Volume 28, Number 5 November 2017

Environment Hawai'i
a monthly newsletter

Wipeout at Palau'ea Beach

As one of the richest men in the world, Douglas Leone may be accustomed to getting his way. But a Maui jury bucked his efforts to sue the county when it turned down a half-hearted effort to apply for a permit to build a house along Palau'ea Beach, near Makena.

And the Hawai'i Supreme Court upheld the jury's verdict as well as its award of more than $40,000 in court costs to the county.

All in all, the high court's decision is a vindication of the county's rights to regulate in the increasingly vulnerable, and increasingly valuable, lands along Hawai'i's public shorelines. Coming on the heels of the court's strong ruling in the aquarium collection case, the justices' rulings are a one-two punch in support of the state's laws protecting the environment and coasts.

IN THIS ISSUE

PHOTO: MAUI COUNTY

Palau'ea Beach

Supreme Court Rejects Takings Claim Of Landowner Against Maui County

The Hawai"i Supreme Court recently delivered a ruling that affirms the right of the counties to enforce regulation of coastal development against claims that regulation amounts to an unconstitutional taking.

The case, *Douglas Leone v. County of Maui*, stems from the apparent effort of Douglas Leone, one of the richest men in the country, and his wife, Patricia Perkins-Leone, to acquire permits to build a single-family residence on an oceanfront lot in Makena, Maui.

The lot was one of nine that Maui County had wanted to purchase in 1996 to create a park at Palau'ea beach. The county ultimately purchased just two of them and the remaining lots, including the one the Leones would buy, were sold to private parties.

All the lots were zoned "hotel-multifamily," which allows for single-family residences. In 1998, the county approved the Kihei-Makena Community Plan that designated the lots as "park" land.

In 2000, the Leones purchased the lot for $3.7 million. Within four months of the purchase, they listed it for sale at $4.75 million. Two years later, without having sought any permits for improvements on the property, they listed it for sale at $7 million and then reducing the asking price to $5.95 million. Two offers came in — one for $4.5 million, another for $4.6 million — and were rejected.

In 2004, a consultant hired by the Leones undertook preparation of a draft environmental assessment, a preliminary step in any application for the requisite Special Management Area permit. The consultant, Munekiyo & Hiraga, Inc., stated that the owner "intends to file a community plan amendment and change in zoning application with the County of Maui, Department of Planning for review by the Maui Planning Commission, and final action by the Maui County Council to achieve land use consistency for the parcel. Since a community plan amendment will be sought, the applicant will

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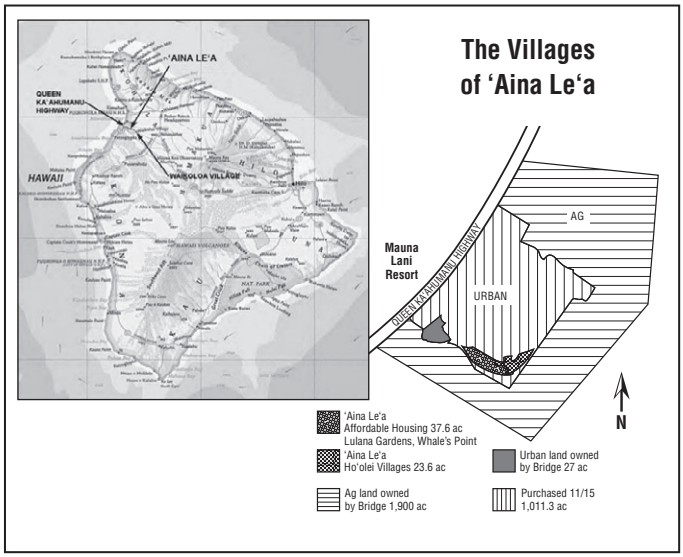
NEW AND NOTEWORTHY



Progress on the 'Aina Le'a Front: In September, the planning firm of Belt Collins delivered to the Hawai'i County Planning Department a draft supplemental environmental impact statement preparation notice for the roughly 1,000 acres of Urban land owned by 'Aina Le'a, Inc., and the 2,000 or so acres of Agricultural land surrounding it owned by Bridge 'Aina Le'a.

On October 13, planning director Michael Yee responded. He explained that the county "will not be the accepting authority … because a State Land Use District Boundary Amendment is being sought and approval … of the boundary amendment will be required from the State Land Use Commission before the project/action can be implemented."

In addition, Yee identified a number of problems with the draft SEISPN. It "should provide an overview of the existing development that has occurred on the property" and should "identify the need for the project and timing" and "provide the basis for warranting [the] density increase" represented by changing the Ag land to the Rural classification – thereby allowing an additional 1,400 house sites in the area.

Quote of the Month

"It's interesting …. We really didn't see a decrease in catch with the monument closure."

— Russell Ito, NMFS Science Center

Little Progress on Spaceport Front: The Office of Aerospace Development within the state Department of Business, Economic Development, and Tourism, is once again seeking no-cost renewals to two contracts that are intended to result in the Kona airport being licensed by the Federal Aviation Administration as a facility for the horizontal launch of reusable space vehicles. If all goes as planned, those vehicles will carry "satellites, experimental payloads, and tourists to space," the OAD said in its latest report to the Legislature.

PHOTO: TRAVIS THURSTON

Yet for some years now, the OAD has been saying the same thing, with little progress to show. In 2012, it signed a $500,000 no-bid contract with a consulting firm to develop an environmental assessment for the project. The EA is still undelivered, and in October the office asked for a no-cost extension of the contract. Work on a separate $80,000 contract to prepare an FAA application for the facility is pretty much on hold until the EA is completed, said Jeffrey Pang, OAD administrator.

Since the 2012 contract was signed, Pang said, "we've had some hiccups along the way." Chief among them, he said, the Department of Transportation "moved the site on us and the consultant" – RS&H – "had to redocument everything." Now the hang-up is that the revised airport layout plan for the Kona airport must receive conditional approval from the FAA before the environmental assessment can be completed, he said.

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After Attempt to Force His Hand, Judge Rules That Aquarium Collecting Permits Are Invalid

In September, when the Hawai'i Supreme Court ruled that commercial aquarium fish collection permits issued by the state Department of Land and Natural Resources require an environmental review, many thought an injunction closing the fishery would soon follow. The high court had remanded the matter of crafting an injunction to the lower court. Last month, Circuit Judge Jeffrey Crabtree allowed fishery representatives to intervene in the case and had not issued an injunction by mid-month.

Displeased with the pace at which Crabtree was implementing the high court's order, as well as his decision to allow the Pet Industry Joint Advisory Council (PIJAC) to join the case, the plaintiffs — Rene Umberger, Mike Nakachi, Willie and Kaimi Kaupiko, Conservation Council for Hawai'i, and the Humane Society of the United States — filed on October 23 a petition for a writ of mandamus with the state Supreme Court, seeking to force an immediate closure.

"Unfortunately, he [Crabtree] has delayed what the Hawai'i Supreme Court has ordered him to do, which is to enjoin commercial aquarium collection," said Earthjustice attorney Paul Achitoff, who represents the plaintiffs. Crabtree had scheduled a hearing for October 27 to consider evidence on the form of relief he would order, but the Hawai'i Supreme Court had already decided that, Achitoff continued.

Rather than signing the plaintiffs proposal for an immediate injunction, submitted on October 3, Crabtree asked the parties to file "any appropriate motions" regarding injunctive relief "and is entertaining a full-blown evidentiary hearing, at PIJAC's request. Moreover, the Circuit Court's scheduling order regarding injunctive relief does not have a completion date for issuing the prohibitory injunction this Court ordered weeks ago," the petition states.

The Supreme Court did not authorize the Circuit Court to "receive evidence regarding the purported harmlessness of the ongoing illegal extraction of public trust resources, or require Petitioners to prove anew what this Court already has found," the petition adds.

The DLNR responded to the petition in a press release. The agency reiterated its belief that current aquarium fishing practices are sustainable and environmentally sound and noted that "dozens of local businesses and families depend on the industry for their livelihoods."

At last month's meeting of the Western Pacific Fisheries Management Council, Ryan Okano of the DLNR's Division of Aquatic Resources presented data showing that the aquarium fishery is by far the most valuable of the state's inshore fisheries, generating an average annual revenue of about $2.25 million dollars, mostly from fish collected around Hawai'i island. (The state's reef fish and bottomfish fisheries were tied at a distance second, each generating about $1.5 million a year between 2012 and 2017.)

To bolster the DLNR's case that the fishery is, indeed, sustainable, despite the fact that each commercial permit allows unlimited commercial take, Okano showed charts depicting the trends in the number of animals caught per hour and the revenue generated per hour between 2008 and 2016. Except for perhaps Maui Nui, the "catch per unit effort" trends for both scenarios were generally stable or increased for all islands, the charts indicated.

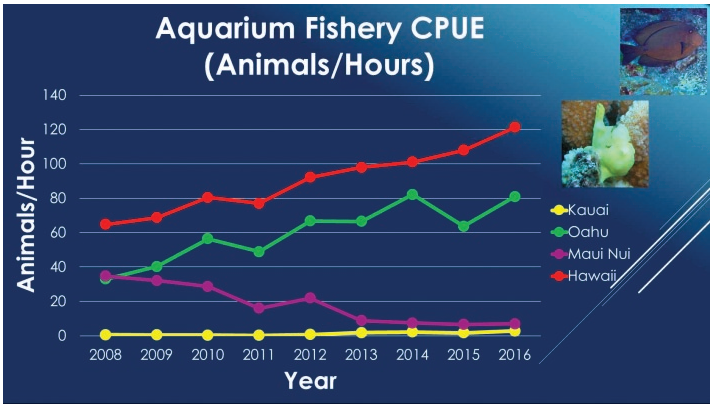
Given that that vast majority of the fish collected for the aquarium trade are taken from waters off West Hawai'i, Okano presented evidence that suggested that fish replenishment areas (FRAs) established by the department more than a decade ago and spanning more than a third of the coastline have successfully protected populations of the most collected species.

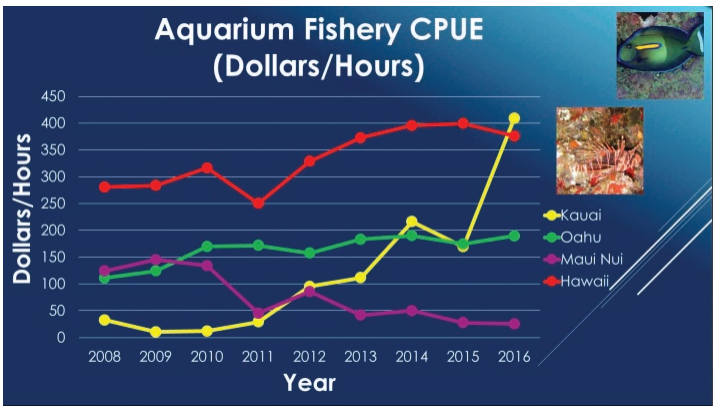
Populations of yellow tang, which made up more than 75 percent of the West Hawai'i aquarium catch in 2016, have increased within FRAs and marine protected areas, skyrocketing in the last few years, the DLNR found. Outside the protected areas, populations have fluctuated, but have been on an increasing trend since 2011. For kole, the second most collected species in West Hawai'i, and for the rest of the ten most-collected species, population trends in all areas have increased between 1999 and 2016, Okano's chart's showed.

"From our perspective, the fishery seems to be doing okay. … We see it as a sustainable fishery. That's why we struggle now. We're probably going to have more rules on it," Okano said.

Whether or not the fishery is sustainable, the plaintiffs argue that the Hawai'i Supreme Court found in September that all 300 or so existing commercial aquarium collecting permits are in violation of the Hawai'i Environmental Policy Act, and are, therefore, illegal. While PIJAC has argued to Crabtree that existing permits should be excluded from any injunction, "excluding existing permit holders from the injunction would render an injunction meaningless as a practical matter, making a mockery of [the Hawai'i Supreme] Court's decision," the petition states. What's more, it adds that the high court "did not leave room for the Circuit Court to undertake any 'tailoring' analysis, nor to parse which commercial permits may or may not be covered under the injunction."

On October 27, Crabtree ruled that all existing commercial aquarium fish permits are illegal and invalid, but denied the plaintiffs' request for a moratorium pending completion of the environmental review process. The DLNR said it "respects Judge Crabtree's ruling and will fully comply so long as it remains in effect." — ***Teresa Dawson***





Leone from page 1

submit a draft environmental assessment."

A short time later, Munekiyo was instructed by the Leones to stop its efforts. As the consultant explained in an inter-office memo, Douglas Leone "felt that the political climate is much too difficult to be seeking any land use entitlements for the property…"

Three years passed before Munekiyo was asked to resume work on the permit. In September 2007, the firm submitted to the county Planning Department an SMA assessment application to start the permitting process for a house. As county deputy corporation counsel Brian Bilberry noted in argument before the Supreme Court, though, the required shoreline survey that accompanied the application was five years out of date, the proposed swimming pool was placed in the shoreline setback area (not allowed), cultural remains on the property had not been properly addressed, and the applicant didn't even include a check for the filing fee. "Clearly, they were not looking for approval," he told the justices.

"It was evident from the county's perspective that the application was not serious, "Bilberry told *Environment Hawai'i*. "It was submitted as a pretext for the Leones to pursue their legal claims." Buttressing that view was the fact that the Leones' real estate lawyer appeared to know the deputy planning director would return the application. As the county argued, "the letter returning the application was requested so that the Leones' lawyer could stake out a legal position with the Maui Planning Commission." However, instead of appealing to the Planning Commission, the Leones went to Circuit Court, claiming that the refusal to process their deficient application itself resulted in a taking of their lot.

In their initial court filing, the Leones sought punitive damages of $50 million in addition to payment for the loss of their lot, which they valued at $12.5 million, or more than three times the $3.7 million they paid for it in 2000. The $50 million claim was thrown out, but they pressed forward with the lower claim for the loss of use and/or the value of their property.

Judge Joseph Cardoza of the 2nd Circuit Court originally dismissed the claim, agreeing with the county that the Leones had options other than seeking remedies through the courts. "First, plaintiffs may still proceed with a new application via an appropriate submission. Plaintiffs are still free to seek amendment to the [Kihei-Makena Community Plan]… Such proposed amendment could be submitted concurrently with a new SMA assessment application… Plaintiffs still have the ability to … and apply for a Special Management Area use permit...."

In March 2009, the Leones appealed to the Intermediate Court of Appeals, which found that the Leones were not required to apply for an amendment to the community plan before bringing their case. In June 2012, the ICA vacated Judge Cardoza's order and remanded the case to the lower court.

The county and attorneys for the Leones engaged in efforts to arrive at a settlement, but those talks bore no fruit. Finally, in 2015, the case went to trial before a jury.

The trial lasted 23 days, from March 30 through May 5, on which day the jury returned a verdict that found the county did not deprive the Leones of any economic use of their property and did not deprive the Leones of any constitutional right. In addition, the county was awarded more than $40,000 in costs.

The Supreme Court Case

The Leones appealed and the state Supreme Court agreed to hear the case directly. Oral argument was made in January. And on October 16, the justices issued their order.

The Leones had raised four points on appeal:

• That the lower court should not have allowed Ted Yamamura, an appraiser with decades of experience in Maui County, to testify as to the economic value of the lot. "[G]iven Yamamura's considerable experience and expertise in appraising real property, and specifically Maui real property, the circuit court did not abuse its discretion in allowing Yamamura to testify as an expert witness."

• That three of the instructions to the jury were erroneous. After reviewing the arguments presented by the Leones' attorneys on these claims, the justices rejected them all.

• That the Circuit Court should have overturned the jury verdict as a matter of law. "The Leones assert that the evidence presented at trial permitted only one reasonable conclusion: The county's regulation of the Leones' property constituted a taking for which they are owed just compensation," the high court noted. "A motion for judgment as a matter of law can be granted only when 'it can be said that there is no evidence to support a jury verdict in the [non-moving] party's favor.' Additionally, a court must give to the non-moving party's evidence 'all the value to which it is legally entitled' and to indulge 'every legitimate inference which may be drawn from the evidence in the non-moving party's favor.'" After a quick review of the evidence presented to the jury, the justices "conclude that there is evidence to support the jury's verdict… Accordingly, the circuit court did not err in denying the Leones' motion for judgment as a matter of law."

• That the award of costs to the county was in error. "Because we affirm the circuit court's judgment, the Leones' argument that the circuit court erred in awarding costs to the county is unavailing," the high court found.

The Context

During the jury trial, the wealth of the plaintiffs was specifically not allowed to be raised. However, in giving context to the dispute, it is worth noting that Douglas Leone, managing partner of the venture capital firm Sequoia Capital, is one of the richest men in the world. As of last month, Forbes put his net worth at $3.3 billion.

The Palau'ea area is one of great historical and archaeological value, as former Maui County Council member Dain Kane testified. The remains of an ancient Hawaiian fishing village are found in a 20-acre cultural preserve just mauka of the beach lots. Human remains are known to occur on several of them, which has required other landowners to obtain approvals from the Maui Burial Council and State Historic Preservation Division before building houses on their lots.

Finally, in arguing for the loss of the value of their property, the Leones noted that in September 2011, a storm surge "came up over the coastal dunes and into their property and left debris much further inland than it had been before. The debris line creates a shoreline and since the debris line came so much farther inland than it had before, the Leones were unable to build."

In a footnote to the Supreme Court order, the justices go on to note that the Leones claim to have applied for a shoreline certification in January 2014 but were told by the Department of Land and Natural Resources that the DLNR had to consider historical evidence in making any shoreline determination. "The Leones contended that, because of the 2011 storm and the court's decision in *Diamond [v. Dobbin]*, the shoreline setback on the property would have overlapped the front yard setback, leaving no buildable area on the property. At this point, the Leones withdrew their shoreline certification application."

State regulations on how shorelines should be determined, however, exclude debris lines created by storms or tsunamis: "'Shoreline' means the upper reaches of the wash of the waves, other than storm or seismic waves, at high tide during the season of the year in which the high wash of the waves occurs, usually evidenced by the edge of vegetation growth, or the upper limit of debris left by the wash of the waves."

— Patricia Tummons

Kaua'i Council Moves to Remove Some Exemptions From Shoreline Ordinance

On October 18, the Kaua'i County Council accepted the introduction of a draft bill aimed at reversing amendments made in 2014 to its shoreline setback ordinance that have turned out to be somewhat problematic. Caren Diamond, a longtime advocate for protecting and preserving public beach access.

Last month, we reported on the perceived problems with the county's current ordinance, in particular, the fact that it allows landowners to avoid the shoreline certification process if they can convince the planning director that work they're proposing won't affect public access or beach processes, or contribute to coastal erosion or hazards.

that would allow structures and activities on lands abutting the shoreline to be exempt from the shoreline certification process. Improvements on properties that do not abut the shoreline, but are within 500 feet of it, however, would be eligible for the exemption.

Any exemption determination by the planning director regarding structures and activities would not be final until accepted by the Planning Commission, under the proposed ordinance.

Reservations

Planning director Michael Dahilig suggests the current ordinance isn't as bad as it has been made out to be.

These homes received exemptions from the shoreline certification process.

Diamond found that once that exemption was added to the law, dozens of landowners used it and were rarely, if ever, turned down. In most cases, the work involved was located more than 100 feet from the shoreline. But in at least one case, an exemption was granted to a homeowner whose structure fell well within the high wash of the waves. The owner claimed the work entailed only interior repairs, and because he was not required to obtain a certified shoreline determination from the state, no encroachments were discovered. In addition to whatever interior repairs he did, the beachfront two-story house — which is used as a vacation rental — was lifted.

Others that claimed they were going to only do interior repairs also lifted and significantly modified the exteriors of their homes.

The proposed ordinance amendments, drafted by Diamond and introduced to the council by members Mason Chock and Mel Rapozo, eliminates the provision

"Many potential requests under the old ordinance would require actions like changing windows, re-roofing and replacing toilets to obtain a certified shoreline survey. These surveys cost between $10,000 to $20,000 and higher. Requiring a $20,000 survey for a toilet replacement serves no rational purpose. Particularly, with our limited resources, we need to focus on those situations that can greatly impact our shoreline environment. The current ordinance allows us to sort out situations like windows and toilets and rather focus on those things actually impeding natural progression of our public coastlines," he stated in an email.

He added that many of the exemption approvals stem from an effort to align the county's code with a federally-mandated flood ordinance. "Consistent with FEMA [Federal Emergency Management Agency] principles, allowances are made for a landowner to keep their legal structure in good repair by allowing 50 percent of the value to be repaired and replaced over a rolling 10-year period," he said.

Addressing the problems raised by Diamond, he said that his agency has caught individuals "representing to us one action and in fact doing another, leading to citations by us."

Dahilig also noted that some feel that the ordinance's 50 percent threshold is too much over a 10-year period.

"How much repair can be balanced with not abusing the system is a question for policy," he said.

While the ordinance may need tweaking, he said his agency has significant concerns with how the proposed draft bill would be implemented.

"I do understand that there have been a handful of cases along the shoreline that were approved as maintenance yet appear to be anything but, and there could be an opportunity to tighten that section of the current shoreline setback ordinance. However, the current proposal casts such a wide and punitive net: It would require minor modifications like bathtub replacements be accompanied by a $20,000 shoreline survey, or even in the case of the Koloa Mill that sits on a large shoreline abutting property," he said.

"For example, if a farm tenant near Koloa Mill (which is approximately 2 miles from the shoreline) wants to put in a fence post, under the current draft proposal my department would have to require the farmer first certify the property's shoreline. That property is fairly large; so that farmer would be looking at hundreds of thousands of dollars to conduct a survey for a fence post. We cannot support such requirements," he continued.

Should the county council decide that it's important to require a certified shoreline, "I would be duty-bound to implement those requirements," he said.

"I would also add that the proposed draft bill actually shrinks the mandatory shoreline setback area from 60 feet to 40 feet, encouraging closer development to the shoreline. To date, Kaua'i is the only County meeting the increased setbacks encouraged by the State of Hawai'i Plan," he said. The new bill does, indeed, reintroduce a shoreline setback chart that allows properties 100 feet deep or less to have a setback of only 40 feet.

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Settled In

Last month, *Environment Hawai'i* revisited the issue of the emergency sandbag revetment installed 20 years ago

Council Seeks To End Hard Caps On Swordfish Fleet's Turtle Takes

The Western Pacific Fishery Management Council (Wespac) is moving to lift measures, in place for more than a decade, that require the Hawai'i shallow-set longline fleet, which targets swordfish, to stop fishing if it hits its annual limit of loggerhead and/or leatherback sea turtle takes. Both species are federally listed as endangered.

Since 2004, as a result of a court battle over the Hawai'i swordfish fishery's ever-increasing catches of the rare sea turtles throughout the 1990s, the fleet has been subject to the caps, which are aimed at protecting listed species from jeopardy. The fleet has also had to implement a number of other measures to minimize its impacts on the turtles, such as using mackerel-type bait, large circle hooks, and de-hooking devices.

While the measures have led to significantly reduced turtle catches — 90 percent for loggerheads and 85 percent for leatherbacks — the fleet did hit its loggerhead cap in 2006 and its leatherback cap in 2011. (In both instances, the caps were 16 and 17, respectively, at the time. They are currently 34 and 26.)

So are those caps still necessary?

The National Marine Fisheries Service's Pacific Islands Regional Office has recently decided to re-evaluate the shallow-set fishery's impacts on endangered species, and Wespac has taken the opportunity to make a case that hard caps are unnecessary. NMFS is expected to produce a new biological opinion (BiOp) and incidental take statement (ITS) for the fishery, which will specify a new acceptable level of interaction between the fishery and a variety of protected species. The last biological opinion and ITS were done in 2012.

Once the new BiOp and ITS come out, Wespac must recommend how NMFS's regulations should be amended to best implement the statement's findings.

At a meeting last month of Wespac's Scientific and Statistical Committee (SSC), council staffer Asuka Ishizaki detailed the reasons why the caps may be superfluous and possibly even detrimental.

She said that the fleet's fishing effort and its interactions with the turtles have been relatively stable since the protection measures were initiated in 2004. Although swordfish fishing isn't as profitable or stable as bigeye tuna fishing by the deep-set longline fleet, she said the local swordfish stock is healthy and she didn't see the fishery going away anytime soon.

"It's unlikely the fishery would return to the historical, 1990s effort level," she added, referring to when fishing effort and turtle interactions were at their peak.

"Despite the poor economic performance of this fishery in recent years, fishing effort in future years may reasonably range within levels seen since 2004, as high global swordfish demand in combination with fresh sustainable swordfish from Hawai'i fisheries could rapidly change levels due to market demand. Additionally, the largest component of the Hawai'i longline fleet is comprised of Vietnamese-American ownership, which have a long-term history of targeting swordfish, and changes in bigeye limits for the deep-set longline fishery could encourage more vessels to resume targeting swordfish as an alternative in the event of a bigeye closure," a staff options paper stated.

Since 2004, the fishery has interacted with, or taken, an average of 9.9 loggerheads a year and 7.8 leatherbacks a year, she said. She noted that the fleet was estimated to have annually killed an average of only 0.1 adult loggerhead female and one adult female

Left: A stairway with a "Private" sign at the top had been installed alongside the sandbag revetment. Above: An irrigation line hides beneath the naupaka covering the revetment.

The sandbag revetment in Ha'ena, Kaua'i.

across several beachfront properties in Ha'ena, Kaua'i. The state last year rejected the landowners' shoreline certification application because it found that the entire revetment encroached within the high wash of the waves and the landowners' surveyor failed to remedy the encroachment before the deadline to process the application. An attorney for the landowners filed an appeal, but the Department of Land and Natural Resources had yet to grant standing or set a briefing schedule by late September. It has still not done so by press time.

While the future of the revetment is in limbo, that doesn't appear to have stopped some of the landowners from installing an irrigation system to foster the naupaka that now blankets most of it, as well as a set of stairs to the beach. A decade ago, during a shoreline certification inspection, an unauthorized irrigation system was discovered and eventually removed. None was apparently found during the state's inspection last year. ***— T.D.***

leatherback, adding that those takes represent a small percentage of adult female populations of both species that interact with the fleet, which total about 6,673 adult female leatherbacks in the North Pacific population, and about 1,949 adult females in the Western Pacific population of loggerheads.

Citing a 2009 *Marine Policy* article by Gordon Rausser and others, Ishizaki continued that any closure of the Hawai'i swordfish fishery triggered by the turtle hard caps would result in an influx of fish entering the local market from countries with higher turtle bycatch rates.

"As a result of the swordfish fishery closing, they brought in fish from elsewhere. They estimated the closure between 2001 and 2004 resulted in an increase of 3,000 sea turtle interactions across the Pacific," she said, adding that a 2016 study (by Hing L. Chan and Minling Pan in *Marine Resource Economics*) estimates that after the fishery reopened in 2004, somewhere between 842 and 1,826 fewer turtles were caught in the Pacific.

PHOTO: CLAUDIA LOMBARD, USFWS

Female leatherback turtle.

Should the new BiOp produce lower ITS levels than what has governed the fishery in recent years, "it would increase the probability that the hard haps would be reached," she said.

The committee ultimately recommended that hard caps be lifted. ""We don't believe there's a biological basis for a hard cap specification. It's an arbitrary figure," said committee member Milani Chaloupka. When the full council met later in American Samoa, it supported the committee's recommendation, although the state of Hawai'i's representative opposed lifting the hard caps.

Specifically, the council recommended removing the annual loggerhead and leatherback hard caps and associated fishery closure procedure since "gear measures implemented in 2004 have been successful in reducing sea turtle interactions in the fishery and that the hard cap measure is no longer necessary given that the fishery and turtle interactions are likely to remain relatively stable in the future." It added that removing the hard caps would "reduce uncertainty in the fishery and eliminate the potential for spillover and transferred effects of increased overall impacts to sea turtles in the Pacific."

'Not Robust'

Not mentioned anywhere in Ishizaki's presentations to the SSC or the council was a June 2017 article in the *Journal of Ocean and Coastal Economics* that contradicts the findings in both the Rausser *et al.* and Chan and Pan articles that the closure of the Hawai'i swordfish fishery in the early 2000s led to a dramatic increase in turtle deaths.

"Our analysis indicates that Rausser *et al.*'s and Chan and Pan's conclusions about increased global turtle mortality are not robust, because while they provide evidence that demonstrates a correlation between the US closure and a market transfer effect, this correlation can be explained by other factors," authors Jason D. Scorse and Shaun Richards of the Middlebury Institute of International Studies and Philip King of San Francisco State University wrote, adding, "For the market transfer hypothesis to be robust one must demonstrate that foreign fleets in the EPO [Eastern Pacific Ocean] increased their catch in response to the closure."

They argued that most of the foreign fish that came to Hawai'i during the closure came from Spain and noted that increased subsidies from the Spanish government and the European Union expanded the Spanish fleet's fishing capacity during the closure period. "This increased Spanish fishing capacity was completely independent of US regulations (and began before 2001), but its effects coincidentally overlap with the 2001-2004 closure. … [B]ecause of the closure, the US happened to provide a convenient and temporary market opportunity for the Spanish fleet, but they subsequently found many more willing buyers," they wrote.

It's unlikely that the influx of foreign fish came from the Western and Central Pacific Ocean (WCPO), since only two countries that fish there — Taiwan (Chinese Taipei) and the Philippines — saw increases in swordfish catch during the closure period and those increases weren't caused by the closure, they wrote.

"Chinese Taipei did not directly increase swordfish effort; they continued a seasonal coastal harpoon fishery between 2001 and 2004, and the bulk of their increase in swordfish landings can be attributed to the development of their tuna fisheries and a subsequent increase in swordfish bycatch. The Philippines only fish for swordfish using municipal vessels and primarily use single hook hand lines, which would not overlap with the part of the WCPO used by the Hawai'i longline fishery, nor very likely result in a large increase in turtle mortality," they wrote. (The fishing industry in the Philippines is divided into four sectors: commercial, municipal, fishponds, and fishing lakes and rivers.)

They concluded that there is insufficient evidence to support the idea that a market transfer effect occurred during the closure period and that there is no robust evidence to suggest that "future restrictions or expansions of the Hawai'i fishery will cause a corresponding net change in turtle bycatch by foreign vessels."

"The notion of market transfer effects is bogus science that's been bought and paid for by Wespac and is simply not supported by the data," said Paul Achitoff, an attorney for Earthjustice, which supported an earlier version of the article. He added that there is no good, factual support for the argument made by Wespac and others that "if you don't allow Hawai'i's fisheries to kill turtles other fisheries will kill more of them. There is no evidence other fisheries care at all what Hawai'i's fishery does."

'We Will Sue'

Market transfer effects aside, Achitoff said that the turtle take by the Hawai'i swordfish fleet is already too high. Earthjustice, on behalf of the Turtle Island Restoration Network and the Center for Biological Diversity, sued NMFS over its 2012 BiOP and ITS setting the current level of take for loggerhead and leatherback, as well as the fishery's seabird take. The federal District Court found in favor of NMFS. An appeal of that ruling is awaiting a decision by the 9th Circuit Court of Appeals.

"Basically, our position is they continue to allow excessive take of endangered turtles," Achitoff said.

Wespac's finding that the hard caps create uncertainty for the fleet "strikes me as absurd. The purpose of the hard cap its to create certainty. If you exceed the hard cap, [the fishery] closes. That's certain," he said.

He agreed with the council's statement that turtle interactions fell as a result of litigation-prompted measures, but found no comfort in the agency's belief that turtle take levels aren't likely to reach the historical highs.

"That's not the point. Analyses show the turtles are jeopardized by take below

the levels that were pervasive prior to 2004. We don't need to go back to 2004 levels in order for there to be a threat to the turtles' survival. The threat continues with the take by the Hawai'i fishery and other fisheries at current levels. It's not that the data shows the leatherbacks [have increased] to some healthy levels. Not at all. They're still critically endangered," he said.

The council plans to meet with shallow-set longliners to discuss what they would prefer and it must still draft and take a final action on an amendment to its Pelagic Fishery Ecosystem Plan to lift the hard caps.

"If they introduce such an amendment and NMFS adopts it, we will sue them as we have done for the past 20 years," Achitoff warned. ***— T.D.***

For Further Reading

Environment Hawai'i has extensively covered the Hawai'i shallow-set fishery's impacts on sea turtles. Below is a short list of some of our stories over the years. All are available on our website, http://www.environment-hawaii.org.

Various articles and the editorial in our January 2000 issue;

"After Eight Years, NMFS Finds Longliners Jeopardize Sea Turtles," April 2001;

"Endangered Species Act Violations Brought Against Vessels Accused of Targeting Swordfish," August 2002;

"Fisheries Council Pushes to Lift Closures Imposed to Protect Turtles," July 2003;

"Turtle Bycatch Continues to Frustrate Council Efforts to Reopen Swordfish Fishery," December 2003;

"Swordfish Fishery Is Shut Down After Reaching Limit on Loggerhead Takes," May 2006;

"New Report Supports Lifting Annual Limit on Interactions between Loggerheads, Fishers," December 2008;

"Hawai'i Longliners Lose Challenge to Settlement Over Loggerhead Turtles," July 2011;

"Swordfish Longliners Hit Turtle Cap; Bigeye Fishery Closed in West," EHxtra, 11/18/2011;

"Lawsuit Challenges Relaxed Limits on Turtle Takes by Swordfish Fleet," EHxtra, 11/02/12.

Swordfish, Bigeye Catches Remain High Despite Expansion of Marine Monument

In the months after President Obama expanded the Papahanaumokuakea Marine National Monument, catches by commercial longliners didn't seem to suffer at all. The deep-set longline fleet caught about the same amount of bigeye tuna as it had in the first half of last year. And, as in past years, the fishery met its annual bigeye catch limit for the Western and Central Pacific, as well as its large-vessel catch limit for the Eastern Pacific, well before the end of the year.

What's more, swordfish catches by shallow-set longline vessels in the first six months of this year were significantly higher than they were last year, according to Russell Ito of the Pacific Island Fisheries Science Center. This despite arguments made last year by expansion opponents that fishers targeting swordfish might suffer more than those targeting bigeye tuna if they were purged from the exclusive economic zone around the Northwestern Hawaiian Islands, since they historically spent more time there.

The increase in swordfish catch was likely due to a change in climatic conditions, Ito told the Western Pacific Fishery Management Council's Scientific and Statistical Committee (SSC) last month. With last year's strong El Niño conditions, "we saw a reduced shallow-set effort last year," he said, adding that this year's La Niña conditions are favorable for shallow-set fishing.

There were 200 more shallow sets this year than last year and 430 fewer deep sets in the first half of this year compared to the previous year, he said.

"It's interesting … We really didn't see a decrease in catch with the monument closure," he said.

The Pacific Remote Island Areas monument expansion in 2014 also didn't prevent the Hawai'i longline fleet from meeting its Western and Central Pacific bigeye tuna quota early. However, in a leaked memo made public earlier this year, Department of Interior Secretary Ryan Zinke recommended reopening the monument to commercial fishing.

Whether or not the Papahanaumokuakea Marine National Monument and/or its expansion area will lose any of its protections as a result of reviews ordered by President Trump for national monuments larger than 100,000 acres remains to be seen. Zinke's memo recommended modifications to all marine national monuments except the Papahanaumokuakea and Marianas Trench monuments.

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Council Seeks to Nearly Double Annual Bigeye Tuna Quota

Things are looking up for the Hawai'i deep-set longline fleet, and not just because a new stock assessment for bigeye tuna in the Western and Central Pacific suggests that it is neither overfished nor subject to overfishing.

This past summer, the Inter-American Tropical Tuna Commission bumped up the United States' Eastern Pacific bigeye tuna catch limit for longline vessels longer than 24 meters from 500 metric tons a year to 750. What's more, it specified that member countries with specified limits (China, Japan, Korea, Chinese Taipei, and the United States) may transfer up to 30 percent of their quotas to another member that also has a set limit. Japan had already been sharing its quota with China, but the new rule makes it clear that others can do it as well, and sets limits on those transfers.

For the past few years, Hawai'i's larger longliners have had to stop fishing in the Eastern Pacific before the year's end because they were predicted to meet the 500 metric ton quota set years ago by the IATTC. (The United States hadn't done a good job of negotiating when the tuna conservation measure was originally created, according to Kurt Schaefer of the IATTC. Schaefer is also a member of Wespac's SSC.)

Wespac and its staff have been pushing recently to increase the U.S. quota in the Eastern Pacific, as the Hawai'i fleet has been shifting its effort there more and more. While the Scientific Committee of the international Western and Central Pacific Fisheries Commission (WCPFC) recently determined that there is a 77 percent probability that the stock is not experiencing overfishing and an 84 percent probability that the stock is not overfished, winning a quota increase in the Western Pacific region won't be easy, said Wespac's Eric Kingma at the council's meeting last month.

"It's going to be a tough go for us. … There's a lot of different proposals in play. Most of the U.S. proposals have not received a lot of support from other members. They

Circuit Court Dismisses Appeal Of Kaloi Gulch Discharge Permit

Stewards of the famed seaweed resources off 'Ewa Beach suffered a major blow earlier this year. On September 29, 1st Circuit Judge Keith Hiraoka issued his official order denying a years-long effort by the group Kua'aina Ulu 'Auamo (KUA) to replace the late limu expert and teacher Henry Chang Wo, Jr., as the petitioner in a contested case over a state permit for drainage improvements at the mouth of Kalo'i Gulch in 'Ewa Beach.

In June 2014, following a contested case hearing, the Board of Land and Natural Resources granted a Conservation District Use Permit to Haseko ('Ewa), Inc., the University of Hawai'i, the state Department of Hawaiian Home Lands, and the City and County of Honolulu's Department of Planning and Permitting. The permit would have allowed the lowering of a sand berm at One'ula Beach Park to allow an increased amount of stormwater runoff to enter the ocean where Chang Wo collected limu and taught community members how to maintain the beds. Represented by the Native Hawaiian Legal Corporation, Chang Wo fought the permit in 1st Circuit Court.

The court remanded back to the Land Board the matter of whether or not the permittees needed to conduct a supplemental environmental impact statement following the sighting of an endangered Hawaiian monk seal on the beach. By the time it did so, however, the board had taken on a number of new members who took some time to familiarize themselves with the case. They did not make a decision by the time Chang Wo passed away in September 2015.

Shortly before his passing, the NHLC asked the Land Board to allow KUA to take his place as the petitioner in the case. The permit applicants, however, argued that the authority to allow a replacement rested with the 1st Circuit Court, not the board.

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may have to give up some of their other interests. December 1 will be the next opportunity to negotiate," he told the SSC, referring to the WCPFC's next meeting.

Earlier this year, the United States proposed that quotas apply to fishing occurring between 20 degrees North latitude and 20 degrees South latitude, where 80 to 90 percent of bigeye catches occur. Kingma noted that nearly 58 percent of the United States' longline catch and nearly 43 percent of Japan's occurred north of 20 degrees North.

Other commission members, however, have proposed cutting the United States' longline annual quota to 2,800 metric tons. It currently stands at 3,250 metric tons.

Kingma said such proposals are mostly driven by politics. "A few hundred metric tons' reduction is not about conserving bigeye. It's about negotiations," he said.

The Scientific Committee has recommended that the fishing mortality level resulting from any new bigeye tuna measure not exceed the average mortality level for the years 2011 to 2014. Should the commission decide to apply that standard to each participating member county, the United States would likely see a reduction in its quota, since, according to NMFS's Mike Tostatto, its recent average caches have been higher than the 2011-2014 average.

Wespac executive director Kitty Simonds suggested that the United States should just ignore the Scientific Committee's advice.

"It's always bothered me that our quota is pathetic, frankly, compared to the rest of the countries. Most of us think we should be asking for a much higher quota and the purse seine quota should be lowered so we can increase our quota. … Purse seiners have continued to catch bigeye, which is the fishery for the longliners," she said.

"The Science Committee has recommended things over the years and nobody pays attention to them," she continued, adding, "We shouldn't be shy. … I don't think we need to follow that [advice from the committee]."

Graham Pilling of the Pacific Community, which prepared the bigeye stock assessment for WCPFC, told Wespac's scientific advisors that his agency will be evaluating 49 different bigeye tuna management scenarios ahead of the December WCPFC meeting. He said his agency plans to prepare a grid of various combinations of purse seine and longline effort and catch levels "and pull things like spawning biomass and fishing mortality values out of that."

The council ultimately voted to recommend that the United States work to obtain a bigeye tuna quota of 6,000 metric tons under the new tropical tuna conservation and management measure to be adopted at the WCPFC annual meeting. Such a quota would perhaps eliminate the need for the Hawai'i longline fleet to enter into quota transfer agreements with U.S. Pacific island territories in order to continue fishing through the end of the year.

As Wespac noted in its recommendations, NMFS has for the past three years failed to authorize the transfers before the fleet hits the WCPFC bigeye quota. This year, there was a six-week gap during which longline vessels that were longer than 24 meters and/or not also permitted by America Samoa had to cease fishing for bigeye.

The closures, however temporary, are "pretty catastrophic for the price of seafood. … This uncertainty always creates a sense of anxiety in the seafood community," said council member Mike Goto, who also manages the Honolulu fish auction.

"We started with an original limit of more than 4,000 metric tons. Now, it's 3,250 metric tons. The PNA [Parties to the Nauru Agreement, which is made up of several small Pacific island nations] proposed reducing it to 2,800 metric tons. Clearly, any rationale based on biology and stock assessment has gone out the window and has been replaced by spite, certainly with the PNA," said Wespac senior scientist Paul Dalzell.

"What does China have? What does Japan have? The United States government needs to stand up for its fisheries," Simonds added.

In addition to recommending that the United States seek a quota increase, the council also recommended that the government not accept any longline quota reduction. Specifically, it wanted the United States to acknowledge that any proposed reductions in its longline bigeye limit in the Western and Central Pacific "would prevent the U.S. in joining consensus on a new tropical tuna measure." ***— T.D.***

To allow KUA to take Chang Wo's place as petitioner "would be to open the back door to KUA's participation where it would not have been allowed entry through the front door," their memo in opposition states.

In their response, NHLC attorneys David Kimo Frankel and Liula Nakama wrote, "It would be illogical and unfair to interpret [the Land Board's substitution rule] to allow perpetual corporations and agencies to freely substitute and sell interests, but deny that ability to Native Hawaiians who live, breathe and die."

The Land Board ultimately decided that KUA could replace Chang Wo as the petitioner, but the permit applicants appealed to the Circuit Court.

On September 20, Judge Hiraoka held a hearing and orally ruled that, despite the caliber of the NHLC's arguments, the Land Board did not have the authority to grant the substitution. "Since the time period to request the substitution [from the court] had lapsed, a new substitution request can no longer be entertained by the court," KUA reported in a hearing update. Hiraoka also granted the University of Hawai'i's motion to dismiss Chang Wo's appeal altogether. His written order followed on October 3.

For Further Reading

"Limu Stewards Oppose Plan to Alter Sand Berm in 'Ewa",
Board Talk, May 2012;

"Board Grants Contested Case on Kalo'i Gulch Berm Project,"
Board Talk, October 2012;

"Fight Over 'Ewa Drainage Project Continues as Limu Gatherer Challenges It in Court,"
October 2014;

"Does the Kalo'i Drainage Project Need a New EIS?" EHxtra,
April 1, 2015;

"Future of Kalo'i Gulch Case Hinges On Limu Group Replacing 'Uncle Henry,'" November 2015; and

"NHLC: It Would Be 'Illogical, Unfair' To Bar Substitution in Kalo'i Gulch Case," December 2015.

All articles are available at environment-hawaii.org.

— Teresa Dawson

Green Infrastructure Authority Seeks Special Ruling for Kalihi Shelter Village

In June of 2016, the Board of Land and Natural Resources approved the request of the City and County of Honolulu and the aio Foundation to develop more than 200 units of permanent housing units on around 13 acres of state-owned land lying between Nimitz Highway and Ke'ehi Lagoon.

Because the housing, on land designated by the county for industrial use, would be developed under an emergency proclamation made by Gov. David Ige, it would be exempt from the usual zoning and environmental disclosure requirements that would otherwise have applied to any proposed use of state-owned land.

The Land Board gave its approval and in November 2016, Ige signed an executive order setting aside the land to the City and County of Honolulu to be developed as an "affordable housing project for homeless families," adding this was to be "under the control and management of the City and County of Honolulu."

Now the homes — made from kits manufactured in Japan following the 2010 earthquake and purchased by Duane Kurisu in 2011 — are starting to go up. A modern-day community barn-raising was held in early October, featuring volunteers and members of the military helping to slide wall panels and windows into steel framing. Kurisu, the entrepreneur whose vision is behind what is being called Kahauiki Village, wants to see 30 families in the homes by December.

But there is a hitch. Hawaiian Electric won't be able to provide service to the area by that time.

Riding to the rescue is the Hawai'i Green Infrastructure Authority. In a document filed October 5 with the Public Utilities Commission, HGIA executive director Gwen Yamamoto Lau asked for PUC approval to use Green Energy Market Securitization funds (GEMS) to finance the photovoltaic panels that are one element of the village's planned power supply. (According to Yamamoto Lau, other elements are solar thermal and energy storage.)

"The project initially planned to operate parallel back-up infrastructure utilizing sophisticated paralleling switchgear and controls," she wrote. "[H]owever, due to high upfront costs, the back-up infrastructure was downsized and engineered to provide emergency back-up power only, ultimately requiring long-term reliance on the grid. The contractor has determined that it would be able to install solar and storage for the first thirty residential units and supporting non-residential buildings in Phase I, scheduled to open in December, to temporarily run without grid connection until service from Hawaiian Electric is available."

But under the PUC's rules for GEMS loans, any recipient has to be connected to the utility's grid until such time that the loan is fully repaid. Given that, Yamamoto Lau wrote, "HGIA is respectfully requesting Commission approval to finance the solar PV infrastructure for [Kahauiki] Village, upon proper underwriting and loan approvals, during the design, development, and construction phase of the project when the project may not be grid-tied, with the understanding that the project will eventually be connected to the grid."

According to Kurisu, who describes his role as chairman of the aio Foundation, solar panels will make the village energy independent. The link to Hawaiian Electric's grid — whenever it finally comes — will be used only for emergencies. "We don't expect to draw power from Hawaiian Electric," he said in a phone interview. "We expect to be 99 percent self-sufficient." (Natural gas, however, will be used for cooking purposes, he added.)

Kurisu said he was unaware of the PUC filing that the HGIA's Yamamoto Lau had made. Arrangements for power for the village were being made by PhotonWorks, he said, and it would have been that company that developed financing arrangements with the HGIA.

Yamamoto Lau's filing does not mention any dollar amount for the loan that GEMS would be providing, in the event of PUC approval. In response to a question from *Environment Hawai'i*, she said the GEMS loan would be in the neighborhood of $685,000 — an amount that, she noted, that included leverage provided by Central Pacific Bank.

A draft "utility connection agreement" appended to Yamamoto Lau's request commits both the borrower (an unnamed "special purpose entity") and the project owner (Kahauiki Village Development, LLC) to connecting to Hawaiian Electric's grid "at such time as the utility improvements have been completed and the connection to the grid is first available."

Yamamoto Lau was asked why the special purpose entity would be required instead of having the agreement be directly between Kahauiki Village Development and the HGIA. "The project owner is a nonprofit and therefore unable to monetize the tax credit," she replied.

By press time, neither the PUC nor any of the other parties in the HGIA docket had replied to Yamamoto Lau's filing.

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PUC Rejects Request By HGIA To Withdraw Oversight

As *Environment Hawai'i* has reported, the Hawai'i Green Infrastructure Authority has chafed under the requirement that its development of various categories of loans for GEMS funds – "loan products," in the HGIA's terms – be subject to approval of the Public Utilities Commission.

During the 2017 Legislature, a proposal to remove PUC oversight did not make it through to passage. Following that, on July 21, HGIA executive director Gwen Yamamoto Lau filed a formal request with the PUC that it voluntarily remove itself from that supervisory role.

On October 12, she got her answer — a loud and clear "no."

"After reviewing the entire record and history of the GEMS Program, the commission is not persuaded by HGIA's rationale for seeking elimination or suspension of the Program Notification and Program Modification processes that HGIA itself designed," the PUC order states.

The commission noted that it "has a statutory duty to oversee the GEMS program that it cannot simply abrogate by motion or stipulation of the parties."

The HGIA had argued that it should not be subject to the same level of PUC oversight as is given to utilities, but the commission rejected that claim: "The Legislature gave the commission such broad oversight powers because the GEMS Program relies on ratepayer funds, which the commission is obligated to safeguard. If GEMS were funded with taxpayer money, or something other than a non-bypassable surcharge on ratepayers, commission oversight would not be necessary."

In any case, the PUC was not responsible for the numerous shortcomings or failures of the various GEMS initiatives, commissioners wrote.

"Some of these problems have been due to HGIA's missteps, and others due to factors beyond HGIA's control. But these problems are not clearly related to the Program Notification and Program Modification processes," the 33-page-long PUC order stated.

Among the problems it identified:

HGIA has had four different executive directors since its launch in September 2014; GEMS "relied on deployment partners and financing products that were ill-prepared to compete in the Hawai'i marketplace;" and, as a result, HGIA has been unable to "capitalize and deploy its funds in a meaningful way," despite the apparently high level of interest in the GEMS program." ***—P.T.***

For Further Reading

More on this may be found in our September 2017 issue: "Once More, Green Infrastructure Agency Is Attempting to Remove PUC Oversight."

BOARD TALK

Land Board Approves Rule Changes Banning Feeding, Abandoning Animals

According to testimony from some of the women who manage feral cat colonies on O'ahu, cat numbers can be dramatically reduced with proper care — not leaving food out, trapping, spaying and neutering them — but it just takes about 15 years or longer.

Lisa Thompson, who has been taking care of cat colonies for 25 years, told the Board of Land and Natural Resources on September 8 that she manages two colonies.

"Each was probably over 50 [cats]. Today, it's 9 and 12," she said.

Over her objections, as well as those of several hundred others, the Land Board voted that day to approve amendments to the administrative rules for the DLNR's Division of Boating and Ocean Recreation (DOBOR) that prohibit the feeding and abandonment of feral or stray animals at the state's small boat harbors.

"I believe these new rules will hinder the efforts of compassionate people to reduce the cat population," Thompson told the board, adding, "I don't only fix cats, I teach people how to trap. . . . I do this all without pay. A lot of the time, I cover the fee to fix the cat."

Christin Matsushige, who with her husband has volunteered with the Hawai'i Cat Foundation for 25 years, added that by adopting and implementing the rules, the department would be ignoring the "army of people willing to provide volunteer services." Those people have kept tens of thousands of cats from the environment by simply trapping and neutering 5,000 feral cats, she argued.

Steph Kendrick of the Hawaiian Humane Society questioned the need for the rule changes, as well as any DOBOR effort to kill strays found at the harbors.

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"In our conversations with DOBOR, they identified problems with cats at two harbors. Ke'ehi and Hale'iwa. Ke'ehi was being managed until a new [harbor] administrator kicked them out. The numbers were declining," she said, before asking, "Is the plan really to kill all animals? Free roaming cats, pets that get loose? … I don't think that's a job they [DOBOR staff] really want to embrace. Even if that is the plan, I tell you what … you can't kill your way out of the problem."

Countering the onslaught of opposing testimony, a few members of the public expressed their support for the rules, citing their concerns about the public health impacts of cat feces.

Bruce Anderson, head of the Department of Land and Natural Resources' Division of Aquatic Resources, also testified to the threat the cats posed to cetaceans and endangered Hawaiian monk seals. Anderson, whose doctoral degree is in infectious diseases, noted that cats are the only source of toxoplasmosis, a deadly disease caused by parasites in cat feces. Over the years, eight monk seals and two spinner dolphins have been known to have died from toxoplasmosis, he said, adding that those were "grossly underestimated numbers."

"Why are we focused on the harbors? The [*toxoplasma gondii*] oocysts come from all over and survive in the ocean for months. If you think you can clean up an area by simply removing some feces … one feces has a million oocysts," he continued.

Harbors are immediately adjacent to the water, and at Ke'ehi lagoon, rain is washing feces into the ocean. There's no buffer … and that's just Ke'ehi lagoon. … Every one of those harbors has hard surfaces where you're going to be concerned about feces going into the harbor. You have an attractive area where people are feeding cats. If there's one place you don't want cats, it's the harbors," Anderson said.

Even though the rule allowing DOBOR to kill strays at the harbor was not up for discussion that day, the Land Board decided not to make any efforts to implement any culling until next January to allow time for those managing cat colonies to discuss with the division where and how to best remove them from harbors.

The DLNR had not responded by press time to questions about the progress of those discussions.

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Rise in Wind Farm's Bat Take Spurs Environmental Review

On October 27, the Land Board approved a recommendation by the DLNR's Division of Forestry and Wildlife to require a Maui wind farm to prepare a supplemental environmental impact statement (SEIS) for a proposed amendment to its Habitat Conservation Plan (HCP) and Incidental Take License (ITL) to allow a 10-fold increase in the number of endangered Hawaiian hoary bats that can be killed by the facility. The board also delegated to its chair the authority to determine whether SEISs are required for other wind farms.

Auwahi Wind Energy's 21-megawatt wind farm at Ulupalakua Ranch was originally authorized to take 19 adult and eight juvenile bats over 25 years under HCP and ITL, which were approved by the Land Board in January 2012. In April 2015, DOFAW and the U.S. Fish and Wildlife Service (FWS) agreed to allow Auwahi to "convert 8 juvenile bats to the equivalent of three adults, resulting in an adjusted approved take permit for 22 bats," according to a DOFAW report to the Land Board. Even so, the FWS estimates there is an 80 percent chance that the bat take to date "does not exceed 45," which suggests that more than 22 bats may already have been killed in the few years the farm has been operating.

To ensure the farm doesn't exceed its permitted take of bats, Auwahi has sought a major amendment to its HCP and ITL. Although still in draft form, the amendment "is expected to request take of bats as high as 10-fold the number represented in the current ITL," DOFAW's report states.

DOFAW administrator Dave Smith told the Land Board that Auwahi's proposed change in the scope of the wind farm's environmental impacts require an SEIS.

"What we're finding out now, some of the [wind] projects are taking significantly more bats [than anticipated]," he said. In addition to Auwahi's proposal to increase allowable bat take, he said several more will be coming from other wind farms.

Given that, board member Chris Yuen asked Smith, "Do we know enough about bats to know how much it would affect the population to have a certain amount of bats killed by turbines?"

"No we don't. … We don't know if there's way more bats than we ever thought or if we're killing them all," Smith replied. He added that his division doesn't think the wind farms are driving the bats to extinction, at least not yet, given that bat takes have not started to decline.

Board member Keone Downing asked how high the take limit needs to be to keep Auwahi's facility operating.

"How many is going to be enough? I call it 'bats per kilowatt hour,'" he said.

Smith said the company is negotiating that level based on its current rate of take, adding that the state's Endangered Species Recovery Committee will be discussing the best science available to help determine the best number.

"Isn't that something they've done already?" Downing asked.

Smith said that new evidence has since come to light. Certain wind conditions and certain speeds may increase the likelihood of taking bats, he continued, adding, "We're hoping to be able to target wind speeds and seasonality to decease bat take by 90 percent. We're hoping to get to that point."

Marilyn Teague of Sempra, Auwahi's parent company, said that her company was prepared to immediately start writing the SEIS. ***— T.D.***