Tahoe stormwater systems survive Jan. deluge

By Kathryn Reed

Stormwater systems were put to the test this month, and seemed to handle the onslaught of water without any serious problems.

“It is somewhat of a success story. In Tahoe all the sewer agencies reported a high flow, but they kept it in their systems. With the stormwater we haven’t heard of any problems,” Lauri Kemper with the Lahontan Regional Water Quality Control Board told *Lake Tahoe News.*

Lahontan regulates and monitors the amount of sediment reaching Lake Tahoe from the various jurisdictions in the basin on the California side, including Caltrans. The Tahoe Resource Conservation District oversees the stormwater.

On Jan. 7 when more than 5 inches of rain fell in some parts of the basin Tahoe RCD measured the highest flows ever recorded at all eight monitoring locations since monitoring began in 2013.

“During this storm event our Tahoe Valley site, located off Tahoe Keys Boulevard, measured 1.5 million-cubic-feet of flow, nearly 90 percent of the flow that was observed throughout the whole 2016 water year,” Sarah Bauwens with TRCD said in a statement.

Rich soil covers the edge of the beach at Cove East. Photo/Kathryn Reed

In one storm this month 18 million gallons of runoff was recorded at the TRCD sites. Even more reached the lake through the other pipes.

The Bijou pump area was temporarily clogged, but South Tahoe Public Utility District and the city of South Lake Tahoe worked together to get it functioning properly.

“There were no major incidents of any kind,” City Manager Nancy Kerry told *Lake Tahoe News* during the thick of the storms. “Many of the investments we’ve made over the last 10 years such as the Bijou erosion control project and others performed exceptionally well.”

One of the good things about strong runoff in the heart of winter when it’s so cold is that fine sediment tends to drop to the lake’s floor relatively quickly. This is what happened in the 1997 storms. Had there been this much runoff in the summer, it might be a different outcome for the effect to lake clarity. This is because when the air and water temperature is warmer that sediment stays closer to the surface, making the

water murky and creating a situation where algae can grow.

UC Davis working through the Tahoe Environmental Research Center at Sierra Nevada College regularly tests the lake's clarity in the winter and summer. The results will reveal in part how the storms this season have affected the lake.

TRCD through its monitoring system analyzes for fine sediment particles, nitrogen, and phosphorus to estimate nutrient and sediment loading from urban stormwater runoff.

Lahontan is still waiting to receive samples taken at various marinas during the storm events.

"When I look around California we are lucky in Tahoe that we made such a big deal about disapproving development in flood lands and wetlands. We have a lot less infrastructure damage because we have not put infrastructure there," Kemper said.

Restoration of meadows and stream environment zones is paying off. For rivers and creeks to overflow their banks into meadows is a good thing. That means the ecosystem is working. Much of the sediment in the water is filtered out naturally.

But it's also normal for Mother Nature to wash away the top layer of soil and carry it downstream. That is why a layer of dirt has been distributed along the beach area of Cove East on the South Shore. It is what was naturally carried out via the Upper Truckee River.