Public Comments Generally

The investigation solicited public comment by mail, electronic mail, or comment on the internet by way of a dedicated web site. Concerned members of the community provided a variety of insightful comments. Following are some illustrative comments, in chronological order.

- This was no more than an act of God and should be treated as such.
- Though the Federal Government has little responsibility with respect to dam safety, the same cannot be said for States. . . . States have responsibility for regular inspection and permitting of new and repaired dams and therefor assumes liability . . . . When I heard the head of DLNR say that the State conducted no inspections since 2002, I was shocked. . . . I encourage you to ensure that the State meets its inspection responsibility and assure that High Hazard dams are inspected regularly and when found to be deficient, as I'm sure Kaloka was, those dams must be breached, repaired, repermitted or remain unfilled.
- I'm sure that the people who constructed the Kaloko dam (and all the other dams in the state) did their best to build a sound, safe structure with the latest technology available to them at the time. . . . Call it "an act of God" . . . It's sad, it's tragic, it's a shame. Circumstances beyond anyone's control. . . . I hope this investigation is not used as an excuse to break every dam and drain every lake in the state. . . . Perhaps it's time to admit that some things just can't be helped despite all our good plans and precautions, admit that no one is at fault, and move on with our lives.
- We're very interested in knowing exactly what and which parties were responsible for the recent dam disaster that took so many lives. We expect a complete, timely, and transparent report.
- The Kilauea Farms Community Association, hopes for an early resolution. The organic farmers rely on the water supply from Kaloko for their livelihood.
- The way to best prevent future dam breaks is to, via vigorous investigation, obtain substantive legal and social results against those found responsible by way of acts of commission or omission. If private property owners on whose land such potentially destructive force is located come to understand clearly that the responsibilities of maintenance, willing allowance of inspections, and not to do anything which compromises the integrity of the dam must be undertaken with the
utmost seriousness in order to protect public safety, and that failure in those responsibilities will, if the dam breaches as a result and lives are lost, property is damaged and/or the environment is degraded, have grave legal consequences, then owners of such lands will be more certain to act responsibly. Further, governmental officials who fail in their duties to inspect dams, follow up on complaints about lands on which dams are located, or, worse yet and for whatever reason, "look the other way" when evidence indicates recklessness or negligence, must likewise suffer severe legal censures. It is only by doing so that other, similar tragedies can be averted.

- It is very sad to lose someone you love. Our friends and family are dear to us all. What happen was the act of nature. Just like Hurricane Katrina. I do not blame the people who own the dam that broke. If the dam was standing for years and years and it broke tomorrow due to heavy rain that super saturated the earth all around it, then it is not the owner fault.

- I know several people struggling for resolution from the devastation caused by the Koloko Dam disaster. Besides the loss of property & life, there are the spiritual and emotional scars. Everywhere they turn for help they continue to be victimized by government agencies passing the buck, or not doing the job that they promised they would.

- The culpability in the Kaloko disaster is mostly the lack of knowledge by the new owners. The former plantation management had the know how to manage the ponds.

- What happens to a dam when you fill in the spillway? It gets bigger and deeper than the wall holding the water back was intended for. Mr. Pflueger filled in the spillway.

- Over the last 30 year much media and formal documentation has been produced pertaining to gross failures of the State of Hawai‘i and Kaua‘i County land use policy and laws. Then there were the frequent public outcries about brazen disregard of state and county land use regulations by large tract land owners, developers and stewards. Despite diverse outcry from our community, government, public and private land use abuses have persisted and often times with complicity from all three sectors. [In my opinion], assigning total blame on any one party would not be accurate or prudent. The loss of life in the Kaloko tragedy must not cloud this investigation, especially since preliminary fact finding already uncovered reasons that a shared responsibility was imminent. What would be possible is for this investigation to be conducted under a standard of zero tolerance for breaches of codified Hawai‘i state and county laws or regulations in force on March [14], 2006 specific to land use, building permits, public and commercial dwellings and other processes and procedures governing the use of land in this tragic instance.

- I have lived on the North Shore of Kauai for 26 years. During this time period Mr. Pflueger has had a reputation in the community for doing whatever he wants regardless of the law or the effect on his neighbors. The first example of this was
the mudslide on the residents of Plia’a after he performed un-permitted grading. It was known in the community that he modified the reservoir on his property in order to operate his pleasure craft (water ski boat and jet skis) – as a result of his actions 7 innocent young people are dead and I hope he will be held accountable along with the appropriate agency who failed to monitor the dams and reservoirs on our little island. I hope that your report will help ensure that this situation will never arise again.

- I currently am managing another dam on Kauai. We want to remove the dam as nobody uses the detained water downstream and there are no plans to use it. You have to be a rocket scientist to be able to just remove or do any modifications.

- Obviously reservoirs (dams) are powerful sources (and vitally important) sources of water storage/irrigation. Farming cannot occur practically without them. . .and as a potential for clean (and yes-safe) alternative energy they are extremely valuable. . . I believe that ultimately the responsibility for the safe use of reservoirs will not be the liability of a sole individual entity. In addition to the state and private landowners, the involvement of county government’s allowance of the sale and development of real estate sold as “lake view” frontage, or “valley” residences in what was once reservoir discharge corridors should be looked at.

- Until your investigation is finished, we cannot deal with the the acute problem of bringing water to the farmers. There is a simple and inexpensive way to do this, but everyone is scared to death because of the legalities. Compounding the damage doesn't help anyone. . . As far as the farmers are concerned, for some this is more a question of economic existence than significant inconvenience. I attended a meeting in Kilauea of affected farmers, I believe in May. I was moved by their hard work and dedication. They have very little time to devote to attending organizational meetings and pursuing remedies, since they really have to work the farms themselves. The Farm bureau, has been quite helpful, but it only takes one bad season to ruin some of them.

- We live on Wailapa Road and heard the water from the reservoir rushing downstream the normally small stream on the morning of the breach. It sounded like several freight trains coming at us. We also participated in the recovery efforts along with the rest of the emergency agencies for a week in the rain and mud after the breach. Please prosecute the one responsible (fullest extent of the law) for this loss of life.

- In defense of Mr. Pflueger, the State seems to be looking to hang this on the landowners (Pflueger & Lucas Trust). Mr. Pflueger isn’t a Dam Engineer. When actually the State themselves by their own admission were responsible to inspect and make any recommendations to these landowners with those Dams on their property on repairs, corrections and or guide these landowners on maintaining these old discontinued DIRT DAMS. The State now admits they haven’t had those entire Kauai Dam’s inspected for sometime. The questions the people of Kauai should also be asking, is who or whom is accountable for the Inspection of these Dams and who allowed the sale of the property below the dam to build in
it’s path. Where are the Realtor’s and Contractor who sold and built all those homes in the path?

- I think the problem of water and mud in the dam wall may have been detected sometime in 1982 to 1986 due to a report authored by a State agency and County agency. I do not have the official title of the report, I believe the DLNR and Kilauea (Kauai) were names mentioned as authors of the report in 1982. Mr. Pflueger bought the property in 1987 from C. Brewer who may have known of this problem from this inspection report. Mr. Pflueger was not told of this problem when he bought his part from C. Brewer and thus did not know of the condition of water and mud in the Kaloko Dam wall. Water coming through the dam wall is probably going on right now and can only be seen if there is no water (falls) coming down from the dam. A report by the State in conjunction with DLNR in 1982 is enough notice to the County of Kauai that a major problem may be developing with Kaloko Dam and no building permits should be given to build homes on property below the dam. Mr. Pflueger is not responsible for giving permission to build below the dam. Is it the Counties' responsibility or another county or state agency (like the DLNR) that did not follow the rules and laws for the inspection of dams?

- I would like to know why the dam did not have proper inspections prior to the dam breaking, I understand that this was a record year for rain. Why the dams weren’t inspected during the rainy season?

**Public Comments Regarding Recommendations**

There were also several comments regarding recommendations for future action. The following comment provided more general suggestions regarding the regulation of dams and the dam rating program, in particular:

1) Voice strong concern to the federal government as to the system of how dams are rated; that is, "high risk" when lots of businesses and/or people are at risk down to "low risk", when few businesses or people are at risk. Because lands below dams become more developed and other uses intensify over time, ratings must be re-visited on an ongoing basis. Ka Loko was considered "low risk". That is inappropriate, given that, had March 14 dawned sunny and warm, residents and visitors alike would have gotten up, out, and about, and many of them would have headed to the beach, including the estuary at Kilauea Stream, a popular haunt for families with young children who enjoy the placid waters there. Imagine the dam then letting go at, say mid-day. As many as a dozen cars might have been washed off the highway and as many as 100 people might have been swept to sea. Low risk? I think not. One life lost is one too many, plus an unborn infant is tragic, many more might have died.

2) Consider a re-wording of the dam rating program. When, after March 14, I first heard about the program and learned that Kaloko was considered "low
risk", I took that to mean that the dam was built in such a way that there was very little chance it could ever breach. I think many other people are similarly confused.

3) Private dam owners must bear the responsibility of maintenance of dams. However, since public safety is at risk, one cannot allow private dam owners to be totally responsible for regular, periodic inspections of dams. A decision must be made...is this the kuleana of the federal government, the state government, or (in the case of Hawai‘i) the county government? In order to be dependable, the system must be regulated and, because of the risks involved, there must be a system of checks, such as periodic audits of the regulatory.inspection agencies. In the case of KaLoko, it appears that the State dropped the inspection ball or, rather, never even picked it up despite a legal mandate to do so. Authorities should be precluded from passing laws indemnifying the government from failure to fulfill their own legal mandates. If they due, courts should determine such inane laws to be invalid.

4) Properties at risk of inundation in the event of a breach should be well-labeled as such, and sales of such properties should be required by law to have a seller's disclosure regarding the risk involved. The National Association of Realtors would be an instrument to make such disclosure mandated.

5) Because of the limited attention span of modern man, each owner of a dam (private or public) should notify the citizenry via public notice, direct mail, and e-mail/web based notification of the areas which would be affected by a breach. www.kauai.gov comes to mind as a great venue for such notice.

The following comment provided specific technical suggestions. Although the previous comments have been provided without attribution, it is worth noting, with appreciation, that this comment was provided by Gordon Tribble, the Director of the United States Geological Survey, Pacific Islands Water Science Center. Mr. Tribble and the USGS have been helpful both to this investigation, and also the State as a whole in responding to this tragedy.

Earthen dams can fail in several ways, but some of the most serious are from overtopping, settlement, and seepage. I am writing to share some information on how these processes can be monitored and thereby promote public safety.

It is practical to monitor the danger of dam overtopping by installing a water level sensor in the reservoir behind the dam. Various methods (satellite, cell phone, land-line phone) can be used to transmit the water level information in real-time.
via the internet to both stakeholder agencies (DLNR, Civil Defense, National Weather Service) and downstream residents. For example, within 2 days of a request from DLNR, the USGS installed real time water level sensors in 4 reservoirs on Kauai. This complements our existing dam monitoring programs at Lake Wilson (Oahu) and Guam. Data from these sensors can be viewed under the Real-Time Stations banner at http://hi.water.usgs.gov. This network, albeit limited, allows people to know the actual water level in a reservoir so they can be assured that it is not in danger of overtopping during flood conditions.

Monitoring for dam stability is traditionally done by periodically measuring the settlement of reference markers on the dam using standard surveying methods. A recent technology known as LiDAR uses laser scans to rapidly and accurately generate a 3-D map of an area that can be compared with previous scans to detect changes (±/− 3 mm). Experts from the USGS California Water Science Center came to Kauai shortly after the Kaloko tragedy and scanned several dams. They will be returning to Hawai‘i in September to repeat this work and determine if there have been changes in the structure of the dams.

Some seepage from earthen dams is normal, and it typical to monitor this by simply measuring seepage from the face of the dam. Special wells known as piezometers are also commonly used to evaluate the movement of water within the structure of the dam. A good example of this is the Honolulu Board of Water Supply program to monitor the dam at Nuuanu Reservoir.