

HAWAII AGRIBUSINESS PLAN JULY 2023



Agribusiness Development Corporation

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INTRODUCTION

The 2022-2023 Fiscal Year has been a year of great change for the State of Hawaii Agribusiness Development Corporation (ADC). Act 219, Hawaii Session Laws 2022 took effect July 1, 2022. Through Act 219, the Legislature redefined ADC's mission, eliminated responsibilities that duplicate efforts of other state agencies, created an internal system of accountability, and recognized the importance of having a plan, with benchmarks and long-term goals. One significant change was the transfer of ADC's administrative attachment from the Hawaii Department of Agriculture (HDOA) to the Department of Business, Economic Development, and Tourism (DBEDT). The Legislature views agriculture as an important economic driver and felt that associating ADC with other innovative industries through DBEDT would help achieve the state's goal of increased production and consumption of local foods and products. ADC will continue to collaborate with HDOA on agriculture related programs.



The sudden and unexpected passing of ADC's long time executive director **James Nakatani** in April 2023 has created a void in ADC's operations that will be hard to fill. Mr. Nakatani has served the agricultural community through working with his family watercress farm, serving as president of the Hawaii Farm Bureau, and Director of HDOA. Mr. Nakatani's knowledge, foresight, and leadership will be greatly missed.

But with loss comes an opportunity for change and creating a new agribusiness plan at this time has become more important than ever. To ensure the plan is done right, ADC has enlisted the aid of the Office of Planning and Sustainable Development, an agency whose mission is to conduct strategic planning, identify and analyze significant issues, problems, and opportunities, and formulate strategies and alternative courses of action in response to identified problems and opportunities. The Legislature's amendment of the Hawaii Agribusiness Plan has provided ADC with a roadmap to success and ADC intends to use this tool to increase agricultural products for local consumption.

INTRODUCTION (cont.)

In Search of the Hawaii Agribusiness Plan

Section 163D-5, Hawaii Revised Statutes, the Hawaii Agribusiness Plan, as amended by Act 219, reads as follows:

- (a) The corporation shall prepare and post on its website the Hawaii agribusiness plan, which shall define and establish goals, objectives, policies, and priority guidelines for its agribusiness development strategy. The plan shall include but not be limited to: (1) An inventory of agricultural lands with suitable adequate water resources that are or will become available; provided that the inventory of agricultural lands under this paragraph shall be agricultural lands within the purview of the corporation that can be used to meet present and future agricultural production needs; (2) An Inventory of available agricultural infrastructure, such as Irrigation systems, drainage systems, processing facilities, and other accessory facilities, that are controlled by the corporation; and (3) Strategies for federal, state, county, and community stakeholder actions that will promote the development and enhancement of Hawaii's agricultural Industries.
- (b) The Hawaii agribusiness plan goals shall have specific one-year, five-year, and ten-year objective and measurable outcomes that prioritize local food production from the corporation's leases or licenses. The objectives and outcomes shall include annual performance goals and measures that the corporation shall be evaluated on annually.
- (c) The Hawaii agribusiness plan shall include metrics, timeframes, and budget expectations as part of the corporation's agribusiness development strategy.
- (d) The corporation shall update the Hawaii agribusiness plan no later than July 1, 2023, and every five years thereafter, and shall Incorporate the plan in its annual report to the governor and the legislature as provided in section 163D-19.

INTRODUCTION (cont.)

OPSD's Plan to Transform Hawaii's Agriculture

The Office of State Planning, now known as the Office of Planning and Sustainable Development (OPSD), created the Hawaii 2050 Sustainability Plan, which was published in January 2008. The 2050 Sustainability Plan identified the goal of increased production and consumption of local foods and products, particularly agricultural products. This goal was based on the fact that only 15% of the food consumed in Hawaii was actually grown in Hawaii. Increasing local agricultural production was seen



as a way of helping farms thrive, preserve green space and a rural way of life, and make Hawaii less vulnerable to external catastrophes. The 2050 Sustainability Plan also noted that focusing on the agricultural sector would create a more diverse and resilient economy.

In 2018, OPSD issued its *Hawaii 2050 Sustainability Plan Ten Year Measurement Update (2008-2017)*. The Hawaii 2050 Sustainability Plan is to be evaluated every ten years. The Updated 2050 Sustainability Plan reviewed the data collected over the course of ten-years to measure Hawaii's progress toward sustainability. The 2018 update reported that local agriculture had marginally increased, but that Hawaii still imported 80-90% of its food, making Hawaii particularly vulnerable to natural disasters, global events, and shipping disruptions. This vulnerability became quite apparent during the global pandemic that hit Hawaii in early 2020.

In light of the extensive research and planning OPSD has already devoted to guiding Hawaii's agricultural industry to increased production, ADC looks forward to working with OPSD in consulting with community and industry stakeholders in developing a more detailed and granular updated Agribusiness Plan by December 2024.

ADC FRAMEWORK

for Increased Agricultural Productivity Land Acquisition & Development

The ADC manages 22,000 acres on the island of Kauai and Oahu. Of the 22,000 acres it manages, 13,900 acres have commercial value and are considered ideal lands for agriculture production. The remainder is comprised of gulches, ravines, ditches, and roadways. To date, ADC has issued license agreements and permits to agriculture operations for long-term use of 8,000+ acres, which represents over 60% of its total land inventory. Keeping large tracts of former plantation lands in agriculture and providing long-term licenses and leases to agricultural operations are the key elements to building the agriculture sector of the future.

GOAL

Acquire and develop productive agricultural lands for agricultural development

OBJECTIVES

1. To maximize utilization (100% occupancy) of ADC agricultural land resources for diversified agribusiness.
2. To implement the State's goal to double local food production and consumption.
3. To reduce food imports.
4. To acquire and make agriculture lands available for production.
5. Educate the public on the importance of local agriculture and farming to our state economy and food supply.



ADC FRAMEWORK FOR INCREASED AGRICULTURAL PRODUCTIVITY LAND ACQUISITION & DEVELOPMENT (cont.)

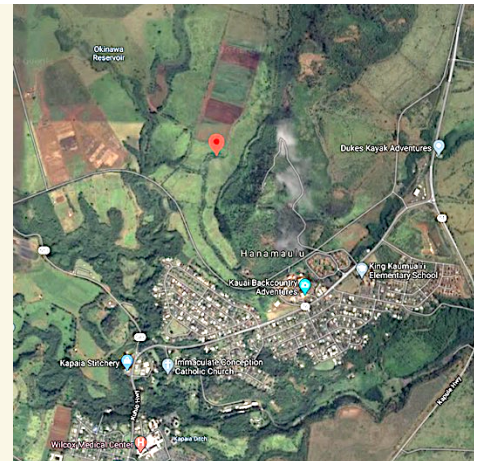
ACTION ITEMS

OAHU

- Acquire additional acres into ADC land inventory (5 to 7 years). Selected parcels will be purchased to protect agriculture status and availability.
- Convert an additional 1,000 acres of vacant land to productive diversified agriculture status (1 to 3 years). Selected parcels will be targeted for land preparation including tree clearing and amending the conditions of the soil.
- Develop and implement a crop rotation framework that includes both livestock and crops (1 to 3 years).
- Develop facilities and infrastructure to accommodate agriculture activities (harvesting, packing, processing and distribution) (5 to 7 years).
- Implementation of new land management software to help better manage ADC properties and communicate with tenants.

KALEPA, KAUAI

- Convert 500 acres to productive diversified agriculture status (1 to 3 years). Selected parcels will be targeted for land preparation including tree clearing and amending the conditions of the soil.
- Implement a crop rotation program (1 to 3 years). Develop a crop rotation framework that includes both livestock and field crops.



KEKAHA, KAUAI

- Convert 1,000 acres to productive diversified agriculture status (1 to 3 years). Selected parcels will be targeted for land preparation including tree clearing and amending the conditions of the soil.



IRRIGATION SYSTEM

Development & Maintenance

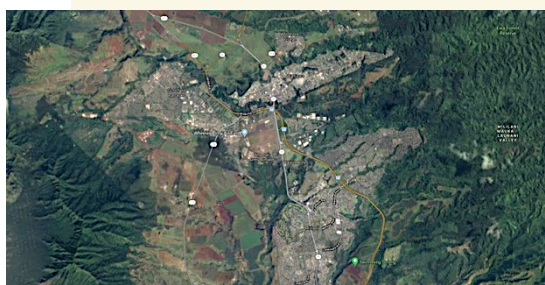
In addition to agricultural lands on Kauai and Oahu, the ADC also manages the Waiahole Water System. The ADC continues to work with its farmers to improve and maintain critical infrastructure necessary to support agricultural operations. In addition to ongoing maintenance of existing infrastructure, the ADC is also developing new infrastructure and improving water storage capacity by constructing reservoirs and storage ponds to ensure farmers have a consistent and affordable supply of irrigation water.

GOAL

Assure the continued availability of adequate, reasonably priced water to lands to accommodate present and future agricultural activities.

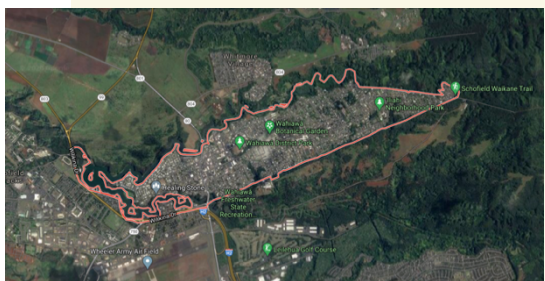
OBJECTIVES

1. To develop a master irrigation plan which incorporates system development, watershed management and water recycling.
2. To maintain and improve the efficiency of existing irrigations systems.
3. To expand agricultural water resources.



CENTRAL OAHU

- Implement the Central Oahu Watershed Management Plan (5 to 7 years).
- Rehabilitate the existing Waiahole Water System which includes constructing a reservoir, renovating reservoirs 155 and 225, back-up well development, enclosing high-risk sections, and improving data gathering (1 to 5 years).



WAHIAWA, OAHU

- Incorporate R-1 water from the Wahiawa Wastewater Treatment Plant into the agriculture system (5 to 10 years).
- Expand system capacity by acquiring and incorporating 3 existing wells (1 to 3 years).
- Develop additional reservoirs to accumulate surface water and incorporate into the agriculture system (2 to 5 years).

IRRIGATION SYSTEM DEVELOPMENT & MAINTENANCE (cont.)

ACTION ITEMS

KALEPA, KAUAI

- Work with the Department of Land and Natural Resources to rehabilitate the Hanamaulu ditch portion of the existing irrigation system (2 to 5 years).
- Improve the Christian Crossing Bridge which provides access for standard trucks and heavy equipment (1 to 3 years). This project began in 2021 and is near completion.

KEKAHA, KAUAI

- Pressurize the existing irrigation system (1 to 5 years). The structural materials required to implement this project has been purchased. Installation is expected to begin in 2023.
- Rehabilitate the existing irrigation system including repair of the hydro-electric plant (2 to 5 years).
- Work with the Kekaha Agriculture Association to improve the Kekaha Bridge which provides access for standard trucks and heavy equipment (1 to 3 years).



Improve Components of the

FOOD SYSTEM

A food system includes all processes and infrastructure involved in feeding a population: growing, harvesting, processing, packaging, transporting, marketing, consumption, and disposal of food and food-related items. It also includes the inputs needed and outputs generated at each of these steps. A food system operates within and is influenced by social, political, economic and environmental contexts. It also requires human resources that provide labor, research and education.

GOAL

To improve the productivity of agriculture operations by providing brick and mortar facilities, as needed, and to promote efficient profitability by enticing the development of applied research and innovation on State lands and in State facilities.

OBJECTIVE

Identify and deploy viable new techniques and tools to improve crop and livestock yield and marketability.

ACTION ITEMS

Research & Development:

- Greenhouse development to lower costs and implement new technology.
- Plant breeding to develop new varietal and cultivar annually.
- Improve the handling and processing of papaya.
- Increase the 'ulu industry to productive scale.

Marketing:

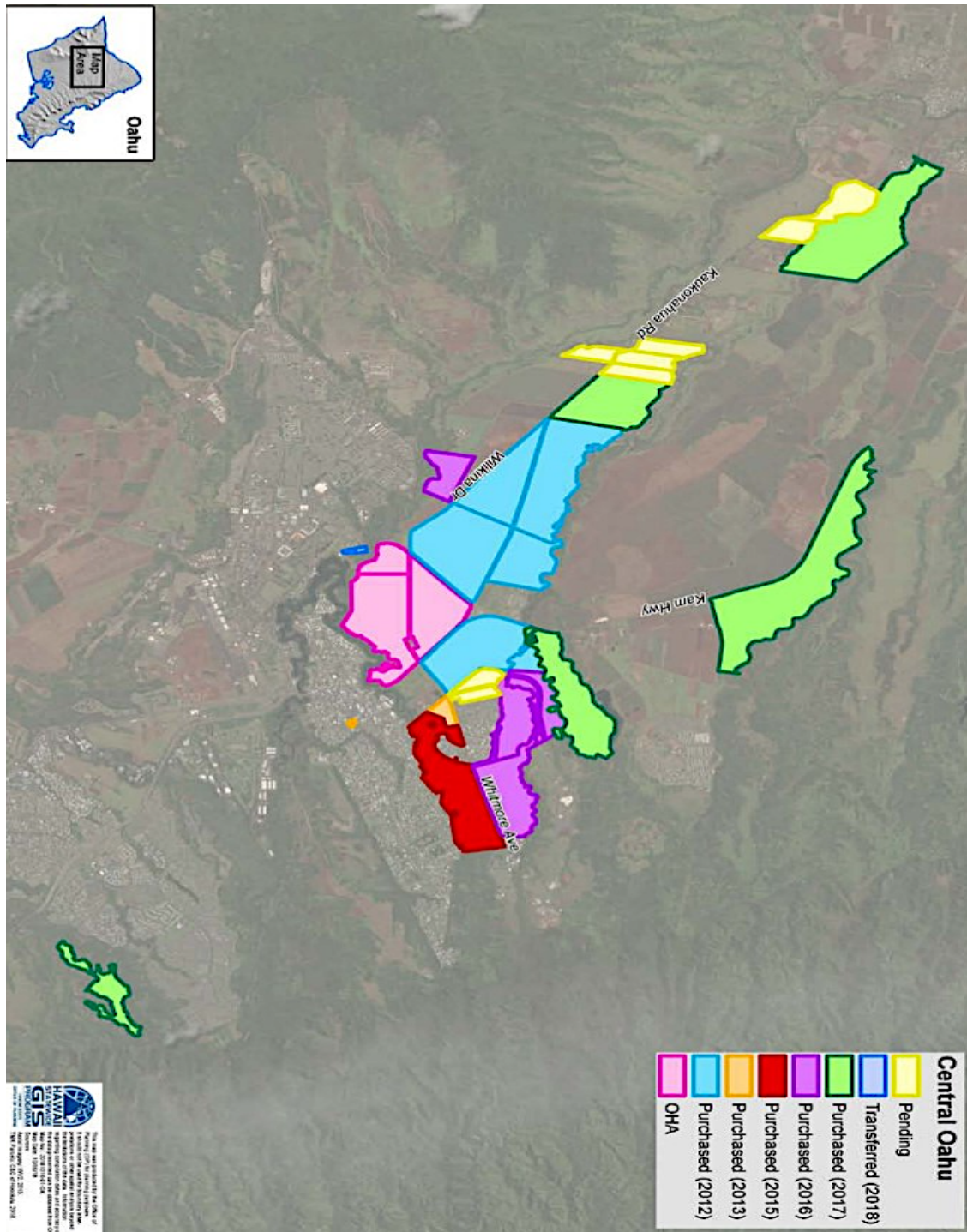
- Increase exposure of emerging crops that include, but are not limited to, tilapia and 'ulu for local, as well as export markets such as papaya.
- Provide available space to producers who can afford to construct their own food hub facility.

KEKAHA, KAUAI

- Develop a central food hub to accommodate processing, packing, storage and distribution.
- Develop a workforce housing solution with private partner.

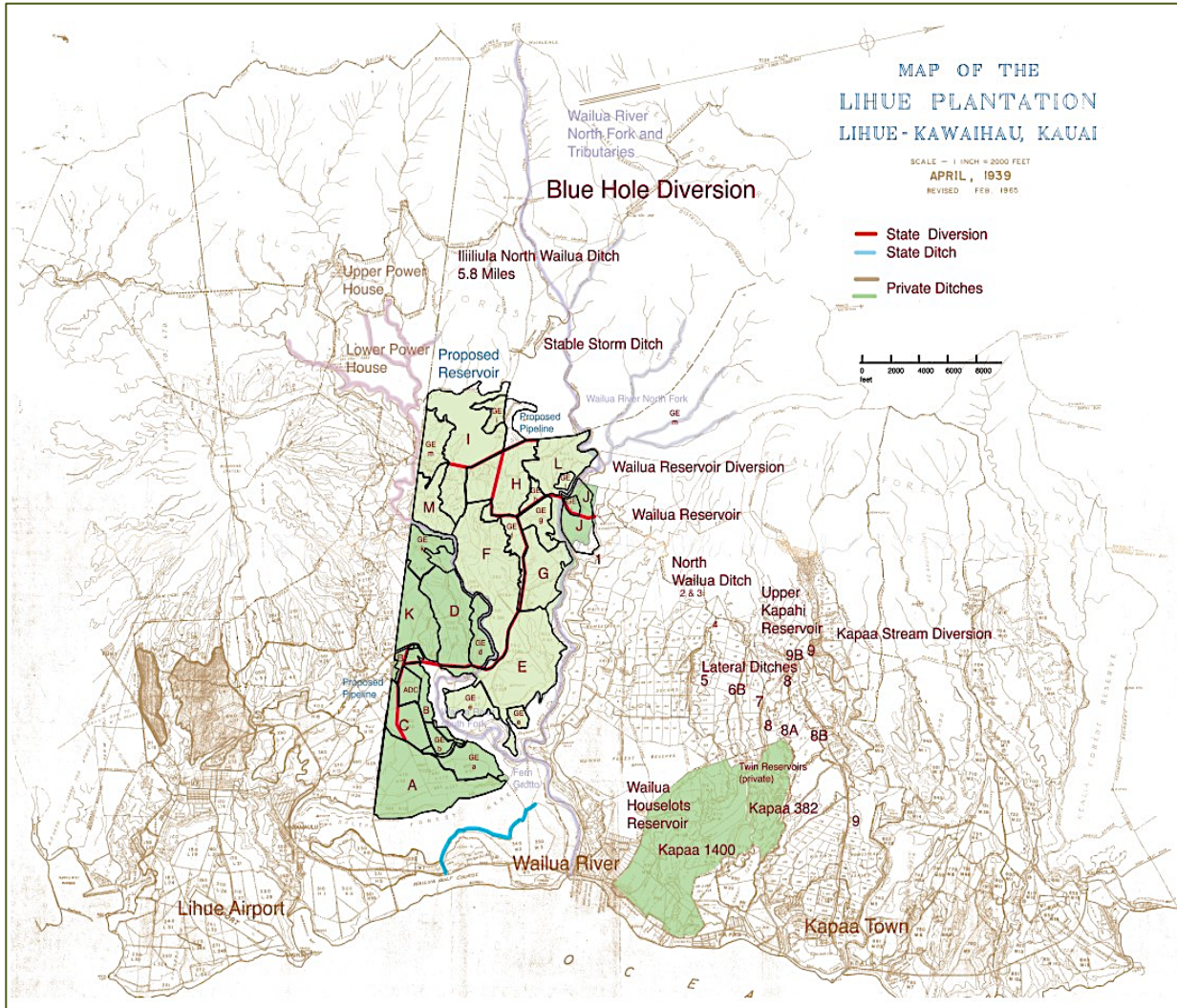
MAPS

CENTRAL OAHU



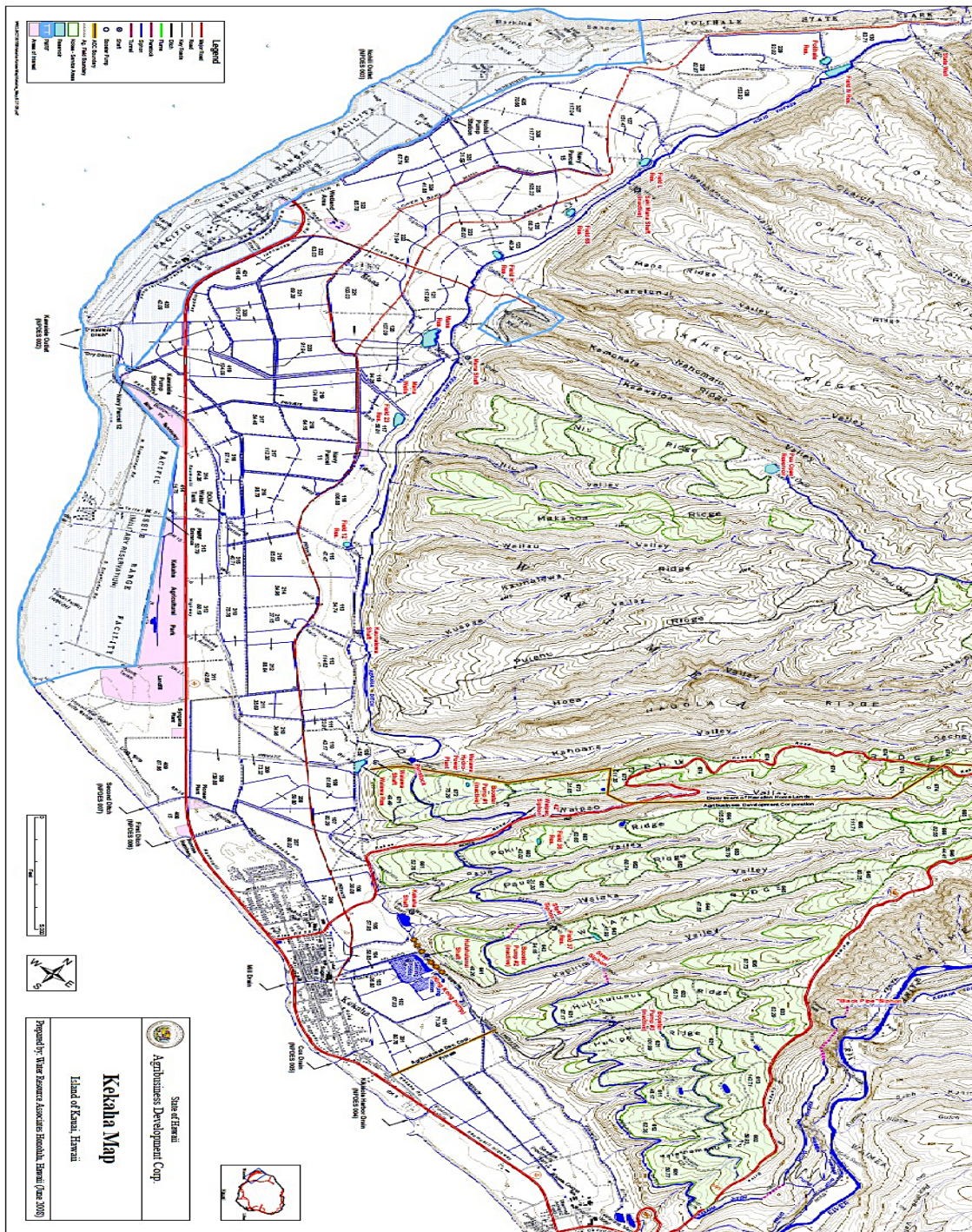
APPENDIX 1 - MAPS (cont.)

KALEPA, KAUAI



APPENDIX 1 - MAPS (cont.)

KEKAHA, KAUAI



APPENDIX 1 - MAPS (cont.)

WAIAHOLE WATER SYSTEM, OAHU

