

DAVID Y. IGE  
Governor

SHAN S. TSUTSUI  
Lt. Governor



SCOTT E. ENRIGHT  
Chairperson, Board of Agriculture

PHYLLIS SHIMABUKURO-GEISER  
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State of Hawaii  
**DEPARTMENT OF AGRICULTURE**  
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**TESTIMONY OF SCOTT E. ENRIGHT  
CHAIRPERSON, BOARD OF AGRICULTURE**

**BEFORE THE SENATE COMMITTEE ON WAYS AND MEANS**

February 26, 2015  
9:00 A.M.  
ROOM 211

**SENATE BILL NO. 774  
RELATING TO THE PROTECTION OF TARO**

Chairperson Tokuda and Members of the Committee:

Thank you for the opportunity to testify on Senate Bill No. 774 that requests the Department of Land and Natural Resources to identify and inventory lands qualifying as taro lands, amends Chapter 171 by establishing taro lands as a new class of public land in intensive agricultural use, and prohibiting the reclassification of this land. The Department of Agriculture supports the intent of this measure that seeks to support, protect, and return historic taro lands to use, but defers to the Department of Land and Natural Resources.

We note there may be inconsistencies in the bill as Section 1 references taro lands within the State's public conservation districts, however, in Section 2 of the bill this connection between taro lands within the conservation districts does not seem to be made clear.

Thank you for the opportunity to present testimony.



DAVID Y. IGE  
GOVERNOR OF HAWAII



STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES

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Testimony of  
**CARTY S. CHANG**  
Interim Chairperson

Before the Senate Committee on  
**WAYS AND MEANS**

Thursday, February 26, 2015  
9:00AM  
State Capitol, Room 211

In consideration of  
**SENATE BILL 774**  
**RELATING TO THE PROTECTION OF TARO**

Senate Bill 774 proposes to create a classification of agricultural public lands entitled “taro lands”, and appropriates funds to the Board of Land and Natural Resources (“Board”) to create an inventory of lands classified as taro lands. **The Department of Land and Natural Resources (Department) appreciates the intent of the measure and offers the following comments.**

The measure requires the Board to classify qualifying public lands as fourth class intensive agricultural lands as “taro lands of no particular productivity determination but having cultural, social, economic, and food self-sufficiency value if preserved for wetland taro cultivation.” The measure prohibits a district boundary amendment for lands subject to this classification. In addition, the bill’s pre-amble makes numerous references to public conservation lands including a finding by the taro task force that “between five thousand and seven thousand acres of historic lo‘i lands may be found within **state conservation districts** based on maps developed by the office of Hawaiian affairs and department of land and natural resources during the 2014 legislative session, or less than 3 per cent of all department of land and natural resources lands.”

However, the measure contains no such language limiting taro land classifications to public lands in the Conservation District. The Department respectfully suggests that measure be amended to require that public lands classified as qualifying taro lands be limited to lands in the Conservation District. Specifically, the Department recommends that the definition of “Taro lands” in SECTION 2 of the bill be amended to read as follows:

“Taro lands” means any undeveloped public lands situated in the land use conservation district pursuant to chapter 205 in

**CARTY S. CHANG**  
INTERIM CHAIRPERSON  
BOARD OF LAND AND NATURAL RESOURCES  
COMMISSION ON WATER RESOURCE MANAGEMENT

**DANIEL S. QUINN**  
INTERIM FIRST DEPUTY

**W. ROY HARDY**  
ACTING 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

wetland taro cultivation prior to statehood, or any undeveloped public lands that were traditional taro lands situated in the land use conservation district pursuant to chapter 205 that retain historic structural evidence of lo'i kalo, such as 'auwai irrigation ditches, terraces, or walls."

This amendment was adopted by the House Committee on Agriculture in House Draft 1 of the companion House Bill 509 in order to resolve the issue.



**SB774**  
**RELATING TO THE PROTECTION OF TARO**  
Senate Committee on Ways and Means

February 26, 2015

9:00 a.m.

Room 211

The Office of Hawaiian Affairs (OHA) offers the following **COMMENTS** on SB774, which seeks to classify and protect undeveloped, historic “taro lands” and infrastructure from land use district boundary.

The traditional mo‘olelo of Wākea and Papahānaumoku explains that the first kalo plant, Hāloanakalaukapalili, is the elder brother of Native Hawaiians. As the elder sibling, Hāloa provides sustenance to Native Hawaiians and, in return, we as the younger siblings care for Hāloa by ensuring that kalo flourishes. The bond that connects Native Hawaiians to kalo remains a sacred one, and it is our kuleana to preserve it. As the plant that has sustained the people of Hawai‘i since time immemorial, kalo is not only integral to the identity of Native Hawaiians, but also to the State of Hawai‘i as a whole.

Notably, much of Hawai‘i’s resident population still relies on kalo as a staple starch, and our tourism industry requires a high volume of kalo to create a more authentic cultural imprint upon our visitors. However, due to steep declines in local taro production, Hawai‘i must now import millions of pounds of kalo every year.

In order to explore ways in which state policies may help to restore our once-flourishing kalo economy, the Legislature created the Taro Security and Purity Task Force (Taro Task Force) in 2008. In their 2010 report to the Legislature, the Taro Task Force’s primary recommendation was for the state to take an active role in remedying the severe reduction in the amount of and access to kalo-growing lands. **The Taro Task Force found that rapid development in the last 20 years has led to a catastrophic loss of lands with the unique set of natural conditions necessary for kalo growth, and to the dismantling of ancient structures most efficient for fostering thriving kalo production.** Recognizing the importance of these lands and structures will help to ensure that they remain available to support our present and future kalo needs, and may facilitate our return to a more traditional, self-sufficient, and sustainable model of local food production.

**By protecting taro lands and infrastructure, this bill may further initiatives to increase our local production of kalo, while improving our state’s food self-sufficiency.**

Mahalo for the opportunity to testify on this important measure.

**Testimony of  
TARO SECURITY AND PURITY TASK FORCE**

**MARK ALAPAKI LUKE  
Chair**

**Before the Senate Committee on  
WAYS AND MEANS**

**Thursday, February 26, 2015, 9:00AM  
State Capitol, Conference Room 211**

**In consideration of  
SENATE BILL 774  
RELATING TO THE PROTECTION OF TARO**

Senate Bill 774 creates a definition of “taro lands” as wetland taro lands in production prior to statehood. This bill also adds a fourth class taro lands to the list of classes of intensive agricultural use lands of the Department of Land and Natural Resources under HRS171-10. The bill eliminates the need for a district boundary amendment for lands designated as fourth-class taro lands. Finally, the bill asks for an appropriation of funds to the Board of Land and Natural Resources to create an inventory of lands classified as taro lands. **The Taro Security and Purity Task Force strongly supports this bill, with a single amendment to the definition of taro lands (see page 3).**

The Taro Security and Purity Task Force was created by the legislature under Act 211 in 2008 specifically to guide policy and research related to taro and taro farming, as well as to support the vitality, economic viability and perpetuation of taro and taro farming in the state. In bringing this bill to the legislature we are fulfilling a portion of the kuleana that this body was tasked with under Act 211.

The Task Force’s 2010 report to the legislature was the result of a yearlong community consultation and included 89 recommendations across seven key issues. Legislators received an update on task force progress related to the recommendations of the 2010 report at the start of the 2014 legislative session. Access to affordable lands to grow taro was of significant importance to young taro growers and organizations looking to create resilient options for food security in their communities along with mentoring programs that develop new farmers. This represents a different sector than that of large acreage commercial taro growers. *Taro plays a significant role in addressing the need for staple starch production in Hawai‘i at a time when we are dependent on 85 percent of our food being imported from outside Hawai‘i.*

The task force has worked closely with the Department of Land and Natural Resources and the Department of Agriculture over the past three years to refine the language of SB774 and address concerns relating to the broadness of applicability of the proposed legislation. HRS171 is specific to Public Lands. *This bill does not prevent or inhibit a private landowner from the sale or development of their private property to a private*

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*buyer, nor does it impact existing developed state-owned properties.*

*This bill creates a fourth class of taro lands specifically and only for undeveloped, unencumbered wetland taro growing systems on state (public) lands. These sites represent important traditional agricultural resources and features, centers for cultural practice, and places of tremendous food productivity. They are typically small in size, with clay soils prone to flooding, and fall within allowable uses of Conservation and Agriculture zones on public lands under HRS13-5. While taro lands have the potential to be designated as important agricultural lands (IAL), HRS 205-49.3 explicitly excludes “lands held in the conservation district” from the process of designation and adoption of IAL maps by the Land Use Commission.*

The task force finds that existing commercial and subsistence wetland taro farms are approximately 500-600 acres, less than one percent of all lands in agriculture. An estimated 30,000 acres of taro lands are needed to grow sufficient taro to feed Hawai‘i’s 1.3 million people, as just one portion of a basic set of starch crops necessary for residents’ wellbeing over the course of a single year. The state imports an estimated 2 million pounds of taro from other countries annually, in order to supplement the 4 million pounds grown in the islands, placing Hawaii and taro growers at high risk from invasive pests and pathogens not currently found within the state. The gap between existing and projected acreage, the narrow range of characteristics required for wetland taro production, the rapid loss of such lands to other uses in the private sector, and the rising cost of land and leases in the private sector necessitates the protection of such sites on public lands.

The Island of O‘ahu is dependent on the neighbor islands as its source of raw taro in the production of poi. An estimated 30 acres of commercial taro is currently recorded for an island with a population of almost 1 million residents. In the event of environmental disasters, such as floods or hurricanes on Kaua‘i, or earthquakes that disrupt large portions of O‘ahu, the island will suffer from extreme taro and poi shortages. Even the lowest estimates for sea level rise indicate that lowland areas like Hanalei, Kaua‘i, Ke‘anae-Wailuanui, Maui, Hālawā, Moloka‘i and Waipi‘o, Hawai‘i Island will be inundated with brackish water unsuitable for kalo production. The road to districts such as the taro-producing region of Windward, O‘ahu will be cut off from Honolulu. Having mauka wetland taro sites in each conservation district protected now for cultivation in the future will help ensure future food security in the midst of climate change. *Adoption of SB774 represents a foresighted and critical first step by the legislature in sea-level rise planning for our most vulnerable food-producing lands.*

There is a growing interest in taro farming, as well as the traditional Hawaiian taro cultivars, as indicated by the more than 200 signatures gathered by the taro task force from potential new farmers, and the distribution of almost a million huli (taro planting stock) of 40 traditional taro varieties since 2013. Many of these varieties are best suited to mid-elevation, cooler lo‘i sites that are found on Conservation zoned lands under DLNR jurisdiction. With additional growth in the demand for high-quality raw taro, particularly the hand-pounding pa‘i ‘ai market, along with value-added taro products is evidence of an untapped economic potential that this diversifying taro industry represents and is in

Contact: Emily Kandagawa, Taro Task Force Coordinator (808) 754-7395 or [tsptfhi@gmail.com](mailto:tsptfhi@gmail.com)

need of support. *The passage of SB774 will create opportunities for small-scale and subsistence farmers to earn a living growing kalo and contribute to the health and well-being of their communities.*

In addition, the task force notes that lo'i kalo retains wetland soil characteristics, whether they are active or have long been fallowed. The physical geographic character of such sites is a primary indicator for existing flooding and future flood potential. Functioning taro lands are known to assist in the absorption and control of floodwaters as well as runoff. The high costs of flood mitigation for the state and all counties are well documented. This includes where groundwater levels rise quickly and persistently in lowland areas, as the State and County have learned in such areas as the Mapunapuna industrial district, or where topography indicates locations are collection points for upstream surface water flows such as Mānoa, Pālolo, Kuli'ou'ou, and Punalu'u – all former lo'i kalo lands. The instability of wetland clay soils translates to increased costs and higher risks for long-term structural integrity. *SB774 provides state agencies with a measure of liability protection by prohibiting the development of such lands for other purposes.*

SB774 is prudent in relieving the State and the Counties of the expense and staff time involved in the boundary amendment process under HRS-171, where fourth-class taro lands designations are applied. It prevents abuse of the application of this new class by requiring that fourth-class lands be specified for wetland taro production. The DLNR retains authority over district boundaries for Conservation zoned lands (Chpt183C).

The task force agrees with the DLNR that existing rules may be sufficient to support the changes in statute created by these amendments. We note that suggestions in the previous legislative session to require attachment of a list of sites to the proposed statute would 1) require immense resources on the part of DLNR; 2) require DLNR to come before the legislature every year to add hundreds of sites to the statute as survey work progresses, a process that would negatively impact staff time and duties already stretched thin by budget cuts, as well as lengthening the proposed statute to the extreme; and 3) fails to recognize that these taro sites are located primarily within state Conservation lands, a zoning category for which DLNR has agency jurisdiction to define use through the HAR process.

After consultation with DLNR, the task force is in support of the following amendment to the definition of "taro lands" to clarify that the lands to which this measure will apply are strictly public conservations lands. In conjunction with DLNR, we recommend the definition of "taro lands" read:

“Taro lands” means any undeveloped public lands situated in the land use conservation district pursuant to chapter 205 in wetland taro cultivation prior to statehood, or any undeveloped public lands that were traditional taro lands situated in the land use conservation district pursuant to chapter 205 that retain historic structural evidence of lo'i kalo, such as 'auwai irrigation ditches, terraces, or walls.”

We encourage full support from Senate committee members to steward this bill forward as a proactive measure in support of family farms and food security in Hawai'i.

Mahalo nui loa

A handwritten signature in black ink on a light beige background. The signature is cursive and reads "Mark Alapaki Luke".

Mark Alapaki Luke, Chair  
Taro Security and Purity Task Force





**Department of Land and Natural Resources  
Aha Moku Advisory Committee  
State of Hawaii  
Post Office Box 621  
Honolulu, Hawaii 96809**

**Testimony of  
Leimana DaMate  
Executive Director – Aha Moku Advisory Committee**

**Thursday, February 26, 2015  
9:00 A.M.  
State Capitol, Conference Room 211**

**In SUPPORT of  
Senate Bill 774  
Relating to the Protection of Taro**

Senate Bill 774 relates to the protection of taro by creating a classification of agricultural public lands entitled “taro lands”. It appropriates funds to the Board of Land and Natural Resources to create an inventory of lands specifically classified as taro lands.

From the very beginning, the Native Hawaiian kanaka maoli have depended upon taro as one of their staple foods. The *mahiai*, or farmers, from ancient times to the present have continued to grow and harvest taro, not only for Native Hawaiian consumers, but for the general public who have grown to depend upon this food as a healthy and necessary staple. However, the demand exceeds the ability to produce especially since this demand is expected to grow as local people move towards greater local food self-sufficiency.

We agree with the Taro Task Force, established under Act 211, who recommended greater protections for wetland taro lands (lo’i) and dry land taro lo’i, including the protection of their structural elements (terraces, stone walls, and irrigation ditches) within the boundaries of the State’s public conservation districts to help meet food security needs.

Aha Moku was created by the Legislature through Act 288, Session Laws 2012, to serve as an advisory committee to the Chairman of the Board of Land and Natural Resources on issues related to land and natural resources management through the aha moku system. One of their mandates is to “sustain the State’s marine, land, cultural, agricultural, and natural resources” (§171 4-5). The agricultural portion specifically means taro sustainability. Creating a fourth class of taro lands under §171-10 falls within the Aha Moku mandate of protection and sustainability of important agricultural resources.

**We support Senate Bill 774 and urge its passage.**

**SB774**

Submitted on: 2/25/2015

Testimony for WAM on Feb 26, 2015 09:00AM in Conference Room 211

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Carl Evensen	Individual	Support	No

Comments: I am in strong support of this bill along with the amendment to the definition of taro lands proposed in the testimony submitted for this hearing by the Taro Security and Purity Task Force.

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**SB774**

Submitted on: 2/25/2015

Testimony for WAM on Feb 26, 2015 09:00AM in Conference Room 211

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
cheryl	Individual	Support	No

Comments: Anything that we can do to support the lands with kalo is a good thing. I think it would be great to even have kalo growing in the Capitol's waters since they need upkeep all the time anyway. :)

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**SB774**

Submitted on: 2/24/2015

Testimony for WAM on Feb 26, 2015 09:00AM in Conference Room 211

<b>Submitted By</b>	<b>Organization</b>	<b>Testifier Position</b>	<b>Present at Hearing</b>
Javier Mendez-Alvarez	Individual	Support	No

Comments:

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