Water Commission Gives Parties One Month To Mediate West Kaua‘i Waste Complaint

From the discussion at the August 11 meeting of the Commission on Water Resource Management, it looks like allegations of water waste in West Kaua‘i will likely be resolved only through a contested case hearing. Both sides in the dispute said they’re willing, even happy, to try to mediate a solution, but neither seemed very optimistic. Some of the Water Commission members shared their pessimism, as well.

“Who knows? Maybe sprinkle some fairy dust and everything will change. I don’t know how far romanticizing it we should go,” commissioner Jonathan Starr said of the potential for successful mediation.

Starr’s skepticism stems in large part from responses submitted to the commission in July by the state Agribusiness Development Corporation (ADC) and its tenant organization, the Kekaha Agriculture Association (KAA), to questions posed by Water Commission chair Suzanne Case about who uses the diverted water and how it’s used and moved around via the Koke’e and Kekaha irrigation systems.

As commissioner Kamana Beamer put it last month, “The responses were not too robust.” What’s more, ADC’s and KAA’s responses made it clear that they won’t readily part with even a drop of the water they currently divert from streams in West Kaua‘i that would otherwise feed Waimea River.

In 2013, community group Po’ai Wai Ola – West Kaua‘i Watershed Alliance accused the agencies of dumping unused diverted water and asked the Water Commission to end what it saw as waste. The group also petitioned the commission to amend the interim instream flow standards of the headwaters that feed Waimea River, as well as Waimea River itself, to allow for the streams — diverted for agricultural purposes for the past century — to be restored.
Power Outage: Of the seven utility-scale solar farms that Hawaiian Electric had proposed for O‘ahu, the Public Utilities Commission approved four in late July.

On August 14, it released its decision for the remaining three: all were denied, including the 14 megawatt project that Hawaiian Electric (HECO) suitor NextEra had proposed to be built in Wai‘anae. Also rejected were the power-purchase agreements HECO had made with SunEdison for its proposed 50 MW solar farm in Wai‘awa and with Hanwa USA/Forest City, for its proposed 19 MW installation in Kuna.

In its decisions, the commission noted that the proposed solar farms could help Hawai‘i achieve its goals of energy self-sufficiency. However, it also considered which proposals had the “best likelihood of providing long-term customer value... In reviewing these long-term agreements, the commission is guided by a fundamental principle of continuing to lower the costs and associated risks” to the utility’s power supply portfolio, it stated in the decisions.

One drawback to approving all seven solar farms was the limitation of HECO’s grid, the PUC stated. It is “apparent that the capability to integrate new renewable projects (without curtailing existing renewables) is declining,” the PUC wrote, “at least until HECO can make major system modifications to improve the operational flexibility of existing generating units, bring online new grid-support resources such as energy storage, and make substantial changes to the system load profile to better align customer demand and available energy supply.”

There was also the matter of cost: “despite HECO’s stated attempt to negotiate the lowest possible PPA pricing... the energy prices... are more than triple the reported PPA prices for utility-scale solar projects on the mainland.”

(The solar farms were the subject of an article in the August issue of Environment Hawai‘i.)

Meanwhile on Maui: On August 5, nine days before the Public Utilities Commission issued its final decisions on three O‘ahu solar farms, Maui Electric filed with the PUC its applications for approval of two proposed power purchase agreements with companies proposing to build solar farms, each with a capacity of 2.87 megawatts.

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Quote of the Month

“We’re not denying the public, we’re just not making accommodations for them.”

— Mike Buck, CWRM member
Fish and Ponds in West Hawai‘i: Highlights of the Conservation Conference

The 23rd annual Hawai‘i Conservation Conference, held last month, brought some 1,300 scientists, natural resource managers, and students to the University of Hawai‘i-Hilo.

For four days, participants criss-crossed the lush, sprawling campus as they walked from one symposium to the next. When lecture halls proved inadequate to hold the crowds, nearby classrooms, linked by video to the power-point screen and by audio to the speaker, accommodated the spillover.

In the past, the Hawai‘i Conservation Alliance, which sponsors the conference, has posted on its website videos of selected speakers. To learn more, go to the HCA site: http://www.hawaiiconservation.org.

In this and coming issues, Environment Hawai‘i reports on some of the highlights of the conference.

活力

The Aquarium Fishery
In West Hawai‘i:
Myth and Reality

The aquarium fishery hasn’t got a lot of aloha over the years,” said William Walsh, master of the understatement.

Walsh, an aquatic biologist with the state Department of Land and Natural Resources’ Division of Aquatic Resources in Kona, noted that more than a decade ago, critics of the aquarium fishery in West Hawai‘i engaged in “lots of hyperbole.”

“Nowadays,” he added, “there’s pretty much the same kind of rhetoric,” but it is limited to “a group of environmental zealots on Maui. It’s not broad-scale anymore.”

It’s easy to see why the capture and export of colorful reef fish could be the subject of heated disputes. But is the aquarium trade depleting wild stock of the very fish that draw tourists to snorkel and dive in waters off the coast of some of the state’s ritziest resorts? Or is it a sustainable, well-regulated industry?

Partly in response to the outcry, at the end of 1999, the state put in place a system of Fish Replenishment Areas (FRAs), zones along about a third of the West Hawai‘i coast where no aquarium fishing is allowed.

“Part of the rationale for establishing the network was focused on aquarium management,” he said, “but it was also to serve as a model for the application of a Marine Protected Area network in Hawai‘i more generally,” Walsh said.

The aquarium industry, Walsh continued, is, the most economically valuable inshore fishery in the state, even though, “like all inshore fisheries in Hawai‘i, it’s small-scale in dollar value.”

The fishery expanded greatly from the mid-1980s to the present day, although in recent years, the number of permits to fishery participants has declined. Now, said Walsh, there are around 15 permit holders who fish full-time, with around 40 total permits issued in West Hawai‘i.

In addition to setting aside the FRAs, two years ago the state developed a “white list” of 40 species of fish that may be taken by aquarium collectors. Most of those make up only a tiny fraction of the overall haul. Yellow tang represent more than 84 percent of the total take, Walsh said, with kole making up about 8 percent.

To monitor the effectiveness of the FRAs, the state set up 25 monitoring sites, which are visited four times a year.

Not surprisingly, the FRAs “have more fish than areas where fishing occurs,” Walsh said. However, “even in the open areas, the number of yellow tang has increased by 10 percent.”

Walsh attributes much of the increase to the enhanced protection of the FRAs in association with several years of high recruitment that occur naturally. “Last year, 2014, was the highest recruitment year we’ve had since we began surveys” in 1999, he said.

He provided estimates of overall numbers of fish in both protected and unprotected areas of West Hawai‘i.

From over 2.3 million yellow tangs in 1999-2000, the number has risen to 4.8 million today, Walsh reported. Kole abundance has also increased – from 4.4 million to 7.7 million, he said.

Data from the National Oceanic and Atmospheric Administration and the Division of Aquatic Resources also indicated that these two species are also more numerous in most size classes in West Hawai‘i than in any other place in the state. Even when compared with fish in the Northwestern Hawaiian Islands, he added, “we see the same sort of pattern – more kole in West Hawai‘i than anywhere else.”

Kole, he noted, “is an endemic species. So it’s fair to say there are more kole in West Hawai‘i than anywhere else in the world.”

Yellow tang, on the other hand, is a “super-endemic” species – a species that first evolved in Hawai‘i and then radiated outward to other Pacific islands. Nonetheless, Walsh said, “its densities are highest here in West Hawai‘i.”

For some other species, the news is less encouraging. “Achilles tang, which is a valuable food fish and also the third-most popular fish taken by aquarium collectors, has been going down in most areas over time,” Walsh said, although there has been a small spike recently in protected areas.

The saddle wrasse is “going down in all areas, protected or not. It is experiencing low levels of recruitment.” Aquarium collectors cannot be blamed for this, he noted, since they take less than one tenth of one percent of the estimated population out on the reef.

Rather, said Walsh, it’s just a “natural fluctuation” in recruitment patterns.

活力

The Need for Refugia
From Rising Seas: The Case Of Anchialine Pools

Lisa Marrack recited the familiar and ever more depressing litany of impacts associated with a changing climate.
Little Headway in Talks On Fisheries Sustainability

The Board of Land and Natural Resources’ October 2014 approval of aquarium fishing rules for O‘ahu came with a request that the Department of Land and Natural Resources’ Division of Aquatic Resources begin a discussion among stakeholders on what sustainability means with regard to Hawai‘i’s fisheries. The division was supposed to have reported back to the board in April, but wound up doing so in late July.

“We are still not ready to provide the board with a full detailed explanation” of what sustainability means, said DAR acting administrator Alton Miyasaka.

Even so, he said he brought the matter to the Land Board at its July 24 meeting because he wanted to acknowledge the board’s initial request.

Testimony by Inga Gibson of the Hawai‘i Humane Society suggested that the lack of progress was due, in part, to the inclusion of aquarium collectors in the stakeholder meetings.

As background, she told the Land Board that 98 percent of the testimony received back in October opposed the aquarium fishing rules for O‘ahu. She argued that they were not based on science or broad stakeholder input.

“The collectors approached the department that this was something they wanted to see,” she said.

Gibson said the stakeholder meetings were an opportunity for opponents like her to let their voices be heard.

“We did not feel we were part of the process,” she said.

But at the first meeting after the board vote last year, “we came into that meeting with the most optimism to move it forward [but] nothing was accomplished. We were not aware the collectors were going to be there,” she said.

She asked that the Land Board allow DAR to continue the meetings to help the division clearly define what sustainable means and what its management objectives are for aquarium species.

“We’re talking about more than 200 species collected for the aquarium trade,” she said.

Citing testimony from Chaminade University professor Gail Grabowski, Gibson added that the industry has never been subject to any kind of environmental review, but should be.

“In seeking out what is sustainable … it’s gonna require an environmental review,” she said.

She concluded that, sustainable or not, aquarium fish collecting is wasteful and disrespectful.

“Up to 40 percent of these animals die before they reach a tank in Maryland or wherever,” she said.

Land Board chair and DLNR director Suzanne Case, however, seemed to want to stick to the topic of sustainability and cited research that suggests that the fishery could be sustainable. She recalled that more than five years of catch data from West Hawai‘i — where about a third of the coastline is protected from aquarium fish collecting — show that the protected areas keep populations of aquarium fish going.

Given that, she asked Gibson, “What’s your baseline for what’s sustainable? There are various statistics of what’s happened over the last 100 years. … Fisheries have gone down a huge amount over the last 100 years. … Are you trying to keep it at this level or restore it?”

Case said she hoped those were questions that could be addressed during future stakeholder meetings.

T.D.

Sea levels have risen about 8 inches globally in the last century and are predicted to increase up to half a meter by the year 2050, she noted. By the end of the century, the increase will stand at nearly two meters, though perhaps somewhat less in Hawai‘i – from 1 to 1.5 meters.

“And it won’t stop there, though,” added Marrack, a Ph.D. candidate in the Department of Environmental Science, Policy, and Management at the University of California-Berkeley.

While there has been a lot of concern over the effects of sea-level rise on humans, including erosion and flooding, Marrack is concerned about its impacts on coastal ecosystems — in particular, Hawai‘i’s anchialine pools.

Among those impacts are “changes in wave dynamics, the increased salinity of aquifers, changes in species,” Marrack noted. And these sea-level-rise impacts will be in addition to other stressors that are already affecting anchialine ponds, she said, including non-point-source pollution, over-harvesting, and invasive species.

Anchialine pools have no surface connection to the ocean, but they are connected through porous bedrock. Although they are found worldwide, one of the highest concentrations of anchialine pools in the world exists in West Hawai‘i, along the Ala Kahakai National Historic Trail.

Of the 400 or so pools Marrack has surveyed in the area, there’s a variety of sizes, vegetation, and animals. A few species — including some yet to be described — are found only in Hawai‘i.

But what will happen to those ecosystems as sea levels rise, Marrack asked.

Some pools will be inundated, and, if adequate habitat exists, new pools will be created inland.

“The exciting thing for me,” Marrack said, “is that hypogal fauna — the animals living below the ground — will disperse into new habitat further upslope.” For that to happen, though, “we need to think about protecting these areas.”

And to do that, “we need to step away from the idea of protecting only the area right around that habitat, since the habitat will be moving.”

“We often try to focus on the best habitat in our protection efforts,” she continued. “But we need to look at marginal sites as well — for example, pools that go dry every day at low tide but where, when water comes up, shrimp flood in. These marginal pools are important refugia for shrimp. They’ll become more flooded as sea-level rise occurs.”

Rising ocean water might actually help the native species in one significant way. Marrack noted that tilapia, an introduced fish, were in four percent of the pools surveyed, while poeciliids, such as mosquito fish, were in 24 percent. “These prey on the endemic grazers,” including the native shrimp, she said.

With sea level rise, the shrimp can move into the new habitats where the invasive species cannot, she continued, and this “can help focus efforts for the removal of introduced fish.”

None of this can happen, however, if measures aren’t taken now to protect the lands where the anchialine pools can migrate.

Eons ago, Marrack noted, sea level change happened and the anchialine pools survived. But back then, “the coastal zone didn’t have the impediments to movement that now exist.”

P.T.
Kekaha from page 1

A consultant hired by the Water Commission to investigate the waste complaint later found that, among other things, ADC and KAA are, indeed, dumping unused water collected from several streams into Koke‘e Stream, creating a constant waterfall that would otherwise be dry most of the time. Although attorneys representing the community group have argued that is an obvious waste of water that could be immediately rectified, ADC and KAA insist that none of the water is being wasted.

Their responses to the commission provided only estimates of the amount of water the ADC’s agricultural tenants in Kekaha use. And whether or not those tenants need all of the water, ADC and KAA argued that a constant flow through the system is necessary to maintain it and to feed hydroelectric plants that keep the Mana Plain arable and prevent floods in Kekaha town and the Pacific Missile Range Facility.

Before the responses had been submitted, commissioner Mike Buck had drafted a letter that he thought would provide the parties with some much needed guidance on how to mediate a solution. The letter encouraged the parties to “help identify and quantify reasonable and beneficial uses for any waters diverted from the Waimea watershed.” It also listed some “hopeful outcomes.” They included the following:

• “The return of quantities of currently diverted water to the Waimea River, ensuring its connectivity mauka to makai;
• “Ensuring the seasonal connectivity of all the tributaries feeding into the Waimea River, where feasible;
• “Ensuring the proper and efficient functioning of the Koke‘e Ditch, which is important to supply water to Hawaiian Home lands;
• “Ensuring that any water diverted out of the Waimea watershed is not wasted and is used for reasonable and beneficial purposes; and
• “Bringing the Pua Loa [sic] Reservoir to safe condition and increasing its capacity for public recreation, fire control, and water storage for Hawaiian Home lands.”

At the August 11 meeting, Water Commission staff had recommended that the commission “review and finalize” the letter.

Commissioner Starr said he appreciated the spirit of getting the parties and the community to collaborate on a solution, but didn’t feel there was a great likelihood of solving the issues that way.

“I felt a lot more strongly about that after reading the responses to the request that commission staff had sent out,” Starr said. The ADC’s and KAA’s responses “just seemed like it’s all kind of taking the 5th rather than providing the information, which is part of what needs to be provided under the Water Code,” Starr said.

Starr recommended that the commission set a definite time period — 30 days — for mediation “so it doesn’t end up delaying our public trust duties.”

Commissioner Beamer also seemed skeptical about the benefits of mediation, “especially when the power situation and dynamics aren’t equal.”

“Given that one party is exclusively delivering the water and has been for 100-plus years, I’m not sure if that mediation can be on equal ground,” he said.

“If there were a little bit of movement, even a bit of acknowledgement [by ADC and KAA] that these waters were a public trust resource and historic practices may not be the norm ad infinitum into the future and wastage isn’t a good thing, that would be a reasonable first step,” Starr said, adding that short of that, he didn’t think there was much to discuss and the commission should act on the waste complaint.

It’s Waste!

Earthjustice attorney David Henkin, representing Po‘ai Wai Ola – West Kaua‘i Watershed Alliance, added that the responses ADC and KAA gave the commission made it difficult for his client to participate in mediation.

“In order for us to participate in some sort of mediation, we’re going to need access to information. … We need to have experts evaluate things,” he said.

He suggested the commission approve a scope of mediation outcomes similar to, but much more robust, than those listed in Buck’s letter.

“You will note they consistently take the position, ‘We may not currently have any use but we need to bank the water to fulfill some future need for diversified agriculture or the [Department of Hawaiian Home Lands].’ We need clear direction from the commission that when you’re talking about waste, it’s what’s happening today, not in the future. The [Hawai‘i] Supreme Court made that very clear in the Waiahole case,” Henkin said.

When it comes to waste, anything more than the minimum flows required for off-stream use must remain in the stream, he said.

Henkin noted that in a February presentation by the commission’s consultant, Steve Spengler of Element Environmental, “it was identified there were several headwaters being diverted virtually in their entirety … [and] being dumped back into Koke‘e Stream.” The reason the water is being dumped is because it cannot be allowed to flow into the state’s Pu‘u Lua reservoir, which, for safety reasons, cannot be entirely filled.

Henkin then went on to list other instances of apparent waste of millions of gallons of water a day, including the fact that more than 400,000 gallons of water a day is being sent through a sluice gate just to keep the gate clean.

He later noted that KAA’s responses to Case’s letter excluded “very important information,” including information on all water users, daily flow by dams on the Kekaha system, and electricity use by the irrigation pumps.

“They tell the commission, ‘We need the flow to power pumps.’ There is no information to verify that claim,” he said.

He continued that KAA’s responses to questions regarding water use by association members contradict each other. Its initial response claims that three members — BASF, Pioneer Hi-Bred International, and Syngenta — have an estimated use of nearly 14 mgd. But later submittals from those tenants make clear they don’t use that much, he said. BASF said it uses less than .5 mgd, Pioneer reported it used only 1.16 mgd, and Syngenta estimated that it used at most 2
mgd and an average of 1.79 mgd, for a total of less than 4 mgd.

“Pioneer in their response, even though you asked for data for several years, they said we’re not gonna give you data from 2013-2014 because those were unusual years. … I’m assuming it was very low, which is why they don’t want to share it,” he said.

Henkin then went on to criticize KAA’s water use estimate of 12,000 gallons per acre per day for Wines of Kaua‘i. He said that was double the amount used on sugarcane (a very thirsty crop), four times what’s generally used for diversified agriculture, and five times what the Waiahole ditch proceeding determined was needed for diversified agriculture.

“On their face, these numbers were not credible,” he said.

Finally, he took on ADC’s and KAA’s argument that continued diversion of water is needed to power the hydroelectric plants to power the pumps that prevent flooding. Henkin pointed out that those plants generate ten to 100 times the electricity needed by the pumps.

“They’re using an entire river to generate power and … selling [it] to KIUC, not to run those pumps,” he argued.

Despite all of his complaints, he said his client was happy to mediate, but without direction from the Water Commission, resolution won’t happen on its own.

He noted that immediately after his client filed its petition in 2013, ADC director James Nakatani made various statements to the press that the agency wanted to stop waste. And at a later Water Commission meeting, Doug Codiga, representing KAA, and deputy attorney general Myra Kaichi, representing the ADC, “said we should promptly address these waste issues [and] we’ve had the same conversation at every meeting since,” Henkin said.

“They’re very nice people, but we’re not going anywhere because they hold all the cards,” he said.

He urged the commission to act quickly on what he thought was ample evidence, collected by Spengler, of waste.

“If at some point in the future, the DHHL or anyone were to come in saying we need this water, then the commission would exercise its discretion to balance the public trust. But in the meantime, there is no use for this water,” he said.

Should the commission decide to order mediation, rather than order ADC and KAA to show cause why they should not have to restore unused water, Henkin said, “we should be given a very short leash to perform and produce. We’re going to need access to the sites, we’re going to need to be able to get into the ditch. So we’re not just taking their say so.”

Commissioner Beamer asked Henkin whether it would be helpful if the commission directed the parties to devise a plan to eliminate waste from Waiakoali Stream while maintaining the Pu‘u Lua reservoir at capacity.

Henkin replied that he’d agree to that, with an implicit finding by the commission that there is no arguable use of that water.

“I think the commission needs to say we find that it’s waste and the parties need to work on a solution,” he said.

No, it’s not!

When it was his turn to testify, Codiga, representing KAA, told the commission that Henkin’s presentation “took us a lot closer to a contested case hearing” and opposed any attempt by the commission to make a decision on the waste complaint without a more complete record.

“Our submission does not support the relief that was suggested [by Henkin]. It does not,” Codiga said. “We think this can be done without a determination … that there is such a thing as waste.”

KAA consultant Basil Gomes then took issue with Henkin’s claims about the amount of water diverted.

“He gave you a lot of very large numbers of how much flow is being diverted from the stream. … They are representative of a snapshot in time, not flows of a day-to-day basis,” Gomes said.

Gomes added that if the flows are reduced below maintenance levels (which he could not quantify), it would be extremely unlikely, given the costs, that the upper reaches of the irrigation system would ever function again. (Henkin later rebutted Gomes’ claims, noting that Spengler found one of the diversions had been concreted over to maximize diversion. “It wasn’t designed to take 100 percent of [Waiakoali] Stream,” he said.)

Although they acknowledged that KAA and ADC had provided a lot of information, Case asked if there was any information the KAA didn’t provide.

“All relevant information was provided,” Codiga replied.

Commissioner Beamer, however, reminded Codiga that KAA member Pioneer Hi-Bred chose not to provide estimates of its 2013-2014 water use because those years were atypical.

“We asked you for all relevant data. One of your parties chose not to provide two entire years,” Beamer said.

Codiga’s suggestion that obtaining data for those years could be handled by a follow-up request from the commission seemed to upset Beamer, who said the KAA had already asked the commission to provide a written request for information, which Case did in May.

“Now you’re giving us data leaving out two entire years and now you want another request?” Beamer asked.

He continued that KAA failed to provide any justification for why it was taking water from Waiakoali Stream and dumping it into Koke‘e Stream, other than that continuous flow is needed to preserve the ditches.

Deputy attorney general Kaichi attempted to explain, in part, the apparent incompleteness of the submittals by KAA and ADC.

“The question is how much [water] have we been using now. … Whether that information was proprietary, we had a lot of discussion on that. The seed companies disclosed what they could,” she said.

Moving Forward

Although it seemed nearly impossible for the attorneys involved in the case to agree on anything, Kaichi did echo the suggestions made earlier by Earthjustice that some “low-hanging fruit” could be addressed in mediation. Restoration could occur gradually, “not go from 9 mgd to 2 mgd” as Henkin had suggested for one portion of the irrigation system, she said. “The risk of decreasing the water flow by 75 percent is
Agricultural Tenants in Kekaha Object To Basic Questions About Water Use

Although it’s standard for the Commission on Water Resource Management to seek information about how diverted stream water is being used so that it can determine if those uses are reasonable and beneficial under the state Water Code, the Kekaha Agriculture Association, at least, and in particular its seed company members, seemed to think it was none of the commission’s business.

In May, Water Commission chair Suzanne Case posed more than a dozen questions about water usage to the KAA and the state Agribusiness Development Corporation (ADC) as a way to obtain the depth of information the commission needs to decide on Po‘ai Wai Ola – West Kaua‘i Watershed Alliance’s 2013 waste complaint and petition to amend interim instream flow standards of several West Kaua‘i streams and Waimea River.

In KAA’s response to Case’s questions, BASF, Pioneer Hi-Bred International, and Syngenta stated that they objected to being asked to estimate their water use “to the extent that it does not properly take into account and consider the fact that such estimates may have limited predictive value because agricultural activities vary greatly as to acreage, crops, land ownership and other parameters,” including changes in weather, business needs, and market demand.

The KAA stressed that diversified agriculture is a core value protected by Hawai‘i’s Constitution and “a fundamental goal of the ADC.” And because the agency is required to conserve and protect agricultural lands, promote diversified agriculture and assure the availability of agriculturally suitable lands, “[t]his casts doubt on the ultimate relevance of such water estimates to commission evaluation of the issues in this proceeding,” the KAA stated.

BASF, Pioneer, and Syngenta object to the information request because “irrigation uses must properly consider the highly integrated and interdependent nature of all aspects of the agricultural infrastructure,” the KAA wrote.

Still, it answered some questions.

For one thing, it did attempt to provide an estimate of water use. No actual measurements have been taken and are not required by any of the license agreements between the ADC and the KAA.

KAA borrowed the Kaua‘i Water Use and Development Plan’s estimate of water needs for diversified agriculture — 3,400 gallons per acre per day — and applied that to its current license areas. BASF’s 977.25 acres would require 3.32 mgd. Pioneer’s 1,337.07 acres would require 4.55 mgd. Syngenta’s 1,785.07 acres would require 6.07 mgd.

“Total estimated use for these lands is 13.94 mgd,” the KAA stated. (The ADC in its response noted that “there has been some discussion” over whether seed corn crops should be classified as diversified crops. Also, in a later submittal, BASF, Pioneer, and Syngenta provided much lower estimates of water use.)

too high. We don’t know what the damage would be, what the cost would be.”

Kaichi envisioned that mediation could produce a plan where the parties would be “slowly chipping away at each little fruit” and where water would be restored “board by board, drop by drop.”

“I don’t believe we are ready to throw in the towel,” she said, although she admitted that resolution may be reached only after a contested case hearing.

Starr, however, saw ADC’s and KAA’s wish to proceed with mediation as merely a stall tactic.

“I really have great difficulty in seeing how this is going to go anywhere. The diverters are saying there’s no wastage and there is no need to provide more information and have difficulty providing access… This is just an attempt to kick the stone down the road and give them a few months to use or abuse public trust waters without any action,” he said.

He again recommended giving the parties a month of discussion and requiring them to report back to the commission.

“Perhaps some magic will happen,” he said, but added, “I see nothing but red flags here.”

He then recommended that staff evaluate KAA’s and ADC’s responses and start drafting an order to show cause letter that the commission could approve at a later date.

Case encouraged the parties to proceed on their own with discussions and report back to the commission in its September meeting.

At the September 16 meeting, the commission would gauge the progress that had been made and “we [will] have a good sense by then whether we need to take affirmative action,” she said. — Teresa Dawson

KAA argued that it manages the agricultural infrastructure in a manner that “does not involve dumping or waste.” The Koke’e and Kekaha systems provide water not only to KAA members, but also to kuleana and taro farmers using the Menehune ditch system, the Department of Hawaiian Home Lands, the Department of Land and Natural Resources for recreational fishing and public sanitation benefiting tourism, and Kaua‘i County to operate the Kekaha landfill, “all for the public benefit,” the KAA stated.

What’s more, the organization argued, pumps powered by the diversions keep the water table low enough to allow farming and keep the area from flooding.

Since 2003, KAA has diverted 22.7 million gallons of water a day from headwater streams to supply the Kekaha irrigation system. That’s compared to 31.1 mgd diverted between 1980 and 1999 by the Kekaha Sugar Co., the KAA pointed out.

“The KAA agricultural infrastructure requires approximately 21 mgd for irrigation purposes and to maintain these reasonable and beneficial uses,” it stated, adding that over and above the 13.94 mgd needed for BASF, Pioneer and Syngenta, “KAA estimates that additional ADC lands not licensed to ADC members increase this total to 17.64 mgd.”

From the Koke’e irrigation system, KAA estimated that Wines of Kaua‘i receives 0.29 mgd.

Since 2003, KAA diverted an average of 8.3 mgd from headwater to the Koke’e system, compared to 15.2 mgd diverted for sugar between 1979 and 1999, KAA stated.

“The KAA respectfully submits that the release of approximately 300 gallons per minute or 0.4 mgd is necessary and appropriate to protect public health and safety and safeguard the operational viability of the Koke’e system before and after the Kauhao sluice,” it continued.

The KAA stated that maintaining flow throughout the Koke’e system is necessary to keep its tunnels from drying, cracking, and possibly collapsing and to suppress vegetation growth and debris accumulation.

The KAA made the same argument for diverting 0.4 mgd into the Kekaha system at the end of the Koke’e system. The flow, it stated, was necessary to keep the unlined ditch between the Pu‘u Lua reservoir and the field 635 settling basin from drying out, cracking, and possibly collapsing.

“If this occurred, it would eliminate the only source of water available to users of the Menehune ditch system and kuleana users when the Kekaha system is shut down for repairs,” it stated. — T.D.
Debate Public Attendance at Kekaha Site Visit

Wow. Where do I begin?” said a stunned Mike Buck.

Buck, along with the rest of the state Commission on Water Resource Management (CWRM), had just heard state deputy attorney general Myra Kaichi suggest that members of the public wanting to join a site visit of the Kokeʻe and Kekaha irrigation systems must provide the state with some kind of indemnity, and perhaps even a doctor’s note. He and other commissioners seemed to think that was excessive.

On October 20 and 21, to better grasp the factors involved in a 2013 petition seeking to restore flows to streams that feed the Waimea River, the Water Commission plans to visit various ditches, stream diversions, pumping stations, hydropower plants, and a reservoir along the Kekaha and Kokeʻe irrigation systems. But because some of those sites are difficult to access and require a four-wheel drive vehicle to reach, commission staff proposed last month that the commission vote to make the visit a “limited meeting,” which allows for the exclusion of the public.

Under the state’s Sunshine Law, the commission can exclude the public from a meeting held at a location that is dangerous to health or safety or that makes public attendance impracticable. Those meetings must be videotaped and the tape must be made available at the commission’s next regular meeting.

In this case, CWRM staff suggested that on each day of the site visit, public testimony be taken at the headquarters of the Kekaha Agriculture Association, which operates and maintains the irrigation system for the state Agribusiness Development Corporation (ADC).

Buck wanted to know whether the public would be excluded even from those portions of the site visit that are on public land and accessible via public roads.

“We’re not denying the public, we’re just not making accommodations for them?” he asked.

Earthjustice attorney David Henkin, representing the petitioner Po’ai Wai Ola, also said it wasn’t clear from the staff’s submittal if the visit would be open to the general public. He noted that the commission had already stated that the petitioner, at least, would be allowed on site visits.

Some of the sites are on “very, very rough roads,” he said, adding that “it’s going to be quite an effort to get to some of these sites, particularly ones in the valley.” However, he said, the Hukipo flume where the KAA measures the amount of water leaving the watershed was relatively accessible. The flume was not on the list of sites to visit, but Henkin encouraged the commission to add it.

Deputy attorney general Kaichi, who advises the ADC, stated that the agency wanted the public excluded for health and safety reasons. Should the public be allowed on the site visits, "we would like to be given some assurances," she said.

“We would like to discuss with [CWRM] staff, do we want waivers from attendees, or a release of liability, insurance coverage? … Perhaps we don’t need a doctor’s certificate, but something from their primary care physician stating they are allowed to participate,” she said.

After Buck expressed his initial shock, he asked Kaichi whether she was talking about all the stops, even those on public land or public roads.

“Even the flumes?” he asked, adding that the ADC was only given management responsibilities (not ownership) over the irrigation systems.

Kaichi clarified that the ditches had been set aside to the ADC, but not the government roads or the lands it manages.

“We have jurisdiction over the diversion areas,” she said.

Buck, a former administrator for the Department of Land and Natural Resources’ Division of Forestry and Wildlife, which manages land in the area, countered that the diversions are improvements on the land.

“I find your request kind of unbelievable. I don’t know where to begin,” he said.

Commissioner Jonathan Starr, who seemed to think Kaichi was suggesting the commissioners, not just the general public, must indemnify the ADC, said such a position was a “complete and total abuse of the public trust.”

“Keeping the public out … I’m frankly amazed by that tack. I feel this is completely an abrogation of your duties for the state of Hawai‘i. I feel this is an attempt to keep this process from occurring as it should,” he continued.

“I really think you should examine what your responsibilities are as a deputy AG and ADC should examine its responsibilities. … We have a right and an obligation to go there and understand this system,” he said.

Kaichi replied that she was not asking the commissioners to be excluded.

“ADC does not want the general public,” she said, adding that she did not agree with Buck’s suggestion that members of the public can attend if they have their own four-wheel drive vehicles. She said she did not object to the attendance of representatives from Earthjustice or the ADC “and our operators.”

Water Commission chair Suzanne Case reiterated Buck’s point that some of the sites to be visited are on public lands accessible by public roads.

“The public has a right to participate, but it’s not handicapped-accessible,” she said.

“I hear the commission,” Kaichi replied.

The question of whether or not the public would be allowed to visit any of the sites on public land, and who, exactly, would be allowed at the meeting, was never really answered when the commission voted to approve the limited meeting. Before the vote, Kaleo Manuel, a planner with the state Department of Hawaiian Home Lands, said that his agency would also like attend the site visit. The agency owns some of the land over which the irrigation system crosses.

— T.D.

For Further Reading

More background on the issues raised in this article and our cover story can be found in the following articles, available on our website, environment-hawaii.org:

“Mediation Over West Kaua‘i Stream Diversions May Hinge on Response to Information Request,” July 2015;

“Water Commission Stresses Importance of Early Assessment of Cultural Impacts,” March 2015;

“Kaua‘i Pumped Storage Project Wins Preliminary Approval of Land Lease,” December 2014;

Water Commission Rebuffs NPS Effort To Shrink Proposed Designation Area

Two years ago, the National Park Service petitioned the state Commission on Water Resource Management to designate the Keauhou aquifer, in West Hawai‘i, as a water management area. The Park Service’s intention was to ensure that the subsurface groundwater flows to the anchialine pools and fish ponds in Kaloko-Honokohau National Historical Park would not be impaired by nearby development.

The petition has been strenuously opposed by many in the community and by the administration of Big Island Mayor Billy Kenoi.

Partly in response to that, last March, the Park Service asked the Water Commission to consider designating an area smaller than the entire Keauhou aquifer system. In its petition, the Park Service took note of the fact that the Hawai‘i Water Code never defines what constitutes an “area” that is subject to designation.

“When it can be reasonably determined … that the water resources in an area may be threatened by existing or proposed withdrawals or diversions of water, the commission shall designate the area for the purpose of establishing administrative control over the withdrawals and diversions of ground and surface waters in the area to ensure reasonable beneficial use of the water resources in the public interest,” the code states.

In its March petition, the Park Service observed, "Despite using the term ‘area’ three times in this section" – Section 174 C-3 – “the water code does not contain any independent definition of the term.” Also, its petition notes, Water Commission rules do not spell out what an “area” is.

Commission staff looked at potential boundaries for defining an “area” for designation smaller than the entire aquifer, said Roy Hardy, acting director for the Water Commission.

“The Water Code is flexible,” he said. So the staff looked at whether designating an area defined by the basal aquifer, ahupua’a boundaries, or a combination of them might meet the needs of the Park Service.

Designating only the basal lens “doesn’t make sense,” he said. Ahupua’a boundaries make a little more sense, since they combine high level and basal sources – “but not perfectly,” Hardy said.

“Ahupua’a boundaries don’t relate that well to basal water,” he continued. “Even though they do go mauka-makai, they’re very thin.”

Hardy presented a map of a combined basal/ahupua’a area, but noted that even with this, the northern half of the park would fall outside the proposed management area.

Whatever the commission decides, he added, “it needs to make hydrologic sense.” And “chopping up” the aquifer doesn’t, he said. “Surface water disperses, and groundwater isn’t confined to the ahupua’a strips.”

“The scale we have now,” he said, referring to the entire Keauhou aquifer, “is the appropriate scale.

On top of everything else, he said, there’s another issue: “carving up hydrologic units into smaller areas sets a precedent for more localized, individual disputes, which staff doesn’t feel is the intent of the Water Code.”

Peter Fahmy, an attorney and policy analyst with the National Park Service, explained that the petition was filed “to get a sense of the authorities and flexibility that the commission has with respect to management of Hawai‘i’s water resources.”

“We’re hoping that this is finding out whether we could shrink the footprint of management,” he said.

Section 174 C-1, he continued, “says that the designation of an area – what we were focusing on in our petition – is for the purpose of establishing administrative control over withdrawals and diversions … in the public interest …

“As we see it, the pre-eminent consideration in defining a water management area is what is necessary to deal with the issue? Mr. Hardy referred to this as just looking at a local situation.

“Yes, that is oftentimes the case. You’re looking at a local situation when dealing with public trust resources. They may be site specific – for example, a fish pond on Moloka‘i, anchialine pools, important cultural resources associated with springs – so, yeah, it is local….

“Let’s try to find a management solution that tries to deal with the issues. We don’t need to assert management over larger areas when a smaller one will do.”

Benjamin Kudo, an attorney representing the Board of Water Supply, said his client agreed with the staff’s recommendation. But he went on to offer an alternative, based on Section 174 C-10, which states: “The commission shall have the jurisdiction statewide to hear any dispute regarding water resource protection, water permits, or constitutionally protected water interests, or where there is insufficient water to meet competing needs for water, whether or not the area involved has been designated as a water management area.”

“Also,” Kudo added, the commission’s rules give it “the ability to negotiate, have a hearings officer, et cetera.”

“This matter involves a small group,” he said. “We, the county, agree that the park should be protected … but we don’t agree that we should use designation to do this.”

Although some commissioners appeared ready to grab at Kudo’s proposal, the matter at hand was the Park Service’s petition.

And on that score, there were no commissioners willing to split the aquifer into smaller parts for designation – at least in this case.

Commission chair Suzanne Case pointed to the difficulty of “carving up the water management areas that we collect data on. Once you start to carve that up, you get into much more confusing pieces. The best approach is to keep it as is.”

Commissioner Jonathan Starr also agreed with the staff’s position. “I don’t see any hydrological basis for [management] on a specified area around the park, other than that it is the park. Also, it creates a situation where we treat water management as spot zoning rather than … [using] hydrological units.”

Kamana Beamer, representing the Big Island on the commission, said he, too had “concerns about breaking up the bigger water management area … but this is just one stage in the understanding of these issues. It’s not about who controls the pond. In future meetings I hope we talk about how we manage that resource better than who owns it.”

The commission approved staff’s recommendation unanimously. — P.T.
Hawai'i County Officials Are Grilled Over Terminology in Water Plan Update

The Hawai'i County Department of Water Supply has been revising the Keauhou section of its Water Use and Development Plan, under the watchful eyes of the staff of the state Commission on Water Resource Management (CWRM), which ordered the revision last December so that it would have the information necessary to decide on the National Park Service's petition to designate the Keauhou aquifer system as a Water Management Area.

But when the commission met last month in Kona to review the county's progress, at least one member was not pleased to learn that the DWS had not included in its projections for future water use most of the 10 villages along a transit corridor that have been included in the county's Kona Community Development Plan.

After Lenore Ohye, of the commission's staff, gave an overview of work on the plan since last spring, Maui commissioner Jonathan Starr noted that the plan makes repeated references to “anticipated water demand.”

“That's not a term I had seen before,” he said, adding that the Hawai'i Water Code itself “mandates us to consider authorized planned use.”

“Before we accept a demand model based on anticipated water demand, I would want to have a legal analysis of what it means to use that as the benchmark instead of authorized planned use.”

Under the Water Code, one of the triggers for designation is when authorized planned use approaches 90 percent of an aquifer's sustainable yield. Under the county's draft water plan, the “anticipated water demand” in Keauhou is around 75 percent of sustainable yield.

Ohye replied to Starr, stating that, “from the staff's perspective, we think it's interchangeable… A semantic thing.”

Commissioner Kamana Beamer from the Big Island asked Ohye if the “authorized planned use” term had been substituted with any other term in any other county. No, Ohye replied.

Keith Okamoto, manager and chief engineer for the county DWS, then informed the commissioners that, as commission staff themselves explained in a prior submittal to the commission, “authorized planned use was accommodated differently each time” the commission dealt with four previous groundwater management area designation petitions. “So we came up with that term” – anticipated water demand – “to come up with future water needs,” he said.

So, asked Beamer, “does the county object to referring to the numbers as authorized planned use?”

“Our concern,” Okamoto replied, “in light of the history of authorized planned use, was to see that it could be used appropriately if we call it such and it turns out to have a different definition down the road.”

Starr jumped in. “You're skating around, so it becomes statutorily impossible to pin you down,” he said. “You're creating another term that's slightly different so you manage to sneak out from the language and the mandates and the letter, if not spirit, of the state Water Code….. If [the terms] are equal, why not just use the one that's in [the Water Code] and not create new language?”

Okamoto objected strongly to Starr's characterization. “It was never our intention to skirt any issue or hide behind any words… We don't intend to hide anything from staff. We try to give them the best available information so they can present that to you folks.”

Linda Chow, the deputy attorney general advising the commission, attempted to pour oil on the troubled waters when she advised the commissioners that they themselves would be the ones to determine if the terms were interchangeable.

'A Farce'

And then came the public testimony.

Jonathan Scheuer, a consultant to the National Park Service and vice chair of the state Land Use Commission, pointed out to the commissioners the fact that the county's projections were only for areas that had received final zoning for a given use. “There's a difference between authorized planned use and zoning,” Scheuer said. “Zoning comes at the end of the development process, right before you build. It's shorter-term demand. The long-term things are what's in the state Land Use District, county general plans.”

By not considering elements in the county's longer-term plans, Scheuer argued, the county was able to low-ball figures in its “anticipated water demand” projections. He noted that the county had estimated that its “transit-oriented developments” would have a water demand of just 1.85 million gallons a day (mgd).

“But the [Kona Community Development Plan] proposes 10 or more transit-oriented developments. Kaloko Makai alone said its potable water demand would be 2.85 mgd. So the entire demand for the Kona CDP in this Water Use and Development Plan is less than just one transit-oriented development.” (Kaloko Makai is a proposed mixed use development that would span more than 1,100 acres in Kaloko and include up to 5,000 new residences, a hospital, schools, commercial space, parks and a judiciary complex.)

Duane Kanuha, the county's planning director, attempted to explain the county's rationale.

“The Community Development Plan is related to transit-oriented-development concepts – communities with a higher density, but with connectivity,” he said. “The difficulty is that in order to effectuate these TODs, we're looking at between 500 and 700 million dollars in improvements. … Which is why, based on the projections for the Kona CDP, we don't see any implementation of these TODs for a long period of time. … Right now, most of those TOD's don't have authorized planned use. They're not in the Urban [land use district], not in our zoning.”

Starr: “So the term was changed from authorized planned use to anticipated water demand because you did not want to acknowledge those 10 TOD centers as part of it. So you thought by changing the term you could avoid dealing with the demand that they would add to the demand side of the plan?”

Kanuha's reply was hardly helpful: "The Department of Water Supply doesn't intend to change the definition," he said. “Instead, they're going to provide this projection under the different definition.”

"So this water plan, the demand side, is a farce!" Starr said, unable to hide his anger.

Okamoto then attempted to clarify the county's methodology: "If it was a TOD but didn't have zoning classification, it wasn't included. It doesn't have the authority to proceed. … It is not a farce." "So," Starr asked, "if any of these [TODs] are headed for approval, is there the intention to approve changes to the Water Use and Development Plan before they can be entitled?"

Yes, Okamoto replied. The plan is intended to be a “living document,” he added, which would be updated when future land
O‘ahu Water Use Plans Include
‘Cushion for Climate Change’

When it comes to preparing Water Use and Development Plans, the Honolulu Board of Water Supply’s approach is the “gold standard,” according to Water Commissioner Jonathan Starr. Rather than simply projecting future water needs and discussing where new water sources need to be developed, the BWS’s plans also incorporate watershed management needs and recognize the potential impacts of climate change and the need to protect native Hawaiian rights and traditional customary practices.

In fact, the BWS actually calls the plans Watershed Management Plans rather than Water Use and Development Plans.

BWS Water Resources Program administrator Barry Usagawa told the Water Commission last month that for the entire island, the potable water demand is expected to reach 89 mgd over the next 30 years and that the BWS will have developed a supply of 102 mgd to meet that need. The extra 13 mgd is a “cushion for climate change,” he said.

By conserving water and reusing treated wastewater, O‘ahu will not only conserve its potable water sources, but it will also drastically reduce the need over the next few decades to desalinate seawater, which is a very expensive process. The BWS’s plans anticipate that several million gallons a day of recycled water will be used to water agricultural lands and for landscaping. As a result, Usagawa said the projected amount of desalinated water needed has been reduced from 15 million gallons a day to a mere 1.5 mgd.

The agency has already completed plans for O‘ahu’s Wai‘anae and Ko‘olau Loa districts and is working on plans for the North Shore, ‘Ewa, and Central O‘ahu districts.

— T.D.

Further Revisions

CWRM staff had requested that the commission approve progress to date on Phase I of the county plan update and a scope of work for Phase II, which is to focus on water supply. (In addition to updating the Keahou aquifer section of the plan, the county is also having its consultant, Fukunaga and Associates, update the Waimea section to take account of growth in that area.)

Several commissioners were concerned that the demand projections dealt only with consumptive uses, with no allowance made for the water needs of resources held in the public trust, traditional and customary uses, and requirements of native ecosystems, including those in Kaloko-Honokohau National Historical Park.

In February, the commission had voted to require the county, as it prepares revisions to its WUDP, to front-load its assessments of the impacts water withdrawals may have on traditional and customary native Hawaiian practices and on the environment. The county was to start by using available published information from environmental assessments and the like, and provide a preliminary report to the commission by May 30. On May 27, the DWS informed the commission that it had reviewed more than 200 such reports prepared from the 1990s to the present.

“Only one report was found to address the potential impacts of pumping water and the potential impacts to [traditional and cultural practices] as well as other habitat concerns.”

At the commission’s August 17 meeting, Ohye reported that the county had begun to do a cultural assessment but was “committed to continuing that.”

“Your concern over environmental and cultural needs is very, very important and needs to be part of the plan,” Ohye responded. The county agreed that it would take account of these issues in the next phase of the water plan update.

With that, the commission voted to authorize the county to move forward with Phase II of the water plan update. It also gave its preliminary approval to the Phase I work, with the understanding that it may require revisions in light of findings obtained in Phase II.

— Patricia Tummons
Commission Sets Precedent in Approval Of DHHL Water Reservation in Kona

Last month, the Commission on Water Resource Management took an unprecedented, but widely applauded, step when it approved a request from the Department of Hawaiian Homelands for a reservation of its water rights in Kona.

The DHHL requested last December that the commission reserve 3,398 million gallons a day of water, the amount that it said was needed to serve as-yet undeveloped lands it owns in the Keauhou aquifer area. The department has around 1,500 acres in this region and is expecting to receive from the state around 360 more. If the department’s plans for full build-out are realized, DHHL beneficiaries will occupy more than 2,200 residential units on 600 acres, with the remainder occupied by commercial, industrial, agricultural, and community uses.

The Hawai‘i Water Code, Chapter 174C of Hawai‘i Revised Statutes, anticipates that the Water Commission will accommodate DHHL needs through the process of reservation of water rights. So far, the commission has approved three water reservations for DHHL, all in the mid-1990s, and all in areas that have been formally designated as groundwater management areas (two on O‘ahu, one on Moloka‘i).

What sets the Keauhou reservation request apart from the previous three is that it is for water in an area where designation has not occurred.

William Aila, former head of the Department of Land and Natural Resources and now deputy director of DHHL, acknowledged this in his testimony to the commission: “We are asking the commission to work with us to confirm that reservations will be protected in non-designated areas, the same as in designated areas. This is all new.”

Although the commission has adopted rules to address DHHL reservations in designated areas, it has none in place for reservations in areas where designation has not occurred. This prompted commission chair Suzanne Case to ask Roy Hardy, of the commission staff, what mechanisms existed to ensure that the reservation is honored by all parties involved.

“Good question,” Hardy replied. “Historically, the way the [Water] Code speaks to it, and the way we’re asking, is that this reservation be considered as part of authorized planned use” — in other words, that the county include the DHHL reservation as part of its future anticipated demand.

If by including this the authorized planned use “kicks us up to 90 percent” — one of the triggers for designation — “then that mechanism [for designation] will kick in,” Hardy said.

“So when the designation process kicks in,” Case said, “the mechanism is created” for ensuring that the DHHL reservation is protected.

Commissioner Kamana Beamer added that under the state Constitution, “the commission is charged with the security of the public trust. So whether or not [an area] is designated, that doesn’t get the commission off the hook in terms of its responsibility to the public trust.”

The reservation of water in the Keauhou area, he added, “is an interesting opportunity to the commission to ensure we’re meeting our obligations in non-designated areas.”

Alan Murakami, an attorney with the Native Hawaiian Legal Corporation, addressed the commission. “I’m appearing today in an unfamiliar role,” he said, going on to note that he had often been in litigation with both CWRM and DHHL. But today, he added, “we are in line with the department, as we have been in prior occasions involving the pursuit of water rights that remain unenforced.”

“Frankly,” he said, “this should not have been the first time reservations have been sought in a non-designated area. Under the Constitution, it is important that this be done as a legal matter, but it is also important from a planning perspective. Under law, it’s very clear that Section 221 of the Hawaiian Homes Commission Act, imposed by Congress upon the state as a condition of statehood, the rights of the department are primary.”

— Alan Murakami

“Under law, it’s very clear that ... the rights of the department are primary.”

— P.T.