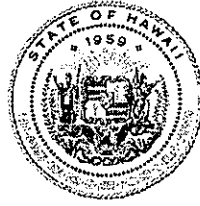
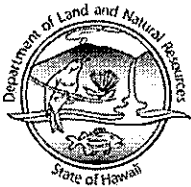


HB 496

NEIL ABERCROMBIE
GOVERNOR OF HAWAII



**STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES**

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

**Testimony of
WILLIAM J. AILA, JR.
Chairperson**

**Before the Senate Committees on
WATER, LAND, AND HOUSING
and
ENERGY AND ENVIRONMENT**

**Thursday, March 17, 2011
2:45 PM
State Capitol, Conference Room 225**

**In consideration of
HOUSE BILL 496
RELATING TO LAKE WILSON**

House Bill 496 would establish a pilot project within the Department of Land and Natural Resources (Department) to demonstrate the effectiveness of phyto-remediation using native plants to remove pollutants and improve water clarity in Lake Wilson, to submit a report on viability of technologies by the 2012 Legislature, and to appropriate an unspecified sum for a demonstration pilot project.

The Department supports the intent of the bill and notes other bills have been introduced in this Session to advocate for the development of an overall plan for the use of Lake Wilson and its water resource. As such, the Department would prefer that the Lake and its resources be comprehensively evaluated to maximize its potential.

Thank you for this opportunity to provide testimony.

WILLIAM J. AILA, JR.
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

GUY H. KAULUKUKUI
FIRST DEPUTY

WILLIAM M. TAM
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS



HB496
RELATING TO LAKE WILSON
Senate Committee on Energy and Environment
Senate Committee on Water Land and Housing

March 17, 2011

2:45 p.m.

Room 225

The Office of Hawaiian Affairs (OHA) **SUPPORTS** HB496, which would establish a pilot project within the Department of Land and Natural Resources (DLNR) to demonstrate the effectiveness of marine phytoremediation using plants that are native to Hawai'i to remove pollutants and improve water clarity in Lake Wilson.

The low water quality in Lake Wilson has limited the public's desire to engage in recreational and subsistence (fishing) opportunities and contributes to the lack of suitable agricultural water for a wider variety of crops on O'ahu's central plains and north shore.

Like the Native Hawaiian relationship with 'āina, the varied ecosystems across Ka Pae 'Āina o Hawai'i have evolved over time to achieve a homeostasis, bio-cultural uniqueness and richness recognized worldwide for its priceless beauty and service to the people of Hawai'i and humanity. The DLNR should be lauded for its work in promoting bioremediation approaches that maximize the potential of our native resources and strives to respect and work within these unique (sometimes fragile) ecosystems before looking outside for solutions.

Therefore, OHA strongly urges the committee to PASS HB496. Mahalo for the opportunity to testify on this important measure.

March 17, 2011

The Senate Joint Committees on Energy and Environment (ENE), and Water, Land & Housing (WLH)

To: The Honorable Senator Mike Gabbard, Chair (ENE)
The Honorable Senator J. Kalani English, Vice Chair

The Honorable Senator Donovan M. Dela Cruz, Chair (WLH)
The Honorable Senator Malama Solomon, Vice Chair

SUBJECT: WRITTEN TESTIMONY IN FAVOR OF H.B. 496
RELATING TO LAKE WILSON

Date: Wednesday, March 17, 2011
Time: 2:45pm
Place: Conference Room 225
State Capitol
415 South Beretania Street

Aloha Chair's Gabbard and Dela Cruz, Vice Chair's English and Solomon, and members of these committees,

Partners In Development Foundation (PIDF) is grateful for the opportunity to provide testimony in support of this measure.

Bioremediation using Native Hawaiian plant based ecologies including phyto-remediation of heavy metals and nutrients dissolved in fresh and marine waters has been successfully demonstrated in the State of Hawai'i. The appropriateness of this technology is based on its cost effectiveness, and limited external impacts to the people and environment of Hawai'i.

The ability of planted hydroponic communities to increase populations of wetland bacteria to improve water quality by reducing nutrient levels, heavy metals, and pathogenic bacteria has been proven conclusively in the laboratory. The implementation of this strategy will enhance water quality, but will be limited by the scale and other factors impacting water quality in an *in situ* setting.

An ecological engineering assessment completed by Strategic Solutions, Inc. as part of a proposal to the State of Hawai'i to address the *Salvina molesta* infestation of Wahiawa reservoir showed that several steps needed to be completed to improve water quality in the water body. First among these is the **cessation of disposal of treated wastewater into the reservoir**. With the latter in mind, a pilot project to demonstrate the effectiveness of phytoremediation is well worth pursuing.

We suggest amending the measure by deleting the term "*marine*", leaving just the reference to phytoremediation, as Lake Wilson is a freshwater environment.

Respectfully,

Jan E. Hanohano Dill
President & Chair
Partners In Development Foundation
808-595-2752 (B) / 808-595-4932
<http://pidfoundation.org>

HB 460

Proposed Amendment: Strike reference to “marine” in Section 2 (a) and Section 3.

SECTION 2. (a) There is established a pilot project within the department of land and natural resources for administrative purposes to demonstrate the effectiveness of ~~marine~~ phytoremediation using plants that are native to Hawaii to remove pollutants and improve water clarity in Lake Wilson.

(b) The department shall submit a report to the legislature no later than twenty days prior to the convening of the regular session of 2012, on the viability, safety, and effectiveness of the technology on a demonstration scale in the Lake Wilson environment and recommendations, including the costs associated with the recommendations, for continuation or expansion of the project.

SECTION 3. There is appropriated out of the general revenues of the State of Hawaii the sum of \$ or so much thereof as may be necessary for fiscal year 2011-2012 for a pilot project to demonstrate the effectiveness of ~~marine~~ phytoremediation using plants that are native to Hawaii to remove pollutants and improve water clarity in Lake Wilson.