Lake Tahoe’s clarity declines by 5 feet

The Tahoe Keys, once the largest marsh in the basin, has long been a source of degradation of clarity for Lake Tahoe. Photo/Kathryn Reed

By Kathryn Reed

Lake Tahoe’s clarity took a turn for the worse in 2013, with visibility decreasing by 5 feet.

Data released March 13 show the average annual clarity level for 2013 at 70.1 feet. This breaks a two-year gain. The measurements have been taken continuously since 1968, when the Secchi disk could be seen to a depth of 102.4 feet.

UC Davis researchers use what looks like a white dinner plate to measure clarity by dropping it over the side of a boat at various locations throughout the year to record how far down

someone on the boat can see it. The highest value recorded in 2013 was 90 feet and the lowest was 49 feet.

“Clarity in Lake Tahoe largely reflected what we saw in the weather in 2013,” Geoff Schladow, director of the UC Davis Tahoe Environmental Research Center, said in a statement. “At the beginning of the year, clarity was lowered by large stream inflows. At the end of the year, the low inflows resulting from the drought conditions helped to improve clarity.”

Clarity continues to improve in the winter (December-March) and decline in the summer (June-September).

Researchers said the large stream inflows in winter 2012-13 were mainly responsible for the lower values. At 63.8 feet, summer clarity nearly mirrored 2012’s 64.4 feet. Still, summer clarity is trending downward.

Through various programs agencies around the lake are trying to restore clarity to 97.4 feet. Reducing fine sediment from reaching Lake Tahoe is one of the major goals.

Even though the 1997 inaugural environmental summit created the environmental improvement program and more than a billion dollars have flowed to the basin for water quality projects, it wasn’t until 2013 that a regional monitoring program for urban stormwater was initiated in the basin. Urban stormwater runoff is believed to be the major contributor to reduced clarity at the lake.

All of the programs and money spent, though, have nothing to do with the shoreline where most people recreate. It wasn’t until last year that the powers that be decided to make a concerted

Lake Tahoe Clarity Readings

- 2013: 70.1 feet
- 2012: 75.3 feet
- 2011: 68.9 feet
- 2010: 64.4 feet
- 2009: 68.1 feet
- 2008: 69.6 feet
- 2007: 70.1 feet
- 2006: 67.7 feet
- 2005: 72.4 feet
- 2004: 73.6 feet
- 2003: 71.0 feet
- 2002: 78.0 feet
- 2001:

effort to study the muck that is making swimming at some beaches resemble any lake in the U.S. because of the algae and murkiness.

73.6 feet • 2000: 67.3 feet – Source: *UC Davis*