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<td>State of Hawai’i Agribusiness Development Corporation</td>
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<td>Agricultural Lands of Importance to the State of Hawai’i</td>
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<td>ALUM</td>
<td>Island of O’ahu Agricultural Land Use Map</td>
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<td>City</td>
<td>City and County of Honolulu</td>
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<td>DLNR</td>
<td>State Department of Land and Natural Resources</td>
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<td>DP</td>
<td>development plan</td>
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<td>DPP</td>
<td>City and County of Honolulu Department of Planning and Permitting</td>
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<td>GIS</td>
<td>geographical information system</td>
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<td>HAR</td>
<td>Hawai’i Administrative Rules</td>
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<td>IAL</td>
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<td>LSB</td>
<td>Land Study Bureau</td>
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<td>National Resources Conservation Service</td>
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EXECUTIVE SUMMARY

This report presents the recommendations of the City and County of Honolulu Department of Planning and Permitting (City) for the lands on O’ahu that meet the statutory requirements for consideration as Important Agricultural Land (IAL) designation in accordance with the county designation process set forth in Chapter 205-47, Hawai’i Revised Statutes (HRS) and Hawai’i Administrative Rules (HAR) 15-15-17. The recommendations presented by the City are to be reviewed by the Honolulu City Council and adopted by resolution with or without changes, then submitted to the LUC for final approval and adoption.

In the context of the State land use system, IAL refers to a State land use designation for a select class of farm land intended to be used in the long-term for active agricultural production. Administered by the State Land Use Commission (LUC), the IAL designation is a supplemental state land use classification for an exclusive sub-set of high-quality farm land within the State Land Use Agricultural District. By granting landowners access to incentives and supportive measures that reduce the cost of farming, the IAL designation seeks to promote the economic viability of farming and to make it possible for landowners to keep agricultural lands active, ultimately leading to the long-term preservation and protection of productive agricultural land (Chapter 205-42, HRS).

There are three distinct processes to designate land as IAL. The first allows farmers or landowners to voluntarily petition the LUC for a declaratory ruling (i.e., voluntary designation); the second authorizes the designation of state-owned land; and the third is a mandatory requirement for the counties to prepare recommendations for IAL and submit its findings to the LUC for decision-making.

The City’s recommendations for IAL are the result of a strategic, resource-based mapping exercise that used available geographic information system (GIS) datasets to inventory land in accordance with the standards and criteria prescribed by the law. The planning process was structured with various forums for public involvement, including consultation with the project technical advisory committee, a series of focus group meetings and community meetings, two 60-
day public comment periods, and a project website. Two separate mail-outs informing affected landowners of the possible IAL designation were also completed to comply with the legal requirements for landowner notification.

The island of O’ahu comprises an approximate 386,000 total acres, of which roughly 128,000 acres, or 32% of the total acreage, is in the State Land Use Agricultural District. The remaining acreage is designated in the Urban District (102,000 acres, 27%) and the Conservation District (157,000 acres or 41%). Of the 128,000 acres in the State Agricultural District, an approximate 12,300 acres have already been designated as IAL through the landowner-initiated process, accounting for nearly 10% of O’ahu lands in the State Agricultural District.

Following the prescribed methodology for determining which lands were “eligible” to be evaluated for IAL designation by the county (meaning which land met the conditions of ownership and land use classifications for consideration), the City identified a study area of roughly 63,900 acres. An approximate 45,400 acres are being recommended for IAL designation under the county-designation process, which corresponds to roughly 72% of the study area and 12% of O’ahu’s total land area. The recommendations articulate a long-term vision for the high quality farm land on O’ahu most suited for farming. While the majority of the recommended land is in Central O’ahu (Mililani, Kunia and Wahiawā) and the North Shore (Hale‘iwa and Waialua), there are several large tracts found along the Wai‘anae coast and in Ko‘olau Loa and Ko‘olau Poko. Revisions to the current inventory are possible pending City Council and LUC proceedings.
INTRODUCTION

This report presents the recommendations of the City and County of Honolulu Department of Planning and Permitting (DPP) for the lands on O‘ahu that meet the statutory requirements for consideration as Important Agricultural Land (IAL) designation in accordance with the county designation process set forth in Chapter 205-47, Hawai‘i Revised Statutes (HRS) and Hawai‘i Administrative Rules (HAR) Title 15, Chapter 15, Subchapter 17 Important Agricultural Land Designation and Proceedings.

“IAL” is a legal term that refers to a State land use designation for a select class of farm land intended to be used in the long-term for active agricultural production. In the context of the State land use system, the IAL designation is a supplemental State land use classification for an exclusive sub-set of high-quality farm land within the State Land Use Agricultural District. Administered by the State Land Use Commission, the IAL designation overlays existing State and county land use classifications (i.e., state land use districts, county zoning districts) and does not change existing classifications or affect the range of current permitted land uses. Contrary to popular belief, the IAL designation does not impose a higher level of permanent protection from future development, and it does not simply ensure that agricultural land is preserved in perpetuity. Rather, the premise of the IAL designation is to grant landowners access to incentives and supportive measures that reduce the cost of farming, which in turn promotes the economic viability of farming and makes it possible for landowners to keep agricultural lands active, ultimately leading to the long-term preservation and protection of productive agricultural land (Chapter 205-42, HRS).

Hawai‘i State law—Chapter 205, HRS—mandates that each of the four counties in Hawai‘i conduct a mapping process to identify lands within their jurisdiction to be recommended to the State Land Use Commission (LUC) for designation as IAL. Upon transmittal of this report to the Honolulu City Council, the City and County of Honolulu (City) will be the first of the four counties to comply with the statutory requirement. Following the prescribed county designation process, the maps and supporting materials presented in this report are to be reviewed by the Honolulu City Council and adopted by resolution with or without changes, then submitted to the LUC for final approval and adoption.

In addition to presenting the City’s recommendations for county-designated IAL, this report provides background information about the City’s mapping process and the methodology used to develop the recommendations. It also documents the public involvement and input received in response to the DPP’s consultation.
efforts. This report supersedes the *O‘ahu Important Agricultural Lands Phase I Study* (April 2014), and should be referenced in place of the previous version.

The following chapters make up the body of this report:

- Chapter 1 provides a description of the IAL designation and background information about the legal mandates that establish the framework for IAL. Emphasis is placed on the salient points of the law, as it relates to the counties’ requirements for IAL mapping.
- Chapter 2 outlines the general structure of the City’s approach to prepare the map recommendations and describes the community consultations and the public outreach strategies, the methodology to define and weight (i.e., prioritize) the criteria, and the underlying assumptions that guided the formation of map recommendations.
- Chapter 3 describes the current agricultural industry on O‘ahu, including the City’s land use planning system and policies for future development, the status of lands available for agriculture production, and recent trends and technological advancements influencing the future of the industry.
- Chapter 4 presents an overview of the lands being recommended by the City for IAL designation. This chapter also documents the issues and concerns raised during the community consultations that are likely to be key topics for future discussions about the viability of Oahu’s agricultural industry.

Meeting summaries, background information about the data sources and criteria maps, and legal references are included in the appendices.
1. LEGAL FRAMEWORK FOR THE IMPORTANT AGRICULTURAL LANDS INITIATIVE

The directive to designate agricultural land as IAL is derived from the State Constitution and Chapter 205, HRS (informally referred to as “Hawai‘i’s Land Use Law”). This chapter introduces the State’s land use system and provides an overview of the legal instruments that establish the framework for IAL and the county designation process.

1.1 ARTICLE XI SECTION 3, CONSTITUTION OF THE STATE OF HAWAI‘I

As an outcome of Hawai‘i’s post-statehood shift from a plantation-dominated economy to one of tourism and Federal spending, concerns about the need to promote the viability of agriculture and protect Hawai‘i’s agricultural lands prompted the 1978 State Constitutional Convention to propose a constitutional amendment to identify and designate IAL. The proposed constitutional amendment was subsequently approved by Hawai‘i voters in the same year and enacted as Article XI Section 3 of the Constitution of the State of Hawai‘i (State of Hawai‘i Department of Agriculture website, 2012).

Article XI, Section 3 of the State Constitution sets out the framework for state policies and all subsequent legislation related to IAL (see Figure 1-1). According to the Constitution, the State has a legal responsibility to conserve and protect

Figure 1-1: Article XI Section 3, Constitution of the State of Hawai‘i

“The State shall conserve and protect agricultural lands, promote diversified agriculture, increase agricultural self-sufficiency and assure the availability of agriculturally suitable lands. The legislature shall provide standards and criteria to accomplish the foregoing. Lands identified by the State as important agricultural lands needed to fulfill the purposes above shall not be reclassified by the State or rezoned by its political subdivisions without meeting the standards and criteria established by the legislature and approved by a two-thirds vote of the body responsible for the reclassification or rezoning action.”
agricultural lands and promote the agricultural industry. The constitutional language provides for the following:

- establishes the constitutional mandate to support the long-term viability of agriculture in Hawai‘i
- mandates the legislature to provide standards and criteria for identifying lands as IAL and for rezoning and reclassifying lands designated as IAL, and
- specifies a two-thirds vote to reclassify or rezone lands designated as IAL.

1.2 PART I OF CHAPTER 205, HAWAI‘I REvised STATUTES

The State Land Use Law—Part I of Chapter 205, HRS—was originally adopted in 1961 to provide a framework for statewide land use management and regulation. Under the State Land Use Law, all lands in the State are classified into one of four land use districts (Urban, Rural, Agricultural, or Conservation), with specific land uses allowable in each district (see Appendix A). Figure 1-2 provides a graphic representation of the four state land use districts.

Part I of Chapter 205, HRS also establishes the authority of the Land Use Commission (LUC), which is the nine-member board that administers the State Land Use Law. Specific responsibilities of the LUC include establishing the land use district boundaries and the boundaries of the IAL designation, deciding on petitions for district boundary amendments, and issuing special use permits within the Agricultural and Rural Districts (State Land Use Commission website http://luc.hawaii.gov/about/).

The following standards are used to determine the boundaries for the State Agricultural District:

“1) It shall include lands with a high capacity for agricultural production
2) It may include lands with significant potential for grazing or for other agricultural uses
3) It may include lands surrounded by or contiguous to agricultural lands or which are not suited to agricultural and ancillary activities by reason of topography, soils, and other related characteristics, and
4) It shall include all lands designated important agricultural lands pursuant to Part III of Chapter 205, HRS.” (HAR Section 15-15-19)
Permitted and prohibited activities and uses within the State Agricultural District are specified in Chapter 205-2 and 205-4.5, HRS. Permitted uses include the cultivation of crops, aquaculture, pasture or forestry; renewable energy facilities (on land with lower agricultural productivity rating); agriculture-related activities such as farm dwellings, employee housing, agriculture processing and storage facilities, and agricultural tourism on working farms. Utility systems and facilities, and open area recreational facilities such as day camps and parks are also allowed.
Although the primary function of the Agricultural District is to denote farmland traditionally used for agricultural production and related activities, the Agricultural District also contains a large acreage of lands that border productive agricultural areas and lack the characteristics to be designated for the Urban, Rural or Conservation Districts, so that they are notably used as recreational and open space resources (e.g., parks, picnic areas, riding stables, golf courses approved before 2005). The inclusion of “areas that are not used for, or that are not suited to, agricultural and ancillary activities by reason of topography, soils, and other related characteristics” (Chapter 205-2(d), HRS) in the Agricultural District has diluted the integrity of the Agricultural District, particularly since certain non-agricultural uses are allowed on Agricultural-designated land.

1.3 PART III OF CHAPTER 205, HAWAI‘I REVISED STATUTES

The intent and purpose of Article XI Section 3 of the State Constitution is codified in Part III of Chapter 205, HRS (see Appendix A). As a result of the State Legislature’s passage of Act 183, Session Laws of Hawai‘i (SLH) 2005 (“Act 183”) and Act 233, SLH 2008 (“Act 233”), Chapter 205, HRS was amended to define the framework for the identification and designation of IAL. Passed nearly 30 years after Hawai‘i’s voters ratified the 1978 constitutional amendments, Act 183 and Act 233 are hailed as landmark legislation that led to the establishment of additional incentives and regulations to support the agricultural industry and protect Hawai‘i’s agricultural lands for agricultural uses.

Chapter 205, Part III, HRS, provides for the following:

- a formal definition of IAL
- policy guidance to assure the long-term agricultural use of IAL
- standards and criteria to be used in identifying IAL and assigning land to an IAL designation
- separate processes and responsibilities for landowners, the counties, and the State to identify lands with potential for IAL
- the establishment of a State IAL designation process that encourages landowners to volunteer their lands for IAL designation, and
- incentives for landowners to petition for important agricultural land designation.
1.3.1 LEGAL DEFINITION OF IAL

In identifying lands as IAL, State law defines “important agricultural lands” as those lands that:

“1) are capable of producing sustained high agricultural yields when treated and managed according to accepted farming methods and technology

2) contribute to the State’s economic base and produce agricultural commodities for export or local consumption, or

3) are needed to promote the expansion of agricultural activities and income for the future, even if currently not in production” (Chapter 205-42(a), HRS).

The law also identifies the desired outcome for the identification of IAL and the overarching implementing actions that form the basis of the IAL program:

“The objective for the identification of important agricultural lands is to identify and plan for the maintenance of a strategic agricultural land resource base that can support a diversity of agricultural activities and opportunities that expand agricultural income and job opportunities and increase agricultural self-sufficiency for current and future generations. To achieve this objective, the State shall:

1) Promote agricultural development and land use planning that delineates blocks of productive agricultural land and areas of agricultural activity for protection from the encroachment of nonagricultural uses; and

2) Establish incentives that promote: a) agricultural viability; b) sustained growth of the agriculture industry; and c) the long-term agricultural use and protection of these productive agricultural lands” (Chapter 205-42(b), HRS).

Policies to guide State and county decisions involving the management and use of IAL-designated lands are also established (see Figure 1-3).
Figure 1-3: HRS, Chapter 205-43 Important Agricultural Lands; Policies

State and county agricultural policies, tax policies, land use plans, ordinances, and rules shall promote the long-term viability of agricultural use of important agricultural lands and shall be consistent with and implement the following policies:

1) Promote the retention of important agricultural lands in blocks of contiguous, intact, and functional land units large enough to allow flexibility in agricultural production and management

2) Discourage the fragmentation of important agricultural lands and the conversion of these lands to nonagricultural uses

3) Direct nonagricultural uses and activities from important agricultural lands to other areas and ensure that uses on important agricultural lands are actually agricultural uses

4) Limit physical improvements on important agricultural lands to maintain affordability of these lands for agricultural purposes

5) Provide a basic level of infrastructure and services on important agricultural lands limited to the minimum necessary to support agricultural uses and activities

6) Facilitate the long-term dedication of important agricultural lands for future agricultural use through the use of incentives

7) Facilitate the access of farmers to important agricultural lands for long-term viable agricultural use, and

8) Promote the maintenance of essential agricultural infrastructure systems, including irrigation systems.
1.3.2 STANDARDS AND CRITERIA FOR EVALUATION

As designed, the process to evaluate lands proposed for designation as IAL is based on a set of eight specific standards and criteria. These standards and criteria, which for the most part represent the contributing factors to a viable and productive agricultural industry in Hawai‘i, are enumerated in Chapter 205-44, HRS (see Figure 1-4).

**FIGURE 1-4: HRS, Chapter 205-44 Standards and Criteria for the Identification of Important Agricultural Lands**

1) Land currently used for agricultural production
2) Land with soil qualities and growing conditions that support agricultural production of food, fiber, or fuel- and energy-producing crops
3) Land identified under agricultural productivity rating systems, such as the agricultural lands of importance to the State of Hawai‘i (ALISH) system adopted by the Board of Agriculture on January 28, 1977
4) Land types associated with traditional native Hawaiian agricultural uses, such as taro cultivation, or unique agricultural crops and uses, such as coffee, vineyards, aquaculture, and energy production
5) Land with sufficient quantities of water to support viable agricultural production
6) Land whose designation as important agricultural lands is consistent with general, development, and community plans of the county
7) Land that contributes to maintaining a critical land mass important to agricultural operating productivity, and
8) Land with or near support infrastructure conducive to agricultural productivity, such as transportation to markets, water, or power.

In using the standards and criteria to evaluate the agricultural qualities of the land, there is no requirement that all the standards and criteria have to be applied and met. The enabling legislation only requires a weighted evaluation process. Per Chapter 205-44, HRS, “Lands identified as important agricultural lands need not meet every standard and criteria [...]. Rather, lands meeting any of the criteria [...] shall be given initial consideration; provided that the designation of important
agricultural lands shall be made by weighing the standards and criteria with each other [...].” The enabling legislation does not specify the methodology that should be used to weight the standards and criteria, which allows for flexibility when choosing the applied criteria weighting tool, and when assigning values and ranking the standards and criteria.

1.3.3 PROCESSES TO DESIGNATE IAL

The LUC is the governing body with the authority to approve petitions for IAL designation. There are three distinct processes to designate land within the State Land Use Agricultural District as IAL. The first allows farmers or landowners to voluntarily petition the LUC for a declaratory ruling (i.e., voluntary designation); the second authorizes the designation of state-owned land; and the third is a mandatory requirement for the counties to prepare recommendations for IAL and submit its report, maps and record of the counties’ identification of IAL to the LUC for decision-making. The three processes are summarized in this section.

VOLUNTARY DESIGNATION

Private landowners seeking an IAL designation are able to voluntarily petition the LUC for a declaratory ruling. The LUC requires a two-thirds majority vote of Commission members to issue a declaratory order in favor of the landowner. A current inventory of IAL designations is presented in Section 3.4.

The voluntary designation process offers specific incentives to encourage private landowners to voluntarily seek an IAL designation. In addition to having the ability to choose which lands may be considered for IAL, landowners who have a majority of their landholdings designated as IAL are exempt from additional lands being designated via the...
county’s process.¹ There is also an expedited land use reclassification allowance—the “85/15 incentive”—that enables the LUC, with the approval of the State legislature, to reclassify or issue future credits to reclassify as much as 15 percent of the petition area to either the State Urban, Rural, or Conservation District, if the remaining portion of the petition area (i.e., at least 85 percent) is designated as IAL and is in the same county as the land proposed for IAL. Reclassifications to the Urban District under this clause are required to be consistent with the relevant county’s general plan and regional plan (HAR Section 15-15-122 and 15-15-124).

DESIGNATION OF PUBLIC LANDS

Chapter 205-44.5, HRS identifies a separate process under which public lands as defined under Section 171-2, Chapter HRS are to be identified for IAL designation (see Figure 1-5). The law states that the State Department of Agriculture

¹ Per Chapter 205-49, HRS, “if the majority of landowners’ landholdings is already designated as important agricultural lands, [...] the commission shall not designate any additional lands of that landowner as important agricultural lands, except by a petition pursuant to section 205-45.”

FIGURE 1-5: HRS, Chapter 171-2

“Public lands” means all lands or interest therein in the State classed as government or crown lands previous to August 15, 1895, or acquired or reserved by the government upon or subsequent to that date by purchase, exchange, escheat, or the exercise of the right of eminent domain, or in any other manner; including lands accreted after May 20, 2003, and not otherwise awarded, submerged lands, and lands beneath tidal waters that are suitable for reclamation, together with reclaimed lands that have been given the status of public lands under this chapter, except:

1) Lands designated in section 203 of the Hawaiian Homes Commission Act, 1920, as amended
2) Lands set aside pursuant to law for the use of the United States
3) Lands being used for roads and streets
4) Lands to which the United States relinquished the absolute fee and ownership under section 91 of the Hawaiian Organic Act prior to the admission of Hawaii as a state of the United States unless subsequently placed under the control of the board of land and natural resources and given the status of public lands in accordance with the state constitution, the Hawaiian Homes Commission Act, 1920, as amended, or other law
5) Lands to which the University of Hawa‘i holds title
6) Lands to which the Hawaii housing finance and development corporation in its corporate capacity holds title
7) Lands to which the Hawaii community development authority in its corporate capacity holds title
8) Lands to which the department of agriculture holds title by way of foreclosure, voluntary surrender, or otherwise, to recover moneys loaned or to recover debts otherwise owed the department under chapter 167
9) Lands that are set aside by the governor to the Aloha Tower development corporation; lands leased to the Aloha Tower development corporation by any department or agency of the State; or lands to which the Aloha Tower development corporation holds title in its corporate capacity
10) Lands that are set aside by the governor to the agribusiness development corporation; lands leased to the agribusiness development corporation by any department or agency of the State; or lands to which the agribusiness development corporation in its corporate capacity holds title, and
11) Lands to which the Hawa‘i technology development corporation in its corporate capacity holds title.
(HDOA) and the State Department of Land and Natural Resources (DLNR) are to conduct a collaborative mapping effort before December 31, 2009. Unlike both the voluntary landowner designation process and the county-mandated process which are subject to LUC’s procedures for district boundary amendments and declaratory orders, public lands recommended for IAL designation are not subject to the LUC’s determination reviews. Upon receiving the maps identifying the State agencies’ recommendations for IAL, the LUC is to adopt the maps that designate IAL on public lands (i.e., without a formal LUC evaluation). Management responsibility for the public lands designated as IAL is to transfer to the HDOA after the maps are adopted (Chapter 141-1(9), HRS). This process has yet to be completed.

**DESIGNATION BY THE COUNTIES**

Each county is mandated—through its planning department—to identify lands within its jurisdiction that have potential for IAL designation and to prepare draft maps of their recommendations for LUC approval. The general sequence of actions and the agencies/parties involved in the county designation process are outlined in Figure 1-6.

**Figure 1-6: County Designation Process**

Chapter 205-47, HRS establishes procedural and content guidance for the counties to follow when preparing the draft maps, including directives for land eligibility, landowner notification, and stakeholder participation and public involvement. The first step in the county process involves the planning department conducting a mapping process to develop draft maps in consultation with their respective stakeholders and agencies, and preparing a report that documents the process. After informing landowners (either by mail or posted notice) of the potential designation of their lands as IAL, the planning department submits their draft
recommendations to the county council for adoption as a resolution (The county council can adopt with or without changes, or return to the planning department un-adopted). Upon approval by the county council, the county then submits the adopted IAL recommendations and map to the LUC. The HDOA and State Office of Planning is provided 45 days to review the IAL recommendations and map and provide comments. A two-thirds majority vote of LUC membership is required for designation as IAL.

Conditions for Eligibility. The county authority to consider land for the IAL designation is limited to certain lands that meet the conditions of ownership and land use classifications set forth in the law. Chapter 205-47(a), HRS states:

“Each county shall identify and map potential important agricultural lands within its jurisdiction based on the standards and criteria in section 205-44 and the intent of this part, except lands that have been designated, through the state land use, zoning, or county planning process, for urban use by the State or county.”

According to the statute, certain categories of land are automatically removed from the county’s screening. These include:

- lands outside the county’s jurisdictional responsibilities, including land owned by the U.S. Government, land owned by autonomous State agencies (i.e., Department of Hawaiian Home Lands, Office of Hawaiian Affairs, Hawai‘i Community Development Authority), and land classified in the State Conservation District
- land within the State Urban District2, and
- land designated by county land use plans and zoning for urban use.

Included as being eligible for IAL consideration are lands that are classified as State Land Use Agricultural District but inside the City’s growth boundary but designated for agriculture.

Additional categories of land are removed from the county’s screening process if they fall under the State’s designation of public lands or are owned by a landowner who successfully designated more than 50% of their landholdings as IAL under the voluntary designation process. These include:

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2 This limitation prevented land in two large development projects from consideration as IAL: Koa Ridge in Mililani and Ho‘opili in ‘Ewa.
• public lands as defined by Chapter 171-2, HRS to be mapped by the State HDOA and DLNR (see Figure 1.5 and the sub-section entitled “Designation of Public Lands”), and
• all lands owned by an individual landowner if more than 50 percent of that landowner’s property is already designated as IAL. ³ This is consistent with the premise of Section 205-49(a), HRS.

Stakeholder Participation and Public Involvement. The statutory requirements for stakeholder participation and execution of an inclusive public involvement process require consultation and cooperation with specific stakeholders and a series of public meetings. Stakeholders that must be consulted are identified:

“.....landowners, the Department of Agriculture, agricultural interest groups, including representatives from the Hawai‘i Farm Bureau Federation and other agricultural organizations, the United States Department of Agriculture Natural Resources Conservation Service, the office of planning, and other groups as necessary” (Chapter 205-47(b), HRS).

Facilitation of “an inclusive process for public involvement, [...] including a series of public meetings throughout the identification and mapping process” is required, and establishment of “one or more citizen advisory committees [...] to provide further public input” is suggested, although there is flexibility to use an existing planning process or an existing and adopted plan or map.⁴

³ HRS, 205-49(a) “In designating important agricultural lands in the State, pursuant to the recommendations of individual counties, the commission shall consider the extent to which: [...] (3) The commission has designated lands as important agricultural lands, pursuant to section 205-45; provided that if the majority of landowners’ landholdings is already designated as important agricultural lands, excluding lands held in the conservation district, pursuant to section 205-45 or any other provision of this part, the commission shall not designate any additional lands of that landowner as important agricultural lands except by a petition [...]”

⁴ HRS, Chapter 205-47(c). “Each county, through its planning department, shall develop an inclusive process for public involvement in the identification of potential lands and the development of maps of lands to be recommended as important agricultural lands, including a series of public meetings throughout the identification and mapping process. The planning departments may also establish one or more citizen advisory committees on important agricultural lands to provide further public input, utilize an existing process (such as general plan, development plan, community plan), or employ appropriate existing and adopted general plan, development plan, or community plan maps.”
Landowner Notification. In the course of transmitting their recommendations to the county council, the county planning department is required to take reasonable action to inform landowners that their land is being recommended for IAL designation:

“Upon identification of potential lands to be recommended to the county council as potential important agricultural lands, the counties shall take reasonable action to notify each owner of those lands by mail or posted notice on the affected lands to inform them of the potential designation of their lands” (Chapter 205-47(d), HRS).

1.3.4 IAL INCENTIVES

The premise of the IAL program is that a viable agricultural industry will keep agricultural land in agricultural use and will ensure the long-term protection of the land from urban development. To promote the long-term agricultural productivity and use of important agricultural lands, the IAL legislation calls for streamlined, coordinated state and county incentives and protections that address the high cost of farming and the profitability of farmers on IAL. The law also requires the State and the counties to ensure that their agriculture-related policies and permitting procedures enable and promote the economic sustainability of agriculture (Chapter 205-26(a), HRS).

The mandate to establish IAL incentives is derived from Chapter 205-46, HRS:

“b) State and county incentive programs shall provide preference to important agricultural lands and agricultural businesses on important agricultural lands. The State and each county shall cooperate in program development to prevent duplication of and to streamline

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5 HRS, Chapter 205-42. “The objective for the identification of important agricultural lands is to identify and plan for the maintenance of a strategic agricultural land resource base that can support a diversity of agricultural activities and opportunities that expand agricultural income and job opportunities and increase agricultural self-sufficiency for current and future generations, the State shall:

(1) Promote agricultural development and land use planning that delineates blocks of productive agricultural land and areas of agricultural activity for protection from the encroachment of nonagricultural uses; and

(2) Establish incentives that promote: (a) agricultural viability; (b) sustained growth of the agriculture industry; and (c) the long-term agricultural use and protection of these productive agricultural lands.
and consolidate access to programs and services for agricultural businesses located on important agricultural lands.

c) Incentive and protection programs shall be designed to provide a mutually supporting framework of programs and measures that enhance agricultural viability on important agricultural lands, including but not limited to:

1) Grant assistance

2) Real property tax systems that support the needs of agriculture, including property tax assessments based on agricultural use valuation

3) Reduced infrastructure requirements and facilitated building permit processes for dedicated agricultural structures

4) Tax incentives to offset operational costs, promote agricultural business viability, and promote the long-term protection of important agricultural lands

5) Agricultural business planning, marketing, and implementation grants

6) Tax incentives and programs for equity investments and financing for agricultural operations, including agricultural irrigation systems

7) Other programs and mechanisms that promote investment in agricultural businesses or agricultural land protection, such as the purchase of development rights

8) State funding mechanisms to fund business viability and land protection programs

9) Water regulations and policies that provide farmers of important agricultural lands access to adequate and cost-effective sources of water

10) Other measures that would ensure that state capital investments, projects, programs, and rules are consistent with this part, and

11) Agricultural education and training for new farmers; upgrading the skills of existing farmers and other agriculture-related employees through the use of mentoring, business incubators, and public or private scholarships; and increasing the returns of farming by adding value to food processing and other tools and methods.”
IAL incentives currently offered by the State include the ability to construct on-site farm dwellings and employee housing, income tax credits for agricultural costs, financing opportunities and loan guarantees, and expedited permitting for agricultural processing facilities. On June 29, 2018, Act 87 extended the income tax credit for agricultural costs to December 31, 2021. The City and County of Honolulu currently provides the following reductions in governmental requirements for agricultural land, irrespective of IAL designation: relaxed infrastructure standards for agricultural subdivisions, property tax assessments at a substantially reduced rate for lands dedicated to agricultural use, a reduced water rate for agricultural properties, and an exemption from building codes and permitting approvals for certain farm structures. The feasibility of offering benefits specific for IAL-designated properties is being addressed by the City administration.

Agricultural Lands, Central O‘ahu
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2. CITY’S APPROACH TO IDENTIFY AND MAP RECOMMENDATIONS FOR IAL DESIGNATION

This chapter outlines the City’s approach to comply with the statutory requirement for the counties to prepare recommendations identifying lands within their jurisdiction for designation as IAL. The first section presents the overall planning process, including an outline of the various community consultations and public participation forums that were conducted during the course of the project. The second section describes the methodology that was used to define and weight (i.e., prioritize) the criteria and develop the City’s recommendations.

2.1 OVERVIEW OF THE PLANNING PROCESS

The City and County of Honolulu is the second of the four counties to initiate a process to identify and map recommendations for county-designated IAL (Kaua‘i County being the first). Upon transmittal of this report to the Honolulu City Council, the City will be the first county to seek county council approval for the county-prepared recommendations.

As described in Section 1.3.3, State law prescribes certain procedural and content requirements that need to be followed when petitioning the LUC for an IAL designation. For the county designation process, the law provides specifications for conditions of eligibility, a set of standards and criteria to be used in evaluating eligible lands for IAL, and guidance for stakeholder participation and public involvement. However, there is no prescriptive formula or illustrative methodology that the individual counties must follow when preparing their mapping recommendations, and each county has the flexibility to develop an individualized approach that best suits their particular needs. This allows each county to structure a level of community participation that reflects their constituents’ priorities (i.e., project funding, staffing, scheduling, community politics).
The process to develop the City’s recommendations consisted of two major phases, Internal Technical Review and Community Engagement, which were each defined by distinct scopes and work products. A third phase, Policy Formation, which has not been completed and is pending future action, will involve City Council and LUC approval. Figure 2-1 presents a graphic illustration of the major tasks and the public participation program as they relate to each phase.

The first phase involved an internal technical review to define the criteria and their use in identifying lands eligible for IAL designation. Specific tasks of the technical review were to:

- identify available data sources to be used in defining the criteria
- develop resource maps based on the criteria definitions, and
- determine how to weight (i.e., rank) the criteria.

Consultation with a technical advisory committee (TAC) comprised of agricultural interests, policy makers, agency representatives, agricultural specialists and scientists, and landowner representatives (including the organizations specified in Chapter 205-47(b), HRS) was a major component of this phase. Given the specialized aspects of farming and the complex, theoretical nature of the subject matter, the ability to hold focused, technical discussions with such a small, dedicated group of agricultural experts allowed for in-depth, thorough examination of the criteria and weighting methodology (see Section 2.2 for the mapping methodology). A roster of TAC members is provided in Appendix B.

Original TAC Composition (2012)
Figure 2-1: City’s IAL Process

1. Internal Technical Review

CRITERIA DEVELOPMENT
Develop resource maps and criteria weighting in consultation with a technical advisory committee
- 6 TAC Meetings (Sept 2012-Jun 2013)

2. Community Engagement

PROJECT REFINEMENT
Conduct preliminary consultation
- TAC Meeting (Dec 2014)
- 3 focus group meetings (Jan-Feb 2015)

INFORMATION GATHERING
Seek public input on resource maps and weighted criteria priorities; launch website
- 1st Community meeting: Mililani, Kāne‘ohe, Kapolei (Apr 2015)
- 60-day public comment period

MAP FORMATION
Prepare and publish preliminary map recommendations
- TAC Meeting (Dec 2015)
- Notify landowners of potential eligibility
- 2nd Community meeting: Hale‘iwa, Kapolei (Jan 2017)
- 60-day public comment period

MAP COMPLETION & PROJECT DOCUMENTATION
Refine and publish final map recommendations and report
- TAC meeting (Nov 2017)
- Notify landowners of eligibility for inclusion
- 3rd Community Meeting: ‘Aiea (Nov 2017)

3. Policy Formation

FORMAL APPROVAL
Transmit to City Council for adoption by resolution
- Council hearings
Transmit City Council resolution and recommendations to LUC for adoption of IAL map
- LUC hearings
The second phase was characterized by a community engagement process that validated how the weighted criteria would be used to develop the City’s recommendations for IAL. Major tasks conducted during this phase included:

- publicizing the resource maps and criteria weighting approach, and gathering public input from the larger community about the work done during the first phase
- developing preliminary map recommendations of land for consideration as IAL, and
- finalizing the City’s recommendations in consultation with the general public.

Compliance with the requirements of Chapter 205, HRS was the principal objective of the community engagement process, and the planning process was structured to incorporate the legal requirements for content, stakeholder participation and public involvement, and landowner notification. The public participation program consisted of various forums to foster transparency in the City’s decision-making process, including consultation with the project technical advisory committee, a series of focus group meetings with a cross section of individuals who were invited to provide feedback on the public outreach strategy, community meetings, two 60-day public comment periods, and a project website that featured an interactive map viewer of the preliminary map.

Table 2-1 lists the public participation program elements and the legal requirements that each element satisfies. Appendices B to D include the meeting summaries and related meeting materials from the TAC meetings, focus group meetings and community meetings. Appendix E includes a summary of public comments.

*Community Meeting at Hale‘iwa, January 2017*
<table>
<thead>
<tr>
<th>ELEMENT</th>
<th>PURPOSE</th>
<th>STATUTORY COMPLIANCE</th>
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</thead>
<tbody>
<tr>
<td>TAC meetings</td>
<td>Provide technical assistance in developing the community participation process and IAL maps</td>
<td>• HRS § 205-47(b). TAC members represented all of the interests specified: “landowners, department of agriculture, Hawai‘i Farm Bureau Federation, US Department of Agriculture Natural Resources Conservation Service, the office of planning, and other agricultural organizations and interest groups.”&lt;br&gt;• HRS § 205-47(c). “Planning departments may also establish one or more citizen advisory committees…”</td>
</tr>
<tr>
<td>3 focus group meetings</td>
<td>Validate criteria weighting, receive input on the public outreach strategy, and gauge reactions to the discussion topics proposed for the community meetings. Meetings were designed for 12-15 participants each, with a different group of participants invited to each meeting.</td>
<td>• HRS § 205-47(b). Focus group participants represented a large cross-section of the larger community, including Neighborhood Board members, representatives of community organizations, and “landowners, …Hawai‘i Farm Bureau Federation,… and other agricultural organizations and interests groups.”&lt;br&gt;• HRS § 205-47(c): “Planning departments may also establish one or more citizen advisory committees…”</td>
</tr>
<tr>
<td>• 3 rounds of community meetings&lt;br&gt;• 2 60-day public comment periods</td>
<td>Inform and seek input from interested stakeholders</td>
<td>• HRS § 205-47 (c). “Each county, through its planning department, shall develop an inclusive process for public involvement,…including a series of public meetings….”</td>
</tr>
<tr>
<td>Website</td>
<td>Provide an on-line presence to inform and seek input from interested stakeholders</td>
<td>• HRS § 205-47(c). “Each county, through its planning department, shall develop an inclusive process for public involvement…”</td>
</tr>
<tr>
<td>Landowner notification</td>
<td>Inform landowners that their land is recommended for IAL designation</td>
<td>• HRS § 205-47(d). “Upon identification of potential lands to be recommended to the county council as potential important agricultural lands, the counties shall take reasonable action to notify each owner of those lands by mail or posted notice on the affected lands informing them of the potential designation of their lands.”</td>
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</tbody>
</table>
2.2 MAPPING METHODOLOGY

This section describes the technical mapping process to prepare the City’s recommendations for county-designated IAL. While the process may appear straightforward, the methodology to map the criteria (i.e., develop the resource maps) and select the priority criteria was demanding and rigorous, involving in-depth discussion of agricultural issues and a comprehensive analysis of the law. The series of steps that make up the mapping methodology are briefly described below:

1. Define the criteria and identify data sources to develop resource maps
2. Assign criteria weighting and select weighted criteria priorities
3. Use the priority criteria to prepare preliminary map recommendations
4. Refine and complete City’s map recommendations.

The technical advisory committee, serving an instrumental role in the mapping, provided substantive input into the analysis of the criteria and the data sources applied to the resource maps and the recommendations for weighting and prioritizing the criteria (see Appendix B for TAC meeting materials). Input received from the focus group members and from the larger community was valuable for validating the weighted criteria, identifying issues and concerns, and refining the map recommendations (see Appendix C and D for focus group and community meeting materials; see Appendix E for summary of public comments). The focus groups were helpful for developing a deeper understanding of individuals’ opinions and reactions, and provided a comfortable, personalized venue to introduce or “test” public outreach materials, while the community meetings were beneficial for reaching a large number of people at once.

2.2.1 DEVELOP RESOURCE MAPS

This first step involved reviewing the eight standards and criteria (“criteria”) that must be considered when evaluating lands for IAL designation (see Section 1.3.2), and crafting definitions that outlined the characteristics desired for each criterion. Understanding the criteria and providing specificity about the physical attributes and defining features of the criteria was critical because the law presents the criteria and standards as broad-based, generalized policy statements.

Once the criteria were defined, the definitions were used to locate Geographical Information System (GIS) spatial datasets (i.e., data sources) that were available
or could be readily developed. The GIS datasets were organized to create a series of resource maps that illustrated the areas with the characteristics of each criterion. In general, mapping of the criteria relied heavily on existing datasets and did not include extensive original research.

A total of nine criteria were considered, including the eight criteria identified by law and an additional criterion for agricultural easements that was added at the request of the technical advisory committee (see Appendix B: TAC Meeting Materials). Table 2-2 presents a summary of the criteria and their accepted definitions, and the specific GIS datasets that were used to create the resource maps. All but one of the resource maps were prepared using multiple datasets (Criterion #2 was the only one to use just one data source).

A summary of the criteria definitions and the individual resource maps is presented in Appendix F. Maps are included for Criteria 1, 2, 3, 4, 5, 6 and 9; maps for Criteria 7 and Criteria 8 were not prepared due to difficulties with quantifying the criteria into measurable parameters.

2.2.2 SELECT PRIORITY CRITERIA

This step involved a criteria weighting exercise to assign weights to the criteria and to identify the priority criteria that would be used to determine the City’s recommendations for IAL designation.

Similar to the provisions that make it possible for each county to develop an individualized community participation program, the counties have the autonomy to devise their own method of weighting the criteria because the law does not prescribe a specific methodology for determining the weighting of the criteria. In addition, strict application of all eight criteria is not a requirement for assessing the agricultural qualities of the land to be designated as IAL since Chapter 205-44, HRS only specifies that a weighted evaluation process be used (see Section 1.3.2).

Criteria weighting methods differ in many aspects, including the complexity of the method, the theoretical application, accuracy, and ease of use and understanding for the decision maker and participants. Selecting a weighting method that is relevant to the situation and results in an effective comparison between the alternatives is critical to ensuring a quality decision outcome. Given the importance of selecting a method that is appropriate for the given situation, the City chose to employ a simple point allocation rating method which scores the criteria and ranks them according to their given score. This method was chosen
### Table 2-2: Criteria Mapping References

<table>
<thead>
<tr>
<th>HRS, CHAPTER 205-44 STANDARDS AND CRITERIA</th>
<th>DEFINING ATTRIBUTES AND FEATURES</th>
<th>GIS DATA SOURCES / REFERENCES</th>
<th>DESCRIPTION OF DATASETS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Land currently used for agricultural production</td>
<td>Either currently being used for farming or grazing/ranching activities, or currently fallow but part of a near-term (three year or less) field rotation, or has the potential to be returned to active production which conveys the notion of historic use.</td>
<td>2011 aerial imagery. State Office of Planning and the U.S. Geological Survey.</td>
<td>2011 aerial imagery was compared to the 1980 ALUM and analyzed to identify active and fallow agricultural lands.</td>
</tr>
<tr>
<td>2. Land with soil qualities and growing conditions that support agricultural production of food, fiber, or fuel- and energy-producing crops</td>
<td>Soil properties and agricultural productivity Solar radiation Slopes</td>
<td>Soil Survey Geographic (SSURGO) Database. USDA Natural Resources Conservation Service.</td>
<td>Land classifications of Irrigated and Non-Irrigated Capability (Classes I, II, and III)</td>
</tr>
<tr>
<td>3. Land identified under agricultural productivity rating systems, such as the agricultural lands of importance to the State of Hawaii (ALISH) system</td>
<td>Land Study Bureau (LSB) ratings range from “A” (Very Good) to “E” (Not Suitable), with land types/ratings based on soil and productive capabilities for certain crop types.</td>
<td>Overall Productivity Rating, Detailed Land Classification – Land Study Bureau, 1965 - 1972. State Office of Planning, GIS data.</td>
<td>Lands that met the LSB Overall Productivity Ratings of A: Very Good and B: Good</td>
</tr>
<tr>
<td>HRS, CHAPTER 205-44 STANDARDS AND CRITERIA</td>
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| adopted by the Board of Agriculture on January 28, 1977 | ALISH ratings identify three classes of important agricultural lands based on soil, climate, moisture supply, slope and production factors:  
  • Prime—best suited for production of food, feed, forage and fiber crops  
  • Unique—useful for specific high-value food crops (e.g., coffee, taro, rice, watercress); and  
  • Other—not prime or unique, but is farmland of statewide or local importance | ALISH - State Department of Agriculture, 1977. State Office of Planning, GIS data. | ALISH ratings of Prime and Unique classifications |
| 4. Land types associated with traditional native Hawaiian agricultural uses, such as taro cultivation, or unique agricultural crops and uses, such as coffee, vineyards, aquaculture, and energy production | Land currently in wetland and dryland taro production or with physical features to support future taro production  
No unique crops and uses, per TAC meeting #3 | Ko’olau Poko Watershed Management Plan. Prepared by Townscape for the Honolulu Board of Water Supply, September 2012. | Areas currently in wetland taro production were identified as part of the Ko’olau Poko Watershed Management Plan. |
|                                             | Ladefoged, Thern, Patrick V. Kirch, Samuel M. Gon III, et al. “Opportunities and constraints for intensive agriculture in the Hawaiian archipelago prior to European contact.” Journal of Archaeological Science, 2009. | [This GIS model/report prepared for The Nature Conservancy “compared physical characteristics (i.e. proximity to natural sources of water, elevation, slope, riparian corridors, and soil type) with archaeological studies that] | Areas that were likely to have been in wetland and dryland taro cultivation prior to western contact |

FOR CITY COUNCIL REVIEW  
August 2018
<table>
<thead>
<tr>
<th>HRS, CHAPTER 205-44</th>
<th>DEFINING ATTRIBUTES AND FEATURES</th>
<th>GIS DATA SOURCES / REFERENCES</th>
<th>DESCRIPTION OF DATASETS</th>
</tr>
</thead>
</table>
| 5. Land with sufficient quantities of water to support viable agricultural production | • Irrigation (available infrastructure)  
• Access to streams  
• Ability to take water from streams  
• Quality of water = not brackish  
• Agricultural water rates  
• Rainfall (mostly for grazing)  
*An ideal definition of “sufficient quantities” should address: (1) availability; (2) adequate supply; (3) connection to supply source (meter ready or needs infrastructure improvements?); (4) reliability (not affected by drought); and (5) efficiency (amount of water loss, cost of transferring water to the site) | Water Use Permit Records, State Commission on Water Resources Management.  
Irrigation System Data, State Department of Agriculture.  
Water Rate Inventory, Honolulu Board of Water Supply. | Water Use Permits by TMK parcel (excludes salt water or brackish water systems used primarily for aquaculture)  
Waiāhole Ditch System service area  
Waimānalo Ditch System service area  
Wahiawā Ditch System service area  
Wahiawā Reservoir Ditch 2 System service area  
Agricultural water rates by TMK parcel |
| 6. Land whose designation as IAL is consistent with general, development, and community plans of the county | Lands (1) designated for Agricultural Use by approved Development Plans/Sustainable Communities Plans Land Use Maps; and (2) zoned either AG-1 Restricted Agricultural or AG-2 General Agricultural  
Development Plans/Sustainable Communities Plans Land Use Maps, various. City Department of Planning and Permitting  
Zoning Designations. Department of Planning and Permitting, Honolulu Land Information System |  | Agriculture, Preservation, Rural or Rural Residential Land Use Designations  
• AG-1 Restricted Agricultural zoning  
• AG-2 General Agricultural zoning  
• P-2 General Preservation zoning |
### HRS, CHAPTER 205-44
#### STANDARDS AND CRITERIA

<table>
<thead>
<tr>
<th>CRITERION</th>
<th>DEFINING ATTRIBUTES AND FEATURES</th>
<th>GIS DATA SOURCES / REFERENCES</th>
<th>DESCRIPTION OF DATASETS</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. Land that contributes to maintaining a critical land mass important to agricultural operating productivity</td>
<td>Proximity (i.e., adjacency) to agricultural lands and other lands with important ecological functions</td>
<td>No data or map associated with this criterion. Concept of proximity could not be quantified as a numeric value for mapping purposes.</td>
<td></td>
</tr>
<tr>
<td>8. Land with or near support infrastructure conducive to agricultural productivity, such as transportation to markets, water, or power</td>
<td>Degree of accessibility to roads and the transportation network Status of existing potable water and electrical infrastructure systems</td>
<td>No data or map associated with this criterion. The entire island of O‘ahu was determined to have equal status with regard to access to transportation, markets and infrastructure systems. Water availability was addressed under Criterion 5.</td>
<td></td>
</tr>
<tr>
<td>9. Land with agricultural easements</td>
<td>Government programs to protect AG lands in perpetuity that are recorded</td>
<td>Farm and Ranch Lands Protection Program. USDA Natural Resources Conservation Service</td>
<td>Farm and Ranch Lands Protection Program easements State of Hawai‘i Legacy Lands Conservation Program. Department of Land and Natural Resources Legacy Land Conservation Program easements Hawaiian Islands Land Trust Easements created by the Land Trust</td>
</tr>
</tbody>
</table>
because of its straightforward and logical approach, and its relative ease to be understood by farmers and the general public which leads to greater transparency. It also allows for the expression of individual judgments and an unlimited number of scoring combinations, as individuals are allowed to allocate points according to their personal preferences.

Using a 100-point scale, TAC members were asked to identify their personal criteria preferences by distributing the total 100 points across the criteria set. Points could be allocated in any manner, as long as all points were accounted for. For example, 100 points could be assigned to a single criterion, split equally between two criteria, or distributed among any combination of criteria. All points assigned to the individual criteria sets were tallied, and the cumulative points were used to form a single score for each criterion that reflected the larger group’s combined preference. Criteria with more cumulative points received a higher score and were considered to have a greater degree of importance. Average and median scores for each criterion were calculated, and the median scores were used to rank the criteria and identify criteria groupings. Criteria with the highest values were identified as priority criteria based on the natural grouping of scores.

Figure 2-2 is a sample of the criteria weighting ballot that was used to identify personal preferences. Because the TAC members were directly involved in developing the criteria definitions and the resource maps, their familiarity with the criteria made them the natural prospect for the balloting process. The criteria weighting ballot was circulated to TAC members via e-mail following the third TAC meeting (November 2012). Of the 25 ballots that were distributed, 23 ballots were returned, representing a 92% participation rate. A description of the TAC balloting procedures, including the results of the individual points assigned to each criterion and the cumulative scores, is presented in Appendix G.

Figure 2-3 is a graph of the resulting median and average scores for the criteria. The distribution of the median scores reveals three distinct groupings: the first grouping comprised of criteria with 15 points each; the second grouping of criteria ranged from 10 to 8 points, and the third grouping received 5 points each.

Based on the obvious grouping of median scores, the three criteria receiving the highest scores were selected as the priority criteria (see Appendix G for details of selection process). The priority criteria—which coincidentally are identical to the top three criteria used in Kaua’i County’s IAL mapping project—are as follows:
- Criteria 1: Current agricultural production
- Criteria 2: Soil qualities and growing conditions, and
- Criteria 5: Availability of water.

**Figure 2-2: Sample Criteria Weighting Ballot**

Use this ballot to indicate your preference for ranking the IAL criteria. Start with a total of 100 points, then allocate the 100 points among the criteria in the way that best reflects your opinion about the criteria’s importance. The number of points given to a criterion reflects its importance. (The more points given, the more important you consider the criteria to be. Less points means less important; a value of zero points means the criteria should not be considered).

<table>
<thead>
<tr>
<th>CRITERIA AND STANDARDS</th>
<th>POINTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Land currently used for agricultural production</td>
<td></td>
</tr>
<tr>
<td>2. Land with soil qualities and growing conditions that support agricultural production of food, fiber, or fuel- and energy-producing crops</td>
<td></td>
</tr>
<tr>
<td>3. Land identified under agricultural productivity rating systems, such as the agricultural lands of importance to the State of Hawai‘i (ALISH)</td>
<td></td>
</tr>
<tr>
<td>4. Land types associated with traditional native Hawaiian agricultural uses, such as taro cultivation, or unique agricultural crops and uses, such as coffee, vineyards, aquaculture, and energy production</td>
<td></td>
</tr>
<tr>
<td>5. Land with sufficient quantities of water to support viable agricultural production</td>
<td></td>
</tr>
<tr>
<td>6. Land whose designation as IAL is consistent with general, development, and community plans of the county</td>
<td></td>
</tr>
<tr>
<td>7. Land that contributes to maintaining a critical land mass important to agricultural operating productivity</td>
<td></td>
</tr>
<tr>
<td>8. Land with or near support infrastructure conducive to agricultural productivity, such as transportation to markets, water, or power</td>
<td></td>
</tr>
<tr>
<td>9. Government programs to protect AG lands in perpetuity that are recorded*</td>
<td></td>
</tr>
<tr>
<td>TOTAL POINTS</td>
<td>100</td>
</tr>
</tbody>
</table>

*Criterion #9 is added as a result of discussion with the technical advisory committee.
2.2.3 PREPARE PRELIMINARY MAP RECOMMENDATIONS

This step involved analyzing the different combinations of priority criteria to determine their preferred application for mapping, followed by preparation of the preliminary map that represented the basis of the City’s recommendations for IAL.

To determine how the priority criteria would be used to qualify land for the IAL designation, consideration was given to all possible combinations. The scenarios, which presented different alternatives based on the number and composition of criteria that had to be satisfied, included the following variations:

- Meet any 1 of the 3 priority criteria in any combination
- Meet any 2 of the 3 priority criteria in any combination
• Meet 2 of the 3 priority criteria in a specific combination
• Meet all 3 priority criteria

The scenarios represented a range of possibilities for mapping, ranging from being as inclusive as possible (i.e., land could have any one of the criteria to be eligible for the IAL designation), to selective (i.e., land had to have a defined set of criteria to be eligible), to exclusive (i.e., land had to have all three criteria to be eligible). Table 2-3 lists the range of possible scenario combinations that were considered, and also describes the variations of criteria sets associated with each scenario. The preferred scenario selected to prepare the City’s preliminary map involved applying the three priority criteria in an inclusive approach, where land with the attributes of any one of the three criteria—meaning land was either currently in agricultural production, had soil qualities and growing conditions to support agricultural production, or had sufficient quantities of water—was considered eligible for IAL designation.

Table 2-3: Possible Criteria Combinations

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Criteria Set Required for IAL Designation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Meets any 1 of the 3 priority criteria</td>
<td>AG PROD or SOILS or WATER</td>
</tr>
<tr>
<td>Meets any 2 of the 3 priority criteria</td>
<td>AG PROD and SOILS + AG PROD and WATER + SOILS and WATER + SOILS and AG PROD</td>
</tr>
<tr>
<td>Meets 2 of the 3 priority criteria</td>
<td>If AG PROD is a prerequisite, then:</td>
</tr>
<tr>
<td>in any combination</td>
<td>AG PROD and SOILS + AG PROD and WATER</td>
</tr>
<tr>
<td></td>
<td>If SOILS is a prerequisite, then:</td>
</tr>
<tr>
<td></td>
<td>SOILS and WATER + SOILS and AG PROD</td>
</tr>
<tr>
<td></td>
<td>If WATER is a prerequisite, then:</td>
</tr>
<tr>
<td></td>
<td>AG PROD and WATER + SOILS and WATER</td>
</tr>
<tr>
<td>Meets all 3 priority criteria</td>
<td>AG PROD and SOILS and WATER</td>
</tr>
</tbody>
</table>

AG PRODUCTION = Criterion 1 Currently Used for Agricultural Production
SOILS = Criterion 2 Soil Qualities and Growing Conditions that Support Agricultural Production of Food, Fiber, or Fuel- or Energy-Producing Crops
WATER = Criterion 5 Sufficient Quantities of Water to Support Viable Agricultural Production
Tax map key (TMK) parcel information to indicate land ownership was added at this point in the mapping process. Prior to this, the analysis and mapping of the criteria focused on the physical characteristics of the land, and ownership was not identified as part of the resource-based criteria as a factor for consideration. However, given the statutory requirement to inform landowners of the potential to be designated IAL, the TMK parcel information was critical for identification and notification purposes. Because the TMK parcel boundaries resulted in some configurations where the land areas identified for IAL designation within the parcel boundaries were too small to be favorable for IAL (since IAL coverage is specific to the land and does not necessarily encompass the entire TMK parcel), parcels with 5% or less of their land area in IAL were eliminated, as were parcels that were less than 1 acre in size. Additional qualitative judgements were made to remove isolated parcels that did not contribute to the larger pattern of agricultural use. Thus, the resulting preliminary IAL map contained both whole parcels and portions of parcels.

Public review of the preliminary map of recommendations included notification via mail to roughly 1,800 landowners, presentation at a community meeting (November 2017; see Appendix D), and a 60-day formal public comment period (see Appendix E for summary of comments). A web-based, interactive map viewer was also attached to the project website, allowing individuals to examine the map and the supporting criteria data at the parcel level. The preliminary map was presented as a working draft that required landowner and public input to verify
the accuracy of the mapping related to individual properties, and thus ensure a quality mapping product.

2.2.4 REFINING FINAL MAP RECOMMENDATIONS

This final step involved refining the preliminary map to prepare the City’s final recommendations, then documenting the process in a written report.

Comments received during the public comment period were compiled and analyzed to identify any necessary map refinements and any other issues and concerns. The preliminary map was refined, with some parcels added due to their proximity to other IAL-designated parcels or because they were previously excluded in error, while other parcels were eliminated in response to landowner justifications. Several parcels found to be inconsistent with the conditions for eligibility (i.e., not included in the county’s IAL screening process as described in Section 1.3.3. Designation by the Counties, see Conditions of Eligibility section) were also removed. Given the TAC’s preference for the City’s IAL recommendations to be resource-based and not project- or owner-based, revisions to the preliminary map were based on changes to the selection criteria and not because of individual project location.

The City’s recommendations for IAL designation, including a summary of the major comments received during the public comment period and the final map for City Council review, are presented in Chapter 4.
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3. AGRICULTURE ON O‘AHU

This chapter presents information about the current agricultural industry on O‘ahu, including the City’s land use planning system and policies for future development, the status of lands available for agriculture production, and recent trends and technological advancements influencing the future of the industry. An inventory of the lands designated as IAL by the LUC is also provided.

3.1 CITY AND COUNTY OF HONOLULU’S LONG-RANGE PLANS AND POLICIES

Land use and development for the City and County of Honolulu is guided through a three-tier planning system comprised of: (1) an island-wide General Plan; (2) secondary regional plans; and (3) the implementing ordinances and regulations (including the Land Use Ordinance, or zoning code) (see Figure 3-1).

FIGURE 3-1: Honolulu's Planning System

The General Plan and the regional plans express the City’s policies for development and growth over a 20-year time frame. The General Plan establishes the long-range objectives and policies for the physical, social, economic, and environmental conditions desired for the future of O‘ahu. It consists of objectives and policy statements across eleven subject areas, and a map of O‘ahu showing
the rough location of urban, urban-fringe and rural areas. The regional plans—known as development plans and sustainable communities plans (DPs/SCPs)—lay out the defining policies and guidelines for the future development pattern, community characteristics, and infrastructure improvements envisioned for the specific region. Each DP/SCP includes a set of regional maps that conceptually indicate open space features, land use patterns, significant views, and locations of public facilities. The DP/SCP maps also include a community growth boundary that conceptually outlines the areas intended for urban/residential development, while areas outside the boundary are generally intended for agricultural and preservation uses.

The City’s directed growth policy set forth in the General Plan and the DPs/SCPs has been guiding land use and infrastructure decisions on O‘ahu since the General Plan was adopted in 1977. To provide adequate land area for the future development needs of the island’s projected population growth, the City’s approach has been to direct growth to ‘Ewa, Central O‘ahu and the Primary Urban Center, and to support the development of Kapolei in ‘Ewa as O‘ahu’s second city (see Figure 3-2).

*FIGURE 3-2: City and County Development Plan and Sustainable Communities Plan Regions*

This strategy provides land area for community needs (e.g., housing, commercial and industrial areas, infrastructure) within a concentrated core, maintains O‘ahu’s suburban and rural areas from more intense development, and preserves high-
quality agricultural land in outlying areas. Within this context, some high-quality agricultural land within the community growth boundary has been and will be developed for urban use in order to preserve large tracts of high-quality agricultural land in Kunia and on the North Shore, and to “keep the country country.”

3.2 LANDS AVAILABLE FOR AGRICULTURE PRODUCTION

All lands in the State are classified into one of four state land use districts: Urban, Rural, Agricultural, or Conservation (see Section 1.2). O‘ahu is the only island that does not have any lands designated in the Rural District (i.e., only Agricultural, Conservation, and Urban District designations on O‘ahu). An inventory of State land use districts on O‘ahu includes roughly 128,000 acres designated in the Agricultural District, 157,000 acres in the Conservation District, and 102,000 acres in the Urban District. With roughly 386,000 total acres across the island, an estimated 32% is in the Agricultural District, 41% in the Conservation District, and 27% in the Urban District (see Figure 3-3).

**FIGURE 3-3: O‘ahu’s Acreage of State Land Use Districts**

<table>
<thead>
<tr>
<th>State Land Use District</th>
<th>Acreage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural</td>
<td>127,698</td>
</tr>
<tr>
<td>Urban</td>
<td>101,661</td>
</tr>
<tr>
<td>Conservation</td>
<td>156,829</td>
</tr>
<tr>
<td>Rural</td>
<td>--</td>
</tr>
<tr>
<td>Total</td>
<td>386,188</td>
</tr>
</tbody>
</table>


Besides farmland suitable for crops, pasture or forestry, the legal description of the State Agricultural District allows for the inclusion of Federally-owned land that is not made available for agricultural use, and land that does not have the qualities necessary to be classified as one of the other land use districts but may be suitable for parks, golf courses and open space relief. Of the roughly 128,000 acres on O‘ahu in the Agricultural District, about 13,700 acres in ‘Ewa, Makakilo, Central
O‘ahu, Hale‘iwa and Pūpūkea (11% of the total State Agricultural District acreage) are within the City’s community growth boundary as areas for future urbanization. The remaining 109,000 acres outside the community growth boundary (89%) is primarily for agricultural and preservation use, and protected from urban development for the foreseeable future (City and County of Honolulu Department of Planning and Permitting, February 2011). When the inventory of Federally-owned lands is subtracted from the Agricultural District acreage, the acreage of agricultural land consists of roughly 88,000 acres, including both farmland and grazing land. An estimated 56,600 acres are useable farmland, of which roughly 44,400 acres have high soil ratings (i.e., rated A or B by the Land Study Bureau (LSB) ratings, Prime or Unique by the Agricultural Lands of Importance to the State of Hawai‘i (ALISH), or I or II by the NRCS).

Figure 3-4 shows the general location of major agricultural areas on O‘ahu and the associated agricultural products grown in those areas in 2011. Agricultural areas occupy large segments of West O‘ahu (Wai‘anae), Central O‘ahu (‘Ewa, Kunia, Wahiawā) and the North Shore (Waialua, Hale‘iwa, Kahuku). Smaller pockets of agricultural areas are found in Kahalu’u/Kāne‘ohe, Waimānalo and Hawai‘i Kai.6

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6 The Statewide Agricultural Land Use Baseline 2015 (State of Hawai‘i Department of Agriculture, 2016) also provides an inventory of agricultural areas on O‘ahu.
In 2012, the State acquired roughly 1,700 acres of agricultural land in Wahiawā previously owned by the Estate of George Galbraith. The acquisition of the Galbraith lands, which was the result of a $25 million public-private partnership brokered by the Trust for Public Lands, transferred 1,207 acres to the State Agribusiness Development Corporation (ADC) and 495 acres to the Office of Hawaiian Affairs (OHA). Since completing this first step to protect high-quality agricultural land in perpetuity, the State has since acquired additional acreage to expand its’ agricultural footprint in Central O’ahu. Additional land acquisitions and investments in infrastructure and facility improvements (i.e., irrigation systems, workforce housing, warehouses/storage units, consolidated agricultural processing and packaging facilities) to support an agricultural hub are also being pursued (Whitmore Village Agriculture Revitalization Plan, 2017).

3.3 RECENT TRENDS INFLUENCING O’AHU’S AGRICULTURAL INDUSTRY

Statistical information reported in this section is based on a report prepared for the City and County of Honolulu Department of Planning and Permitting in February 2011 entitled “O’ahu Agriculture: Situation, Outlook and Issues.” Efforts were taken to update the information where current figures were readily available. However, data from the 2011 report is used where updated figures could not be found. Data sources at the county level are limited because HDOA and the National Agricultural Statistical Service (NASS) no longer monitor the agricultural industry or conduct in-depth reporting formerly done.

3.3.1 DIVERSIFIED AGRICULTURE

Agriculture has historically been an important activity in Hawai‘i for both subsistence and economic purposes, largely due to factors such as the islands’ moderate climate, year-round growing conditions, and the availability of water.
Beginning with the traditional farming practices of the first Polynesian settlers to the subsequent arrival of American and European interests and the evolution of modern-day Hawai’i, agriculture—and the agricultural interests seeking to maintain viable agricultural operations—has profoundly influenced the history of Hawai’i. This is evidenced in the various events and political, cultural and physical landscapes that define each phase of Hawai’i’s history, the key points which are summarized:

1. Prior to the introduction of Western culture, subsistence agriculture formed the basis of Native Hawaiian society.

2. Private land ownership rights were introduced in the mid-1800s, which enabled foreigners to own land for sugar plantations and other agricultural activities.

3. The Hawaiian Kingdom signed a free trade agreement with the United States in 1875, which allowed duty-free export of sugar and other products grown in Hawai’i in exchange for the U.S. Navy’s use of Pearl Harbor.7

4. The construction of extensive irrigation systems supported the growth of sugar plantations.

5. The overthrow of Hawai’i’s monarchy in 1893 and the resulting annexation to the United States in 1897 was motivated in part by a group of American sugar planters seeking to improve the competitive position of Hawai’i’s sugar industry.

6. The demand for plantation laborers during the second half of the 19th century prompted the influx of Asian and European immigrants to Hawai’i.

7. Following Hawai’i’s induction into the United States in 1959, the five largest sugar producers emerged as the state’s leading corporate entities with subsidiaries in major industries of shipping/importing, and real estate development.

8. A number of towns and urbanized areas throughout the state trace their origins back to the plantation camps (i.e., housing areas) for the immigrant workers.

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7 The Reciprocity Treaty was ratified in 1875.
Beginning in the mid-19th century through the last quarter of the 20th century, O‘ahu’s agricultural industry (and the state as a whole) was heavily dominated by commercial sugar cane and pineapple plantations. The O‘ahu Sugar Company farmed lands in ‘Ewa, Kunia and Wahiawā; Waialua Sugar Company grew sugar cane on the North Shore; and Dole (Castle & Cooke) and Del Monte occupied higher elevation fields in Central O‘ahu and the North Shore to grow pineapple. Most of the Del Monte fields were located to the west of Kamehameha Highway, and except for mid-elevation fields on the North Shore, most of Dole’s fields were east of the highway. With the plantations occupying the major portions of the prime agricultural lands, diversified crops (meaning all crops other than sugarcane and pineapple) were relegated to outlying areas with lesser quality agricultural land.

With stronger mainland and foreign competition diminishing the profitability of Hawai‘i’s sugar cane and pineapple crops in the last quarter of the 20th century, tracts of prime agricultural land were left vacant, allowing new diversified crops to access former plantation lands. The recent composition of the agricultural industry reflects this shift from sugar and pineapple production to diversified agricultural commodities: a new era of smaller farms is growing a variety of crops, including fruits and vegetables for local consumption, niche crops such as coffee and specialty exotic fruits, traditional Native Hawaiian crops, nursery plants, and flowers. International seed corn producers have also purchased or leased large tracts for research and production.

In 1980, approximately 47,900 acres were in crop production on O‘ahu, including about 33,100 acres in sugarcane (69% of total crop acreage), 11,500 acres in pineapple (24%), 1,400 acres in other crops (seed corn, taro, flowers and nursery products, feed crops, etc., amounting to 3%), 1,100 acres in vegetables and
melons (3%), and 800 acres in fruits other than pineapple (2%). In the almost 30 years between 1980 and 2008, the acreage in crop production fell from 47,900 acres in 1980 (16% of the State’s total crop acreage) to approximately 11,000 acres in 2008 (about 12% of the State’s total crop acreage). The loss in production acreage, which reflects the steady decline and eventual closure of sugarcane and pineapple plantations, comprised roughly 37,000 acres, or 77% of the 1980 inventory. Of the 11,000 acres in crop production on O‘ahu in 2008, more than half of the acreage (about 56% or 6,200 acres) was used to grow specialty crops such as seed corn, floriculture and nursery products. Despite the decline in total acreage, the number of acres in vegetable and melon crops increased from 1,100 acres in 1980 to 3,900 acres in 2008, accounting for 35% of O‘ahu’s total crop acreage, while fruits other than pineapple reported a slight increase of 100 acres from 800 acres in 1980 to 900 acres, or about 8% of O‘ahu’ total crop acreage, in 2008 (City and County of Honolulu Department of Planning and Permitting, February 2011).8

Table 3-1 compares the statewide total of farm revenues for 2011 and 2015. The value of crop, livestock, and aquaculture sales in 2015 totaled $604.1 million, compared to 2011 sales which totaled $719.5 million. This represents a decline of $115.4 million from 2011, due to a $156.0 million revenue decline in crop sales that was slightly offset by increases in livestock revenue ($4.3 million) and aquaculture revenue ($36.3 million).

Table 3-1: Farm Revenues, State Totals 2015 and 2011

<table>
<thead>
<tr>
<th>Year</th>
<th>All crops, livestock, aquaculture ($1,000)</th>
<th>Crops</th>
<th>Livestock</th>
<th>Aquaculture</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All crops</td>
<td>Sugar cane</td>
<td>Other crops</td>
<td></td>
</tr>
<tr>
<td>2015</td>
<td>604,052</td>
<td>446,850</td>
<td>48,148</td>
<td>398,702</td>
</tr>
<tr>
<td>2011</td>
<td>719,474</td>
<td>602,881</td>
<td>78,100</td>
<td>524,781</td>
</tr>
</tbody>
</table>


8 The Statewide Agricultural Land Use Baseline 2015 (State of Hawai‘i Department of Agriculture, 2016) provides the most current available data. In 2015, roughly 40,800 acres were in production on O‘ahu, representing 4% of the statewide acreage of 913,300 acres. O‘ahu’s total production included 22,500 acres in crops and 18,400 acres in pasture. Of the 22,500 acres in crop production, diversified agriculture crops accounted for 9,900 acres (44%).
Table 3-2 presents the state’s top twenty agricultural commodities for 2011 and 2016, which is the most current year of data compiled by the United States Department of Agriculture National Agricultural Statistics Service (NASS).

### Table 3-2: Top 20 Commodities, State Totals 2016 and 2011

<table>
<thead>
<tr>
<th>Commodity</th>
<th>Rank 2016</th>
<th>Rank 2011</th>
<th>Value of production ($1,000) 2016</th>
<th>Value of production ($1,000) 2011</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seed crops</td>
<td>1</td>
<td>1</td>
<td>145,300</td>
<td>242,970</td>
</tr>
<tr>
<td>Coffee</td>
<td>2</td>
<td>5</td>
<td>48,856</td>
<td>31,540</td>
</tr>
<tr>
<td>Sugar cane</td>
<td>3</td>
<td>2</td>
<td>48,148</td>
<td>78,100</td>
</tr>
<tr>
<td>Cattle</td>
<td>4</td>
<td>3</td>
<td>45,209</td>
<td>46,369</td>
</tr>
<tr>
<td>Macadamia nuts</td>
<td>5</td>
<td>4</td>
<td>42,000</td>
<td>38,220</td>
</tr>
<tr>
<td>Other aquaculture</td>
<td>6</td>
<td>--</td>
<td>41,361</td>
<td>--</td>
</tr>
<tr>
<td>Algae</td>
<td>7</td>
<td>6</td>
<td>34,349</td>
<td>25,230</td>
</tr>
<tr>
<td>Landscape plant material</td>
<td>8</td>
<td>--</td>
<td>23,064</td>
<td>--</td>
</tr>
<tr>
<td>Papayas</td>
<td>9</td>
<td>8</td>
<td>9,713</td>
<td>9,722</td>
</tr>
<tr>
<td>Milk</td>
<td>10</td>
<td>9</td>
<td>9,318</td>
<td>9,547</td>
</tr>
<tr>
<td>Lettuce</td>
<td>11</td>
<td>12</td>
<td>9,270</td>
<td>5,453</td>
</tr>
<tr>
<td>Cucumbers</td>
<td>12</td>
<td>--</td>
<td>6,490</td>
<td>--</td>
</tr>
<tr>
<td>Palms, potted</td>
<td>13</td>
<td>13</td>
<td>5,737</td>
<td>3,736</td>
</tr>
<tr>
<td>Bananas</td>
<td>14</td>
<td>7</td>
<td>5,592</td>
<td>11,310</td>
</tr>
<tr>
<td>Honey</td>
<td>15</td>
<td>17</td>
<td>4,176</td>
<td>3,137</td>
</tr>
<tr>
<td>Cabbage, head</td>
<td>16</td>
<td>19</td>
<td>3,805</td>
<td>2,790</td>
</tr>
<tr>
<td>Dendrobiums, potted</td>
<td>17</td>
<td>14</td>
<td>3,280</td>
<td>3,400</td>
</tr>
<tr>
<td>Plant rentals</td>
<td>18</td>
<td>--</td>
<td>3,193</td>
<td>--</td>
</tr>
<tr>
<td>Hogs</td>
<td>19</td>
<td>--</td>
<td>2,745</td>
<td>--</td>
</tr>
<tr>
<td>Anthuriums, cut</td>
<td>20</td>
<td>18</td>
<td>2,743</td>
<td>3,115</td>
</tr>
</tbody>
</table>

**TOTAL** | **494,349** | **573,390***

* Four crops ranked in the Top 20 commodities in 2011 were not ranked in 2016. These include: sweet potatoes ranked 10th ($7,348); basil ranked 11th ($6,225); dry onions ranked 15th ($3,267); and potted dracaena ranked 16th ($3,164)

In both 2011 and 2016, the seed industry was the leading agricultural commodity statewide, accounting for $145.3 million (29.4%) of the combined $494.3 million collected for the top 20 commodities. Revenues from coffee accounted for $48.8
million (9.9%) of the $494.3 million total, making coffee the second highest-ranked commodity statewide. Sugar cane production accounted for $48.1 million (9.7%) and was the third-highest ranked commodity statewide in 2016, falling from the second-highest ranked commodity in 2011. This represents a significant decline in sugar cane revenues since 1990, when the farm value of sugar cane accounted for $213.8 million, or 36%, of the statewide revenue of $595.9 million (United States Department of Agriculture National Agricultural Statistics Service, 2009).

### 3.3.2 INCREASED FOOD SELF-SUFFICIENCY

Due to competition across the international marketplace and efficiencies in shipping logistics, Hawai‘i residents consume mostly imported food products that can be grown in better conditions and at lower costs than in the islands. Less than 15,000 acres of the 91,500 acres farmed in 2008 (roughly 16%) were used to supply food to Hawai‘i markets (City and County of Honolulu Department of Planning and Permitting, 2011). Available estimates indicate that Hawai‘i imports between 85-90% of the food consumed locally, while the majority (as much as 85%) of the agricultural crops grown in Hawai‘i is exported (City and County of Honolulu Department of Planning and Permitting 2011). Measurements of self-sufficiency and import dependency from a study of Hawai‘i’s food consumption and supply sources published in *Agriculture and Food Economics* (Loke and Leung, 2013) estimates that only 11.6% of food available for Hawai‘i consumption in 2010 came from local production, and that 88.4% of the available food came from imports. Of the estimated 966.6 million kilograms (1,065,494 tons) available in 2010, which corresponds to a per capita consumption of 657.9 kilograms, 81% was imported from the continental United States, with 6% imported from foreign countries. Study findings indicate that local production supplied 30% of the total market requirement for fresh vegetables, 38% for fresh fruits, 12.4% of the total fresh milk available, and 9.3% for beef, poultry and nuts (Loke and Leung, 2013).

Recent campaigns have fostered public consciousness about the ethic of sustainability and positively raised awareness about minimizing society’s impact on the environment to ensure that resources are available for future generations.
The increased consciousness is yielding a number of societal changes, such as the use of low-impact and renewable technologies and alternative energy sources, improved land use and transportation patterns, and lifestyle modifications to reduce consumption and practice ethical consumerism (University of Hawai‘i at Hilo Geography and Environmental Studies Department, 2012). For Hawai‘i—which is 2,500 miles from the continental United States and is recognized as the most geographically isolated land mass in the world—additional emphasis is placed on increasing self-sufficiency and local self-reliance. This includes using local energy resources to reduce dependence on imported fossil fuels and increasing production and demand for locally-grown food to reduce reliance on imported foods. Within this context, the State is leading a sustainability commitment that seeks to double local food production by 2030, with a goal of 20-30% of the food consumed in Hawai‘i grown locally.

The State Office of Planning has prepared a strategic/functional plan, Food Security and Food Self-Sufficiency Strategy (2012), which outlines objectives, policies and actions to increase the amount of locally grown food consumed by Hawaii’s residents. While former plantation lands have become available for diversified agricultural operations and the consumer demand for locally-grown products continues to grow, systemic challenges prevent the agricultural industry from achieving higher rates of local food production. Such challenges range from the high cost of land and infrastructure which make it difficult for farmers to acquire land, the need for a larger pool of qualified, skilled farmers, and the competitive prices of imported crops. Even for crops that can be grown profitably for local consumption, Hawai‘i’s growers face challenges from a number of factors that limit their market share, including:

1. local varieties that may not be equal or comparable substitutes for imported products (e.g., inexpensive, imported storage onions vs. premium-priced sweet Maui onions)
2. low-cost imported fruits and vegetables make it difficult for farmers to produce profitable crops during the summer months, and
3. depressed pricing and lower profit margins resulting from over-production and fluctuating demand.

3.3.3 URBANIZATION OF AGRICULTURAL LANDS

O‘ahu is the most heavily populated and developed island of the eight main Hawaiian islands, reporting a population in 2010 of roughly 953,200 residents and
337,000 housing units which represents roughly 70% of the State’s total population and 64% of the State’s total housing units (State of Hawai‘i Data Book 2016. Table 21.20: Housing Units, by County: 2000 to 2016). In the 50+ years between 1960 and 2012, O‘ahu’s population nearly doubled from an estimated 500,000 residents in 1960 to roughly 976,000 residents in 2012 (see Figure 3-5 for population trend).

To accommodate population growth, lands that were once used for agricultural purposes have steadily been converted for urban uses. Across the island, stretching outward from Honolulu’s urban core, residential subdivisions have historically replaced productive farming operations (e.g., Kaimukī, Hawai‘i Kai/Kalama Valley, Kailua, Kāne‘ohe, ‘Aiea, Mililani, Kapolei, etc).

Figure 3-6 traces the estimated acreage of State Land Use Districts from 1970 through 2016. Since 1970, an estimated 18,000 acres in the State Agricultural District on O‘ahu were reclassified to the Urban District, and the acreage in the Conservation District remained relatively constant. In 2016, the share of lands in the Urban District accounted for 26% (101,661 acres) of the island’s total land area (386,188 acres), compared to the acreage in the Agricultural and Conservation Districts accounting for 74% of the total land area (more than 284,527 acres).

Monsanto Hawai‘i Agricultural Park, Kunia
SOURCE: www.monsantohawaii.com/community/agriculture/kunia-ag-park/

Kamehameha Schools Punalu‘u Ahupua‘a Farms
SOURCE: www.ksbe.edu/windward_oahu/punaluu/
While the rate of urbanization since 2000 has slowed in comparison to the period between 1970 and 2000 (1,975 acres reclassified to the Urban District between 2000-2012, as compared to 16,788 acres between 1970-2000), recent decisions to urbanize large tracts of agricultural lands in Central O‘ahu and ‘Ewa spurred community concerns about the need to protect remaining agricultural lands. Additional questions about the City’s long-standing directed growth policy are also being raised, as the recent urbanization decisions are consistent with City policy to develop within the community growth boundary in order to preserve high-quality farmland in Kunia, the North Shore and the rural communities (see Section 3.1).

*Figure 3-5: Resident Population, 1900-2012*
### Figure 3-6: Inventory of O‘ahu State Land Use Districts

<table>
<thead>
<tr>
<th>Year</th>
<th>Urban District</th>
<th>AG. District</th>
<th>Conservation District</th>
<th>Timeframe</th>
<th>Total Acres Urbanized</th>
</tr>
</thead>
<tbody>
<tr>
<td>1975</td>
<td>85,186</td>
<td>145,206</td>
<td>154,908</td>
<td>1980-1990</td>
<td>7,349</td>
</tr>
<tr>
<td>1980</td>
<td>86,851</td>
<td>143,555</td>
<td>154,894</td>
<td>1990-2000</td>
<td>5,486</td>
</tr>
<tr>
<td>1985</td>
<td>89,497</td>
<td>141,849</td>
<td>154,842</td>
<td>2000-2016</td>
<td>1,975</td>
</tr>
<tr>
<td>1990</td>
<td>94,200</td>
<td>137,142</td>
<td>154,846</td>
<td>TOTAL</td>
<td>18,763</td>
</tr>
<tr>
<td>1995</td>
<td>98,214</td>
<td>131,356</td>
<td>156,618</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2000</td>
<td>99,686</td>
<td>129,884</td>
<td>156,618</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2005</td>
<td>100,730</td>
<td>128,839</td>
<td>156,619</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td>101,051</td>
<td>128,523</td>
<td>156,614</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>100,894</td>
<td>128,465</td>
<td>156,829</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2012</td>
<td>101,661</td>
<td>127,698</td>
<td>156,829</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

![Graph showing the inventory of O‘ahu State Land Use Districts from 1970 to 2016.](image-url)
3.4 INVENTORY OF CURRENT IAL DESIGNATIONS

Roughly 134,000 acres statewide have been designated as IAL as of December 2017 (HDOA 2018), which accounts for a small percentage (less than 7%) of the total acreage statewide in the State Agricultural District (1,928,034 acres statewide). On O‘ahu, roughly 12,280 acres have already been designated as IAL, including land owned by Castle & Cooke Homes Hawai‘i, Kamehameha Schools, Monsanto Company and Hartung Brothers Hawai‘i. Lands with an IAL designation on O‘ahu are identified in Figures 4-1 and 4-2. Table 3-3 lists the landowner-initiated petitions that have been approved by the LUC. None of the approved voluntary petitions to date have exercised the “85/15 incentive” (see Section 1.2.3).

Table 3-3: Inventory of Acres Designated as IAL, Statewide (July 2018)

<table>
<thead>
<tr>
<th>Island, Region</th>
<th>Landowner /Farm Name</th>
<th>Acres</th>
<th>LUC Approval</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kaua‘i, Kōloa</td>
<td>Alexander &amp; Baldwin/Kauai Coffee</td>
<td>3,869</td>
<td>March 2009</td>
</tr>
<tr>
<td>Kaua‘i, Kōloa</td>
<td>Māhāulepū Farm (Grove Farm)</td>
<td>1,533</td>
<td>May 2011</td>
</tr>
<tr>
<td>Kaua‘i, Hā‘upu/Lihu‘e</td>
<td>Grove Farm Company</td>
<td>11,206</td>
<td>February 2013</td>
</tr>
<tr>
<td>Kaua‘i, Lumaha‘i/Waipā</td>
<td>Kamehameha Schools</td>
<td>190</td>
<td>January 2014</td>
</tr>
<tr>
<td>Kaua‘i, Makaweli</td>
<td>Robinson Family Partners</td>
<td>20,888</td>
<td>September 2016</td>
</tr>
<tr>
<td>O‘ahu, Waialua, Mililani and Whitmore</td>
<td>Castle &amp; Cooke Homes Hawai‘i</td>
<td>679</td>
<td>March 2011</td>
</tr>
<tr>
<td>O‘ahu, Punalu‘u and North Shore</td>
<td>Kamehameha Schools</td>
<td>9,591</td>
<td>March 2015</td>
</tr>
<tr>
<td>O‘ahu, Kunia</td>
<td>Monsanto Company</td>
<td>1,550</td>
<td>October 2017</td>
</tr>
<tr>
<td>O‘ahu, Kunia</td>
<td>Hartung Brothers Hawai‘i</td>
<td>463</td>
<td>June 2018</td>
</tr>
<tr>
<td>Maui, Central</td>
<td>Alexander &amp; Baldwin/HC&amp;S Plantation</td>
<td>27,294</td>
<td>June 2009</td>
</tr>
<tr>
<td>Hawai‘i, South Kohala</td>
<td>Parker Ranch</td>
<td>56,772</td>
<td>September 2011</td>
</tr>
</tbody>
</table>

TOTAL ACREAGE 134,035

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4. RECOMMENDATIONS FOR IAL DESIGNATION

This chapter presents maps of the study area and the City’s recommendations for lands to be considered for IAL designation, including a summary of the public comments received during preparation of the City’s recommendations. The City Council will review the City’s recommendations and following the Council’s proceedings and adoption via resolution, will submit its recommendations to the LUC for final approval. In anticipation of the public dialogue that will ensue at the City Council and LUC hearings, this chapter also documents the issues and concerns that dominated the community consultations and are likely to continue as topics of discussion during future public venues.

4.1 MAP OF RECOMMENDATIONS FOR IAL DESIGNATION

The City’s recommendations for IAL are the result of a strategic, resource-based mapping exercise to inventory land with the qualities necessary to support active agricultural use. The recommendations articulate a long-term vision for the high-quality farm land most suited for farming. Secondly, the recommendations provide policy guidance to reconcile the varied quality of land classified in the State Agricultural District (since not all the land in the State Agricultural District is suitable for farming).

Figure 4-1 is a map of the study area showing the land “eligible” to be considered for IAL designation by the county; meaning the land that meets the conditions of ownership and land use classifications specified in Chapter 205, HRS (see Section 1.3.3 “Conditions of Eligibility” for study area exclusions). The study area consists of approximately 63,800 acres that passed the initial screening process, which represents approximately 17% of O’ahu’s total land area. An approximate 12,300 acres currently designated as IAL through the landowner-initiated process are shown (3% of O’ahu’s total land area), alongside an additional 11,400 acres in the State Land Use Agricultural District owned by the State of Hawai‘i (3% of O’ahu’s total land area). Ineligible land, or land excluded from the county designation process, represent some 298,700 acres, or 77% of the island-wide total.

- Help farming be an economically viable activity
- Ensure that the best of O‘ahu’s high-quality farm land is actively used for agricultural purposes
- Guide decision-making in the State Agricultural District

Long-Term Goals of IAL
Figure 4-2 is an island-wide map showing the City’s recommendations for IAL through the county-designation process. Figures 4-3 through 4-8 are regional profiles showing the recommendations for IAL at a closer view. The current map includes roughly 45,400 acres recommended for IAL designation, which corresponds to roughly 72% of the study area and 12% of O‘ahu’s total land area. While the majority of the recommended land is in Central O‘ahu (Mililani, Kynthia and Wahiawa) and the North Shore (Hale‘iwa and Waialua), there are several large tracts found along the Wai‘anae coast and in Ko‘olau Loa and Ko‘olau Po. A list of the TMK parcels being recommended for IAL is presented in Appendix H; future revisions are possible pending City Council proceedings.

Public input into the preparation of the City’s recommendations for IAL involved presentation of the preliminary (draft) recommendations at two community meetings (January 2017, Hale‘iwa and Kapolei), a mail-out to inform affected landowners, and a 60-day public comment period. Written comments received during the public comment period were compiled and analyzed, and recommendations were refined accordingly. A total of 93 written comments were received from various government agencies, community organizations and landowners (see Table 4-1). Of the 93 comments, nearly 80% (74) were from landowners, 12% (11) from government agencies, and the remaining 8% (8) represented concerned individuals or community organizations. A summary of the written comments and the City’s response/action is provided in Appendix E.

Of the 74 landowners that responded with written comments, 90% (67) expressed dissatisfaction with the preliminary IAL designation and requested exclusion from the City’s IAL process. Landowners seeking to be excluded from the City’s IAL process offered specific rationale to support their request, although a recurring theme among landowners was that their land was not in current agricultural use or not intended for future agricultural use, or did not have the qualities to support productive agricultural use. After reviewing the requests on a case-by-case basis, the City complied with more than half of the landowner requests (57%, 38 of 74) for exclusion.

Table 4-1: Inventory of Public Comments

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>COUNT</th>
</tr>
</thead>
<tbody>
<tr>
<td>State agencies</td>
<td>4</td>
</tr>
<tr>
<td>County agencies</td>
<td>7</td>
</tr>
<tr>
<td>Individuals</td>
<td>7</td>
</tr>
<tr>
<td>Community organizations</td>
<td>1</td>
</tr>
<tr>
<td>Landowners (individuals + corporations)</td>
<td>74</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>93</strong></td>
</tr>
</tbody>
</table>
Lāʻie
'Aiea
Mā'alōli Waipiʻo
Waimea
Mā'kaha
Kailua
dHahuku
Kaʻaʻawa
Hauʻula
Punaluʻu
Kēōkea
Kahaluʻu
Haleʻiwa
Waiʻanae
Wahiawā
Kāneʻohe
Kailua
Walāhole
Waikane
Waimānalo
Honolulu
Waimānalo
Pearl City
Mililani Town
Mokulēʻia
Study Area
Lands subject to City screening for county-designated IAL (63,855 acres)
Excluded from Study Area
Existing designation as IAL (per LUC Declaratory Rulings) (12,283 acres)
Public lands pending State screening for IAL designation (11,381 acres)
Other excluded areas that did not meet conditions of eligibility

Figure 4-1
Study Area

City and County of Honolulu
Department of Planning and Permitting
Report on the Oʻahu Important Agricultural Land Mapping Project | August 2018
Figure 4-2
O'ahu Lands Recommended for IAL Designation: Island of O'ahu

Report on the O'ahu Important Agricultural Land Mapping Project | August 2018
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City's recommendations for IAL designation
Existing designation as IAL (per LUC Declaratory Rulings)
Public lands pending State screening for IAL designation

Figure 4-3
O'ahu Lands Recommended for IAL Designation: Central O'ahu
Report on the O'ahu Important Agricultural Land Mapping Project | August 2018

City and County of Honolulu
Department of Planning and Permitting
City's recommendations for IAL designation
Existing designation as IALs (per LUC Declaratory Rulings)
Public lands pending State screening for IAL designation

Figure 4-4
O'ahu Lands Recommended for IAL Designation: 'Ewa
Report on the O'ahu Important Agricultural Land Mapping Project | August 2018
City’s recommendations for IAL designation

Existing designation as IAL (per LUC Declaratory Rulings)

Public lands pending State screening for IAL designation

Figure 4-5

O‘ahu Lands Recommended for IAL Designation: Wai‘anae

Report on the O‘ahu Important Agricultural Land Mapping Project | August 2018
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City’s recommendations for IAL designation

Existing designation as IAL (per LUC Declaratory Rulings)

Public lands pending State screening for IAL designation

Figure 4-7

O‘ahu Lands Recommended for IAL Designation: Ko‘olau Loa
Report on the O‘ahu Important Agricultural Land Mapping Project | August 2018

City and County of Honolulu
Department of Planning and Permitting
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A handful of landowners who submitted comments (8%, 6 of 74) concurred with the preliminary IAL designation and expressed a desire to have their land designated as IAL. After reviewing the requests on a case-by-case basis, the City complied with five of the six landowner requests to be included in the City’s IAL process. The only landowner request for IAL designation that was not met involved a parcel in the country zoning district, in which case the subject parcel and the entire subdivision surrounding the parcel was removed from the City’s IAL recommendations because the country zoning was deemed inconsistent with the intent of the IAL designation.

The remaining comments (20%, 19 of 93) were from stakeholders who did not own land being recommended for IAL, including government agencies, community organizations, and concerned individuals. These comments were generalized and not specific to any of the individual parcels listed in the preliminary recommendations for IAL. Comments were mostly related to the City’s land use and development policies, and the planning process being used to complete the mapping (see Appendix E for summary). Common themes reflected in the comments are listed as follows:

- Important to protect and preserve all land currently classified and/or zoned for agricultural use, particularly those which are not included in the City’s recommendations for IAL designation
- Expand the inventory of land recommended for IAL designation to include land formerly used for agriculture that is currently in the State Urban District and planned for future development (Ho’opili and Koa Ridge project areas)
- Allow for more community outreach and opportunities for public discourse, and greater transparency, in the planning process
- Use IAL as a mechanism to promote food security and self-sufficiency
- Welcomes the City’s effort to comply with the legal mandate for county-designated IAL.

Taking into consideration the input received through the public comments, the City conducted a thorough review of the preliminary recommendations and identified a number of refinements to prepare the final iteration for City Council approval. In addition to verifying the accuracy of the recommendations for consistency with the priority weighted criteria, the City’s review sought to ensure that the recommendations demonstrated a critical mass—or concentration—of
agricultural land. Revisions made to the preliminary recommendations are listed as part of the summary of comments and actions presented in Appendix E. Parcels were either added or removed from the inventory of IAL recommendations based on comments from landowners or the City’s identification of an inconsistency or oversight. While a handful of the revisions were parcels that were added because of contextual attributes or proximity to other IAL-designated parcels (i.e., critical mass), most of the revisions were parcels that were removed because the City agreed with the landowner’s justification; the parcel was found to be currently designated/zoned or planned for uses other than agriculture; or the land did not demonstrate the priority weighted criteria or proximity to other agricultural lands to be considered IAL.

4.2 RELATED ISSUES AND CONCERNS

The section outlines the issues and concerns identified during the community consultations that are important considerations for the future of O’ahu’s agricultural industry, and are likely to continue as topics of discussion for community members participating in the upcoming City Council and LUC proceedings related to the county designation process. These issues and concerns, while relevant to the ongoing public debate and conflicting perspectives concerning the future use of O’ahu’s agricultural lands, were beyond the scope of the IAL mapping project and were not addressed as part of the City’s focused effort to develop recommendations for county-designated IAL. Familiarity with these issues and concerns will be helpful in preparation for the next phase of the designation process and the public dialogue that may unfold at the City Council.
### 4.2.1 EXISTING FARMS IN THE STATE URBAN DISTRICT

Per Chapter 205, HRS, land must be classified in the State Agricultural District to be designated as IAL. This requirement automatically precludes existing farms situated on land in the State Urban District from being eligible for the IAL designation and the incentives that accompany the designation.

While some of the existing farms in the State Urban District are on land identified for future urbanization according to the City’s current land use policies (such as lands in Central O‘ahu and ‘Ewa), a number of small farms are on land no longer planned for urban uses by the State or the City, on land intended for long-term agricultural and open space use (largely because previous development proposals for these areas have been dropped and the Urban classification has been retained). These pockets of agricultural areas in Kahalu‘u, Hawai‘i Kai, Pālolo Valley and Wai‘anae are typically characterized by small, family-owned operations run by farmers who live on their land and rely on their farms as part of their livelihood. For these small farms, conformance with the state land use classification system has not been a major deterrent, since the City’s land use policies and the community’s sentiments generally support farming in these areas. However, considering that the purpose of IAL is to promote viable agriculture, proponents suggested that farms in the State Urban District be granted access to the IAL incentives as a means of additional financial assistance and to support the continuation of these farms.\(^9\) Under the existing structure of the State land use system, farms in the Urban District that want to access the IAL incentives are required to exercise one of three actions:

- Relocate operations from land in the State Urban District to the State Agricultural District
- Petition the LUC to reclassify the land to the State Agricultural District, followed by voluntary landowner petition for IAL designation, or
- Dedicate lands for perpetual agricultural use via an agricultural or conservation easement. Although such easements provide tax relief, they do not affect a landowners’ ability to qualify for IAL-related incentives.

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\(^9\) The IAL incentives are not available to farms in the State Urban District because public funding mechanisms have resource limitations, and it is necessary to focus public investment (i.e., incentives that support infrastructure improvements) on “important” lands.
Proponents also suggested a need to inventory the existing farms in the State Urban District and the acreage currently used for agriculture, and conduct a survey of landowners/farmers in the State Urban District to identify how many would be interested in pursuing an IAL designation. Such a project would be a rigorous, labor-intensive effort involving extensive public outreach.

4.2.2 IAL DESIGNATION OF PUBLIC LANDS

Chapter 205-44.5, HRS assigns HDOA and DLNR joint responsibility to identify State-owned lands that should be designated IAL and to prepare maps delineating those lands (see Section 1.3.3. Designation of Public Lands). Although the law specifies a December 31, 2009 date for completion of this process, the State has been unable to comply with this requirement due to funding deficiencies and delays associated with land transfers between HDOA and DLNR.

Although there is no statutory requirement for the county’s mapping process to consider or await the completion of the State’s identification and designation of state-owned IAL, identification of the public lands with potential to be designated as IAL can be useful for decision-making when identifying county-designated IAL. Of the estimated 80,000 acres of public lands on O'ahu, approximately 14 percent, or 11,400 acres, is agricultural land eligible to be considered for IAL. A complete inventory of all lands on O‘ahu with IAL potential (both privately-owned and public lands) would help to ensure contiguous blocks of agricultural land units that contribute to the critical mass, and also to discourage the fragmentation of IAL which is consistent with the State’s policies for IAL (per Chapter 205-43, HRS).

4.2.3 FOOD SELF-SUFFICIENCY AND FOOD SECURITY

Perspectives about food self-sufficiency vary, from those who want to promote agriculture as a means to achieve island-wide (100 percent) food self-sufficiency and reduce Hawai‘i’s dependence on imported food, to those who argue that food self-sufficiency would be unprofitable and impractical for many crops as well as risky for food security. (If a hurricane or severe storm were to wipe out much of the supply of local products, logistics would not be in place for off-island suppliers to quickly meet the demand for imported products.)

In support of increased food self-sufficiency and food security, proponents have expressed concerns about overdevelopment and the potential impacts resulting from the conversion of agricultural land in ‘Ewa and Central O’ahu for planned master-planned residential developments (i.e., Ho‘opili and Koa Ridge). In general,
proponents of food self-sufficiency and food security also want to promote agricultural production that prioritizes growing food for local consumption (as opposed to export crops, ornamentals, or non-agricultural uses). Ensuring the long-term protection and availability of all lands in agricultural use—including those identified by long-range plans for urban uses and those not designated as IAL—is also viewed as a valuable strategy to improving both food self-sufficiency and food security.

In contrast, some policy analysts caution against the potential consequences of achieving significant food self-sufficiency and food security, as the economic costs may outweigh the benefits. An assessment of the benefits and risks associated with self-sufficiency and security included in a report on the situation and outlook for agricultural land on O‘ahu (City and County of Honolulu Department of Planning and Permitting, February 2011) indicates that the agricultural industry would require substantial government subsidies to attain high levels of self-sufficiency and food security, which may prove to be unaffordable in the long term.

Since Kaua‘i’s IAL Study was structured to emphasize food self-sufficiency as a condition for decision-making, there were a number of questions about the City’s willingness to follow Kaua‘i’s model or to shift the focus of the study to food crops. The City favored an inclusive approach that was impartial to the different types of agricultural producers and did not differentiate between food crops and other crops, largely under the assumption that land currently used for other crops may be converted to support food crops in the future. The preference for impartiality, without an emphasis on food self-sufficiency, is consistent with the objective of the IAL program “to identify and plan for the maintenance of a strategic agricultural land resource base that can support a diversity of agricultural activities and opportunities” (Chapter 205-42(b), HRS). Accordingly, the crop type is secondary to the physical characteristics of the land when determining IAL.

Conducting an island-wide food self-sufficiency study is a complicated, research-driven task that is made difficult by the lack of available data. (Federal non-disclosure requirements limit access to the data needed for a comprehensive analysis, and some major farmers do not disclose their production data). While an island-wide study may be desirable, examining food self-sufficiency as a statewide issue may be more appropriate. Unlike an independent study, a comprehensive assessment allows for a coordinated effort that balances the needs of all the islands. More importantly, a statewide comprehensive analysis recognizes the
state’s long-standing economic strategy to use O’ahu as a primary or secondary market for agricultural exports from the neighbor islands, where major changes in island food production can seriously affect farming activity, production levels, employment and the supporting industries on other islands.

4.2.4 COUNTY INCENTIVES

Chapter 205-46, HRS provides broad guidelines for incentives at both the State and county level, and a framework for state-administered incentive programs (see Section 1.3.4). To date, although the City has focused its’ efforts on preparing recommendations for IAL identification, efforts are underway to explore suggestions and appropriate additional county incentives that can be applied to IAL-designated properties. The City is pragmatic about the practicality of the incentives, as much of the suggested additional City incentives could result in a loss of revenues needed for infrastructure maintenance and improvements, potentially leading to increases in fees and/or taxes affecting all taxpayers to replenish the loss revenues. The City currently has a number of programs available that benefit properties in agricultural use (e.g., lower property tax rate for agricultural land, property tax exemptions for certain infrastructure improvements, special water rate for agricultural properties). The City is currently collaborating among its agencies to devise additional benefits. Preference is being given to incentives that do not require significant financial outlays by the City.

IAL incentives are generally intended to benefit properties that have received an IAL designation. However, agricultural businesses that own or lease 50% of their land as IAL land, may also benefit from the IAL incentives (see State Tax Instructions, Form N-344). Certain classes of agricultural lands, including active agricultural lands in the State Urban District and lands being used for agricultural support functions (i.e., agricultural processing facilities and agricultural worker housing), are not able to qualify for an IAL designation because they do not meet the IAL eligibility requirements. Without the IAL designation, landowners and farmers who use these lands would not receive the benefits of the incentives unless they own or lease IAL lands in the amount which is greater than 50% of the area of their operations Proponents suggested that the county incentives program be expanded to incorporate these unique types of scenarios, particularly because there is a need to promote the economic viability of such agricultural operations as well as to ensure that such areas are available for long-term agricultural use.
4.2.5 FUTURE UNANTICIPATED CONSEQUENCES OF IAL

Comments and questions received during the various meetings and written comment periods suggested a general sense of distrust and unfamiliarity with the IAL initiative. Despite the City’s community outreach efforts to inform and educate the public about the intricacies of the designation, participants that took part in the community consultations were not certain that the IAL designation would be an effective tool to promote the agricultural industry. Concerns raised regarding the possibility for future unanticipated consequences as a result of the IAL program, including the potential for undesirable, negative impacts to land use, are summarized:

- Landowners need assurances that additional use restrictions will not be imposed on the IAL classification. Landowners are concerned that the IAL classification adds another layer of stringent regulation to Hawai‘i’s land use system.

- Is it possible that the IAL designation will encourage development of land not classified as IAL? What are the safeguards to ensure that developers do not find it easier to urbanize and rezone “unimportant” agricultural land?

- How will the IAL designation affect the cost of owning land (including property taxes), land values, and the future development potential of the land? Additional information about the availability of state and county agricultural initiatives that support the economic viability of IAL-designated properties is needed.

Besides the City and County of Honolulu, Kaua‘i is the only other county to prepare recommendations for IAL designation. However, based on the City’s understanding, Kaua‘i County determined that it has fulfilled its IAL obligations, and Honolulu will be the first county to advance to the next step of the county designation process.

4.2.6 PUBLIC PARTICIPATION IN THE PLANNING PROCESS

Controversy and difficulty finding consensus are typical of public planning processes in today’s modern world. Likewise, because the general public has grown to expect a high level of involvement in both planning and decision-making processes, outspoken criticism can be expected when processes do not provide for public outreach and participation at levels that satisfy the expectations of the
general public. Within this context, proponents in favor of greater participation expressed a desire for more outreach, additional opportunities for public input, and increased transparency in the decision-making process. Specifically, critics of the planning process wanted more community meetings spread out across the island, more outreach targeting small farmers, and more collaboration and consultation with landowners during the initial stages of the process before the public meetings. The dissatisfaction with the City’s planning process was coupled with a fundamental distrust of government initiatives and a perception that public sentiments were not being considered.

The composition of the technical advisory committee was also a concern. Community members questioned the membership selection process, the interests represented by the TAC members, and the qualifications of the members. Concerns reflected biases against corporate farming interests, preferences to include more small farmers and organic farmers, and dissatisfaction about how individual landowners were represented. Recognizing the instrumental role that the TAC played in formulating the resource maps and the TAC’s influence on the selection of the priority criteria, the City convened the TAC to include a broad cross-section of agricultural industry interests with balanced representation between small farmers, family farms and corporate farming operations. The composition of the TAC was also based on the statutory requirements established in HRS § 205-47(b), which specified representation from certain interest groups, including “landowners, department of agriculture, Hawai’i Farm Bureau Federation, US Department of Agriculture Natural Resources Conservation Service, the office of planning, and other agricultural organizations and interest groups.”
REFERENCES


County of Hawai‘i Department of Research and Development. *Hawai‘i County Food Self-Sufficiency Baseline 2012 Report.* Prepared by Jeff Melrose and Donna Delpate, University of Hawai‘i at Hilo Geography and Environmental Studies Department. 2012.

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Report on the O‘ahu Important Agricultural Land Mapping Project


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