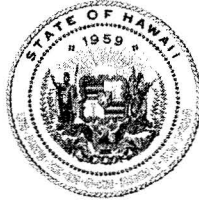


NEIL ABERCROMBIE  
GOVERNOR OF HAWAII



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

POST OFFICE BOX 621  
HONOLULU, HAWAII 96809

**WILLIAM J. AILA, JR.**  
INTERIM 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

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

**Before the House Committees on  
HAWAIIAN AFFAIRS  
and  
CULTURE & THE ARTS**

**Wednesday, February 16, 2011  
8:30 AM**

**State Capitol, House Conference Room 329**

**In consideration of  
HOUSE BILL 378, HOUSE DRAFT 1  
RELATING TO LANDSCAPING OF PUBLIC FACILITIES**

The Department of Land and Natural Resources (Department) supports the intent of House Bill 378, House Draft 1 to increase the use of native Hawaiian plants in landscaping for public facilities and offers the following comments.

It is important that the State do what it can to maintain our native plants and animals, and slow the spread and impacts of non-native and invasive plants on our environment. However, not all non-native plants are an immediate and significant threat to our environment. The landscaping and nursery industries use a variety of useful and popular non-native plants that serve a beneficial purpose in our lives, beautify our communities, and would be difficult to replace in short order. Adopting a program to move to greater use of native Hawaiian plants in public facilities is admirable and desirable, but will take time to achieve. The Department suggests a phased-in approach to do this such as going from 50% to 100% requirement over 5 years.

The Department can play a part in this initiative, helping to educate the industry to the damaging impacts of many non-native plants, participate in the community discussion on what are acceptable non-native landscaping plants, and help identify alternative native Hawaiian plants with similar shape, color and growth form that can be used instead.

An equally important part of this initiative should be a shift to the production and use of "Hawaii grown" products for the landscaping industry. This would provide both economic benefits by supporting of our local agricultural and nursery industries, and reduce the risk of importing new diseases and invasive species that come in on foreign and domestic imports.

NEIL ABERCROMBIE  
GOVERNOR



BRUCE A. COPPA  
Comptroller

RYAN OKAHARA  
Deputy Comptroller

STATE OF HAWAII  
DEPARTMENT OF ACCOUNTING  
AND GENERAL SERVICES  
P.O. BOX 119  
HONOLULU, HAWAII 96810-0119

WRITTEN TESTIMONY  
OF  
BRUCE A. COPPA, COMPTROLLER  
DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES  
TO THE  
HOUSE COMMITTEE  
ON  
HAWAIIAN AFFAIRS  
ON  
February 16, 2011  
H.B. 378, H.D. 1

RELATING TO LANDSCAPING OF PUBLIC FACILITIES

Chair Hanohano and members of the Committee, thank you for the opportunity to submit written testimony on H.B. 378, H.D. 1.

The Department of Accounting and General Services supports this bill because it gives the flexibility to incorporate native Hawaiian land plants wherever and whenever feasible.

Thank you for the opportunity to submit written testimony on this matter.



## LANDSCAPE INDUSTRY COUNCIL OF HAWAII'I

FEBRUARY 14, 2011

TESTIMONY FOR HOUSE BILL 378

HOUSE COMMITTEE ON HAWAIIAN AFFAIRS

The Landscape Industry Council of Hawai'i SUPPORTS House Bill 378.

As the president of the Landscape Industry Council of Hawai'i (LICH), I wanted to share with you my thoughts on the benefits and impacts of the H.B. 378 in its current form. Although I am the landscape industry president, I am a state worker and have no financial interests from the passing of this bill but I am a native plant advocate.

I have lead all of LICH's recent sustainability initiatives: Invasive Species Initiative (the most aggressive in the nation, 2008), Irrigation Water Conservation Initiative (saving over 50% of outdoor water use, 2010) and Native Plant Initiative (only initiative for reintroducing native species in a responsible manner, 2010).

A mere 8% of the land below 1000-foot elevation is inhabited by native species and frankly the amount in the built environment is around 1-2%. There are a number of reasons including agricultural practices altering the soil pH, invasive plants, low maintenance non-invasive plants, exotic ornamentals and our highly altered environment that is different than any ecosystem that a native plant has adapted to. There are only 10 native plants that make up over 90% of the native plants in the built environment. If native plants were just as easy to grow as ornamental plants in the urban environment, it would be done already.

What is the best we can do regarding native species? With an aggressive strategy for the built environment, we can develop a 'hybrid' environment of 30-40% native plants over 20 years and this is highly dependent on developing a native turf grass.

While the intent of the bill is an important step in the right direction, if the bill took the form of the companion Senate Bill 287 with mandatory use for all state projects the implementation would be problematic. I am aware of some of the challenges from leading the LICH Native Plant Initiative and my position at the state where I manage 2,500 miles of state roadsides. I will attempt to explain some of the difficulties of mandatory use of native plants on all state projects:

### Street Trees

Street trees are the real green of any city far outreaching all the city's parks. Street trees are amazingly resilient to survive in a three-foot by three-foot planting pit and grow to a size that is relative to the scale of streets. Street tree canopies and roots are pruned for clearance for people, vehicles and street curb projects. It's a rule of thumb that programmatically a city should have no more than 10% of any one tree species so that a Dutch Elm disease or in our case the Wiliwili gall wasp doesn't ravage our entire city. There are 36 trees that do well on our streets and zero are native and one is Polynesian introduced. The Wiliwili tree was our only native street tree and Milo is the only Polynesian tree. All other native trees have been tried unsuccessfully. Since federal funds are channelled through the State for county street projects, the counties will be affected by this bill. Street trees help to clean the air, curb storm water runoff, raise property values, sequester carbon, and reduce energy costs.

### Historic Properties

Historic federal and state laws protect historic buildings and sites and restricting replacement plants to native may or may not be a problem. Native alternatives may in some cases meet the intent of the historic design but other times they will not.

### Turf Grass

The biggest issue facing this bill is turf grasses. Short turf grasses are 75% or greater of all urban green spaces and there are no native turf grasses. The landscape industry needs to develop a native turf grass cultivar or variety. We currently use about 5 turf grasses for all the different situations; wear resistant for sports, salt tolerant for seashore and nonpotable water, full sun, shade, and drought resistant. Our parks, golf courses, athletic fields, roadsides, lawns and playgrounds all depend on short turf grasses. Sustainability wise, Seashore Paspalum is the only turf grass that will thrive with nonpotable water saving our precious potable drinking water.

### Erosion Control

Vetiver grass, a sterile non-native plant, has promising erosion control applications growing on hardpan and eroded areas. The State DOT is actively working on pilot projects. Vetiver grass will be 1/10 the cost of more costly plastic grids, fabrics, and metal soil anchors. Vetiver could be the magic bullet for eroded embankments providing a low cost and environmentally friendly solution reducing erosion and sediments entering our storm water drains and silting our reefs.

### Native Plant Biodiversity

This bill would reduce our native plant diversity by homogenizing native plants and reducing distinct varieties of native species. The landscape industry does not currently curate the source of plants and propagates one genetic version millions of times. So a plant like Naupaka from Oahu will end up on every other island and there is no way currently to verify the origin of a plant. Hawaii enjoys some of the most diverse plant genetics in the world. A recent study showed that Ohia enjoyed 30 times more genetic diversity in Hawaii than a particular Pine with a range across the entire western United States. The industry through the LICH Native Plant Initiative is working hard to resolve this issue, but we're years away from meaningful results.

### Native Plant Economics

Requiring all state projects to exclusively use native plants would be great financially for the landscape industry but with our current practices would be more expensive to plant and to maintain than non-native plants. From my experience at the State, the installation is many times more expensive to install and maintain. While state projects are using native plants, more maintenance resources are needed for long-term success.

### Hydroseeding Cost Efficiency

Hydroseeding is a quick, economical, and effective means of establishing plantings where seeds are mixed together in a slurry of mulch and essential fertilizers and sprayed uniformly across the soil, creating a favorable, nutrient rich environment for the germination and establishment of seedlings into the soil. Typically grass is hydroseeded but shrubs and trees can also be utilized as long as the seeds are small. Developing low cost hydroseeding techniques for native plants is a critical step for using native plants on the scale of large projects like roads, highways and large developments. Hydroseeding is generally less than 10% - 20% of planting costs. There are a number of research projects discovering the means of hydroseeding native plants but the results are very preliminary.

### State Project Process

State projects take years to development with all the required processes and enacting this bill would require design changes on current projects that would have some cost impacts. Also a project with non-native trees involving transplanting to another site; would these non-native trees have to be destroyed since we can't use funds for non-native trees?

### University of Hawaii Research

University of Hawaii conducts valuable research on promising native plants and non-native plants. Some research applies to improve agriculture, forestry, fruit trees, erosion control plants, ornamental plants, biofuels, etc. There are many plants that are non-native and non-invasive

that have unique uses that help our sustainability, environment, food supply, economic and energy independence. This bill could jeopardize this state institution's research.

To make House Bill 378 a success, I would suggest one of two approaches or a combination to avoid these impacts and take advantage of this opportunity for government to lead by example. The simple short-term solution would be to keep House Bill 378 on the use of native plants on a "as feasible" approach. There are many state projects using native plants in the applications that make sense avoiding the pitfalls explained above.

The long-term solution is to financially support the LICH Native Plant Initiative for the responsible use of native plants. This is the real 800-pound gorilla in the room, this is the bold move to make as a leader, and this will achieve an important component of sustainability and protect and enhance one of the distinctive elements that make Hawai'i so special. The estimated budget for LICH Native Plant Initiative is \$38.5 million over ten years.

The LICH Native Plant Initiative (NPI) is a long term effort to change the paradigm of using non-native plants and reverse the decline of native plants by promoting the responsible use of native plants in their original range of distribution. The LICH NPI is an inclusive, transparent, and collaborative nonprofit industry initiative bringing together professionals from the landscape industry, conservation, forestry, agricultural, government, education and science to protect and enhance our native biodiversity.

I am excited about House Bill 378 and as a native plant advocate I want it to succeed, but in it's current form it will be a setback. If you would like to discuss this further feel free to contact me at 927-3503 or email at [chris.dacus@gmail.com](mailto:chris.dacus@gmail.com).

Chris Dacus  
President  
Landscape Industry Council of Hawai'i  
P. O. Box 22938, Honolulu, Hawai'i 96823-2938

#### Landscape Industry Council of Hawai'i

Hawaii's landscape industry is one of the fastest growing and largest segments of the green industry with an economic impact of over \$520 million annually and full time employment of over 11,000 landscape professionals.

Celebrating 25 years, LICH was formed in June 1986, the Landscape Industry Council of Hawai'i is a state wide alliance representing Hawaii's landscape trade associations: Aloha Arborist Association, American Society of Landscape Architects Hawaii Chapter, Hawaii Association of Nurserymen, Hawaii Island

Landscape Association, Hawaii Landscape and Irrigation Contractors, Hawaii Society of Urban Forestry Professionals, Kauai Landscape Industry Council, Maui Association of Landscape Professionals, Professional Grounds Management Society, Big Island Association of Nurserymen, and the Hawaii Professional Gardeners Association.

Online at [www.landscapehawaii.org](http://www.landscapehawaii.org)

February 16, 2011

The Honorable Representative Faye Hanohano, Chair  
House Committee of Hawaiian Affairs  
The Honorable Representative Jessica Wooley, Chair  
House Committee on Culture & the Arts  
Hawai'i State Capitol  
Honolulu, HI 96813

RE: Testimony opposing HB378 HD1

Chair Hanohano, Chair Wooley and Members of the Committees:

Thank you for this opportunity to present testimony in opposition to HB378 HD1.

The Outdoor Circle strongly believes that while the intent of this proposed legislation has merit, its passage, as written, could have wide-ranging unintended consequences for the beauty of our state, Hawaii's important landscaping industry and the pocketbooks of those who pay the bills—taxpayers.

We believe that the results envisioned by this legislation would be difficult, if not impossible to achieve given numerous limitations of the landscape industry and the inability of most native plants to fulfill the landscaping needs at state buildings. And if somehow implemented the fulfillment of the law would have dramatic negative impacts on the visual beauty of State-owned public buildings while creating economic problems for the states landscape industry.

We support efforts to grow the native plant industry in Hawaii by encouraging the appropriate use of native plants as part of the palette available to landscape architects and landscape contractors. However do not believe the way to do this is by legislating the exclusive use of native plants in state projects.

We urge you to review the illuminating testimony of the Landscape Industry Council of Hawaii (LICH) which further elaborates on some of our concerns and provides an excellent perspective on the impacts of this legislation on the landscape industry. The members of this organization are experts in their field and voice concerns which should carry enormous weight as you deliberate the future of this legislation.

Respectfully,

Bob Loy  
Director of Environmental Programs