Forecast Guidance Wednesday, 9/16/2020

12Z 700 mb temp : 12°C
Expected afternoon 700 mb temp today : 13°C

Then and Now:

No much has changed since yesterday. Currently, we’re under the influence of a ridge that is centered over the western US. Luckily for Utah, the anti-cyclonic flow is helping to divert the majority of smoke to our north.

GOES 17 (weather.cod.edu)

The trough off the west coast in the image above will slowly make its way into the western US over the next few days, affecting Utah this weekend.

Short Term: 12Z Wednesday to 06Z Friday:

Leading up to the aforementioned trough, strong southerly winds will begin to develop starting tomorrow and Friday. This will be coupled with very dry conditions, leading to heightened fire danger across most of the state. The NWS currently has a fire weather watch up for the western ⅔ of the state, with the watch likely being upgraded to red flag warnings.
Critical Fire Weather

A Fire Weather Watch begins Thursday afternoon for western Utah and expands into most of Utah Friday.

Relative humidity: 10-15%
Winds: South gusting to 35 mph

NWS Statement: Critical fire danger (https://www.weather.gov/slc/)

Long Term: After 06Z Friday:

Strong winds will continue through the day Friday leading up to the passage of the cold front associated with the trough moving through.

GFS Cold Front Position 12 am Saturday (weather.utah.edu)
As depicted in the image above, the cold front is expected to move through very early Saturday, with precipitation lagging behind. Precipitation along the Wasatch front is expected to fill in mid-morning Saturday and end early in the afternoon.

ECMWF Ensemble precipitation accumulations (maps.weatherbell.com)

Colder temperatures are expected as well, with most valley locations seeing temperatures in the 60s and 70s, with the higher elevations in the 50s and 60s. By early next week, slight ridging over the region will allow temperatures to rebound a bit.
**Valley Forecast:**

<table>
<thead>
<tr>
<th>Day</th>
<th>Highs</th>
<th>Lows</th>
<th>POP</th>
<th>Type</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>09/16 Wednesday</td>
<td>Low 90s Upper 80s</td>
<td>Low-Mid 60s</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>09/17 Thursday</td>
<td>Low 90s Upper 80s</td>
<td>Low-Mid 60s</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>09/18 Friday</td>
<td>Mid-Upper 80s</td>
<td>Mid-Upper 50s</td>
<td>20%</td>
<td>RA</td>
<td>FROPA</td>
</tr>
<tr>
<td>09/19 Saturday</td>
<td>Low-Mid 70s</td>
<td>Mid-Upper 50s</td>
<td>40%</td>
<td>RA</td>
<td>FROPA</td>
</tr>
<tr>
<td>09/20 Sunday</td>
<td>Mid-Upper 70s</td>
<td>Low 60s Upper 50s</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>09/21 Monday</td>
<td>Low-Mid 70s</td>
<td>Low 60s Upper 50s</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>09/22 Tuesday</td>
<td>Low-Mid 70s</td>
<td>Low 60s Upper 50s</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

-Eric McNamee