

YEARLY ACTIVITY PLAN (YAP) - FY '10 & FY'11

Division/Attached Agency:

Program Name:

Program ID:

I. PROGRAM PURPOSE AND PRIORITIES

Purpose of this program: Summarize the purpose of this program based on statutory guidelines and functional statement.

The purpose of the Natural Energy Laboratory of Hawaii Authority is to facilitate research, development, and commercialization of natural energy resources in Hawaii.

Program Changes: What changes in the purposes or functions of the program are anticipated or requested and why?

None

Program Priorities. Given the existing and anticipated program purposes and responsibilities what are the core priorities going forward and why?

- Repair 40” pipeline to prevent “catastrophic” loss possibility and preserve asset for Hawaii.
- NELHA should continue taking a leadership role in developing renewable energy resources --- in a sense, back to its roots.
- Another imperative is achieving operating profitability to secure the future of the agency.
- NELHA should promote research on the constituents of the deep sea water to produce new medicines and cures for mankind.
- NELHA is a statewide authority by statute; its operations should be extended to other islands in order to promote their economies.

II. PROGRAM GOALS

Program Goals: What are the specific long-term goals (up to 6 years) established to address the program’s purpose and priorities?

- Restore Hawaiian leadership in OTEC development through leadership and implementation of a demonstration OTEC facility.
- Achieve energy independence through privately-financed alternative green power projects at NELHA, fulfilling the objectives of the Green Energy Zone as well as pointing the way for the Hawaii Clean Energy Initiative effort.
- Have a multiplicity of Hawaiian operations throughout the state, not just Keahole Point.
- Have at least one on-going partnership to construct, operate and profit from OTEC plants in various locations.

With the remaining +/-500 acres, having completed the arduous subdividing, permitting, and platting process, lease these lands at their highest and best use prices to assist in maintaining operating expense self-reliance. With the *Ohana Pale Ke Oa v. Board of Agriculture* ruling and implementation of new requirements by Department of Agriculture

YEARLY ACTIVITY PLAN (YAP) - FY '10 & FY'11

regarding importation of species and so forth, this may require NELHA to draft either an entirely new Environmental Impact Statement or at least conduct a Supplemental Environmental impact Statement.

- Complete the actions necessary to prepare the large blocks of remaining acreage for tenants – E.I.S. zoning, subdividing, utilities, roads, ground preparation.

Biennium Objectives: What specific objectives and evaluation criteria (metrics, indicators) are planned for:

- a) Year one of the current biennium?
- b) Year two of the current biennium?

a.)

- Determine how to -- and then secure -- the 40" pipeline anchoring system to prevent a "catastrophic" failure and the resultant negative impacts on tenants and the state for not maintaining a unique valuable asset.
- Achieve total self-reliance for operating expenses through continued execution of higher yielding leases (lease revenues rose approximately 8% in fiscal 2007 – 2008 through continuation of the new lease policy adopted in August of 2006), continued ramp up of seawater delivery prices to reflect actual costs, development of new seawater uses (such as its sale for Sea Water Air Conditioning at the Kona International Airport and culture of algae for bio-fuels production) and the development of independent revenue sources such as the delivery of energy related services to others.
- Issuance of RFPs and subsequent contracts for a large solar array project that would supply both NELHA and KOA with at least intermittent power, therefore relief from the grid. (This RFP is at DBEDT for issuance on the state procurement system at present.)
- Issuance of RFP and subsequent contract for construction of a scale-up ocean thermal energy plant (OTEC), which materially would aid in proving the economic feasibility of establishing such plants elsewhere (at commercial size) for the benefit of Hawaiian electricity consumers. This could also create a NELHAcentric revenue base. (This RFP will be filed for issuance by DBEDT by the middle of August 2008.)
- Issuance of, and funding for, an RFP for planning and design (and then construction) of the vital airport connector road, enabling ingress to the largest remaining section of undeveloped NELHA real estate.
- Create the "NELHA" brand as a unique product source. Recent developments in deep sea water branding have shown the need to brand NELHA products for their recognized exclusivity. This will require a new Servicemark as well as participation by tenants using the Servicemark.

b.)

- Continuation of first year's goals and objectives.

Program Challenges: Briefly summarize what opportunities constraints, etc. the program faces in addressing the biennium goals.

Opportunities

- NELHA should continue taking a leadership role in developing renewable energy resources --- in a sense, back to its roots.
- Another imperative is achieving operating profitability to secure the future of the agency.
- NELHA should promote research on the constituents of the deep sea water to produce new medicines and cures for mankind.
- NELHA is a statewide authority by statute; its operations should be extended to other islands in order to promote their economies.

Constraints

- Current laws and regulations regarding the transmission, distribution and charging for electricity deliveries. This will require corrective action by the Public Utilities Commission and a change in the way private utilities conduct their business.

YEARLY ACTIVITY PLAN (YAP) - FY '10 & FY'11

- The need to engage private enterprise to fulfill NELHA self-sufficiency projects due to a lack of agency or state funding to construct and operate such projects.
- Existing tenants expecting a continuation of the traditional subsidization that they have received in terms of less-than-cost seawater deliveries and substantially-less-than-cost land rents.
- Non-local interest groups, such as some supposed environmental groups that oppose any type of progress or development for their own pecuniary purposes.
- The *Ohana Pale Ke Oa v. Board of Agriculture* ruling, which could severely curtail activities at NELHA.
- An Environmental Impact Statement dating from the early 1980's that restrains modern development, particularly on the HOST Park acreage.

III. PROGRAM ACCOMPLISHMENTS

FY 2009 Goals and Accomplishments: Please list the specific goals that were established for FY 2009 and indicate the extent to which those goals were accomplished.

1. Successful repairs to both the 18" and 40" pipelines for deep seawater deliveries. Procurement delays caused this not to be accomplished until September 2009, into the fiscal 2010 year.
2. Successful conclusions to pending and anticipated RFPs --- for example, airport connector road, 55" expansion, micro-grid, photovoltaic array, and OTEC. Procurement delays caused these goals not to be accomplished. Either contract encumbrance has been delayed or RFPs not issued.
3. Implementation of the new Master Plan. Final Master Plan not delivered by Group 70 until the fall of 2009.

FY 2009 Evaluation: What opportunities, constraints, unexpected events, etc. were encountered, how were they addressed, and what impact did they have on accomplishment of goals in FY 2009.

1. NELHA was asked to subsidize a tenant, doing so cost approximately \$300,000 and if continued into the future, as much as \$450,000, depleting the Special Fund very rapidly.
2. Delays in the procurement process resulted in very few projects or needs being met in fiscal 2009.

IV. ALIGNMENT

Briefly describe how the program's biennium goals are expected to impact DBEDT's nine strategic objectives?

1.	Hawaii Five Point Economic Plan (tourism marketing/outreach, CIP acceleration, lower fees/taxes, investment attraction/retention, & maximizing Federal dollars) NELHA has millions of unencumbered CIP dollars ready to be expended.
2.	Hawai'i Clean Energy Initiative NELHA has more alternative energy programs underway than everywhere else. Over 3,000 members of the public were educated last fiscal year at NELHA concerning Hawaiian energy matters. NELHA has RFPs waiting for issuance that would make it self-sufficient in the production of energy.

YEARLY ACTIVITY PLAN (YAP) - FY '10 & FY'11

3.	Hawai'i Innovation Initiative (technology development, infrastructure for innovation, STEM education, skilled workforce, emerging industries) NELHA incubates numerous companies, development technologies ranging from clean new forms of energy (biofuels) to food production.
4.	Global Links Numerous foreign governments send representatives to NELHA every year to gain information on replicating its success.
5.	Economic research and data analysis None
6.	Hawai'i Open for Business NELHA had added tenants this year and has at least three new tenants for inclusion in the next fiscal year.
7.	Workforce Housing None
8.	Planning and Land Use None
9.	World Class Infrastructure NELHA is recognized around the world has having the most complete, functional, and credible system of seawater pipes. Researchers from all over the world come to NELHA to conduct research and there are plans to make it the world headquarters for certain ocean deep water research.

YEARLY ACTIVITY PLAN (YAP) - FY '10 & FY'11

YAP SUMMARY FORM

PROGRAM:

NELHA

PROGRAM PURPOSE	The purpose of the Natural Energy Laboratory of Hawaii Authority is to facilitate research, development, and commercialization of natural energy resources in Hawaii (according to statute) It is also, according to its mission statement, to help develop and commercialize the resources of the ocean in other ways.
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PROGRAM PRIORITIES	LONG-TERM GOALS (up to six years)	BIENNIUM OBJECTIVES	ACCOMPLISHMENTS FY 2009	
			GOALS SET	ACCOMPLISHMENTS
<ul style="list-style-type: none"> • Repair 40" pipeline bights. • Take leadership in energy development. • Achieve operating self-sufficiency. • Promote research on deep seawater products. 	<ul style="list-style-type: none"> • Restore Hawaiian leadership in OTEC. • Achieve energy independence. • Have a multiplicity of operations throughout the state. 	YEAR 1: <ul style="list-style-type: none"> • Fix 40" pipeline bights. • Achieve total self-reliance. • Build energy production facilities. YEAR 2: <ul style="list-style-type: none"> • Continuation of first year's goals 	<ul style="list-style-type: none"> • Fix pipeline earthquake damage. Issue RFPs and contracts for airport connector road, solar array, 55" pipeline expansion, OTEC plant, and micro-grid. 	<ul style="list-style-type: none"> • None, due to procurement delays

YEARLY ACTIVITY PLAN (YAP) - FY '10 & FY'11

SUPPLEMENTARY INFORMATION

1. Please elaborate on the Challenges the program faces over the current biennium.
Lack of staffing
Lack of funding
Procurement delays
2. Please elaborate on optional program changes, strategies, leveraging with other efforts, and assistance from other programs that could help this program accomplish its biennium goals.
None
3. Describe efforts to explore additional sources of funding including Federal stimulus grants.
We continue to solicit new tenants.
4. Summarize your anticipated 2010 supplemental legislative requests and their relationship to the program's biennium or long term goals.
The Board of Directors is to decide on submitting a request for \$2,000,000 to conduct a new E.I.S.