
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 (kalo) is
4 the most culturally significant food plant in Hawaii and also
5 one of Hawaii's highest yielding staple starch food crops,
6 producing between 10,000 and 30,000 pounds per acre per annum
7 under current wetland cultivation practices. Hence, taro plays
8 a 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 Hawaii
16 moves towards greater local food self-sufficiency. Growing
17 local also significantly reduces the threat of new taro pest and
18 disease introductions from raw taro imports, a critical and



1 necessary step for improving biosecurity control measures and
2 reducing the high costs associated with control efforts.

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



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

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

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

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



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

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

12 Chapter 171, Hawaii Revised Statutes, entitled "Public
13 Lands, Management and Disposal of", outlines the laws for land
14 use specifically and only for public lands. Section 171-10,
15 Hawaii Revised Statutes, describes the allowable land uses on
16 public lands. The taro security and purity task force finds
17 that wetland taro lands are highly productive but often classed
18 as marginal under the existing categories of paragraph 1,
19 section 171-10, Hawaii Revised Statutes, relating to intensive
20 agriculture use.



1 The purpose of this Act is to improve protections for
2 wetland taro lands (lo'i kalo) and ancient wetland agricultural
3 structures on undeveloped state-owned or -acquired conservation
4 lands for Hawaii's long-term future food security and well-
5 being.

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

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

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

18 "**§171-10 Classes of lands.** The board of land and natural
19 resources shall classify all public lands and in doing so be
20 guided by the following classifications:

21 1. Intensive agricultural use



1 (A) First class--Lands highly productive of intensive
2 crops such as sugarcane, pineapples, truck crops, and orchard
3 crops.

4 (B) Second class--Lands having medium productivity for
5 intensive crops.

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

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

16 2. Special livestock use

17 (A) First class--Lands highly suitable for special
18 livestock uses such as swine, dairy, and poultry production. In
19 making the determination, consideration shall be given to
20 drainage, climate, topography, proximity to market, and
21 transportation and compatibility to adjoining land use, among



1 other considerations. "Dairy" as used for disposition purposes
2 means a "dry lot" dairy without allowance for grazing.

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

5 3. Pasture use

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

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

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

21 4. Commercial timber use



1 (A) First class--Lands of high suitability for growth of
2 merchantable timber having mean annual growth potential under
3 normal forest management practices with yields exceeding amounts
4 such as one thousand board feet per acre, and with location and
5 terrain presenting favorable logging, transportation, and
6 marketing conditions.

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

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

19 (D) Fourth class--Lands of medium suitability for growth
20 of merchantable timber having mean annual growth potential in
21 amounts such as five hundred to one thousand board feet per acre



1 under normal forest management practices, and with location and
2 terrain presenting less favorable logging, transportation, and
3 marketing conditions.

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

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

14 5. Quarry use

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

17 6. Mining use

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

20 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 pursuant to chapter 91, Hawaii Revised
6 Statutes, identifying lands classified as fourth class taro
7 lands.

8 SECTION 5. There is appropriated out of the general
9 revenues of the State of Hawaii the sum of \$ or so
10 much thereof as may be necessary for fiscal year 2015-2016 and
11 the same sum or so much thereof as may be necessary for fiscal
12 year 2016-2017 for the purposes of section 4 of 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, 2050.



Report Title:

Classification of Agricultural Lands; Taro Lands; Appropriation

Description:

Creates a classification of agricultural public lands entitled "taro lands". Appropriates funds to the board of land and natural resources to create an inventory of lands classified as taro lands. Effective 7/1/2050. (SD1)

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