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Watershed Decisions

Justice delayed is justice denied. That saying is as true of water rights as it is of civil rights.

In the years-long process of deciding flow standards for streams in East and West Maui, every day of delay inflicts an injustice on those who hold rights to instream water uses. And every day of delay bestows a boon on those who benefit from the status quo.

Even after the state Commission on Water Resource Management announced its decisions in these two disputes, justice continues to elude the holders of stream rights.

It is unreasonable to expect streams and holders of rights to their natural flows to wait years more, while appeals run their course. Simply put, the commission is irretrievably broken. It's time to put it out to pasture and come up with something new.

IN THIS ISSUE

2

Editorial: The Water Commission: An Idea Whose Time Has Passed

5

Maui Agency Is Sued Over Plan to Have A&B Put Stream Water in Municipal System

7

Water Commission Amends Flows For Six of 19 East Maui Streams

11

A Q&A with Lawrence Miike

Commission's Order on Na Wai 'Eha Baffles Its Most Experienced Member

A fter all the evidence and expert testimony presented during the Na Wai 'Eha contested-case hearings in 2007 and 2008 on the minimum flows necessary to protect stream habitats and other instream values, which numbers did the state Commission on Water Resource Management finally go with?

The ones that were never intended to be used for that purpose, at least not exclusively. Ones that were proposed as part of a U.S. Geological Survey study on how Waihe'e River and 'Iao and Waiehu streams would respond if water was allowed to flow to the sea past diversions installed by Hawaiian Commercial & Sugar and Wailuku Water Company a century ago.

Back in 2006, when the contested-case hearing over a petition to amend the interim instream flow standards (IIFS) for Waihe'e River, and 'Iao, Waikapu, and Waiehu streams (collectively known as Na Wai 'Eha) and over water use permits for the 'Iao highlevel aquifer was just beginning to ramp up, the USGS requested that HC&S and WWC, which together divert more than 50 million gallons of water a day from those streams, temporarily release water into 'Iao and

Waiehu streams and Waihe'e River. The USGS didn't propose any releases for Waikapu Stream at that time.

The controlled releases, which would have occurred in three phases with increasing amounts of water released in each successive phase, would have allowed the USGS to measure stream flow, infiltration, and the physical habitat under different flow conditions in stream sections that are now often dry, USGS hydrologist Delwyn Oki stated in testimony submitted in the case.

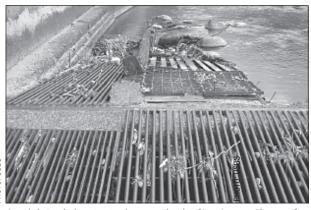
Oki noted that the controlled releases were not designed to predict the abundance of native aquatic species under different flow conditions, but were intended to determine the effects of flow on habitat.

Even so, in its June 10 decision on the case, the Water Commission adopted the USGS's proposed Phase 1 controlled releases as the IIFS for Waiehu Stream and Waihe'e River: 10 million gallons a day for Waihe'e River, 1.6 mgd for North Waiehu, and 0.9 mgd for South Waiehu, for a total of 12.5 mgd below the diversions and, after stream losses, about 7 mgd at the mouth.

The USGS had proposed a Phase I release

of 9.5 mgd for 'Iao, but the commission chose not to implement it because, as it stated in its decision, the stream's channelized sections and a steep drop-off limited the potential for ecological improvement.

The commission also chose not to restore water to Waikapu Stream because it reached the ocean only occasionally and, therefore, was believed to have little habitat restoration potential — this despite testimony from HC&S and the USGS that



Spreckels Ditch diversion intake on south side of 'Iao Stream. Closeup of parts of intake grate, June 6, 2006.

EDITORIAL

The Water Commission: An Idea Whose Time Has Passed

Tf they dream – and who is to say they don't? — Hawaiian gobies (oʻopu) would certainly dream of free-flowing streams, of cool riffles and shaded, still pools. This, after all, is the habitat in which they evolved over millennia. For those species that originated here, it is the only habitat they have ever known.

Throughout the islands, over the last century and a half, gobies' dreams have been denied by the diversion ditches of sugar planters and the lifeless, cement-lined troughs touted as flood-control systems. What Hawai'i's unique, amphidromous fresh-water fish have been left with are stream beds that rarely see water and stream mouths that fail to deliver the signals goby fry need to begin their journey back to the upstream areas where they spend their adult reproductive lives.

The planters who put the streams into their ditches, by means of diversions cleverly designed to leave no drop in the reaches below, had dreams as well — of lush, green fields of cane and uninterrupted years of profit. Stream water on Maui has allowed them to realize those dreams, but at the expense of the o'opu and other native aquatic

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72 Kapi'olani Street Hilo, Hawai'i 96720

Patricia Tummons, Editor Teresa Dawson, Staff Writer Susie Yong, Office Administrator

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Telephone: 808 934-0115. Toll-free: 877-934-0130. E-mail:pattum@aloha.net

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species. And not them alone. Hawaiians wanting to continue or resume their traditions of gathering and of growing wetland taro have also suffered as their sources of water have disappeared. As streams dried up, so, too, did the aquifers below them as they near the coast. Areas once wetted by streams and springs – Kealia Pond, for example, or Waihe'e wetlands – are barely able to support the waterbirds and other aquatic life that once flourished there.

For more than two decades, the Hawai'i Commission on Water Resource Management has been charged with establishing some balance between these competing visions of streams by setting instream flow standards. Given the inherent difficulties of the task, the commission initially adopted non-quantified "in-

terim" flow standards, reflecting the status quo. It was widely thought that, as commission staff gained knowledge of the demands made of stream resources, the commission would on its own adopt more permanent flow standards and even identify and protect streams having high value for recreation or resources. That, too, was a dream, undercut by the harsh realities of insufficient information and, frankly, a complete failure of nerve in the face of the political and economic juggernaut represented by the planters.

The planters have disappeared—all, that is, but Hawaiian Commercial & Sugar, or HC&S, a subsidiary of Alexander & Baldwin. On Maui, HC&S cultivates more than 30,000 acres of sugar, irrigated by water from streams on the eastern side of the island (some 167 million gallons a day) and the western side (more than 50 mgd). In recent years – and by recent, we mean over the last decade - the Water Commission has struggled with demands from environmentalists and traditional stream users that the dewatering of Maui streams cease.

Legislative vs. Judicial

As described elsewhere in this issue, the commission took two different approaches to the demands: in East Maui, it held public hearings and asked for (though it apparently really didn't want) information on technical matters from the commission's staff, the Department of Land and Natural Resources' Division of Aquatic Resources, and the U.S. Geological Survey. For the West Maui streams, known as Na Wai 'Eha, it proceeded with a contested-case hearing, with each party to the dispute presenting expert witnesses

subject to cross-examination by the others.

In the end, the route taken did not matter. The result was the same. Streams and the wildlife they support, and those seeking their restoration, whether for customary stream uses or for environmental reasons, lost out. A&B, Wailuku Water Company,

and Maui County, which has come to rely on HC&S as a kind of wholesale provider of water to the county municipal system, won out. To be sure, some streams will see a bit more water in their lower reaches, but the total amount restored to streams is embarrassingly small: on the east, 14 of 27 streams received increased flows totaling at most, during the wet season, around 20 million gallons a day; on the west, two of four streams will see flows increased by about 12.5 mgd. Compared to the volume of water removed from the streams – well over 200 mgd – these increases seem, well, the word stingy comes to mind.

The Waste

In the case of both the East and West Maui diversions, far more water is wasted daily than has been proposed for restoration. In East Maui, A&B has admitted it has no precise handle on the amount of water lost to leaks in unlined ditches, but has suggested that anywhere from 10 to 15 percent of the diverted water might be lost in this fashion. That comes to more than 25 million gallons a day of waste. In the area of Na Wai 'Eha, losses to waste have been pegged by the diverters themselves at between 9 and 12 mgd (A&B) and 4 mgd (WWC), for a total of some 16 mgd.

A&B claims it cannot afford to address the waste. As Alan Murakami of Native Hawaiian Legal Corporation points out, that's only because the water is so cheap. Still, the commission has been swayed by A&B's crocodile tears and is requiring only that, in the case of East Maui, sometime in the next three years, it prepare a plan to measure the waste. (On the other hand, Maui County, which diverts about 7 mgd into its municipal system, of which it estimates 14 percent is lost to leaks, is being required to repair its system within three years.) In West Maui, the commission is requiring that A&B stop the losses associated with its unlined Wai'ale Reservoir (estimated at between 6 mgd and 8 mgd a day), and halve the remaining losses, "for a total reasonable loss of 2 mgd."

Even in this case, however, the burden the commission has foisted upon A&B is light. In return for requiring losses to be reduced, it has given A&B rights to a well – Well No. 7 – that has been out of service for some years. And instead of rating the well's productive value at around 19 mgd, based on past usage, the commission has discounted it to 9.5 mgd. In other words, whatever A&B may have lost to streams, it can more than make up with water from Well No. 7.

Lawrence Miike, in his scathing dissent, describes this as the turning point in his decision to break from his fellow commissioners. By lowering the well's rated productivity, the commission effectively justified its decision *not* to restore 9.5 mgd to 'Iao Stream, and thus fell short of restoring 22 mgd. Miike had proposed restoration of more than 30 mgd, but had been willing to go along with 22 mgd. The shenanigans over Well No. 7 put paid to any prospect of his consent.

Implementation

In his proposed decision and order, Miike had recommended the commission require HC&S and WWC to "immediately remedy significant system losses." Language approved by the commission merely requires them to "aggressively address" such losses. It requires "new diversion infrastructures and gauges" on all four streams, and to modify diversions that cut off all flows, "in order to allow recruitment of stream life past the diversions." Something along the lines of a fish ladder is proposed to mitigate the 20-foot vertical concrete drop on 'Iao Stream that makes it impossible for gobies and other amphidromous species to return to its upper reaches; the diverters are instructed to work with commission staff in devising this.

A deadline of two months from the commission's decision (that would be mid-

August) is imposed for fixing diversions on Waihe'e River and Waiehu Streams "that can be easily modified." For other diversions, action is required within one year. Given that stream flows in East Maui still have not been restored according to the commission's order two years ago, one may be forgiven for thinking the diverters' compliance with these latest timelines may be less than scrupulous as well.

Insults to Streams

Protection and restoration

of streams and the customary and traditional uses associated with them are among the commission's primary purposes, as set forth by law. Over the last two decades, however, the zeal with which it has pursued these goals has undergone a slow transformation. Initially, the commission seemed enthusiastic. One of the commission's earliest projects was compilation of a comprehensive inventory of stream resources, which resulted in publication of *The Hawai'i Stream Assessment* in 1991. This was to be used as a guide to designation of important streams worthy of extra protection. Nothing resulted from that.

In 1992, the Stream Protection and Management (SPAM) task force was established as a result of a legislative resolution. Over the next year, it held nine public meetings across the state, went on site visits, and held deliberations facilitated by a mediator. The result was a report containing consensus recommendations as well as commentary by individual task force members (including A&B vice president Meredith Ching) setting forth the positions of their respective constituents. The commission received their report, but did nothing else.

From 1994 on, the commission was consumed with the Waiahole contested case hearing. As Miike notes in his dissent from the Na Wai 'Eha order, Waiahole did result in flows being restored to Windward O'ahu streams, but only after the state Supreme Court weighed in on the matter (twice).

State law requires the commission to give to the Legislature each year a report on what it has done to identify rivers and streams worthy of protection. For most of the last decade, the report has been nothing more than a recap of litigation, whether before the commission or the courts. The report for 2010 has not yet been submitted and is more than seven months overdue.



Photograph of vertical drop structure in concrete-lined channel, 'Iao Stream, Maui, Hawai'i, August 13, 2008.

A Third Way

The commission itself now seems to suggest that the contested-case approach to stream restoration may not be the best way for deciding disputes over stream flows. There is "a great deal of value" in "the quasi-legislative process used in East Maui," the commission says in its Na Wai 'Eha decision and order. "There is a great deal of value in being able to hear testimony from the public and to be able to question and continue gathering information for consideration up to the decision point," the majority write.

But the East Maui decision is almost certainly going to wind up in a contested-case hearing. And no matter what the outcome there, both it and the decision in Na Wai 'Eha will inevitably end up, as Waiahole did, in the

In short, the only purpose that the Water Commission seems to serve these days, so far as stream restoration is concerned, is to give diverters years, even decades, of water as the challenges to their use drags through the commission's unwieldy processes. Even after it issues its milquetoast orders, it lacks the staff – to say nothing of the will – to enforce them.

If the Legislature had tried to invent a means of paying lip service to streams while leaving status quo diversions intact and flourishing, it would have been hard pressed to come up with a better solution than the Water Commission. Now that the commission has shown its distaste for making responsible decisions that fulfill one of its most important missions, it is time to come up with an alternative. Perhaps a hearings master whose decisions are binding. Perhaps an environmental court that specializes in natural resource issues.

Whatever the answer, the fact remains: the Water Commission, as a tool for resolving stream disputes, is utterly, hopelessly broken.

Maui Agency Is Sued Over Plan to Have A&B Put Stream Water in Municipal System

Earthjustice attorneys have sued the Maui Department of Water Supply over its acceptance of a final environmental impact statement (EIS) for a plant that would treat surface water collected from Central Maui streams and pipe it into the DWS system, to meet future development needs. Earthjustice is representing Hui O Na Wai 'Eha and the Maui Tomorrow Foundation. Both were parties in the recently concluded contested-case hearing before the state Commission on Water Resource Management over how much water should be left in the streams and how much should be allowed for off-stream uses, primarily by Hawaiian Commercial and Sugar (HC&S), a subsidiary of Alexander & Baldwin that operates Hawai'i's last sugar plantation.

The EIS was actually prepared by A&B, which, under an agreement involving A&B, the Wailuku Water Company, and the DWS, will build a treatment plant to scrub 9 million gallons a day diverted into the Wai'ale reservoir from Na Wai 'Eha. The facility would be sited on A&B land, with the water it produces then fed into the DWS system. In return, A&B would be able to use some fraction of the treated water for future developments, and the county would also pay A&B and WWC for the remaining water.

The final EIS was accepted in early April by the DWS; notice of the acceptance was published in the Office of Environmental Quality's "Environmental Notice" on April 23. Last month, two days before the 60-day window for legal challenge passed, Earthjustice sued.

The complaint, filed in Second Circuit Court, asks for a determination that the EIS does not comply with the state's environmental disclosure law, Chapter 343, Hawai'i Revised Statutes. Contrary to the full description of impacts required by statute, the EIS "limited its discussion to the direct impacts in the immediate vicinity of the project site and left critical issues of public interest and importance – such as the impacts of diversions on Na Wai 'Eha water resources, the economic characteristics and impacts of the proposed water deal between A&B, WWC, and Maui County, and mitigation and alternatives – entirely unaddressed."

The plaintiffs ask the court for a declaratory judgment, finding that the EIS violates Chapter 343; that the DWS's acceptance of the EIS is invalid; and that the proposed plant "may not legally proceed" until full compliance with Chapter 343 is achieved.

The project may face another obstacle,

apart from the court challenge. There is no certainty that the stream water A&B is proposing to treat will be available for that use, especially since the Water Commission decided last month that 9 mgd for the proposed plant was not a reasonable use of Na Wai 'Eha water. After the Water Commission's Na Wai 'Eha decision, all current and future users of stream water must file a Water Use Permit Application (WUPA). While A&B was allowed to continue its current diversions, it, too, as well as the county and WWC, still must have their WUPAs for existing and future stream use approved by the commission at a future date.

After reading news reports about the county's plans, commission chair Laura Thielen says she was surprised that it was still proceeding with the plant's development given the commission's decision.

"The county has missed the message...and needs to take action to reduce waste and develop water sources [other than surface water]," she says.

HC&S general manager Chris Benjamin, however, says that commission's Na Wai 'Eha decision regarding the Wai'ale plant, could be "detrimental to residents, businesses, farmers, and local government. The larger issue here is finding additional water sources for the community's needs. That's a County of Maui priority...and is the reason we were asked to develop this water treatment facility for the public benefit."

— Patricia Tummons

Na Wai Eha from page 1

controlled releases would help resolve whether Waikapu flows to the sea under natural conditions.

"All they [the USGS] were doing was studying the hydrology," Earthjustice attorney Isaac Moriwake told *Environment Hawai'i.* "That's the context of all this." Moriwake represents Hui O Na Wai 'Eha and the Maui Tomorrow Foundation, which petitioned to amend the IIFS of the four streams in 2006 to protect kuleana uses, traditional and customary practices, and stream health.

When asked why the commission went with USGS's numbers, commission chair Laura Thielen said, "There was a variety of experts involved. The USGS is one of them. But I don't think I can reveal the substance of deliberations. I think those are confidential. The commission spent a lot of time deliberating, asking questions of our counsel and the hearing officer [commissioner Lawrence Miike] and there was a spectrum of opinion

of what would be the appropriate levels...The bulk of us arrived at a decision we felt comfortable signing."

Initial Reaction

Whether or not it was appropriate for the commission to base its IIFS on numbers proposed as part of a hydrology study is just one of the many concerns critics have raised since the decision's release.

The decision to leave two streams dry while accommodating the maximum needs of the largest user of diverted water, HC&S, has been described by Hui members as "disturbing" and a "kick in the butt" in media reports.

Earthjustice noted in its press release that the case has parallels to the seminal Waiahole water case on Oʻahu, in which the Hawaiʻi Supreme Court "chastised the commission's proceedings as being tainted by external pressure at the eleventh hour. Similarly, in this case, during closing arguments...HC&S dispensed with any legal argument and instead had its manager and A&B's chief financial

officer, Chris Benjamin, deliver testimony lacking any connection to the evidence in the record and threatening the shutdown of the plantation and layoffs of all of its workers."

Moriwake told *Environment Hawai'i*, "After two reads, it appears to me...that what the commission tried to do was figure out what is the lowest point of stream flow at which point the offstream users would suffer some kind of shortage. It was clear they didn't want to go one drop beyond the point at which the offstream users would really have to start cutting back." He also argued that the commission focused on the lowest historical flows and peak water demands, then "worked backwards from that point."

"First of all, that's illegal" according to the Waiahole decision, he said. "You don't accommodate offstream users first."

HC&S's Benjamin also released a statement, which said that although the Na Wai 'Eha decision will increase his company's operating costs, it was a dramatic improvement over Miike's recommendation to establish IIFS totaling 34.5 mgd.

Benjamin added, "Many factors...will ultimately determine our long-term survival, but no single factor is more important than access to water. The combined impact of the commission's three rulings [the Na Wai 'Eha decision and two recent rulings on IIFS in East Maui] will result in substantially less water available to HC&S. We are encouraged, however, that the commission recognized the important public benefits served by offstream uses..."

Double-Talk

In juggling the countless statistics and assertions raised during hearings and the laws that apply to IIFS, the commission seems to have tripped over itself in a few areas, possibly because the decision's final analysis and order were written by the majority, while the findings of fact and conclusions of law were written by Miike, who strongly opposed the final decision.

The commission's treatment of HC&C's Well No. 7, which some have argued is an ideal alternative water source, is one example. In explaining how it decided reasonable uses, the commission declared, "In balancing instream values with offstream uses, the commission will not recognize the economic impact on diverted water that is being used inefficiently, losses that could be prevented through practical actions, or waters that have practical alternatives." However, cost seemed to play a role in the commission's determination of the amount of water available from Well No. 7.

This well historically pumped about 19 mgd. An additional booster pump would incur costs of \$1 million, and it would cost \$475,000 to pump water to a field not currently able to be irrigated with the well existing configuration, the commission notes, adding that a power contract with Maui's utility limits the company's ability to run the pumps on a consistent and sustained basis.

Based on the fact that pumping in the Kahului aquifer, which Well No. 7 taps, already exceeds the sustainable yield (although to no apparent detrimental effect) and claims that changes in farming practices have likely reduced the aquifer's recharge, the commission determined that the water currently available is less than the historical rate of 19 mgd.

The commission then concluded that these uncertainties "in combination with the commission's decision to place the full burden of remedying losses immediately upon HC&S" led to its decision to limit the "practical alternative" from Well No. 7 to 9.5 mgd. (It should be noted that other wells continue to pump the aquifer. According to Thielen,

that's because irrigation water appears to be artificially recharging it.)

"This alternative will not require capital costs, only the costs of pumping," the decision states.

How the commission arrived at 9.5 mgd and how or whether the "burden of remedying losses" and other costs figured into determining that amount is not discussed.

Another example is the approach taken in determining the IIFS. In its discussion of the IIFS proposed by the parties to the case — the Hui/MTF, Maui County, WWC, the Office of Hawaiian Affairs, and HC&S — the com-

mission discarded the county's and the Hui's recommendations.

The county had proposed setting aside 3.2 mgd to meet current municipal needs, reserving an allocation of 9 mgd for future needs (the proposed Waiʻale Treatment Facility), and 6.1 mgd to meet irrigation needs for HC&S fields that cannot be irrigated by Well No. 7. All remaining water diverted by WWC would be returned to the streams.

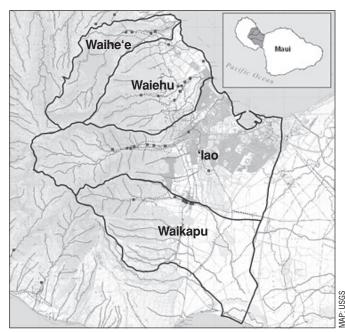
In addition to its proposed IIFS below the diversions of each stream, the Hui had recommended that the commission reserve water at the mouths of each stream — ranging from 0.07 mgd to 2.5 mgd — for kuleana users, traditional and customary users, and the Maui Coastal Land Trust.

These requests to reserve water for offstream uses and leave the excess in the stream are contrary to the tenets contained in the Waiahole Supreme Court decisions, the commission stated. Yet the commission itself seems to have adopted that very approach with regard to HC&S's needs.

In its section on balancing instream values and non-instream uses, the commission evaluates how the USGS's proposed Phase 1, 2, and 3 releases for Waihe'e River and Waiehu Stream would provide for HC&S's median and maximum water needs.

Both the Phase 2 and 3 flows, totaling 20.5 mgd and 49.3 mgd, respectively, would require HC&S to seek alternatives for at least half of a given year. The Phase 1 flow, however, left enough water to meet both HC&S's median and 90-percent-maximum irrigation requirements.

During peak irrigation, "[o]nly the 1st phase flow would leave enough water for



The Water Commission's four watershed units that contain Na Wai 'Eha.

offstream use, but only if all 9.5 mgd of Well No. 7's practical alternative were used.

"Therefore, adopting the 1st phase controlled flows for the IIFS would provide the best balance between instream values and offstream uses," the decision states.

Dissent

With regard to the commission's determinations regarding Well No. 7, Moriwake says that there was no evidence in the record that proved the aquifer was being overpumped or what the real capacity of Well No. 7 is, "which HC&S has the burden of providing."

And he was not alone in his reaction to the commission's decision. Commissioner Miike issued a highly critical dissent to the commission's order. As a member of the commission who served during the original Waiahole ditch contested case, and who also was a hearing officer in that case and in the Na Wai 'Eha case, Miike focused mainly on how the commission could have and should have complied with the state Constitution and Water Code and the Hawai'i Supreme Court's rulings in the Waiahole case.

"By its decision, the majority has failed in its duties under the Constitution and the State Water Code as trustee of the state's public water resources," he concluded.

To start, Miike cited the court's finding in the Waiahole case that, "Uncertainty regarding the exact level of protection necessary justifies neither the least protection feasible nor the absence of protection." And as for private commercial users, he cited the court's finding that the public trust "has never been understood to safeguard rights of exclusive use for private commercial gain," and that a

Water Commission Amends Flows For Six of 19 East Maui Streams

eaving a few East Maui streams largely intact when Central Maui is wet, but robbing them of all but thin, sometimes disconnected, ribbons of water when it's dry does not, in commissioner Lawrence Miike's eves, meet the state Commission on Water Resource Management's legal responsibility to protect streams. And so when the commission voted May 25 to restore a mere 450,000 gallons of water a day to East Wailuaiki, West Wailuaiki, and Waiohue streams in dry times and about 8.7 million gallons of water a day to those streams plus Waikamoi during the wet season, Miike dissented. He also opposed the commission's decision not to return any water to 13 other East Maui streams that area residents have sought to restore since 2001. (Miike did, however, agree with the commission's interim instream flow standard, or IIFS, amendments to Makapipi and Hanawi streams, which would restore 0.66 mgd.)

The rest of the commissioners, however, apparently felt they had struck the right balance between instream and offstream uses. The East Maui Irrigation system supplies water to some 30,000 acres of sugarcane in Central Maui and serves more than 9,000 Upcountry residents and farmers. It also leaves dry many of the 110 East Maui streams that it diverts, thereby degrading streams and limiting downstream farming opportunities. In a press release issued after the decision, the commission wrote, "This new seasonal approach balances the needs of the resources and the demands of offstream users where all interests share the bounty during the wet seasons and share the limits in the dry seasons."

In addition to amending the IIFS of six streams, the commission directed Hawaiian

Commercial & Sugar, the largest user of East Maui water, to determine its reservoir leakage. It also ordered Maui County to start fixing its leaking Waikamoi Flume within three years and urged it to wean itself off of surface water, which currently supplies 85 percent of its Upcountry domestic and agricultural needs.

While HC&S manager Chris Benjamin wasn't thrilled with the decision, he stated in media reports that he felt it at least gave the struggling company a fighting chance. Native Hawaiian Legal Corporation attorney Alan Murakami, however, was bitterly disappointed and requested a contested-case hearing on behalf of his clients, native Hawaiian taro farmers Beatrice Kekahuna and Marjorie Wallett, and a group of East Maui residents known as Na Moku 'Aupuni O Ko'olau Hui.

NHLC's clients had petitioned the commission to amend the standards for 27 streams where diversions by the East Maui Irrigation Co., an A&B subsidiary, left little or no water for taro growing or for the exercise of traditional or customary native

higher level of scrutiny applies to private commercial uses.

Miike pointed out that in nearly every case where there was scientific uncertainty, the commission favored presumptions that protected private, commercial offstream uses — specifically, HC&S's — and held resource restoration to a "higher level of scrutiny."

The commission's decision not to restore water to 'Iao Stream even though the commis-

sion determined that the stream retained some potential to maintain healthy populations of aquatic life was one of a number of examples of the commission choosing "presumptions to the detriment, and not the protection, of instream values," he wrote.

He added that all four Na Wai 'Eha streams were important for traditional and customary purposes and the commission had a duty to "reasonably protect native Hawaiian rights."

He indicated the commission's decision to reduce the pumping capacity of Well No.7 by half was perhaps its most significant misstep, stating the move was "arbitrary" and "without any credible foundation."

And in defiance of the state Water Code's requirement that commission weigh the importance of instream values against that of offstream uses, including the economic impact of restricting such uses, the commission decided to set the IIFS at "the amounts of water remaining after all offstream requirements were met; i.e., a residual — not a balanced — approach. Such an approach does not even rise to the level of the 'least protection feasible,'" he wrote.

Miike offered a couple of examples of alternative IIFS — totaling 22 mgd and 29.4 — that he believed would have reflected a more reasonable restoration effort and might have had only a minor impact on HC&S.

"Absent an economic analysis by HC&S, the commission cannot assume that HC&S's doomsday scenario [of a total plantation closure] would result from an occasional 10.5 to 13.4 percent decrease of its irrigation requirements for 15 percent of it entire operation," he wrote, referring to the impacts his proposed 29.4 mgd IIFS would have. "Those decreases equate to only 1.6 to 2.0 percent of its irrigation requirements for its entire 35,000-acre operations, and then only on an occasional basis."

In response to Miike's critique, Thielen



For Further Reading

Environment Hawai'i has published several articles (available at www.environment-hawaii.org) that will provide additional background to the dispute over West Maui surface water. Our online EH-xtra column features an article on the recently released USGS report on Na Wai 'Eha, as well as a link to the report.

- ♦ "Commission Struggles with Conflicting Claims Surrounding West Maui Stream Diversions," February 2006;
- ◆ "Commission Orders Contested Case Mediation for Maui Water Disputes," March 2006;
- ◆ "Finally, a Schedule for Contested Case Over Charge of Wasting Maui Stream Water," January 2007;
- ◆ "Hearings Begin in Contested Case over Diversion of West Maui Streams," "USGS Seeks Temporary Releases For Study of Instream Values," and "Wailuku Water Co. Sells Ditch Water

Without Consent of Utilities Commission," December 2007;

- ◆ "Commission Tightens Grip on Waters of Central Maui," May 2008;
- ◆ "Wailuku Companies Seek PUC Approval to Serve Existing, Future Water Users," November 2008;
- ◆ "Hearing Officer Issues Recommendations for Na Wai 'Eha Contested Case Hearing," June 2009;
- ◆ "Parties Conclude Debate over Impacts of Stream Restoration in Central Maui," November 2009.

East Maui from page 7

Hawaiian practices. From Murakami's standpoint, the commission's decision has done little to improve his clients' situation.

"What East Maui residents were asking for was clearly reasonable. It's amazing [the commission] so blindly adopted HC&S's statements on what water they do need. It's pretty appalling," he said.

As of press time, the commission had not yet decided whether to grant the contested, case hearing sought by Murakami.

A Winding Road

In the summer of 2001, Kekahuna, Wallett, Elizabeth Lapenia (no longer a party to the case), and Na Moku 'Aupuni O Ko'olau Hui requested a contested case hearing with the state Board of Land and Natural Resources after Alexander & Baldwin, parent of HC&S and EMI, requested a long-term lease for the continued diversion of some 165 million gallons of water a day from East Maui to Central Maui. The non-profit Maui Tomorrow Foundation also contested the lease request. Shortly thereafter, the East Maui residents, represented by NHLC, filed petitions with the Water Commission to amend the IIFS of 27 streams.

After conducting hearings in 2002 and 2003, the Land Board decided in 2003 to issue a lease to A&B/EMI, but the decision was later overturned in state court. In 2007, the board ordered an interim release of 6 mgd into one of the 27 streams — Waiokamilo — to meet Na Moku's needs, but postponed further action until the Water Commission decided on the IIFS petitions.

By 2006, the U.S. Geological Survey had created a model that could correlate various levels of habitat improvement with various stream flows. Relying heavily on this tool and on stream data collected by the state Department of Land and Natural Resources' Division of Aquatic Resources, Water Commission staff proposed in the fall of 2008 instream flow standards that would restore several millions of gallons of water a day to six streams and no water to two streams.

In September 2008, the commission approved its staff's recommendations, and over the following year, staff

worked largely on its own to develop recommendations for the remaining 19 streams. In that same period, the agency lost its survey branch, its geologist, and other key positions, nor did it work as closely with the DAR as it had on the first eight streams. As a result, the branch recommended last December that only one of the 19 streams, Makapipi, receive any more water. And even that one, it suggested, should receive only a temporary release of 0.32 mgd. The IIFS for the rest should remain at the status quo because flows were adequate to meet instream needs, CWRM staff stated in its report to the commission.

NHLC and its clients strongly disagreed with the recommendations, as did DAR. According to the division's then-administrator Dan Polhemus, DAR had not been asked to comment on CWRM staff's recommenda-



Koʻolau Ditch intake on Makapipi Stream.

tions until a few days before the commission's December meeting. DAR felt that allowing all of those streams to continue to be diverted at current levels was unacceptable and recommended that at least eight of them — those that had the best restoration potential — receive more water and that the diversion system be modified to allow amphidromous animals to complete their life cycle.

When the commission asked Polhemus how much water was necessary to restore ecological functions, he said he did not have those numbers, but that his staff could come up with some. When commission chair Laura Thielen asked him whether seasonal releases, with minimal restoration in dry times, would improve the stream habitat, Polhemus said that "complete connectivity is not required to still have some biological viability," be-

points to language in the decision that notes, among other things, that the Waiahole decision states, "Reason and necessity dictate that the public trust may have to accommodate offstream diversions inconsistent with the mandate of protection, to the unavoidable detriment of public instream uses and values."

She said Miike did a disservice to the process by inadequately addressing Wailuku Water Company's role in Na Wai 'Eha water use (i.e., golf course irrigation), and Maui County's water management practices.

"[The hearing] focused too much on one diverter and not on broader issues," she said. The issue of whether WWC should continue to be the water purveyor in that area should have been a "huge focus" of the hearing.

She added that decisions like these are meant to be decided by a group of people, not just one person, because it is more likely to arrive at "the most reasoned decision."

"Commissioner Miike, at the end of the day, he disrespected the rest of the commission in unfairly and wrongly characterizing the deliberations," she said.

Benjamin's response to those who say the commission took a backwards approach: "To its credit, the commission's process was thorough, evidence-based, carefully considered the law and court rulings. All in all, [it was] a very deliberative process to meet competing needs for an increasingly scarce resource."

Next Steps

Earthjustice has stated that it plans to appeal the commission's decision in court. In the meantime, it has already filed a lawsuit regarding the county's acceptance of an environmental impact statement for its proposed Wai'ale Treatment Plant (see our

article on Page 4).

The commission plans to proceed with issuing water use permits for Na Wai 'Eha, where parties will likely have to "go through this all over again" with respect to justifying their uses and proving that they are reasonable and beneficial, Moriwake said.

In Moriwake's view, the Water Use Permit Application (WUPA) process gives some of the parties a "second bite at the apple" to supplement deficiencies in the contested case hearing record. He added that he thought it was unwise for the commission to issue any water use permits anytime soon, since they could be overturned if the IIFS decision is thrown out by a court.

Thielen added that there is no guarantee every party is going to get water, and said the issue of WWC's role as water purveyor will definitely be addressed in the permitting process. — *Teresa Dawson*

cause animals can hang out in still flow or pools until the wet season.

Based in part on DAR's testimony, the commission deferred acting on those streams and directed its staff to work on a recommendation for a seasonal IIFS.

Stream Recommendations

Following the commission's December meeting, CWRM staff met with DAR staff, the Maui Department of Water Supply, NHLC,

and HC&S to determine seasonal IIFS. A May 17 memo to CWRM deputy director Ken Kawahara from DAR's Robert Nishimoto suggests that the division supported a seasonal approach, but not because it was best for stream organisms. Rather, it felt the need to "share the pain" of limited water in dry times with offstream users.

DAR had determined that, at a minimum, flows providing for 90 percent of natural habitat availability (H_{90}) were necessary for reproduction, recruitment, and growth. The memo points out that the DLNR administration asked DAR to calculate flows needed to meet 50 and 70 percent of habitat requirements (H_{50} and H_{70} , respectively), but "DAR staff had already determined that these flow rates for these habitat levels would not support all aspects of the native species life history requirements."

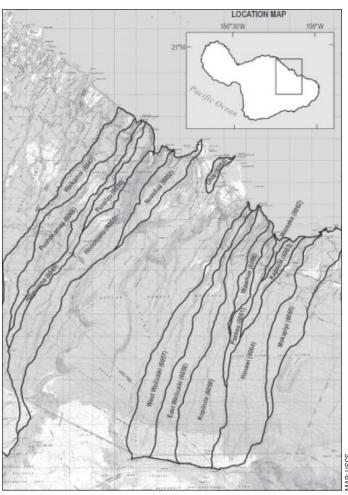
"While DAR has the ability to calculate flows for any habitat level based on the [USGS model], DAR does not believe that H_{50} or H_{70} reflect viable flow rates for the protection of native aquatic biota.... These flows are considered by DAR to be too low to expect suitable long-term growth and reproduction of native stream animals," Nishimoto wrote.

Even so, the pressure to come up with some kind of seasonal approach led DAR to recommend dry season flows that would establish minimum mauka-makai connectivity. That level of flow, 20 percent of a stream's median base flow, would allow adult stream animals (fish, shrimp, and snails) to move among habitats and allow recruiting animals to move upstream. But, like H_{50} and H_{70} flows, the minimum connectivity flows, or C_{\min} , aren't enough to allow for growth and reproduction, Nishimoto wrote.

On May 25, CWRM staff returned to the commission with its recommendations for the 19 streams: Restore 0.6 mgd to Makapipi

to meet the needs to taro growers and gatherers in the Nahiku community; restore 0.06 mgd to Hanawi because it was a small amount that would have significant biological benefit; implement seasonal IIFS for East Wailuaiki, West Wailuaiki, Waikamoi, and Waiohue streams; and maintain the status quo for the remaining 13 streams.

DAR also offered its own recommendations for streams it felt would benefit the most from restoration: East Wailuaiki, West



Water Commission's watershed units that contain the 19 streams dealt with at its May meeting.

Wailuaiki, Puohokamoa, Waikamoi, Waiohue, Kopiliula, Hanawi, Puaka'a, and Haipuaena.

CWRM staff based its recommendations on DAR's premise that 64 percent of median base flow was necessary to reach H_{90} levels during the wet season.

Of those streams the CWRM and DAR had both recommended restoring, the proposed H_{90} and C_{min} flows for each stream differed slightly because they based their calculations on data gathered from different parts of the streams (DAR used data from middle and lower reaches; CWRM used upper reaches).

CWRM recommended against restoring Puohokamoa, Haipuaena, and Kopiliula

streams because EMI used them to convey ditch water and "any modification to the existing diversion infrastructure on these streams could result in more water being released than naturally occurs," the staff report stated.

With regard to Puaka'a Stream, CWRM staff determined that because the amount of habitat gain in that stream would be only 300 meters, "the cost and effort to modify the diversion to allow for connectivity is better

spent in Hanawi Stream."

As for the remaining nine streams covered by the NHLC's petitions, CWRM staff recommended against restoration because it felt the biological resources would not significantly benefit from additional flow.

Water Needs

At the commission's May meeting at the Paia Community Center, CWRM staffer Dean Uyeno briefly addressed system losses. The EMI system includes 50 miles of tunnel and 25 miles of open ditch, a portion of which is lined. HC&S, which uses the bulk of the water, had no estimate of water losses from the irrigation system, but did provide a decades-old estimate of losses from its 36 reservoirs, 31 of which are unlined. Studies done in the 1960s estimated that 23 to 31 million gallons a day were lost due to seepage. HC&S estimated that it would cost about \$45 million to line its unlined reservoirs.

Staffstated that HC&S's ground-water sources in the area were fully tapped. Pumping of the Paia and Kahului aquifers regularly exceeded maximum sustainable yields. Staff also pronounced that HC&S could not increase pumping of its 16 brackish wells, which provide an average

of 72 mgd.

The Maui Department of Water Supply, which uses a few million gallons of diverted water a day to supply domestic and agricultural needs in Upcountry, reported system losses of 14 percent. It also claimed that it would cost \$117 million over 25 years to develop alternative groundwater sources.

Maui Mayor Charmaine Tavares testified that the county needs 8 mgd from Waikamoi. She added that of the more than 9,000 Upcountry water meters served by Waikamoi, 752 of them are for agriculture.

Jeffrey Eng, head of the county's DWS, said he worried about emergency restrictions during dry periods if the IIFS were set too

high. "That would mean stream restoration is more important than domestic needs. No-body wants to see that....Take a conservative approach to habitat restoration," he said. He then suggested that the commission set IIFS to meet 50 percent of natural conditions.

With regard to the streams' needs, the commissioners questioned DAR and CWRM staff about their recommendations. In response to a question from Miike on the quality of ecosystem functions under a seasonal approach, Nishimoto stated that in the dry season, the water that remains in streams is warmer and animals are stranded in "tight spots." Reproduction stops and low flow in isolated pools can lead to parasite infections, he said.

Upon further questioning, DAR's Glen Higashi revealed that its dry season recommendations might still leave sections of the streams dry.

When it came time for Murakami to testify, he reminded the commission of its legal obligations to his clients, who have superior rights to the diverters. He pointed out that A&B's and HC&S's arguments have always centered on economics, not the law, which he said was "on the side of my clients." He added that the commission still does not know what the reasonable, beneficial uses of HC&S's diversions are. (State law requires the commission to ensure that any diversions have such uses.)

Regarding CWRM staff's decision not to restore flows in the DAR-recommended streams that EMI uses to convey water, Murakami said there was no scientific evidence that a pipe could not be used to bypass the diversions.

"We are asking for a percentage of a percentage of a percentage" of flows to be restored, Murakami said.



One of the East Maui Irrigation System's many stream diversions.

Finally, with regard to the dry season recommendations, Murakami said he thought the "wetted rocks" approach should be abandoned.

HC&S's Chris Benjamin and Rick Volner supported the restoration of Makapipi Stream, as well as the wet season releases CWRM staffhad proposed, but opposed any restoration during Central Maui's dry season and any restoration of West Wailuaiki Stream because it is "a highly productive stream for us," Benjamin said.

Benjamin complained that the restoration that the commission ordered in September 2008 has already cost his plantation 10 mgd. (NHLC and CWRM staff, however, dispute that figure, saying that at most, only 4.5 mgd has been restored under that action.)

When questioned by Miike about the effects of incremental water losses, Benjamin said that it takes roughly one million gallons of water to produce four tons of sugar.

Contrary to HC&S's claims that it needs all of the water A&B/EMI diverts, Miike argued that based on his understanding of HC&S's farming methods and its failure to account for rainfall, the company overestimated its water needs by about 20 percent.

"I know you're going to dispute that, but I had to put it on the record," he said.

Both Miike and commissioner Neal Fujiwara asked Benjamin what the "magic number" of acres was for HC&S to survive. Benjamin said that that was an ongoing question. In general, he said, more crops means more revenue, although the cost-effectiveness of farming rocky and/or distant lands is constantly being re-evaluated. Regarding Miike's claims that HC&S was overstating its water needs, he said, "Why would we do that [pump wells to capacity] if we had excess water?"

Deliberation

After hours of public testimony, the commissioners attempted to address the petitions one at a time. But as they began debating seasonal versus annual IIFS, CWRM's versus DAR's recommendations, and the various other restoration permutations offered by the parties, Miike interjected: "We are piece-mealing our way to the total number and I want to make a comment on the total number before piece-meal our way to it."

He noted that EMI was diverting about 165 mgd from East Maui streams "and we are quibbling between 10.3 versus 3.7 to restore to the streams. And I find that kind of funny. That's not a balancing act to me. What it's saying is that we want to so minimally harm the offstream users that we are willing to harm the stream. Not harm the stream, but we're

willing to so minimally restore the streams and that, to me, it's not a balancing act." His comments were met with applause from many members of the public.

He then argued for annual interim instream flow standards, stating that he believed the commission was legally required to ensure that those standards met the minimum habitat requirements identified by DAR.

His motion, which he knew the commission would reject, was to set an IIFS of H_{90} for all 19 streams. No one seconded his motion.

When commissioner William Balfour suggested dropping West Wailuaiki, as HC&S had requested, Miike noted that the streams recommended for restoration had been identified as having the best potential for significant ecological improvement.

"DAR gave their assessment of which were the most promising; CWRM gave their assessment and we narrowed it down. I don't understand why we need to narrow it any further," he said and was again met with applause.

After the majority of commissioners expressed their preference for seasonal IIFS at H₉₀ levels, the commission voted to adopt DAR's dry season restoration recommendations for East Wailuaiki (0.13 mgd), West Wailuaiki (2.6 mgd), Waiohue (.06 mgd), and Waikamoi (zero). In total, 0.45 mgd would be restored to those streams during dry season. (Generally, with regard to the streams that CWRM staff and DAR agreed to restore, CWRM's recommendations restored slightly more water than DAR's did. Also, the commission chose to focus on the amount of water to be restored to the stream, rather than on the total IIFS amount, which would include existing flows.)

For the wet season, the commission was a bit more generous and went with CWRM's recommendations for East Wailuaiki (2.39 mgd), West Wailuaiki (2.46 mgd), and Waiohue (2.07 mgd). Because Waikamoi has problems with a leaky flume and the county had requested minimal diversion there, the commission went with DAR's numbers for that stream (1.68 mgd). In total, the commission restored about 8.54 mgd in the wet season.

A Compromise?

Before the commission's vote, the issue of whether DAR had truly supported the concept of minimum connectivity surfaced briefly. Thielen had started praising HC&S and DAR for their efforts to resolve the dispute over East Maui water. HC&S had agreed last December to a seasonal restora-

tion, and DAR had considered human needs as well as resource needs in its recommendations, she said.

"Traditionally, IIFS are set at some level, and the IIFS stays at that level and as the water in the stream lowers, until it reaches that level, the only people hurt are the offstream users," she said, adding that DAR was willing to share the pain and determined the "bare minimum needs so resources would not perish, recognizing the commission has difficult decisions to make," she said.

To this, Miike said, "My understanding of DAR, what you call the 'DAR compromise,' is they said that annual H₉₀ is the minimum restoration, but they were also told to provide alternatives for H₉₀ and for dry weather, so it's not that they volunteered it. They were told. I don't think it's quite accurate to characterize their production of those numbers as a compromise on their part."

Thielen countered that when the com-

ing. Regarding the commission's discussion about DAR's dry season recommendations, Murakami said, Thielen misconstrued what DAR had said in December "and Larry Miike corrected her." He added that he also believed DAR was forced to make certain statements.

Whatever the outcome of his contested case hearing request, Murakami told *Environment Hawai'i*, the Land Board must still make its own assessment of what is required to protect public trust resources. When First Circuit Judge Eden Hifo overturned the Land Board's decision to issue a lease to A&B, "she basically said you can't rubber-stamp whatever the commission does," Murakami said. And in this case, the commission accommodated a private, commercial user "in the face of the fact that the diverter was wasting more water than we wanted restored," he said.

In an email to *Environment Hawai'i*, Murakami added, "Note that action on the 19 streams under the DAR and NHLC pro-

"[It] seems like I'm giving everything away, but I'm not." — **Bob Nishimoto**

mission met in December and HC&S "stepped forward and offered a seasonal restoration... we called Dan Polhemus and asked if seasonal restoration would have a benefit to the resources and he said yes and the commission at that point directed DAR to go back and do further research on seasonal restoration."

"All I heard them say is H_{90} is the minimum restoration....We characterize it differently. That's my characterization," Miike said.

Earlier in the hearing, DAR's Nishimoto had tried to explain things, but even his explanation sounded conflicted.

He said that DAR would prefer to have streams restored to the H_{90} level, but followed with, "again, we share the pain, we understand that."

He continued, "In defense of my position, it seems like I'm giving everything away, but I'm not. We recommended nine streams. We got four or five. We've been giving away, we've been backing out a lot and I think we'd like to say we stand for the animals, but we understand the plea of the offstream users and so this is why we took that [approach]. What I want to say is that, philosophically, we want to be part of the solution."

Reaction

After the commission's decision, NHLC's Murakami requested a contested case hear-

posals would amount to 10.4 mgd, leaving HC&S with 80 percent of the total water allocated.... Significantly, that amount pales in comparison with: (a) 23-41 mgd of losses from HC&S's unlined reservoir seepage (not including evaporation); and (b) 16.6–25 mgd of losses from HC&S's system seepage from 25 miles of unlined ditches. And the CWRM required no conservation from HC&S!

"You can see why HC&S refuses to pay for conservation measures – it's cheaper to avoid it, given what they pay for the water from the state — a 1/4 of a penny per 1,000 gallons."

A&B/EMI is currently diverting the water at the same rate set by the Land Board in its last revocable permit, but does not have a current lease, license, or revocable permit. Right now, the diversions continue under a "holdover" status. Because "holdovers" do not exist in either statutes or rules, Murakami added, his clients may also need to address the legality of that.

In an email to *Environment Hawai'i*, Benjamin disputed the view that "system leakage means water waste."

"Leakage and irrigation provide considerable aquifer recharge, and to the very aquifers the commission is requiring us to use more heavily to compensate for water returned to the streams. We hope these future studies will help us all understand more about the relationship between sys-



For Further Reading

Environment Hawai'i has given extensive coverage to East Maui water issues over the years. For more background, see the following, all of which are available on our website:

- ◆ "Water Commission Amends Standards for Six Diverted East Maui Streams," and "Land Board Resumes Discussion of Diversion of East Maui Water," November 2008;
- ◆ "Land Board Orders EMI to Release Water to Meet Needs of East Maui Taro Farmers," May 2007;
- ◆ "Commission Gains Funds, New Tools to Pin Down Water Use, Stream Needs," September 2006;
- ◆ "Ex-Judge Says East Maui Farmers Don't Need More Water for Taro," August 2006;
- ♦ "Water Commission is Urged to Look at Lessons from Mono Lake Dispute," August 2005;
- ◆ "Board Talk: Land Board Favors EMI Water Diversion,"
 March 2003;
- ◆ "Board Talk: East Maui Water Dispute Heats Up with Hearing Officer's Recommendation," January 2003;
- ◆ "Board Talk: Contested Case on Renewal of EMI Water Permits," July 2001;
- ◆ "Battle Looms Over Waters Diverted from East Maui Streams" and "Complex Legal Issues Surround A&B's Taking of East Maui Water," August 1997.

tem "losses" and recharge," he wrote. Given the possibility of rising water costs, Benjamin states, "As we transition to growing biofuels—using either a 'less thirsty' sugar crop or anything else—water will continue to be a major component in our mix of costs. We'll have to conserve every way we can." — *Teresa Dawson*

Environment Hawai'i Questions Miike On Dissent in Na Wai 'Eha Decision



Pormer state Department of Health director Lawrence Miike, a physician and a lawyer, is the longest-serving member of the state Commission on Water Resource Management and

was the lone dissenter in the commission's recent decisions to amend the interim instream flow standards for about two dozen diverted streams in East and West Maui. In our cover story, we report on his dissenting opinion in the Na Wai 'Eha contested case. Here, we delve further into his thoughts on how things went down and how they're likely to play out.

Since the Na Wai 'Eha decision came out, several people, including you, have pointed out how the commission's decisions for interim instream flow standards (IIFS) in both the East and West Maui cases seem to conflict with or fall short of requirements established by the Waiahole case. Do you think a briefing on the Waiahole decisions would have helped inform the commission's decisions and/or the staff's recommendations?

I essentially wrote everything in the decision except for the Decision and Order on the IIFS, where the majority substantially deviated from what I read as what the law required. If you read the beginning of the Conclusions of Law section, you will see that I summarized what the Waiahole decision required us to do—and what I summarized in my dissent—but the majority was uninterested in following what the court said in Waiahole. So I think the majority will be reversed on appeal—maybe not exactly along the lines I summarized in my dissent, but I am certain the decision will be reversed.

As for the staff, you may recall that in our first meeting on the East Maui hearings, I said that it was unfair/unrealistic for the staff to be tasked with what the law required, and that the best we should hope from them is that they just give us the data. Even though their analyses of the individual streams were quite different, in every case, they concluded that the weight of the evidence fell heavily on the side of offstream uses. That was unacceptable to me and I said so.

As for the balancing test that should have been done in setting the IIFS (instream values versus offstream uses, including the economic impact on offstream uses), when I asked the staff why there was nothing at the May 25th meeting on HC&S's and the other users' requirements, one of the staff told me that they were directed not to include that in the last submittal. So all the staff presented was the restoration potential data. (And note that they were also directed to provide alternatives to the 90 percent of habitat data — namely, 50 percent and 70 percent of habitat; the staff at least had the gumption to say that those numbers were meaningless, and that the MINIMUM restoration was represented by the 90 percent numbers.) And that is why I questioned HC&S on what they claimed were their requirements — and I estimated that they were overestimating their requirements by at least 30 percent.

As an example, the HC&S representative at the last Maui meeting, when challenged by me on 10 percent of their 30,000 acres not being irrigated (comparable to the 10 percent non-irrigated figure that was definitely proven at the Na Wai 'Eha hearings on those 5300 acres), suddenly came up with a new number of 42,000 acres instead of a total of 35,000 acres — the number they had been using up to that moment.

The Waiahole decisions required that private commercial users had the burden to overcome a presumption in favor of stream

restoration (preservation/restoration of the resource, a public trust purpose), but the majority was uninterested in even considering that burden. So that is one of the areas in which I believe their decision will be reversed. Note also that, in the Na Wai 'Eha area, when the water use permit applications are considered, what HC&S decided to provide in the contested case on setting the IIFS standards will not be sufficient to meet their burden of proving that their uses are reasonable and beneficial.

The commission considered system losses in determining reasonable uses and in setting the IIFS for Na Wai 'Eha, but didn't when determining the IIFS for East Maui streams. Why the different approaches? Are the general conditions the commission adopted incentive enough to force HC&S and Maui County to minimize system losses in East Maui? Do you think the habitat needs of East Maui streams can be adequately met if the county and/or HC&S reduced system losses to an acceptable level and HC&S used its water more efficiently?

On your second question, yes, the commission should have considered losses in the East Maui case, but they chose not to factor that into their decision, because, as I explained above, they were not interested in doing the balancing test between instream values and offstream uses, and only considered what absolute minimum they would put back into the streams. Note that by HC&S's own data, they measure an average of about 167 mgd a day from the East Maui streams and of that amount, 23 to 31 mgd are lost through their reservoirs, plus unknown amounts lost



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through the ditches. So in effect, the majority let HC&S continue to lose those amounts, which could have easily been restored to the streams without affecting HC&S (except for the costs and logistics of preventing those losses), but the majority did not require HC&S to address their losses. (Note that, while HC&S complained that there was not enough water for their uses even under present total diversion conditions, they have not made any serious efforts to address their substantial system losses.)

Instead, the majority chose to restore only about 9.26 mgd to six streams for half of the year, in amounts that reflect the minimum flow to maintain MINIMUM viable habitat for stream animals. For the other half of the year, the majority reduced the total amount to about 1.11 mgd, amounts that only allow stream animals to exist in shallow pools without major growth and reproduction. (The commission also added about 5 mgd when it addressed the first 8-9 streams in September 2008.)

The difference between Na Wai 'Eha and East Maui is that the former was in a contested case and I documented all the relevant findings of fact in the Decision and Order that I drafted, and the majority could not practically remove that information, because my proposed Decision and Order had been publicly released.

In the Na Wai 'Eha decision, the commission seemed to prefer the public hearing process over the contested case hearing process in setting IIFS. What are your thoughts on the pros and cons of each approach? Do you have a preference?

On your last question, my answer would be "depends." With the present majority, I



would prefer the contested case approach, because everything has to be put on the public record and nothing can be conveniently left out. If the commission would follow the law, then I would prefer not having a contestedcase, because the process is very tedious and adversarial and takes years for final resolution through the appeals process. An upcoming issue is the petitioners asking for a contestedcase hearing at the conclusion of the East Maui decision meeting. The attorney general's office is of the opinion that there is no right to a contested-case hearing on amending the IIFS, because it is an administrative proceeding, similar to establishing the sustainable yield for aquifers.

Their citation would be to the first Waiahole case, where the court stated that establishing the IIFS was akin to establishing the sustainable yield. However, I would argue that all the court meant was that both the IIFS and sustainable yield establish how much water would be available for offstream uses or to be pumped out of the aquifer. In establishing the IIFS, the commission has to weigh competing interests, an issue that is not present in setting the sustainable yield. So if the commission does not allow a contested case on the East Maui decision, then parties at interest have no recourse to appeal the decision. This would not only apply to the parties who want the streams restored and the taro farmers who want water, but also to the Upcountry farmers and HC&S.

If the attorney general advises the commission not to allow the parties into a contested-case hearing and the commission agrees, I am sure on appeal that that decision will also be reversed.

Finally, the reason why there was a contested case in Na Wai 'Eha was that there were also ground-water permits being considered, and there is an undisputed direct relationship between ground and surface waters in that area. The attorney general had advised against consolidating the permits with the petition to

amend the IIFS, but the commission at that time (Chiyome Fukino and I are the only current members who were on the commission at that time) did not listen to the attorney general and consolidated the permit applications and petition to amend the IIFS into a contested case hearing.

Incidentally, Na Wai 'Eha is now a surface water management area, so all reasonable and beneficial amounts of existing uses are eligible for existing use water permits. East Maui, however, is not a designated management area, and the common law applies there. I have argued that neither the state nor other landowners in East Maui have the right to transport water out of the area, and neither does HC&S have the right to use it. But HC&S can use it, as long as rights-holders (riparian and appurtenant rights) don't want to use the water. The state and other landowners in East Maui may have such rights, but those rights are only to use the stream waters on their riparian and appurtenant lands, and do not extend to a right to transport water out of the area. On HC&S, even if their uses are reasonable, rights-holders have first call.

Furthermore, in addition to riparian and appurtenant rights, the court has said in the cases on traditional and customary rights that state agencies have to accommodate those rights in their decision-making processes, so gathering of stream life would also take precedence to HC&S transporting the water elsewhere. The East Maui petitioners should have sued the state and HC&S directly, on the basis that they had rights that were being denied by the state and HC&S, whether or not the offstream uses were reasonable. Instead, they chose to seek to amend the IIFS and indirectly, to restore water to some of the taro farmers. The petitioners could still follow that parallel course even as they have asked for a contested case on the commission's decision on amending the IIFS.