

**PERMITS AND REGULATORY
REQUIREMENTS FOR
AQUACULTURE IN HAWAII**

Prepared for the
Aquaculture and Livestock Support Services Program
Department of Agriculture

by

Aquaculture Planning & Advocacy, LLC

September 1, 2011

ACKNOWLEDGEMENTS

The Permits and Regulatory Requirements for Aquaculture in Hawaii Guidebook was prepared by John S. Corbin, Aquaculture Planning and Advocacy LLC, for the Aquaculture and Livestock Support Services (ALSS) program, Hawaii Department of Agriculture. ALSS and the author gratefully acknowledge the value of a previous permits report, published in 1995, and prepared by John H. Bay for the Aquaculture Development Program, Hawaii Department of Land and Natural Resources. Further, the author wishes to thank the permitting agencies who assisted in the preparation of this document.

DISCLAIMER

This guide is designed to help prospective aquaculture projects have a better understanding of the Hawaii permitting process, and is not a legal document. Further, the guide book should not be relied on exclusively to determine a project's legal and permitting responsibilities. Some permits and licenses not included in this guide may be necessary to site, build, and operate a particular project.

The Department of Agriculture (DOA) and the State of Hawaii are not responsible for delays or losses caused by the permit processing and approval experience should it differ from that written in this guide book. Additionally, this guidebook is not meant to be a substitute for hiring professional permitting assistance should the scope and complexity of any specific project warrant it.

The DOA recommends that each aquaculture project carefully assess the need to hire a professional consultant familiar with these federal, state and county permits to assist in the process. Further, the DOA also strongly recommends contacting the relevant permitting agencies early in the project planning process to begin discussions of the information requirements for the proposed site, production technology and species chosen.

TABLE OF CONTENTS

ACKNOWLEDGEMENTS.....2

DISCLAIMER 2

1.1 Purpose6

1.2 Guide Organization.....6

2.0 HOW TO USE THIS GUIDE.....7

2.1 Defining the Project for Discussion..... 8

2.2 Land Use Classifications 9

2.2.1 State Level Zoning 9

2.2.2 County Level Zoning 10

2.3 Coastal Area Designations 11

2.4 Wetlands Designations 12

2.5 Sourcing Water 13

2.6 Disposing of Water 15

2.7 Initial Determination of Major Permits 16

3.0 STREAMLINING THE PERMIT PROCESS 18

3.1 Preliminary Preparation..... 19

3.2 Environmental Review 19

3.3 Sequence of Permit Receipt..... 20

4.0 LAND AND OCEAN USE AND ENVIRONMENTAL REGULATIONS AND PERMITS 21

4.1 Federal Regulations and Permits 22

4.1.1 Federal Environmental Impact Statement..... 22

4.1.2 U.S. Department of the Army Permit 26

4.1.3 Section 106 Review: National Historic Preservation Act 30

4.2	State Regulations and Permits	34
4.2.1	Environmental Impact Statement – State	34
4.2.3	Conservation District Use Application: Use of State Marine Waters	47
4.2.4	Historic Properties and Sites Review	51
4.2.5	Burial Sites Review	55
4.2.6	National Pollutant Discharge Elimination System (NPDES) Permit.....	59
4.2.7	Zone of Mixing Approval.....	63
4.2.8	Water Quality Certification	67
4.2.9	Federal Consistency Review: Coastal Zone Management Program	70
4.2.10	Underground Injection Control.....	73
4.2.11	Well Construction and Pump Installation Permits.....	76
4.2.12	Water Use Permit	79
4.3	County Regulations and Permits.....	82
4.3.1	Environmental Impact Statement – County	82
4.3.2	Special Management Area Use Permit: Coastal Zone Management Program.....	85
4.3.3	Shoreline Setback Variance: Coastal Zone Management Program	90
4.3.4	Grading, Grubbing and Stockpiling Permits.....	94
4.3.5	Building Permit.....	97
5.0	REGULATION OF AQUACULTURE OPERATIONS AND PRODUCT SALE	100
5.1.	Federal Regulations and Permits	100
5.2	State Regulations and Permits.....	103
5.2.1	Importation of Non-domestic Aquatic Animals.....	103
5.2.2	State Food, Drug, and Cosmetic Law: Aquatic Food Sale Regulations	107
5.2.3	Shellfish Sanitation Regulations.....	109

5.2.4 Sanitation Permit 112

5.3. Emerging Issues 114

5.3.1. Organic Certification 114

5.3.2. Best Practices Certification..... 115

6.0 USEFUL REFERENCES 118

APPENDIX: GENERAL BUSINESS REQUIREMENTS..... 119

1.0 INTRODUCTION

1.1 Purpose

Hawaii has a long history of encouraging and supporting commercial aquaculture development that continues today. The state wants to use this food production technology to expand and diversify the economies on all islands and enhance overall island food self-sufficiency. The Islands have the longest tradition of aquaculture in the United States, as evidenced by the many remarkable remnants of the coastal, stone-walled fish ponds constructed by early Hawaiians over 800 years ago.

Industry proponents have steadily built on Hawaii's supportive aquaculture policy and tradition, today farming over 30 species of aquatic plants and animals, while utilizing both land and ocean sites and the latest technologies. Essential for this growth in an island setting has been a regulatory framework and permitting process that leads to selection of the most appropriate site through a balanced and transparent review of the project by the responsible agencies and the interested public. The Department of Agriculture (DOA) is providing this updated guide to Permits and Environmental Requirements for Aquaculture in Hawaii to assist companies in understanding the current regulatory process.

This guide reviews the current federal, state and county permits and major requirements to site, build and operate an aquaculture business in the state. The review endeavors to incorporate the most current information available. However, the user is cautioned that the regulatory environment is constantly changing due to changes in law and rules, as well as, decisions handed down by the courts. Prospective projects should work closely with the responsible permit agencies during all phases of planning and development to have a clear understanding of the permit process and the information required.

1.2 Guide Organization

The guide is organized into five sections:

- Section 1.0: Introduction – Describes the purpose of the guide.
- Section 2.0: How to Use This Guide – Outlines the structure of the guide and how to utilize it to determine which major permits may be needed for a particular project. The last part, 2.7, includes a graphic to assist in identifying the permits for a particular site based on general location.
- Section 3.0: Streamlining the Permit Process – Describes the sequence of receiving certain permits for a project and provides suggestions on how to approach the process

to make it more efficient and perhaps save time and cost.

- Section 4.0: Land and Ocean Use and Environmental Regulations and Permits – Outlines the major federal, state and county permits to site and build an aquaculture project. Each requirement is described in detail including: Purpose, Administering Agency, Legal Authority, Applicability to Aquaculture, Information Requirements, Public Participation, Process Time, Sequence of Filing, and Cost.
- Section 5.0: Regulation of Product Production and Sale for Aquaculture – Presents the federal and state regulations that govern product production and sale. In addition, two emerging issues in seafood production and handling are discussed: Organic Certification and Certification of Sustainable Production or Best Practices.
- Section 6.0: Useful References – Provides a list of references, either hard copy or web-based, that can be useful for more detailed understanding of certain regulatory processes.

In addition, the guide includes an Appendix that provides a brief description of the General Business Requirements for starting and operating a business in Hawaii. The principal federal, state and county requirements are described and the contact information for each responsible agency is presented. Contact information for the organizations that offer “hands on” assistance to business start-ups is included here.

2.0 HOW TO USE THIS GUIDE

This guide provides a general overview of the major laws, regulations, permits and permissions that are important for siting and operating a commercial aquaculture business in Hawaii. Initial determination of the requirements for a particular site and technology is a critical first step in planning and anticipating the time and cost for compliance.

The guide can provide an aquaculture project with an initial understanding of the major regulatory requirements to secure an appropriate site, including the time and cost to go through the process. It is not a comprehensive document that is inclusive of all the potential permits necessary to site, start up and operate a commercial project, but is meant to be used as an introduction for a potential project group to work closely with the responsible agencies to meet regulatory requirements.

In order to effectively utilize this information, a project should be aware of the following key considerations in planning and evaluating the suitability of a potential site.

2.1 Defining the Project for Discussion

Before initially contacting permitting agencies and evaluating alternative sites, the aquaculture project must be able to describe the project in sufficient detail for the permitting agencies and other interested parties to understand the scope and impacts of the proposal. At a minimum, the following information should be available for discussion:

- Target species – Identify all the species being considered for production and determine if they are native or non-native (exotic) to Hawaii. If they are non native, have they been imported into the state before (see Section 5.2.1 on Species Importation)?
- Proposed technology – Identify the type of production technology that will be utilized. Has it been utilized commercially in Hawaii or elsewhere, or is it developmental? What are the water requirements for the technology, i.e., type (fresh, brackish, salt), temperature, volume, etc.? What is the proposed water source and what are the disposal options?
- Alternative sites – Ideally, the project would have one or several specific sites it is considering. Identify where the proposed sites are located and at its full build out how extensive an area will be needed by the project. Are there any environmentally sensitive areas on or near the site and in general what does the surrounding area look like, e.g., ownership, existing uses, etc.?
- Preliminary business plan – At this early stage of identifying a site, a full business plan is generally not possible. However, the project should be able to discuss the general business plan, such as the amount of production planned, any phased increases in production and where the product will be sold ,i.e., local market or export.

The Department of Business, Economic Development & Tourism (DBEDT) maintains a statewide, online Geographic Information System (GIS) that will be extremely useful in compiling this initial physical site information. It contains a wide variety of digitized data organized under the general categories of: 1) Physical Features/Basemap Layers; 2) Political Boundaries/Administrative Layers; 3) Natural Resources/Environmental Layers; 4) Hazard Layers; and 5) Coastal/Marine Layers. It can be accessed at the following web site: [<http://hawaii.gov/dbedt/gis/download.htm>]. In particular, the following web site can be used to determine the ownership of parcels by large land owners and the state. In addition, lands classified as Agricultural Lands of Importance to the State, can be found at this web site: [<http://hawaii.gov/dbedt/gis/miscmaps.htm>]. Another useful site has a link to Tax Map Keys by island [<http://hawaii.gov/dbedt/gis/links.htm>].

2.2 Land Use Classifications

Prospective aquaculture projects looking for a site need to be aware of the zoning classification. The basic concept of zoning refers to exercise of the power vested in government to legally regulate the use of land and the structures built to protect public health, safety, and general welfare. In Hawaii, there are two levels of zoning: state level and county level.

2.2.1 State Level Zoning

State level zoning classifies the entire state into four land use district designations: 1) Urban (about 5 per cent of the state's land area); 2) Agriculture (about 47 per cent); 3) Conservation (about 48 per cent); and 4) Rural (less than one per cent).

The Urban District includes lands currently in urban use and a reserve for foreseeable urban growth. Uses are permissive only, with the counties issuing permits for development through their ordinances or regulations. Aquaculture use is classified differently under each county's ordinances.

The Agricultural District includes lands used for cultivation and grazing, as well as related uses. The permissible uses in this district are extensive and include aquaculture. Other uses require a special permit. Special permits are handled by the respective county for uses requiring less than 15 acres. Projects larger than 15 acres are handled by the State Land Use Commission.

The Conservation District includes a variety of uses, including:

“protecting watershed..., preserving scenic and historic areas; providing park lands, wilderness and beach reserves; conserving endemic plants, fish, and wildlife; ... forestry; open space areas whose existing openness, natural condition, or present state of use, it retained, would enhance the present or potential value of abutting or surrounding communities, or would maintain or enhance the conservation of natural or scenic resources, areas of value for recreational purposes; other related activities; and other permitted uses not detrimental to a multiple use conservation concept” (§205-2(e), HRS).

The Conservation District also includes large areas of shoreline lands, and most submerged offshore lands and outlying small islands out to the jurisdiction of the state (three nautical miles). Most remaining and recognizable traditional Hawaiian fishponds are also in this zone.

The Conservation District is broken down into four subzones: 1) Protective; 2) Limited; 3) Resource; and 4) General. Aquaculture is a permitted use by rule within the Resource and General subzones.

The Rural District consists primarily of small farms and rural subdivisions on Maui and Kauai.

Maps depicting gross state level zoning by island are available online [<http://hawaii.gov/dbedt/gis/slud.htm>] or by contacting the Land Use Commission, Office of Planning, Department of Business, Economic Development & Tourism (DBEDT).

Office of Planning, DBEDT
P.O. Box 2359
Honolulu, Hawaii 96804-2359
Phone: 808-587-2846
Web site: <http://hawaii.gov/dbedt/op/>

2.2.2 County Level Zoning

All four counties of the state utilize a similar system for land use planning/zoning and execution of plans. It can be described as a three tiered structure:

- Tier 1: A general plan which is long-term and can describe such goals, policies, strategies, and courses of action for the entire county.
- Tier 2: Addresses the intermediate term through preparation of such documents as country-wide functional plans, specific community plans, development plans and other plans. These documents will usually have accompanying land use maps that can be useful in siting decisions.
- Tier 3: Are the most specific and most near-term actionable items; namely county zoning ordinances, regulations and budgets.

Most, if not all, of the counties make mention of aquaculture in these planning documents; however, it is beyond the scope of this guide to describe those specific mentions and projects are referred to the individual counties and documents to determine relevant information. In general, land zoned for agriculture would permit aquaculture uses, as statutorily the state considers aquaculture a form of agriculture use. In some instances, land zoned urban, e.g., residential and industrial, may be utilized for some forms of aquaculture production depending on the scale of the project and the technology used, e.g., backyard systems.

Critical to siting aquaculture within each county is the county-level land use zoning developed by each county planning department and there is a great deal of information on county web sites. The City and County of Honolulu and Hawaii County have the most current zoning and land use information online at the following land use and GIS web sites:

City and County of Honolulu

Web sites: <http://gis.hicentral.com/about.html>
<http://gis.hicentral.com/>

Hawaii County

Web sites: <http://www.co.hawaii.hi.us/maps/zone/maps.htm>
<http://www.co.hawaii.hi.us/planning/rules.htm>

Hawaii County lists a table on the web site (directly above) entitled Zoning Code Permissible Uses, that indicates that aquaculture is a permitted use in seven of the sixteen zoning code designations.

Both Maui County and Kauai County are developing online GIS systems with much useful information. In regard to determining specific land use and zoning information for these counties, contact the respective planning departments and associated programs:

Maui County

Web sites: <http://www.co.maui.hi.us/index.aspx?nid=121>
<http://www.co.maui.hi.us/index.aspx?NID=1123> (Zoning)
<http://www.mauicounty.gov/index.aspx?nid=972> (GIS Program)
<http://www.co.maui.hi.us/index.aspx?nid=80> (Land permit Map Viewer)

Kauai County

Web site: <http://www.kauai.gov/default.aspx?tabid=61>

2.3 Coastal Area Designations

The Hawaii Coastal Zone Management Act, Chapter 205A, HRS, provides a regulatory framework for management of activities in the coastal zone and nearshore areas of all islands. The Coastal Zone Management Program (CZMP) involves the management of designated coastal areas termed Special Management Areas (SMA) and Shoreline Setback Areas (SSA) by the counties. In addition, the CZMP requires a review of federal permitting activities for consistency by of the Office of State Planning (OSP) (see Sections 4.3.3 and 4.3.4 on Coastal Zone Consistency Review , SMA, and Shoreline Setback Variance for details)

Prospective aquaculture projects should be aware if the facility is located in the SMA or SSA. SMAs are shoreline and coastal water related lands, inland from the “shoreline” (usually 300 ft.) which have been designated by individual counties. No development can occur within the SMA unless a permit is obtained from the county. Permits will be granted only if the development will not have substantial adverse impacts on the environment and is consistent with the State’s CZMP and the county general plan and zoning ordinances.

State statute also designates a Shoreline Setback from 20 to 40 feet landward from the shoreline (counties can extend the setback requirement further by ordinance). Construction or land disturbing activity is prohibited within the SSA unless a Shoreline Setback Variance (SSV) is obtained from the County.

To discuss the SMA and SSA boundaries and permitting for a specific site and view maps, contact the planning departments of the individual counties.

Hawaii County
Planning Department
Phone: 808-961-8288
Web site: http://www.co.hawaii.hi.us/directory/dir_plan.htm

Kauai County
Planning Department
Phone: 808-241-6677
Web site: <http://www.kauai.gov/planning>

Maui County
Planning Department
Phone: 808-270-7735
Web site: <http://www.co.maui.hi.us/index.aspx?NID=1354>

City and County of Honolulu
Department of Planning and Permitting
Phone 808-768-8014
Web site: <http://www.honoluludpp.org/permitinfo/>

2.4 Wetlands Designations

Land areas identified as wetlands are environmentally sensitive areas of regulatory significance to all levels of government in Hawaii. Wetlands are defined as areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands provide many beneficial functions including: 1) flood water storage; 2) prevention of erosion; 3) sediment control; 4) critical wildlife habitat; 5) recreational opportunities; and 6) open space. These areas, and areas adjacent to them, can be suitable for aquaculture operations.

The primary federal agencies responsible for designation of wetlands and regulation of development are the U.S. Army Corps of Engineers (ACOE) and the U.S. Environmental Protection Agency (EPA), under Section 404 of the Clean Water Act (see Section on the

Department of the Army). State and county governments also regulate development in wetlands through the Coastal Zone Management Program (CZMP) and the Special Management Area (SMA) permits (see Sections on the CZMP and the SMA permits).

It behooves a prospective project to determine if a potential site has any designated wetlands on or near the area. Contacting the ACOE, Honolulu District, early in the site evaluation process is recommended. Also, the National Resources Conservation Service (NRCS) of the U.S. Department of Agriculture (USDA) offers assistance for wetland determinations. In addition, the State GIS System has a layer for wetlands under the Natural Resource/Environmental Layers category that will be helpful.

U.S. Army Corps of Engineers, Honolulu District
Phone: 808-438-9258
Web site: <http://www.poh.usace.army.mil/EC-R/EC-R.htm>

Pacific Islands Area, State Office
National Resources Conservation Service, USDA
Phone: 808-541-2600
Web site: <http://www.pia.nrcs.usda.gov/technical/>

State GIS System
Office of Planning
Department of Business, Economic Development & Tourism
Phone: 808 587-2846
Web site: <http://hawaii.gov/dbedt/gis/download.htm>

2.5 Sourcing Water

2.5.1 Land Sites

Land-based aquaculture can for the most part source water (fresh, brackish and salt water) in three basic ways: 1) wells; 2) surface water diversions; and 3) treated potable water from a public entity. (Note: catchment and reservoir/ditch sources are not considered). In evaluating a site, a prospective project must consider how production water will be obtained, the volumes available, and the quality of the source. The feasibility of sourcing adequate water will vary with location.

The Commission On Water Resources Management, DLNR, manages any man-made diversions from the streams of the state and is responsible for granting and administering well construction and pump installation permits statewide (see Sections on Well and Pump Permits). Aquaculturists must also be aware that certain islands have designated Water Management Areas that are hydrologic areas where water resources are being threatened by existing or proposed withdrawals or diversions of water, water quality problems, or serious

disputes. The Water Commission exerts strict administrative control over these areas through a Water Use permit system (see Section on Water Use Permit).

Specific sites and the feasibility of sourcing water should be discussed with Commission staff. The Commission has various plans, reports, and maps (e.g., the designated Water Management Areas) online that can assist in evaluating a site and more detailed information and maps on file at the office.

Aquaculture projects in residential areas may be able to use potable fresh water from public water supply entities, such as the Board of Water Supply on Oahu. Generally, this source is only economically feasible when the volume of use is relatively small (e.g., by using a backyard recirculating or aquaponic system) because of the cost of the water. In addition, in some areas water maybe treated with chemicals that make it not conducive to fish growth. Contacting the water provider to determine the feasibility of sourcing water is advisable early in the planning process.

Commission on Water Resource Management

Phone: 808-587-0214

Web site: <http://hawaii.gov/dlnr/cwrm/sitemap.htm>

2.5.2 Ocean Sites

Open ocean sites for sea cage aquaculture have unlimited amounts of sea water available by virtue of Hawaii's oceanographic conditions, such as waves and currents. Important considerations in locating an ocean site include: 1) water depth; 2) currents, 3) wind and wave patterns; and 4) multiple use issues. The ocean around Hawaii has certain sensitive environmental areas (e.g., coral reefs) or public or military use areas and projects should become aware of these potential siting limitations.

Much information is available online describing the physical and use characteristics of state marine waters out to three nautical miles, for example:

- The State GIS system has a section entitled Coastal/Marine Layers which has extensive information on the location of such characteristics as: 1) anchorage areas; 2) body surfing sites; 3) coral reefs; 4) fish aggregating devices; 5) ocean recreation areas; 6) whale sanctuary boundaries, etc.

Web site: <http://hawaii.gov/dbedt/gis/download.htm>

- The State GIS system also has a section with useful links for evaluating ocean sites, such as the National Oceanic and Atmospheric Administration's (NOAA), National Ocean Service and Coastal Services Center and the U.S. Geological Survey.

Web site: <http://hawaii.gov/dbedt/gis/links.htm>

Potential projects are encouraged to use Internet searches and key words to find out the extent of the information available.

2.6 Disposing of Water

2.6.1 National Pollutant Discharge Elimination System (NPDES) Permit and Zone of Mixing (ZOM)

Aquaculture operations that are sited on land and state marine waters have to evaluate each potential location for the options to dispose of farm effluents or waste water. Both land and ocean sites are subject to the NPDES and ZOM permit system to control entry of pollutants into the waters of the U.S. from point sources (see Section on the NPDES permit and ZOM for details). The permitting requirements are delegated by the federal government to the state Department of Health (DOH) for implementation.

All the waters for the state are classified into two categories, Inland and Marine, with more detailed classifications under each that are based on ecological and other natural characteristics, such as water depth (§11-54-2, HAR). Each category is further classified as to uses of the water for purposes of applying receiving water standards for certain parameters and for selection or definition of appropriate quality parameters and uses to be protected (see Chapter 11-54, HAR).

For marine waters, the classifications include sets of criteria for both the water column and the bottom. For example, criteria for the water column in marine waters include numerical measures that can't be exceeded of: 1) Total Nitrogen; 2) Ammonia Nitrogen; 3) Nitrate+Nitrite Nitrogen; and 4) Total Phosphorus. Further, the regulations specifically list certain geographic areas, such as specific harbors or bays, under the classification scheme and receiving water requirements (Chapter 11-54, HAR).

Key for aquaculture projects is determination if the proposed coastal or ocean site will allow a ZOM permit for discharge and dilution of effluents to meet receiving water standards (§11-54-3, HAR). The regulations state that no zones of mixing shall be permitted in Class AA marine waters (pristine waters) that are: 1) Within a defined reef area, in waters of a depth of 60 ft. or less; or 2) In waters up to a distance of 1000 ft. offshore if there is no defined reef area and if the depth is greater than 60 ft. ZOMs are allowed in Class A marine waters, but discharges must have received the best degree of treatment or control compatible with the criteria established by this class.

It is clear that determining the potential for direct discharge of aquaculture effluents in the state waters can be challenging. Projects should meet with the Clean Water Branch (CWB) of DOH early in the project site determination process to discuss effluent disposal

requirements. Further, the CWB web site has maps of water classification areas by island. These maps, plus information found on the State GIS web site for Coastal and Marine Layers, can be very useful in evaluating a site.

Clean Water Branch
Department of Health
Phone: 808-586-4309
Web site:
<http://hawaii.gov/health/environmental/water/cleanwater/wqsmaps/index.html>

2.6.2 Underground Injection Control

Another option for waste water disposal on land is obtaining a permit for an injection well under the Underground Injection Control (UIC) Program. Permits are issued by the Safe Drinking Water Branch (SDWB) of DOH to inject certain types of fluids from aquacultural and other types of operations into the ground to disperse (see Section on the UIC Permit). The concern in locating injection wells is to prevent migration of effluents into and pollution of underground drinking water sources.

The state manages this concern by establishing a UIC line around every island. Generally, lands on the mountain side of this line are considered to have aquifers that could serve as a source of drinking water, hence no injection wells are permitted. Lands on the ocean side of the line are not considered as potential sources of drinking water and may be permitted for an injection well.

Prospective aquaculture projects should contact the SDWB to discuss the characteristics of any proposed site. The Branch has a detailed web site that has maps that show the UIC line for each island.

Safe Drinking Water Branch
Department of Health
Phone: 808-586-4258
Web site:
<http://hawaii.gov/health/about/admin/health/environmental/water/sdwb/uic/uicprogrm.html>

2.7 Initial Determination of Major Permits

In the previous discussions, important site evaluation considerations were described: 1) Land Use Classifications (Zoning); 2) Coastal Area Designations; 3) Wetland Designations; 4) Sourcing of Water; and 5) Disposing of Water. With each area, the responsible agency was

named, contact information was listed, and the links to online maps and other useful resources were provided. The prospective aquaculture project should review this information to gain insight as to the suitability of the initial candidate sites for the project.


The next step is to develop an initial list of likely regulatory requirements and permits for each candidate site, such that appropriate agencies can be contacted and detailed information collection can begin (see next Section 3.0 on Streamlining the Permit Process for other recommended actions).

Figure 1 is provided to allow the project to make an initial determination of which federal, state and county environmental permits and regulatory requirements may be needed to secure a particular site according to its general location; inland, coastal, or in the ocean. The figure directs prospective projects to appropriate permit sections of this guide for more detailed information.

The graphic is organized according to location of the project; that is, seaward of the shoreline or in the ocean (state marine waters), in the coast (within the designated Special Management Area (SMA) or inland of the SMA), and towards the mountains. Likely federal, state and county permit requirements are listed and possible requirements are also described. Review of this graphic, with one or more specific candidate sites in mind, should allow a prospective project to develop a checklist of potential permits to further investigate with Section 4.0 of the Guide.

The goal of the user should be to gain a “working understanding” of the requirements for detailed discussions with the responsible agencies to elaborate and clarify application process for a specific permit.

Figure 1. Initial Determination of the Major Regulatory Requirements for Aquaculture Project Siting in Hawaii by Location (Not to scale)

SEAWARD OF SHORELINE	COASTAL AREA	INLAND
<u>LIKELY REQUIREMENTS:</u>	<u>LIKELY REQUIREMENTS:</u>	<u>LIKELY REQUIREMENTS:</u>
Environmental Assessment/Environmental Impact Statement (EA/EIS)	EA/EIS	EA/EIS
Department of the Army (DA) Permit	CDUP	NPDES/ZOM Permit
Conservation District Use Permit (CDUP)	Special Management Area Permit	UIC Permit
Coastal Zone Management (CZM) Consistency Review	Shoreline Setback Variance	Well Permit
National Pollutant Discharge Elimination System/Zone of Mixing (NPDES/ZOM Permit)	NPDES/ZOM Permit	Grading, Grubbing, Stockpiling Permits
	Underground Injection Control (UIC) Permit	Building Permit
	Well Permit	
	Grading, Grubbing, Stockpiling Permits	
	Building Permit	
<u>POSSIBLE REQUIREMENTS:</u>	<u>POSSIBLE REQUIREMENTS:</u>	<u>POSSIBLE REQUIREMENTS:</u>
	DA Permit	Historic/ Cultural Review
	CZM Consistency Review	CDUP
	Water Quality Certification Permit	CZM Consistency Review
	Historic/Cultural Review	DA Permit (Wetlands)
	Water Use Permit (Water Management Area)	Water Use Permit (Water Management Area)
	SHORELINE SETBACK (20-40 FT.)	SPECIAL MANAGEMENT AREA (minimum 300 ft. from shoreline)
		
OCEAN	COAST	INLAND
		MOUNTAIN

3.0 STREAMLINING THE PERMIT PROCESS

The significant number of agencies and permits that can potentially be involved in starting an aquaculture project can be daunting. However, with careful preparation and planning, the process in many respects can be streamlined by consolidating information and dealing with the requirements of several agencies at the same time. Moreover, anticipation of

the data requirements for the involved agencies and the public can lead to efficient preparation and submission of applications and a single, comprehensive environmental review document that facilitates the process.

3.1 Preliminary Preparation

An aquaculture project should develop an initial project description with sufficient detail to discuss the proposed species and technology, a specific candidate site or sites, and the general business plan. This will allow meaningful preliminary project discussions with the regulatory agencies.

An initial determination of the necessary permits for the proposed site by the project using this guide should dictate which agencies should be involved in these preliminary meetings. As a result of these meetings, the project proponents can gain a better understanding of which permits and federal, state and county agencies will be involved in securing a site.

3.2 Environmental Review

Under Hawaii law, the decision-making authority concerning the acceptability of the environmental review documents is the purview of the first agency (the lead agency) to receive a permit application. In practice, it may be preferable to have this authority to determine adequacy of an Environmental Assessment (EA), or the need for an Environmental Impact Statement (EIS), reside with the agency having jurisdiction over the resource subject to the greatest project impacts, e.g., in the case of use of state lands and ocean waters, the DLNR.

General guidelines and advice on the preparation of the environmental review document are available from the Office of Environmental Quality Control (OEQC), DOH (see section on State Environmental Impact Statements). The OEQC also has an online, searchable archive of all EAs and EISs done in Hawaii, organized by island, that is available for review to help educate the applicant on document requirements [<http://Hawaii.gov/health/environmental/oeqc/index.html>].

Once applicants have a general understanding of the permits required, it is desirable for the project personnel to meet with stakeholders, including government agencies, public organizations, non-governmental organization (NGOs) and members of the public that may be impacted by or have a strong interest in the project. These meetings are utilized to define environmental and other issues of concern to stakeholders that should be addressed in the EA/EIS. Two approaches have been used effectively by previous projects:

- 1) For input from government agencies, either the lead agency or the applicant can organize a Scoping Meeting, where relevant agencies are invited to a meeting to discuss the proposed project and raise any potential issues that the environmental review should address.
- 2) For input from other organizations and members of the interested public, the applicant can organize one or more informational meetings to discuss the proposed project and receive input on issues of concern to address in the environmental review.

These stakeholder meetings should occur early in the planning and permitting process to allow for conducting any environmental studies that may be needed to collect data and identify any major obstacles to securing the site. Issues identified by the stakeholder meeting are used to prepare the environmental review and provide the essential information for the decision making process. Moreover, a thorough collection of information and preliminary analysis of issues will allow the single environmental review document to be comprehensive and address most, if not all, of the major issues posed by federal, state, and county governments, NGOs and the general public.

Preparation of a single comprehensive environmental review document efficiently provides more or less the same information to government agencies and the interested public at the same time to facilitate review. Further, it allows the applicant to consider simultaneous filing of federal and state permit applications, in the event that both types of permits will be required. In non-controversial projects this approach can save time and money.

3.3 Sequence of Permit Receipt

Applicants should be aware that the order of obtaining certain permits is specified by the enabling law. Within the parameters of the law, the actual order of applying for and obtaining permits will depend on the location, scope and nature of a particular project, and is ultimately the decision of the applicant. For example, the following limitations for submission of certain permits should be considered:

- If an SMA permit (see Section 4.3.2 on SMA) is required for the site, it must be obtained prior to any other permit decision. If an SSV is needed (see Section 4.3.3 on SSV), it can be processed with the SMA permit. However, a project must complete the environmental review process before an SMA is issued.
- If historic resources/properties are involved with the site, the State Historic Preservation Division (SHPD) must be given an opportunity to review the project prior to final action by any other agency (see Sections 4.2.4 and 4.2.5 on Historic Properties and

Sites, and Burials, respectively).

- If a Department of the Army (DA) permit is required, all permits except for building and grading permits, must be obtained before the permit is issued (see Section 4.1.2 on DA permit). These permits include a Water Quality Certification (WQC) Permit (not required for ocean sea cage projects) and a Coastal Zone Consistency Determination from the state (see Sections 4.2.8 and 4.2.9 on WQC and Coastal Zone Management, respectively).

4.0 LAND AND OCEAN USE AND ENVIRONMENTAL REGULATIONS AND PERMITS

This section provides brief synopses of over twenty federal, state, and county laws, permits and regulations that may apply to siting aquaculture operations; organized by jurisdiction. For each regulation or permit, a brief description of purpose, administering agency, legal authority, applicability to aquaculture, application information requirements, public participation expectations, process time requirements, sequencing requirements, and where applicable the fees or costs, is provided.

It must be emphasized: no summary can substitute for critically reviewing the relevant statutes and regulations themselves, and for contacting the responsible agencies directly early in the project planning to discuss specific requirements as they apply to any project and site. Importantly, laws and regulations, and interpretations by government change constantly; for example, the case law affecting agency policies and decisions is constantly evolving and its consideration is beyond the scope of this compilation. The prospective applicant must, therefore, always use due diligence to review the most current adopted language for any statute or rule, and find out current agency policy. All responsible agencies encourage early consultation on projects.

To facilitate the applicant gaining a working understanding of each applicable law, regulation and permit requirement, Internet links to appropriate compilations and discussions are provided, when available. In addition, contact information for responsible agencies is provided, including e-mail addresses and web sites, when available. The information in this guide book is current as of July 2011.

4.1 Federal Regulations and Permits

4.1.1 Federal Environmental Impact Statement

A. Legal Authority

- National Environmental Policy Act of 1969, Public Law 91-190, 42 U.S.C. 4321 et seq.
- Title 40 C F R, Parts 1500-1508, Council on Environmental Quality Guidelines

Information: <http://www.whitehouse.gov/administration/eop/ceq>

B. Purpose

The National Environmental Policy Act of 1969 (NEPA) established a process for review of the environmental impacts of actions taken by the federal government, including related economic, social and cultural effects. This review is intended to ensure that environmental concerns are examined and alternatives considered prior to making the final decision on a project or action. This is accomplished by the preparation of either an Environmental Assessment (EA) or an Environmental Impact Statement (EIS) that describes the environmental impacts of a project and discusses alternative actions and mitigation measures. The document is meant to inform stakeholders that are able to offer comments so that the responsible agency can make an informed decision.

C. Applicability to Aquaculture

Environmental review is required for any federal agency's decision involving the following actions which have the potential to significantly affect the human environment: funding and conducting projects and programs; agency rules, plans, and policies; and legislative proposals. Federal agencies may allow categorical exemptions for activities which do not individually or cumulatively have a significant effect of the human environment. If a project is not categorically exempt, an EA must be prepared that briefly provides sufficient evidence and analysis for determining if the project will have a significant effect and require an EIS. If no significant effect is found, the agency can make a Finding of No Significant Impact (FONSI) and the project can proceed in the permit process.

If the reviewing agency concludes the project will have a significant effect, an EIS must be prepared. An EIS is a full and fair discussion of the significant environmental impacts and should inform the public and the decision makers as to project details and reasonable alternatives to minimize adverse impacts or enhance the quality of the environment.

Aquaculture related activities are not exempt under current law and regulations.

Actions that could require a federal environmental review include: proposed projects involving sites listed or eligible for listing in the National Register of Historic Places; dredging and filling of wetlands and other waters; activities in navigable waters, including both state and federal waters out to 200 nautical miles; and activities affecting protected and endangered species.

Private companies and individuals become involved in NEPA when they need a permit issued by a federal agency. The agency receiving the permit application must evaluate the environmental effects of the potential permit decision. If an EA or EIS is required, the private individual or company will be asked to pay for analysis, but the agency remains responsible for the scope and accuracy of the study.

D. Administering Agency

Every agency in the Executive Branch of the federal government has a responsibility to implement NEPA. Activities which trigger NEPA include: providing funding, issuing permits, or undertaking a project. The responsible agency must determine the need for an EIS and coordinate preparation and review.

The NEPA process and requirements may differ slightly between federal agencies. If more than one agency is involved, then the agency with the most significant involvement or concerns will usually be designated the "lead" agency. Federal agencies must, to the fullest extent possible, cooperate with state and local agencies to reduce the duplication between federal, state and local environmental review requirements. Such cooperation includes: 1) joint planning processes; 2) joint environmental research; 3) joint hearings; and 4) joint EAs or EISs.

Generally, preparation of a single environmental review document will suffice for federal, state and local compliance. More information can be obtained at NEPA net, the Council of Environmental Quality (CEQ) NEPA web site, that includes links to statutes, regulations, NEPA procedures by federal agency, and federal agency NEPA web sites and contacts [www.nepa.gov].

E. Information Requirements

General format and informational requirements are detailed in cited regulations and the NEPA web site. These requirements are similar to those for environmental reviews at the state level, which are detailed in the state EIS section of this document. As indicated above, each federal agency typically has its own specific requirements concerning the preparation of EAs and EISs that may differ from the basic format.

Generally, the purpose of an EA is to determine the significance of the environmental effects and look at alternative means to achieve the agency's objectives.

The EA is intended to be a concise document that: 1) provides sufficient evidence and analysis for determining if an EIS is required; 2) satisfies the agency's compliance with NEPA when an EIS is not necessary; and, 3) when necessary, facilitates EIS preparation. Important information to address includes: 1) a need statement; 2) alternative courses of action to achieve the objective; 3) environmental impacts of the proposed action; 4) alternatives; and, 5) a list of agencies and persons contacted.

An EIS must describe the full scope of the activity and consider direct and indirect environmental impacts of the activity over time. Such impacts include changes in land use patterns, energy supply and demand, floodplain development, air and water quality, noise levels, water resource use, wetlands, coastal zone, and fish and wildlife habitat.

F. Public Participation

When preparing an EA, the agency has discretion as to the level of public involvement. The CEQ regulations state that the agency shall involve environmental agencies, applicants, and the public, to the extent practicable, in preparing EAs. Sometimes the agency may mirror the public comment procedure in the EIS process, while in other situations they may simply make the EA and draft FONSI available to interested individual groups.

When an EIS is required, the agency must solicit public comment on the draft EIS. A public hearing will be held when required by the agency's enabling statutes or regulations or when the agency deems it appropriate considering the degree of environmental controversy or public interest. The agency must respond to written comments and comments received at public hearings as part of the preparation of the final EIS and its publication.

G. Process Time

Once a draft EA and EIS are completed and accepted for processing, the time requirement to complete the environmental review will vary depending on the scope of the proposed project, the magnitude of the impacts, and the number of federal, state and local permits required. Periods of three to six months for a minor non-controversial project, and a year or more for major actions with significant impacts would not be unusual.

H. Sequence of Filing

The environmental review process must be completed prior to a final decision on the proposed project by the federal agency(s) involved. The environmental review process should be started early in the planning process to provide information for the project design and to ensure the timely processing of required permits.

I. Cost

The cost of preparing the environmental review documents is highly variable, depending on the location, size and scope of the project, its potential impacts, the number of permits involved and the amount of public concern surrounding the project.

4.1.2 U.S. Department of the Army Permit

A. Legal Authority

- Section 10 of the Rivers and Harbor Act of 1899, 33 U.S.C. 403
- Section 404 of the Clean Water Act, as amended, 33 U.S.C. 1344
- Section 103 of the Marine Protection, Research and Sanctuaries Act , 33 U.S.C. 1413
- Title 33 CFR, Parts 320-330, Regulatory Programs of the Corps of Engineers

Information: http://www.usace.army.mil/CECW/Pages/reg_materials.aspx

B. Purpose

The Department of the Army (DA) Permit program was originally established to ensure that the navigational characteristics of coastal waters of the United States were not adversely affected by development. The jurisdiction of the permit program under the Army Corp of Engineers (ACOE) originally extended only to navigable waters. Activities that could interfere with navigation required a permit under the Rivers and Harbors Act. However, with passage of the amendments to the Clean Water Act in 1972, the authority of the ACOE was extended to include issuance of permits for discharge of dredge or fill material into "waters of the United States," including wetlands, ponds, and any inland and coastal waters that affect commerce. DA permits are also required for construction of artificial islands, installations, and other devices on the seabed to the seaward limit of the outer continental shelf (33 CRF 320.2 (b)).

C. Applicability to Aquaculture

Navigable waters are defined as those waters that are subject to the ebb and flow of the tides and/or are presently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce. The ACOE can issue two kinds of permits; a general permit and an individual permit. General permits include nationwide and regional permits that pre-approve certain activities to streamline these actions. Individual permits, which are more likely for aquaculture actions, include standard permits and letters of permission. Both documents require submittal of a standard DA permit application form (ENG Form 4345).

Under Section 10 of the Rivers and Harbors Act, a DA permit is required for structures or work in navigable waters of the U.S. Structures and such work includes piers, pilings, boat docks, breakwaters, revetments, riprap, permanent moorings, power transmission lines, or any other obstacles or obstructions to navigation, and any dredging

or disposal of dredged material or other modification of a navigable water.

Under Section 404 of the Clean Water Act, a DA permit is required for the discharge of dredged or fill materials into waters of the United States. Waters of the United States includes all navigable waters, plus all other waters such as lakes, rivers, streams, mud flats, sand flats, wetlands, wet meadows, natural ponds, the use, degradation or destruction of which could affect commerce. This regulatory definition specifically includes any body of water from which fish or shellfish are or could be taken and sold.

Maintenance and repair of existing structures is, for the most part, exempt from the DA Permit requirements. Issuance of a DA Permit is based on a "public interest review" which evaluates the probable impacts of a project, including its cumulative impacts, and intended use. This decision process requires a balancing of the reasonable benefits which can be expected to accrue from an activity against its reasonably foreseeable detriments. The decision whether to authorize a project, and if so the under what conditions, will be determined by the outcome of this "general balancing process."

D. Administering Agency

The U.S. Army Corps of Engineers is responsible for administering and granting DA Permits.

U.S. Army Corps of Engineers
Honolulu District, Regulatory Branch, Building 230
Fort Shafter, Hawaii, 96858-5440
Phone: 808-438-9258
Web site: <http://www.poh.usace.army.mil/EC-R/EC-R.htm>

E. Information Requirements

The DA permit basically requires that the proposed work be described in sufficient detail so that its potential impact on the affected environment can be fully evaluated. The information required could be diverse as the ACOE's evaluation extends well beyond the potential impact of the project on navigation and includes consideration of: conservation, economics, historic values, water quality, aesthetics, coastal zone management, recreation, water supply, general environmental concerns, and land use, energy needs, safety, food production, flood damage prevention, fish and wildlife values, and, in general, the needs and welfare of the people.

Both a complete narrative description and detailed plans and drawings are required. Strictly, preparation of an EA is not required with the application. In the case of actions with significant potential environmental effects, an EIS can be required.

F. Public Participation

A public notice soliciting comments on the permit application is issued within 15 days after the receipt of a complete application. The comment period on the application is 15 days to 30 days from the date the public notice is issued and the period can be extended an additional 30 days. Depending on the complexity of the proposal and the public comment received, a public hearing may be held, but is not required.

G. Process Time

The timing of the DA Permit process varies with the scale and complexity of the proposed action. If all information requirements have been met, the evaluation indicates manageable impacts, and there are no substantive comments to be considered, a DA Permit can be issued 60 days after the receipt of a complete application. If an action provokes public concerns and/or additional information is required (e.g., preparation of an EIS), issuance of a DA Permit can take one year or more.

For example, if the comment period is extended by 30 days, the district engineer will, absent other restraints, decide on the application within 90 days of receipt of a complete application. Certain other laws require procedures such as state or other federal agency certifications, public hearings, environmental impact statements, consultation, and special studies which may prevent district engineers from making a decision in 60 days.

H. Sequence of Filing

A DA permit will not be issued until all related permits, certifications, and authorizations required by the federal, state and county governments have been obtained. At the discretion of the ACOE, however, the DA permit can be processed and issued concurrently with other permits. Prior to issuing a DA permit, the ACOE must send the application to, and consult with, the local offices of other affected federal agencies if threatened, endangered or protected species or critical habitat are involved: 1) U.S. Fish and Wildlife Service, Department of the Interior ; and 2) National Marine Fisheries Service, National Oceanic and Atmospheric Administration, Department of Commerce. The Advisory Council on Historic Preservation is involved if a site is listed, or eligible for listing, on the National Register of Historic Properties. If the project is located within the state's coastal zone (see Section 4.2.9 on Coastal Zone Management), the ACOE must obtain a determination that the project will be consistent with the Hawaii Coastal Zone Management Program. If discharges of effluent into waters of the state are involved, the ACOE must obtain a certification (a 401 Water Quality Certification) from the Hawaii Department of Health (DOH) stating that the project is consistent with state water quality standards (Note: not required for offshore aquaculture projects).

I. Cost

The cost of preparing the application, project plans, an EA and if required an EIS, can be significant depending on the size of the project site, the complexity of the proposed action and the environmental conditions to be managed and mitigated. A permit filing fee of \$100.00 is charged for commercial or industrial uses and a \$10.00 filing fee is charged for non-commercial use. Payment of the fee will be required prior to issuance of the DA Permit.

4.1.3 Section 106 Review: National Historic Preservation Act

A. Legal Authority

- National Historic Preservation Act of 1966, as amended, Public Law 89-665; 16 U.S.C. 470 et seq.
- Title 36 CFR, Part 800, Protection of Historic Properties, Regulations of the Advisory Council on Historic Preservation

Information: <http://www.achp.gov/106summary.html>

B. Purpose

The purpose of Section 106 of the National Historic Preservation Act (NHPA) is to reduce or avoid damage to historic resources of the U.S. from federal actions. The act requires federal agencies to take into account the effects of their decisions on historic properties, and affords the Advisory Council on Historic Preservation (ACHP), an independent federal agency, a reasonable opportunity to review and comment on such actions.

C. Applicability to Aquaculture

A Section 106 applies when two thresholds are met: 1) there is federal or federally licensed action, including grants, licenses and permits; and 2) that action has the potential to affect properties listed, or eligible for listing, in the National Register of Historic Places. This broad applicability means that properties which have not yet been listed and even those not yet discovered can be subject to the Section 106 review requirements.

Section 106 requires each federal agency to identify and assess the effects of its actions on historic resources. The responsible federal agency must consult with appropriate state and local officials, applicants for federal assistance, and members of the public and consider their views and concerns about historic preservation issues when making final project decisions. Concerns are resolved by mutual agreement, usually among the affected state's State Historic Preservation Officer (SHPO), the federal agency, and any other involved parties.

D. Administering Agency

The Advisory Council on Historic Preservation, in consultation with the SHPO, is responsible for administering the Section 106 review and providing comments. See the web site for Neighbor Island offices.

Advisory Council On Historic Preservation 1100 Pennsylvania Avenue, N.W., Suite 803 Old Post Office Building Washington, D.C. 20004 Phone: 202 606-8503 E-mail: achp@achp.gov Web site: www.achp.gov	State Historic Preservation Division Department of Land and Natural Resources State of Hawaii Kakuhihewa Building 601 Kamokila Blvd., Suite 555 Kapolei, Hawaii 96707 Phone: 808 692-8015 Web site: http://hawaii.gov/dlnr/hpd/hpgrtg2.htm
---	---

E. Information Requirements

The review information required depends on the nature of the review and the result of the initial evaluation of the property. If the process is fully executed, the information will include at least the following:

- Description of the undertaking, including photographs, maps and drawings, as necessary;
- Description of the efforts used to identify historic properties;
- Description of the affected historic properties, with information on the significant characteristics of each property;
- Description of the effects of the undertaking on historic properties and the basis for the determinations;
- Description and evaluation of any alternatives or mitigation measures that the agency proposes for dealing with the undertaking's effects;
- Description and evaluation of any alternatives or mitigation measures that were considered but not chosen and the reason for their rejection;
- Documentation of the consultation with the SHPO;
- Description of the agency's efforts to obtain and consider the views of affected local governments and other interested persons;
- Planning and approval schedule for the undertaking;
- Copies or summaries of any written views submitted to the agency concerning the effects;
- Any additional information needed to understand the undertaking; and

- Summary of the views of the SHPO and any interested parties.

F. Public Participation

The concerned agency is required to provide adequate opportunity for the public to receive information about the project and express their views. Actions to publicize the project review opportunity include publication of a notice in the newspaper. A general description of the Section 106 review process can be found in, "A Citizens Guide to Section 106 Review," (see Section 6.0 on Useful References).

Information: www.achp.gov.

G. Process Time

The review process involves five basic steps:

- Identifying and evaluating historic properties;
- Assessing effects of the project;
- Consultation between the agency and the State Historic Preservation Officer (SHPO) regarding the manner in which to proceed;
- ACHP review and comment; and
- Implementation and action by the agency.

The intent of the process is for the agency, SHPO and ACHP to reach a formal agreement on the manner in which to proceed in light of any potential effects on the historic property.

If it is determined that there will be an adverse effect and agreement is reached as to what steps the agency or private sector applicant will take to mitigate the adverse effects, a formal Memorandum of Agreement (MOA) will be signed and the agency will act accordingly. If no agreement is reached, the ACHP makes its review comments and the entire package is forwarded to the applying agency for consideration prior to proceeding with the proposed activity. It is up to the agency to determine the course of action to take given the authoritative comments on the historic preservation considerations.

The time required to complete Steps 1 through 3 of the review process are dependent on the agency. If the agency submits a signed MOA with the required documentation for review by the Advisory Council, review can take up to 30 days. If there is no MOA the agency can request issuance of the Advisory Council's comments within 60 days after all of the required documentation is submitted.

H. Sequence of Filing

It is important that consideration of any impacts on historic properties occur in the early stages of project planning to ensure that preservation concerns receive appropriate consideration. Early review also permits modifications to a project while they are relatively easy to consider and accomplish, thereby reducing the potential for conflict and delay.

I. Cost

The cost to the federal agency or individual of preparing the required review documentation will vary with the size of the property in question, the complexity of the proposed undertaking under review and the need for professional assistance.

4.2 State Regulations and Permits

4.2.1 Environmental Impact Statement – State

A. Legal Authority

- Chapter 343, HRS, as amended, Environmental Impact Statements
- Title 11, Chapter 200, HAR, Environmental Impact Statement Administrative Rules

Information: <http://hawaii.gov/health/environmental/oeqc/index.html>

B. Purpose

The Hawaii Environmental Impact Statement law, Chapter 343, HRS, establishes a system of environmental review at the state and county levels that is intended to ensure that environmental concerns are given appropriate consideration in decision making along with relevant economic and technical issues. The law also assures the public the right to participate in the planning of projects that may affect their community. This is accomplished first by preparing an Environmental Assessment (EA), an information sharing document, to evaluate whether an action may have a significant environmental effect. If the action is determined to have a significant effect, then a more detailed Environmental Impact Statement (EIS) must be prepared.

Both the EA and the EIS provide information which describes the proposed project and discloses the potential environmental effects, as well as the effects of a proposed action on the economic and social welfare of the community and the state. In addition, information is presented to evaluate the effects of the economic activities arising out of the proposed action, any measures proposed to minimize or mitigate adverse effects, and the considered alternatives to the action and their effects. Applicants must also carry out a cultural impact assessment for inclusion in the document.

The state environmental review process is modeled on the federal National Environmental Policy Act. If both federal and state agencies are involved with approving the proposed project, the environmental review must be coordinated.

C. Applicability to Aquaculture

Under the state's environmental law, all activities fall into one of four categories: 1) do not require a Chapter 343 review; 2) trigger a Chapter 343, but are exempt; 3) trigger Chapter 343 and require the preparation of an EA; or 4) trigger Chapter 343 and require the preparation of an EIS. In general, the environmental review is required under Chapter 343 for any program or project that proposes one or more of nine land uses or

administrative acts, six of which relate to aquaculture:

- Use of state and county lands or funds other than for feasibility studies or the purchase of raw land;
- Use of any land classified as Conservation District by state law;
- Use within the Shoreline Setback area;
- Use within an Historic Site or District as designated in the National or Hawaii Register of Historic Sites;
- Any amendment to county general plans that would designate land as other than agriculture, conservation, or preservation except comprehensive plan amendments initiated by the county; and
- Reclassification of state Conservation District Lands.

Once an agency determines that an action triggers the EIS law, it must decide if the action is either: exempt, will require an EA, or will require an EIS.

If a proposed action is not exempt (see below), an EA must be prepared. If the administering agency determines, after reviewing the EA, that the proposed action will not have a significant impact on the environment a "negative declaration" will be issued stating that preparation of an EIS will not be required. If an agency anticipates that a "negative declaration" will be issued, a draft EA must be made available for public review for at least 30 days and in the final EA the agency/applicant must respond in writing to comments received. If, for actions covered by the categories described above, the responsible agency determines that the proposed action may have a significant impact, an EIS must be prepared.

Not every program or project falling within the six categories will need to undergo an environmental review. Certain activities are deemed minor or routine by the state or county agency that has oversight. The agency can declare the activity exempt from environmental review. There are nine classes of exempt action under EIS rules that relate to aquaculture projects (see §11-200-8 HAR for details). However, if the cumulative impacts of actions are significant where the action is normally insignificant, the exemptions listed below are inapplicable. The exempt classes of activities are as follows:

- Operations, repairs or maintenance of existing structures, facilities, equipment, or topographical features, involving negligible or no expansion or change of use beyond that previously existing;

- Replacement or reconstruction of existing structures and facilities where the new structure will be located generally on the same site and will have substantially the same purpose, capacity, density, height, and dimensions as the structure replaced;
- Construction and location of single, new, small facilities or structures and the alteration and modification of these structures and installation of new, small, equipment and facilities and the alteration and modification of same, for example single family residences;
- Minor alterations in the conditions of land, water, or vegetation;
- Basic data collection, research, experimental management, and resource evaluation activities which do not result in a serious or major disturbance to an environmental resource;
- Construction or placement of minor structures accessory to existing facilities;
- Interior alterations involving things such as partitions, plumbing, and electrical conveyances;
- Demolition of structures, except those structures located on any historic site as designated in the National Register of Historic Properties or Hawaii Register of Historic Places; and
- Zoning variances except: use, density, height, parking requirements and shoreline setback variances.

D. Administering Agency

For state environmental review purposes, actions are divided into two groups, Applicant Actions and Agency Actions:

Applicant Actions – The state or county agency to whom the applicant (generally a private individual or company) first applies for any permit connected with an action requires an EA, is responsible for reviewing the EA and determining the need for an EIS. The agency is also responsible for acceptance of the final EIS.

Agency Actions – Government initiated actions (e.g., those projects involving the use of state or county lands or funds) are assessed by the agency proposing the project to determine the need for an EIS. The Governor or the respective county Mayor is responsible for the acceptance of the final EIS for Agency Actions.

Statewide, the Office of Environmental Quality Control (OEQC) is responsible for

handling the processing of the EA/EIS for both applicant and agency actions.

Office of Environmental Quality Control
235 S. Beretania Street, Suite 702
Honolulu, Hawaii 96813
Phone: 808-586-4185
Fax: 808-586-4186
E-mail: oeqc@doh.hawaii.gov
Web site: <http://hawaii.gov/health/environmental/oeqc/index.html>

E. Information Requirements

The state Department of Health (DOH) Administrative Rules, Title 11, Chapter 200, HAR, outlines the information requirements for an EA and a final EIS, under Chapter 343. Both documents must address each of the required information areas, described briefly below, in sufficient detail to allow decision makers to fully anticipate the environmental consequences of a proposed action.

A Draft Environmental Assessment should contain, but not be limited to the following information:

- Identification of the applicant or proposing agency;
- Identification of the approving agency, if applicable;
- Identification of agencies consulted in making the assessment;
- A general description of the action's technical, economic, social, and environmental characteristics;
- A summary description of the affected environment, including suitable and adequate location and site maps;
- Identification and summary of major impacts and alternatives considered, if any;
- Proposed mitigation measures, if any;
- A determination of the need for an EIS;
- Findings and reasons supporting determination; and
- Agencies to be consulted in the preparation of the EIS, if applicable;
- List of all permits and approvals (federal, state, and county) required; and

- Written comments and responses to the comments.

A Final Draft Environmental Impact Statement, at a minimum, must contain the following information:

- Summary sheet which concisely discusses the following:
 - brief description of the action;
 - significant beneficial and adverse impacts;
 - proposed mitigation measures;
 - alternatives considered;
 - unresolved issues; and
 - compatibility with land use plans and policies, and listing of permits or approvals;
- Table of contents;
- Statement of purpose and need for action;
- Project description;
- Description of any known alternatives for the action;
- Description of the environmental setting, including a description of the environment in the vicinity of the action, as it exists before commencement of the action, from both a local and regional perspective;
- Statement of the relationship of the proposed action to land use plans, policies, and controls for the affected area;
- Statement of the probable impact of the proposed action on the environment, which shall include consideration of all phases of the action and consideration of all consequences on the environment; direct and indirect effects shall be included;
- Discussion of the relationship between local short term uses of the human environment and the maintenance and enhancement of long-term productivity;
- Discussion addressing all irreversible and irretrievable commitments of resources that would be involved in the proposed action should it be

implemented;

- Discussion of all probable adverse environmental effects which cannot be avoided;
- Discussion of mitigation measures proposed to minimize impact;
- Summary of unresolved issues and either a discussion of how such issues will be resolved prior to commencement of the action, or what overriding reasons there are for proceeding without resolving the problems;
- List identifying all governmental agencies, other organizations and private individuals consulted in preparing the statement;
- Reproductions of all substantive comments and responses made during the consultation process;
- Comments and recommendations received on the draft EIS;
- List of all persons, organizations and agencies commenting on the draft EIS; and
- Responses of the applicant to significant environmental points raised during the review process and a list of changes made to the document based on the review.

F. Public Participation

Public participation is a critical aspect of the EA and EIS process. If a negative declaration is anticipated, the agency must make a "draft EA" available for public comment for 30 days. If after reviewing an EA, an agency makes a determination that preparation of an EIS is required, a notice is published in the OEQC Bulletin advising the public of the EIS preparation. The Environmental Impact Statement Preparation Notice – prepared by the agency requiring the EIS – summarizes the proposed action and lists the reasons supporting the determination. The Notice includes the name and address of a person who may be contacted for further project information.

Following the publication of the Notice, the public has 30 days in which to request to be a consulted party during the EIS's preparation. After a draft EIS has been prepared and submitted for review, the public has an additional 45 days during which to comment in writing. The applicant must respond in writing to any public comments. Both the comments and the applicant's responses must be included in the final EIS submitted to the administering agency.

For Applicant Actions, a determination as to the acceptability of a final EIS must be made within 30 days of filing the final EIS with the administering agency and the OEQC.

The 30-day period may be extended at the request of the applicant for a period not to exceed 15 days. There is no maximum period for determining the acceptability of Agency Actions. No public hearing is required under Chapter 343 HRS, but one or more public hearings are not unusual in the project review and permitting process. It is important to understand that acceptance of an EA or EIS does not mean that a project is approved, it is merely a condition which must precede a permit approval.

G. State-Federal EIS Coordination

§343-5(f), HRS, requires that whenever an action is subject to both federal and state environmental review, the OEQC and state agencies shall cooperate with federal agencies to the fullest extent possible to reduce duplication between federal and state requirements. Such cooperation is required to include such actions as the preparation of joint environmental impact statements with concurrent public review and processing at both levels of government. Where federal law has environmental impact statement requirements in addition to, but not in conflict with, Chapter 343, the OEQC and agencies are required to cooperate in fulfilling these requirements so that one document complies with all applicable laws.

H. Process Time

The time requirement to complete the environmental review will vary depending on the complexity of the project, including the scope of the proposed project, the magnitude of the impacts, and the number of federal, state and local permits required. Periods of three to four months for a relatively minor non-controversial project and a year or more for major actions with significant impacts would not be unusual

I. Sequence of Filing

If required, an EA or an EIS should be prepared very early on in the planning and permitting process to evaluate the significance of a proposed action and ensure the timely processing of all required permits. The earlier in the project planning that agency and public comments can be received, the more time there is available to address those comments that must be taken into account in the design.

J. Cost

There is no specific filing or processing fee associated with the environmental review process. However, the preparation of the environmental review documents, e.g., the EA and EIS, can be expensive depending upon the scope and complexity of the proposed project and the environmental and community sensitivities of the surrounding area.

4.2.2 Conservation District Use Application: Use of Land Sites

A. Legal Authority

- Chapter 205, HRS, as amended, Land Use Commission
- Chapter 183 C, HRS, as amended, Forest Reservations, Water Development, Zoning
- Title 13, Chapter 5, HAR, Department of Land and Natural Resources, Providing for Land Use within the Conservation District

Information: www.hawaii.gov/dlnr/occl

B. Purpose

The Land Use Commission (LUC) has classified all lands in the state, public and private, into one of four categories of zoning; Urban, Rural, Agricultural or Conservation. The Conservation District (CD) includes areas necessary for: 1) protecting watershed and water sources; 2) preserving scenic and historic areas; 3) providing park lands, wilderness and beach reserves; 4) conserving endemic plants, fish and wildlife, including those which are threatened or endangered; 5) preventing floods and soil erosion; 6) forestry; 7) open space areas whose existing openness, natural condition, or present state of use, if retained, would enhance the present or potential value of abutting or surrounding communities, or would maintain or enhance the conservation of natural or scenic resources; 8) areas of value for recreational purposes; 9) other related activities; and 10) other permitted uses not detrimental to a multiple use conservation concept. The Board of Land and Natural Resources (BLNR) that manages the state Department of Land and Natural Resources (DLNR) regulates activities within the Conservation District. The Department requires that a Conservation District Use Permit (CDUP) be approved prior to any use of land in the CD.

C. Applicability to Aquaculture

Use of lands within the CD requires submission of a Conservation District Use Application (CDUA) for BLNR approval. In general, the CD encompasses large areas of mountain and shoreline lands, along with areas necessary for protecting watersheds and water sources. Also included is most of the state's submerged land in state marine waters and outlying small islands. Most of the state's historic Hawaiian fishponds are in the Conservation District.

Pursuant to Title 13, Chapter 5, HAR, land within the CD is classified into one of four use subzones:

- Protective (P): The objective of this subzone is to protect valuable resources in such designated areas as restricted watersheds; marine, plant and wildlife sanctuaries; and significant historic, archaeological, geological, and volcanic features and sites and other designated unique areas.
- Limited (L): The objective of this subzone is to limit uses where natural conditions suggest constraints on human activities (e.g., land susceptible to flooding, erosion, tsunami, volcanic activity or landslides).
- Resource (R): The objective of this subzone is to develop areas to ensure sustained use of natural resources, (e.g., future parkland, lands for growing and harvesting of timber, outdoor recreation, and shoreline and ocean waters).
- General (G): The objective of this subzone is to designate open space where specific conservation uses may not be defined, but where urban use would be premature.

It is important to note that certain permitted uses within the Conservation District subzones are cumulative; that is, all uses permitted in the Protective subzone are also permitted in the Limited subzone, all uses in the Limited subzone are also permitted in the Resource subzone, and all uses in the Resource subzone are permitted in the General subzone. The specific uses permitted in each subzone are listed below.

Aquaculture is a permitted use in the Resource and General subzones. The restoration or operation of significant historic and archaeological sites listed on the National Register of Historic Properties or State Register of Historic Places, e.g. Traditional Hawaiian fishponds, is a permitted use in all of the subzones.

The following land uses are permitted in the Protective (P) subzone:

- Research, recreational, and educational uses which require no physical facilities;
- Establishment and operation of marine, plant, and wildlife, sanctuaries and refuges, wilderness and scenic areas, including habitat improvements;
- Restoration or operation of significant historic and archaeological sites listed on the National or State Register;
- Maintenance and protection of desired vegetation, including the removal of dead, deteriorated and noxious plants;

- Programs for the control of animal, plant, and marine populations, including fishing and hunting;
- Monitoring, observing, and measuring natural resources;
- Occasional use; and
- Government use where public benefit outweighs any impact on the conservation district.

The following land uses are permitted in the Limited (L) subzone:

- All uses permitted in the Protective subzone;
- Emergency warning systems or emergency telephone systems;
- Flood, erosion, or siltation control projects; and
- Growing or harvesting of forest products.

The following land uses are permitted in the Resource (R) subzone:

- All uses permitted in the Protective and Limited subzones;
- **Aquaculture;**
- Artificial reefs; and
- Commercial fishing operations.

The following land uses are permitted in the General (G) subzone:

- All permitted uses in the Protective, Resource, and Limited subzones; and
- Development of water collection, pumping, storage, control and transmission.

According to statute, the BLNR uses the following general guidelines in considering approval of CDUA applications:

- The objectives of the subzone are given primary consideration;
- Any physical hazard identified shall be alleviated when required by the BLNR; Subdivision applications shall address the relationship with the county general plan; and

- The application shall meet the purpose and intent of the Conservation District.

D. Administering Department

The CDUA is administered by the DLNR, Office of Conservation and Coastal Lands (OCCL). The BLNR has the sole responsibility for approving a CDUA and has the option of attaching governing and legally binding conditions to the resulting permit.

Office of Conservation and Coastal Lands
Department of Land and Natural Resources
Kalanimoku Building, Room 131
1151 Punchbowl Street
Honolulu, Hawaii 96813
Phone: 808-587-0377
E-mail: dlnr.occl@hawaii.gov
Web site: www.hawaii.gov/dlnr/occl

E. Information Requirements

A detailed application form is available from DLNR and on the OCCL web site. The complete application must include at least the following information:

- A Draft EA must be prepared for the project and attached to the CDUA (and after review an EIS may be required);
- Description of the location and boundaries of the area to be utilized, including regional and site maps;
- Description of the parcel's characteristics including existing use, structures, utilities, access, vegetation, and topography, including appropriate photographs;
- Description of any existing covenants, easements, and restrictions for the parcel;
- Information on any historic sites which may be affected by the proposed use, including a plan for protection, salvage or restoration;
- Statement of the reasons for selecting the proposed location;
- Description of the activities to be conducted, including a specification as to whether the activities are commercial or noncommercial, a timetable for construction, deployment and operation of the facilities, and planned levels of use;

- Preliminary site plans for the proposed development (where applicable these should include site and elevation plans, floor plans, grading and drainage plans and landscaping plans); and
- As appropriate, a Construction Plan, abbreviated Business Plan, Management Plan, and Emergency Plan

F. Public Participation

A Public Hearing is required for all applications involving the following:

- **Land use(s) for commercial purposes, e.g., commercial aquaculture;**
- Change of subzone(s) or boundaries;
- Land use(s) in the Protective “P” subzone;
- Land use(s) as determined by the Chairperson where the scope of the proposed use or the public interest requires one.

G. Process Time

The processing time for a CDUA is 180 days from the date the application is officially received. If the application is for state lands under the control of DLNR, the processing time starts when the Chairperson signs the application as land owner. If the activity is on private land, the timeframe starts when the application is submitted to DLNR and deemed complete.

The application is considered during regularly scheduled public meetings of the BLNR. If the BLNR fails to act within 180 days after the receipt of an application, the applicant may automatically put the land to the proposed use, subject to the conditions outlined in §13- 2-21, HAR. If the application involves an EIS or a contested case hearing (see §91-9 HRS), the 180-day period may be extended for an additional 90 days at the request of the applicant, or, subject to approval by the BLNR, for a longer period.

H. Sequence of Filing

The BLNR will not act on an application until the environmental review process has been completed and a determination made, and if applicable, a Special Management Area Permit, Shoreline Setback Variance, Department of Health approval of sanitation facilities, and water supply permits or approvals have been obtained.

I. Cost

The cost of assembling the information required to supplement the CDUP application, e.g., EA or EIS, can be substantial depending on the size of the property, the complexity of the proposed development, the surrounding environmental conditions and community concerns. All CDUA fees shall be in the form of cash, certified or cashier's check, and payable to the State of Hawaii. The various fee categories are listed below:

- Board Permit – \$100 application fee, plus an additional \$100 per potential developed acre, or major fraction thereof, up to a maximum of \$2,000;
- Department Permit – \$50 application fee;
- Site Plan Approval – \$50 fee;
- Subzone Boundary Determination – \$50 fee;
- Emergency Permit – Waived;
- Temporary Variance – \$100 fee; and
- A fee of \$250 will be required for a public hearing.

4.2.3 Conservation District Use Application: Use of State Marine Waters

A. Legal Authority

- Chapter 205, HRS, as amended , Land Use Commission
- Chapter 183C, HRS, as amended, Forest Reservations, Water Development, Zoning
- Chapter 190 D, HRS, Ocean and Submerged Lands Leasing
- Title 13, Chapter 5, HAR, Department of Land and Natural Resources, Providing for Land Use Within the Conservation District

Information: http://www.capitol.hawaii.gov/hrscurrent/Vol03_Ch0121-0200D/HRS0190D/HRS_0190D-.htm

B. Purpose

The Land Use Commission (LUC) classifies all lands in the state as Urban, Rural, Agricultural, or Conservation. The Conservation District (CD) includes areas necessary for the purpose of conserving, protecting, and preserving the important natural resources of the state through appropriate management and use to promote their long-term sustainability and the public health, safety, and welfare. The CD not only includes the designated land areas, but also includes most of the state’s submerged land and outlying small islands. The Board of Land and Natural Resources (BLNR) that manages DLNR regulates activity within the CD. The Department requires that a CDUP be approved prior to any use of land or submerged land. DLNR has developed a separate CDUA for state marine waters.

C. Applicability to Aquaculture

Anyone proposing to conduct marine activities (including ocean thermal energy conversion, commercial mariculture, and other energy or water research, scientific, and educational activities) in, on, or under state marine waters or submerged lands is required to submit a CDUA for BLNR approval. The CD includes most of the state’s submerged land. Also termed state marine waters, they are defined as all waters of the state, including the water column, water surface, and submerged lands, extending from the upper reaches of the wash of the waves on shore seaward to the limit of the state’s police power and management authority, including the United States territorial sea, notwithstanding any law to the contrary (Chapter 190 D, HRS).

All state marine waters are placed in the Resource Subzone of the CD. The objective

of this subzone is to develop areas to ensure sustained use of natural resources (e.g., future park land, lands for growing and harvesting of timber, outdoor recreation, and ocean waters). Aquaculture is a permitted use in the Resource subzone, therefore offshore mariculture (salt water aquaculture) is a permitted use of state ocean waters. According to the law, mariculture means the aquaculture, cultivation and production for research, development, demonstration and commercial purposes of aquatic plants and animals within state marine waters, but excludes floating structures that are not anchored.

Generally, as with land sites, the BLNR uses the following guidelines in considering approval of CDUP applications:

- Objectives of the subzone are given primary consideration;
- Any physical hazard identified shall be alleviated when required by the BLNR;
- Applications shall meet the purpose and intent of the CD;
- Any person who has obtained an approved CDUA for marine activities in state marine waters or submerged lands must enter into a lease for the conduct of those activities;
- An application shall not be approved if in so doing it would fail to protect the public's use and enjoyment of the reefs in state marine waters.

D. Administering Department

The CDUA is administered by the DLNR, Office of Conservation and Coastal Lands (OCCL). The BLNR has the sole responsibility for approving a CDUA and has the option of attaching governing and legally binding conditions to the resulting permit.

Office of Conservation and Coastal Lands
Department of Land and Natural Resources
Kalanimoku Building, Room 131
1151 Punchbowl Street
Honolulu, Hawaii 96813
Phone: (808) 587-0377
E-mail: dlnr.occl@hawaii.gov
Web site: www.hawaii.gov/dlnr/occl

E. Information Requirements

A detailed application form for use of marine waters is available from DLNR and on the OCCL web site. The application differs somewhat from the CDUA for land sites and

includes additional information specific to mariculture and the requirements of Chapter 190 D HRS. As with the request for a land site, an application for an ocean site requires preparation of a draft EA, and if necessary, an EIS. The information needs are briefly highlighted below, under four categories:

- Chapter 190 D requirements include, but are not limited to: a) location, size and boundaries of state marine waters used and the nature of the intended use; b) extent the proposed project requires exclusive use; c) reasons for selection of the proposed location; d) general description of the activities and whether they will be commercial; e) existing uses of the proposed site and impacts of the project; f) impacts of the project on the environment; and g) capacity of the applicant to carry out the entire project.
- CD requirements include, but are not limited to addressing: a) project consistency with the purpose of the CD and objectives for the subzone; b) how potential adverse impacts will be mitigated; and c) how the proposed use will not materially be detrimental to the public health, safety, and welfare.
- Additional information requirements include, but are not limited to: a) a cultural resources assessment; b) feasible actions to reasonably protect native Hawaiian rights; c) impacts on public access to the shoreline; and d) impacts on viewscape for any individual or community.
- Requirements applicable to mariculture projects include, but are not limited to: a) physical description of the size of the site and infrastructure; b) how will the project limit public access to the area and how will the public be notified of the limitations; c) what are the existing uses and how will ocean use be managed in the area; d) describe any impacts on rare, threatened and endangered species; e) describe the features of the benthic habitat in the area; and f) a detailed Management Plan for the project that includes construction and operational details and a time table.

F. Public Participation

A Public Hearing is required for all applications for use of state marine waters involving the following:

- Use(s) for commercial purposes, e.g., commercial aquaculture;
- Change of subzone(s) or boundaries;
- Use(s), as determined by the Chairperson, where the scope of the proposed use or the public interest, require one.

G. Process Time

The processing time for a CDUA is 180 days from the date the application is officially received. If the application is for state lands under the control of DLNR, i.e. in this case an ocean site, the processing time starts when the Chairperson of the BLNR signs the application as the land owner. The application is considered during regularly scheduled public meetings of the BLNR. If the BLNR fails to act within 180 days after the receipt of an application, the applicant may automatically put the land to the proposed use, subject to the conditions outlined in §13- 2-21, HAR. If the application involves an EIS or a contested case hearing (see §91-9 HRS), the 180-day period may be extended for an additional 90 days at the request of the applicant, or, subject to approval by the BLNR, for a longer period.

H. Sequence of Filing

The BLNR will not act on an application until the environmental review process has been completed and a determination made, and if applicable, a Special Management Area Permit, Shoreline Setback Variance, Department of Health approval of sanitation facilities, and water supply permits or approvals have been obtained.

I. Cost

The cost of assembling the information required to supplement the CDUP application, e.g., EA or EIS, can be substantial depending on the size of the property, the complexity of the proposed development, the surrounding environmental conditions, and community concerns. All CDUA fees shall be in the form of cash, certified or cashier's check, and payable to the State of Hawaii. The various fee categories are listed below.

- Board Permit – \$100 application fee, plus an additional \$100 per potential developed acre, or major fraction thereof, up to a maximum of \$2,000;
- Department Permit – \$50 application fee;
- Site Plan Approval – \$50 fee;
- Subzone Boundary Determination – \$50 fee;
- Emergency Permit – Waived;
- Temporary Variance – \$100 fee;
- A fee of \$250 will be required for a public hearing.

4.2.4 Historic Properties and Sites Review

A. Legal Authority

- Presidential Executive Order 11593
- National Historic Preservation Act of 1966, as amended, Public Law 89-665; 16 U.S.C., 470 et seq.
- Chapter 6E, HRS, Historic Preservation
- Title 13, Subtitle 13, Chapters 275 -284 HAR , Rules Governing Procedures for Historic Preservation Review for Governmental Projects Covered Under Sections 6E-7 and 6E-8, HRS

Information: <http://hawaii.gov/dlnr/hpd/hphrs.htm>

B. Purpose

The purpose of the historic places and sites review is to protect buildings, structures, objects, districts, areas, and sites, including underwater sites that are significant to the history, architecture, archaeology, or culture of the state, its communities or the nation. The review procedure is designed to provide the state adequate advance notice to assess the project prior to any construction, alteration or improvement being undertaken that may affect a historic property.

C. Applicability to Aquaculture

Before any agency or officer of the state, or counties, approves any project involving a permit, license, certificate, land use change, subdivision or other entitlement for use, which may affect a historic property, the agency shall advise the State Historic Preservation Division (SHPD) in the DLNR and allow the SHPD an opportunity to review the potential effects of the proposed project, if any, on historic properties or burial sites. In particular, before any construction alteration, disposition or improvement on private land which could affect a property on the Hawaii Register of Historic Places, the landowner shall notify the SHPD and allow an opportunity for review. The activity cannot commence until SHPD has concurred or 90 days have passed. Within 90 days, SHPD shall concur with the project or begin condemnation proceedings, or undertake to record, preserve and salvage any historical information deemed necessary to preserve Hawaiian history.

Persons interested in restoring fishponds should contact SHPD early in the planning process. Since the ponds were important food production features of early Hawaiian communities and are considered cultural treasures, they are likely to be surrounded by

significant archeological and cultural sites. Moreover, accurate restoration of a Hawaiian fishpond will need to be closely coordinated with SHPD.

Importantly, it is unlawful to take, destroy, or alter any historic property located on lands owned or controlled by the state, except as permitted by DLNR. Projects by state agencies shall not commence until SHPD concurs with the action. If SHPD does not concur within 90 days, the agency may apply to the Governor for a review and final decision.

For large projects, SHPD recommends applicants instigate a historic site review, also called an archeological assessment, of property to determine if unrecorded historic sites may be present, particularly if there are known sites in the vicinity (permits for archeological work are issued under §13-282, HAR). SHPD requires that archeological survey consultants be qualified for this task (see §13-281, HAR). If sites are found and the applicant decides to continue with the project, then SHPD may require preparation of a historic site preservation plan to avoid, minimize, or mitigate effects on historic properties (§13-276-280, HAR). Survey and plans are submitted to SHPD for review, comment and approval for a fee.

The respective state and federal laws and regulations do not necessarily prohibit alteration or destruction of designated historic places, but every effort is made by SHPD to preserve and protect such resources to the extent permissible by law. Projects affecting historic properties, but judged to be in the best interests of the public, or projects that produce adverse effects to landowners or other affected parties, may be allowed to proceed (following SHPD review), provided the state has the opportunity to record, retrieve, or salvage historical data, information, or artifacts which would be otherwise lost.

D. Administering Agency

The Historic Site Review requirement is administered by the Historic Preservation Division of the Department of Land and Natural Resources.

State Historic Preservation Division
Department of Land and Natural Resources
State of Hawaii
601 Kamokila Blvd., No. 555
Honolulu, Hawaii 96707
Phone: 808-692-8015
Fax: 808-692-8020
Web site: <http://hawaii.gov/dlnr/hpd/>

E. Information Requirements

An applicant or agency must file a notice of their intention to perform any action

which may impact an historic site 90 days prior to the proposed project start date. The applicant must make clear the nature of the proposed action and the precise location of such activities with respect to any historic site. A site plan and scale drawings describing the proposed action are generally required. A survey by a qualified archeologist may also be required if sites are suspected but not evident. Actions affecting historic sites on the National Register or Hawaii Resister will also require the preparation of an Environmental Assessment and if determined to be necessary an Environmental Impact Statement (see state EIS section).

Once a site is surveyed and it is determined that significant historic sites will be impacted, then the applicant must work with SHPD to develop one of several approaches to avoiding, minimizing, or mitigating adverse impacts. Options include developing one or more of the following: a preservation plan, a monitoring plan and/or an archeological data recovery plan. Once these documents are available, SHPD will review and approve the plan or plans for implementation.

F. Public Participation

There is no requirement for a public hearing in connection with a Historic Site Review. However, if a site mitigation plan is required then SHPD will post on its web site that the plan has been received and interested parties may comment. Projects affecting a designated historic property will frequently require an EIS and may entail a public hearing for the EIS.

G. Process Time

The processing time for a Historic Properties and Site Review is approximately 180 days from the date SHPD is officially notified. If a historic site is present and the applicant must develop plans to avoid, minimize or mitigate impacts, the general process is described below. Time required will vary with the scope and complexity of the historic site issues encountered.

H. Sequence of Filing

By law, a permit, license, certificate, land use change, subdivision or other entitlement for use, which may affect a historic property may not be approved without allowing SHPD the opportunity to comment. It is therefore highly advisable that SHPD be consulted early on in the planning process regarding any known or suspected historic sites to ensure the prompt processing of applicable permits.

I. Cost

The cost associated with obtaining the necessary information for a SHPD review will

vary depending upon the scope and nature of the historic sites affected. An archeological reconnaissance survey, if required, can be costly, depending on the size and scope of the proposed project. SHPD charges fees established by rule for all its document review actions. Below is a listing of the specific actions and the cost for staff review of a particular type of document, be it an assessment or survey of a site or a plan to avoid, minimize or mitigate impacts of a project moving forward.

- Archeological Assessment – \$50 fee;
- Archeological Inventory Survey Plan – \$150 fee;
- Archeological, Architectural or Ethnographic Survey Report – \$450 fee;
- Preservation Plan – \$150 fee;
- Monitoring Plan – \$25 fee;
- Archeological Data Recovery Plan – \$150 fee;
- Burial Treatment Plan – \$250 fee;
- Archeological Monitoring Report – \$100 fee;
- Archeological Data Recovery Report – \$450 fee;
- Ethnographic Documentation Report – \$450 fee;
- Burial Disinterment Report – \$25 fee;
- Osteological Analysis Report – \$50 fee.

4.2.5 Burial Sites Review

A. Legal Authority

- National Historic Preservation Act of 1966, as amended, Public Law 89-665; 16 U.S.C., 470 et seq.
- Chapter 6E, HRS, Historic Preservation
- Title 13, Subtitle 13, Chapters 275 -284 HAR , Rules Governing Procedures for Historic Preservation Review for Governmental Projects Covered Under Sections 6E-7 and 6E-8, HRS

Information: <http://hawaii.gov/dlnr/hpd/hphrs.htm>

B. Purpose

Chapter 6E, HRS, also governs practice and procedure relating to proper care and protection of native Hawaiian burial sites found in the state and provides additional protection for sites deemed of high preservation value. A burial site means any specific unmarked location where prehistoric or historic human skeletal remains and their associated burial goods, if any, are interred, and its immediate surrounding archeological context (Chapter 13-300-1, HAR).

C. Administering Agency

Administration of Native Hawaiian burial issues is by the State Historic Preservation Division (SHPD) in the DLNR.

State Historic Preservation Division
Department of Land and Natural Resources
State of Hawaii
601 Kamokila Blvd., No. 555
Honolulu, Hawaii 96707
Phone: 808-692-8015
Fax: 808-692-8020
Web site: <http://hawaii.gov/dlnr/hpd/>

D. Applicability to Aquaculture

Before any agency or officer of the state, or counties, approves any project involving a permit, license, certificate, land use change, subdivision or other entitlement for use, which may affect a historic property the agency shall advise the State Historic Preservation Division (SHPD) in the DLNR and allow the SHPD an opportunity to review the

potential effects of the proposed project, if any, on historic properties or burial sites. For large land area projects, SHPD recommends a comprehensive archeological inventory survey that properly and adequately discloses potential native Hawaiian burials and historic artifacts to facilitate timely regulatory approvals and timely completion of construction schedules.

In general, there are two possible decision making processes once a historic burial site is evident. If the site has been “previously identified,” meaning burial sites identified during an archeological survey or known through oral or written testimony prior to any disturbance, then one of the five Island Burial Councils has sole authority to decide permanent disposition, in consultation with known lineal or cultural descendents (see §6E-43 (b), HRS). If the burial site is “inadvertently discovered,” meaning unanticipated finding of human skeletal remains and any burial goods resulting from unintentional disturbance, then SHPD has authority to decide permanent disposition (see §6E-43.6, HRS). Though there is a legal presumption that all burial sites are significant and shall be preserved in place, SHPD and the burial councils have the option of recommending preserving in place or relocating remains.

E. Information Requirements

The historic preservation review process for sites and burials is governed by a number of legal requirements and detailed rules promulgated to assure high quality work. As such, the information requirements to negotiate the process to manage potential impacts on burial sites on a proposed aquaculture site can be extensive. To illustrate the requirements, consider there are rules found in §13-275-284 and 300, HAR governing:

- Procedures for historic preservation review for government projects;
- Standards for Archeological Inventory Surveys and Reports;
- Requirements for Archeological Site Preservation and Development ;
- Standards for Archeological Data Recovery Studies and Reports;
- Standards for Archeological Monitoring Studies and Reports;
- Professional Qualifications;
- Permits for Archeological Work; and
- Procedures for Proper Treatment of Burial Sites and Human Skeletal Remains.

As interpreting and understanding these governing rules can be challenging, applicants should consult with SHPD to determine the information and action required for a

particular project.

F. Public Participation

There is no requirement for a public hearing in connection with a Burial Site Review. However, if a burial site issue is referred to a burial council, the meetings and deliberations are posted and the public may attend. Further, there is a requirement in burial site matters before the council that consultation should occur with known lineal or cultural descendents, Office of Hawaiian Affairs, Hui Malama I Na Kupuna, or other interested organizations.

G. Process Time

Depending on the nature of the discovery of a burial site, that is as a previously identified site which is under the jurisdiction of the burial councils or an inadvertently discovered site, which is under the jurisdiction of SHPD, the process of reconciliation will differ. Likewise the amount of time will vary with the scope, size, and complexity of the site.

In general, the island burial councils shall determine whether preservation in place or relocation of previously identified native Hawaiian human burial sites is warranted, following criteria which shall include recognition that burial sites of high preservation value, such as areas with a concentration of skeletal remains, or prehistoric or historic burials associated with important individuals and events, or areas that are within a context of historic properties, or have known lineal descendents, shall receive greater consideration for preservation in place. Further, the burial council has 45 days to render a decision, unless otherwise extended by the agreement between the landowner and the department.

In general, SHPD will consider the same criteria that are considered by the burial council to render a decision regarding an inadvertently discovered site; that is, preserving a burial in place or relocating the remains to another appropriate area. SHPD will render a decision on relocation or preservation in place of inadvertently discovered human burial sites within two (2) working days (if on Oahu) and three (3) working days on the neighbor islands. SHPD may consult with the island burial councils, recognized lineal or cultural descendents and Office of Hawaiian Affairs, or Hui Malama I Na Kupuna.

H. Sequence of Filing

By law, a permit, license, certificate, land use change, subdivision or other entitlement for use, which may affect a historic property may not be approved without allowing SHPD the opportunity to comment. It is therefore highly advisable that SHPD be consulted early on in the planning process regarding any known or suspected historic

burial sites to ensure the prompt processing of applicable permits.

I. Cost

The cost associated with obtaining the necessary information for a SHPD review will vary depending upon the scope and nature of the historic sites affected. An archeological reconnaissance survey, if required, can be costly, depending on the size and scope of the proposed project. SHPD charges fees established by rule for all its document review actions. Below is a listing of the specific actions and the cost for staff review of a particular type of document, be it an assessment or survey of a site or a plan to avoid, minimize or mitigate impacts of a project moving forward.

- Archeological Assessment – \$50 fee;
- Archeological Inventory Survey Plan – \$150 fee;
- Archeological, Architectural or Ethnographic Survey Report – \$450 fee;
- Preservation Plan – \$150 fee;
- Monitoring Plan – \$25 fee;
- Archeological Data Recovery Plan – \$150 fee;
- Burial Treatment Plan – \$250 fee;
- Archeological Monitoring Report – \$100 fee;
- Archeological Data Recovery Report – \$450 fee;
- Ethnographic Documentation Report – \$450 fee;
- Burial Disinterment Report – \$25 fee;
- Osteological Analysis Report – \$50 fee.

4.2.6 National Pollutant Discharge Elimination System (NPDES) Permit

A. Legal Authority

- Clean Water Act, as amended, 33 U.S.C. 1342
- Title 40 CFR, § 122.
- Chapter 342D, Part III, HRS, Water Pollution Control
- Title 11, Chapter 54, HAR, Department Of Health, Water Quality Standards
- Title 11, Chapter 55, HAR, Department Of Health, Water Pollution Control

Information: http://www.capitol.hawaii.gov/hrscurrent/Vol06_Ch0321-0344
<http://gen.doh.hawaii.gov/sites/har/admrules/default.aspx>

B. Purpose

The purpose of the National Pollutant Discharge Elimination System (NPDES) permit is to protect the water quality of the U.S., and this case Hawaii, by regulating the discharge of wastewater from fixed point sources into surface waters, including wetlands and coastal waters. Fixed point sources include pipes, ditches, channels, tunnels, wells, etc., from which pollutants may be discharged. Ponds, tanks, cages or other similar aquaculture infrastructure are generally considered fixed point sources for purposes of law.

There are two levels of permits, a general permit and an individual permit. The activities that qualify for a general permit are adopted by rules (Chapter 11-55, HAR). They include discharges that are similar in nature, minor and non-controversial. The activities that must seek an individual permit do not qualify for a general permit and are site specific in their potential impacts.

C. Applicability to Aquaculture

The NPDES permit applies to several types of aquaculture systems, generally categorized under the terms; Aquaculture Project and Concentrated Aquatic Animal Production Facility (CAAP). “Aquaculture Project” means a defined managed water area which uses discharges of pollutants into a designated area for the maintenance or production of harvestable freshwater, estuarine, or marine plants or animals. “Designated” means the portions of waters of the U.S. within which the applicant plans to confine the cultivated species, using a method of plan or operation (including, but not limited to, physical confinement) which, on the basis of reliable scientific evidence, is expected to ensure the specific individual organisms comprising an aquaculture crop will enjoy

increased growth attributable to the discharge of pollutants and be harvested within a defined geographic area.

“Concentrated Aquatic Animal Production Facility” means a hatchery, fish farm, or other facility which contains, grows or holds aquatic animals in either of the following categories, or which the director of the Department of Health (DOH) designates as such on a case-by-case basis:

- Cold water fish species or other cold water aquatic animals including, but not limited to, trout and salmon in ponds, raceways, or other similar structures which discharge at least 30 days per year but does not include:
 - Facilities which produce less than 20,000 pounds of aquatic animals per year; and
 - Facilities which feed less than 5,000 pounds of food during the calendar month of maximum feeding.
- Warm water fish species or other warm water aquatic animals including, but not limited to, catfish, sunfish, and minnows in ponds, raceways or other similar structures which discharge at least 30 days per year, but does not include:
 - Closed ponds which discharge only during periods of excess runoff; or
 - Facilities which produce less than 100,000 pounds of aquatic animals per year.

The NPDES permit sets specific limits on discharge volume and effluent concentration. It is issued for a set time period of no more than five years and is renewable and transferable. Once granted, monitoring of effluent volume and concentration is usually required. Title 11, Chapters 54 and 55 of the DOH Administrative Rules should be reviewed for specific requirements for any site.

D. Administering Agency

The Department of Health, Clean Water Branch (CWB) is responsible for administering the NPDES permit requirements.

Clean Water Branch
Environmental Management Division
Department of Health
State of Hawaii
919 Ala Moana Blvd., Room 301
Honolulu, Hawaii 96814-4920

Phone: 808-586-4309

Fax: 808-586-4352

E-mail: CleanWaterBranch@doh.hawaii.gov

Web site:

[http://hawaii.gov/health/environmental/water/cleanwater/forms/indiv-](http://hawaii.gov/health/environmental/water/cleanwater/forms/indiv-index.html)

[index.html](http://hawaii.gov/health/environmental/water/cleanwater/forms/indiv-index.html) (see web site for Neighbor Island Branch Office information: Kauai; Maui; Hilo, Hawaii; and Kona, Hawaii.)

E. Information Requirements

The CWB has an extensive web site that can be accessed through the link above that provides information on administrative procedures and forms needed to obtain an NPDES permit and a Zone of Mixing permit. This site also lists the Standard NPDES Permit Conditions which are attached to all approved NPDES permits. In addition, highly useful water quality maps, i.e., island maps of receiving water classifications published by the DOH Office of Environmental Planning can be found on the web site.

In general, a project application must describe the proposed activity, including location, species and number of animals, daily flow of effluent, and infrastructure making up the facility. The physical-chemical nature of the effluent, including pH, temperature, dissolved oxygen, nitrogen, and phosphorus, must be characterized. Further, it describes the receiving water and water source and the total pounds of food being fed during the calendar month of maximum feeding. Tests on the existing quality of the receiving water, a survey of the receiving water's ecosystem and an analysis of the prevailing water currents may also be required.

Preparation of environmental review documents is not specifically required by the state. However, if the discharge of effluent or the placement of outfall structures fall under the permit authority of a federal or state agency and the project involves the potential for a significant effect on the environment, an Environmental Assessment and possibly an Environmental Impact Statement will be required. The applicant should consider, if an EA or EIS is prepared for another project permit, asking CWB if they should submit a copy to support the NPDES application.

F. Public Participation

There is no required public hearing. The Department of Health must notify the public through the Office of Environmental Quality Control (OEQC) Environmental Notice publication of their intent to issue a permit. A public hearing may be required if requested by a member of the public.

G. Process Time

The processing time for an NPDES permit varies with the complexity of the project. For minor project proposals, processing of the NPDES permit can be expected to take from three to four months from the acceptance of a completed application. Projects requiring an Environmental Assessment or Impact Statement may take considerably longer. NPDES permits are issued for a finite period of time, generally five years. All NPDES permit applications will be reviewed by the U.S. Environmental Protection Agency, Region 9 Office. Permits are renewable.

H. Sequence of Filing

There is no specific sequencing requirement for NPDES permits. Generally, for warm water aquaculture projects, an approved NPDES permit must be in place before production reaches 100,000 pounds a year or biomass at a site reaches 100,000 pounds.

I. Costs

The filing fee for an NPDES permit application for a CAAP or an Aquaculture Project is \$1000. Public notice and hearing fees will vary. The cost of preparing the permit application and required information varies with the scope and complexity of the project and the nature of the surrounding environment. NPDES permits are conditioned upon the applicant conducting periodic monitoring tests during the life of the permit to ensure compliance. The costs of conducting such monitoring, including equipment and laboratory analysis, can be significant.

4.2.7 Zone of Mixing Approval

A. Legal Authority

- Clean Water Act, as amended, 33 U.S.C. 1342
- Title 40 CFR, § 122
- Chapter 342D, Part III, HRS, Water Pollution Control
- Title 11, Chapter 54, HAR, Department of Health, Water Quality Standards

Information: http://www.capitol.hawaii.gov/hrscurrent/Vol06_Ch0321-0344/HRS0342D
<http://gen.doh.hawaii.gov/sites/har/admrules/default.aspx>

B. Purpose

The Zone of Mixing (ZOM) works “hand in glove” with the NPDES permit by providing a form of variance to allow an effluent discharge to be assimilated into state marine waters under certain conditions, so as not to violate water quality standards (§11-54-9 HAR). A ZOM is a limited area around the outfall of a fixed point source that provides for the initial dilution of waste effluent upon its entry into the receiving waters. ZOMs are accepted as being necessary for the assimilation of certain discharges, including aquaculture discharges, which have received the best degree of treatment or control. It is the objective of these limited zones to provide for a practical means to manage the placement and manner of discharges or emissions so as to achieve the highest attainable level of ambient water quality or otherwise to achieve the minimum environmental impact from dilution and dispersion from substances which may be considered pollutants.

C. Applicability to Aquaculture

ZOM approval is required for aquaculture facilities that discharge effluent into a location where receiving water quality standards for that area would be violated by the effluent without further dilution or treatment prior to discharge. Specific water quality standards for the state and the classification of receiving waters are found in Title 11, Chapter 54 of the Department of Health Administrative Rules. In general terms, ZOMs are not allowed for discharges into waters categorized as pristine or protected (Class 1 Inland Waters, Class AA Marine Waters, and Class 1 Marine Bottom Ecosystems). Descriptions of the classifications are found in §11-54-2, through §11-54-7, HAR. ZOMs may be allowed for discharges into other waters (e.g., Class A marine waters) consistent with the standards and requirements set forth in the administrative rules. A ZOM approval is normally processed in conjunction with an NPDES permit.

Approval of a ZOM can only be made if:

- The operation which is making the discharge is in the public interest;
- The discharge does not substantially endanger human health or safety;
- Compliance with the existing water quality standards from which a zone of mixing is sought would produce a hardship without equal or greater benefits to the public;
- The basic standards of all waters are not violated; and
- The discharge has/will receive the best degree of treatment or control.

Every ZOM approved and established must be monitored, including benthic (bottom) biological communities, on an ongoing basis by the successful applicant and the results reported to DOH and if required, to DLNR.

D. Administering Agency

The Department of Health, Clean Water Branch, is responsible for administering the ZOM approval. The Department may approve the establishment of a ZOM after review and concurrence by the Regional Office of the U.S. Environmental Protection Agency.

Clean Water Branch
Environmental Management Division
Department of Health
State of Hawaii
919 Ala Moana Blvd., Room 301
Honolulu, Hawaii 96814-4920
Phone: 808-586-4309
Fax: 808-586-4352
E-mail: CleanWaterBranch@doh.hawaii.gov
Web site:
<http://hawaii.gov/health/environmental/water/cleanwater/forms/individ-index.html> (see web site for Neighbor Island Branch Office information: Kauai; Maui; Hilo, Hawaii; and Kona, Hawaii)

E. Information Requirements

The application for a ZOM approval must be made on the DOH CWB-ZOM form found on the CWB website. The application should be made concurrent with any application for an NPDES permit. Categories of information on the form include the following:

- Owner information;
- Owner type;
- Operator and facility information;
- Receiving state water(s) information;
- Period of discharge;
- Note if attached to the NPDES application;
- Pollution control measures presently applied prior to discharge;
- Present waste water discharge;
- Source and quantity of discharge;
- Physical quality of discharge;
- Specific water quality criteria parameters;
- Description of present conditions and use of receiving water;
- Proposed ZOM boundaries map; and
- Best degree of treatment.

F. Public Participation

A public hearing is required prior to approval of a ZOM in the county where the source is located. If an NPDES permit is being considered in conjunction with a ZOM, the public notification and comment process established for the NPDES permit can be substituted for the hearing requirement.

G. Process Time

The processing time for a Zone of Mixing approval varies with the complexity of the project and the processing time for the NPDES permit. For minor project proposals, processing the NPDES/ZOM package can be expected to take from three to four months from the acceptance of a completed application. A ZOM approval is issued for a period of time up to five years and is tied to the approval period for a NPDES permit. Permits are renewable and transferable.

H. Sequence of Filing

An applicant should consult with the DOH CWB early in the planning process to consider applicable water quality standards for the proposed site and effluent disposal alternatives to determine approval requirements and facility design alternatives. Generally, for aquaculture projects, an approved NPDES/ZOM permit package must be in place before the yearly production reaches 100,000 pounds or the biomass on site reaches 100,000 pounds.

I. Cost

There is no filing fee for the ZOM. Public Notice and Hearing fees will vary. The cost of preparing the application and the necessary supplemental information varies with the scope of the project. When established, ZOMs are generally conditioned upon the applicant conducting certain monitoring tests to ensure compliance. The cost to conduct such monitoring can be significant.

4.2.8 Water Quality Certification

A. Legal Authority

- Clean Water Act, as amended, 33 U.S.C. 1251, et seq.
- Chapter 342D, HRS, Water Pollution
- Title 11, Chapter 54, HAR, Department of Health, Water Quality Standards

Information: <http://gen.doh.hawaii.gov/sites/har/admrules/default.aspx>

B. Purpose

A Water Quality Certification (WQC) Permit is used to certify that any action involving a federal license or permit does not, or will not, violate applicable state Water Quality Standards.

C. Applicability to Aquaculture

A WQC is required by §401 of the Clean Water Act, 33 U.S.C. 1251 et seq., for any applicant for a federal license or permit (in this case Department of the Army permit) to conduct any activity, including, but not limited to, the construction or operation of aquaculture facilities which may result in any discharge into navigable waters of the U.S. The DOH Director will issue the certification if there is reasonable assurance that applicable water quality standards will not be violated and the best practicable methods of control will be applied to a discharge from the operation.

A WQC will be needed to restore a coastal Hawaiian fishpond. However, offshore aquaculture projects do not require the certification.

D. Administering Agency

The Department of Health, Clean Water Branch is responsible for administering the Water Quality Certification, which is issued by the Department Director.

Clean Water Branch
Environmental Management Division
Department of Health
State of Hawaii
919 Ala Moana Blvd., Room 301
Honolulu, Hawaii 96814-4920
Phone: 808-586-4309
Fax: 808-586-4352

E-mail: CleanWaterBranch@doh.hawaii.gov

Web site:

<http://hawaii.gov/health/environmental/water/cleanwater/forms/individ-index.html> (see web site for Neighbor Island Branch Office information: Kauai; Maui; Hilo, Hawaii; and Kona, Hawaii)

E. Information Requirements

A WQC application includes the following information:

- Owner information;
- General contractor information;
- Emergency contact information;
- Project site information;
- Associated permits or licenses;
- Receiving state water information;
- Project description;
- Description of existing environment and a description of the facility or activity, the discharge from construction and operation, the potential environmental effects from construction activities;
- Project schedule;
- Site-specific best management practices (BMP's) plan;
- Mitigation compensation plan; and
- Supporting documents.

F. Public Participation

The DOH Director may provide public notice of a WQC application and an opportunity for public comment or hearing, upon request or at the Director's own determination. A public hearing may be required depending on a case-by-case basis.

G. Process Time

The Director is required to act on a request for certification within one year. If the

Director fails or refuses to act on a request for certification within one year after receipt of a complete application, then the certification requirements shall be waived with respect to the federal applications in question.

H. Sequence of Filing

The WQC permit is required prior to the issuance of the subject federal approval or permit. Therefore, an applicant should apply for the certification at the earliest feasible time and in conjunction with the federal action being requested.

I. Cost

The filing fee for a Section 401 WQC permit is \$1000, except for an activity which meets the DOH conditional blanket certification criteria issued to the U.S. Army Corp of Engineers, Honolulu District (<http://gen.doh.hawaii.gov/sites/har/admrules/default.aspx>). Public Notice and Hearing fees will be paid by the applicant and will vary with the project.

4.2.9 Federal Consistency Review: Coastal Zone Management Program

A. Legal Authority

- Coastal Zone Management Act of 1972, as amended, Public Law 92-5 83, 16 U.S.C. 1451 et seq.
- Title 15 CFR, Part 930, Federal Consistency with Approved Coastal Zone Management Programs
- Chapter 205A, Part I, HRS, Hawaii Coastal Zone Management Act

Information: http://www.capitol.hawaii.gov/hrscurrent/Vol04_Ch0201-0257/HRS0205A/.

B. Purpose

The Hawaii Coastal Zone Management Act provides a broad set of Hawaii-specific goals, objectives and policies, consistent with the Federal Coastal Zone Management Act, that deal with protection, management, development, restoration and enhancement of coastal zone recreational, historic, scenic, open space, economic and ecosystem resources (Chapter 205A, HRS). In Hawaii, the regulation of activities within the coastal zone is separated into three areas: Federal Consistency Review, administered by the Coastal Zone Management Program, within the Office of State Planning (OSP), Department of Business, Economic Development, and Tourism (DBEDT); and Special Management Area Permits and Shoreline Setback Variances, both administered by the respective counties.

Federal law requires that federal agencies conduct their planning, management, development and regulatory activities in a manner consistent with the state Coastal Zone Management Program (CZMP). Pursuant to federal regulation, the state may review all federal activities within the coastal zone for consistency with the CZMP. If the state determines the federal action is not consistent with its CZMP, the federal activity cannot go forward unless the U.S. Secretary of Commerce overrides the determination.

C. Applicability to Aquaculture

In Hawaii, the Coastal Zone Management Area (Coastal Zone) is defined as all marine waters extending from the upper reaches of the wash of the waves on the shore seaward to the limit of the state's police power and management authority, including the United State's territorial sea and all land areas, excluding those lands designated as state forest reserves. Activities within the Coastal Zone that are federally funded require a federal permit or license, or are conducted by the federal government and directly impact the Coastal Zone, are subject to review for consistency with the state's CZMP.

Aquaculture facilities that require a Department of the Army permit from the Army Corps of Engineers will be sent to the state CZMP for consistency review, as part of the federal permit process. The review process generally involves:

- Determination by the proponent and applicable federal agency as to whether the activity is consistent with the CZMP;
- Submission of the determination, CZMP forms and related information to the OSP for review;
- OSP's concurrence with or objection to the determination; and
- OSP's non-concurrence can be appealed to the Secretary of Commerce.

D. Administering Agency

The Office of State Planning and its Coastal Zone Management Program are administered by the Department of Business, Economic Development & Tourism (DBEDT). The CZMP is responsible for administering Hawaii's Program and conducting Federal Consistency Reviews.

Coastal Zone Management Program
Office of State Planning
Department of Business, Economic Development & Tourism
235 S. Beretania Street, 6th Floor
Honolulu, Hawaii 96813-2419
Phone: 808-587-2878
E-mail: jnakagawa@dbedt.hawaii.gov
Web site: http://hawaii.gov/dbedt/czm/program/fed_con.php

E. Information Requirements

Detailed instructions for preparing the consistency assessment are found in "Hawaii Coastal Zone Management Program Federal Consistency Procedures Guide", available on the OSP web site above. The basic application submittal for review includes the following items: CZM application form, detailed project description, CZM Assessment Form (detailed list of questions on potential impacts), site location map, project plans or drawings, copy of the Section 401 Water Quality Certification application and such supplemental information as required. If an EA or EIS is prepared for another permit process then it could be included to supplement the available information.

F. Public Participation

Public notice of a consistency review is required and is generally provided through the federal agency public notice. Responses are usually requested within 30 days of the notice. The OSP weighs all written public comments pertaining to the enforceable CZMP policies applicable to the project. Public hearings on the proposed activity, if any, conducted by the federal agency are also a source of public input into the consistency review process.

G. Process Time

The processing time for a consistency review varies with the scope and complexity of the project. After receipt of the necessary information, OSP conducts a preliminary review and may request additional information. Next, input from agencies and the public will be requested. When the review is completed, a determination will be made. If OSP determines that the proposed activity is not consistent with the CZMP objectives, it will recommend alternative measures that would make the project consistent.

H. Sequence of Filing

The proposed federal funding, permit or activity cannot go forward until the consistency determination is obtained. Therefore, the review process should be initiated early in the project planning and federal permitting process.

I. Cost

There is no fee associated with the consistency review. The cost of preparing the necessary information will depend on the scope and complexity of the proposed activity. Generally, most of the necessary information will have been prepared in conjunction with other applicable permits.

4.2.10 Underground Injection Control

A. Legal Authority

- Federal Safe Drinking Water Act, Pub. Law 93-523, U.S.C. 300f et seq.
- 40 CF R Part 144
- Chapter 340E, HRS, Safe Drinking Water
- Title 11, Chapter 23 HAR, Underground Injection Control

Information: <http://gen.doh.hawaii.gov/sites/har/AdmRules1/11-23.htm>

B. Purpose

The purpose of the Underground Injection Control (UIC) program is to protect the quality of the state's underground sources of drinking water from pollution by subsurface disposal of fluids. The program seeks to control the location, construction and operation of injection wells so that injected fluids do not migrate and pollute the underground drinking water sources.

C. Applicability to Aquaculture

In certain situations, land-based aquaculture operations may find it advantageous to discharge wastewater into underground injection wells rather than into surface waters. An injection well is defined by HAR as a well into which subsurface disposal of fluid, or fluids, occurs or is intended to occur, by means of injection. A well is defined as a bored, drilled or driven shaft, or a dug hole, whose depth is greater than its widest surface dimension.

No injection well can be constructed and operated in the state without obtaining a permit from the Department of Health (DOH), Safe Drinking Water Branch (SDWB). For purposes of UIC the state has classified aquifers and underground sources of drinking water as either exempt, i.e., generally not serving as a source of drinking water, or non-exempt, i.e., all other aquifers. On each island, the DOH has established a UIC Line. Lands *mauka* (towards the mountains) of the line are non-exempt. Lands *makai* (towards the sea) are exempt. The standards for issuing permits depend upon whether the proposed injection well is drilled into an exempt or non-exempt aquifer. Note, maps of the UIC lines for each island can be found on the SDWB web site below.

In certain circumstances, injection wells from aquaculture may be classified as a subclass B well permitted *mauka* of the UIC line, if the water in the receiving formation has either: 1) an equal or greater chloride concentration as that of the injected fluid; or 2) a

total dissolved solids concentration in excess of five thousand mg/L (§11-23-06, HAR). If this test is not met, the well can only be sited *makai* of the line.

All new wells must be sited more than one-quarter mile from any part of a drinking water source. Subclass B wells sited *mauka* of the UIC line must, in addition, submit data concerning the water quality of the aquifer at the location. All wells must be constructed consistent with good engineering practices as recommended by the Honolulu Board of Water Supply's "Water System Standards" (§11-23-09, HAR).

A permit will be issued, for up to five years, for an injection well into exempted aquifers if the well: 1) will not endanger the quality of underground drinking water sources; 2) is designed and constructed to operate without causing a violation of applicable rules and laws; and 3) is designed and built in compliance with the standards set forth in the rules. For wells injecting into a non-exempt aquifer, the issuance must also be based on an evaluation of the contamination potential of the local water by the injection fluids and the water development potential of the aquifer for public and private consumption (§11-23-16, HAR).

D. Administering Agency

Safe Drinking Water Branch
Environmental Management Division
Department of Health
State of Hawaii
919 Ala Moana Blvd., Room 308
Honolulu, Hawaii 96814-4920
Phone: 808-586-4258
From Hawaii (toll free): 974-4000, ext. 64258
From Kauai (toll free): 274-3141, ext. 64258
From Maui (toll free): 984-2400, ext. 64258
From Molokai and Lanai (toll free): 468-4644, ext. 64258
Fax: 808-586-4351
E-mail: sdwb@doh.hawaii.gov
Web site: <http://hawaii.gov/health/environmental/water/sdwb/index.html>

E. Information Requirements

An application must be submitted on the DOH's application form and if for a new well, the document must be signed by a geologist or professional engineer. The application must include the following data, as well as other items set forth in the regulations (§11-23-13, HAR):

- Facility name, location and owner;

- Maps, including an island and tax map key number and map;
- Site plan for the facility showing injection wells;
- USGS topographic map showing proposed well, and all other wells, within one quarter mile;
- Nature and source of injected fluid;
- Proposed design capacity and operating volume;
- Description of injection well system, including the connection to the waste water source; and
- Description of the waste stream process and chemical composition of the injectant.

Once approval is given to dig the well, the applicant must conduct an injection test and provide results to the DOH.

F. Public Participation

Public notice of applications for injection wells must be circulated, with a 30 day period provided for public comment. If a public hearing is requested by the applicant or an interested party, DOH shall hold a public hearing if the Director determines that there is significant public interest.

G. Process Time

The rules do not set forth a specific time frame for permit issuance. However, because of the public notice requirement, the minimum time is thirty days.

H. Sequence of Filing

Upon completion of the application with all required data, the DOH may approve the start of construction. However, approval of the start of construction does not guarantee approval to operate.

I. Cost

The filing fee for a permit application is \$100. In addition, the applicant must pay all fees assessed for publishing the public notice and for the notice of the public hearing, if required.

4.2.11 Well Construction and Pump Installation Permits

A. Legal Authority

- Chapter 174C, HRS, State Water Code
- Title 13, Subtitle 7, Chapter 168, HAR, Water Use, Wells, and Stream Diversion Works, as amended

Information: http://www.state.hi.us/dlnr/cwrm/aboutus_regulations.htm

B. Purpose

The purpose of the Well Construction and Pump Installation Permit is to regulate the use and withdrawal of water to assure the maximum and beneficial use of the ground and surface waters of the state.

C. Applicability to Aquaculture

Land-based aquaculture can require the construction of a new, or use of an existing, well to provide water. Statewide, no well can be constructed, altered or repaired and no pump or pumping equipment can be installed without the issuance of a Well Construction or Pump Installation Permit, respectively. The requirement to obtain a permit extends to all areas of the state including a designated Water Management Area (see also Water Use Permit section). All well and pump installations must be operated so as to ensure the prevention of waste and the prevention of contamination of ground water aquifers. All wells must be constructed to meet at least the minimum standards specified in §13-168-13, HAR, which include the standards in Volume I, Part III, Section 5, of the publication entitled, "Water System Standards," State of Hawaii, 1985, adopted by the counties and in the "American Water Works Association Standards" (ANSI/AWWA E10177).

D. Administering Agency

The Commission on Water Resource Management is responsible for administering and granting the Well Construction and Pump Installation Permits.

Commission on Water Resource Management
Department of Land and Natural Resources
State of Hawaii
1151 Punchbowl Street, Room 227
Honolulu, Hawaii 96813
Phone: 808-587-0214
Fax: 808-587-0219
E-mail: dlnr.cwrm@hawaii.gov

Web site: http://hawaii.gov/dlnr/cwrp/resources_permits.htm

E. Information Requirements

In addition to a completed application form, which can be obtained on the web site above, the following information will be required:

- The purpose of the well or pump installation;
- Proposed withdrawal rate, amount of withdrawal, and use of the water;
- Water use permit information, if applicable (see Water Use Permit);
- Type, size and expected capacity of the well or pump; and
- Any additional information the commission needs to fully understand the proposal.

A pumping test will also be required for new wells or wells that have not had a previous pumping test (§13-168-12(b), HAR).

Within 30 days after the completion of the well or pump installation, a Well Completion Report must be filed. The report is usually prepared by the well driller or pump installation contractor and is submitted on behalf of the applicant. The content of the Completion Report is specified in §13-168-13, HAR.

F. Public Participation

No public hearing is required in conjunction with the issuance of a Well Construction or Pump Installation Permit.

G. Process Time

By rule, the Commission is required to act on an acceptably completed application within ninety days of the receipt of the application. The Commission will issue a permit only if the proposal complies with all applicable laws, rules and review standards. Before approval, the application will be forwarded to the DOH for their review concerning, among other things, the appropriateness of the well location, §13-168-12, HAR.

H. Sequence of Filing

In cases where a Water Use Permit is required, the Commission will not issue a Well Construction or Pump Installation Permit until formal approval of a Water Use Permit has been received. An applicant is therefore advised to consult the Commission on Water Resource Management to sequence the submittal of the applicable permit applications.

I. Cost

A filing fee of \$25 is required with each permit application. The cost of preparing the application and the necessary supplemental information varies with the scope of the project.

4.2.12 Water Use Permit

A. Legal Authority

- Chapter 174C, HRS, State Water Code
- Title 13, Subtitle 7, Chapter 171, HAR, Designation and Regulation of Water Management Areas, as amended

Information: http://www.state.hi.us/dlnr/cwrm/aboutus_regulations.htm

B. Purpose

The purpose of the Water Use Permit requirement is to establish administrative control over the withdrawal and diversion of ground and surface water in designated Water Management Areas. Water Management Areas are hydrologic areas where water resources are being threatened by existing or proposed withdrawals or diversions of water, water quality problems, or serious disputes, which have been so designated by the Commission on Water Resource Management (CWRM).

C. Applicability to Aquaculture

Land-based aquaculture may require sourcing water from within a Water Management Area. A Water Use Permit is only required in geographic areas which have been designated by the CWRM, pursuant to §174C-41, HRS, as Water Management Areas. The Commission has designated four Ground Water Management Areas on Oahu: Honolulu, Pearl Harbor, Wailua, and Windward Oahu; and the entire island of Molokai. One Surface Water Management Area has been designated in Central Maui.

In those areas designated as Water Management Areas, no withdrawal, diversion, impoundment or consumptive use of water may occur without the issuance of a Water Use Permit. Domestic consumption of water by individual users and catchment systems are exempt from this requirement.

To obtain a Water Use Permit an applicant must establish that the proposed use of water:

- Can be accommodated by the available water source;
- Is a reasonable and beneficial use as defined in §13-172-2, HAR;
- Will not interfere with any existing legal use of water;
- Is consistent with the public interest;

- Is consistent with state and county general plans and land use designations; and
- Is consistent with county land use plans and policies.

D. Administering Agency

The CWRM is responsible for administering and granting the Water Use Permit:

Commission on Water Resource Management
Department of Land and Natural Resources
State of Hawaii
1151 Punchbowl Street, Room 227
Honolulu, Hawaii 96813
Phone: (808) 587-0214
Fax: 808 587-0219
E-mail: dlnr.cwrn@hawaii.gov
Web site: http://hawaii.gov/dlnr/cwrn/resources_permits.htm

E. Information Requirements

In addition to a completed application form, which can be found on the above web site, the following information will be required:

- Source of the water supply;
- Quantity and quality of water requested;
- Use of water and any limitations thereon;
- Location of the use of water;
- Location of the well or point of diversion; and
- Any other relevant information necessary to adequately understand the proposal.

It is also advisable that an applicant submit a written document with their application that specifically addresses the issues required by §13-171-13, HAR, and listed in the Applicability to Aquaculture section above.

F. Public Participation

Upon receipt of the application, notice is published and a copy of the notice is transmitted to the Mayor and the Board of Water Supply of the affected county and any person requesting formal notice. Written objections to the proposal must be submitted

within 10 working days of the last public notice. The CWRM may then request additional information from the applicant or objectors. A public hearing may also be scheduled, at the discretion of the Commission.

G. Process Time

By rule the Commission is required to approve or disapprove a completed application with all the necessary information within 90 days of the receipt. If the application requires a public hearing, a decision must be rendered within 180 days.

H. Sequence of Filing

An application for a Water Use Permit, if required, should be submitted early in the project development process to secure an allocation of the necessary water for the project. A Water Use Permit is also required prior to obtaining a Well Construction permit and a Designated Water Management Area or a CDUA approval for Conservation District lands in a designated Water Management Area.

I. Cost

A filing fee of \$25 is required to accompany each permit application. The cost of preparing the application and the necessary supplemental information varies with the scope of the project and proposed water use.

4.3 County Regulations and Permits

4.3.1 Environmental Impact Statement – County

A. Legal Authority

- Chapter 343, HRS, as amended, Environmental Impact Statements
- Chapter 205A, HRS, as amended, Coastal Zone Management
- Title 11, Chapter 200, HAR, Environmental Impact Statement Administrative Rules
- Charters of the County of Kauai, City and County of Honolulu, County of Maui, and County of Hawaii
- County Ordinances of the County of Kauai, City and County of Honolulu, County of Maui, and County of Hawaii

Information: <http://hawaii.gov/health/environmental/oeqc/index.html>

B. Purpose

The requirements of Chapter 343, HRS, apply to county agencies and actions in the same manner as to state agencies and actions. For convenient reference, the purpose of the environmental review process is briefly reiterated here. For a more detailed discussion, please refer to the state EIS section.

The Hawaii Environmental Impact Statement law, Chapter 343, HRS, establishes a system of environmental review at the state and county levels that is intended to ensure that environmental concerns are given appropriate consideration in decision making, along with relevant economic and technical issues. The law also assures the public the right to participate in the planning of projects that may affect their community. This is accomplished by first preparing an Environmental Assessment (EA), an information sharing document, to evaluate whether an action may have a significant environmental effect. If the action is determined to have a significant effect, then a more detailed Environmental Impact Statement (EIS) must be prepared. Both the EA and the EIS provide information which describes the proposed project and discloses the potential environmental effects, as well as the effects of a proposed action on the economic and social welfare of the community and the state. In addition, information is presented to evaluate the effects of the economic activities arising out of the proposed action, any measures proposed to minimize or mitigate adverse effects and the considered alternatives to the action and their effects. Applicants must also carry out a cultural impact assessment for inclusion in the document.

The state environmental review process is modeled on the federal National Environmental Policy Act. If both federal and state agencies are involved with approving the proposed project, the environmental review must be coordinated.

C. Applicability to Aquaculture

An aquaculture project involving any of the following actions will require environmental review:

- Use of county lands or funds, other than funds to be used for feasibility or planning studies for possible future programs or projects which an agency has not approved;
- Development on land within the county designated Special Management Area (see Special Management Area Use Permit section);
- Use within the shoreline area as defined in §205A-41, HRS (see Shoreline Setback Variance section);
- Use within any historic site as designated in the National Register of Historic Properties or the Hawaii Register of Historic Places as provided for in the National Historic Preservation Act of 1966, 16 USC 470, as amended, or Chapter 6E, HRS; or
- Amendment of existing county general plans where such amendment would result in a designation other than agriculture, conservation or preservation.

D. Administering Agency

In general, actions triggering environmental review at the county level are divided into two groups, Applicant Actions and Agency Actions.

- Applicant Actions – The county agency to which the applicant first applies for any permit connected with a non-exempt activity is responsible for determining the need for an EA or EIS and for acceptance of the final environmental review document.
- Agency Actions – For government initiated actions the department proposing the project is responsible for determining the need for an EA or EIS. The Mayor of the county is responsible for the acceptance of the final environmental review document.

For both agency and applicant actions, the processing of the EA and EIS is coordinated between the affected county department and the Office of Environmental Quality Control (OEQC).

E. Information Requirements

See generally state EIS section.

F. Public Participation

See the state EIS section.

G. Process Time

See the state EIS section.

H. Sequence of Filing

An EA, and if required an EIS, should be prepared very early on in the planning process to evaluate the significance of a proposed action, solicit stakeholder input, and ensure the timely processing of all required permits.

I. Cost

There is no filing fee associated with the preparation and processing of the environmental review documents. The cost will depend upon the scope and complexity of the proposed activity and the nature of the affected environment.

4.3.2 Special Management Area Use Permit: Coastal Zone Management Program

A. Legal Authority

- Chapter 205A, Part II, HRS, as amended, Special Management Areas
- Special Management Area Rules and Regulations of the County of Kauai, City and County of Honolulu, County of Maui and County of Hawaii.

Information: http://www.capitol.hawaii.gov/hrscurrent/Vol04_Ch0201-0257/HRS0205A/

B. Purpose

Pursuant to the state's Coastal Zone Management Program, Hawaii's four counties are required to designate Special Management Area (SMA) boundaries and through the establishment of a permitting process, provide special controls on development within these areas. This important process is intended to avoid the permanent loss of valuable resources and the foreclosure of planning and management options. Further, the process is intended to ensure adequate access, by dedication or other means, to public owned or used beaches, recreation areas, and natural reserves.

The SMA ranges inland from the "shoreline" for a considerable distance (300 ft. or greater) and is required to include only shoreline or coastal water related land. Shoreline is defined as the upper reaches of the wash of the waves, other than storm or seismic waves, at high tide during the season of the year in which the highest wash of the waves occurs, usually evidenced by the edges of vegetation growth or the upper limit of debris left by the wash of the waves. The exact boundaries of the SMA are designated on maps on file with the administering department of the respective county.

C. Applicability to Aquaculture

No development may proceed in the SMA unless an applicant obtains a Special Management Area Use Permit (SMAP) from the granting authority of the respective county. §205A-2, HRS, defines "development" broadly to include:

- Placement or erection of any solid material or any gaseous waste, liquid, solid, or thermal waste;
- Grading, removing, dredging, mining, or extraction of any materials;
- Change in density or intensity of the use of land, including the division or subdivision of land;

- Change in the intensity of use of water, ecology related thereto, or of access thereto; and
- Construction, reconstruction, demolition, or alteration of any size of any structure.

There are, however, a number of exemptions that may cover or partially cover aspects of aquaculture development. These include:

- Construction of a single-family residence that is not part of a larger development;
- Routine maintenance dredging of existing streams, channels and drainage ways; and
- Use of land for the purpose of cultivating, planting, growing, and harvesting of plants, crops, trees, and other agricultural, horticultural, or forestry products or animal husbandry, or aquaculture or mariculture of plants or animals, or other agricultural purposes subject to review.

§205A-22, HRS, as amended, specifically exempts aquaculture and mariculture from the definition of development, as do the SMA regulations of the counties. However, the exemption is qualified in the regulations, such that if the activity is, or may become, part of a larger project, the cumulative impact of which may have a significant environmental or ecological effect on the SMA, the activity will be defined as "development." Construction of facilities ancillary to the aquaculture operation, such as storage facilities, maintenance buildings, research offices, and restaurants, may also not be considered exempt. It is, therefore advisable to check with the county administering agency to determine the practical scope and effect of the exemption on any particular project.

The SMA guidelines in the respective county regulations provide that an SMAP will only be granted if the applicant demonstrates that the development:

- Will not have any substantial adverse environmental or ecological effect, except as such adverse effect is minimized to the extent practicable and clearly outweighed by public health, safety, or compelling public interests;
- Is consistent with the objectives, policies and special management area guidelines contained in Chapter 205A, HRS, as amended; and
- Is consistent with the general plan, development plans, zoning and other applicable ordinances of the respective county.

D. Administering Agency

The SMAP is administered by the respective county planning department:

Planning Department County of Kauai 4444 Rice Street, Suite 473 Lihue, Kauai, Hawaii 96766 Phone: 808-241-4050 Web site: http://www.kauai.gov/planning	Department of Planning Current Planning Division County of Maui 250 South Main Street Wailuku, Hawaii 96793 Phone: 808-270-7735 Web site: http://www.co.maui.hi.us/index.aspx?NID=12
Department of Planning and Permitting Land Use Permits Division City and County of Honolulu 650 South King Street Honolulu, Hawaii 96813 Phone: 808-768-8014 Web site: http://www.honoluludpp.org/permitinfo/ http://www1.honolulu.gov/council/ocs/roh/25.pdf	Planning Department County of Hawaii Aupuni Center 101 Pauahi Street, Suite 3 Hilo, Hawaii 96720 Phone: 808-961-8288 Web site: http://www.co.hawaii.hi.us/directory/dir_plan.htm http://www.co.hawaii.hi.us/forms/planforms.html

The approving authority for the SMAP depends upon the size and scope of the project. Proposed projects which are less than \$125,000 in value, and do not have the potential to cause substantial adverse environmental or ecological impacts, can be processed through an SMA Minor Permit that can be issued administratively by the Planning Department. For projects that exceed \$125,000 in value or which may have a substantial adverse environmental or ecological impact, the county Planning Commission (on Oahu the City Council) has the authority to grant the SMAP.

E. Information Requirements

In general, with all counties a completed Special Management Area Use Permit Application Packet is required to be submitted by the applicant, the following information:

- Evidence of ownership;
- Compliance with Chapter 343, HRS and Chapter 200 HAR;
- Map of the proposed area;
- Written description of the proposed action;

- Environmental assessment report identifying the anticipated impacts of the proposed action on the Special Management Area;
- A certified shoreline survey prepared by a Registered Land Surveyor confirmed by the Chair of the BLNR;
- List of owners and lessees of real property within a 500 foot radius of the subject site;
- A preliminary drainage plan;
- A plot plan of the land; and
- A preliminary development and landscaping plan.

F. Public Participation

A public hearing is required in conjunction with the all SMAP applications. If a Shoreline Setback Variance is also required in connection with the development proposal, a joint public hearing will be held.

G. Process Time

The processing time for a Special Management Area Minor Permit (i.e., a project which is not in excess of \$125,000 and will not have significant environmental impact) can be as little as 30 days in all the counties. The processing time for a full SMAP (greater than \$125,000 in value) varies considerably between counties and the complexity of the project. From the date the completed application is accepted by the administering department, the full processing time for the application can be as little as 120 days. However, if issues arise as the application moves through the process, approval could take a year or longer.

A number of formal sequencing steps are involved with the processing of an SMAP application. Although the steps are similar between counties, specific time periods for each step vary by county. An applicant contemplating a development activity in the SMA should consult with the administering department of the respective county as early as possible in the planning process to understand the required processing steps and identify information requirements.

H. Sequence of Filing

Issuance of an SMAP is required by statute to precede any other permit approval. If a Shoreline Setback Variance is required in conjunction with a SMAP, they will be processed concurrently.

I. Cost

The filing fee for a Minor SMAP for aquaculture is \$300 in the City and County of Honolulu; and for a Major SMAP, the cost depends on the project size, with a maximum fee of \$10,000. For the County of Hawaii the fee is \$250 for a Minor permit and \$500 for a Major permit. In the County of Kauai, the cost is \$150 maximum. For the County of Maui, the fee is \$550 minimum, with the actual fees dependent on project costs.

The cost of preparing supporting information, such as a Certified Shoreline Survey, project plans, project valuation, an EA, and if required an EIS, can be significant, depending on the size of the property, the complexity of the proposed development and surrounding environmental conditions.

4.3.3 Shoreline Setback Variance: Coastal Zone Management Program

A. Legal Authority

- Chapter 205A, HRS, Part III, as amended, Shoreline Setbacks
- Shoreline Setback Rules and Regulations of the County of Kauai, City and County of Honolulu, County of Maui, and County of Hawaii.

Information: http://www.capitol.hawaii.gov/hrscurrent/Vol04_Ch0201-0257/HRS0205A/

B. Purpose

The purpose of the shoreline setback law is to regulate uses and activities within the shoreline area to preserve and protect the natural shore and open space and to protect against encroachment of structures which may disturb the natural processes of the shoreline and cause erosion of the shoreline.

The shoreline setback law establishes a permitting system in which all non-exempt structures must obtain a Shoreline Setback Variance (termed Shoreline Area Variance in Maui County), and meet certain guidelines and criteria. Shoreline is defined as the upper reaches of the wash of the waves, other than storm or seismic waves, at high tide during the season of the year in which the highest wash of the waves occurs, usually evidenced by the edges of vegetation growth or the upper limit of debris left by the wash of the waves. As defined, structure includes, but is not limited to, any portion of any building, pavement, road, pipe, flume, utility line, fence, groin, wall, or revetment.

C. Applicability to Aquaculture

Anyone proposing to construct a structure in the shoreline area or otherwise physically alter the shoreline area is required to obtain a Shoreline Setback Variance (or Shoreline Area Variance), unless otherwise exempted. The "shoreline area" includes, at least, all of the land area between the shoreline and the shoreline setback line (not less than 20 feet and not more than 40 feet inland). It may include the area between mean sea level and the shoreline (§205A-41, HRS) and be set back at distances greater than 40 feet (§205A-45, HRS, as amended) by county ordinance. In their recently amended rules relating to the shoreline area, Maui County extended shoreline setbacks to a distance of 150 feet in some areas (see current Maui County rules relating to the shoreline area for details).

The law prohibits most activities involving the mining or taking of sand, dead coral or coral rubble, rocks, soil or other beach or marine deposits from the shoreline area. No variance will be granted unless the following conditions are imposed, as appropriate:

- Maintain safe lateral access along the shoreline or adequately compensate for its loss;
- Minimize the risk of adverse impacts on beach processes;
- Minimize the risk of structures failing and becoming loose rocks or rubble on public property; and
- Minimize adverse impacts on public views to, from, and along the shoreline.

A Shoreline Setback Variance (or Shoreline Area Variance) may also be granted for a structure or activity otherwise prohibited if the granting authority finds in writing that, based on the record presented, the proposed activity is necessary for, or ancillary to, among other things cultivation of crops, aquaculture, or drainage (§205A-46, HRS, as amended).

D. Administering Department

The Shoreline Setback Variance (or Shoreline Area Variance) is administered by the respective county planning department.

Planning Department County of Kauai 4444 Rice Street, Suite 473 Lihue, Kauai, Hawaii 96766 Phone: 808-241-4050 Web site: http://www.kauai.gov/planning	Department of Planning Current Planning Division County of Maui 250 South Main Street Wailuku, Hawaii 96793 Phone: 808-270-7735 Web site: http://www.co.maui.hi.us/index.aspx?NID=1245
Department of Planning and Permitting Land Use Permits Division City and County of Honolulu 650 South King Street Honolulu, Hawaii 96813 Phone: 808-768-8014 Web site: http://www.honolulu.dpp.org/permitinfo/ http://www1.honolulu.gov/council/ocs/roh/25.pdf	Planning Department County of Hawaii Aupuni Center 101 Pauahi Street, Suite 3 Hilo, Hawaii 96720 Phone: 808-961-8288 Web site: http://www.co.hawaii.hi.us/directory/dir_plan.htm http://www.co.hawaii.hi.us/forms/planforms.html

If the Shoreline Setback Variance (or Shoreline Area Variance) is processed alone or in conjunction with a Special Management Area Minor Permit, the granting authority is the Director of the administering department. If a Special Management Area Major Permit is required in conjunction with the Shoreline Setback Variance (or Shoreline Area Variance), both permit requests are forwarded to the county Planning Commission of the respective county for approval (on Oahu the City Council is the granting authority).

E. Information Requirements

An applicant for a Shoreline Setback Variance (or Shoreline Area Variance) is required to submit the completed application form, including project drawings and plans, and a Certified Shoreline survey showing the actual field location of the shoreline in relation to the position of the proposed facilities (see appropriate county web site for more details). To be valid, the survey must be prepared by a Registered Land Surveyor and confirmed by the Chairman of the Board of Land and Natural Resources. Detailed construction plans showing the design of the proposed structure and its relationship to property boundaries and existing topography in and adjacent to the subject property are also required.

An Environmental Assessment (EA) evaluating the potential impact of a proposed project will be required. Ask the respective county for guidelines on content. If, on the basis of the EA's findings, it is determined that a significant impact may result from the proposed project, preparation of an Environmental Impact Statement (EIS) will be required. If an adequate EA and/or EIS have already been prepared for a proposed project in conjunction with some other permit requirement, preparation of a new document will not be required.

A written statement describing how a proposed project is necessary for, or ancillary to, aquaculture is also required. This statement should specifically address the relationship between aquaculture and each feature of the development proposal. Further, additional information may be required, depending on the project and the county.

F. Public Participation

A public hearing is conducted in conjunction with the request for a Shoreline Setback Variance (or Shoreline Area Variance). If a Special Management Area Use Permit is also required in connection with the development proposal, a joint public hearing will be held.

G. Process Time

Generally, the processing time for a Shoreline Setback Variance (or Shoreline Area Variance) varies with scale of the project proposal and the need for additional permits

(e.g., an SMAP). Usually within 30 days of the official receipt of a complete application, the Director of the administering department assesses the impact of the project and determines the need for the preparation of an EIS. Within 45 days of the completion of the environmental requirement (i.e., an accepted EIS or if an EIS is not required a Negative Declaration), the administering department will hold a public hearing on the application. Within 45 days after the public hearing is held, the Director will make a written decision and forward it to the applicant. In cases where the variance application is being processed with an application for a Special Management Area Use Permit, the recommendation will be forwarded to the county Planning Commission (City Council on Oahu) a decision; denial, approval, or approval with conditions.

H. Sequence of Filing

If an SMAP is required in conjunction with the development proposal, the request for a Shoreline Setback Variance should be filed at the same time so that the applications can be processed concurrently.

I. Cost

If a Special Management Area Use Permit is required in conjunction with the development proposal, the request for a Shoreline Setback Variance is \$600 minimum for a non-seawall application and \$1,000 for a seawall in the City and County of Honolulu. In the County of Maui the amount for a permit is \$550 and in the County of Hawaii it is \$2,000. For Kauai County, the amount is not available.

The cost of preparing a Certified Shoreline Survey, construction plans, an EA, and if required an EIS, can be substantial depending on the size of the property, the complexity of the proposed development and surrounding environmental conditions. Any fees associated with public notices and signage will vary.

4.3.4 Grading, Grubbing and Stockpiling Permits

A. Legal Authority

- Chapter 180C, HRS, Soil Erosion and Sediment Control
- County Ordinances of the County of Kauai, City and County of Honolulu, County of Maui, and County of Hawaii

Information: http://www.capitol.hawaii.gov/hrscurrent/Vol03_Ch0121-0200D/HRS0180/HRS_0180-.htm

B. Purpose

Generally, the purpose of grading, grubbing and stockpiling permits are to control activities which alter land forms and which have the potential to change drainage patterns, destroy vegetation, cause erosion and produce unsafe or unsightly disfigurement of the landscape.

C. Applicability to Aquaculture

Construction of aquaculture facilities may require performing grading, grubbing, stockpiling, or clearing activities that require a permit from the responsible county department. Grading is carried out when a site undergoes an amount of excavation or fill, as defined by county ordinance. Grubbing is carried out when an activity dislodges or uproots any vegetation, including trees, timber, shrubbery, or plants from the surface of the ground in an area defined by county ordinance. Stockpiling refers to temporary open storage of an amount of earth materials defined by county ordinance upon any premises.

D. Administering Agency

Grading, Grubbing and Stockpiling Permits are administered by the Department of Public Works of the respective county in which the project is located.

<p>Engineering Division Department of Public Works County of Kauai 4444 Rice Street, Suite 175 Lihue, Kauai, Hawaii 96766 Phone: 808-241-4883 Web site: http://www.kauai.gov/publicworks/engineering http://www.kauai.gov/Government/Department/PublicWorks/Engineering/Design&Permitting/tabid/133/Default.aspx</p>	<p>Department of Public Works Development Services Division County of Maui 250 South High Street Wailuku, Maui 96793 Phone: 808-243-7845 Web site: http://www.co.maui.hi.us/index.aspx?NID=1223</p>
<p>Site Development Division Department of Planning and Permitting City and County of Honolulu 650 South King Street Honolulu, Hawaii 96813 Phone: 808-587-0230 Web site: http://www.honoluluodpp.org/download/permits/permitlistings.asp?p_TypeID=4</p>	<p>Department of Public Works County of Hawaii Aupuni Center 101 Pauahi Street, Suite 7 Hilo, Hawaii 96720-4224 Phone: (808) 961-8327 Web site: http://www.co.hawaii.hi.us/directory/dir_publicworks.htm http://www.co.hawaii.hi.us/forms/dpweng.html</p>

E. Information Requirements

The applications for Grading, Grubbing and Stockpiling activities for each county are somewhat different in form and content. The City and County of Honolulu, the County of Hawaii, and the County of Kauai have separate applications for grading, grubbing and stockpiling. The County of Maui has a single grading and grubbing application.

Common elements of a county grading application include: 1) project location information; 2) detailed project plans, e.g., site map and cubic yards of soil involved; 3) erosion control measures; and 4) a statement of best management practices.

Common elements of a county grubbing permit include: 1) project location information; 2) a grubbing plan, e.g., site map of proposed area to be disturbed; 3) an erosion control plan; and 4) a statement of best management practices.

Common elements of a county stockpiling permit include: 1) project location information; 2) a stockpiling plan, e.g., type and amount of material and site map; and 3) a statement of best management practices.

For major projects, a Civil Engineer licensed in the State of Hawaii may be required. A performance bond, in the amount equal to the cost of all work and services required to complete the project, may be required.

Assistance in preparing an erosion control plan can be obtained free of charge from the Pacific Islands Area of the Natural Resources Conservation Service (NRCS). More information can be obtained at: <http://www.pia.nrcs.usda.gov/>.

F. Public Participation

There is no mandatory requirement for a public hearing in connection with a Grading, Grubbing and Stockpiling Permit.

G. Process Time

The processing time of the permit application varies with the size of the project being proposed. Early discussion of the project requirements with appropriate staff is recommended. Providing the application contains all the required information, the processing time could be between two to three weeks and three to six months for major actions. An issued permit will expire if work is not begun within a certain time frame from the date of issuance.

H. Sequence of Filing

The Grading, Grubbing and Stockpiling Permit will not be granted until an applicant complies with all other environmental and regulatory requirements.

I. Cost

The filing fee for a Grading, Grubbing and Stockpiling Permit is based on the volume of earth moved or square feet of area denuded. The cost of preparing the required information to accompany the application can be significant depending on the size of the property and the extent of proposed earth-moving activities. It is recommended the applicant consult with a civil engineering firm to estimate the costs specific to their project.

4.3.5 Building Permit

A. Legal Authority

- Hawaii Revised Statutes (Various)
- Charters of the County of Kauai, City and County of Honolulu, County of Maui and County of Hawaii
- County Ordinances of the County of Kauai, City and County of Honolulu, County of Maui and County of Hawaii

B. Purpose

The Building Permit System was developed to protect the health, safety and welfare of the public through the government review and enforcement of various codes as provided by law (statutes, regulations and ordinances), including those for zoning, building, housing, electrical, and plumbing.

C. Applicability to Aquaculture

Land-based aquaculture requires various production and support structures to be built on a project site. Anyone desiring to erect, construct, enlarge, repair, move, improve, convert, alter, remove, or demolish any building or structure (including most fences and retaining walls) is required to obtain a Building Permit from the respective county prior to undertaking the activity.

D. Administering Department

Building Permits for the respective counties are administered by the Department of Public Works in the County of Kauai, Maui and Hawaii and the Building Division of the Department of Planning and Permitting in the City and County of Honolulu.

<p>Building Division Department of Public Works County of Kauai 4444 Rice Street, Suite 175 Lihue, Kauai 96766 Phone: 808-241-4854 Web site: www.kauai.gov/publicworks/building http://www.kauai.gov/default.aspx?tabid=64</p>	<p>Building Division City and County of Honolulu 650 South King Street Honolulu, Hawaii 96813 Phone: 808-523-4564 Web site: http://honolulu.gov/downloadpdf/construction/buildingperm2.htm</p>
<p>Building Permit Office Development Services Administration Department of Public Works County of Maui 250 South High Street Wailuku, Maui 96793 Phone: 808-270-7379 Web site: http://www.co.maui.hi.us/index.aspx?nid=1208</p>	<p>Building Division Department of Public Works County of Hawaii 25 Aupuni Street Hilo, Hawaii 96720 Phone: 808-961-8331 Web site: http://www.co.hawaii.hi.us/directory/dir_pubworks.htm Http://www.co.hawaii.hi.us/permits/permits.htm</p>

E. Information Requirements

In general for all counties, the information required for a Building Permit is similar and is presented in the form of detailed scale drawings, with explanatory information annotated. An applicant is required to submit a variety of information, as pertinent to their specific project proposal, including:

- Plot plan showing the location of the proposed action in relation to property lines, other buildings or structures, roadways and easements and any other pertinent information;
- Floor plan which indicates the dimension and use of the rooms;
- Framing plan or typical section view showing ceiling heights and the size and spacing of beams, floor joists, studs, siding, foundation, rafters, etc.;
- Exterior elevation views showing the height of the building or structure;
- Location of property and owner's address;
- Name and address of person preparing the plans (if other than the property owner);

- Contractor's statement as required by Chapter 444, HRS; and
- Any additional information as deemed necessary by the administering department.

As required by Chapter 464, HRS, plans and specifications submitted in conjunction with the request for a Building Permit shall bear the seal and signature of an architect or structural engineer licensed in Hawaii.

F. Public Participation

There is no requirement for a public hearing in connection with a Building Permit.

G. Process Time

The processing time of the permit application varies with the size and complexity of the project proposal. The administering department reviews the application and plans for compliance with the respective county zoning ordinance, building, housing, electrical and plumbing codes. The application is routed through a number of county and state agencies with jurisdiction over specific aspects of the proposed work. Each of these agencies is required to sign the application form to indicate the applicant's compliance with applicable laws. If an applicant has not met all of the agency requirements, the application will not be signed and the Building Permit will be denied.

H. Sequence of Filing

A Building Permit will not be granted until an applicant complies with all other environmental and regulatory requirements.

I. Cost

The filing fee for a Building Permit is calculated on the value of the proposed project: the larger the value of the project, the larger the fees. An applicant should consult the administering department of their respective county for specific fee schedules.

5.0 REGULATION OF AQUACULTURE OPERATIONS AND PRODUCT SALE

5.1. Federal Regulations and Permits

A. Legal Authority

- Federal Food Drug and Cosmetic Act, 21 U.S.C. 301 et seq.
- Food Safety Modernization Act of 2010, 21 U.S.C. 301 et seq. (amendments to FDCA)
- Federal Insecticide, Fungicide, and Rodenticide Act, 7 U.S.C. 121-134, 136 et seq.
- Title 21 CFR Parts 500 - 589, Animal Drugs, Feeds and Related Products
- Title 40 CFR Part 180, Tolerances and Exemptions from Tolerances from Pesticide Chemicals in or on Raw Agricultural Commodities

Information: <http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfcfr/cfrsearch.cfm>

B. Purpose

The purpose of the federal Food, Drug and Cosmetic Act (FDCA) is to protect the public from misbranded or adulterated food, drugs, and cosmetics. The Food Safety Modernization Act (FSMA) of 2010 made changes to the FDCA to shift the focus of federal regulations to preventing contamination through stricter controls and regulation, improved inspection services, and more scrutiny of imported foods, including seafood. The purpose of the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) is to regulate the sale, distribution and use of pesticides in the U.S.

C. Applicability to Aquaculture

Aquacultured food products are subject to regulation by the Food and Drug Administration (FDA). The FDCA prohibits the addition of any poisonous or deleterious substance to food products in interstate commerce, unless permitted by the FDA. The jurisdiction of the FDA covers virtually all commercial aquaculture production. The regulatory scheme has three areas applicable to aquaculture: 1) food additives; 2) pesticide use on raw agricultural commodities; and 3) animal drugs used directly or in animal feed. For otherwise prohibited food additives which are required for food production or cannot be avoided, the FDA has established regulations as to the quantity and circumstances under which the substance can be used.

The FSMA imposes a number of mandates on individuals and entities that manufacture, process, pack, transport, distribute, receive, or hold articles of food. It

broadens the FDA's authority to regulate food facilities and would establish new requirements for those facilities. It also does the following: 1) provides FDA with mandatory recall authority (§206); 2) requires food companies to enhance due diligence on imported foods (§301); 3) provides food testing results to FDA (§202); 4) enacts Hazard Analysis and Critical Control Point (HACCP) programs (§103); 5) supplements food tracking recordkeeping; and 6) provides food industry employees with whistle-blower protection (§402). It exempts some farms and small businesses from some of the new regulatory requirements, and imposes fees on a limited number of FDA services/functions such as recalls, re-inspections, and export certifications (§207).

Pesticides applied to raw agricultural products are regulated by the FIFRA. The standards concerning allowable quantities of regulated pesticides are found at 40 CFR Part 180. Drugs for use on animals used for food and used in animal feed must be approved by the FDA (21 CFR, Parts 500 to 589).

D. Administering Agency

U.S. Food and Drug Administration
10903 New Hampshire Ave.
Silver Spring, MD 20993
Phone: 888-463-6332
Web site: <http://www.fda.gov/>
<http://www.fda.gov/SiteMap/default.htm>

E. Information Requirements

Permits and approvals required for sale of food additives, pesticides, and animal drugs and feed would generally apply only to manufacturers. For example, in 1995 the FDA finalized a rule (21 CFR 123), "Procedures for the Safe and Sanitary Processing and Importing of Fish and Fishery Products," that requires processors of fish and fishery products to develop and implement HACCP systems for their operations. HACCP creates a process control system that identifies where hazards might occur in the food production process and puts in place stringent actions to take to prevent hazards from occurring.

With respect to aquaculture producers, they are exempt from coverage. Treatment with carbon dioxide, bleeding, washing, and icing of otherwise unprocessed fish by the aquaculture producer is an integral part of the process of harvesting and getting the fish to market, and is, therefore, not considered to be processing. However, heading, gutting, or packaging of fish (e.g., retail or wholesale packages or cartons) performed by the aquaculture producer is considered processing, and would subject the producer to coverage under the regulations.

With respect to which activities of a molluscan shellfish harvester are exempt from

the requirements of the seafood HACCP, a person is exempt from all provisions of 21 CFR, §123 if they engage in the activity of harvesting molluscan shellfish without otherwise processing the shellfish. The following harvesting activities are not considered to be processing:

- Temporarily holding shell stock in bulk, or in containers, in part of the same natural shellfish growing waters where harvested, where such holding is an integral part of the operation of getting the harvested product to market;
- Placing shell stock in containers as they are harvested;
- Placing shellfish shipping tags on containers or shell stock;
- Sorting or washing shell stock in the harvest area; and
- Transporting by the harvester of shell stock in a boat to a processing facility.

Specific standards, permits and approvals which may apply to the use of food additives, pesticides and animal drugs and feed are beyond the scope of this summary. Go to the federal FDA web site and state DOH web site with specific questions and guidance documents. The FDA regulations only apply if and when regulated substances are used by an operator. It is important, however, that the operator be aware of possible restrictions and regulations before engaging in production.

5.2 State Regulations and Permits

5.2.1 Importation of Non-domestic Aquatic Animals

A. Legal Authority

- Lacey Act, 18 U.S.C. 42
- 50 CFR 16 et seq.
- Chapter 150A, HRS, Hawaii Plant Quarantine Law
- Title 4 Subtitle 6, HAR, Department of Agriculture, Division of Plant Industry

Information: <http://hawaii.gov/hdoa/pi/pq/lists>

B. Purpose

The purpose of the Permit to Import Restricted Commodities into Hawaii is to control the importation and movement between islands of specific plants, insects, microorganisms, and non-domestic animals that are or could be detrimental to the agricultural and aquacultural industries, natural resources and environment of Hawaii.

C. Applicability to Aquaculture

Anyone desiring to import aquatic animals, plants and microorganism cultures into Hawaii must obtain a Permit to Import Restricted Commodities from the Plant Quarantine Branch (PQB), Department of Agriculture (DOA). Though called the PQB, the Branch oversees all plant, animal, and microorganism imports into Hawaii. This permitting process is important to the local aquaculture industry because much of the industry grows non-native species.

To manage exotic species importation, the DOA maintains three lists of specific species that are established by going through a rule making process: 1) Prohibited; 2) Restricted A and B; and 3) Conditionally Approved. If a particular species is listed and has been allowed previously under established permit conditions, and the new import request is for a similar purpose, then the process is a straight-forward administrative approval.

However, if the importation is for an unlisted (new to Hawaii) species, the organism must first be placed on a designated list, which is initiated when an application and species profile is submitted to the PBQ for a submission to the Board of Agriculture (BOA). The submission goes through a multi-tiered review, which includes reviews by two advisory committees, and then recommendations by the PQB to the BOA. Based on the Board decision and following public hearings, the species will be placed on one of the three lists.

There are separate lists for microorganisms.

In general, organisms on the prohibited list are not allowed for importation into the state. Organisms on the Restricted List require a permit for both importation and possession and the list is separated into Parts A and B. Part A includes species used primarily for research or display by recognized government agencies. Part B includes species that may also be imported for private and commercial use. All Restricted species are monitored closely and movement within the state is only by permit.

The Conditionally Approved List is reserved for organisms that present the lowest risk in the event of escape or unauthorized release into the environment. These species may or may not be monitored after arrival.

D. Administering Agency

The permit is administered by the Plant Quarantine Branch. Permit decisions on animals for which a permit application has been previously made and the Board of Agriculture has ruled, can be made by the Branch Chief. Decisions on new animals or organisms are made by the BOA, based on an application.

Plant Quarantine Branch
Department of Agriculture
State of Hawaii
1849 Auiki Street
Honolulu, Hawaii 96819-3100
Phone: 808-832-0566
Fax: 808 832-0584
Web site: <http://hawaii.gov/hdoa/pi/pq/>

E. Information Requirements

For animals the entry of which has been previously permitted (previously listed), an applicant submittal should include:

- Name and address of the shipper and importer;
- Method of shipping and approximate quantity and species type (scientific name);
- Purpose of the importation;
- Mode of transportation; and
- Approximate date of shipment and arrival.

For new animals or organisms, the following additional information is necessary to allow reviewers to make a responsible and informed decision on potential risks versus economic benefits:

- Statement of reasons for importation;
- Person responsible for the importation;
- Description of the containment facility and the safeguarded to prevent escape;
- Detailed species profile, including information on: 1) local prey; 2) potential competitors; 3) feeding strategy and diet; 4) diseases and treatments; 5) reproduction; and 6) environmental requirements of life stages; and
- Means of transportation.

Microorganisms will have special information requirements and applicants should contact PQB for a complete list.

F. Public Participation

Decisions for the listing and importation of new species are subject to public meetings of the Advisory Committee on Plants and Animals and the Board of Agriculture. Before the regulations are changed to add a new species, a public hearing must be held in every county.

G. Process Time

The regulations do not provide a specific time frame for a decision on the permit application and duration of the process will vary with the complexity of the request. Already listed species, subject to requests with similar conditions can be processed in as little as two weeks. Applications for new species could take twelve months or longer.

H. Sequence of Filing

The PQB permit must be obtained prior to importation of the organism of interest.

I. Cost

Article/Commodity	Type of Request	Fees
Restricted Plants	Single Shipment Multiple shipments in 1 year	\$20 \$100
Conditionally Approved Animals (pet birds, rates, guinea pigs, etc.)	Single shipment Multiple shipments in 1 year	\$20 \$100
Restricted Animals (for research institutions, municipal zoos)	Single shipment Multiple shipments in a year	\$50 \$200
Unlisted Animals (by Board of Agriculture approval)	Special permit Short-term permit	\$100 \$500
Listed/Unlisted Microorganisms	Single shipment Multiples shipments	\$150 \$500
Unlisted Microorganisms	Letter of authorization	\$50
Unlisted/Restricted Microorganisms	Emergency permit	\$100
Microbial Product	Registration (annual)	\$150
Laboratory under HRS §150A-6.3(f)(2)	Registration (annual)	\$150
Plants/Animals/Microorganisms	Expedited processing Requiring Rule Amendment	\$250 \$2500

5.2.2 State Food, Drug, and Cosmetic Law: Aquatic Food Sale Regulations

A. Legal Authority

- Chapter 328, HRS, Food, Drug, and Cosmetics
- Chapter 321-11, HRS, Department of Health
- Title 11, Chapter 29 HAR, Department of Health, Food and Food Products

Information: <http://gen.doh.hawaii.gov/sites/har/admrules/default.aspx>

B. Purpose

The general purpose of the food, drug and cosmetic regulations is to establish standards of identity, quality and labeling for foods, and specifically in this context to regulate the sale of aquatic foods in the interest of consumer protection and the public welfare. Aquatic food includes all species of edible plants and animals from fresh, brackish, and salt or sea water.

C. Applicability to Aquaculture

According to §11-29-4, HAR, it is unlawful to take, sell, deliver for sale, hold for sale, or offer for sale, any aquatic food from any body of fresh, brackish, or salt water, which the state Department of Health (DOH) may find and declare to be polluted. Specifically, a violation exists when that pollution constitutes a condition whereby the aquatic food found may have become contaminated with filth, or rendered diseased, unwholesome or injurious to health. It is also unlawful to offer for sale any fish which have been bruised, torn, or otherwise rendered liable to spoilage.

The DOH has a separate set of rules and regulations which apply to shellfish, such as oysters, clams, and mussels (see the Shellfish Regulations Section). The DOH regulations also incorporate by reference various federal regulations promulgated under the U.S. Food, Drug and Cosmetic Act (§11-29-4, HAR). The applicable sections of federal law are listed in the DOH regulations and are generally found in Title 21, Part 161, of the Code of Federal Regulations.

D. Administering Agency

The regulations are administered by the Department of Health, Food and Drug Branch.

Food and Drug Branch
Department of Health

591 Ala Moana Boulevard

Honolulu, Hawaii 96813

Phone: 808-586-4725

Fax: 808-586-4729

Web site: http://hawaii.gov/health/environmental/food_drug/food/about.html

E. Information Requirements

There is no permit or permit application required by these regulations, but the Food and Drug Branch can monitor and inspect for compliance by a business. The law allows for inspection of establishments where food products are manufactured, distributed or sold. The Branch also investigates complaints and collects samples to determine compliance with product standards.

5.2.3 Shellfish Sanitation Regulations

A. Legal Authority

- Chapter 328, HRS, Food Drugs and Cosmetics
- Title 11, Chapter 35, HAR, Department of Health, Shellfish Sanitation
- U.S. Food, Drug and Cosmetic Act, 21 U.S.C. 301 et seq.
- National Shellfish Sanitation Program Manual of Operations, Public Health Service Publication Number 33, U.S. Department of Health and Human Services

Information: <http://gen.doh.hawaii.gov/sites/har/admrules/default.aspx>
<http://www.fda.gov/Food/FoodSafety/Product-SpecificInformation/Seafood/FederalStatePrograms/NationalShellfishSanitationProgram/ucm046353.htm>

B. Purpose

The purpose of these shellfish sanitation regulations is to establish sanitary controls for the shellfish industry. The provisions shall apply to the growing area and to all aspects of harvesting, processing, packaging, storing, and distributing of shellfish.

C. Applicability to Aquaculture

Culture of shellfish (e.g., oysters, clams, mussels) is an established industry on the U.S. Mainland and an emerging industry in Hawaii. No person in the State of Hawaii shall operate a plant or business engaged in growing, harvesting, shucking, packing, repacking, or reshipping fresh or fresh-frozen shellfish for sale to the public for human consumption without a valid permit issued by the Department of Health (DOH). Shellfish include all edible species of oysters, clams, and mussels of the molluscan class *Pelecypoda*, unless the product is in final packaging and has been heat-sterilized and packaged in hermetically sealed containers.

Shellfish growing areas (e.g., offshore ocean, coastal, estuarine or fresh water areas suitable for natural shellfish growth or artificial shellfish propagation) are surveyed, approved and classified by DOH. A survey evaluates all factors affecting the quality of the shellfish growing area, including sources of pollution, the effects of wind, tides, and currents, and the distribution and dilution of the polluting materials, and the bacteriological quality of water.

Areas not surveyed are automatically classed as prohibited areas. Shellfish from approved areas may be harvested for direct marketing. No person shall sell, transport,

receive or take any shellfish not declared to be approved or otherwise fit for direct marketing.

Artificial growing systems for shellfish, e.g., a man-made system with definite boundaries in which shellfish are grown using supplemental materials, must meet the performance criteria for natural growing systems. The operator of an artificial growing system shall be issued a shell stock shipper's certificate. Harvesting, processing, packing, storing and shucking operations must be approved and meet the standards set forth in the regulations.

Permits issued are valid for up to one year, with an automatic expiration date of June 30 of each year.

D. Administering Agency

Food and Drug Branch
Department of Health
591 Ala Moana Boulevard
Honolulu, Hawaii 96813
Phone: 808-586-4725
Fax: 808-586-4729

Website:

http://hawaii.gov/health/about/admin/health/environmental/food_drug/about.html

E. Information Requirements

Permit applications shall be accompanied by sufficient written data, drawings and descriptions for the department to evaluate the operation relative to the regulations. All collection and transportation of shellfish growing water samples and shell stock shall be performed in accordance with "Recommended Procedures for the Examination of Sea Water and Shellfish," American Public Health Association, 4th edition, 1970. Analyses of these samples for bacteriological, toxicological, chemical, and physical parameters shall be performed by a laboratory approved by the DOH and in accordance with methods recommended in the regulations.

F. Public Participation

There is no requirement for public notice or participation in the decision.

G. Process Time

The regulations do not set forth any specific time frames for action on permit

applications. However, sampling of proposed growing areas for classification will require a year or more of data for review by DOH.

H. Sequence of Filing

The permit must be obtained prior to conducting shellfish operations for sale of product to the public.

I. Cost

There is no filing fee associated with the permit application to sell shellfish. However, the application must have sufficient written data, drawings and descriptions for the department to evaluate the operation relative to the regulations. The cost of a Sanitary Survey to classify a natural growing area is the responsibility of the DOH. An artificial growing system must have a routine monitoring program by the certificate holder to assure proper functioning of the water system. This program shall include the monitoring of temperature, salinity, and fecal and total coliforms of source and effluent waters.

5.2.4 Sanitation Permit

A. Legal Authority

- Chapter 321-11, HRS, Department of Health
- Hawaii Public Health Regulations, Chapter 1-A, Food Service and Food Establishment Sanitation Code

B. Purpose

The purpose of the sanitation regulations is to provide minimum requirements for the handling, processing and serving of foods to protect the public health, safety and welfare.

C. Applicability to Aquaculture

The need for a sanitation permit will depend on the specific nature of the aquaculture operation. Any person operating a food establishment must obtain a permit (Art. 1, Sec. 5, PHR). A food establishment means any place or portion thereof, maintained, used, or operated for the purpose of storing, preparing, serving, manufacturing, packaging, transporting, or otherwise handling food at the retail or wholesale level. The term includes any place where food is served or provided to the public, with or without charge, regardless of whether the food is consumed on or off premises.

Food establishments include: fish markets, fish-processing plants, or facilities for the production, preparation for sale, packing, storage, sale or distribution of any food. If a company is only harvesting and wholesaling to a processor or other permitted facility, a sanitation permit may not be required. Concerned aquaculture operations should check with the Sanitation Branch directly regarding the applicability of the requirements to any specific operation.

D. Administering Agency

The Sanitation Permit is administered by the Department of Health, Sanitation Branch.

Sanitation Branch
Department of Health
591 Ala Moana Boulevard
Honolulu, Hawaii 96813
Phone: 808-586-8000
Fax: 808-586-8040
Web site:

<http://hawaii.gov/health/about/admin/health/environmental/sanitation/index.html> (See web site at main branch for neighbor island offices)

E. Information Requirements

Permit applications can be obtained from the Sanitation Branch and online. Information needed includes the establishment name and location and owners name. There will be an inspection of the facility to review compliance with appropriate regulations.

F. Sequence of Filing

An applicant must apply for a permit prior to beginning construction, extensive remodeling or conversion work. Operation can begin pending a permit decision so long as the application has been made to the department.

G. Cost

Each application for issuance or renewal of a food establishment permit shall be accompanied by a fee payment. The fees are based on the total number of food operations conducted within the establishment, e.g., receiving, cold storage, cooling, display, etc. (see §11-12-7, HAR to determine the appropriate fees). In addition, there is a charge of \$200 for food establishment plan review for new construction and \$150 for remodeling.

5.3. Emerging Issues

There are two emerging global trends in the production and sale of seafood evident today that the prospective commercial aquaculture projects should understand. They are: Organic Certification and Best Practices Certification. These trends are extensions of existing long-term trends in terrestrial agriculture and livestock food production and are indicators that developed-world consumers are becoming more concerned about health and where their food comes from and how it is grown. In the U.S., these certifications are currently optional for aquaculture farmers; however, major seafood buyers are beginning to require some sort of certification from their sources, thus putting pressure on producers to participate.

In essence, the two concepts generally involve aquaculture farmers adopting certain required processes and procedures to grow their product. Then an independent third party, either government or an approved/accepted private group, inspects and certifies that the product has met these required growing standards. The farmer may then use a special label or logo to show consumers and the marketplace that the farm has been certified. Expectations are that by meeting these standards and displaying this “eco label” or brand, a farmer may charge a premium for the product.

This section briefly introduces each concept, its implantation status with respect to U.S. and global aquaculture, and where an interested business can go to find more information.

5.3.1. Organic Certification

A. Concept

Congress passed the Organic Foods Production Act (OFPA) in 1990. The OFPA required the USDA to develop national standards for organically produced agricultural products to assure consumers that agricultural products marketed as organic meet consistent, uniform standards. The OFPA and the National Organic Program (NOP) regulations require that agricultural products labeled as organic originate from farms or handling operations certified by a state or private entity that has been accredited by USDA.

The NOP is a marketing program housed within the USDA Agricultural Marketing Service. Neither the OFPA nor the NOP regulations address food safety or product nutrition.

Production and handling standards address organic crop production, wild crop harvesting, organic livestock management, and processing and handling of organic agricultural products. Organic crops are raised without using most conventional pesticides, petroleum-based fertilizers, or sewage sludge-based fertilizers. Animals raised on an organic operation must be fed organic feed and given access to the outdoors in the case of livestock. They can be given no antibiotics or growth hormones.

The NOP regulations prohibit the use of genetic engineering, ionizing radiation, and sewage sludge in organic production or handling. As a general rule, all natural (non-synthetic) substances are allowed in organic production and all synthetic substances are prohibited, unless approved by the NOP. The National List of Allowed Synthetic and Prohibited Non-Synthetic Substances maintained by the NOP and promulgated in a section of the regulations, contain the specific exceptions to the rule.

Labeling requirements for agricultural products are based on the percentage of organic ingredients in a product.

B. Current Status

After trying for three years to incorporate aquaculture under the livestock regulations and resolve inherent incompatibilities between terrestrial and aquatic animals, the National Organic Standard Board (NOSB) concluded that an independent set of standards for aquaculture was needed. This decision was advised by a group of aquaculture industry representatives and environmentalists, the Aquaculture Working Group (AWG), which continued to work on the issue. On November 19, 2008, the NOSB did recommend several limited changes to existing regulations that addressed aquaculture feeds and the use of fish oil and fish meal and related issues. Details can be found at: [\[http://www.ams.usda.gov/AMSV1.0/getfile?dDocName=STELPRDC5074508\]](http://www.ams.usda.gov/AMSV1.0/getfile?dDocName=STELPRDC5074508).

While other countries, such as those of the European Union, are moving forward rapidly with standards for organic aquaculture, the U.S. has made limited progress. The specifics of how marine fish species can be certified as organic remain unclear and consumers are currently confused about organically labeled products due to the many conflicting and misleading standards around the world. Challenges to address include: 1) the flexibility and ambiguity in the term “organic”; 2) defining appropriate practices is complicated by the variety of cultured species; 3) the difficulty in keeping pollutants out of the aquatic medium; and 4) controlling food supplies.

C. More Information

There is a great deal of information on the Internet that addresses Organic Aquaculture around the world. In the U.S., aquaculturists can begin to check the status with the following source:

National Organic Program
Agricultural Marketing Service
Web site: <http://www.ams.usda.gov/AMSV1.0/nop>
Questions E-mail: amsadministratoroffice@ams.usda.gov

5.3.2. Best Practices Certification

A. Concept

In the past 40 years, aquaculture has grown to produce more than 50% of the world's edible seafood and projections are that the industry will continue to expand to meet the increasing global demand. Such rapid global growth, the majority of it in developing countries, has elevated concerns by environmental groups, governments and others about the potential for large-scale negative environmental and social impacts. The solution to these concerns is generally summarized under the concept of fostering sustainable aquaculture practices or best practices.

These issues of sustainable aquatic farming are part of the wider reaching concerns over sustainability of planet earth's land and ocean ecosystems, and specifically the food production systems, in the face of global climate change and continued population growth. Around the world, governments, the aquaculture industry, and the environmental and NGO communities have responded with various cooperative efforts to develop best practices or standards for the major species and production technologies in use today.

In concept, industry compliance with standards would not only minimize the major environmental impacts of farming, but some groups have also included addressing the negative social impacts that have been particularly evident in developing countries. As with organic certification, once the accepted processes, procedures and standards are developed for responsible aquaculture, then the usual approach is one or more third party organization could play the role of certifiers and the a producer could utilize a special certification or brand in product marketing.

B. Current Status

There are dozens of global, regional and national public and private sector groups currently working on some form of best practices or aquaculture certification today. Some groups are focusing on managing the environmental impacts of aquatic farming , while a few are incorporating addressing social and community impacts, e.g., disrupting the rural community structure. Three efforts are emerging as the leading global approaches (including in the U.S.) to managing and certifying sustainable aquaculture practices:

- 1) The Global Aquaculture Alliance (GAA) is an international, non-profit trade association, registered in the U.S., that promotes advancement in environmentally and socially responsible aquaculture. GAA is developing Best Aquaculture Practices (BAP) certification standards for the major aquaculture products. BAP standards will be determined by evaluators accredited by an independent body, the Aquaculture Accreditation Council (AAC).
- 2) The GLOBAL G.A.P. is a private group that sets voluntary standards for certification of production processes of agricultural products around the world, including aquaculture. The adopted standards serve as a global reference system for other existing standards. This is a business-to-business label and not directly visible to consumers.

- 3) The World Wildlife Fund (WWF) is a non-profit conservation organization interested in fostering a sustainable supply of seafood through responsible aquaculture farming that minimizes impacts. WWF has initiated eight round table discussions, called the Aquaculture Dialogues, to facilitate communication and foster consensus among the diverse stakeholders involved in global aquaculture to develop specific standards that farmers must meet to be certified. WWF intends to turn the standards over to an independent organization, the Aquaculture Stewardship Council (ASC), to be the third party auditors to certify farms.

C. More Information

There is a great deal of information on Best Practices Certification on the Internet. For example, the Food and Agriculture Organization (FAO) of the United Nations has addressed sustainability, certification and codes of practice for aquaculture. The contact information for the groups mentioned above is as follows:

Global Aquaculture Alliance

Web site: <http://www.gaalliance.org/bap/>

GLOBAL G.A.P.

Web site: http://www.globalgap.org/cms/front_content.php?idart=883

Aquaculture Dialogues

World Wildlife Fund

Web site:

<http://www.worldwildlife.org/what/globalmarkets/aquaculture/aquaculturedialogues.html>

6.0 USEFUL REFERENCES

- Advisory Council on Historic Preservation, 2010. Protecting Historic Properties: A Citizens Guide to Section 106 Review. ACHP, Washington D.C., 15 p.
[<http://www.achp.gov/citizensguide.html>]
- Council on Environmental Quality, 2007. A Citizens Guide to the NEPA, Having Your Voice Heard. CEQ, Executive Office of the President, 49 p.
[http://ceq.hss.doe.gov/nepa/Citizens_Guide_Dec07.pdf]
- Hawaii Coastal Zone Management Program, 2006. A Participants Guide to the Special Management Area (SMA) Permit Process in the State of Hawaii. HCZM, Honolulu, Hawaii, 10 p.
[<http://Hawaii.gov/dbedt/czm/resource/publication.php>]
- Keala, G., 2007. Loko Ia, A Manual on Hawaiian Fishpond Restoration and Management. College of Tropical Agriculture and Human Resources, University of Hawaii, 74 p.
- Juvik, S. and J. Juvik, eds., 1998. Atlas of Hawaii, Third Edition. University of Hawaii Press, Honolulu, Hawaii, 333 p.
- Web site: Hawaii Statewide GIS.
[<http://www.gov/dbedt/gis/>]
- Web site: Hawaii Revised Statutes.
[<http://www.capitol.hawaii.gov/site1/hrs/default.asp>]
- Web site: Hawaii Administrative Rules.
[<http://hawaii.gov/ltgov/office/adminrules>]
- Web site: United States Joint Sub Committee on Aquaculture, includes a Guide to Federal Aquaculture Programs and Services and Guide to Drug, Vaccine, and Pesticide Use in Aquaculture.
[<http://aquanic.org/jsa/>]
- Web site: Sustainable and Organic Agriculture Program, College of Tropical Agriculture and Human Resources, University of Hawaii.
[<http://www.ctahr.hawaii.edu/sustainag/index.html>]

APPENDIX: GENERAL BUSINESS REQUIREMENTS

Starting an aquaculture business in Hawaii is subject to a variety of federal, state and county government regulations and requirements which apply to all business. This discussion provides a brief overview of a number (not all) of these important requirements and direction on how a company can obtain more detailed information and assistance from responsible agencies and their respective web sites.

General assistance with business start-up related questions in Hawaii can be obtained from the following agencies:

Department of Agriculture
Aquaculture and Livestock Services
99-941 Halawa Valley Street
Aiea, Hawaii 96701-5602
Phone: 808-483-7130
Fax: 808-483-7110
E-mail: todd.e.low@hawaii.gov
Web site: <http://hawaii.gov/hdoa/adp>

Department of Commerce and Consumer Affairs (DCCA)
Business Action Center
1130 North Nimitz Highway
Second Level, Suite A-220
Honolulu, Hawaii 96817
Phone: 808-586-2545
Fax: 808-586-2544
E-mail: bac@dcca.hawaii.gov
Web site: <http://hawaii.gov/dcca/bac/contact> (Neighbor Island locations are on the web site)
Hawaii Business Express: <http://hbe.ehawaii.gov>

Business Registration Division, DCCA
King Kalakaua Building
335 Merchant Street, Rm. 201
Honolulu, Hawaii 96813
Phone: 808-586-2727
Fax: 808-586-2733
Web site: <http://hawaii.gov/dcca/breg/contact/>

Department of Business, Economic Development & Tourism (DBEDT)
No. 1 Capitol District

250 S. Hotel Street
Honolulu, Hawaii 96813
Phone: 808-586-2423
Web sites: <http://hawaii.gov/dbedt/>
http://hawaii.gov/dbedt/business/start_grow/

U.S. Small Business Administration (SBA)
Hawaii District Office
500 Ala Moana Blvd., Suite 1-308
Honolulu, Hawaii 96850
Phone: 808-541-2990
Fax: 808 541-2976
Web site: <http://www.sba.gov/about-offices-content/2/3112/about-us>

1. Federal Requirements

All basic federal business regulations apply in Hawaii as they do in other states. These requirements include: 1) Social Security taxes; 2) wage-and-hour laws; 3) child labor laws; 4) income reporting; 5) employee certification of citizenship; and 6) other employment practices. A full discussion of all these requirements is beyond the scope of this guide. Aquaculture businesses are encouraged to check in with the appropriate federal agency for a complete and detailed list of requirements.

- Federal Employer Identification Number – The federal ID number is issued by the Internal Revenue Service (IRS) and is necessary when establishing a business account at banks and to report income for state and federal taxes.

Hawaii Office, IRS
300 Ala Moana Blvd
Honolulu, Hawaii 96850
Phone: 808-524-5953
Web site: <http://www.irs.gov/localcontacts/article/0,,id=98271,00.html>

- Social Security and Income Tax – Employers are required to collect and withhold federal Social Security and income taxes. In addition to withholding Social Security taxes, an employer must also pay Social Security on employee’s wages. Businesses should consult the IRS for detailed reporting requirements and forms.
(See above IRS contact information)
- Federal Unemployment Tax – In addition to the state unemployment tax, an employer must pay federal unemployment tax, if the employer pays an employee more than \$1500 in a calendar year.
(See above IRS contact information)

- Employee Certification of Citizenship – Employers are required to certify the citizenship or legal status of their employees by completing a Form I-9 Employee Certification of Citizenship form. The law requires employers to hire only U.S. citizens and aliens lawfully authorized to work in the U.S.

U.S. Citizenship and Immigration Services
 500 Ala Moana Blvd.
 Building 2, Room 400
 Honolulu, Hawaii 96813
 Web site: <http://www.uscis.gov/portal/site/uscis>

2. State Requirements

- Aquaculture License – Aquaculturists that grow a species regulated by the fisheries laws of the state must have an Aquaculture License issued by the Division of Aquatic Resources (DAR), DLNR. The aquaculturists must be qualified as a commercial business by DAR and the license is to fish, possess, rear and sell any aquatic life whose fishing, possession or sale is prohibited by closed season, minimum size, or bag limit (§187A-3.5, HRS, Aquaculture License and license to sell prohibited aquatic life).

Division of Aquatic Resources
 Department of Land and Natural Resources
 1151 Punchbowl Street, Room 330
 Honolulu, Hawaii 96813
 Phone: 808-587-0100
 Email: DLNR.aquatics@hawaii.gov
 Web site: <https://dlnr.ehawaii.gov/cms-public/app/welcome.html>

- State Income Tax – Employers are required to collect and withhold state income tax from employees. Information and forms for this purpose can be obtained from the Department of Taxation.

Taxpayer Services
 Department of Taxation
 P.O. Box 259
 Honolulu, Hawaii 96809-0259
 Phone: 808-587-4242 or 1 800 222-3229 (Toll Free)
 Web site: <http://www6.hawaii.gov/tax>
 (Neighbor Islands phone numbers can be found on the web site)

- General Excise Tax – Virtually anyone doing business in Hawaii must obtain a General Excise Tax (GET) License from the Department of Taxation. The one-time fee is \$20.00. Most businesses must pay a GET of 4.712% of gross revenue. For certain wholesale

transactions the rate is only one-half per cent. The tax is on the business, not on the consumer, and must be paid monthly, quarterly, or semi-annually, depending upon the level of gross revenues. A use tax may also apply to imported tangible personal property upon which the GET is not paid. Both taxes are deductible from one's state income tax liability. Information and report forms can be obtained from the Department of Taxation.

(See Hawaii Department of Taxation contact information above)

- Business Registration – Businesses other than sole proprietorships must register with the State Department of Commerce and Consumer Affairs. The fees range from \$3.00 for a general partnership to \$50.00 minimum for corporations.

Business Registration
Department of Commerce and Consumer Affairs
King Kalakaua Building
335 Merchant Street, Room 201
Honolulu, Hawaii 96813
Phone: 808-586-2727
Fax: 808-586-2733
Web site: <http://hawaii.gov/dcca/breg/contact/>

- Various Employee Insurance Requirements:
 - Unemployment Insurance – Hawaii imposes an unemployment tax on any employer with one or more employees. The tax rates vary from year to year, and for ongoing business rates also vary according to the claims experience of the employer. Information on current rates and other requirements can be obtained from the State Department of Labor and Industrial Relations (DLIR), Unemployment Insurance Division.
 - Workers Compensation Insurance – Employers are required to carry Workers Compensation Insurance. This coverage must provide medical benefits and certain scheduled wage replacement benefits for work-related injury and illness. The cost of the insurance must be borne entirely by the employer and cannot be passed on to the employee. Failure to provide the required insurance can result in a penalty. Information on benefits and other requirements can be obtained from the DLIR, Disability Compensation Division.
 - Temporary Disability Insurance – Employers must provide Temporary Disability Insurance (TDI) or sick leave benefits to eligible workers who are unable to work due to a non-work related disability or injury. Generally, workers are not eligible unless they have been working at least 20 hours per work for at least 14 weeks and earning

at least \$400 during the four most recent calendar quarters. An employer can meet the requirements by purchasing the insurance from an approved carrier or providing an approved sick leave policy. The employer may collect part of the cost of providing the TDI from covered employees. Failure to provide the required coverage can result in a penalty. Information on benefits and other requirements can be obtained from the DLIR, Disability Compensation Division.

- Prepaid Health Care Insurance – Employers must provide covered workers with medical and hospital care for non-work-related illness or injury by purchasing an approved health care plan, by adopting an approved self-insured health care plan, or negotiating a collective bargaining agreement which provides benefits at least equivalent to the required benefits. The employer may collect part of the cost of providing the coverage from covered employees. The requirements do not apply to seasonal agricultural workers and certain types of workers. The employee share can be partially deducted from the employee's wages. Failure to provide the required coverage can result in a penalty. Information on benefits and other requirements can be obtained from the DLIR, Disability Compensation Division.

Department of Labor and Industrial Relations
830 Punchbowl Street
Honolulu, Hawaii 96813
Phone: 808-586-8842
E-mail: dlir.director@hawaii.gov

Unemployment Insurance Division
Phone: 808-586-8971
Web site: <http://hawaii.gov/labor/ui>
(Check the web site for the locations of many branch offices)

Disability Compensation Division
Phone: 808 586-9161 (TDI)
Phone: 808 586-9166 (WCI)
Phone: 808 586-9188 (PHCI)
Web site: <http://hawaii.gov/labor/dcd/dcd-links/guidelines>
<http://hawaii.gov/labor/dcd>
<http://hawaii.gov/labor/dcd/dcd-links/contact-information>
(Note agency has many branch offices listed)

3. County Requirements

- Business License – In certain circumstances, a business license from the county may be required. Contact the finance departments in the respective counties for further information on their requirements.

- Property Tax – Real property, land and improvements are subject to property tax. No property tax is assessed on business inventory or other personal property. Assessments are at 100% of “fair market value.” Various rates apply for land improvements and classes of property. Contact the finance department in the respective counties for further information on their requirements.

Department of Budget and Fiscal Services
City and County of Honolulu
530 S. King Street, 2nd Floor
Honolulu, Hawaii 96813
Phone: 808-768-3900
Web site: <http://www1.honolulu.gov/budget/>

Department of Finance
County of Hawaii
25 Aupuni Street, Suite 2103
Hilo, Hawaii 96720-4245
Phone: 808-961-8234
Web site: http://www.hawaii-county.com/directory/dir_finance.htm

Department of Finance
County of Maui
200 South High Street
Kalana O Maui Bldg., 2nd Floor
Wailuku, Hawaii 96793
Phone: 808-270-7844
Web site: <http://www.co.maui.hi.us/index.aspx?nid=507>

Department of Finance
County of Kauai
4444 Rice Street, Suite 220
Lihue, Hawaii 96766
Phone: 808-241-4200
Web site: <http://www.kauai.gov/finance>