A new low at Lake Waiau

Published September 28, 2013 - 12:05a

By Erin Miller
Lake Waiau’s water levels have reached an unprecedented low, environmentalists said Friday.

The lake, near Mauna Kea’s summit, is a significant cultural site for Native Hawaiians. Nelson Ho, of the Sierra Club, visited the lake Thursday with a group of state and federal officials, as well as cultural practitioners, to assess the dropping water levels.

Once reaching depths of 9 feet, the lake has shrunk to a small puddle of about 1 foot, Ho said.

"It’s been a drought up there, actually," he said, adding the lake usually replenishes itself during a cycle of wet winters following dry summers. "In 2010, the winter was dry. The water took a precipitous decline."

The problem could be more than just one dry winter, he said. Scientists and environmentalists have two prevailing theories about what even allows the lake to exist in the otherwise dry, rocky terrain. One idea is that a clay layer exists somewhere below the lake. The other is a layer of permafrost, Ho said.

"Maybe global climate change, maybe the drought or something has done something to those layers," he said. "It is very disconcerting. There is sorrow and questioning what is going on."

Never in recorded history has the lake completely dried up, Ho added.

Hawaiians have always held the lake in high regard, leaving offerings there.

A resolution, drafted by the Waimea Civic Club, describes some of the lake’s cultural importance.

“Lake Waiau is noted to be a significant natural resource and a sacred site, a source of sacred water used in healing and cultural practices and is used as a sacred repository for the piko (umbilical cord) of babies born to families connected to the mountain,” the resolution said, adding that Hawaiian royalty, including Queen Emma, visited the lake for “physical and spiritual healing.”

Pua Case, a cultural practitioner, said the lake was the most sacred water for Hawaiians, because it was from the highest source. The dropping water levels have more significance than just an emptying lake, she said.

“It feels like, to me, as a Hawaiian, that it’s a plea, a sign that we have to activate ourselves to take better care of our water sources,” Case said.

Case’s pictures of the lake, posted online after Thursday’s visit, have prompted comments from Hawaiians questioning whether Lake Waiau’s guardian, Mooinanea, had abandoned the lake “because we have not taken care,” Case said.

“That gives me hope, because we have not forgotten,” she added.

Department of Land and Natural Resources Natural Area Reserve System Specialist Ian Cole said the department is investigating the cause of the dropping water levels. Department officials are working on signs to warn visitors to the lake not to walk into the now-dried lake bed.

“People are more than welcome to hike to the edge of the lake,” Cole said. "We’re worried people will go to the crusted layer of where the water was and break through.”

Officials are trying to determine, but don’t yet know, if the decline is related to drought, or some other, as-yet-unknown cause, Cole said. Scientists with the Hawaiian Volcano Observatory are also working with DLNR officials on the problem, Cole said, trying to determine if there is a volcano-related cause for the change.