

National Weather Service, Boulder Colorado

March 5, 2014

Spring Runoff Considerations

Due to the September 2013 floods, localized flooding can be expected this spring even with a normal snowmelt runoff. More significant flooding will likely occur if rain falls on the snow, rapid warming occurs and of course there is more snow between now and the melt.

Residents in areas where stream channels have moved or significant debris and sedimentation has occurred - should be prepared for the possibility of spring snowmelt flooding. A small amount of water could start moving large quantities of sediment in affected streams. Debris flows may obstruct the stream channels and cause flood issues.

The mountain snowpack in Larimer County is one and a half times higher than it's normal early March snowpack, and already close to its normal peak snowpack. (There is still time and conditions could change before the runoff begins. Above normal future snow accumulations combined with heavy rains and rapid melt will increase the current flood potential while below normal future precipitation and gradual or intermittent freezing and thawing will decrease the magnitude of any flooding.) The mountain snowpack this year is slightly lower than at the same time in 2011. There was a concern in the spring of 2011 but the snow that year melted out in an orderly fashion without major issues.

Spring rain amounts and timing will also be very important. The September rains likely destabilized hillsides and steep slopes and causing numerous landslides during September event (source: USGS (<http://pubs.usgs.gov/fs/2013/3114/pdf/fs2013-3114.pdf>)). Increased landslides and rock slides can be expected this spring particularly with heavier and/or prolonged rainfall.

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