Record snowpack could threaten Western states

By Kirk Johnson and Jesse McKinley, New York Times

STEAMBOAT SPRINGS, Colo. — For all the attention on epic flooding in the Mississippi Valley, a quiet threat has been growing here in the West where winter snows have piled up on mountain ranges throughout the region.

Thanks to a blizzard-filled winter and an unusually cold and wet spring, more than 90 measuring sites from Montana to New Mexico and California to Colorado have record snowpack totals on the ground for late May, according to a federal report released last week.

Those giant and spectacularly beautiful snowpacks will now melt under the hotter, sunnier skies of June — mildly if weather conditions are just right, wildly and perhaps catastrophically if they are not.

Fear of a sudden thaw, releasing millions of gallons of water through river channels and narrow canyons, has disaster experts on edge.

"All we can do is watch and wait," said Bob Struble, the director of emergency management for Routt County in north-central Colorado. The county's largest community, Steamboat Springs, sits about 30 miles from the headwaters of the Yampa River, a major tributary of the Colorado River that has 17 feet of snow or more in parts of its watershed.

"This could be a year to remember," Mr. Struble added in a recent interview in his office as snow fell again on the high country.

No matter what happens, the snows of 2011, especially their

persistence into late spring, have already made the record books.

But the West has also changed significantly since 1983, when super-snows last produced widespread flooding. From the foothills west of Denver to the scenic, narrow canyons of northern Utah, flood plains that were once wide-open spaces have been built up.

Many communities have improved their defenses, for example, by fortifying riverbanks to keep streams in place, but those antiflood bulwarks have for the most part not been tested by nature's worst hits.

And in sharp contrast to the floods on the Mississippi River — one mighty waterway, going where it will — the Western story is fragmented, with anxiety dispersed across dozens, perhaps even hundreds, of large and small waterways that could surge individually, collectively or not at all.

In California, officials staged three days of flood training last week, running disaster scenarios and practicing the grunt work of filling sandbags and draping and tying down tarp. The state's aging levee system has long been a source of concern, with fears of large-scale failures that could leave Sacramento, the state capital, vulnerable to a Hurricane Katrina-scale flood. The anxieties are amplified this year by the deep snows in the Sierra Nevada, where some ski spots around Lake Tahoe saw more than 60 feet this season.

Read the whole story