

From: [John Cross](#)
To: [DLNR.BLNR.Testimony](#)
Subject: [EXTERNAL] Written Testimony in support of Agenda item L-1 June 9, 2022 meeting
Date: Tuesday, June 7, 2022 3:16:33 PM

To: Members of the Board of Land & Natural Resources

From: John C.Cross, Land and Water Consultant

Subject: Support for agenda item L.-1; Requesting approval of variance for Keaiwa Reservoir (HA-0049), to allow for more than 5 feet of water depth to remain in the breached dam.

Aloha Board Members,

My name is John C. Cross, a lifelong resident of Hawaii and Hawaii Island. I have been responsible for the Keaiwa Reservoir for many years, first through C. Brewer & Company, Ltd, and then following that being the Land Manager for the Edmund C. Olson Trust No.2. Presently I am not an employee of the Trust, but have been retained by the Trust as a land and water consultant. I have extensive knowledge of the water systems of Ka'u, the tunnels that were bored in the early to late 1920's, and have been responsible for much of the renovation work at the Keaiwa Reservoir. I composed the Emergency Action Plan that is currently on the Hawaii.Dams website.

Starting in 2010 we started removing the stands of trees and forest growth that was on the dam face and crest. Much of the recommended remedial work identified by DLNR engineering division has been accomplished since then. To be clear though, more still needs to be done to bring the dam into recommended compliance. The Trust drained the Keaiwa reservoir in 2011, many years ahead of DLNR's 2016 Notice of Deficiency. Further to that the system of pipes that feed the reservoir have been chained into the CLOSED position. Similarly, the outlet works valve has been chained and locked into the OPEN position. The reservoir has no opportunity to fill.

It has been a pleasure working with DLNR staff over the years, Jimmy Leung, John Dawson and now Tony Koyamatsu and Edwin Matsuda. After many years, and unfortunate delays and stalls, I can now finally see that we are on the right track, both in compliance and in resolution in bringing the dam to a lower height. Austem Drake of SSFM has provided clear and actionable recommendations to the Trust and to DLNR engineering. All of us being on Zoom calls and working towards a resolution.

The plan developed by SSFM will install a large spillway with a 15' wide base at the bottom and some 60'+ at the top. This spillway is many times the capacity of the single 12" PVC inlet pipeline that will supply the reservoir with water.

The downslope users of water being livestock, coffee, macadamia nuts and other truck crop farm tenants need assurance that water will still flow to their farms and ranches. The reservoir will allow for days of backup supply water should the source tunnels or transmission lines experience a failure. Flumes and pipelines permitted under R.P. 7432 sometimes are crushed by falling trees requiring days of repair work. The Trust is looking forward to impounding water again in Keaiwa Reservoir and will only do so after the proper demolition plan and remedial work has been completed.

I will be in Kau on the day of the BLNR meeting but can easily join in for any questions the Board may have by phone.

Respectfully,

John C. Cross