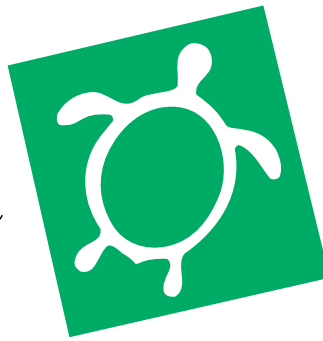


# Environment



# Hawai'i

a monthly newsletter

## GEMS' Sparkle Fades with Time

Two years after passage of a law intended to jumpstart the purchase of renewable energy technology, *Environment Hawai'i* takes a look at how the Department of Business, Economic Development, and Tourism has developed the Green Energy Market Securitization program.

Our cover article and sidebars take a look at the program, while our editorial raises several key concerns about its past and future directions.

While articles on energy lead off our reports this month, we also include updates on some of the most important water issues facing the state: the leaks of fuel at Red Hill, imperiling O'ahu's major source of potable water; the proposed designation of the Keauhou aquifer in West Hawai'i; and the allegations of water waste in Kaua'i.

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## Rollout of Green Energy Loan Program Shows Limited Pool of Beneficiaries

When the Hawai'i Legislature passed Senate Bill 1087 in 2013, the bill was hailed as a way to democratize access to energy-saving technology, such as rooftop photovoltaic installations. Nearly two years later, as the program anticipated in the legislation is beginning to take shape, its scope is far more modest and bears little resemblance to the hype.

"It is in the public interest to make cost-effective green infrastructure equipment options accessible and affordable to customers in an equitable way," the bill stated.

"A green infrastructure financing program administered by the state that capitalizes on existing ratepayer contributions for green infrastructure equipment can serve a critical role in ensuring all Hawai'i electricity ratepayers receive the greatest opportunity for affordable and clean energy," the legislators went on to say.

The bill sailed through to passage, becoming Act 211 of the 2013 session. Testimony at the several committee hearings it received was almost universally laudatory. The only discouraging word came from Aaron S. Fujioka, then the administrator of the State Procurement Office. Every time the bill came up for a hearing, Fujioka urged legislators to delete the exemption from the state public procurement code that was carved out for the agency that is to administer the loan program at the heart of the system established by Act 211. (He was ignored.)

Since then, the Department of Business, Economic Development and Tourism has received approval from the Public Utilities Commission to float \$150 million in bonds and to have those bonds be repaid through an

irrevocable Green Infrastructure Fee — "nonbypassable," in the terms of the PUC dockets, for the next 20 years — that has already begun to appear on the utility bills of HECO, MECO, and HELCO customers. (Kaua'i Island Utility Cooperative customers do not pay the fee and are excluded from the program.)

The bond sale occurred last fall, with associated fees taking some \$3.66 million out



PHOTO: U.S. DEPARTMENT OF STATE

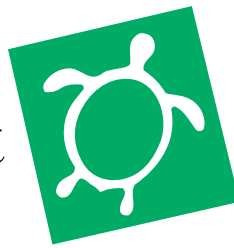
of the net to the state. Since then, the state has earned \$2.99 in interest on the funds raised in the bond float. It has spent \$80,862.15 in administrative costs. Added to the fund has been \$250,000 left over from a different DBEDT program. As of December 31, the date of the last balance report, the account stood at \$146,510,101.79.

### A Shifting Base

In late December, DBEDT released its "initial program notification" for the Green Infrastructure Loan Program, also known as GEMS (for Green Energy Market Securitization).

However, contrary to what was touted in testimony for SB 1087, customers participating in the program will not be able to pay off

# Environment Hawai'i



Volume 25, No. 9

March 2015

## NEW AND NOTEWORTHY



Malaekahana, O'ahu

**Keeping the Country Country:** Last month, Ikaika Anderson, chair of the Honolulu City Council's Zoning and Planning Committee, proposed gutting all references in the draft Ko'olau Loa Sustainable Communities Plan (KLSCP) to a new residential community in Malaekahana.

In his February 13 letter to committee clerk Gail Murayama, Anderson attached about two dozen proposed amendments to Bill 47, which recommends the adoption of a KLSCP revised by the city Department of Planning and Permitting

in December 2012. The plan will serve as the city's guide for development decisions for the district over the next 25 years.

The current version of the plan, conditionally approved by the Honolulu Planning Commission in 2013, includes controversial amendments to the urban growth boundary and the overall vision for the region to accommodate the building of an entirely new town on what is now agricultural land in Malaekahana. The amendments reflect the development plan known commonly as Envision La'ie, largely developed by Hawai'i Reserves, Inc., which manages property owned by the Church of Jesus Christ of Latter-Day Saints.

Among other things, Anderson's proposed amendments call for the removal of all references to Malaekahana in sections of the plan dealing with residential growth and commercial and industrial centers. He also proposed deleting all references to a proposed mauka road intended to connect La'ie and Kahuku to the proposed new development in Malaekahana.

Also with regard to Malaekahana, Anderson recommended that the plan's Land Use, Open

Space, and Public Facilities maps retain the growth boundaries set in the October 1999 KLSCP.

An additional proposal to amend Bill 47 was expected from committee member Ernie Martin, who represents the Ko'olau Loa district, but it had not been posted as of press time.

The committee was tentatively scheduled to hear Bill 47 on March 5. (For background on the evolution of the KLSCP, see our May 2013 issue, available at [www.environment-hawaii.org](http://www.environment-hawaii.org).)

**More Trouble for 'Aina Le'a:** Developers of the stalled Villages of 'Aina Le'a project in South Kohala are being sued yet again by the chief contractor on the project, Goodfellow Bros., Inc. The contractor first sued the developer in 2011, claiming it was owed more than \$2 million for work it had performed at the site, including grading, site preparation, and construction.

The case went to arbitration, and 'Aina Le'a was instructed to pay Goodfellow nearly \$3 million. 'Aina Le'a asked for a reconsideration of the arbitrator's findings, and in late 2012, that resulted in an even greater award to the contractor as a result of increased attorney's fees and costs. In early 2013, judgment against 'Aina Le'a was entered in favor of Goodfellow.

To date, 'Aina Le'a has paid off less than a third of the amount owed.

On January 15, Goodfellow Bros. sued for relief in 3<sup>rd</sup> Circuit Court. What sets this filing apart from earlier ones is the long recitation of the various name changes 'Aina Le'a has undergone in recent years.

Named as defendants are 'Aina Le'a, LLC; its manager, Robert Wessels; 'Aina Le'a, Inc., a Nevada corporation; 'Aina Le'a, Inc., a Delaware corporation; and 'Aina Le'a Real Estate Investment Fund, LLC.

**Never Say Die:** Charles Barker III, whose efforts to revitalize a fuel pipeline at the port of Hilo were the subject of a recent article in these pages, has filed his "second motion for reconsideration of dismissal of plaintiff's third amended complaint" in a federal lawsuit filed two years ago against former business partners.

The filing, made on February 6, asks for reconsideration on the basis of his having identified three new "Roe" defendants in the complicated case, which was dismissed in January.

For a brief description of Barker's claims, see the article in the January issue of *Environment Hawai'i*.

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*Environment Hawai'i* is published monthly by Environment Hawai'i, Inc., a 501(c)(3) non-profit corporation. Subscriptions are \$65 individual; \$100 non-profits, libraries; \$130 corporate. Send subscription inquiries, address changes, and all other correspondence to *Environment Hawai'i*, 190 Keawe Street, Suite 29, Hilo, Hawai'i 96720. Telephone: 808 934-0115. Toll-free: 877-934-0130. E-mail: [ptummons@gmail.com](mailto:ptummons@gmail.com) Web page: <http://www.environment-hawaii.org> Twitter: [Envhawaii](https://twitter.com/Envhawaii)

*Environment Hawai'i* is available in microform through University Microfilms' Alternative Press collection (300 North Zeeb Road, Ann Arbor, Michigan 48106-1346).

Production: For Color Publishing

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ISSN 1050-3285

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### Quote of the Month

*"Creating too much of an open process with people who simply have opinions but who have no experience in loan development or loan packaging on the program side may not be the most effective thing to do."*

— Mark Glick  
*DBEDT Energy Office*

## EDITORIAL

## Green Energy Loan Program Betrays Its Promise

When cooking up its Green Energy Market Securitization (GEMS) program, the Department of Business, Economic Development, and Tourism seems to have followed the recipe for growing mushrooms.

You know the one: keep them in the dark and feed them ...

The Legislature authorized the program in 2013, with passage of Senate Bill 1087. As Act 211, it was supposed to make rooftop solar and other energy-saving technologies available to sectors of the public otherwise unable to afford them.

So, two years later, and with DBEDT apparently poised to roll out the first stage of GEMS, it is not too soon to take a look at how the program is playing out.

From our close review of the program — as close a look as the overseers at DBEDT would allow, that is — it has evolved in ways that would probably shock SB 1087's many enthusiastic supporters.

Given the way that GEMS has been implemented, cynics might be forgiven for thinking that the program has nothing at all to do with putting the state on track to reach its clean energy goals. Count us among them.

### *Lack of Transparency*

The public was left completely in the dark as the GEMS program was being shaped following passage of Act 211, even though the act calls for a five-member board to run it. With the Hawai'i Green Infrastructure Authority's meetings subject to the Sunshine Law, the public should have had some way to track the state's progress in designing GEMS. But, apparently in the interest of moving the program forward with all due haste, DBEDT was given leave to "exercise all powers reserved to the authority" until such time as the board was "duly constituted."

That didn't happen until October 2014, nearly five months after the fundamentals of the program — including a 20-year irrevocable fee on every Hawaiian Electric customer — had been proposed to the Public Utilities Commission, a month after the PUC had approved them, and days before a scheduled bond float of \$150 million. By the time the HGIA met for the first time on October 23, not only had the horse fled the barn, it was in the next county.

As for the HGIA, it elevates the term "rubber stamp" to heretofore unscaled heights. When presented with a proposal to shift \$144 million from state management to that of a commercial bank "custodian," it did so without a peep on the sole basis of a poorly written, three-paragraph summary from a DBEDT staffer.

At least two of the HGIA members, of course, knew full well the details of GEMS. By law, the head of the state Energy Office (Mark Glick) and the head of DBEDT (Richard Lim) are also members of the HGIA. And they — together with investment bankers, utility executives, and private business consultants — had been talking for months, working out how best to put the GEMS program in place.

But best for whom?

### *Driven by Investors*

Hawai'i's Clean Energy Initiative has as its stated goal achieving "70 percent clean energy by 2030, with 30 percent from efficiency measures and 40 percent coming from locally generated renewable resources."

But GEMS has no place for efficiency, which, after all, is of little concern to the high-flying capital markets that helped DBEDT mold the program. What they want is to park their money in investments that will qualify for the generous state and federal tax credits associated with expensive photovoltaic systems and related technology.

In a world governed by common sense, efficiencies would be the first order of business. The size — and expense — of a PV system can be substantially reduced with a few low-tech, less costly measures that reduce demand. Solar water heating, for example, not only cuts down on the need to generate electricity, it also stores hot water for days, reducing not only daytime demand (when sunlight is usually plentiful) but also peak loads.

But common sense is in short supply at DBEDT. When it unveiled the first phase of GEMS in late December, the "loan products" it proposed were exclusively to "expand access and affordability of ... a solar photovoltaic (PV) system" for nonprofits or homeowners unable to finance it otherwise. The potential pool of nonprofits is limited by the require-

ment that loans be in the principal amount of no less than \$150,000 and that the nonprofits either own their own premises or have a long-term lease. As for consumers, if they are able to access financing through customary means, it is difficult to see how the GEMS loan product will be appealing. With interest rates "capped" at 9.999 percent, homeowners with a good credit history will probably be able to find a bank willing to front a loan for them directly, allowing them to take the tax credit themselves. People who are poor credit risks, and who, presumably, will be burdened with an interest rate toward the north end of the scale, will probably not find the GEMS "consumer loan product" very attractive. The lower-tech measures that could be of far greater benefit to them are still beyond their reach.

And what of renters? Condo owners who might want to devise a collective system?

Maybe, if the institutional investors just walk away from the program once the tax credits end, the needs of these groups will finally be addressed.

### *Carts before Horses*

As to that escaped horse, it was probably being led away by the cart.

Any homebuyer knows that you don't take out a mortgage until you close on the purchase of your house.

DBEDT, however, committed the ratepayers of Hawaiian Electric utilities to a 20-year, \$150 million bond months before it was ready to issue the first GEMS loan. (It *still* isn't ready, in fact.)

You might think that DBEDT would have parked bond proceeds in an account where earned interest would at least partly offset bond obligations. Even at 1 percent a year, by now the \$144 million in proceeds from the GEMS bond could have generated \$600,000 in interest. As it turns out, DBEDT is getting not one percent, but *one one-hundredth* of a percent — and no one has the sense to be embarrassed by this. (To make up for that, apparently, DBEDT is charging exorbitant rates for copies of GEMS-associated contracts. One can only wonder what they are hiding.)

DBEDT managers say they can't get a higher rate since the funds need to be liquid — so that, as the HGIA was told last fall, they can immediately start "making weekly loan purchases and money transfers to a number of GEMS capital partners."

Maybe they really believed at the time that all the pieces required for their "loan products" to work — including resolution of grid interconnection issues and approval of on-bill financing — would soon be in place.



## Green Infrastructure Authority Gets Little Information on Custodial Bank

Usually, when a state board or commission is asked to make a decision, its staff will prepare a background report. In the case of the Board of Land and Natural Resources, for example, the staff report can run to several pages and have correspondence, maps, or other documents attached. The idea is to give the board members, and members of the public as well, information needed to allow it to come to an informed decision.

When the Hawai'i Green Infrastructure Authority held its first meeting, on October 23, it was asked to approve the transfer of roughly \$144 million in proceeds from the Green Energy Market Securitization bond sale into an account at the Bank of New York Mellon.

The HGIA approved the transfer of funds on the basis of a 442-word presentation from DBEDT staffer Cyd Miyashiro (now HGIA interim executive director). We reprint it in its entirety:

“Members of the Authority, the purpose of this request is to transfer approximately \$144 million in net proceeds from the Green Infrastructure Special Fund to the GEMS Program Custodian — Bank of New York Mellon. Bank of New York Mellon is pro-

viding custodial services and acting as a paying agent for the Green Energy Market Securitization (GEMS) Program. The \$144 million transfer from the special fund will allow Bank of New York Mellon to purchase GEMS loans originated by GEMS capital partners when instructed to do so by

*The HGIA approved the transfer of funds on the basis of a 442-word presentation from DBEDT staffer Cyd Miyashiro.*

the HGIA. The reason Bank of New York Mellon is acting as GEMS' paying agent for this program is because we anticipate GEMS to be making weekly loan purchases and money transfers to a number of GEMS capital partners, a task that would be difficult for the Department of Accounting and General Services to fulfill.

“The approximately \$144 million held by Bank of New York Mellon will be in accounts in the name of the State of Hawai'i, Hawai'i Green Infrastructure Authority. We currently estimate the amount to be deployed as loans to be approximately \$144 million, net of bond issuance costs and administrative costs for the operations of

the Hawai'i Green Infrastructure Authority.

“To reiterate, the \$144 million will be held at Bank of New York Mellon in accounts belonging to the State of Hawai'i, Hawai'i Green Infrastructure Authority. This one time transfer is needed to facilitate the day to day operations of deploying GEMS loans because it would not be practical for the Department of Accounting and General Services to be doing weekly money transfers to multiple GEMS capital partners. The money residing in the Bank

of New York Mellon still belongs to the Hawai'i Green Infrastructure Authority.”

*Environment Hawai'i* asked to see the contract with the bank, but it had not been provided by press time. However, DBEDT Energy Office communication officer Alan Yonan stated that the bank is charging HGIA a fixed annual administrative fee of \$1,900, which includes 72 “complimentary” wire transfers per year. Additional transfers will be charged at a rate of \$25 each.

Yonan also said that the bank is paying interest at a rate of 1/100 of a percent a year. “The estimated annual return on the current balance in the account is \$14,325,” he added.

— *P.T.*

If so, they were not paying attention. Although DBEDT's two GEMS-related dockets moved with warp speed through the PUC process, the dockets relating to on-bill financing and utility requirements for PV installations are still walking with lead boots.

As the head of DBEDT and, for the first year and a half following approval of SB 1087, the head of GEMS, Lim might have been expected to be a bit more aggressive in protecting the state's interest. But when you get right down to it, the state has no interest in ensuring that the proceeds of the GEMS bond, which will be paid off by ratepayers, not by any agency of the state, are prudently managed.

Throughout this whole process, in fact, no one seems to have had the ratepayers' interest at heart — a fact that probably goes far toward explaining its perversion.

### *Moving Forward*

It is too late to walk back the \$150 million bond. But the state could still take steps to

make the GEMS program deliver on the promises made when Act 211 was passed.

- First, the Public Utilities Commission should stop stalling on two dockets where decisions are well past due: on-bill financing and requirements for interconnection of photovoltaic systems. Until these issues are resolved, expansion of PV systems, whether financed through GEMS or any other means, is pretty well on ice.

- Second, the HGIA must finish putting in place all the components of the loan program so at least some customers can start benefiting.

- Third, the HGIA should immediately launch a program to make low-interest loans available to utility customers wanting to install technologies other than photovoltaic systems.

- Fourth, the Legislature should require — if not this year, then next — the HGIA to go through the rule-making process instead of leaving approval of its “loan products” in the hands of the PUC. While this may be cumbersome, it has the virtue of requiring

rule-making agencies to air their plans at public hearings. Had DBEDT been forced to defend its GEMS program to the public, the outcome would probably have been far different — and far more efficient.

- Fifth, the Legislature must eliminate the procurement process exemption for GEMS. Why it granted this in the first place is a puzzle. Perhaps if competitive bids had been received for the “custodial services” contract granted to Bank of New York Mellon, the state might be getting more than negligible interest on its \$144 million in deposits there.

One thing is certain: until meaningful, substantial structural changes are made in the GEMS program, it will be for ratepayers a huge burden for decades to come, with little measurable benefit to them or to the state. At this point, it is even questionable if the institutional investors, for whose aid and comfort the program seems to have been designed, will be able to draw any advantage from it.

Well done, DBEDT!

## New Green Infrastructure Fee Cuts into Public Benefits Fund

Since 2009, customers of the Hawaiian Electric companies have been charged a Public Benefits Fee. Calculated as a percentage of usage, the fee pays a contractor to the state Public Utilities Commission who manages a program that is intended to push the state onto the path of renewable energy and conservation in a more aggressive manner than the utilities themselves might do. Since its inception, the program, called Hawai'i Energy, has been run by Leidos Engineering (formerly known as SAIC), and, among other things, it subsidizes the purchase of solar water heaters, gives out compact fluorescent light bulbs, and helps businesses and homeowners with energy audits.

But did the 2013 Legislature intend, when it enacted what became Act 211, to abolish the Public Benefits Fee (PBF) as soon as the Green Infrastructure Fee (GIF) was imposed?

Sally Kaye, the sole member of the public who intervened in PUC proceedings that led to establishment of the Green Energy Market Securitization (GEMS) fund, thinks so.

In the PUC's 2014 docket on the GIF, Kaye argued that the authorizing statute

did not anticipate that ratepayers would have to support both the Green Infrastructure Fee *and* the Public Benefits Fee.

"The clear language of the statute is disjunctive," she wrote in a filing to the PUC. "[I]t states, 'the public benefits fee, or the green infrastructure fee,' not 'and' the GI fee." (That language appears in the "definitions" part of Section 269-161, Hawai'i Revised Statutes.)

In addition, the statute defines a green infrastructure charge as "the on-bill charges for the use and services of the loan program, including the repayment of loans made under the loan program" authorized by the PUC. Kaye argued that this constituted "evidence that the Legislature intended that those accessing the GEMS program's products or services would pay back the costs and charges of such products and/or services," but that it did not support a conclusion "that the Legislature intended that the entire universe of ratepayers, including those that have already installed green infrastructure, should be responsible for underwriting the costs for future systems for up to 20 years."

In that same vein, she noted that the statute gives the state Department of Business, Economic Development, and Tourism no authority "to impose a fixed charge on ALL customers expressly for the purpose of underwriting the debt service incurred by only some customers."

Despite Kaye's concerns, the PUC approved the GEMS bond float of \$150 million pretty much as DBEDT proposed it, along with an irrevocable fixed fee, which, unlike the PBF, is not based on usage and which is to be imposed on each Hawaiian Electric customer for at least another 20 years. As for the Public Benefits Fee, it continues to appear, in slightly reduced form, on customers' bills, right along with the new (since December) Green Infrastructure Fee.

When the PUC approved the GIF, it also called for corresponding reductions in the amounts collected for the Public Benefits Fee. In a filing with the commission last November by Hawaiian Electric, the utility estimated that GIF collections would amount to roughly \$7.06 million for the first seven months (December 2014 through June 2015).

To offset this, the utility said, the estimated PBF surcharge for an average residence using 600 kWh per month would drop by \$1.54 – to \$4.55.

## DBEDT Wants \$259 For Contract Copies

In researching the articles for this issue, *Environment Hawai'i* sought copies of contracts that the Department of Business, Economic Development and Tourism entered into with the Bank of New York Mellon, Renewable Funding, and Clean Power Finance.

On February 24, DBEDT informed us that to comply with this request we would need to pay \$259. Had the \$60-per-request waiver not been granted, the total would have been \$379.

According to Susan Gray-Ellis, DBEDT's staffer who responds to Uniform Information Practices Act requests, the time required to "review and segregate" the contracts for Renewable Funding and Clean Power Finance is nine hours (costing \$180). That required to segregate the Bank of New York Mellon contract is 8.5 hours (at a cost of \$170).

Even though the information is to be provided by email, DBEDT still charges for copying costs, at 10 cents a page (for a total of \$19).

All the contracts are with businesses. It is unclear why there would need to be so much time to "review and segregate" them, a process intended by law to ensure that proprietary or personal information is not improperly made public. The question was posed to Gray-Ellis, who had not responded by press time.

### Acronyms Explained

The articles in this issue relating to the Green Energy Market Securitization program have several acronyms that may not be familiar to many readers.

Here is a handy reference:

**DBEDT:** The state Department of Business, Economic Development, and Tourism

**GEMS:** Green Energy Market Securitization

**GIF:** Green Infrastructure Fee

**HGIA:** Hawai'i Green Infrastructure Authority

**PBF:** Public Benefits Fee

**PUC:** Public Utilities Commission

### A Shrinking PBF Fund

The public benefits fund now stands to see a substantial reduction in its resources. Until this year, funds raised through the PBF were around \$40 million annually. Now it will be getting around \$25 million.

When asked what the impact of the GIF will be on Hawai'i Energy, Mark Glick of DBEDT's Energy Office did not seem too concerned. "It will be a reduction," he said, "but if you look at their annual report, they've had difficulty spending what they collect."

Had any thought been given to reducing the PBF? he was asked.

"It could be that they're collecting too much, or it could be there isn't enough innovative thinking about how to use that fund to support efficiency and renewable energy," he said.

Hawai'i Energy was invited to comment on the impact of the reduction on its operations. It declined to do so. — P.T.

*GEMS continued from page 1*

the cost of the energy-saving systems on their utility bills, through something called on-bill financing. Two years earlier, in 2011, the Legislature ordered the PUC to investigate ways in which consumers might arrange for long-term financing of their energy-saving improvements by having their loans paid off through their monthly electric bills. The PUC studied the issue and established a working group to recommend how this might be carried out. Not until June 3, 2014—just days before DBEDT filed its applications for approval of the GEMS bond and loan program—did the PUC open a docket “to establish and implement an on-bill financing program.” In mid-November, the commission released a draft “Hawai'i Energy Bill Saver Program” manual, which was widely panned by environmental groups participating in the docket. The pay-as-you-save option is still a work in progress.

Thus, by the time the GEMS program was ready for rollout, the state still had no means by which the loans to customers could be paid off through on-bill financing.

In a December filing with the PUC, the Energy Office stated, “In the event that on-bill repayment is available to serve GEMS participants, payments will be collected by the utility and remitted by the [Public Utilities] Commission’s Finance Program Administrator to GEMS-approved loan servicers.”

**Nonprofits Only**

Another significant change has to do with who can qualify. One of the big selling points for SB 1087 was the idea that it would democratize access to energy-saving technologies, which up to now have been out of reach of low-income customers.

Yet the initial program is not going to benefit renters at all, and very few homeowners. Only nonprofits—and well-established ones at that—are going to be eligible to participate when the loan tap is finally turned on. Nonprofits, which pay no taxes, are not able to take advantage of the tax credits for renewable energy installations. The credits are substantial. The federal tax credit, expiring the end of 2016, allows taxpayers to deduct up to 30 percent of their investment in renewable energy, while the corresponding state credit is 35 percent.

While the nonprofits cannot use the credits, other businesses can, provided they are the ones who pay for the system that ultimately ends up on the roofs of the nonprofits. The GEMS “nonprofit loan product” in effect allows for the transfer of those tax credits to

businesses through the services of a company called Clean Power Finance. As Alan Yonan, the DBEDT Energy Office communications officer, describes it, “In this transaction, Clean Power Finance will monetize the state and federal tax credits, which results in lower system and prepaid costs to the nonprofit.”

In a phone interview, Tanyan Chen with the Energy Office elaborated on the role of Clean Power Finance: “They are a solar developer, helping with the nonprofit product. Their role is essentially to combine tax equity with our financing to create a prepaid PPA [power purchase agreement] product.”

In other words, since the investors lined up by Clean Power Finance are getting a significant tax break, they can install the PV system at a discount and thus lower the cost-per-kilowatt-hour that the nonprofit is expected to prepay with the proceeds of the loan. Yonan estimates that the energy cost for participating nonprofits can be reduced to as low as 17 cents per kilowatt hour.

According to a description of the “nonprofit loan product” that DBEDT provided to the PUC in December, the qualifying nonprofits must own or have a long-term lease on the premises where the renewable energy installation is to be sited. Interest rates are capped at 9.999 percent, with a “minimum loan amount of \$150,000.”



Mark Glick

Mark Glick, head of the Energy Office, justified the decision to address nonprofits as the first class of customers eligible for GEMS loans. “Part of the trick in getting the nonprofit community served was to address the inability of the nonprofits to take advantage of the cost benefits that accrue from having tax credits involved. So, basically, we designed a package that allowed that nonprofit sector to accrue the benefits that private individuals with tax liability have.”

“When it comes to strategies involving nonprofits,” he added, “being able to take advantage of something in place at the federal level makes sense to do while it’s there.”

The Energy Office has indicated it is considering a “consumer loan product” as well as the “nonprofit loan product.” In addition to having the ability to purchase the long-term agreement with Clean Power Finance, customers would also have the option of buying the PV equipment on their own, and thus qualify for tax credits—if, that is, the “consumer loan product” is up and running quickly. With the federal tax credits for installed systems expiring the end of next year,

it may be a challenge for HGIA to put money in consumers’ hands in time for them to avail themselves of the tax advantages.

Contrary to the promise of low-interest loans being made available to renters however, the “consumer loan product”—should it become available—would be available only to owners of fee-simple or leasehold properties.

“We’re currently in program design for the renter market,” said Chen. “That’s harder to crack, since the property is owned by the owner, and the renter is not there for the long term. So we’re trying to address incentive issues—how to incentivize the owner to be willing to install a system.”

Glick said that the department was supporting passage of a “community solar bill.” “Then you’d be able to wrap renters into purchasing shares in a communal system,” he said. “Essentially that would solve the renter dilemma.”

**Next Steps**

If all goes well, Glick expects that the first GEMS loans will be issued sometime in April. “We originally thought we’d be running by December 2014, but it will be more like March 2015,” he said. From the time of passage of Act 211 to that point, he added, “is a fair time to get a complicated, multi-headed program in place that will lead to installations across the board.”

So how much of the bond proceeds will be distributed this year?

“In the next 10 months, I would just be guessing,” he said. But by the time the federal tax credits close in December 2016, he added, he expects all the funds to be distributed.

**Grid Lock-ups**

A major piece of the puzzle that the Department of Business, Economic Development, and Tourism is still trying to figure out is how the customers receiving the loans will be able to connect to the Hawaiian Electric grid, given the near-moratorium on solar PV systems that the HEI utilities have imposed for the last year. Hawaiian Electric has argued that before new PV systems can be authorized, costly and time-consuming studies need to be done to demonstrate that the new systems will not have an impact on circuits that the utility claims are already saturated with PV.

To address this, at least in part, the Hawai'i Green Infrastructure Authority has told the Public Utilities Commission that it “plans to make GEMS financing products available to fund grid-connected, non-export PV systems



## Public Input Largely Absent As GEMS Program Evolves

On June 4, 2014, the Department of Business, Economic Development, and Tourism unveiled its plan to carry out Act 211 of the 2013 Legislature, which promised to bring the benefits of renewable energy to sectors of the population that had so far been unable to afford it.

It did this with the filing of two applications with the state Public Utilities Commission. One sought PUC approval for the Green Energy Market Securitization (GEMS) program, which, DBEDT maintained, would allow nonprofits, renters, and low-income families to participate in the savings afforded by renewable technology. The second sought PUC approval for the sale of \$150 million in bonds to fund the GEMS program. The bonds would be secured by a Green Infrastructure Fee (GIF) that would appear each month on the bills of all Hawaiian Electric customers. The amount of the fee would be determined by what was required to pay off the bond, recalculated periodically to ensure that the fees generated were sufficient to meet bondholder obligations (initially around \$14 million a year, including \$4.5 million in interest).

The broad outlines of the GEMS program and the means to finance it were developed with little public input. Although Act 211 anticipated the appointment of a

Hawai'i Green Infrastructure Authority to oversee the program to finance renewable energy installations for underserved populations, the authority did not exist until October 23, 2014, when Governor Neil Abercrombie appointed Jeff Mikulina, of the Blue Planet Foundation, and Wesley Machida, of the Hawai'i Employees Retirement System, as the two public members of the five-member authority. (The others are the directors of Department of Business, Economic Development, and Tourism and the Department of Budget and Finance, and the administrator of DBEDT's Energy Office.)

By that time, the PUC had approved the program, largely as DBEDT proposed. The customers of Hawaiian Electric's three utilities — HECO, MECO, and HELCO — were now stuck with a fee that will last the next 20 years, at least, to fund a program of far more limited scope, at least initially, than that anticipated by lawmakers and others who strongly supported the initial legislation.

The sole opportunity for public input occurred when DBEDT made its filings with the PUC last June.

As state agencies go, the PUC is not the friendliest venue for public involvement. Parties wishing to intervene must show how their interest differs from that of the general

public, whose interests are nominally represented by the state consumer advocate in all PUC proceedings, known as dockets. Once they are approved as intervenors, questions they may have about the proposals in a given docket have to be posed in writing. The process can take months and is so formal and difficult that most intervenors find it necessary to hire a lawyer.

In the GEMS financing docket, one individual — Sally Kaye, of Lana'i — and one organization — the Blue Planet Foundation, represented by attorney Doug Codiga — intervened. Blue Planet wholeheartedly endorsed DBEDT's program; in its three-page statement of position, it recommended not one change. Kaye, on the other hand, was highly critical.

What DBEDT was proposing to the PUC, Kaye said in her 14-page statement of position, did “not accurately reflect the Legislature's intent in enacting the relevant statutory provisions.” A review of testimony and standing committee reports, she continued, “confirms that there is simply no mention or discussion of, nor support shown for, a fixed fee on utility ratepayers that could stretch out for 20 years or more. To the contrary, the testimony offered, including from the Department itself, reveals a focus on 1) low-interest financing; 2) targeted at underserved markets; 3) to be paid for from the already assessed, usage-based public benefits fund; and 4) paid back via an on-bill mechanism.”

Kaye had other concerns as well, especially regarding the Green Infrastructure Fee (detailed elsewhere in this issue).

that allow for the installation of PV without excess energy flowing back onto the grid.” This also means that the PV systems purchased with GEMS funds would have to include some sort of storage to allow energy generated during daylight to be used at other times, since the excess energy would no longer be able to flow back into the utility circuits.

But anyone installing a battery back-up system also needs to obtain utility approval.

Given the challenges associated with new PV systems, Glick was asked, who made the decision to finance only PV systems in the first phase of the GEMS program.

“When we began program design, [we thought] the interconnection issue ... would be in the hands of the Public Utilities Commission, which would issue standards for and approvals of interconnections, as opposed to leaving it up to the utility, but that never materialized,” he replied.

“There were a number of other measures underway at that time that we thought would be in place, and we would've been way ahead of the curve if that had been the case. In any event, since that time, we have also — we're still in programmatic design to expand [what is offered]. It is not a difficult process to go back to the PUC and add additional uses.”

Last June, in compliance with a PUC order, Hawaiian Electric filed with the PUC a proposed rule to clarify just what customers would be required to provide for systems that ran in parallel with, but did not feed into, the utility grid. Since then, it has become apparent that the company and the installers of solar PV systems are at loggerheads.

Although Hawaiian Electric claimed in its original filing that it had consulted in advance with all the interested parties, as the docket progressed, it became clear that there was no agreement on the level of utility review that

should be required for such “non-export” systems.

In its statement of position filed in this docket, Hawaiian Electric acknowledged “that the interconnection review process can be improved” and added that it had made “significant efforts to do so.”

“However, rather than attempting to eliminate all oversight over the interconnection process, ... all interested stakeholders should work towards the goal of implementing interconnection standards ... that support the safe and reliable operation of the distribution system for all customers and utility employees in a fair and sustainable manner.”

Progress in the docket is slow. In early February, the PUC approved an extension of time to February 19 for the parties to file their reply statements of position.

— *Patricia Tummons*

## PUC Rejects Plea of Developers Of Solar Farm on State Land in 'Ewa

That didn't take long. On February 4, the state Public Utilities Commission (PUC) dismissed without prejudice a petition filed late last December by West Wind Works, LLC, Investricity, Ltd., and PSP III, LLC, seeking to revive their rejected 30 megawatt solar farm project on about 100 acres of state industrial land in 'Ewa, O'ahu.

In 2013, as part of its review of renewable energy projects for which it would seek a waiver from the PUC's competitive bidding process, Hawaiian Electric Company (HECO) determined that the companies did not control the site and had improperly revised the project's size and scope. As a result, the utility chose not to request a waiver for the project from the

PUC's framework for competitive bidding.

In their petition, the companies argued that HECO's assessment of their project was flawed and asked the PUC for a declaratory order forcing HECO to keep open its 2013 invitation for low-cost, non-bid renewable energy projects on O'ahu. The petition also asked the PUC to order HECO to review the project "in good faith." (See our February 2015 cover story for more on this.)

In its order last month, the PUC granted HECO's motion to intervene in the docket on the companies' petition, but also dismissed the petition itself. The PUC pointed out that it can only issue declaratory orders on the application of its statutes, rules, or orders. In this case, the petitioners failed to identify any

provision, rule, or order in question, and weren't seeking a determination as to the applicability of it, the PUC stated.

"Rather, Petitioners' claims specifically refer to HECO's 2013 Invitation for Waivered Projects" — a process that occurred outside the PUC's competitive bidding framework, the order states.

Echoing HECO's argument in its motion to intervene, the PUC noted that the utility had a right not to request a waiver on behalf of a developer "for any reason."

Whether the companies will ever have the level of site control HECO desires remains to be seen. Under PSP III's development agreement with the state Department of Land and Natural Resources, the company was supposed to have completed a draft environmental assessment for the project by the end of last month, but had not done so as of press time. Without an environmental assessment, the state cannot issue the company a lease for the property. — *T.D.*

Yet when the PUC issued its order approving the program, it was almost exactly as DBEDT had proposed.

### 'Stakeholder' Input

Mark Glick, administrator of DBEDT's Energy Office, was asked who had input into the design of the GEMS. His staff worked closely with the PUC, he said, to develop the applications. "Once we made the applications, we knew we could no longer talk with them, so we wanted to know precisely what they were looking for in an application," he said.

Helping to develop the bond package were First Southwest and Goldman Sachs, said Tanyan Chen, manager of DBEDT's Clean Energy Solution's branch. Renewable Funding out of Berkeley was hired to help develop the loan program, she said, with a contract worth around \$1 million. (That is one of several contracts that *Environment Hawai'i* has asked to see. So far, none has been provided.)

The 2014 report to the state Legislature on the activities of the Hawai'i Green Infrastructure Authority (prepared in part by Renewable Funding) states that DBEDT and HGIA "has [sic] worked with hundreds of public and private stakeholders." Pressed to give examples of public meetings, Chen could cite only the PUC deliberations, which included "a technical conference" as well as "stakeholder meetings with industry folks." The PUC's technical conference qualified as a public meeting, she said, "since they noticed it. Anybody could attend that meeting."

Chen also suggested that the public had plenty of opportunity to testify on GEMS as the enabling legislation worked its way through the legislative hearing process.

Glick said that his agency had actually done "a lot of scoping meetings" with "members of the solar community, environmentalists, Sierra Club, Earthjustice. We were trying to deal with the people who are ultimately going to use the funding."

None of this constituted a public hearing, he acknowledged, adding: "There could be broader forms of outreach, but we are developing a loan program that has technical components. Creating too much of an open process with people who simply have opinions but who have no experience in loan development or loan packaging on the program side may not be the most effective thing to do."

Still, he added, "The community has the opportunity to give us feedback. I hear it all the time. People can approach us at any time and say, here's what concerns us, here's what we'd like to see."

When asked whether the HGIA should be subject to the rule-making process in devising its various loan programs, Glick stated, "If it is viewed that that will be beneficial to creating a more robust program, that'd be fine. I personally don't think it is necessary. But if the public or policy-makers think it would be advantageous, we wouldn't stand in the way."

### At Last, an Authority

The Hawai'i Green Infrastructure Authority, anticipated in Act 211 to design

and oversee the GEMS program, held its first public meeting on October 23, the same day its two members of the public were appointed. By that time, there was little the authority's members could do to shape the GEMS program had they wanted to.

The Energy Office's Glick was asked why the establishment of the HGIA came so long after Act 211 was passed. "From a functional standpoint," he responded, "the initial work and design of the program occurred within the Energy Office. The same people were developing and overseeing contracts for both the program and finance order, so it just became a matter of at what point did you need to have the authority up and running to oversee a functioning loan program. ... It didn't seem to be imperative to have that functioning prior to the commencement of the loan program."

The HGIA also met in November, to discuss hiring issues, and was scheduled to meet on February 26, to approve the appointment of Tanyan Chen as interim executive director and to approve "agreements with program deployment partners."

The authority's first quarterly report to the PUC, filed January 30, suggests much more activity than what was undertaken at the public meetings. "The Authority, in conjunction with the state Energy Office, has continued to seek out participants who are unable to gain access to the PV market and work with Deployment Partners to develop products to meet their needs," the report states. — *P.T.*



## Solar Water Heaters Absent from List Of Technologies Approved for GEMS Loans

One of the big puzzles about the Green Energy Market Securitization program is why it excludes loans for solar water heaters. These certainly offer the biggest bang for the buck to any customer wanting lower utility bills. And the cost is a fraction of what it would take to install a solar photovoltaic system.

But although water heating accounts for roughly a third of the average household's energy consumption, solar water heaters are absent from the list of technologies approved for GEMS loans.

Why?

This question was raised by Life of the Land when it intervened in the Public Utilities Commission docket approving the loan program.

"Solar water heaters save more dollars per dollar invested than PV panels, they have shorter payback periods, but more importantly, solar water heaters decrease peak load..." wrote Henry Curtis, the group's vice president. "Will those receiving PV financing have to install solar water heaters before acquiring PV?"

The response of the Department of Business, Economic Development, and Tourism was that the Public Utilities Commission "intends to support the financing and deployment of solar water heaters" through its on-bill financing program (still a work in progress). GEMS, on the other hand, "will

primarily support solar PV and technologies that mitigate challenges related to interconnection."

Nor would the GEMS program require customers to install solar water heaters before PV. "GEMS is open to customers who want to install solar water heaters," wrote deputy attorney general Gregg Kinkley for the department. But "mandating the installation of solar water heaters may make the process less appealing and more burdensome for both customers and deployment partners, leading them not to use GEMS and potentially not to install distributed generation altogether."

"As a public-private partnership, it is essential that [DBEDT] work with existing market players and deployment partners to have GEMS augment and expand the market to the underserved — already a new concept to deployment partners. Adding additional requirements and components that do not integrate with their current processes will likely reduce the usefulness and impact of the program," Kinkley wrote.

In an interview, Curtis noted that if solar water heaters and other efficiencies were in place before the GEMS loans were obtained, it could lower the cost of the solar PV installation, since the customer's electrical load would be substantially reduced.

Mark Glick, the head of the state's Energy Office, was asked why financing for solar water heaters was excluded from the GEMS program.

"There was a philosophic decision that we wouldn't do what ... was being done by the energy efficiency and conservation block grant program administered by the [federal] Department of Energy, where they say you can't get a loan for a PV system until you go through a step process, an efficiency audit, all that. ... We acknowledge there are other programs out there, particularly Hawai'i Energy, to support rebates for solar water heaters as well as other programs being contemplated by the PUC, so we weren't going to establish rules to establish efficiency first. We didn't want to slow up the process for all of the folks who have either already installed [solar water heaters] or who have gone through audits or are pursuing other measures independently. It was a choice that we didn't want to impede progress on moving forward with somebody who knows what they want to do."

❖ ❖ ❖

### Water Heater Variances By the Thousands

Seven years ago, the Hawai'i Legislature passed a law forbidding counties to issue building permits after January 1, 2010, for the construction of any house that did not include a solar water heater. Variances were allowed in limited circumstances, but they had to be approved by the state energy resources coordinator.

In 2009, the circumstances that qualified for a variance were further restricted, with the Legislature adding, in the "Findings" section of the bill, that it was the Legislature's intent "that the variances ... will be rarely, if ever, exercised or granted because the burden of proof will lie with the applicant to demonstrate that a solar water heater system, regardless of location or circumstance, is not cost-effective in the context of a 30-year mortgage."

So, how is this working out?

Not that well, apparently.

DBEDT's Glick, who signs the variances, was asked how many variances had been approved.

"Far too many," he answered. "They come from the Big Island and Kaua'i, by the thousands, maybe three or four thousand a year. ... You've got a number of engineers, architects, and contractors who have figured out how to help homeowners skirt the law. So we have to work harder on that. ... It does concern us."

— P.T.



## Leaks at Red Hill Tanks Concern Lawmakers, Health Department, Water Commission

At the request of the state Department of Health (DOH), the federal Environmental Protection Agency (EPA), and various U.S. military agencies, two state Senate committees last month deferred a bill that would have effectively forced the Navy to completely double-line or cathodically protect its active Red Hill fuel storage tanks within ten years.

Sen. Mike Gabbard introduced the bill, SB 1168, which mirrors many of the concepts proposed in rules being drafted by the EPA for field-constructed underground storage tanks (USTs).

The bill's preamble notes that the Red Hill Bulk Fuel Storage Facility, which includes 20 250-foot-deep, 150-foot-wide, 72-year-old tanks capable of storing up to 187 million gallons of fuel, is located just 100 feet above a primary drinking water source. However, Hawai'i Administrative Rules exempt all field-constructed USTs from leak protection standards required for other UST owners and operators. (Field-constructed tanks are those that are built on-site.) Such an exemption for the state's largest underground storage tank system "is extremely detrimental to human health and the environment," the bill stated. As such, the bill proposed ending that exemption.

Had the bill passed, currently exempt tanks or tank systems would have been subject to stricter leak monitoring, record-keeping, corrosion protection, spill, and overflow requirements.

Tanks constructed or installed before July 1, 2015, would have been required to be cathodically protected or be secondarily contained and interstitially monitored.

The bill set a deadline of July 1, 2025, for owners and operators to complete the upgrades or permanently close the tanks or tank systems. Also, anyone relying on vapor and groundwater monitoring to detect UST leaks would have five years to implement another release detection monitoring method in accordance with federal regulations.

Ernie Lau, manager and chief engineer for the Honolulu Board of Water Supply, testified in favor of the bill, as did the Office of Hawaiian Affairs and the Massapequa (New York) Water District's superintendent, Stan Carey.

Carey lamented that his agency is dealing with "the largest groundwater contamination plume in the country that is emanating from the Grumman-Navy facility located in

Bethpage, New York. ... This massive plume now impacts and/or threatens 25 supply wells that provide drinking water to over 250,000 people."

Gabbard's proposed legislation is "critical to proactive drinking water protection," Carey wrote.

### *Bad Timing*

In the next couple of months, the DOH and the EPA are expected to publish their long-awaited enforcement agreement regarding the release last year of an estimated 27,000 gallons of jet fuel from the Red Hill facility.

The agreement, called an Administrative Order on Consent (AOC), will likely require the Navy and the Defense Logistics Agency (DLA) to increase maintenance efforts, improve oversight, provide more data, and, if necessary, install more monitoring wells, Gary Gill, former DOH director of environmental management, told the state Commission on Water Resource Management at its January 28 meeting. The agreement may also require the Navy to upgrade the tanks, he said.

The kinds of upgrades that will be required will depend on the results of studies by the Navy and the DLA of technologies that could reduce the likelihood of future fuel releases. The studies will be a requirement of the agreement, according to testimony on the bill from the EPA's Jared Blumenfeld.

"Once the appropriate upgrade of technologies are determined by the studies, the AOC would require the Navy and DLA to upgrade all of the Red Hill tanks that will remain in-use. Secondary containment is one of the upgrade technologies that will be evaluated. However, to date, we have not identified any tanks of similar design to Red Hill where a secondary containment retrofit has been installed successfully. Given the size of the facility and the technical issues involved, it is likely that any major improvements to the Red Hill tanks will require more than ten years to implement," Blumenfeld stated.

Blumenfeld, along with U.S. Army Brigadier General John O'Neil, U.S. Navy Capt. Dean Tufts, and the DOH requested a deferral of the bill.

"The AOC is intended to establish a process to make well-researched, well-planned and cost-effective improvements to protect the groundwater resource beneath the Red Hill [facility]. ... Unfortunately, S.B. 1168 may have the unintended consequence of compli-

cating the ongoing negotiations by requiring a specific solution which may not yet be practical," the DOH stated in testimony submitted February 17 to the Committee on Energy and the Environment.

That day, the committee deferred the bill and the Committee on Health followed suit the next. Although the bill had been referred to the Committee on Commerce and Consumer Protection and the Committee on Ways and Means, no hearings on the bill by those committees had been set by press time.

Although the DOH had asked for a deferral, in his comments to the Water Commission weeks earlier, Gill seemed to support the bill's intent to force the Navy to either upgrade the tanks at Red Hill or shut them down. (Gill, who was not reappointed by Gov. David Ige, has since left the DOH.)

The Navy disputes any suggestion that the Red Hill tanks — other than the one that leaked last year — are faulty. Even so, Gill told the Water Commission at its January 28 meeting, "These tanks all could be leaking, a constant, slow drip. I think that's what's happening."

The ground beneath all 20 of the tanks are stained with fuel and, according to a 1998 study, some 1.2 million gallons of fuel — in addition to the 27,000 gallons reported to have been lost last year — may have already leaked, he said.

Short of closing the facility, Gill continued, the best way to mitigate the groundwater threat is to apply the best industry standards, i.e., double walls and advanced leak detection.

"Right now, [leaked fuel] goes straight into the environment and you don't know the damage until it's done," he said.

If and when the technology or methods become available to double-line the tanks, the public will have to decide whether it's cost-effective to upgrade them.

"If it costs a dollar, well, why not? If it costs a million, well, maybe. If it costs a billion, is it worth that investment? That's a political, public call we all have a stake in," he said.

### *Bills for the Bills*

Although the AOC is expected to be finalized soon, the DOH may not have the resources to ensure adequate enforcement and oversight, Gill said.

"Our program is broke," he said of the DOH's Hazard Evaluation and Emergency Response Branch, noting that the department could not make payroll last November for some of the key staff members working on Red Hill.

To ensure the state has adequate funds to maintain robust oversight of activities at Red Hill and the few dozen other field con-

## Water Commission Stresses Importance Of Early Assessment of Cultural Impacts

The state Commission on Water Resource Management has asked Hawai'i County to front-load its assessment of the impacts that future water withdrawals in Waimea and Keauhou will have on native Hawaiian traditional and customary rights and on the environment. In doing so, it may, as Native Hawaiian Legal Corporation attorney Alan Murakami put it, save people "a lot of time, energy and heartache."

At its February 18 meeting, the Water Commission heard recommendations from its staff on the scope and phasing of work to be done by the Hawai'i County Department of Water Supply in revising its Water Use and Development Plan (WUDP) for the areas of Waimea and Keauhou. The commission ordered the revision last December as part of its response to a petition submitted by the National Park Service to designate the Keauhou aquifer system as a Water Management Area.

The commission's December order required a draft revision to be completed by May 15. However, after meeting with the county and its consultants, Water Commission staff determined that deadline was not realistic. Instead, staff recommended that the update proceed in two phases, with the county presenting the results of the first phase by May 30.

In that first phase, as recommended by staff, the county is to update the plan's projections of demand and authorized use, while in the second phase, it is to address strategies for developing water sources and improving infrastructure. In the second phase as well, the

county is to outline strategies to meet agricultural and other non-potable demands, assess potential impacts of source development on environmental resources and traditional and customary native Hawaiian practices, and identify appropriate mitigation measures.

But during discussion on the staff proposal, commissioner Denise Antolini suggested including the assessment of traditional customary rights and ecological impacts in the first phase, given their importance to the commission and the length of time required to do it.

John Nishimura of Fukunaga & Associates, the county's consultant, seemed reticent about jumping straight into an assessment of cultural and environmental impacts. He said those things also need to be addressed in the statewide Hawai'i Water Quality Plan and Water Resource Protection Plan — both elements of the overall Hawai'i Water Plan that are prepared by state agencies — as well as the county-prepared WUDP. To properly assess the cultural and environmental impacts of source development, he suggested, all of those plans need to assess the interconnection between surface and ground water and their connection to marine environments.

Antolini said that environmental assessments and impact statements are a treasure trove of information that could help with the assessment absent updates to all of the sub-plans that make up the Hawai'i Water Plan.

Commissioner Kamana Beamer added that the assessment is "not sort of like a side dish. It's constitutionally mandated."

The NHLC's Murakami said he was en-

couraged by the commissioners' suggestions. For decades, the NHLC has been fighting on behalf of native Hawaiians for the return of diverted stream water and limits on groundwater pumping so that they can properly exercise their traditional and customary rights.

"I come from a place in history when a lot of these things were either ignored or neglected," he said. "The comments about front-loading really hit home for me. ... If you don't front-load it, it becomes difficult when you try to talk about developing sources." He added that the Hawai'i Supreme Court's decision in the *Ka Pa'akai* case requires state and county agencies to assess and mitigate cultural impacts before decision making.

Doing the cultural impact assessments early on "can avoid really intense conflicts that are unnecessary. If you can incorporate that into this process, I really encourage it," he said, adding that his office would be happy to assist.

After conferring with the county during a brief recess, commission staffer Lenore Ohye suggested amending her recommendation so as to require the county to begin assessing cultural and environmental issues using available published information, with a report back to the commission of its preliminary findings by May 30.

The commission unanimously approved the amended recommendation.



### Early Findings On Claims of Kaua'i Water Waste

The Water Commission has enough information to start finding a way to end the waste of diverted stream water in West

structured underground storage tanks around the state, state House representatives introduced three bills this legislative session that would provide funds to the DOH to address concerns regarding Red Hill and other leaking underground storage tanks.

While two bills — House Bill 987 and HB 645 — seek a one-time appropriation, House Bill 1087, introduced by Rep. Chris Lee, would raise the percentage of the state barrel tax that goes to the DOH's Environmental Response Revolving Fund from 5 cents to 15 cents per barrel of oil. The bill would also establish a task force to address issues surrounding field-constructed tanks, including those at Red Hill.

— Teresa Dawson



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Kaua'i, Earthjustice attorney David Henkin said at the commission's February meeting.

It's been more than a year since Earthjustice, on behalf of Po'ai Wai Ola and the West Kaua'i Watershed Alliance, filed a waste complaint over the state Agribusiness Development Corporation's use of water diverted from the headwaters of the Waimea River along with a petition to amend the interim instream flow standards for the river and its tributaries. At the commission's meeting, Element Environmental's Steve Spengler, a consultant the commission hired to investigate the complaint, presented the results of his wet-season baseline measurements of the Koke'e and Kekaha irrigation ditches that serve the ADC's lands in Kekaha, as well as the streams that are part of the petition.

Spengler found some leakage from both ditches. He also said that the vast majority of the water diverted from Waiakoali, Kawakoi, Kauaikinana and Koke'e streams into the Koke'e ditch is dumped into Koke'e Stream. Historically, the ditch sent water into the state's Pu'u Lua reservoir. But after the state Department of Land and Natural Resources found the reservoir to be non-compliant with state standards, the height of water in the reservoir has been limited to 60 feet for safety reasons.

Under normal conditions, flows in Koke'e Stream are tiny, Spengler said, but because it is now receiving 80 percent of the ditch's water, the stream now produces a consistent waterfall that otherwise would be dry.

Koke'e ditch water that used to lead to the state Department of Hawaiian Home Lands' Kitano reservoir is also diverted elsewhere. "Kitano was repeatedly vandalized. ... They no longer divert there; it's a dry hole right now," he said.

Instead, the water is discharged into a pipe that leads to fallow sugarcane fields and intersects with the Kekaha ditch system, he said.

The Kekaha ditch system, meanwhile, serves some taro patches before its waters are fed into a hydropower plant or are dumped into reservoirs linked to Kaua'i County's wastewater treatment plant, he said.

Below the first hydropower plant, the ditch provides about 4 million gallons of water a day to a second hydro plant, then the system deteriorates, Spengler said, showing a picture of a big belt of green vegetation fed by leakage from the ditch.

Finally, toward the end of the system, the Kekaha ditch feeds the Mana and Polihale reservoirs. From the Polihale reservoir, a pipe distributes water to smaller irrigation ditches.

In general, Spengler said, flow in the Kekaha ditch is controlled to optimize electricity production by the hydros.

"A significant amount of ditch flow is diverted back into Waimea River just below the mauka hydro," he said.

Spengler said he and his team still have to measure flows during the dry season and a final report should be completed some time later in the year.

To Henkin of Earthjustice, the information Spengler had gathered on what the ADC, through the Kekaha Agriculture Association, does with the diverted waters should have been sufficient to allow the Water Commission to take action on the waste complaint at the least.

"We have an entire plantation system that disappeared in 2001 and all the water continues to be diverted. Regarding Koke'e, three streams are being dewatered at the source. The fact that they take 10 mgd and put it in Koke'e Stream does nothing for the headwater streams that are completely dewatered," he said.

His clients have been waiting for the conclusion of Spengler's investigation for more than a year, and the com-

munity is concerned that it may take until the end of 2015 to address the waste allegation, he said.

"I don't think anyone is claiming any use is being made of the headwaters of the Koke'e system. They can't. The reservoir can't be more than 60 feet," he said.

Henkin asked the commission to set a schedule to immediately address what he saw as the waste of water.

With regard to the Kekaha ditch, the system appears to be operated and maximized for power production, not agricultural use, he continued. "It's now being used for power production that may not be technically waste. That gets to our ... petition on the IIFS [and] what should be in stream," he said.

The hydro plants provide power to pumps that protect the Mana plain and Kekaha town from flooding, he said, and keeping those pumps running is "obviously something we care about." But maybe there are ways to power the pumps other than by dewatering an entire system, he added.

Finally, Henkin stressed the need for the commission to obtain information on the types of crops being grown on ADC lands and how many acres are being farmed.

"You can't do an investigation about waste and beneficial use until you know what people are growing," he said. Referring to Spengler's photo of the leakage-induced belt of green along the Kekaha system, "I was struck about how little green there was everywhere else," Henkin said.

Attorney Doug Codiga, representing the Kekaha Agriculture Association, responded to Henkin's characterization of the system by saying simply that there is a "different and opposing view" on most if not all of the issues Henkin raised. The KAA is a cooperative of ADC tenants that maintains and manages the irrigation system for the agency. — T.D.