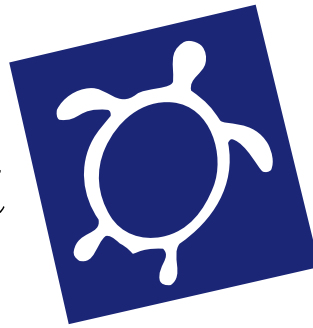


Environment



Hawai'i

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Wasting Away in Wai'anae

The Land Use Commission's decision to let Honolulu keep dumping waste into the Waimanalo Gulch landfill for three more years had to have been a disappointment to Wai'anae residents. For years, they'd been promised that the landfill's days were numbered, that their community would not forever be a dumping ground for O'ahu's waste.

But bowing to the realities of the situation – no alternative site for waste, no chance that all of it could be shipped off-island, and an ongoing need for an active landfill – LUC members gave the city one more time extension.

Will the city be able to identify and prepare an alternative site in the short time allotted? Three years is the blink of an eye when it comes to preparing and developing landfills. If nothing happens soon, it will be *déjà vu* all over again in 2012.

LUC Keeps Waimanalo Gulch Open For Municipal Waste Another 3 Years

It seemed to come down to integrity versus practicality. And integrity lost.

On September 24, the state Land Use Commission heard hours of testimony and debate about whether or not it should grant the City and County of Honolulu a new special use permit (SUP) for the continued use of about 200 acres agricultural land in Kapolei's Waimanalo Gulch as a landfill. And in the end, arguments that the city should be held to its repeated promises to close the landfill were pushed aside as commissioners were confronted with the strong possibility that most of the waste that now goes to Waimanalo Gulch, amounting to nearly a hundred tons of waste a day, would have nowhere to go should the city's current SUP not be renewed or extended past its November 1 expiration date.

The commission voted 5-3 to approve a new SUP to the city on the condition that Waimanalo Gulch stop receiving municipal solid waste (MSW) on July 31, 2012. Ash and residue from the city's H-POWER waste-to-energy plant may continue to be landfilled until the gulch reaches capacity.

The permit allows the city to pursue its planned 92-acre expansion of the landfill, but representatives from the city and landfill operator Waste Management Hawai'i, Inc., were clearly unhappy with the permit's conditions. And so were those who sought to close the landfill.

"The worst thing about it is...irrespective of what's put there, ash or otherwise, it's a dumping ground," state Sen. Colleen Hanabusa said after the vote. Hanabusa, **to page 9**

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The Waimanalo Gulch Sanitary Landfill must cease accepting municipal solid waste in July 2012.

Environment



Hawai'i

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NEW AND NOTEWORTHY

Focus on Cetaceans

Stranding Mystery – Solved: July 3, 2004, saw some 150 melon-headed whales milling about in Hanalei Bay, apparently trying to beach themselves. Most were herded out to sea by a rescue team organized by the National Oceanic and Atmospheric Administration; one calf was known to have died.

The incident was quickly laid at the door of the U.S. Navy, which had been using mid-frequency sonar during RIMPAC training exercises. Not surprisingly, the Navy disputed the claim. Pointing to another mass stranding of melon-headed whales that occurred the same day in Rota, an island in the Marianas chain nearly 6,000 miles away, the Navy argued that the two incidents must be related and were possibly caused by lunar cycles.

In July, scientists with NOAA's Southwest Fisheries Science Center published a paper in *Marine Mammal Science* that pretty much blows the Navy's argument out of the water. Principal

author Robert Brownell and colleagues looked at nearly two dozen stranding incidents involving melon-headed whales – and determined that there was no relation at all between the events and lunar phases. "You can't blame the moon for what happened in Hawai'i," Brownell told *ScienceNOW* Daily News reporter Virginia Morell.

False Killer Whales, I: Will Judge David Ezra require the National Marine Fisheries Service to develop at once a plan to protect false killer whales from interactions with the Hawai'i-based longline fishery? A request that he do so was the subject of a hearing in his courtroom October 26. Asking for the order to find that NMFS is in violation of the Marine Mammal Protection Act by not developing such a Take Reduction Plan were Hui Malama I Kohola, the Center for Biological Diversity, and Turtle Island Restoration Network, represented by Earthjustice attorney David Henkin.

NMFS' attorneys do not deny that the MMPA requires the agency to establish a Take Reduction Team and a TRP, but only when they have the funds to do so. Since Congress did not appropriate the funds, they say, there is no mandate. In any event, they say, NMFS has hired facilitators to begin the process of establishing a Take Reduction Team, with the preliminary meeting of potential members to occur November 16.

Joining in opposition to the conservation groups' request is the Hawai'i Longline Association, which has been admitted as an intervenor in the case. HLA claims that the groups' lawsuit is "part of a misguided conservation campaign to litigate commercial longline fisheries in Hawai'i out of existence." HLA even denies that there is

such a thing as a Hawai'i pelagic false killer whale population, describing it instead as a "legal construct (e.g., faux subgroup)" of the much larger Eastern North Pacific population.

False Killer Whales, II: Accepting (as NMFS does) that the group of false killer whales that inhabit pelagic waters around the Hawaiian islands is a *vrai* population and qualifies for the protective measures called for in the Marine Mammal Protection Act, it's in the pink of health compared to the insular population of false killer whales. That group, genetically and behaviorally distinct from the pelagic population, numbers in the low 100s, inhabits waters that are less than 75 miles from shore, and is thus far more likely to be affected by land-based activities.

Recent research shows that the Hawai'i insular population of false killer whales has high levels of persistent organic pollutants (POPs). Researchers who authored the study, published in the *Marine Pollution Bulletin*, collected blubber samples from nine individuals and analyzed them for the presence of POPs, which are generally fat-soluble and accumulate in tissue over time. Adult females generally had lower levels of DDT and PCBs than adult males and juveniles. Levels of chlordane, DDT, PCBs and mirex "were at least an order of magnitude higher in the subadult male offspring than those measured in his mother," the authors wrote. This, they suggest, is "due to the transfer of lipids and POPs associated with these lipids from mother to calf during gestation and lactation."

"These findings of elevated contaminant levels in subadult whales are a concern," they write, "as these animals are still developing biologically and may be at higher risk to deleterious effects associated with exposure to these compounds than adults in the same population."

Exposure to toxic chemicals was one of the reasons given by the Natural Resources Defense Fund to support its petition, filed September 30, asking that NMFS list the insular population of false killer whales as endangered. Other threats cited in the petition were interaction with fishing gear, suppression of prey as a result of fishing, deliberate injury to the animals by fishermen, and possible injury from mid-frequency sonar used by the Navy.

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Quote of the Month

"How would HC&S use water if it had to pay for it like everyone else? Would it dismiss using the largest well in the state? No."

— Isaac Moriwake, Earthjustice

Parties Conclude Debate over Impacts Of Stream Restoration in Central Maui

You could tell it was a big deal by the throng that had gathered October 15 at the 'Iao Congregational Church to hear final arguments in the Na Wai 'Eha contested case hearing. People filled the dozen or so rows of mismatched chairs, crowded the narrow aisles and spilled down the steps into the yard.

Judging by the resounding applause that followed arguments by Pamela Bunn, an attorney representing the state Office of Hawaiian Affairs, and Isaac Moriwake, who represents Hui O Na Wai 'Eha and the Maui Tomorrow Foundation, the crowd clearly favored the large-scale restoration of Waihe'e River and 'Iao, Waikapu, and Waiehu streams, collectively known as Na Wai 'Eha (the four great waters).

The Hui, made up largely of kuleana landowners and taro farmers, and the non-profit Maui Tomorrow Foundation initiated the hearing in 2006, prompted by evidence suggesting that the Wailuku Water Company, LLC (WWC), which owns and operates the Wailuku Ditch, had begun selling the water instead of using it for agriculture. WWC and its predecessors in the sugarcane industry have diverted Na Wai 'Eha for roughly a century to water crops in Central Maui, mainly sugarcane. The groups, which saw WWC's actions as an attempt to continue to monopolize a public trust resource for private gain, filed a petition with the state Commission on Water Resource Management to amend the interim instream flow standards (IIFS) of Na Wai 'Eha.

As the petition morphed into a contested case hearing, the Maui Department of Water Supply, Hawaiian Commercial & Sugar (a subsidiary of Alexander & Baldwin), and WWC joined in to lobby for an adequate share of the 67 million gallons of water a day that flows through the four waterways. OHA, whose interests aligned largely with the Hui's, also intervened in the case.

Oral arguments began in December 2007 and concluded the following year. In April, hearing officer and water commissioner Lawrence Miike issued his 200-plus-page recommended Findings of Fact, Conclusions of Law, and Decision and Order.

Miike recommended amending the IIFS below the uppermost diversions of each stream to allow for a total flow of 34.5 mgd. He also suggested that the commission require minimum flows at the mouths of Waihe'e River and Waiehu and 'Iao streams



Dry 'Iao streambed

PHOTO COURTESY OF EARTHJUSTICE

to ensure water runs uninterrupted from the mountains to the sea. For Waikapu Stream, Miike recommended a temporary release of 4 mgd. If that does not result in water reaching Kealia Pond, or if it does not improve the recruitment of gobies and other amphidromous animals, then he recommended that the existing interim instream flow standard not be amended at all.

The parties filed their responses to his recommendations in May.

Now that final arguments have wrapped up, the Water Commission will take the next few months to deliberate before issuing a final decision, which has the potential to change the face of Maui. As commissioner William Balfour put it, "To say we have a tiger by the tail is an understatement. This is big, big, big, folks.... It's going to be very, very far-reaching. God help us we make the right one."

'I Object'

Divining the best solution from the case's thousands of pages of evidence, dozens of witness testimonies, and oral arguments was always going to be a daunting task. But HC&S's decision last May to attach several exhibits, containing a boatload of new information, to its response to Miike's recommendation will almost certainly make it even more difficult for the Water Commission.

Before HC&S could begin its final argument at the October hearing, Moriwake objected to those May exhibits, containing what he described as a variety of "black box" calculations and charts, because they were submitted months after the hearing's official record closed.

During his own final arguments, Moriwake accused HC&S of "sandbagging" and of repeated "trial-by-ambush" tactics. He added, "Similar attempts were made to poison the well in the Waiahole case," referring

to the 1994 landmark water case that resulted in the restoration of flow, long diverted by O'ahu Sugar Company, to windward O'ahu streams.

Despite Moriwake's initial objection, the commission allowed HC&S general manager Chris Benjamin to include most of the information presented in the exhibits in his final arguments.

Benjamin said that HC&S, the last functioning sugarcane plantation in the state, is barely surviving and the adoption of Miike's proposed IIFS would effectively kill the company.

"HC&S operates on a very thin margin," Benjamin said, adding that the company made only \$2.6 million in 2006 (its last profitable year), which amounts to a mere 2 percent profit. He continued that the company is expected to post losses of \$25 million this year as a result of a 25 percent decline in production caused by the 2007-2008 drought. Miike's proposed IIFS would have the same effect as a drought, he said.

Benjamin disputed Miike's decision to base his impact analysis on long-term average stream flows, which he said underestimated the impacts to offstream users. Based instead on USGS flow data for the last four years, Benjamin said, the proposed IIFS would leave HC&S without water at its Waiale Reservoir for 159 days out of the year. It would also leave the county's proposed 9-mgd Waiale Water Treatment Facility without water 73 days of the year and would result in the county's 'Iao Water Treatment Facility operating below capacity for 129 days.

"These are the actual effects," he claimed, adding that Miike's proposal would leave kuleana users with less water than they have today.

Benjamin also disputed Miike's determination that there are alternative water sources – Well 7, in particular – for 1,500 acres of sugarcane served by Na Wai 'Eha. He said Well 7 water could not be transported to where it was needed, and that it would cost too much to use. Without those 1,500 acres, total productivity would drop by five percent, which would wipe out any profit HC&S might stand to make, he said.

In light of the recent losses, the board of directors of A&B will make a decision on the future of HC&S by the end of the year, he said, noting that if HC&S goes away, so will 35 percent of the island's renewable energy. While HC&S is looking at using its lands for energy production, the crops and technology aren't ready yet for the company to make a go of it, he said.

"We cannot shrink our way to profitability," he said. Instead, he proposed reducing



the amount of water restored to 'Iao Stream and Waihe'e River. Under HC&S' proposal, the IIFS for Waihe'e River and 'Iao Stream would be amended to 5 mgd and 4 mgd, respectively, which would still leave a total of 16 mgd in the streams.

When it came time for the commissioners to question Benjamin, Miike immediately addressed the late submission of evidence.

"Most of your [arguments] are based on evidence submitted after closing," he said. With regard to the new information on revenues, "I would have wanted that information [during the hearing]," he said.

Miike asked Benjamin to comment on possible incremental impacts of amended IIFS (rather than the total impact to HC&S and all of Maui). In reply, Benjamin said only, "Every acre we lose is revenue lost."

"At the hearing, you didn't provide any of that information," Miike noted.

'Harsh result'

WWC also argued for a less ambitious restoration of stream flow.

"You want to avoid the law of unintended consequences" associated with broad actions such as the IIFS amendments, said Paul Mancini, attorney for WWC. Mancini admitted that the issues in the Na Wai 'Eha case are too complex to avoid all unintended consequences, but tried to describe how the proposed IIFS would be insufficient for offstream users.

Miike's proposal would leave only about 29 mgd for "reasonable" existing uses that already total 26-28 mgd. That leaves little to no water left for the county's proposed Waiale Water Treatment Facility or several other existing uses, Mancini said.

He added that under the proposed IIFS for Waihe'e River, there will be a "serious shortfall" of water available for offstream use 50 percent of the time. For 'Iao Stream, one-third of the offstream demand would not be met 50 percent of the time.

The "harsh result" Miike's IIFS would have on WWC could cause the company to shut down, Mancini warned. As an alternative, he proposed restoring 5.4 mgd to Waihe'e River and 4.2 mgd to 'Iao Stream (both HC&S and WWC proposed no amendments to Miike's proposed IIFS for Waiehu or Waikapu streams.) Under these IIFS, all demands of offstream users would be met 50 percent of the time, he said.

The Maui DWS also had concerns about meeting demand. County corporation counsel Jane Lovell said, "It would be more prudent for this body to start with lower numbers."

Attorney John Van Dyke, also represent-

ing the county, said that the commission should consider the needs of public offstream users when setting the IIFS, not just when considering water use permits, which are issued if there is water in excess of the IIFS.

"The county is concerned there won't be enough [water] left to the county if the [proposed amount of] water is put into the streams," Van Dyke said, adding that the commission must consider the Waiale Treatment Facility as well.

"There's not going to be enough water for that plant," he said. Lovell added that if 13 mgd is returned to 'Iao Stream as proposed, the amount left would "be inadequate for the 'Iao treatment facility." She said that even the 11.5 mgd the county had originally proposed for 'Iao Stream may be too high.

Lovell ended her arguments with stern words for HC&S. She said it was "utterly inexplicable" that HC&S did not submit any of the new numbers before the hearing closed months ago.

"HC&S did not make its case then in the legal evidence. The county might have been able to accept those numbers and would be here advocating for them. ... It's a crime that, given the importance, a better case was not made," she said.

An End to Waste

"It is well past time to restore the balance to Na Wai 'Eha," OHA's Bunn said. And while she acknowledged that it was important to allow for municipal water, the evidence presented in the case did not establish that 9 mgd was required for the Waiale plant.

"What happened to the water Wailuku Water Company couldn't find a use for?" Bunn asked, referring to letters WWC wrote a few years ago detailing how much it had available for sale. That water eventually went to HC&S, where, she said, it was squandered on a marginal, low-yielding field – Field 920 – that could have been left fallow.

Between 2004 and 2006, Bunn said, HC&S used 11,000 gallons per acre per day (gad) on Field 920, when the optimum requirement was only 5,750 gad. Bunn said that the over-watering of Field 920 and of HC&S' Waihe'e-Hopoi and 'Iao-Waikapu fields wasted 5 mgd between 2004 and 2006. That amount alone could restore Waikapu Stream, she said.

Bunn added that between 2004 and 2006, 9 mgd of WWC's surplus was lost through seepage at HC&S' Waiale Reservoir, and 3 to 4 mgd was lost from the plantation's smaller reservoirs. In total, Bunn calculated that HC&S wasted about 14 mgd of Na Wai 'Eha water between 2004 and 2006.

"OHA doesn't believe that's how you treat

For Further Reading

Environment Hawai'i has published several articles that will provide additional background to the current dispute over West Maui surface water:

- "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" (December 2007)
- "Commission Tightens Grip on Waters of Central Maui" (May 2008)
- "Hearing Officer Issues Recommendations for Na Wai 'Eha Contested Case Hearing" (June 2009)

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a resource that's necessary for survival," Bunn said.

With regard to HC&S' claims that Well 7 is not a viable alternative, Bunn said that using HC&S' numbers, it would cost less than \$0.20/1,000 gallons to operate Well 7. Bunn hedged her calculations, saying that she was not sure where HC&S' cost figures came from and that they changed from one document to the next. She added that she spent a lot of time trying to replicate HC&S' numbers and, "I couldn't do it."

Moriwake's arguments were similar to Bunn's. He called out WWC for providing no proof – only paper contracts – of actual use. At one point, he noted, WWC had been spraying 1 mgd of Na Wai 'Eha water "into the air in dry Ma'alaea, all day, every day" and had called it a reasonable use.

As for HC&S, he, too, said Well 7 – the largest well in the state – was a viable source, noting that HC&S had drawn in excess of 20 mgd from that well for more than 50 years. Reclaimed water was another alternative, he said.

Bird Study Reveals, Dispels Overlaps In Diets of Native, Introduced Species

Over the past year or so, research on the endangered 'akepa (*Loxops coccineus*) by the husband-and-wife team of University of Hawai'i zoology professor Leonard Freed and Rebecca Cann, also a UH professor, has garnered publicity in the prestigious scientific journals *Science* and *Nature*. Articles in those journals reported Freed's work suggesting that 'akepa within the Hakalau Forest National Wildlife Refuge are declining as a result of food-competition from the introduced Japanese white-eye (*Zosterops japonicus*).

But a recent study by Robert Peck and Paul Banko of the U.S. Geological Survey and David Leonard of the state Department of Land and Natural Resources on the diets of endangered and introduced forest birds at Hakalau tells a different story.

During the mid-1990s, in the Maulua and Nauhi sections of the 32,733-acre refuge, Peck and his colleagues collected 'akiapola'au (*Hemignathus monroii*), 'akepa, Hawai'i creepers (*Oreomystis mana*), Hawai'i 'amakihi (*Hemignathus virens*), 'elepaio (*Chasiempis sandwichensis*), and Japanese white eye (JWE) in mist nets and collected fecal samples. They studied the identifiable body parts – fangs, mandibles, legs – from those samples and determined to a large degree what those birds ate. They presented their results in a poster at the Hawai'i Conservation Conference held last July in Honolulu.

Although the researchers were unable to

determine about 10 to 16 percent of the birds' diets, they were able to identify 41 categories of prey items and found that caterpillars are key food items, which is consistent with observations made by naturalist R.C.L. Perkins 100 years ago, the poster states.

Caterpillars make up 67 percent of all prey for the 'akiapola'au, 48 percent for the Hawai'i 'amakihi, 42 percent for the 'akepa, and 41 percent for the Hawai'i creeper. Caterpillars made up only 16 percent of the white-eye's diet, the researchers found. (The researchers were unable to determine any particular species of caterpillar. Rearing moths from caterpillars with the same 16 different mandible types found in the fecal samples may allow for identification at the family or genus level, the poster states.)

Spiders, the second most popular prey item, comprised 18 percent of the diet of the Hawai'i creeper, 16 percent of the 'akepa's diet, 15 percent of the 'elepaio's, and only 3 percent of the 'akiapola'au's. For the white-eye, spiders accounted for 23 percent of its diet.

The second-most common food item found in the 'akiapola'au's diet was a cerambycid beetle, which accounted for 12 percent.

The researchers also found differences in the types of homopteran prey – plant-hoppers, lice, aphids, scales, etc. – preferred by the birds. Delphacid plant-hoppers were



The Hawai'i 'Akepa

PHOTO: © JACK JEFFREY

avored by 'elepaio, white-eye, and 'amakihi, but made up just 29 percent of homopteran prey consumed by the 'akepa. The 'akepa, they found, preferred Psyllids, a type of plant lice.

"These results suggest that diet overlap between Japanese white-eye and the endangered birds is relatively small," the poster's abstract states. "A more substantial threat to caterpillars likely comes from alien parasitoids, which kill about 25 percent of native *Scotorythra* caterpillars at Hakalau."

The native honeycreeper whose diet overlapped most with the white-eye's was the Hawai'i creeper, which consumed a lot of the same type of caterpillar. Among the native birds, the greatest overlap in diet was between the 'akepa and the 'amakihi. The 'akepa and the 'akiapola'au also ate many of the same things.

The study notes that the influence of sex, age, and season on the diets of these birds has not yet been studied and that detailed studies on foraging behavior are needed to understand how native and introduced birds partition resources.

Still, Freed and Cann are not swayed by the dietary study. Their most recent article is to appear this month in *Current Biology*, titled, "Negative Effects of an Introduced Bird Species on Growth and Survival in a Native Bird Community." In this paper, they argue that as a result of an explosive growth in numbers of white-eye at Hakalau, 'akepa "became nonviable during 2000-2006," the last year Freed was allowed to work at the refuge. Once more, Freed and Cann propose "intensive management" measures to control white-eye populations at Hakalau.

Peck says that he and his team are trying to get more detailed diet information by identifying the prey samples to the highest taxonomic level possible. Using the caterpillar mandibles, for example, they are trying to

"How would HC&S use water if it had to pay for it like everyone else?Would it dismiss using the largest well in the state? No," he said.

The fact that there may not be enough water for the Waiale Treatment Facility did not bother Moriwake, since, under an agreement with the county, the plant would mainly serve A&B development projects.

"Municipal and domestic are two different animals," he said, adding that the 9 mgd is not a public use, nor is it an existing one.

A Rebuttal

HC&S attorney David Schulmeister had the last word. With regard to the "extra evidence" he provided in May, he argued, "There is no rule that says it has to be in the record." The commission has to consider the best information available, including potential impacts to

offstream users, and must do so at every stage in the planning and permitting process, he said.

He noted that while the interim instream flows for Na Wai 'Eha were being determined through a contested case hearing, those for several East Maui streams were not.

"You cannot put on blinders. In this case, it would have been impossible to say what the impacts would be until the recommendation was made," he said.

At the hearing's close, Water Commission chair Laura Thielen said that Na Wai 'Eha and East Maui interim instream flow cases will be ground-breaking decisions and that the commission will be comparing the different processes – contested case hearings versus a more open, legislative scheme – to determine how best to proceed in the future.

— Teresa Dawson

identify the species, or at least family they belong to, which will help narrow down the microhabitats where the caterpillars live, he says.

Regarding efforts to determine the age of the birds sampled, Peck says for species like the 'akepa, the sample size was limited to only a dozen.

"There is very little we're going to be able to say about seasonality and sex" with regard to the 'akepa, he says. He adds that they did collect enough 'amakihi and 'elepaio to make some determinations and that the group hopes to have a manuscript on the additional analysis prepared by the end of the year.

As for future research, Peck says, "We would like to do more field work and get data we don't have now.... We would really like to get foraging observations on birds, which is really critical. You can only surmise so much using diet samples."



For Further Reading

Environment Hawai'i has reported extensively on the controversy over the work of Freed and Cann. See:

"Is Hawai'i 'Akepa on the Brink of Collapse? Alone among Peers, UH Professor says Yes," November 2006; and

"UH Professor Takes Long-Running Feud with Feds into Court of Public Opinion," April 2009.

All past articles are available online at www.environment-hawaii.org. Access is free for current subscribers. Others may view the complete archives with a two-day pass for \$10.



Ant Control Results For Offshore Islets

As part of a larger strategy to control pests on offshore islets, University of Hawai'i graduate student Sheldon Plentovich has attempted to control and eradicate two species of ants on islets off O'ahu's eastern shore. Ant poison can effectively eradicate certain species, she's found, and while that might seem to be an ideal result, it can also open the door to new invasions. Even so, merely suppressing ants allows native seabirds and plants to thrive, she concluded.

In her presentation (for which won the award for best student presentation) at this year's Hawai'i Conservation Conference, Plentovich stated that more than 50 species of ants have been introduced to the Hawaiian islands, where native ecosystems evolved without them. Ants can reduce or extirpate arthropods, increase unwanted bugs, harm seabirds, and change forest structure, among other things, she said, noting as an example that the yellow crazy ant (*Anoplolepis gracilipes*) killed off the red land crab on Australia's Christmas Island, and as a result, altered the island's forest structure.

While ant eradication has been accomplished in some places, such as the Galapagos, there is very little information on the ecological effects of ant control, she said.

In her experiment, Plentovich tested the effects of the ant poison Amdro (hydramethylnon) on the big-headed ant (*Pheidole megacephala*) and the tropical fire ant (*Solenopsis geminata*), which can inflict crippling stings on shearwater chicks. In 2002, the first year of her study, the big-headed ant was the most abundant arthropod on her first set of study sites, the islets of Mokuauia and Popia off O'ahu's east coast. The tropical fire ant was most abundant on her second pair of study sites, the twin islands known as the Mokulus. All four islands are seabird sanctuaries and host a variety of rare native species.

On each islet, Plentovich randomly selected 15 monitoring sites. She set out cards baited with peanut butter, honey, and SPAM to monitor ants; collected arthropods in pitfall traps; and monitored the seabirds there for three years. She treated one islet from each pair — Mokuauia and Moku Nui — with Amdro.

Following treatment, big-headed ant numbers on Mokuauia dropped to zero from 2003-2008, while on the control island, Popia, big-headed ant numbers grew.

In the long term, the big-headed ant remained the dominant species on Popia. On Mokuauia, however, the eradication of the big-headed ant was followed by a significant change in the ant species on that island. The tropical fire ant showed up, and later disappeared; pavement ants (*Tetramorium bicarinatum*) also came and went, and the yellow crazy ants eventually arrived.

"We were really concerned about this because the yellow crazy ant is the species that's causing problems on Christmas Island, we know it attacks seabirds, and in some situations, it can cause colony abandonment," Plentovich said. The invasion made her reexamine her seabird data which revealed that the yellow crazy ant invasion of Mokuauia coincided with declines in the number of

wedge-tail shearwater chicks.

On the Mokulus, "things were a little less clear cut," she said. Tropical fire ant numbers decreased on both islands (Moku Nui and Moku Iki). On Moku Nui, the tropical fire ant population was diminished but not eradicated.

"We have this period of suppression... but we were not able to achieve eradication on that island," she said.

Although Plentovich was unable to eradicate the tropical fire ant from Moku Nui, reduced densities "resulted in increased weight and fledging success of wedge-tailed shearwater (*Puffinus pacificus*) chicks and increased leaf cover in the native plant ilima (*Sida fallax*)," she wrote in the abstract of her talk.

Also, from her pitfall traps, Plentovich found that the pesticide also seemed to have affected alien cockroaches. "I'm sure everyone is devastated by all this," Plentovich joked. Because the islands had no native detritivores, she said she doesn't know how they might be affected by Amdro.

As a result of her experiment, Plentovich concluded that hydramethylnon can eradicate big-headed ants but, with monitoring, should be used cautiously in an adaptive management plan.



Shearwater chicks, like this one, have been crippled by stings from invasive tropical fire ants.



Do Aliens Evolve To be More Invasive?

Do individuals from a Hawaiian population of an invasive species grow faster than individuals of the same species from their home ranges? A study by National Park Service botanist David Benitez suggests that the answer is yes.

"It's long been noted that invasive plants appear larger and more aggressive in their new ranges... but only recently have researchers begun to explore the possibility that genetic differences contribute to this larger

BOARD TALK

Land Board Orders Removal of Boulders Fronting Waimanalo Beachfront Home

It seems like a problem that is never going to go away," state Office of Conservation and Coastal Lands administrator Sam Lemmo said of illegal shoreline structures. And at its September 25 meeting, the state Board of Land and Natural Resources just barely stuck to its no-tolerance policy on unauthorized shoreline structures when it ordered Richard Barrett to remove the boulders and geotextile fabric he used to fortify his Waimanalo beachfront property. Despite the unanimous vote, half of the board members had originally favored allowing him to leave the boulders and fabric in place.

At the meeting, the OCCL had recommended that the board impose the maximum fine of \$15,000 and order the removal of tree remnants, boulders, geotextile fabric, fill and any other introduced material to the shoreline inside the Conservation District.

According to OCCL's report to the board, an

inspection of Barrett's property in May 2006 revealed several potential Conservation District violations and encroachments, including stairway remnants, fill, and concrete blocks. While Barrett removed those features, the OCCL was notified in November 2008 that, a year earlier, he had allegedly placed tree remnants, boulders and fill on the beach fronting his property.

In letters to the DLNR, Barrett explained that he had removed a tree along the shore, which left a big hole on the beach. He wrote that he merely filled in the hole to keep people from falling in, chopped up the tree and placed the remnants, along with some boulders, at the foot of his property. He wrote that he had also placed along his property the remnants of a tree that had fallen over in a storm and secured it with geotextile fabric.

At the Land Board's meeting, Barrett said his intentions were to increase the public

right of way and to remove a nuisance.

"I actually decreased the vegetation line and increased the public beach... The beach is the cleanest, the largest, the nicest because of what I've done," he said, adding that he was unaware a permit was required for the work and that he had removed some of the netting. He also said some of the netting in the OCCL's exhibits to the board belonged to his neighbor.

The rocks, he argued, came from the beach and are now buried deep under sand and vegetation.

When discussing the proposed penalties, Barrett said the fine was excessive, but that he would rather pay it than have to remove the landscaping that had grown over the crude revetment he had built.

Hawai'i island Land Board member Robert Pacheco was not entirely clear why the board was being asked to penalize Barrett for leaving pieces of a fallen tree on the beach and to fine him such a large amount of money.

"Is a property owner responsible for removing a tree if it fell over in a storm and is left there?" Pacheco asked Lemmo.

Lemmo responded that in Barrett's case, it didn't happen that way, so he couldn't answer Pacheco's general question. He also

appearance and hence invasiveness," Benitez said in his conference presentation.

When invasive plants enter new habitats that lack natural enemies, those species can put more energy into growing larger and eventually evolve to stay that way, leading to genetic differences between populations, Benitez explained.

In his study, Benitez set out to test two hypotheses: 1) that plants from invasive populations here grow faster than their counterparts from South America, and 2) that plants from invasive populations here will have fewer chemical and structural defenses than their South American counterparts. As subjects, he chose some of Hawai'i's most invasive weeds — strawberry guava (*Psidium cattleianum*), Koster's curse (*Clidemia hirta*), and herb cane tibouchina (*Tibouchina herbacea*). All three species have been in the islands anywhere from 40 to 150 years and two are on the state Department of Agriculture's noxious weed list, he said.

With seeds collected in both Hawai'i and the plants' home ranges in Brazil and Venezuela, Benitez grew some 1,200 plants at a quarantine lab in Volcano, Hawai'i, and monitored them for 120 to 180 days. Benitez said the data he collected on plant height, mass, and growth rates support his hypoth-

esis that Hawaiian plants grow larger than the South Americans. (The Hawai'i Department of Agriculture's import permits prohibited him from conducting experiments on their ability to reproduce.)

The tibouchina exhibited the greatest differences. Based on 365 individuals, Benitez found that plants from Hawai'i grew significantly taller, faster, and more massive than those from South America. He also found that the leaf shape of those from South America varied more than those from Hawai'i, and that the Hawai'i plants grew more upright.

The trends for strawberry guava were similar, but not as strong, Benitez continued. Based on 465 individuals, he found that the Hawai'i plants grew significantly taller and more massive. They also grew faster, but not significantly so. He found that while the seed size of strawberry guava varied in Hawai'i, it varied even more for those from South America.

With clidemia, Benitez said he faced significant challenges: 60 percent of his plants died from volcanic gases and pest infestation. As a result, he could not identify any clear or statistically significant trends. However, his general observations were that there were no height differences, but there was greater survival among the Hawai'i plants.

"These findings suggest that the plants are more competitive here than in their native South America," he said.

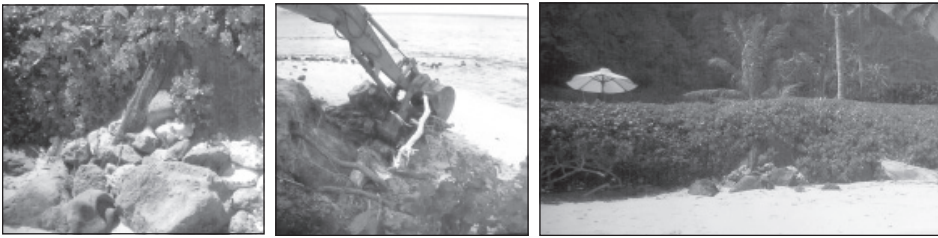
In response to a question from the audience about whether his South American and Hawaiian plants were really the same taxa, Benitez said that "depends on which botanist you talk to" since some do not recognize varieties. When asked whether the differences could be due to chromosome number, Benitez said he was interested in pursuing that kind of research, but was legally limited in his ability to do genetic work.

Regarding the Hawai'i tibouchina, he added that some say it evolved here, while another possibility is that it is a mutant variety from South America. If that's the case, he said, "We need to locate it."

Although Benitez did not share his results regarding plant defenses, a couple of his clidemia pictures suggested that the leaves of the South American individuals were hairier.

— Teresa Dawson

The Hawai'i Conservation Alliance webpage contains links to more than 70 talks and presentations given at this year's Hawai'i Conservation Conference: http://hawaiiiconservation.org/2009hcc_presentations.asp



Left to right: Richard Barrett used netting and rocks to keep his embankment in place. He said his removal of a tree from the shore actually improved the beach. Richard Barrett's property now. PHOTOS PROVIDED BY RICHARD BARRETT

noted that in the past, his office always recommended the maximum fine for illegal shoreline structures. For years, the maximum fine for a Conservation District violation was \$2,000, but the Legislature recently raised the maximum fine to \$15,000.

With regard to Barrett's preference to pay a fine rather than remove the illegal structure, Lemmo said he would rather have Barrett remove the revetment and not pay as much in fines.

"My objective is compliance. If we can get compliance, I don't really need lots of money.... [Requiring removal] sends a message," he said. He added that since the beach did not appear to be in an erosion phase at the moment, removal should not harm Barrett's property, except for some initial, temporary destabilization of the bank.

At-large board member Samuel Gon countered that unless the boulders maintained their alignment as they sank into the sand over the years, it would be difficult to determine which ones were from the revetment and which were there to begin with.

The problem with simply imposing a fine, even a \$15,000 fine, is that some people will build illegal structures and "will just take the fine. If we set a precedent, that type of thinking will continue," Kaua'i board member Ron Agor countered.

To this, Pacheco said, "That was when the maximum fine was \$2,000; \$15,000 is a pretty significant slap on the wrist. If it's not going to make the beach better, I'd rather not remove it to make a point. Are we going to make the beach better?"

"A little bit," Lemmo said. He explained that the boulders lock up the mauka sand and when the beach does begin to erode, the exposed rocks may become hazards.

Land Board administrator Laura Thielen added that Barrett's revetment may encroach onto state land.

"What if he's taken two feet?" she asked. If he has encroached on 600 square feet of public beach, she added, a \$15,000 fine would not serve as a deterrent. Removal is a "clearer step to say, 'These are public trust areas,'" she said.

She also said she found it difficult to

accept that Barrett thought bringing in a backhoe to move rocks onto the beach didn't require a permit.

When Pacheco argued that it didn't make sense to require Barrett to remove the revetment when he would probably just have to return to the Land Board for permission to put something similar back in, Agor said that whatever the board approved would not be similar.

Maui board member Jerry Edlao sided with Agor and made a motion to accept OCCL's recommendations. His motion failed, 3-3, with Pacheco, Gon, and O'ahu board member John Morgan voting in opposition. Morgan then made a motion to accept the fine recommendation, but not require any removal, but no one seconded his motion.

Finally, Pacheco made a motion to reduce the fine to \$9,500 and require the removal of the boulders and geotextile fabric, but not the fill or tree remnants. His motion passed unanimously.

After the board's vote, a befuddled looking Barrett said he was not sure which boulders the board wanted removed. Although Thielen referred to one of the exhibits showing the rock slope, Barrett said, "They're buried now." To which, Edlao responded, "You gotta go figure that out."



Tradewinds Reorganizes, Wins License Amendments

Don Bryan, head of Tradewinds Forest Products, LLC, was obviously happy finally to be able to deliver good news to the Land Board. Granted, he was also there to seek yet another round – the sixth – of amendments to his company's timber license that were necessary to keep his veneer mill project alive. But this time, he wasn't alone: The recent economic downturn has led investment firm GMO Renewable Resources, LLC, to partner with Tradewinds and principal investor Rockland Capital, so that GMO can take advantage of its 13,000-

acre timber plantation on the Hamakua coast, where Tradewinds also plans to construct its mill.

On October 9, upon the recommendation of its Division of Forestry and Wildlife, the Land Board unanimously approved the amendments, including the removal of 3,450 acres of "replacement stands," the pushing back of deadlines to obtain county approvals and complete mill construction, and the delegation to the Land Board chair of the authority to extend the license term to August 28, 2021, on the condition that construction financing is secured by December 31.

Only one member of the public, Scott Enright, testified in opposition to the amendments. Enright, a Big Island resident, recommended that the board should instead require a feasibility study, noting that Tradewinds originally intended to sell its timber locally, but has now shifted its focus to Asian markets.

"Is there a market? Nobody can verify if there is one," he said.



A Progress Report For Pu'u Wa'awa'a

For the record, it was a community initiative," Big Island Land Board member Rob Pacheco said of DOFAW's and State Parks' development of a 10-year management plan for Pu'u Wa'awa'a and makai lands at Pu'u Anahulu.

During DOFAW administrator Paul Conry's presentation to the board, he had left out the fact that the state stepped up its efforts there only after the non-profit group Ka 'Ahahui o Pu'uwa'awa'a attempted in 2001 to lease, with the intention of restoring, the 104,499-acre area, ravaged by decades of grazing.

"The department hijacked it," Conry admitted, referring to Ka 'Ahahui's restoration plans. Despite fears early on that the DLNR lacked sufficient funding resources, this year's progress report suggests the department has made headway on a significant portion of its plan, which expires in 2013.

The plan includes 62 management objectives, and according to the report, all of the administrative priorities, and fire, natural resource, and grazing management activities have been initiated or achieved. For fiscal year 2009, the division was able to secure \$1,087,257 through in-kind contributions (\$373,000), partner/grant funding

(\$693,657), and revenue from a cell tower lease and collection permits (\$20,600). Some management highlights include the following:

- Since February 2007, a total of 1,100 feral pigs have been removed from Pu'u Wa'awa'a and released elsewhere.
- The Lake House reservoir has been re-lined.
- To date, nearly 70,000 common and rare plants have been planted.
- In 2009, DOFAW secured funds to construct an enclosure around the 700-acre Henahena Unit, which will protect mid-elevation remnant forest and several lava tube systems, the report states. Also, a 50-acre reservoir paddock (Hauaina enclosure) was re-fenced and will serve as a nene habitat restoration site and a large-scale native plant and tree seed orchard.

Despite all the accomplishments, not everything has gone smoothly. Certain public hunting objectives have been put on hold pending the approval of rules or improvement in habitat. The report was pessimistic about meeting its goal to control feral ungulates makai of Queen Ka'ahumanu Highway. While staff does trap and release animals into a nearby game management area, the report states, "It is anticipated that feral goat ingress...will continue indefinitely."

The report also reveals that the division

has struggled to hire and retain a qualified field crew. Currently, Mike Donoho, who resides on site, is the only staff dedicated to management at Pu'u Wa'awa'a.

"The long commute distances and field crew pay scale has limited retention and field work productivity," it states.

At the meeting, Big Island board member Robert Pacheco asked Donoho about opportunities for revenue-generating activities.

Donoho responded that while some ideas have been kicked around, he wanted to be careful about rushing into commercial activities at Pu'u Wa'awa'a. He cited the department's policy to focus on the resources first, the public second, and then commercial interests. Right now, he said, not enough is currently being offered to the public so it would be premature to jump into any commercial ventures.

With regard to the trapping and release of ungulates, at-large board member Sam Gon said that he would prefer "catch-and-release into somebody's mouth." When asked if there had been any cost analysis about relocation versus eradication, Donoho said that relocating ungulates did not incur significant time or material costs. He also pointed out that the management plan includes game management objectives and seeks only to remove ungulates from key areas.



DLNR to Join Mauna Kea Alliance

On September 11, the Land Board agreed to allow its chair, Laura Thielen, to sign a Memorandum of Understanding with the Mauna Kea Watershed Alliance (MKWA), which stretches from Hilo to just south of Waipi'o Valley and covers the vast chunk of land that lies between the Kohala Watershed Partnership and the Three Mountain Alliance. The MKWA will be the 10th watershed partnership the state Department of Land and Natural Resources participates in. With this approval, it is now eligible to receive money from the state Natural Area Reserves System special fund to manage and protect the area's natural resources.

In addition to the Department of Land and Natural Resources, the MKWA is made up of the state Department of Hawaiian Homelands, Kamehameha Schools, the University of Hawai'i's Office of Mauna Kea Management, Parker Ranch, the U.S. Army, and Kukaiau Ranch.

The University of Hawai'i Pacific Cooperative Studies Unit has already begun drafting a management plan for the area. —*T.D.*

Waimanalo from page 1

state Rep. Maile Shimabukuro, and the Ko Olina Community Association, all of which represent people living near Waimanalo Gulch, filed petitions with the LUC asking it to deny the city a new permit.

By all accounts, the city will be back before the LUC in three years, or sooner, to seek an extension and perhaps other amendments to the SUP. If the discussions during the September LUC hearing and the July county Planning Commission meeting are any indication of what the LUC will ultimately decide, the city will probably receive another extension. As planning commissioner Kerry Komatsubara said during the July 31 meeting where the commission recommended LUC approval of the SUP, "It becomes incumbent on us as to whether we enforce that commitment or not. It is kind of a game of chicken, however, because at the same time we really don't want to close this landfill [by revoking the permit]. I asked myself the question, I said, 'Would you, Kerry, really be willing to close Waimanalo Gulch?' and the answer is no."

Background

The city's Waimanalo Gulch Sanitary Landfill has been accepting O'ahu's garbage for about 20 years and today receives about 300,000 tons of MSW and nearly 100,000 tons of ash from H-POWER a year. The landfill was originally set to close in 2002, but, in March 2003, to allow for a 15-acre expansion, the LUC extended the expiration date of the city's SUP to May 1, 2008. Despite attempts by the city during Mayor Jeremy Harris' administration to find a new landfill site before the expiration date, his successor, Mufi Hannemann, indicated in early 2006 that he preferred to keep Waimanalo Gulch open. The city then proposed a 92.5-acre expansion of the gulch, which would add an estimated 15 years of capacity.

Last March, in response to the city's request for more time to complete the environmental impact statement for the expansion, the LUC extended the expiration date yet again, to November 1, 2009 or when the landfill reached capacity, whichever came sooner. Before the year was out, however, the city filed a petition with the LUC for a



Trash is sorted before incineration at the city's H-POWER plant.

new SUP to cover the expansion and replace the existing SUP. As a backup should that permit be denied, it also filed a petition for a boundary amendment to place Waimanalo Gulch in the Urban District,

where rules for permitting landfills are less strict than in the Agriculture District, the current zoning for the area.

The LUC held a single hearing on the boundary amendment in May, which drew a lot of testimony from Nanakuli residents worried that a closure would force the city to start dumping waste at the PVT landfill, which is located in Nanakuli and accepts only construction and demolition waste. Two months later, the county Planning Commission voted to recommend that the LUC grant the city a new SUP without a closure deadline. As commissioner Komatsubara explained, "To me, clearly simply having a specified end date certain on the previous SUPs has not resulted in the closure of Waimanalo Gulch. We have been down this road many times. I think it's been extended three or four times. In my opinion, simply putting on a new closure date to this new SUP will not lead to the closure of Waimanalo Gulch Sanitary Landfill. I believe that the focus should not be on

Coast is the sentiment of many of the community leaders," the motion states.

Needed or Not?

At the commission's September 24 meeting, city councilmember Todd Apo, who represents the Leeward coast, agreed with Hanabusa's arguments against the landfill, although he did support a two-year permit extension.

Apo did his best to convince the commission that very soon, O'ahu would no longer need Waimanalo Gulch. He testified that the Seattle-based company Hawaiian Waste Systems, LLC, which has a contract with the city to ship waste to Washington, can also take H-POWER's ash. He said that by 2011, H-POWER will have expanded to accept 400,000 tons of waste a year. After that, Apo said, "We don't need a landfill anymore... [except for] an emergency site." He added that while the council needs to appropriate a little more funding to complete the expansion, the contractor building the new boiler

for and funded the expansion.) Takeuchi also referred to the city's recent contract with Hawaiian Waste Systems to ship 100,000 to 150,000 tons of waste a year as an interim solution until the H-POWER expansion goes on line. Takeuchi added that the city is also looking at whether pellets from H-POWER can be used as soil amendments, which would lessen the amount of ash and residue sent to Waimanalo Gulch.

Takeuchi also disputed Apo's claims that H-POWER and Hawaiian Waste Systems could together make Waimanalo Gulch obsolete, stating that closing Waimanalo Gulch actually "raises the spectre" of closing H-POWER, since there needs to be a home for the ash should shipping cease being an option. Currently, all of H-POWER's ash goes to Waimanalo Gulch.

Despite Takeuchi's arguments, commissioner Normand Lezy was not swayed and countered that when the LUC granted the city an extension on its SUP last year, its Decision and Order was very clear that the city was to close the landfill by November 1, 2009 at the latest.

"It's some curiosity we're sitting where we are now," he said and asked Takeuchi how the city reconciled last year's D&O with the city's application for a new permit.

Takeuchi said the record clearly shows that the commission granted the 18-month extension last year to give the city more time to complete its EIS for the expansion. "So I hope it's not a complete surprise," he said.

Commissioner Reuben Wong asked Takeuchi, "Is there ever a time when... municipal waste will not be placed in Waimanalo Gulch?"

Takeuchi responded, "that day is not here now" and in any case, the city must have the option to landfill waste if it needs to.

When Wong asked Takeuchi what kinds of assurances the city could give to the commission that waste management alternatives will be funded, Takeuchi said he could not speak for the City Council or the administration, but said it is the Department of Environmental Services' intention to divert 80 percent of MSW from the landfill.

To this, Hanabusa argued, "Before, it was, 'It will close. We won't need a landfill.' Now, the city's main argument is there will always be a need for a landfill. There comes a point in time when people have to be held to their word."

OP's Stance

Although not a party to the docket, the state Office of Planning weighed in on the application in a 14-page letter dated September 22 to LUC chair Ransom Piltz. In it, OP

"It's reprehensible that we would consider the solution to be putting our trash in someone else's backyard." — Thomas Contrades, LUC

picking a date. The focus should be on: How do we get the city to select a new site because you are not going to close this landfill until you find another site." During the hearing, city representatives said that the city would begin seeking and developing a supplemental landfill site next year.

In September, Hanabusa (D-Ko Olina, Kahe Point, Nanakuli, Ma'ili, Wai'anae, Makaha, Makua, Ka'ena Point), Shimabukuro (D-Wai'anae, Makaha, Makua), and the Ko Olina Community Association filed a motion to intervene in the LUC docket and a motion to deny the permit.

The motion to deny, which Hanabusa filed on behalf of all three parties, cited the various health and safety issues the state Department of Health has found at the landfill, including excessive temperatures and improper storm water management, among other things. It also chronicled the various instances where city representatives told Leeward coast residents that landfill would close. The petition cited testimony from Hawaiian cultural experts about how the city's plan to blast out the back of the gulch, which will destroy the locations of three large stone fishing ground markers, will cause irreparable harm to the Hawaiian culture.

"The city is dumping on the Wai'anae

has already started ordering the equipment.

"Can you deny this petition without causing havoc for the city? Yes you can," he said, adding that a two-year extension of the existing permit was reasonable. In response to a question from commissioner Kyle Chock about whether a November closure of Waimanalo Gulch would result in waste being rerouted to the state's PVT construction and demolition landfill in Nanakuli, Apo said he didn't think that would happen since PVT is not lined or permitted by the state Department of Health to accept MSW.

In direct contrast to Apo's testimony, Gary Takeuchi, counsel for the city's Department of Environmental Services, argued that there will always be a need for a landfill on O'ahu.

"There are always things that can't be used, recycled, combusted or shipped," he told the LUC, referring to things like the sludge left over from food establishments, which makes up a considerable percentage of the total waste landfilled at Waimanalo Gulch every year.

Takeuchi added that the city has not been relying solely on the landfill: It has repurchased H-POWER and is planning to construct the third boiler, referenced by Apo, that would roughly double the facility's capacity. (Apo pointed out during his testimony, however, that it was the City Council, not the administration, that had pushed

director Abbey Seth Mayer recommended that the LUC deny the permit application as well as the city's request to withdraw the existing special use permit. Instead, the OP proposed extending the existing permit for three years and allowing for the expansion of one cell for ash and two for municipal solid waste. Mayer also recommended that the city be required to select a new site, via an "inclusive, transparent, public site-selection process," within 18 months of the LUC's Decision and Order, with an automatic expiration of the permit if the city

Commission's] obligation to impose appropriate conditions. The solution actually lies in setting clear requirements with clear deadlines, and an automatic expiration if these requirements are not met. It is then up to the City and County of Honolulu to follow through. If the [city] wants to avoid the early expiration of the SUP, it will be forced to conduct a site selection process, make a selection, and come back to the Planning Commission and the LUC with that decision and information about the alternatives considered," he wrote.

automatic termination date.

"In my mind, you're advocating again that the city create a self-fulfilling prophecy," Lezy said, referring to the city's apparent position that "we have to have a landfill because we have not done what we need to do to not have one and we've done that intentionally."

Mayer explained that his office had supported the city's use of Waimanalo Gulch as a landfill in 2003. While he supported closure now, "I'm trying to take responsibility for my office's statements in the past," he said.

"Three years from now, we will be back exactly where we are today." — Normand Lezy, LUC

fails to meet that deadline. If the LUC chose to issue a new permit, Mayer recommended that all of the previous permit's conditions and the site-selection deadline be included.

"Alternatively, the OP recommends that the [LUC] should remand the entire docket back to the City and County of Honolulu Planning Commission," he wrote.

Mayer argued that during the Planning Commission's July meeting, when Planning Commission chair Karen Holma prevented fellow commissioner Beadie Dawson from proposing an amendment to a motion to approve a draft Decision and Order, Holma violated the rules of order and abused her discretion. Holma's actions, he claimed, required the LUC to remand the issue back to the Planning Commission.

Mayer also contended that the city's Land Use Ordinance prevents the LUC from approving a new permit for Waimanalo Gulch, citing a section of the LUO that prevents waste disposal and processing facilities from being located 1,500 feet (500 feet if environmental impacts can be mitigated) of any zoning lot in a residential or apartment district. Because the adjacent Makaiwa Hills low-density apartment zoning (rezoned in September 2008) lies 100 to 150 feet from existing landfill cells, a new SUP would violate the LUO, Mayer argued. At the LUC hearing, however, Robert Bannister of the city's Department of Planning and Permitting testified that the section of the LUO Mayer cited does not apply to the Waimanalo Gulch landfill and does not affect its operation.

Mayer also disputed planning commissioner Komatsubara's reasoning behind abandoning a permit deadline.

"Commissioner Komatsubara...is wrong. He tries to solve the problem of enforcing the time deadline by eliminating the time deadline. But this merely surrenders the [Planning

At the LUC's meeting, Mayer added that he felt the city's proposal was "extremely troubling" and agreed with Hanabusa that "at a certain point, enough is enough.... Responsibility should be shifted back to [the city]."

"On the other hand, I would like to be able to bring them into the fold and clean the record," he said as a way of explaining his recommendation that the commission extend the city's permit to operate Waimanalo Gulch three more years, with an automatic expiration at the end of that time. An extension of the existing permit would not allow the city to, as Mayer put it, "sweep under the rug the history of this entitlement process."

Lezy said he agreed with everything Mayer said, but did not follow him to the conclusion that the permit should be extended for three years, with automatic termination. Lezy contended that the November 1, 2009, deadline the LUC set last year was itself an

A Motion

In the end, no one got what they asked for.

Commissioner Reuben Wong made a motion to grant the city a new special use permit with several conditions, including the following:

- All conditions in the 1986 SUP shall be incorporated into the new permit;
- Municipal solid waste will be allowed in Waimanalo Gulch until July 31, 2012;
- A third stability berm will be built in 2011;
- After July 31, 2012, only ash and residue will be allowed;
- The city administration and council will report to the LUC every three months on operations at Waimanalo Gulch, including financial arrangements under consideration;
- The city will hold public hearings every three months on the status of waste management activities.

Environment



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Lezy said he could not in good conscience support the motion and that had he been “quicker on the draw,” he would have made a motion to deny the permit. He noted that the last few dockets before the LUC have centered around the integrity of the commission’s decisions. In this case, he said, November 1 was a self-executing deadline and by issuing a new permit now, the commission would be breaking a promise.

Lezy didn’t seem to think the city would meet Wong’s MSW deadline, either.

“Three years from now, we will be back exactly where we are today...I can’t support yet another broken promise, another blow to the integrity of this [commission],” he said.

Commissioner Thomas Contrades, on the other hand, said he did not remember the LUC’s 2008 decision the same way Lezy did. Contrades said he expected the city to return for an extension to allow for the expansion. Although he was not “totally pleased” with what Wong had proposed, Contrades said, “We have to do something. It’s reprehensible that we would consider the solution to be putting our trash in someone else’s backyard.”

He added that he felt sorry for Leeward coast residents — he has family there — but said he knew 18 months was not going to be enough time for the city to find alternatives to Waimanalo Gulch.

With regard to the city’s “broken promises,” Contrades said, “Everyone has the right to ask for a change,” including a new city administration.

Contrades said he didn’t know what the perfect solution was, but he didn’t think Hawaiian Waste Systems would be ready to start taking all of the city’s waste by November 1.

Commissioner Chock sided with Lezy, stating, “We’ve been kicking this can down

the road for generations of administrations and commissions,” and it was time to put an end to the “environmental injustice” that has been inflicted on Leeward residents.

In defense of his motion, Wong explained that while he would love to say that the Waimanalo Gulch should be closed, “What is the solution? At what point do you continue to hold to decisions of previous councils, administrations, et cetera?” Although the city is making progress with regard to recycling and constructing a new burner for H-POWER, Wong said he was not confident that, three years from now, the city will do what they promised, which is why he recommended regular public hearings.

When it came time to vote, Lezy, Chock, and commissioner Lisa Judge opposed Wong’s motion, which passed 5-3.

What now?

After the LUC’s decision, all of the parties at the table walked away looking displeased. City officials said that the city would not be able to meet the terms of the new permit and would likely return in three years for an extension or modification.

Joe Whalen of Waste Management added that the commission will most likely have to revisit the issue to address treatment of special wastes — sludge, asbestos, etc. — that can’t be shipped, recycled or burned. He added that the commission’s decision to accept only ash and residue after July 2012 does not mean that the landfill will have to be re-engineered. Since ash and residue will be allowed in perpetuity, the city will stick to its plans to excavate the whole gulch, and simply re-designate some of the cells for municipal solid waste as ash cells, he said.

During the LUC hearing, the parties debated whether the 2008 EIS covering the 92-acre expansion is adequate in light of the fact that the city’s permit application is for the total 200 acres owned by the city. Hanabusa

and Apo argued the EIS wasn’t adequate for this reason. “At what point [in the EIS] were we told the total 200 acres was for perpetual use? Nowhere,” Hanabusa said.

Takeuchi noted that EIS does address the entire area, and what’s more, the LUC does not have the jurisdiction to rule whether or not the EIS was adequate. He also noted that Hanabusa was already challenging the EIS in circuit court. However, should the court find in her favor, Takeuchi said the LUC may have to revisit its decision. — ***Teresa Dawson***



For Further Reading

Other articles published by *Environment Hawai'i* are available online, at www.environment-hawaii.org:

- “Ash: A Resource Beyond Recovery” (October 1990);
- “Resolution of Waimanalo Gulch Violation Case Pushes Limits of DOH Rules, Permit Deadlines” (July 2007);
- “City, Waste Management Struggle to Renew Waimanalo Gulch Permit” (February 2009);
- “Auto Scrap Lawsuit Draws Concern Over Metals in Waimanalo Gulch” (February 2009);
- “Hearing Begins on Honolulu’s Petition to Change Landfill’s District to Urban” (June 2009).

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