the wettest on record for some areas as pacific storms broke down the upper ridge and suppressed it southward, allowing the cold air to plunge into the United States from Canada. Temperatures lowered to around 5 degrees below normal for the period of the 17th through the 26th. Prior to this, there was very little in the way of snow was in the mountains. In fact, Bogus Basin had their latest opening day ever, on January 19th. All that changed during this wet period when some mountain locations received over 40 inches of snow in 10 days.



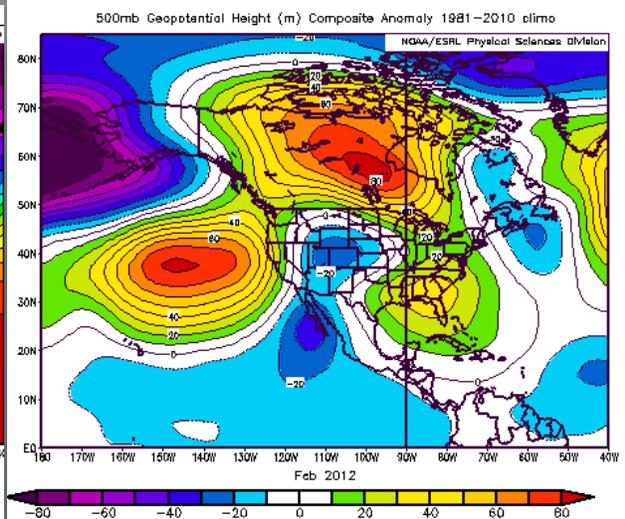
For example, Mores Creek summit recorded 47 inches of new snow. The attached image shows the abundant snow accumulating during the mid part of January on the Mores Creek Snotel Gauge. Sites further south were not as lucky with the abundant precipitation. Wilson Creek Snotel south of Twin Falls remained below record levels through the month.

Feb

500mb Heights



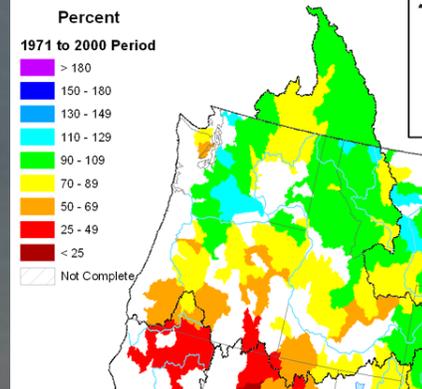
500mb Anomaly



An upper level ridge rebuilt over the area bringing dry weather until the last day of the month.

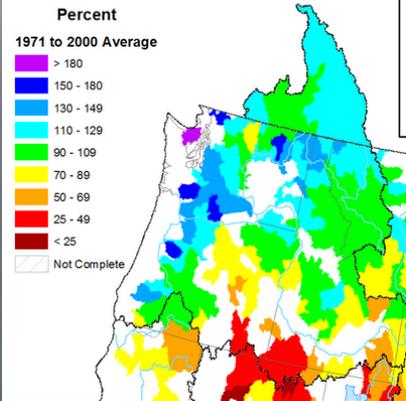
Record precipitation amounts were recorded on that day, but the monthly totals remained extremely low, especially across Oregon. Burns only recorded 0.15" which is only 15% of their normal total for February. Rome recorded around 50% of normal. By the end of the month, the snowpack varied across the region with the highest percentage across the Idaho Panhandle 75-85% of normal for the central Mountains to around 50% across the Owyhee Mountains. Across Southeastern Oregon snowpack averaged only 30 to 60%.

Mountain Snowpack as of March 1, 2012

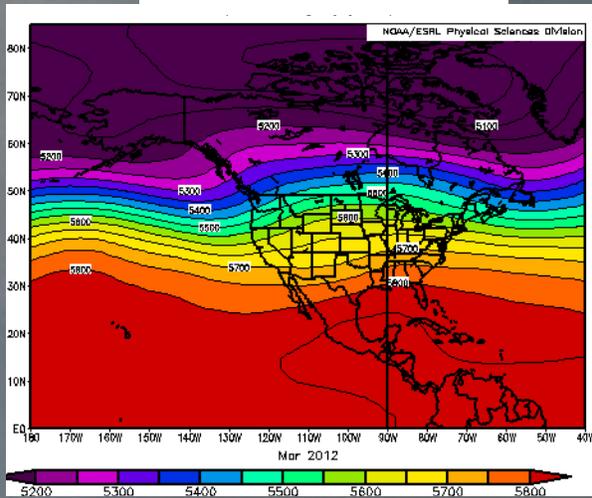


March:

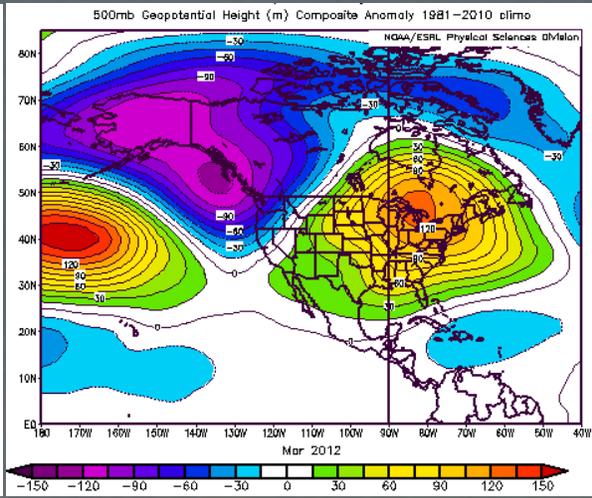
Mountain Snowpack as of April 1, 2012



500mb Heights



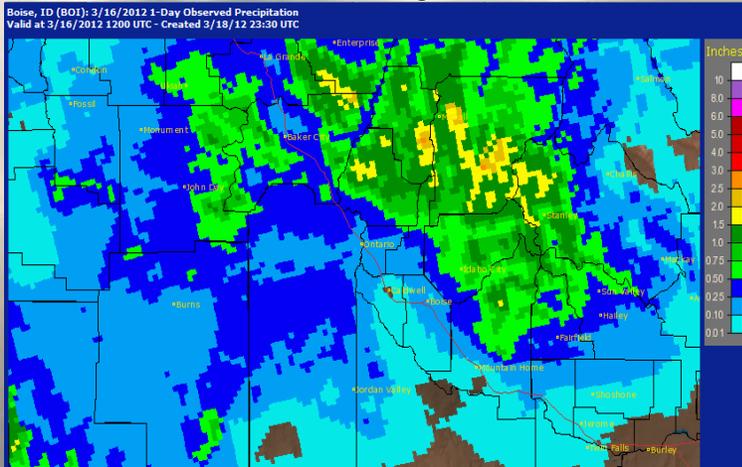
500mb Anomaly



The upper ridge that was in place along the coast for a majority of the month of February was replaced by an upper trough that brought storm after storm into the region. As a result, the West Central Mountains of Idaho recorded 200-300% of normal precipitation. For example, McCall received almost 6 inches of precipitation and Cambridge 3.6 inches. Other places were not so

March 16th Precipitation

fortunate. Places like Rome, Oregon and Bruneau, Idaho recorded below normal monthly

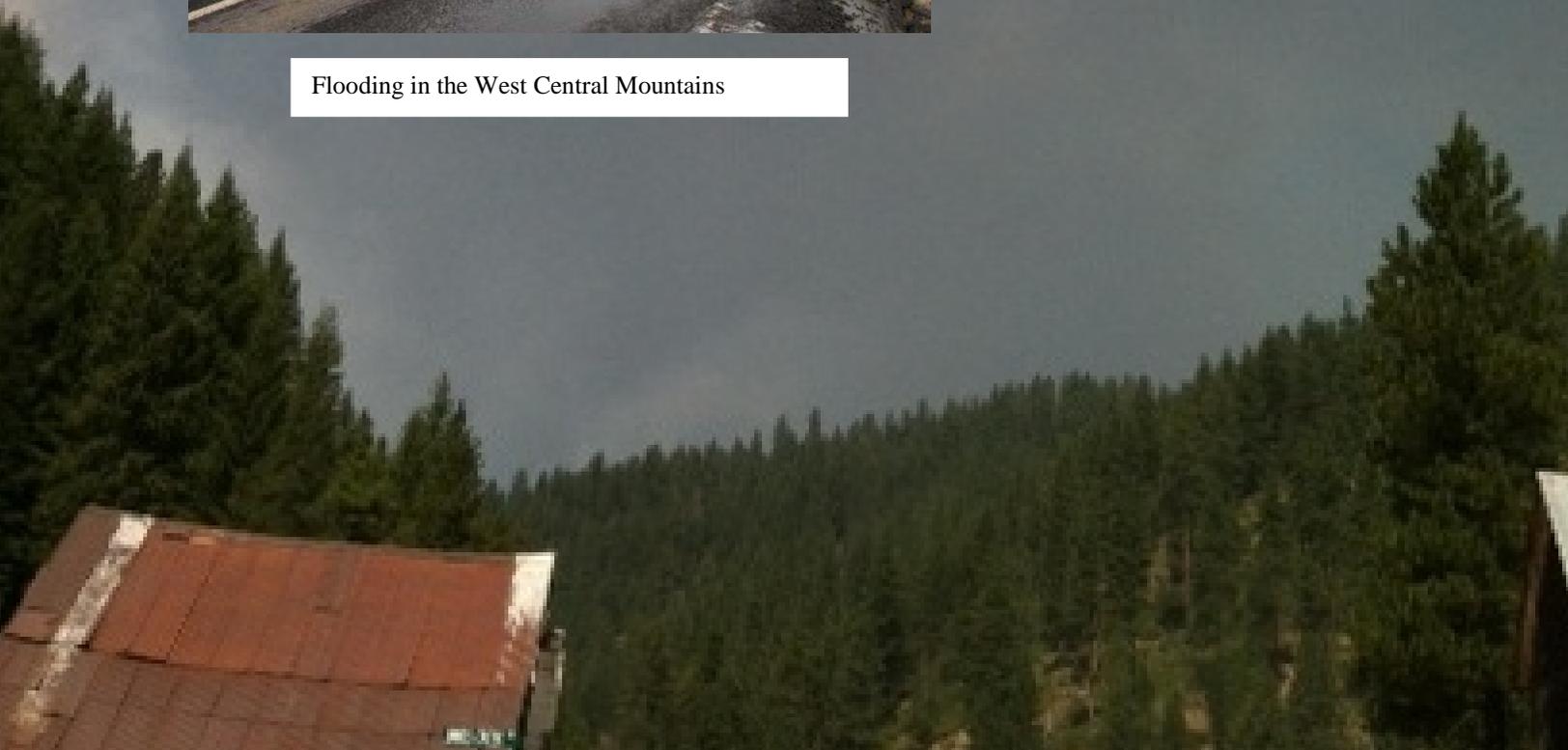


precipitation. During one particular warm/wet storm on March 15 and 16, moderate to heavy rain fell across the West Central and Boise Mountains while snow levels rose to 7000 to 8000 feet. Widespread rainfall amounts of 1-2 inches occurred across much of these mountains. Runoff

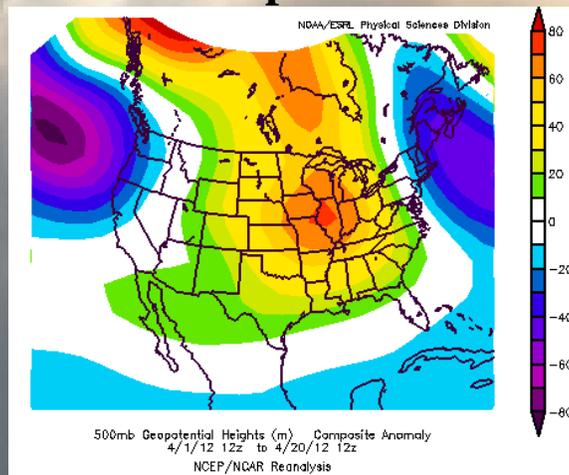


Flooding in the West Central Mountains

from rain in addition to snow melt caused creeks and rivers to swell and turned frozen fields into lakes. Numerous reports of flooding were received. This wet pattern did help increase the snowpack but mainly over central Idaho. The snowpack across Southeast Oregon and Southwest Idaho remained extremely poor.

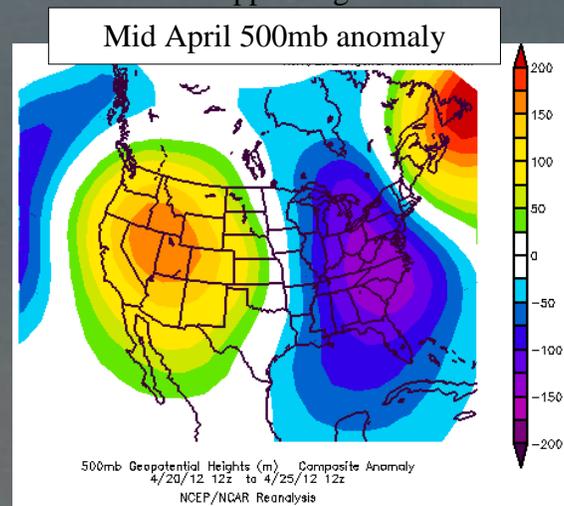


April:



April 500mb
anomaly

Typical Spring weather was observed during the first three weeks of the month as storms tracked into the Pacific Northwest, then northeastward through Canada. Normal temperatures were recorded with periods of valley rains and mountain snows. This pattern made a dramatic shift on the 20th through the 25th. A strong upper ridge built over the region with temperatures 15 to 25 degrees above normal. Some new record high temperatures were set, shattering records that were previously set back in the 1930s! The map attached below shows that the upper ridge was centered over the Great Basin with heights well above normal for April. This heat wave brought temperatures into the mid 70s across the mountain locations and lower 90s across the BLM lands. With the ripe snowpack in place, this record heat brought abundant snowmelt into the area reservoirs. The snowpack at elevations above 9000 feet started melting nearly a month early! The rollercoaster pattern in the weather then changed again as a potent weather system moved into the area bringing record precipitation amounts to the area. Boise recorded 1.09 inches of rain which broke the previous record that dated back to 1956. Other area rain amounts included McCall at 1.53", Weiser River RAWS 1.47, Teapot RAWS 1.36, 2.07 at Little Anderson, and 1.80 inches at Wagontown. The Burns, Vale and Western Twin Falls BLM averaged 0.25-0.75 inches during this event.



The Blue Mountain Fire which burned over 4,000 acres before it was contained (end of April) was the first big wildfire of the season for the Vale BLM. The lack of green-up, poor winter precipitation and little in the way of water carry-over were all contributors to this early spring fire.

May:

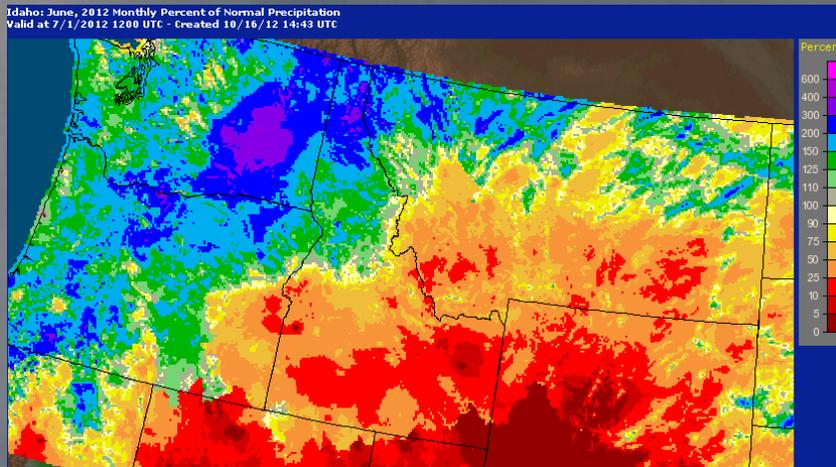
Typical springtime weather occurred during the month of May as periods of warm and dry weather alternated between cool and wet conditions. Areas south of the Snake River registered record high temperatures which melted the snowpack much earlier than normal. As a result, streams were already at their yearly minimums by the end of the month, which is much earlier than normal.

June:

The most pronounced aspect of June was the overall dryness through the entire month. Showers were few and far between and only occurred during the first week of the month. The dry conditions were the result of a persistent wedge of dry air between a trough in the Pacific Northwest and an intense high pressure ridge over the Rockies and high plains states. These conditions contributed to light fuels drying out rapidly. Several Boise BLM fires were started

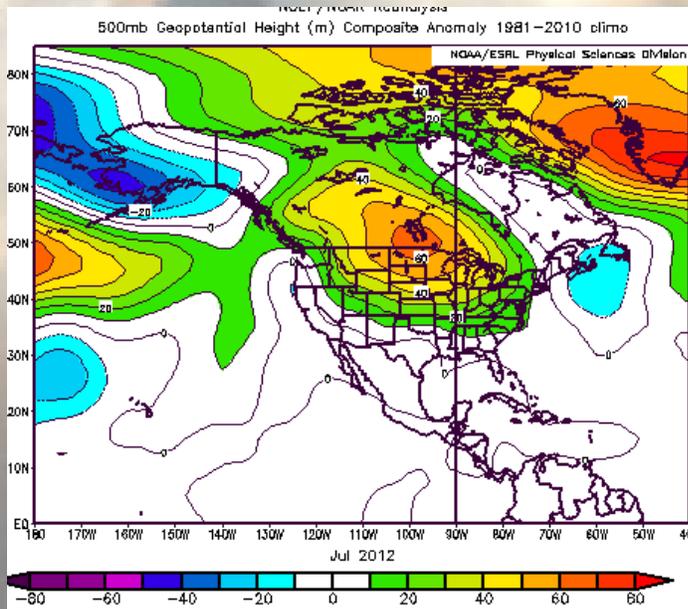
due to careless recreationists.

Strong winds fanned the flames of numerous fires caused by damaging winds that were started during the passage of a very strong cold front June 4th along the I-84 corridor between Boise and Mountain Home.



July:

An anomalously strong upper ridge over the northern plains brought above normal temperatures and strong southeast flow to the region. As a result, July 2012 will enter the record books as the third hottest July ever for the Boise area with an average monthly temperature of 81.3 degrees. There were an exceptional 9 days of 100 degrees or more and a string of 6 consecutive days of 100 or more from the 7th through the 12th in the Boise area. The highest was 108 degrees, which occurred on both the 9th and the 12th.

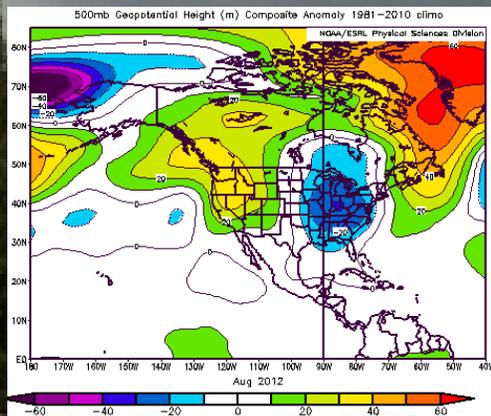


July 500mb height anomaly

Other area temperatures included Wagontown and Lodgepole RAWs that were 87-97 degrees respectively for the period from the 7th through the 12th. Many BLM RAWs sites both in Oregon and Idaho recorded highs in the 95-105 degree range for the same time period. Monsoonal moisture surges climatologically increase during this month and this year was no exception. During one surge during from the 6th through the 8th, dozens of BLM fires were started due to lightning. The Kinyon Road Fire near Castleford, Idaho was one such fire that eventually burned almost 235,000 acres and included a Type 1 Team dispatch.

August:

Compared to the official climate statistics for the Boise Airport, the months of June through August characterize the summer of 2012 as the driest summer since 1957! August continued where July left off as above normal temperatures and very dry weather prevailed. Of the 31 days in the month, Boise recorded 26 days (average is 18 days) of at least 90 degrees, Twin Buttes RAWs had 29 days and Horse Butte RAWs had 18 days. Across the mountains, Ski Hill RAWs saw at least 90 degrees for a total of 9 days in August, McCall 5 days, and 14 days at the Wagontown RAWs. Oregon sites included 16 days at Owyhee Ridge and 17 days at P- Hill RAWs.



Another big weather story for the month was the large fires across the region. Trinity Ridge, Halstead, Mustang, and numerous other ones resulted in widespread smoke concerns to the state. Higher than normal 500mb heights over the region brought light winds along with dry and hot conditions. As a result, air stagnation advisories were posted for most of the month by Idaho's DEQ.



The evening of August 5, 2012 a dust storm of large proportion moved through the Vale BLM and Owyhee Mountains fire weather zones OR637 and ID419 respectively. From there it continued to move Northeast through the Treasure Valley/Boise metropolitan area with visibility significantly reduced and air quality hindered.

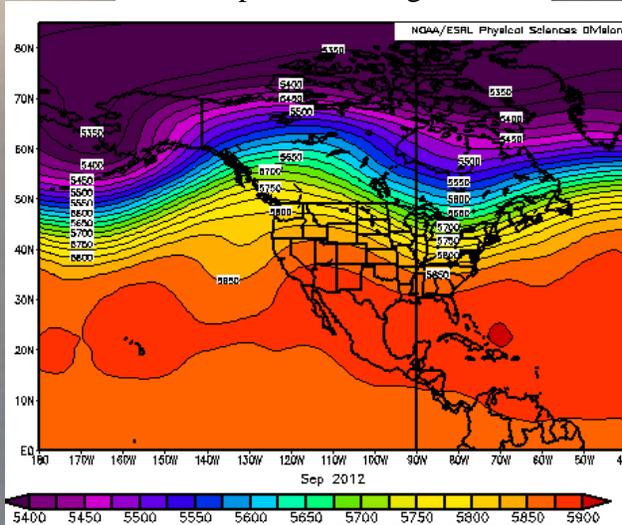
Near Burns Junction, August 5, 2012



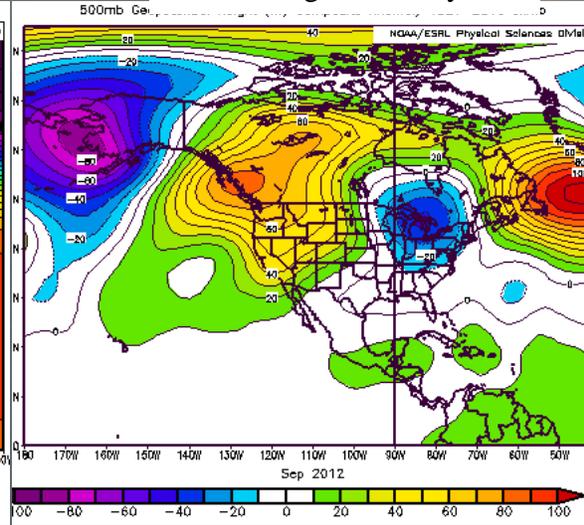
The Vale BLM was hit very hard with fire activity this summer including the largest fire in Oregon History (Long Draw Fire ~558,000 ac). Yet another large fire occurred across the Vale BLM in August. The Holloway Fire started August 10th, when a line of early morning thunderstorms triggered abundant lightning.

September:

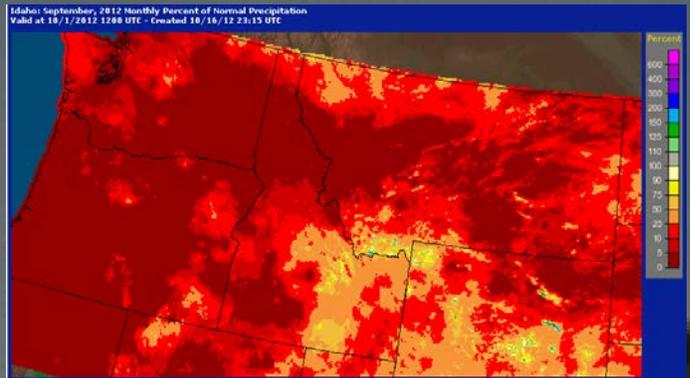
Sept 500mb heights



500mb height anomaly



September 2012 was the third consecutive month with average monthly temperatures well above normal. The hot dry summer which started back in early June seemed to continue through September. The three month combination of July through September recorded only 0.12" in Boise, which is one of the driest on record. Maximum temperatures were generally 4 to 6 degrees above normal with precipitation a third to .75 " below normal for the month. Several sites reported **ZERO** precipitation for the month. The hot and dry conditions made for an active fire season that continued unabated during the month. A stagnant upper air pattern allowed smoke from regional wildfires to fill the valleys for many days. On at least 15 days through the month, smoke was the prevailing weather with visibilities reduced to 2 to 3 miles in Idaho's Treasure valley and mountain valleys. Thick smoke produced poor and hazardous air quality throughout Idaho for a good part of the month. Idaho DEQ issued several air quality alerts. Finally during the last couple of days of the month, stronger winds aloft improved mixing allowing smoke to clear and improving air quality.



October:

Rainfall in October finally broke the long dry spell across the region. Most of the rainfall came from two significant storms. The first and most noteworthy event occurred on the 15th and 16th of the month. This weather system raced across the area producing the most widespread significant weather the area had seen in several months. High wind watches and wind advisories were issued well in advance of the storm and a potent outbreak of thunderstorms occurred out along the cold front as it moved through the Treasure Valley and southwest Idaho. In addition, flash flood watches and warnings were issued for the mountain areas where high intensity rains produced rock and mudslides over the burn scars of the Springs and Trinity Ridges fires.

II. 2012 ACRES BURNED

There were 451 wildfires this year across the districts, burning a total of 1,824,185 acres. Below are the largest fires for each agency as well as the number of fires/ total acres burned during the 2012 fire season.

<u>Agency</u>	<u>Wildfire Name</u>	<u>Acres Burned</u>
Payette NF	Wesley	16,010 ac
Boise NF	Trinity Ridge	146,832 ac
Boise BLM	Jacks	46,467 ac
Vale BLM	Long Draw	557,648 ac
Burns BLM	Millers Homestead	160,858 ac
Shoshone BLM	Kinyon Road	172,335 ac

	2012 Wildfires		2011
	Fires	Acres	Wildfire Acres
Payette NF	62	22,475	1,345
Boise NF	57	153,711	4,948
Boise BLM	143	155,969	153,068
Vale BLM	41	819,743	30,653
Burns BLM	17	223,589	17,347
SITPA / IDL	47	21,002	188
Shoshone BLM-			
Twin Fall Dist	84	427,696	
TOTAL	305	1,374,014	206,204

III. 2012 SPECIAL FORECASTS AND SERVICES

The Boise Fire Weather Office issued 311 spot forecasts between January and December. Of these, 108 were from prescribed burns, 203 for wildfire incidents. The first spot was issued for the Riddle Brothers Ranch Rx on Jan 4th on the Burns BLM. The last spot was on issued on Dec 2nd for a wildfire near Mountain Home Air Force Base.

Fire Weather Watches are issued to alert fire control agencies of potential severe fire weather episodes. Red Flag Warnings indicate that severe fire weather is imminent or are already occurring. Severe fire weather usually means scattered lightning, extremely low humidities, and/or strong winds together with very high to extreme fire danger. This year the Boise office issued 130 Red Flag Warnings of which, 61 verified. This gave the office a False Alarm Ratio (FAR) of 0.53 and a Probability of Detection (POD) of 0.80.

IMET ASSIGNMENTS

<u>Incident</u>	<u>IMET</u>	<u>Dates</u>
Russels Camp Fire Near Glenrock, Wy	Chuck Redman	6/24 – 6/29
Arapaho Fire Near Wheatland, Wy	Chuck Redman	6/29 – 7/9
Quail Fire Near Alpine, Ut	Coleen Decker	7/4 – 7/8
Kinyon Rd Fire Near Castleford, Id	Jim Wallman (Reno)	7/10 – 7/13
Long Draw Fire Near Rome, Or	Pam Szatanek (Elko)	7/11 – 7/16
Bonito Complex Near Vale, Or	Dan Borsum (Billings)	7/11 – 7/16
Millers Homestead Fire Near Frenchglen, Or	Chuck Redman	7/13 – 7/20
Trinity Ridge Fire Near Featherville, Id	Chuck Redman Bob Tobin (Spokane)	8/6 – 8/14 8/10 – 8/25

	Amanda Graning (t-Duluth)	8/14 – 8/28
	Dan Byrd (Jackson)	8/23 – 9/7
	Simone Lewis (Charleston)	8/22 – 9/6
	Chuck Redman	9/6 – 9/14
Springs Fire Near Crouch, Id	Rachael Trimarco (Pendleton)	8/8 – 8/20
10 Mile Fire Id/Or Border	Scott Weishaar (Portland)	8/13 – 8/20
Wesley Fire Near New Meadows, Id	Joe Soloman (Pendleton)	9/10 – 9/25
	Joel Curtis (Juneau)	9/23 – 9/29
Karney Fire Near Boise, Id	Chuck Redman	9/19 – 9/22

TRAINING/TEACHING ASSIGNMENTS

Chuck Redman

Taught:

Mar 2012	S-390 Introduction to Wildland Fire Behavior Calculations	Boise, ID
Apr 2012	Payette Fire Refresher	
June 2012	Payette Lookout Fire Refresher	New Meadows, ID
Nov 2012	S-390 Introduction to Wildland Fire Behavior Calculations	Boise, ID

Attended:

May 2012	RT-130	Boise Idaho
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Coleen Decker

Taught:

Feb 2012	S-490 Advanced Wildland Fire Behavior Calculations	Boise, Id
Feb 2012	Rx-410 Smoke Management Techniques	Boise, Id
Feb 2012	Burn Boss Refresher	McCall, Id
Jun 2012	S-190 Intro to Wildland Fire Behavior	Fairfield, Id
Jun 2012	S-290 Intermediate Fire Behavior	Nampa, Id
Jun 2012	S-290 Intermediate Fire Behavior	LaGrande, Or

Attended:

Jun 2012	RT-130	Boise, Id
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Josh Smith

Attended:

May 2012 RT-130

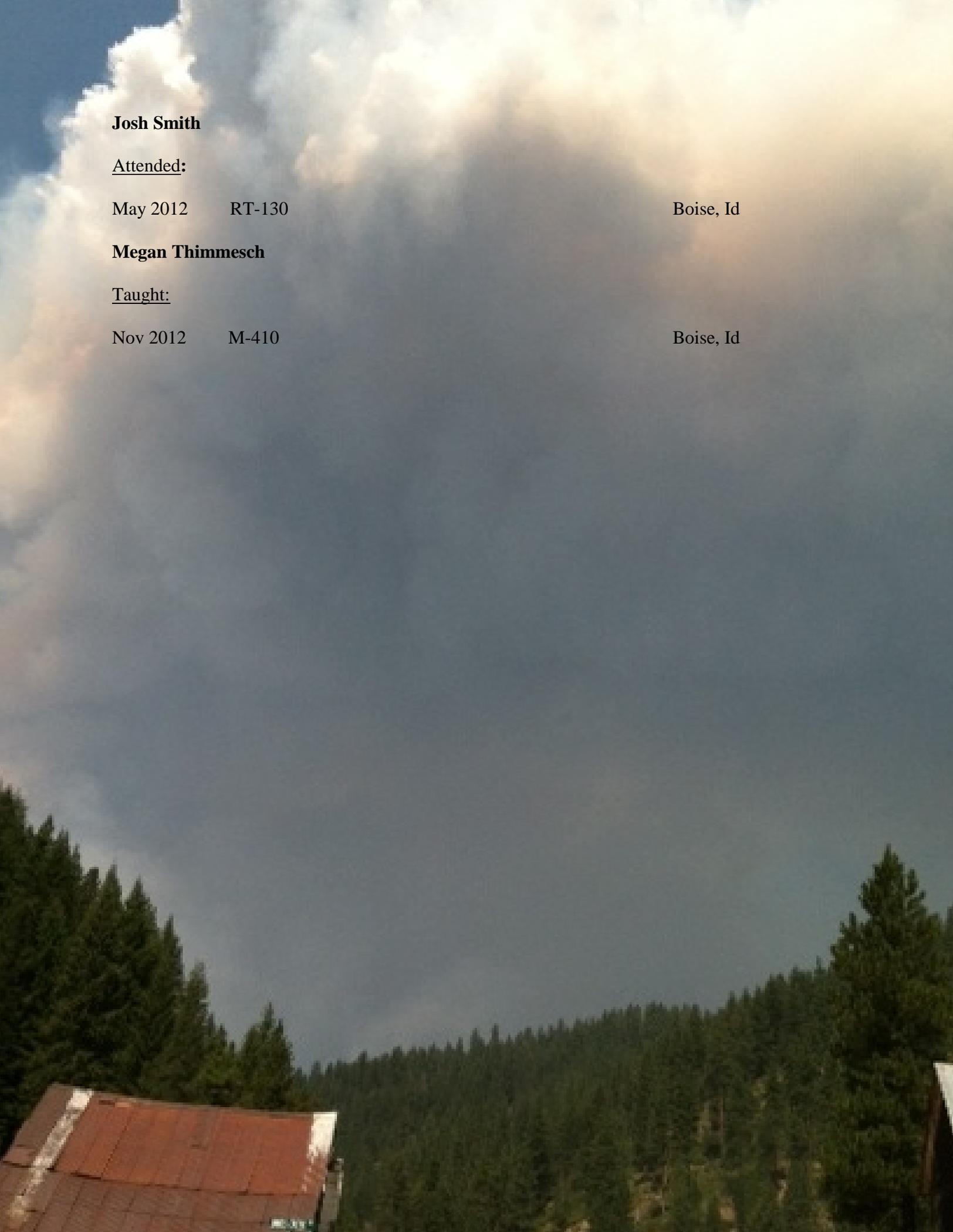
Boise, Id

Megan Thimmesch

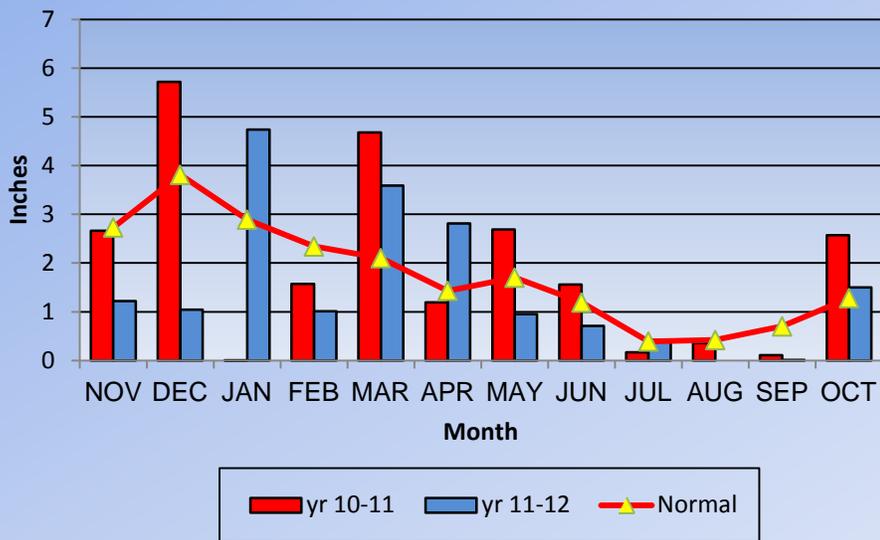
Taught:

Nov 2012 M-410

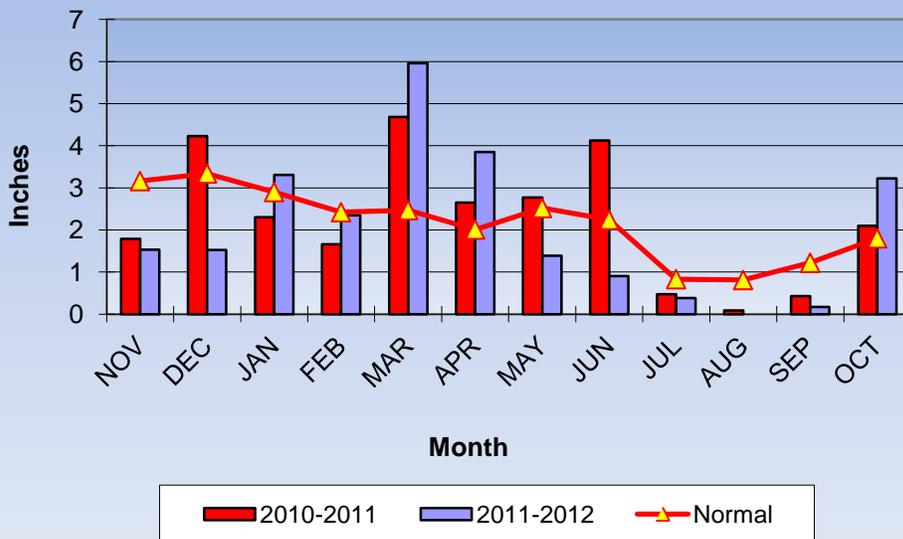
Boise, Id



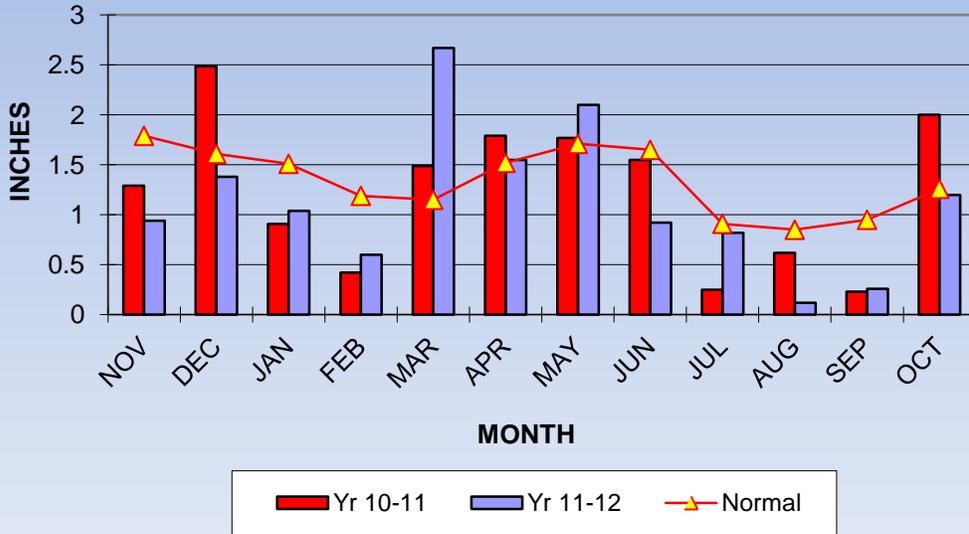
Zone 400 Precipitation Cambridge



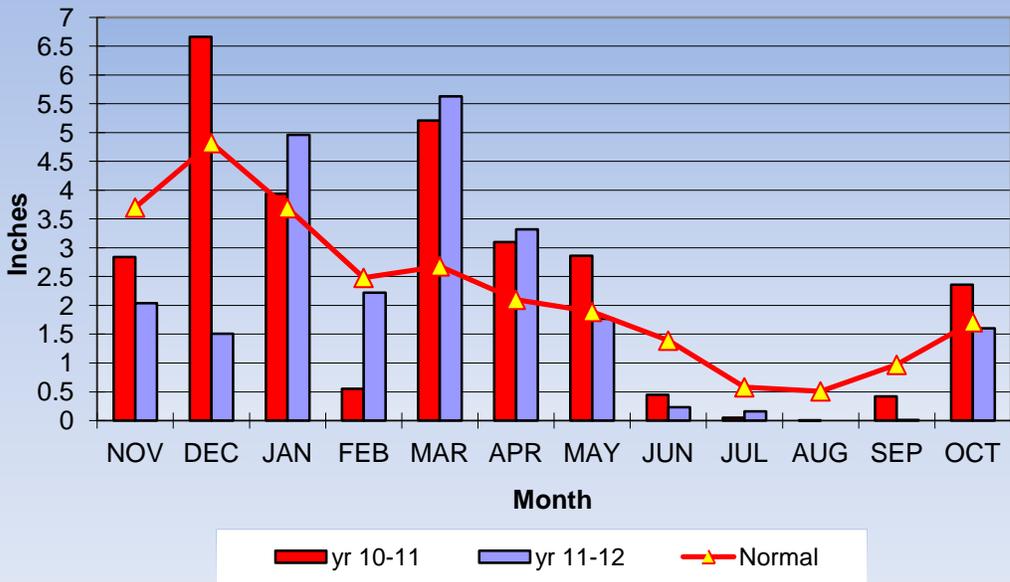
ZONE 401 PRECIPITATION MCCALL R.S.



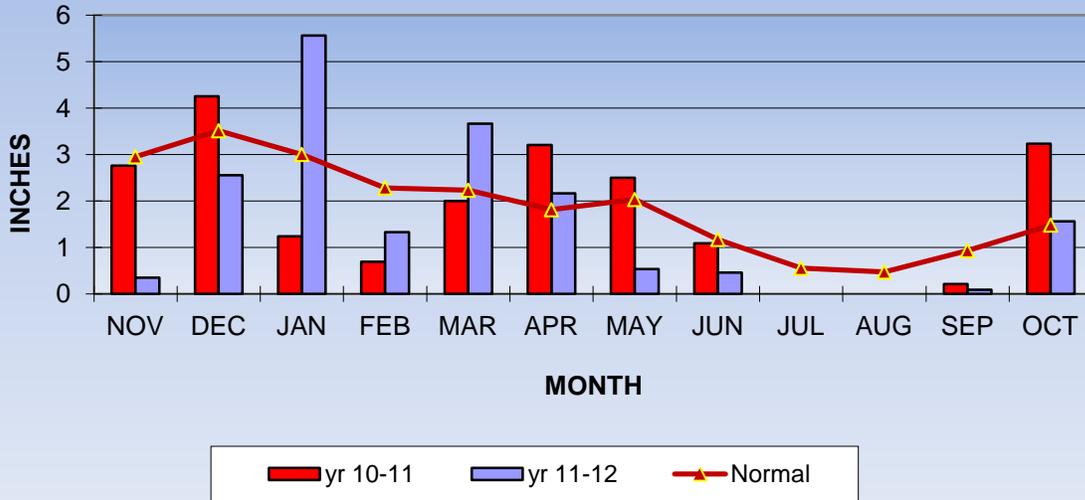
ZONE 402 PRECIPITATION MIDDLE FORK LODGE



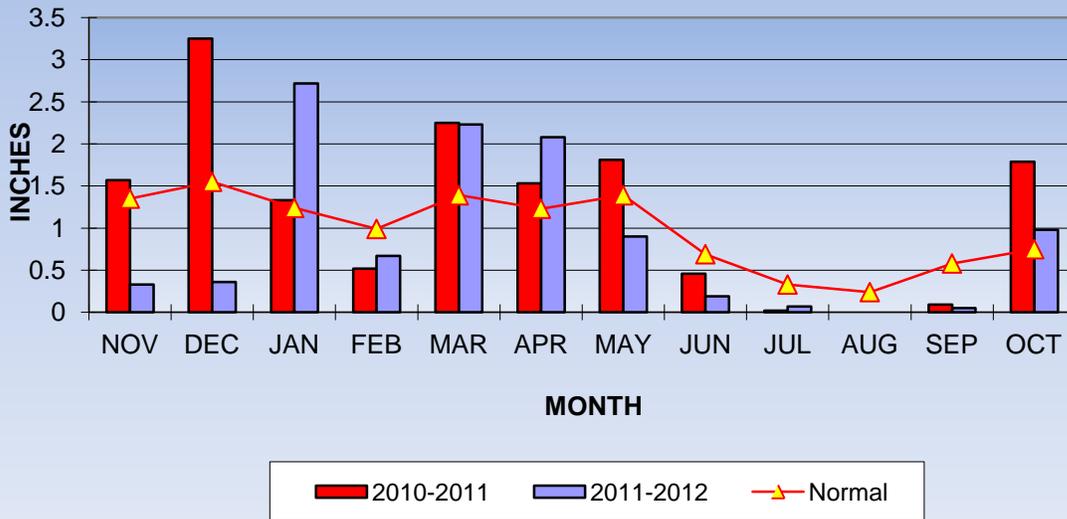
Zone 403 Precipitation Garden Valley R.S



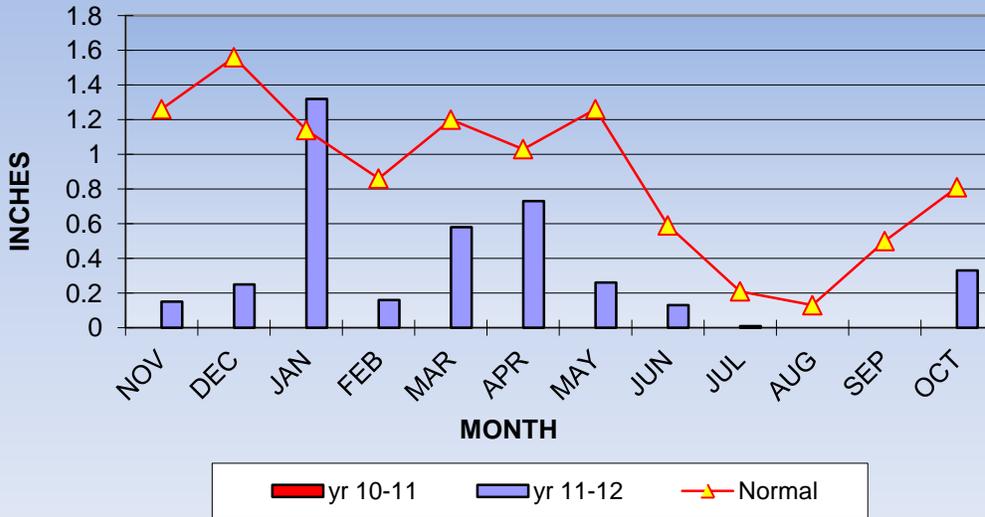
ZONE 404 PRECIPITATION IDAHO CITY



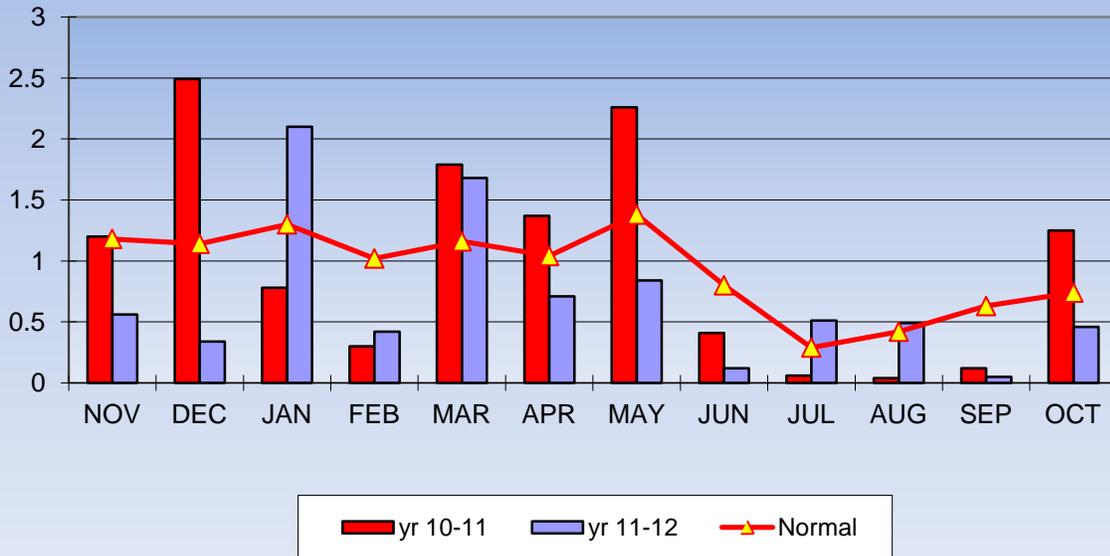
ZONE 408 PRECIPITATION BOISE



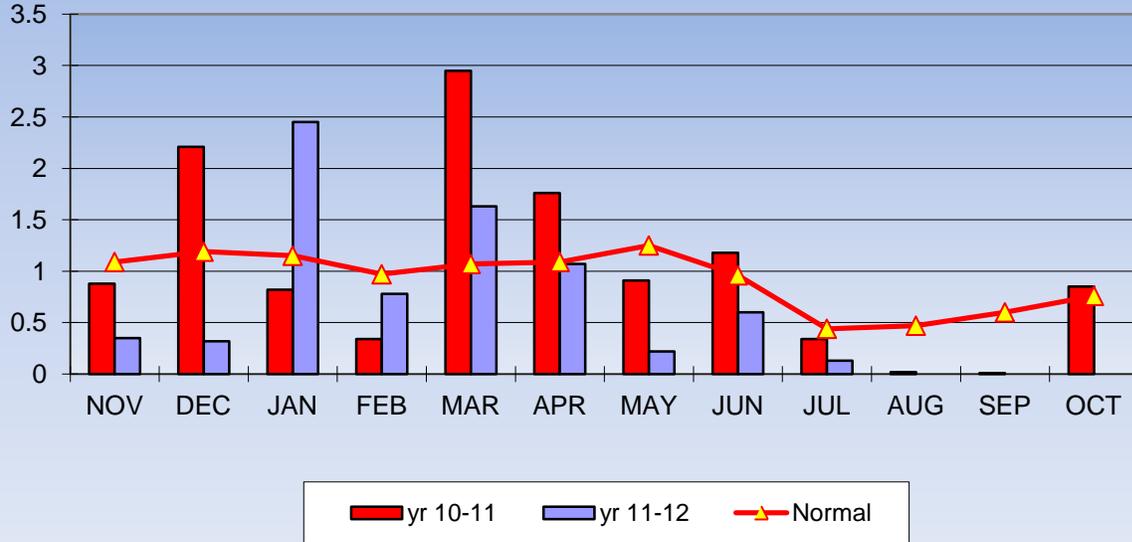
SOUTHERN ZONE 408 PRECIPITATION Mountain Home



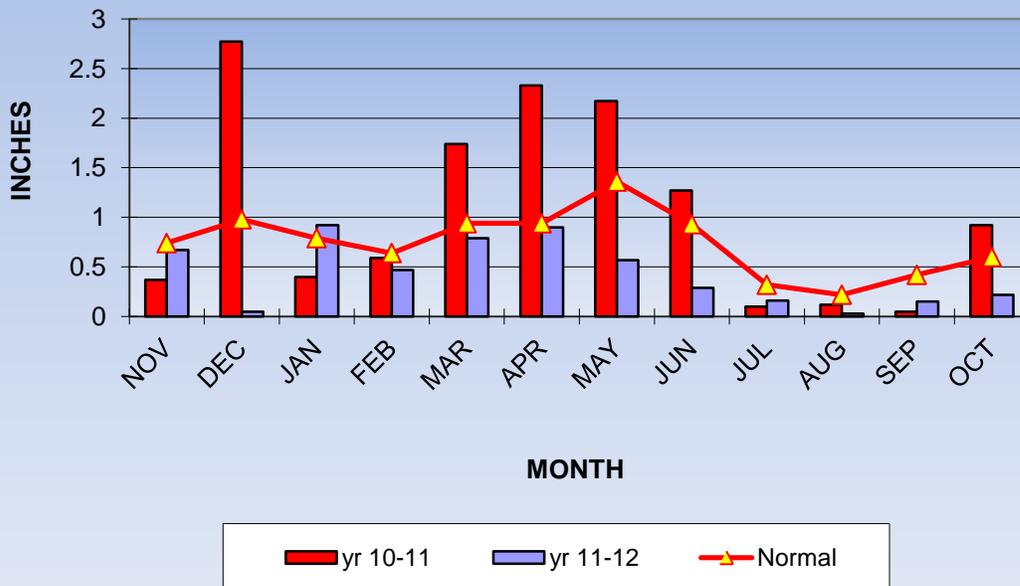
Zone 418 Precipitation Twin Falls



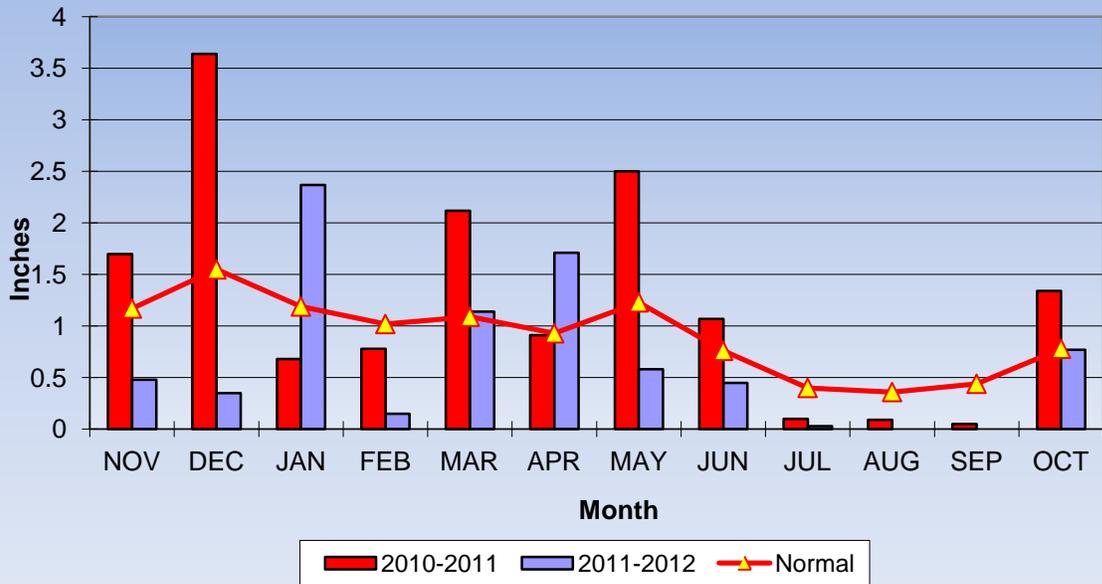
Zone 419 Precipitation Reynolds Creek



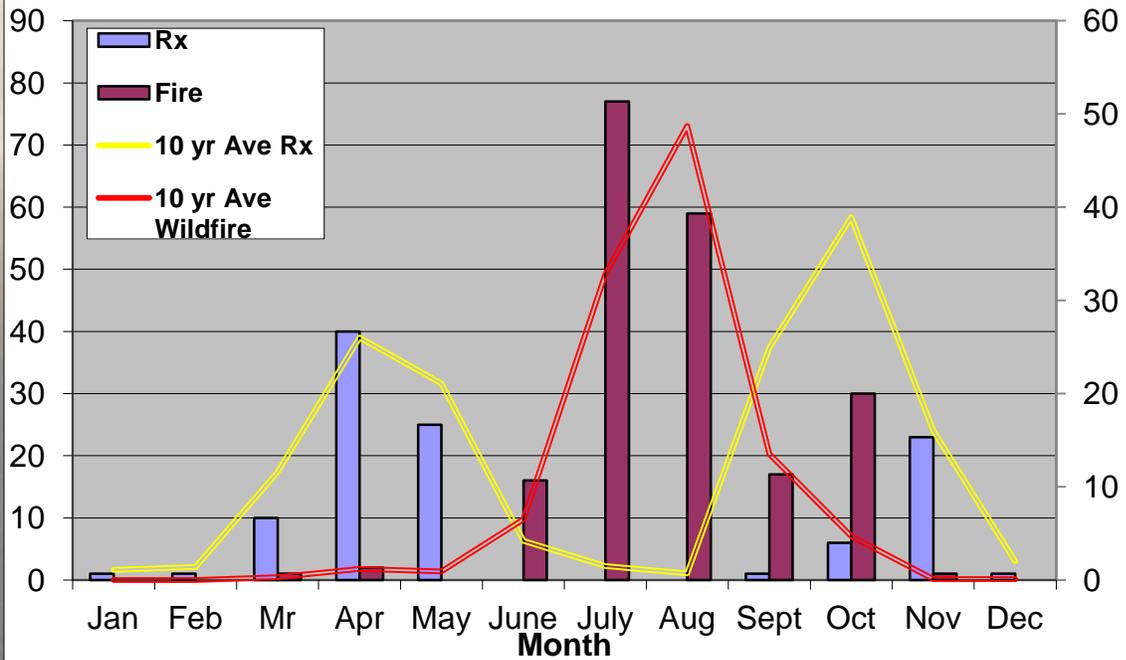
SOUTHERN ZONE 637 PRECIPITATION- 30sw ROME, OREGON



Zone 636 Precipitation Burns Oregon



2012 Monthly Spot Forecast Distribution



2012 Spot Forecast Distribution by Agency

