"OAHU WATER SUPPLY? ARE YOU WILLING TO BET YOUR LIFE ON EFFECTIVE LOCAL GOVERNMENT?

The early inhabitants of these Islands regarded land and water as their Ai'na, that which provides food and energy. It was regarded as the essence of life, in fact, as life itself. Today, it seems our Hawaii government and special interests have a different view. Rather than leaving our Ai'na better than we found it, our leadership appears to be systematically degrading or even destroying it, and we are letting it happen?

You all know that there are water supply problems, don't you? You just don't want to believe it, right? You know that we have been a bit short of rain for the past few years. This brings the usual Board of Water Supply circulars on "conservation." That is a good thing, except for the fact that much more action is required! This is especially important, because the experts tell us that it takes 25 years for surface water to percolate down to the water table.

However, when the question of running out of water comes up to our State Legislators and other government leadership, they have recurrently spoken words like – "How can we run out of water, we're surrounded by it?" I suppose that response has been enough to help us relax a bit. After all, no one who has responsibility, seems to really be very concerned?

"BOOMTOWN," a special issue insert in the Honolulu Star Bulletin on Wednesday, 26 September, 2007 documents growth patterns on Oahu from the years 2000 to 2005. During that period, a few places like Kailua experienced a population growth of only .2%. On the other hand, the population of Mililani grew by just under 5,000, or 45.3%. Similarly, the Makakilo/Kapolei areas are on track with 21-22% growth respectively (about 15,100 people), as they expand toward the planned second city on the Ewa plain of about 60, 000?

Now comes the sticky part. In 2005, Senator Akaka and Congressman Abercrombie told the Congress and the President of the United States that <u>Hawaii was going to run out of potable water in 2018</u>. In that year, the President signed into law a revision of an earlier act, now titled "<u>Hawaiian Water Resources Act of 2005</u>." The Oahu portion of the Act stated that the Federal government will pay 25% of the cost of establishing a desalinization capability in the Kapolei area. At this point, it doesn't appear that anyone knows just what that means?

- There is already one desalinization installation on the Leeward coast, which can produce about 5 million gallons a day (gpd), a small demonstration of capability for starters.
- That desalinization process also results in about 7 million gallons of chemical/brine per day getting pumped into the ground. Wonder where that goes?
- Imagine Oahu needing a desalinization capability to produce 50-100 million gallons a day, even more? At least Uncle Sam will pay for 25% of establishing the capability (but not day to day operation).
- SO Now then, what will water cost when so much of it is obtained from this process?
- Will the situation cause diversion of even more water from our streams to support the development on the Ewa /Kapolei plain or simply just to maintain a reasonable lifestyle on our highly populated Island? Think about that.

- Wouldn't a <u>highly visible public plan</u> that <u>everyone is vested in</u> be the best way to address this pending "ship wreck?" The issue is, preserving life as we know it?
 - o Do you want to own land here when Oahu "runs out of potable water?"

Does all that make you nervous? Anyone that is paying attention knows that despite conservation efforts and recycling/redistribution of irrigation water, the water table has been dropping steadily over the past several decades. It is also clear that this cannot continue forever. Ground water supply will finally equal demand. When the water table reaches the lens cap on any of our aquifers, that's it! Drawing salt water from the tap will be normal. Redistribution from other aquifers would really just be a band aid. In fact, you may remember that within the past two years some wells in the "Pearl Harbor Aquifer" have been closed for just that reason. They turned brackish. The net result of this trend is that as ground water sources are reduced, alternate sources must be identified and optimized. Desalinization to produce enough potable water to make up for the ground water no longer available from our aquifers will certainly be required..

Are you ready for this? **The Saipan Experience**: Saipan has allowed itself to virtually tap out its ground water resources.

- Salt water now comes from the tap
- Hotels and some other businesses do their own desalinization (usually by reverse/osmosis), however, the process produces more chemical brine than potable water. Where to put it is an issue.
- Drinking/cooking water and potable water for other purposes is purchased by most, in 5 gallon containers for \$1.50.
 - o For grins: check your water bill. 300 gallons a day (?) divided by 5 = 60, five gallon containers x \$1.50 per container would be, ah, gee = \$90 per day? You ain't gonna do that, are you? A lifestyle change would certainly be in order.
- Stock in Menehune or Aloha Water anyone? I wonder who?

The "<u>Hawaii Water Works Association (HWWA</u>)" Annual Conference just met during the first week of October 2007. It was attended by experts in all fields related to these water issues. In fact it was hosted by the Board of Water Supply. Mayor Hannemann was the opening speaker.

- These are smart, sincere folks
- Initially the forum focused on learning from the early Hawaiian Island settlers and their relationship with the land. The idea is to provide plans and actions that will sustain a wonderful future life in the Hawaiian Islands (in our case, on Oahu). The agenda addressed:
 - o Conservation in general.
 - o Academic instruction on Hawaiian Island hydrology from the US Geological Survey (USGS) organization.
 - o Lots of BWS "plans" and conservation initiatives
 - o Innovative ways to increase production / recycle / etc.
- The instruction and training were great, and the Conservation initiatives and concepts are needed. However, they are certainly no substitute for arresting the descent of the "Water Table" toward the lens caps of the aquifers. Doing more of what has been done all along, in "Boomtown Oahu," just ain't gonna "cut it."

At the HWWA Convention, I found out that there was also a "<u>Hawaii 2050 Sustainability</u> <u>Task Force</u>" kick-off meeting of 1000 key personnel in September, 2007. I was all optimism until I Googled it and got the "<u>Hawai'i 2050 Sustainability Summit Draft Plan</u>" and the "<u>Hawai'i 2050 Issue Book</u>" that accompanies it. Surely the pending crisis was addressed!?

Alas, in both forums, there was no mention at all of "running out of potable water in 2018" as our Congressional delegation has posed to Congress and the President.

- That being the case, there was no focus on specific actions to prevent the 2018 scenario from ever happening.
 - o The small desalinization demonstration plant was not even mentioned.
- To the contrary: in the "<u>Hawaii 2050...Draft Plan</u>" it states that there is a "relative abundance of water...." I almost got vertigo reading that section.

What is needed is some straight talk from our State and County leadership about this? The voters need to know if running out of water in 2018 is predicated on our "BOOMTOWN" scenario. They need to know whether more care is needed with zoning ordnances and other means of controlling development (and losing our agricultural land in the process).

o [Don't tell me again to shut off the water when I'm brushing my teeth, or I'll scream. This is far beyond all that!]

There needs to be some lead time before 2018, in case "it" happens sooner (like in 7 or 8 years?) This may surprise some folks, but we are not in charge of whether it rains or not! Actually, at this point I'd say that you are probably as smart as anyone on this subject, so just pick a date! Don't forget, if the experts are right, heavy rain for the next 10 years won't reach the water table until 2032 (in 25 years) at the earliest.

Remedial action milestones that are measurable, and <u>tracked by the public</u> on a regular <u>basis</u>, will help insure there are no "gotchas" on this in our future. Contingency options must be well thought out in order to keep real solutions proactive, rather than reactive.

No more make believe! No more "Hoping." <u>Leadership and overt action to overcome the potential consequences of failure are required NOW</u>. Solutions must transcend election cycles. There must be responsibilities assigned and accountability for successes and failures! Can you imagine failure here??? The economic impact will be absolutely staggering for everyone! This isn't simply about saving our Ai'na for the children. This will happen soon - in our lifetime.

Our leadership has been admiring this problem so fundamental to our existence for far too long. <u>Decisive actions</u> must be taken that will actually work, actions that are <u>laser focused upon true results that actually solve the supply & demand problem</u> and will <u>stand the test of time</u>. They must be actions that transcend individual personalities and politics, that are durable and have responsibilities and accountability clearly identified. <u>This is all about our life in Hawaii.</u> <u>Get involved folks.</u> It is already late.

Essayist credits statement:

Visit ZeroShibai site: http://www.zeroshibai.com

See these sites:

"Hawai'i 2050 Sustainability Task Force" www.hawaii2050.org/

"Honolulu Board of Water Supply" www.boardofwatersupply.com