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# A BILL FOR AN ACT

RELATING TO THE PROTECTION OF TARO.

**BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF HAWAII:**

1           SECTION 1. Hawaii imports eighty-five per cent of its  
2 food. In 2011, the department of agriculture pointed out that  
3 the State is most at risk for staple starches. Taro is the most  
4 culturally significant food plant in Hawaii and also one of  
5 Hawaii's highest yielding staple starch food crops, producing  
6 between 10,000 and 30,000 pounds per acre per annum under  
7 current wetland cultivation practices. Hence, taro plays a  
8 critical role in food security for the State.

9           The State produces approximately four million pounds of raw  
10 taro on an estimated five hundred to six hundred acres (three  
11 hundred eighty acres in commercial lo'i) statewide and imports an  
12 additional two million pounds or more annually. Collectively,  
13 this does not meet local demand, which is diversifying as value-  
14 added producers and consumers become more educated about kalo,  
15 poi, and pa'i'ai. This demand is expected to grow as the state  
16 moves toward greater local food self-sufficiency. Growing local  
17 also significantly reduces the threat of new taro pest and



1 disease introductions from raw taro imports, a critical and  
2 necessary step for improving biosecurity control measures and  
3 reducing the high costs associated with control efforts.

4 Access to affordable taro lands remains a major challenge  
5 for young taro growers striving for success, greater family food  
6 self-sufficiency, and community well-being. In 2009, the taro  
7 security and purity task force (task force), established under  
8 Act 211, Session Laws of Hawaii 2008, found "no logical reason  
9 why we should continue to import any type of taro to meet local  
10 needs" and provided a series of recommendations for improving  
11 taro and taro farmer success. In its 2010 and 2014 reports to  
12 the legislature, the task force recommended greater protections  
13 for wetland taro lands (lo'i), including their structural  
14 elements, such as terraces, kuauna or paepae pohaku (stone  
15 walls), and 'auwai (irrigation ditches) within the boundaries of  
16 the State's public conservation districts to help meet food  
17 security needs and to support community and cultural resilience  
18 in the face of the rising costs of imported food for local  
19 families. The task force also found that these key agricultural  
20 structures for wetland taro production are frequently destroyed,  
21 severed, and built upon due to gaps in land use designations,



1 historic preservation records, planning, laws, and agency  
2 policies, making the need for improved taro land protections  
3 more urgent.

4 Over the last five years, the task force has documented a  
5 strong and growing desire among Hawaii's younger generation of  
6 farmers, potential farmers, and community groups, to plant kalo  
7 and return to the lo'i on each island to grow food, care for  
8 their families, create places of education and renewal, and  
9 perpetuate Hawaiian culture.

10 As global warming and sea-level rise progresses in the  
11 Pacific and Hawaii, existing lowland agricultural sites,  
12 particularly lo'i kalo, will disappear or become inundated with  
13 brackish water, raising the question of where food can be grown  
14 in the future. At this time, since the State has no measures in  
15 place to protect the necessary upland taro-growing places, the  
16 State will need to mitigate these changes.

17 Historic, long-fallowed lo'i kalo lands can be found on  
18 public conservation lands within most ahupua'a on each island and  
19 point to an opportunity for greater food productivity and a  
20 chance to address the looming issue of food security in the face  
21 of sea-level rise.



1           The task force estimates between five thousand and seven  
2 thousand acres of historic lo'i lands may be found within state  
3 conservation districts based on maps developed by the office of  
4 Hawaiian affairs and department of land and natural resources  
5 during the regular session of 2014, or less than three per cent  
6 of all department of land and natural resources lands.

7           There is a compelling interest in preserving wetland taro  
8 lands and their supporting structures on public conservation  
9 lands under the jurisdiction of the department of land and  
10 natural resources for these purposes.

11           Chapter 171, Hawaii Revised Statutes, entitled public lands  
12 management and disposal of, outlines the laws for land use  
13 specifically and only for public lands. Section 171-10, Hawaii  
14 Revised Statutes, describes the allowable land uses on public  
15 lands. The task force finds that wetland taro lands are highly  
16 productive, but often classed as marginal under the existing  
17 categories of section 171-10, Hawaii Revised Statutes, intensive  
18 agriculture use.

19           The purpose of this Act is to improve protections for  
20 wetland taro lands (lo'i kalo) and ancient wetland agricultural  
21 structures on undeveloped state-owned or -acquired conservation



1 lands for Hawaii's long-term future food security and well-  
2 being.

3 SECTION 2. Section 171-1, Hawaii Revised Statutes, is  
4 amended by adding a new definition to be appropriately inserted  
5 and to read as follows:

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

13 SECTION 3. Section 171-10, Hawaii Revised Statutes, is  
14 amended to read as follows:

15 "§171-10 **Classes of lands.** The board of land and natural  
16 resources shall classify all public lands and in doing so be  
17 guided by the following classifications:

18 1. Intensive agricultural use

19 (A) First class--Lands highly productive of intensive  
20 crops such as sugarcane, pineapples, truck crops, and orchard  
21 crops.



1 (B) Second class--Lands having medium productivity for  
2 intensive crops.

3 (C) Third class--Lands having fair to marginal  
4 productivity for intensive crops.

5 (D) Fourth class--Taro lands of no particular productivity  
6 determination, but having cultural, social, economic, and food  
7 self-sufficiency value if preserved for wetland taro  
8 cultivation. District boundary amendment of fourth class-taro  
9 lands shall be prohibited. Notwithstanding any law to the  
10 contrary, public land classified as fourth class-taro lands  
11 pursuant to this section shall not be subject to district  
12 boundary amendment.

13 2. Special livestock use

14 (A) First class--Lands highly suitable for special  
15 livestock uses such as swine, dairy, and poultry production. In  
16 making the determination, consideration shall be given to  
17 drainage, climate, topography, proximity to market, and  
18 transportation and compatibility to adjoining land use, among  
19 other considerations. "Dairy" as used for disposition purposes  
20 means a "dry lot" dairy without allowance for grazing.



1 (B) Second class--Lands suitable for special livestock  
2 uses, but inferior to those of first class.

3 3. Pasture use

4 (A) First class--Lands having a potentially high economic  
5 animal unit carrying capacity and capable of correspondingly  
6 high liveweight gains per acre per year, such as, less than five  
7 acres per animal unit per year and more than one hundred pounds  
8 live beef gains per animal unit per acre per year.

9 (B) Second class--Lands having a potentially medium  
10 economic animal unit carrying capacity and capable of moderate  
11 liveweight gains per acre per year, such as, five to twenty  
12 acres per animal unit per year and twenty to one hundred pounds  
13 live beef gains per animal unit per acre per year.

14 (C) Third class--Lands having a relatively low animal unit  
15 carrying capacity and producing correspondingly low liveweight  
16 gains per acre per year, such as, more than twenty acres per  
17 animal unit per year and less than twenty pounds average live  
18 beef gains per animal unit per acre per year.

19 4. Commercial timber use

20 (A) First class--Lands of high suitability for growth of  
21 merchantable timber having mean annual growth potential under



1 normal forest management practices with yields exceeding amounts  
2 such as one thousand board feet per acre, and with location and  
3 terrain presenting favorable logging, transportation, and  
4 marketing conditions.

5 (B) Second class--Lands of high suitability for growth of  
6 merchantable timber having mean annual growth potential under  
7 normal forest management practices with yields exceeding amounts  
8 such as one thousand board feet per acre, and with location and  
9 terrain presenting less favorable logging, transportation, and  
10 marketing conditions.

11 (C) Third class--Lands of medium suitability for growth of  
12 merchantable timber having mean annual growth potential in  
13 amounts such as five hundred to one thousand board feet per acre  
14 under normal forest management practices, and with location and  
15 terrain presenting favorable logging, transportation, and  
16 marketing conditions.

17 (D) Fourth class--Lands of medium suitability for growth  
18 of merchantable timber having mean annual growth potential in  
19 amounts such as five hundred to one thousand board feet per acre  
20 under normal forest management practices, and with location and





1 terrain presenting less favorable logging, transportation, and  
2 marketing conditions.

3 (E) Fifth class--Lands of relatively low suitability for  
4 growth of merchantable timber having mean annual growth  
5 potential less than an amount such as five hundred board feet  
6 per acre, and with location and terrain presenting favorable  
7 logging, transportation, and marketing conditions.

8 (F) Sixth class--Lands of relatively low suitability for  
9 growth of merchantable timber having mean annual growth  
10 potential less than an amount such as five hundred board feet  
11 per acre, and with location and terrain presenting less  
12 favorable logging, transportation, and marketing conditions.

13 5. Quarry use

14 Lands having sufficient quantity and quality of rock,  
15 gravel, and sand for purpose of commercial use.

16 6. Mining use

17 Lands bearing sufficient quantity and quality of mineral  
18 products for purpose of commercial mining and use.

19 7. Recreational use



- 1           Lands suitable for use and development as parks,
- 2 playgrounds, historical sites, natural area, camp grounds,
- 3 wildlife refuge, scenic sites, and other such uses.
  
- 4           8.    Watershed use
- 5           Lands suitable for the use and development as watersheds or
- 6 for the development of water, and requiring necessary
- 7 restrictions on other uses.
  
- 8           9.    Residential use
- 9           Lands suitable and economically feasible for residential
- 10 development and use.
  
- 11          10.   Commercial and industrial use
- 12          Lands suitable and economically feasible for commercial and
- 13 industrial development and use.
  
- 14          11.   Hotel, apartment, and motel use
- 15          Lands suitable and economically feasible for hotel,
- 16 apartment, and motel development and use.
  
- 17          12.   Resort use
- 18          Lands suitable and economically feasible for resort
- 19 development and use.
  
- 20          13.   Unclassified uses



1           Lands not otherwise classifiable under the foregoing  
2 sections."

3           SECTION 4. The board of land and natural resources, in  
4 conjunction with the taro security and purity task force, may  
5 create an inventory under chapter 91, Hawaii Revised Statutes,  
6 identifying lands classified as fourth class taro lands.

7           SECTION 5. There is appropriated out of the general  
8 revenues of the State of Hawaii the sum of \$           or so much  
9 thereof as may be necessary for fiscal year 2015-2016 and the  
10 same sum or so much thereof as may be necessary for fiscal year  
11 2016-2017 for the purposes of identifying lands classified as  
12 fourth class taro lands pursuant to this Act.

13           The sums appropriated shall be expended by the board of  
14 land and natural resources for the purposes of this Act.

15           SECTION 6. This Act does not affect rights and duties that  
16 matured, penalties that were incurred, and proceedings that were  
17 begun before its effective date.

18           SECTION 7. New statutory material is underscored.

19           SECTION 8. This Act shall take effect on July 1, 2015.



**Report Title:**

Classification of Agricultural Lands; Taro Lands; Appropriation

**Description:**

Creates a classification of agricultural public lands situated in the land use conservation district entitled "taro lands". Appropriates funds to the Board of Land and Natural Resources to create an inventory of lands classified as taro lands. (HB509 HD1)

*The summary description of legislation appearing on this page is for informational purposes only and is not legislation or evidence of legislative intent.*

