

# Goldman illustrates climate change realities to Lake Tahoe

By Kathryn Reed

STATELINE – Proving scientists are not all nerds stuck in some cubicle plotting the future, Charles Goldman sprinkled his talk to a receptive group Wednesday with food tips – like the best way to dry bushels of lettuce is in a pillowcase on the spin cycle.

It all made sense at the time of his noon talk to Soroptimist International of South Lake Tahoe at Harrah's Tahoe.



Charles Goldman gives a scientific lecture of sorts to Soroptimist on Aug. 18. Photo/Kathryn Reed

Goldman's name is most often used with lake clarity and Secchi disk. The latter is the instrument that looks like a dinner plate for testing how clear Lake Tahoe is.

Limnology, the study of inland waters, is what Goldman is all about. He's been doing so for more than a half century, with the bulk of his work at Lake Tahoe while employed by UC Davis until just retiring. Now he is an adjunct professor at UNR's Desert Research Institute.

In those 50 years, the lake has lost about a third of its transparency. Although the rate of decline has been curbed, Goldman approaches the news with cautious optimism. The lake mixes its waters about every four years.

"If it doesn't mix, transparency gets better," Goldman explained.

After his recap of Tuesday's annual environmental summit, Goldman delved into a variety of topics, most of which centered on the impacts of climate change to Tahoe and the far reaches of the globe.

"The Himalayan glaciers are retreating. You can't imagine the impact when those go dry," Goldman said. "Global warming is a very severe reality."

People in the room nodded as he said fewer blankets are needed at night than years ago. This is because the daily minimum temperatures in the basin are rising.

The water temperature is also increasing. In the last 30 years the surface temp has increased by 4 degrees, Goldman said.

"Sea levels are going to come up. Florida at the current rate will be under water in the next 100 years," Goldman predicted.

Plant and animal life are affected by the changes – even if the numbers sound minimal.

He said for 20 years he has been trying to get Harold Singer, executive director of Lahontan Water Quality Board, to put up a dam at Tahoe Keys to isolate the water so the invasive milfoil weed could be eradicated. As it is now, about \$100,000

is spent on continual mowing. The duff washes into the main body of the lake and spreads.

Goldman said he gave Singer and others an earful again about his idea at the Aug. 17 summit and thinks he may be making progress.

“People didn’t used to slip-side on rocks (in Tahoe) and now they do,” Goldman said, illustrating how the lake is changing with the algal growth as the water warms.