

The Waiʻanae Wastewater Treatment Facility was recently upgraded to secondary level treatment. The ocean outfall was also extended to a greater depth.

Although the wastewater treatment plant has adequate capacity to handle additional flows, sewer lines in the District may need to be upgraded, depending on where and when new development occurs. The first sewer lines were installed during the 1950s, and some of these lines may be nearing the end of their useful lives.

4.3.2 Policies Pertaining to Wastewater Collection and Treatment

4.3.2.1 Continue Phased Program for Replacement of Old Sewer Lines

The program for the phased replacement of old sewer lines in Farrington Highway and in the main valley roadways should be continued.

4.3.2.2 Improve the Waiʻanae Wastewater Treatment Plant

Implement landscaping improvements to the Waiʻanae WWTP to minimize this facility's visual impact on the community. Monitoring of the operations that contribute to odor problems should be continued and operational improvements should be implemented if needed to minimize odor impacts.

4.3.2.3 Coordinate with DHHL Regarding Sewer Connections

Develop a strategy to assist Hawaiian Homesteads homeowners to connect to the City's wastewater collection system. The cooperating entities should seek federal, state, and local assistance in establishing a program of small grants and low interest loans that can be made available to lower income families to finance these hookups.

4.4 ELECTRICAL POWER AND COMMUNICATIONS

4.4.1 Overview of Electrical Power and Communications Systems

The Waiʻanae District is at present adequately served in terms of electrical power, and both telephone and cable television systems. Hawaiian Electric Company is planning a new electrical substation in the vicinity of Waiʻanae Valley Road/Plantation Road to provide a more reliable system. As relatively little growth is planned for this District to the Year 2035, upgrading these systems is not a significant issue for the Waiʻanae Sustainable Communities Plan.

Renewable Energy

Hawaiian Electric Company continues to engage in a broad spectrum of renewable energy-related initiatives and activities, including projects that will occur in Wai‘anae. They include:

- *Solar Water Heating*
Since commencing in 1996, Hawaiian Electric’s residential solar water heating program has resulted in more than \$34 million in rebates to help over 39,000 Hawai‘i households statewide to install rooftop solar water heating systems. Hawaiian Electric continues to advocate maintaining demand-side management programs, including solar water-heating.
- *Bio fuels*
Hawaiian Electric provides research funding for biofuels crop research conducted with the University of Hawai‘i. Some of this research includes the evaluation of promising oil-producing crops.
- *Photovoltaics*
The number of photovoltaic (PV) systems installed under net energy metering continues to grow in Hawai‘i. Hawaiian Electric expects continued interest in PV by both residential and business customers. In addition, Hawaiian Electric is developing a program that will offer its customers another option to install PV systems at customer sites.

Hawaiian Electric is in its 12th year of the *Sun Power for Schools* program with the State of Hawai‘i Department of Education. Through the *Sun Power for Schools* program, it continues to install PV systems at Hawai‘i public schools using voluntary customer contributions and in-kind utility contributions, including engineering, project management, administration, advertising, and marketing. To date, 30 public schools have received PV systems totaling over 38 kilowatts. Three of them, Wa‘ianae High School, Wai‘anae Intermediate, and Nānākuli High and Intermediate are in the Wai‘anae District.

Antennas

Antennas have been around as long as we have had radio and television services. Antennas associated with communication purposes have grown tremendously especially since the U.S. introduction of mobile communication devices in the early 1980s. While the telecommunication industry has provided more convenient communication capabilities for individuals, it has also

increased the public agencies' ability to provide faster and more efficient response to those in need, particularly on an emergency basis.

While the benefits of the telecommunications industry cannot be disputed, communities have opposed the antennas due to aesthetic impacts, particularly on public views and on neighborhood character. Their visibility has increased, especially where antennas are mounted on free-standing towers.

The general public has also raised concerns about the environmental effects of electromagnetic field exposure associated with radio transmissions, as evidenced by the presence of antennas. However, the Federal Communications Commission (FCC) is responsible for evaluating the human environmental effects of radio frequency (RF) emissions from FCC-regulated transmitters. The federal guidelines specifically preclude local decisions affecting environmental effects of radio frequency emissions, assuming that the provider is in compliance with the Commission's RF rules.

The following are general principles governing utilization of antennas, to be applied to telecommunications providers and not to personal use antennas:

- Encourage co-location of antennas: towers should host the facilities of more than one service provider to minimize their proliferation and reduce visual impacts.
- Mount antennas onto existing buildings or structures so that public scenic views and open spaces will not be negatively affected. However, except for the occupant's personal use, antennas on single-family dwelling roofs in residential districts are not appropriate.
- Use stealth technology (e.g. towers disguised as trees) especially on free-standing antenna towers in order to blend in with the surrounding environment and minimize visual impacts.

4.4.2 Policies Pertaining to Electrical Power and Communications

4.4.2.1 Reduce the Visual Impact and Improve Safety of Utility Lines and Poles and Reliability of Service

As discussed in the section on Transportation and the policies relating to the beautification of Farrington Highway, there is a need for a phased program of undergrounding utility lines that now severely impact the scenic quality of the District's main coastal roadway. The utility lines also pose a safety threat to drivers on Farrington Highway, as they sometimes get knocked down by car accidents or severe weather. In

addition, any new transmission line corridors for electricity or communications should be located with care so that scenic qualities are not adversely impacted.

4.4.2.2 Encourage the Development of Alternative Energy Sources

The City and State should provide incentives for the use of alternative energy sources in the building of new developments.

4.4.3 Guidelines Pertaining to Electrical Power and Communications

4.4.3.1 Require New Developments to be Powered by Alternative Energy

Require all new developments proposed for the Wai'anae District to be powered at least 50% by alternative energy sources.

4.5 DRAINAGE SYSTEMS

4.5.1 Overview of Drainage Systems

There are no perennial streams in the coastal areas of the Wai'anae District, and the average annual rainfall in the coastal plain is less than 20 inches. However, because of flood damage that has occurred in the area from severe storms, such as Kona storms, studies were performed in the late 1950s by the West O'ahu Soil Conservation District and the City and County of Honolulu. These studies were performed to determine what drainage facilities would be needed to handle the one percent event or the 100-year storm.

As a result of these studies, four large concrete-lined drainage channels were constructed to discharge storm water runoff into the ocean. These channels are: 1) Kaupuni Stream Channel in Wai'anae that discharges into the northwestern side of Pōka'i Bay; 2) Mā'ilī'ilī'i Stream Channel that discharges into the ocean between Lualualei Beach Park and Mā'ilī Beach Park at Pu'u Mā'ilī'ilī'i; 3) Mā'ilī Channel that discharges into the ocean north of Mā'ilī Point; and 4) Ulehawa Stream Channel that discharges into the ocean south of Pu'u o Hulu Kai.

These "improvements" notwithstanding, Wai'anae still has localized flooding and drainage problems. These problems are caused by the lack of adequate drainage facilities in existing subdivisions, residents building walls around their property to divert storm water, and people filling in natural drainage swales and ditches. In addition, certain sections of Farrington

Highway were constructed at a higher elevation than areas *mauka* of the road and the highway thus acts like a dam.

The City is currently designing a project for a new drain line on Lahaina Street and conducting a study for potential drainage improvements on Hakimo Road. Also contained in the City's 6-year Capital Improvement Program are drainage improvements for Auyong Homestead Road and Wai'anae Elementary School. The City has submitted a proposal to the Department of Land and Natural Resources (DLNR) through the "Flood Mitigation Assistance Program" to prepare a Drainage Master Plan for Wai'anae. However, competition for these funds is high and the prioritizing system for projects is uncertain. It appears that a comprehensive study of local drainage problems in Wai'anae would provide a long-range plan of action for the City. Alternative ways of funding such a study should be considered.

The larger flooding problems relate to flooding from major storms, including heavy rainfall from Kona storms and high surf from coastal storms. Storms with heavy rains create severe local flooding and, on occasion, can cause major damage to homes from *mauka* stream flooding. Coastal storms with high winds and waves can result in flooding and sand accumulation on shoreline properties, including sections of Farrington Highway that are adjacent to the beach. Farrington Highway is especially vulnerable to coastal flooding in the vicinity of Ulehawa Channel, Mā'ili Channel, Mā'ili'ilī'i Channel, East Mākaha Stream, Mākaha Stream, and sections of the highway in Kea'au and Ohikilolo. In addition, the entire Wai'anae Coast is subject to severe damage from any major tsunami. The tsunami evacuation zone here extends up to, and in some cases as much as ¼-mile *mauka* of Farrington Highway. (Note: As of July 2010, the Department of Emergency Management was in the final phase of updating the current O'ahu tsunami evacuation zone maps.)

4.5.2 Policies Pertaining to Flooding and Drainage

4.5.2.1 Develop Wai'anae District Local Drainage Improvements Plan and Program

Prepare a comprehensive study of local flooding and drainage problems in the Wai'anae District, together with a phased plan for the correction of these problems. Corrective measures may include removal of barriers, cleaning of drainage channels and stream channels, re-grading areas to encourage positive drainage, and construction of new drainage channels, culverts, and other drainage structures. The Drainage Improvements Plan and Program should also include programs for the ongoing enforcement of rules and regulations relating to proper grading and drainage for both urban development projects and agricultural use of the land, and public education.

Drainage system design should emphasize control and minimization of non-point source pollution and retention and detention. Modifications if needed for flood protection should maintain rural character and aesthetic quality, avoid degradation of coastline and of stream and near shore water quality. To the extent possible, integrate planned drainageway improvements into the regional open space network by providing for access for pedestrians and bicycles.

4.5.2.2 Establish a Sediment Control Program

Establish a sediment control program to protect both stream quality and the quality of nearshore waters. Minimally, standards for the creation and use of sediment basins at critical locations on both agricultural and urban lands should be established. Thereafter, a program of phased implementation and conscientious enforcement of sediment control measures should be pursued.

4.6 SOLID WASTE HANDLING AND DISPOSAL

4.6.1 Overview of Solid Waste Issues

The majority of Wai‘anae’s domestic solid waste is collected and disposed of by the City’s Department of Environmental Services, Refuse Division. The Refuse Division handles the bulk of O‘ahu’s residential solid waste services, including the recycling and green waste collection. Since 1990, most of O‘ahu’s residential and general commercial trash has been disposed of at H-POWER, the City’s waste-to-energy plant, located in Campbell Industrial Park.

Noncombustible solid waste, construction and demolition (C&D) debris, and industry wastes go directly to a privately owned landfill – the PVT Nānākuli Construction and Demolition Material Landfill, located in the Wai‘anae District, on Lualualei Naval Station Road. Waimanalo Gulch, located in the southwestern corner of the ‘Ewa District, near the border with the Wai‘anae District is city owned, and operated by a private solid waste company. These landfills are near their permitted capacities, and the question of what to do with the island’s waste in the long-run remains unanswered.

The future of O‘ahu’s solid waste became a major public and political issue in 2004, when the decision to expand Waimanalo Gulch landfill came before the City Council. At that time, the Council voted to expand the Waimanalo Gulch, instead of opening one of the four alternative sites proposed. The other sites given consideration were Mā‘ili, Nānākuli, and Makaiwa Gulch, all on the Leeward Coast, and Kapa‘a Quarry in Kailua. Wai‘anae residents were vocally adamant that their District should not have to carry the burden of housing yet another landfill. In addition, most did not support the expansion of Waimanalo Gulch. Wai‘anae residents have continued to watchdog landfill proposals for their District.

Another local solid waste issue that is of concern to the Waiʻanae community is the problem of illegal dumping of all kinds of solid waste, including material from demolished buildings and from construction sites, old cars, old appliances, animal carcasses, animal wastes, and various other kinds of junk and debris. The many country roads and open spaces in the Waiʻanae District are unfortunately very easy to use for illegal and indiscriminate dumping of unwanted solid (and liquid) wastes. The many illegal dump areas in the District are both unsightly and a threat to public health. Much stronger State and City controls are needed to combat this problem.

4.6.2 Policies Pertaining to Solid Waste Disposal

4.6.2.1 Enforce Anti-Dumping Laws

Public agencies should coordinate with the community to develop and implement a comprehensive program for the cleanup of illegal dumps and the ongoing enforcement of laws forbidding illegal dumping of wastes and debris. The enforcement program may include some form of partnership with the community whereby each subcommunity of the Waiʻanae District organizes volunteers who will patrol the area's roads on a regular basis and report to a designated code enforcement officer any illegal dumps or illegal dumping activity. Public agencies, in turn, must provide the manpower to follow up on these reports of illegal dumping. The appropriate field visits and investigations must be made, and, where necessary, prosecution of offenders must be pursued.

4.6.2.2 Encourage Green Waste Composting

Green waste composting should be encouraged by private sources within the District.

4.7 CIVIC, PUBLIC SAFETY, AND EDUCATIONAL FACILITIES

4.7.1 Overview of Civic, Public Safety, and Educational Facilities

Waiʻanae Satellite City Hall is located within the Waiʻanae Neighborhood Community Center at 85-670 Farrington Highway, just south of Waiʻanae Intermediate School. As of 2010, services include:

- Car Motor vehicle registration, renewal, and transfer of ownership
- Bicycle and moped registration
- Payment of water bill and real property tax
- Disabled parking permits
- Dog licenses

- Spay/neuter certificates
- Monthly bus passes
- Picnic and campsite permits
- Informational brochures and applications for voter registration and Handi-Van
- Bus time schedules
- Conference Room

The Honolulu Police Department provides police services to the Wai‘anae District through the Wai‘anae Police Station and the Barbers Point substation. Between 14 and 17 police officers are normally on duty to service the area. The Wai‘anae Police Station handles a large number of 911 calls and a large number of arrests: typically about 6,000 to 7,000 calls to 911 and 500 to 600 arrests in an average month. There are not enough officers to handle this substantial need for police services.

The Honolulu Fire Department has two fire stations in the Wai‘anae District – one in Nānākuli and the other in Wai‘anae Valley. The Nānākuli Fire Station is equipped with a 5-person engine and a 1-person tanker truck. The Wai‘anae Fire Station is equipped with a 5-person engine, a 5-person quint (combination pumper/ladder truck), and a 1- person tanker. Backup service is provided by fire stations located in Kapolei, Makakilo, ‘Ewa, and Waipahu. The firefighters in the Wai‘anae District are called upon to respond to a large number of brushfires each year, especially during the dry summer months. The Honolulu Fire Department has recently stated their need for a new fire station in the Mā‘ili area, between the Nānākuli and Wai‘anae Fire Stations, in order to meet their Standards of Response Coverage goals.

Emergency ambulance service is also provided out of the Wai‘anae Fire Station with one unit. Patients are taken to Hawai‘i Medical Center-West or the Wai‘anae Comprehensive Health Care Facility. In severe cases, a helicopter is dispatched to Wai‘anae to transport patients to Queen’s Medical Center. Members of the community have voiced the need for a full service hospital on the Wai‘anae Coast. There is also a need for a second ambulance that operates 24 hours a day.

In regards to **Emergency Shelters**, the Civil Defense system for the City and County of Honolulu is the responsibility of the Department of Emergency Management (DEM). The DEM is responsible for monitoring, warning, evacuating, and securing (if necessary) the vulnerable areas of the Wai‘anae Coast susceptible to natural hazards such as tsunami, tropical storms, high surf, and hurricanes. The DEM recommends that any new public buildings, such as schools and recreation centers, be required to consider emergency shelter capabilities as a secondary use of the building. The following schools are the existing emergency shelters within the District:

- Kamaile Elementary
- Leihoku Elementary
- Mā'ili Elementary
- Mākaha Elementary
- Nānākuli Elementary
- Nānākuli High & Intermediate
- Wai'anae Elementary
- Wai'anae Middle

Regarding **schools**, the Wai'anae District currently contains ten public schools operated under the State Department of Education (DOE). There are six elementary schools, one intermediate, one combined intermediate and high school and one high school. The total enrollment of each of the schools as of the 2008-2009 school year are shown in Table 4-1.

In addition to these public schools, the District has two charter schools, Ka Waihona o ka Na'auao-PCS and Kamaile Academy. Ka Waihona is located at the former Nānāikapono DOE school site in Nānākuli. Kamaile Academy is located in Wai'anae Valley, in an area historically known as Kamaile. These charter schools strive to offer an educational experience that is based on community and cultural values, an experience that is a viable alternative to the existing conventional public school model. They also offer after school and summer programs.

The Wai'anae community generally supports such charter schools, as is shown by their growth. Both schools' enrollments have increased to over 500 students each. This is significant growth, considering that Ka Waihona enrolled only 68 students in its start-up year of 2002-2003.

Recent plans for developments in Mākaha Valley include the establishment of a special "Learning Community" facility that will provide special educational resources and opportunities for all of the people of the Wai'anae community, from small children to *kūpuna*.

Table 4-1: Public School Enrollment in the Waiʻanae District

School	Grades	Official Enrollment Count, 2008-2009 School Year
PUBLIC		
Leihoku Elementary	K – 6	770
Māʻili Elementary	K – 6	681
Mākaha Elementary	K - 6	484
Nānāikapono Elementary	K – 6	758
Nānākuli Elementary	K – 6	421
Nanakuli HS & Intermediate	7 - 12	820
Waiʻanae Elementary	K – 6	487
Waiʻanae Intermediate	7 – 8	780
Waiʻanae HS	9 – 12	1,611
TOTAL		6,812
Charter		
Ka Waihona O Ka Naʻauao-PCS	K – 8	510
Kamaile Academy	K – 6	589
TOTAL		1,099
OVERALL TOTAL		7,911

Source: DOE, 2008

The Board of Education has approved new design enrollment guidelines for new Department of Education schools (Board Policy 6701):

- Elementary (K-5)
 - 400-750 students
 - 8 to 15 usable acres
- Middle (6-8)
 - 500-1,000 students
 - 15 to 20 usable acres
- High (9-12)
 - 800 to 1,600 students
 - 45 to 55 usable acres

Leeward Community College has a satellite facility in Waiʻanae that offers Associate Degrees and vocational programs, such as nursing. The current student population is approximately 720 people. The college is located in a single building next to Waiʻanae Mall and contains five classrooms.

Waiʻanae also offers a number of enrichment programs on Hawaiian culture for children and adults. One of the better known programs is the Cultural Learning Center at Kaʻala. This center

began operations in 1979 with a focus on working with youth and adults on “hands-on” projects, such as planting taro and other food and medicinal plants in Wai‘anae Valley. The focus of the program is “Aloha ‘Aina – loving and caring for the Land.”

It is recognized that public schools are a State function, and that the City’s Sustainable Communities Plans cannot provide definitive plans for these facilities. However, City policies can provide some guidance to the development of future schools for the community.

4.7.2 Policies Pertaining to Civic, Public Safety, and Educational Facilities

4.7.2.1 Improve Quality of Facilities and Adequacy of Staffing

There is a need for improvements in both the quality of public facilities and the level of staffing for some of these facilities. Specifically, the Wai‘anae Satellite City Hall needs to be improved in terms of staffing, programs, equipment, and maintenance. The Wai‘anae Police Station needs more manpower. Adequate police services are critical to the safety and welfare of Wai‘anae’s people.

4.7.2.2 Selection of Sites for New Schools Should Comply with the Wai‘anae Sustainable Communities Plan Criteria

Even if future growth in the Wai‘anae District is fairly slow, there will be an eventual need for one or more new elementary schools, and possibly another Intermediate School and High School by the Year 2035. The sites for these new schools should be selected through a careful planning process. Public agency planners should coordinate with the community to ensure that the site selection process for new schools fully considers the plans and policies that make up the Wai‘anae Sustainable Communities Plan.

Specifically, the site selection studies will need to focus on potential sites within the Rural Residential areas, and eliminate from consideration any sites on Agricultural lands or sites *makai* of Farrington Highway. The construction of a school on Agricultural land would encourage urban and suburban development that is not compatible with the intent of this land use designation, and would potentially compromise the learning environment for students, teachers and staff due to odors, dust and vectors that often accompany agricultural land uses. Schools should not be *makai* of Farrington Highway, due to the long-term issue of sea level rise, as well as more immediate threats, such as tsunamis.

In addition, schools should be located next to parks, and should allow for shared facilities in order to maximize use of facilities. The City should support fair share contribution, as adopted by State law.

4.7.2.3 Consider Multi-Purpose Function of Schools

School planners should consider the multipurpose role of schools in the community. Thus, in addition to classroom education, schools in many communities throughout the State provide other functions and facilities that are important to the community, including after school programs, meeting places for adult education and special programs, meeting places for community groups and organizations, and meeting places for youth groups and health and fitness classes. Schools are also the primary emergency shelters during hurricanes, tsunamis, or other large-scale emergency events. Recognizing these diverse functions of public schools, new schools should be sited in centralized locations that are easily accessible to a large number of residents.

4.7.2.4 Encourage Charter Schools

Encourage and support the opening of more charter and immersion schools. (Please note that “stand alone” charter schools do not use DOE facilities.)

4.7.2.5 Increase Ambulance Service

There is currently only one ambulance that serves the District 24 hours a day. It is recommended that a second one also be on duty at all times.

4.7.2.6 Provide Adequate Emergency Shelters

Emergency shelters provide places for people to live temporarily when there are natural disasters, such as hurricanes and tsunamis. They can also provide shelter for people fleeing other situations, such as domestic violence or other types of abuse. An adequate number of emergency shelters should be provided for the Waiʻanae District.

4.7.3 Guidelines for Civic, Public Safety, and Educational Facilities

4.7.3.1 Design Standards

Public buildings, whether designed and constructed by federal, state, or city agencies or by other quasi-public entities, should be designed to be both functionally efficient and aesthetically pleasing. Too many public buildings on Oʻahu, including police stations, fire stations, and schools, have been designed with insufficient attention to sound design principles, which should include:

- The use of building forms and materials that reflect Hawaiʻi’s diverse cultural and architectural heritage.
- The predominantly residential scale of the built environment of the Waiʻanae District. Massive building forms would not be compatible with this residential scale.

- The hot, dry climate of the coastal plain zone of the Wai‘anae District. Public buildings should therefore incorporate “natural” cooling devices including lanais, wide roof overhangs, natural air circulation, strategically placed shade trees, and cooler colors for exterior walls.
- Related open areas including front yard areas, parking lots, playgrounds, and garden spaces should be generously planted with colorful trees, shrubs, and ground covers. Drought-tolerant native plant species should be favored.
- Sea level rise should be taken into account when choosing the location of a public building, especially emergency facilities.
- Design new public buildings, such as schools and recreation centers, to serve a secondary function as an emergency shelter.

4.8 HEALTH CARE FACILITIES

4.8.1 Overview of Health Care Facilities

There is a wide variety and a large number of health care facilities and programs in the Wai‘anae Sustainable Communities Plan area. These programs include mental health, family violence counseling, substance abuse counseling and health support groups (e.g., Alzheimer, cancer, diabetes, AIDS, etc.). Regular health care services are provided by Kaiser Permanente in Nānākuli and by the Wai‘anae Coast Comprehensive Health Center.

The Kaiser Permanente Clinic offers the following services:

- Family Practice
- Internal Medicine
- Pediatrics
- Behavioral Health Services
- Diabetes education
- Diabetic eye exams (once a month)
- Diagnostic Imaging (General Radiology)
- Health Education
- Laboratory
- Medical Social Services
- Medication counseling
- Nutrition counseling
- Pharmacy (24-hour prescription refill)
- Nephrology (selected days)

Emergency service for Kaiser Permanente is provided from the Moanalua center with ambulance service provided by the Waipio Clinic in Waipahu. The nearest hospital is the Hawai'i Medical Center-West on Fort Weaver Road. For severe cases, a helicopter is dispatched to the Wai'anae coast and the patients are taken to Queen's Medical Center.

Wai'anae Coast Comprehensive Health Center is an outpatient primary care medical center that offers a wide variety of health care and supportive services. The Health Center has a main clinic located in Wai'anae, and satellite clinics located in the Wai'anae Mall and Nānākuli Shopping Center. The Health Center's primary health care services include:

- Primary Care: family practice, pediatrics, and internal medicine
- Specialty Care: orthopedics, podiatry, dermatology, obstetrics, gynecology, nephrology, general surgery, pain management, ophthalmology
- Dental: adult and pediatric
- Behavioral Health: mental health and substance abuse treatment
- Integrative Health: acupuncture
- Pharmacy

The Health Center also provides a 24-hour emergency room, laboratory, and radiology services. The emergency room is designated a Trauma Support Clinic as well as a Type II facility for Hospital Capability for Readiness in case of a natural disaster, pandemic, or bioterrorism event. Other Patient and Community Services include:

- Adult Day Care
- Anonymous HIV Counseling and Testing
- BabySafe Services
- Case Management
- Child Passenger Safety Seat Fitting Stations
- Chronic Disease Management
- Community Health Education
- Diabetes Support Group
- Family Planning
- Fitness Training and Classes
- Health Care for the Homeless
- Health Education (Smoking Cessation, Asthma)
- Kid-Fit Program
- Medical Nutrition Therapy
- Native Hawaiian Healing
- Patient Assistance Services
- Perinatal Services

- Transportation
- Wai'anae Health Academy
- WIC (Women, Infants, and Children Program)
- Youth Health Corp: TeenBEAT (Teens Being Educated About Tobacco)

The Wai'anae Coast Community Mental Health Center also offers a number of programs and services. They operate six Headstart offices at Koa Ike, Nānākuli, Puu Heleakala, Mā'ili, Mākaha, and Wai'anae. These offices provide comprehensive child development programs with education, health, and social services. The service is offered to low-income children and their families as well as to people with handicapped conditions or referrals from the Child Protective Services. Education and vocational support services, job search and placement are also provided for persons 55 years of age or older.

Although there are no housing facilities for the elderly in the Wai'anae District, there are programs and services that provide assistance to the elderly. Adult day care is provided by Wai'anae Adult Day Care operating out of the Wai'anae Coast Comprehensive Health Center. Activities such as crafts and exercise in a social environment are provided, as well as breakfast, lunch and a snack.

Other programs for the elderly include the Honolulu Gerontology Program that offers exercise and social support twice a week; Hui O Ka'ala, Kupuna O Nānākuli, and Wai'anae Golden Age that provide social activities and crafts; and senior citizens social clubs.

4.8.2 Policies Pertaining to Health Care Facilities

4.8.2.1 Support Quality, Community Health Care Facilities

Support and assist community health care facilities and programs to ensure high quality health care for Wai'anae residents.

4.8.2.2 Assess the Need for New Health Care Facilities and Services

Assess the need for new health care facilities, including possibly a full-service hospital. Proceed with planning and funding of new health care facilities as appropriate.

4.9 RELATION TO PUBLIC FACILITIES MAP

The major existing and planned public facilities discussed in Chapter 4 for the Wai'anae District are located schematically on the Public Facilities Map in Appendix A.

5. IMPLEMENTATION

Throughout the process of updating the Wai'anae Sustainable Communities Plan, the number one concern raised by community members was the lack of Plan implementation. While the community generally agrees that DPP (the City Department of Planning and Permitting) has satisfactorily utilized the Wai'anae Sustainable Communities Plan as a tool when assessing development proposals for the District, they are concerned that there has been little-to-no implementation of the projects and programs set forth within the Plan. However, the responsibility of achieving proactive implementation should be shared by the community and the City, including all of the City's planners, engineers, and other technical and policy-level personnel, as well as elected officials who determine the allocation of City resources.

Many other City, county, and town jurisdictions on the U.S. mainland have instituted comprehensive planning programs that emphasize a proactive community-based planning and implementation process. These local governments seek to establish a strong link between planning policies and guidelines, and specific organization, funding, and actions needed to implement a variety of public and private projects and programs. The following sections of this Chapter are intended to strengthen the linkage to implementation to realize the Vision of the future presented in this Plan. It should also be noted that implementation will depend on each department's priorities and availability of resources.

This Chapter includes the following sections:

- 5.1 Overview of Planning Implementation Tools
- 5.2 Implementation Matrix
- 5.3 Public Facility Investment Priorities
- 5.4 Development Priorities
- 5.5 Special Area Plans
- 5.6 Functional Planning
- 5.7 Review of Zoning and Other Development Applications
- 5.8 Five-Year Sustainable Communities Plan Review
- 5.9 Relationship to General Plan and Development Codes

5.1 OVERVIEW OF PLANNING IMPLEMENTATION TOOLS

Implementation of the Wai'anae Sustainable Communities Plan should be pursued through a variety of means, including:

- Organization and action by the appropriate City departments towards the realization of the policies contained in the Wai'anae Sustainable Communities Plan;
- On-going cooperation and communication with community leaders and community organizations in order to accomplish the objectives of the Wai'anae Sustainable Communities Plan;
- Broad dissemination and explanation of the Wai'anae Sustainable Communities Plan to public agencies, landowners, major local development companies, community services providers, and community organizations. The Wai'anae Sustainable Communities Plan can be an effective planning guide if it is widely known and supported;
- Guiding the City's investment in infrastructure in accordance with the policies and guidelines of the Wai'anae Sustainable Communities Plan;
- Initiating development code amendments to achieve consistency with the Wai'anae Sustainable Communities Plan, including changes to the Land Use Ordinance that will result in standards that are more appropriate to rural areas;
- Recommending approval, approval with modifications, or denial of developments seeking zoning and other development approvals based on their conformance with the Wai'anae Sustainable Communities Plan;
- Evaluating progress in fulfilling the Vision of the Wai'anae Sustainable Communities Plan every two years, and presenting the results of the evaluation in the Biennial Report; and
- Conducting a review of the Vision, Policies, Guidelines, and CIP priority investments of the Wai'anae Sustainable Communities Plan every five years and recommending revisions as necessary.

5.2 IMPLEMENTATION MATRIX

This section provides a summary of the specific physical improvements and actions identified in Chapters 3 and 4 of the Plan to help organize and facilitate plan implementation.

Table 5-1 presents the implementing actions, the related plans, regulatory code or action, and the public or private entities responsible for implementing the action. The table is organized by land use category, with the categories listed according to the order of Chapters 3 and 4.

- The first column of the table – Policy/Guideline – is comprised of the guideline statements for each land use category. Policy statements are used if the land use category does not include guidelines.
- The second column – Program – relates each statement to a specific regulatory code, functional plan, or other action. The term “project review” indicates the review of

discretionary land use approvals, such as State land use, zoning and special management are use permits. In some instances, To Be Determined (TBD) was used to indicate that the related code/plan/action was not clear. TBD actions are intended to be identified and developed by the agencies responsible for implementation.

- The third column – Agency(ies) – identifies the public and/or private entities responsible for implementing the policy or guideline. Although many of the implementing actions fall under DPP’s jurisdiction, some actions are the responsibility of other Federal, State or City departments or public agencies, while a few have been assigned to private entities or individual landowners.
- The fourth column identifies the role of the agencies involved in implementation. The three categories identified include Implementer, Regulator (after the law or regulation is implemented), and Advocate.

The following acronyms and abbreviations are used in the Implementation Matrix:

BFS	Department of Budget and Fiscal Services
BWS	Board of Water Supply
CBO	Community-Based Organizations*
CIP	Capital Improvement Program
CSD	Customer Services Department
CWRM	State Commission on Water Resource Management
DDC	Department of Design and Construction
DES	Department of Emergency Services
DLNR	State Department of Land and Natural Resources
DOA	State Department of Agriculture
DOH	State Department of Health
DOT	State Department of Transportation
DPP	Department of Planning and Permitting
DPR	Department of Parks and Recreation
DTS	Department of Transportation Services
ENV	Department of Environmental Services
HECO	Hawaiian Electric Company
IBC	International Building Code
LUC	State Land Use Commission
MIL	Military (U.S. Navy and/or U.S. Army)
NPDES	National Pollution Discharge Elimination System
TAX	State Department of Taxation

TBD	To Be Determined
WWMP	<u>Wai'anae Watershed Management Plan, PreFinal</u> (BWS, 2010)
WWTP	Wastewater Treatment Plant

**Community-Based Organizations (CBO) consist of groups that are already formed, or that may form in the future, that will partner with government agencies to manage Wai'anae's natural and cultural resources. Thus, although "CBO" is listed numerous times in the matrix, these organizations may not yet be ready to implement the Policy they are listed next to, but their formation should be encouraged, and when appropriate, assisted.*

TABLE 5-1: IMPLEMENTATION MATRIX

NO.	POLICY/GUIDELINE	PROGRAM	AGENCY(IES)	ROLE
CHAPTER 3 LAND USE POLICIES AND GUIDELINES				
3.2 Preservation of Open Space				
3.2.2.1	Do Not Allow Significant Negative Impacts on Large Open Spaces	Project Review	DPP/DLNR/MIL	Implementer
3.2.2.2	Address Project Impacts on Open Space	Project Review	DPP/DLNR/MIL	Implementer
3.2.2.3	Do Not Allow Significant Negative Impacts on Important Public Views	Project Review	DPP/DLNR/MIL	Implementer
3.2.2.4	Address Project Impacts on Important Public Views	Project Review	DPP/DLNR/MIL	Implementer
3.2.2.5	Limit Urban Development	Project Review	DPP	Implementer
3.2.2.6	Government Agencies Should Partner with Community-based Organizations in order to Better Manage Wai'anae's Open Spaces	TBD	DLNR/CBO	Implementer/ Advocate
3.2.2.7	Minimize Outdoor Lighting	TBD	Private	Advocate
3.2.3.1	Minimize Adverse Effects of Artificial Lighting	TBD	Private	Advocate
3.2.3.2	Adopt Outdoor Night Lighting Standards	TBD	Private	Advocate
3.3 Preservation of Coastal Lands				
3.3.2.1	Do Not Allow New Coastal Development	Project Review	DPP/DOT/DPR	Implementer
3.3.2.2	Incrementally Acquire Coastal Properties	TBD	DLNR	Implementer
3.3.2.3	Discourage Shore Armoring	TBD	DPP/DLNR	Implementer
3.3.2.4	Government Agencies Should Partner with Community-based Organizations in order to Better Manage Wai'anae's Coastal Lands	TBD	DLNR/CBO	Implementer/ Advocate
3.3.2.5	Prohibit Projects that Negatively Impact Coastal Lands	Project Review	DPP/DLNR	Implementer
3.3.2.6	Prevent the Introduction of Alien Species	TBD	DOA/DOT/ DLNR/CBO	Implementer/ Advocate
3.3.2.7	Maintain Beaches/Sand	Project Review	DLNR/CBO	Implementer/ Advocate
3.4 Preservation of Mountain Forest Lands				
3.4.2.1	Protect Mountain Forest Lands	TBD	DLNR/MIL/CBO	Implementer/ Advocate
3.4.2.2	Develop Forest Restoration Plan	TBD	DLNR/MIL/CBO	Advocate

NO.	POLICY/GUIDELINE	PROGRAM	AGENCY(IES)	ROLE
3.4.2.3	Do Not Grant Permits that Negatively Impact Mountain Forest Lands	Project Review	DLNR	Implementer
3.4.2.4	Government Agencies Should Partner with Community-based Organizations in order to Better Manage Wai'anae's Mountain Forest Lands	TBD	DLNR/CBO	Implementer/ Advocate
3.4.2.5	Protect Rare and Endangered Species	TBD	DLNR/MIL/CBO	Implementer/ Advocate
3.4.2.6	Prevent the Introduction of Alien Species	TBD	DOA/DOT/CBO/ DLNR	Implementer/ Advocate
3.4.2.7	Allow Public Access to Hiking Trails	TBD	DLNR	Advocate
3.4.2.8	Develop Wildfire Management Plan	TBD	DLNR/MIL/CBO	Implementer/ Advocate
3.5 Preservation of Streams and Floodplains				
3.5.2.1	Establish Stream Conservation Corridors	TBD	CWRM/DLNR/ BWS/CBO	Implementer/ Advocate
3.5.2.2	Restrict Uses within the Stream Conservation Corridors	TBD	DLNR/DPP/CBO	Implementer/ Advocate
3.5.2.3	Establish Minimum In-Stream Flow Standards	TBD	CWRM/DLNR/ BWS/CBO	Implementer/ Advocate
3.5.2.4	Government Agencies Should Partner with Community-based Organizations in order to Better Manage Wai'anae's Streams and Stream Corridors	TBD	DLNR/CBO	Implementer/ Advocate
3.6 Preservation of and Access to Historic and Cultural Resources				
3.6.2.1	Preserve Major Concentrations of Cultural Sites and Allow Access for Cultural Practices	TBD	DLNR/DPP/CBO	Implementer/ Advocate
3.6.2.2	Do Not Allow Development that Negatively Impacts Cultural Sites or Access to such Sites	Project Review	DPP/SHPD/ DLNR	Implementer
3.6.2.3	Government Agencies Should Partner with Community-based Organizations in order to Better Manage Wai'anae's Cultural Sites	TBD	DLNR/CBO	Implementer/ Advocate
3.6.2.4	Create Signage for Cultural Sites	TBD	DLNR/CBO/ SHPD	Implementer/ Advocate
3.6.2.5	Protect and Allow Access for Cultural Practices at Sites on City-Owned Lands	TBD	DLNR/CBO/ DDC/DPP	Implementer/ Advocate

NO.	POLICY/GUIDELINE	PROGRAM	AGENCY(IES)	ROLE
3.6.2.6	Protect and Allow Access for Cultural Practices to Federal, State, or Private Lands	TBD	DLNR/CBO/MIL/ property owners	Implementer/ Advocate
3.6.2.7	Conduct a Thorough Cultural Survey of the District	TBD	DLNR/CBO/ SHPD	Implementer/ Advocate
3.7 Preservation of Agricultural Lands				
3.7.2.1	Maintain the Boundary for Agricultural Lands	Zoning	DPP	Implementer
3.7.2.2	Support Agriculture through Zoning Regulations and Tax Assessments	LUO	DPP/BFS	Implementer/ Advocate
3.7.2.3	Limit the use of "Agricultural" Land to Agriculture and other Compatible Land Uses	Zoning	DPP/LUC	Implementer
3.7.2.4	Prohibit Incompatible Land Uses of "Agricultural" Land	Zoning	DPP/LUC	Implementer
3.7.2.5	Coordinate Farmers Markets and Other Low-Cost Marketing Outlets	TBD	DOA/Local farmers	Advocate
3.8 Residential Land Use				
3.8.2.1	Do Not Increase Lands Designated "Residential"	WSCP	DPP	Implementer
3.8.2.2	Coordinate with DHHL	TBD	DPP	Advocate
3.8.2.3	Preserve Agricultural Lands	Zoning	DPP/SLUC	Implementer
3.8.2.4	Support Home-Based Businesses	Zoning	DPP	Implementer
3.8.2.5	201H Projects Should Meet Wai'anae SCP Guidelines	Project Review	City Council/DPP	Implementer
3.8.3.1	Follow Wai'anae SCP Affordable Housing Guidelines	Project Review	DPP/private developers	Implementer/ Advocate
3.8.3.2	Limit the Height of Residential Structures	LUO	DPP	Implementer
3.8.3.3	Encourage Clustered Housing in Wai'anae Country Town	TBD	DPP	Regulator/ Advocate
3.9 Commercial and Industrial Uses				
3.9.2.1	Encourage the Continuation of Existing Commercial Establishments	TBD	DPP	Regulator/ Advocate
3.9.2.2	Encourage Establishment of Commercial Businesses that Serve the Community	TBD	Wai'anae Chamber of Commerce	Regulator/ Advocate
3.9.2.3	Support the Continued Viability of the Mākaha Resort	TBD	Private	Implementer
3.9.2.4	Prohibit "Big Box" Stores	Project Review	DPP	Implementer
3.9.2.5	Encourage Light Industrial Businesses	Zoning	DPP/private developers	Implementer/ Advocate

NO.	POLICY/GUIDELINE	PROGRAM	AGENCY(IES)	ROLE
3.9.2.6	Do Not Allow Heavy Industry	LUO	DPP	Implementer
3.9.3.1	Design Guidelines for Neighborhood Commercial Establishments	Project Review	DPP	Implementer
3.10 Country Towns, Rural Community Commercial Centers and Gathering Places				
3.10.2.1	Establish a Phased Development Program	TBD	Private developers/DPP	Advocate
3.10.3.1	Geographic Size of Centers	Zone Change	DPP	Regulator
3.10.3.2	Commercial Establishments in the Centers	Zoning	DPP	Regulator
3.10.3.3	Residential Structures in the Centers	Zoning	DPP	Regulator
3.10.3.4	Center Amenities	Zoning	DPP	Regulator
3.10.3.5	Guidelines for Community Gathering Places Connected by Walking/Jogging/Biking Path	TBD	CBO/DPP	Implementer/Advocate
3.11 Existing Parks and Recreational Areas				
3.11.2.1	Develop Adequate Public Parks	CIP	DPR	Advocate
3.11.2.2	Prohibit More Golf Courses That Compete with Agriculture or Open Space Resources	Zoning	DPP	Implementer
3.11.2.3	Plan for a System of Hawaiian Cultural and Educational Parks	TBD	DPR/CBO/ DLNR	Advocate
3.11.3.1	Increase Neighborhood Parks Based on City's Park Standards	CIP	DPR/DDC	Advocate
3.11.3.2	Flexible Criteria for Recreational Facilities	City Park Standards	DPR/CBO/DDC	Implementer
3.12 Military Land Uses				
3.12.2.1	Preserve and Transition Military Lands to Civilian Use	TBD	CBO/MIL	Implementer/Advocate
3.12.2.2	Organize and Implement Cooperative Programs	TBD	CBO/MIL	Advocate

NO.	POLICY/GUIDELINE	PROGRAM	AGENCY(IES)	ROLE
CHAPTER 4 PUBLIC FACILITIES AND INFRASTRUCTURE POLICIES AND GUIDELINES				
4.1 Transportation Systems				
4.1.2.1	Implement Farrington Highway Safety Improvements	CIP	DOT	Advocate
4.1.2.2	Beautify Farrington Highway	CIP	DOT	Advocate
4.1.2.3	Establish an Emergency Bypass Road	CIP	DOT/MIL	Advocate/ Implementer
4.1.2.4	Enhance Public Transportation	CIP	DTS	Advocate
4.1.2.5	Encourage Other Modes of Transportation	TBD	DTS/DOT/ individuals	Advocate
4.2 Potable and Nonpotable Water Systems				
4.2.4.1	Implement Watershed Protection Strategies to Improve Forest Health & Perennial Stream Flows	WWMP	CWRM/BWS/ DLNR/CBO	Advocate
4.2.4.2	Encourage Water Conservation	WWMP	BWS/CBO	Advocate
4.2.4.3	Diversify Water Supply, Matching Quality with Use	WWMP	BWS	Advocate
4.2.4.4	Support the Goals and Objectives of the Adopted <u>Wai'anae Watershed Management Plan</u>	WWMP	BWS/DPP	Advocate
4.3 Wastewater Collection and Treatment Systems				
4.3.2.1	Continue Replacement of Old Sewer Lines	CIP	ENV	Advocate
4.3.2.2	Improve the Wai'anae Wastewater Treatment Plant	CIP	ENV	Advocate
4.3.2.3	Coordinate with DHHL Regarding Sewer Connections	TBD	ENV/DHHL	Advocate
4.4 Electrical Power and Communications				
4.4.2.1	Reduce the Visual Impact and Improve Safety of Utility Lines and Poles and Reliability of Service	TBD	HECO/ Hawaiian Telcom	Advocate
4.4.2.2	Encourage the Development of Alternative Energy Sources	TBD	DBEDT, Developers, HECO, State Legislature	Advocate
4.4.3.1	Require New Development to be Powered 50% by Alternative Energy	IBC	DPP	Implementer
4.5 Drainage Systems				
4.5.2.1	Develop Wai'anae District Local Drainage Improvements Plan and Program	TBD	ENV/DDC	Advocate

NO.	POLICY/GUIDELINE	PROGRAM	AGENCY(IES)	ROLE
4.5.2.2	Establish a Sediment Control Program	NPDES	ENV/DLNR/CBO	Advocate
4.6 Solid Waste Handling and Disposal				
4.6.2.1	Enforce Anti-Dumping Laws	TBD	DLNR/CBO	Implementer/ Advocate
4.6.2.2	Encourage Green Waste Composting	TBD	ENV/DLNR/DPP/ CBO	Implementer/ Advocate
4.7 Civic, Public Safety, and Education Facilities				
4.7.2.1	Improve Quality of Facilities and Adequacy of Staffing	TBD	CSD	Advocate
4.7.2.2	Selection of Sites for New Schools Should Comply with <u>Wai'anae Sustainable Communities Plan</u> Criteria	TBD	DOE	Implementer
4.7.2.3	Consider Multi-Purpose Functions of Schools	TBD	DOE	Implementer
4.7.2.4	Encourage Charter Schools	TBD	Community	Advocate
4.7.2.5	Increase Ambulance Service	TBD	DES	Advocate
4.7.2.6	Provide Adequate Emergency Shelters	Civil Defense System	DEM	Implementer
4.7.3.1	Design Standards	Project Review	DPP/DDC	Implementer
4.8 Health Care Facilities				
4.8.2.1	Support Quality, Community Health Care Facilities	Project Review	Funders	Implementer/ Advocate
4.8.2.2	Assess the Need for New Health Care Facilities and Services	TBD	DOH	Advocate

5.3 PUBLIC FACILITY INVESTMENT PRIORITIES

The VISION for the Wai'anae District requires the cooperation of both public agencies and private organizations in planning, financing, and improving infrastructure. The City must take an active role in planning infrastructure improvements, such as land acquisition and site improvements for neighborhood parks, provision of adequate public access to the shoreline, provision of pedestrian, bicycle, and other transportation options, planning and implementation of drainage improvements, and improvements to the Wai'anae Satellite City Hall and to the Wai'anae Community Center building.

5.4 DEVELOPMENT PRIORITIES

Projects that should receive priority in the process of City land use approvals are those which:

- Involve land acquisition and improvements for public projects that are consistent with the Wai'anae Sustainable Communities Plan's Vision, Policies, and Guidelines;
- Involve applications for zoning and other regulatory approvals that are consistent with the Wai'anae Sustainable Communities Plan's Vision, Policies, and Guidelines;
- Are located on usable parcels of land that are consistent with the Wai'anae Sustainable Communities Plan's Land Use Map.

5.5 SPECIAL AREA PLANS

Special Area Plans provide more detailed policies and guidelines than Sustainable Communities Plans for areas requiring particular attention. The form and content of Special Area Plans depend on what characteristics and issues need to be addressed in greater detail in planning and guiding development or use of the Special Area.

Special Area Plans can be used to guide land use development and infrastructure investment in Special Districts, Redevelopment Districts, or Resource Areas. Plans for **Special Districts** provide guidance for development and infrastructure investment in areas with distinct historic or design character or significant visual and scenic resources. Plans for **Redevelopment Districts** provide strategies for the revitalization or the redevelopment of an area. Plans for **Resource Areas** provide resource management strategies for areas with special natural and cultural resource values.

In 2000, Mākaha Valley was identified for Special Area Plan status because of several important characteristics:

The City owns approximately 4,000 acres of land in the upper valley and the steeper valley walls;

- Most of the valley has been designated “urban” under the State Land Use system;
- There are approximately 350 acres of undeveloped land in Mākaha Valley that are already zoned for Residential and Resort uses;
- Mākaha Valley is an important resource area in terms of water resources, rare and endangered plants and animals, and cultural sites.

Since that time, the Mākaha Special Area Plan was developed through a community-based planning process. It was completed in 2009. See Section 3.8.1 “Overview of Existing and Planned Residential Uses” for a summary of the Mākaha Special Area Plan.

5.6 FUNCTIONAL PLANNING

Functional planning is the process by which various City agencies determine needs, assign priorities, phase projects, and propose project financing to further implement the vision articulated in the Sustainable Communities Plans. This process may take a variety of forms, depending upon the missions of the various agencies involved, as well as upon requirements imposed from outside the City structure, such as federal requirements for wastewater management planning.

Through the functional planning process, City agencies responsible for developing and maintaining infrastructure and public facilities or for provision of City services review existing functional planning documents and programs. As a result of these reviews, the agencies then update, if required, existing plans or prepare new long-range functional planning documents that address facilities and service system needs. Updates of functional planning documents are also conducted to assure that agency plans will serve to further implement the Sustainable Communities Plans as well as to provide adequate opportunity for coordination of plans and programs among the various agencies.

The functional planning process should have opportunities for early and continuing public involvement, timely public notice, public access to information used in the evaluation of priorities, and opportunities to suggest alternatives and to express preferences. The functional planning process provides the technical background for the Capital Improvement Program and public policy proposals that are subject to review and approval by the City Council.

5.7 REVIEW OF ZONING AND OTHER DEVELOPMENT APPLICATIONS

5.7.1 Wai‘anae District Zoning Designations

A primary way in which the Wai‘anae Sustainable Communities Plan will guide land use will be through the review of applications for zone changes and other development proposals. Approval for all development projects should be based on the extent to which the project supports the Policies and Guidelines of the Wai‘anae Sustainable Communities Plan.

Projects that do not involve significant zone changes will be reviewed by City Planners for consistency with the Policies and Guidelines of the Wai‘anae Sustainable Communities Plan

during the Zone Change or permit application process. Projects involving significant zone changes will require an environmental review in accordance with HRS Chapter 343.

5.7.2 Adequate Facilities Requirement

All projects requesting zone changes shall be reviewed to determine if adequate public facilities and infrastructure will be available to meet the needs created as a result of the development. Level of Service Guidelines to define adequate public facilities and infrastructure requirements will be established as part of the City's Capital Improvement Program.

In order to guide development and growth in an orderly manner as required by the City's General Plan, zoning and other development approvals for new developments should be approved only if the responsible City and State agencies indicate that adequate public facilities and utilities will be available at the time of occupancy or if conditions the functional agency indicates are necessary to assure adequacy are otherwise sufficiently addressed.

Staff planners, as part of their report to the Department of Planning and Permitting on the consistency of the project with the Wai'anae Sustainable Communities Plan, will review and summarize any individual agency's findings regarding public facilities and utilities adequacy which are raised as part of the EA/EIS process. The Department of Planning and Permitting will address these findings and any additional agency comments submitted as part of the agency review of the zone change application and recommend conditions that should be included in the Unilateral Agreement or Development Agreement to insure adequacy of facilities.

5.8 FIVE-YEAR SUSTAINABLE COMMUNITIES PLAN REVIEW

The Planning Division shall conduct a comprehensive review of the Wai'anae Sustainable Communities Plan and shall report its findings and recommended revisions to the Planning Commission and the City Council five years after adoption and every five years thereafter.

In the Five-Year review, the Wai'anae Sustainable Communities Plan will be evaluated to see if the regional vision, policies, guidelines, and implementing actions are still appropriate.

5.9 RELATIONSHIP TO GENERAL PLAN AND DEVELOPMENT CODES

This section discusses the transition from the former Wai'anae Sustainable Communities Plan (2000) to this revised Wai'anae Sustainable Communities Plan (2010), including its relationship to the General Plan guidelines, and the need for review and revision of development codes, standards, and regulations.

5.9.1 Existing Land Use Approvals

This Wai'anae Sustainable Communities Plan will go into effect upon adoption by ordinance. At that time, the Wai'anae Sustainable Communities Plan will become a self-contained document.

Land use approvals granted under existing zoning, Unilateral Agreements, and approved Urban Design Plans will remain in force and guide entitlement decisions until any zoning action to further implement the Vision and Policies of the Wai'anae Sustainable Communities Plan is initiated. If an Environmental Assessment or Environmental Impact Statement (EA/EIS) was accepted in the course of a Wai'anae Sustainable Communities Plan (2000) land use approval for a project, it should be acceptable to meet the requirement for an initial project EA/EIS when zone change applications are submitted for subsequent phases of the project unless the project scope and land uses are being significantly changed from those described in the initial EA/EIS.

5.9.2 Review and Revision of Development Codes

Upon completion of the Sustainable Communities Plan Revision Program, current regulatory codes and standards should be reviewed and revised, as necessary, to maintain their consistency and effectiveness as standards to guide attainment of the objectives and policies envisioned for all Sustainable Communities Plan areas. At the time that such reviews are conducted, the following regulatory codes and standards may warrant further review and revision to ensure achievement of the vision for the Wai'anae District and consistency with the Wai'anae Sustainable Communities Plan:

- **Land Use Ordinance.** (Chapter 21, Revised Ordinances of Honolulu) Zoning code standards and the zoning map for the Wai'anae District need to be revised to further implement the Policies and Guidelines of the Wai'anae Sustainable Communities Plan. Special zoning provisions may be needed for the Commercial Centers and Gathering Places.

- **Subdivision Rules and Regulations.** (Department of Planning and Permitting, pursuant to Chapter 22, Revised Ordinances of Honolulu) Public road right-of-way standards used for subdivisions and rules for the consolidation of land may need to be revised to reflect the rural emphasis of the Policies and Guidelines in the Wai'anae Sustainable Communities Plan.
- **Traffic Standards Manual.** (Department of Transportation Services, July 1976, as revised) Standards that are applied to local and most collector streets may need to be revised to reflect transportation Policies and Guidelines in the Wai'anae Sustainable Communities Plan.
- **State Highways Division Procedures Manual,** Volume 8, Chapter 5, Section 4. (State Department of Transportation) These State highway standards need to be reviewed to identify provisions that may conflict with the transportation Policies and Guidelines in the Wai'anae Sustainable Communities Plan.
- **Standard Details for Public Works Construction.** (Department of Planning and Permitting) Engineering standards for the dedication of public works construction need to be revised to reflect Wai'anae Sustainable Communities Plan Policies and Guidelines.
- **Storm Drain Standards.** (Department of Planning and Permitting) Standards for the dedication of drainage systems to incorporate retention basins, rip-rap boulder lining of stream banks, and streamside vegetation into the design need to be created to further implement the Wai'anae Sustainable Communities Plan Policies and Guidelines for open space.
- **Park Dedication Rules and Regulations.** (Department of Planning and Permitting, pursuant to Chapter 22, Article 7, Revised Ordinances of Honolulu) Regulations need to be reviewed to determine if passive drainage systems which are designed for recreational use should count toward park dedication requirements, especially in cases where the area would exceed the amount of land that would be required under current rules and regulations.
- **Wastewater Management Design Standards.** (Department of Environmental Services and the 1990 Revised Ordinances of Honolulu, Chapter 14, relating to sewer services) These standards and ordinances may require review to further implement Wai'anae Sustainable Communities Plan Policies and Guidelines.

APPENDIX: THE CONCEPTUAL MAPS: LAND USE, OPEN SPACE, AND PUBLIC FACILITIES

INTRODUCTION

The Wai'anae Sustainable Communities Plan includes three conceptual maps in color:

- The Land Use Map (EXHIBIT A-1)
- The Open Space Map (EXHIBIT A-2)
- The Public Facilities Map (EXHIBIT A-3)

These maps illustrate the long-range VISION for the Wai'anae District and the major land use, open space, and public facility policies that are articulated in the Plan. In examining them the reader should keep in mind that:

1. These maps are general and conceptual.
2. They are illustrative of the Plan's policy statements, presented in the text of this report.

These policy statements, which appear in the preceding chapters, are considered to be the most important elements of the Plan. The maps are considered illustrations of the policies. However, it is recognized that the maps may be more reader friendly than the written policies. This section of the Plan, therefore, presents a brief explanation of the contents of each of these maps.

Elements common to each of the three maps include one boundary and four land use designations: "Community Growth Boundary," "Rural Residential," "Agriculture," "Preservation," and "Golf Course." These designations and the Community Growth Boundary are not parcel-specific. Because they are not parcel-specific, the lines do not indicate precise or abrupt demarcations. Rather, the extent of permissible or appropriate uses within these boundaries should be evaluated and determined in concert with relevant sections of the Plan's text and specific site characteristics. These common elements are discussed below. Information particular to each map is presented under each map topic.

1. Community Growth Boundary

The Community Growth Boundary defines, protects, and contains the intended extent of the “built-up” or “settled” areas of rural communities. Its purposes are to provide adequate lands to support established communities, to protect such communities from more intense forms of development, and to protect lands outside the boundary for agriculture or other resource or open space values. Areas within this boundary typically consist of relatively small, dispersed residential communities and towns. The Community Growth Boundary is not intended to reflect a desire for more growth in Wai‘anae than what is planned under the General Plan.

In the Wai‘anae District, the Community Growth Boundary is defined by a line that has been drawn to delineate and contain the Farrington Highway development corridor. This line, although conceptual in nature, has been drawn and should be interpreted such that the mid-section of the line more or less coincides with the limits of lands that are zoned, as of 2009, R-5 and R-10, as well as existing scattered zoned commercial and industrial sites and the major residential developments of the Department of Hawaiian Home Lands in Nānākuli. The intent of this line is to identify existing urban/suburban areas, allow for infill residential and commercial development on undeveloped parcels within this boundary, and clearly define the limits of urban/suburban development. Thus, no new urban/suburban development shall be allowed *mauka* of this Community Growth Boundary line, except for already residentially zoned lands in Mākaha Valley and “Industrial” lands in Lualualei Valley. Lands *mauka* of this line are designated “Agriculture” and “Preservation.” Continued small-scale agricultural uses of small farm lots within the Community Growth Boundary should be encouraged.

2. Rural Residential

Most of the lands *makai* of the Community Growth Boundary are designated and colored “Rural Residential.” This general designation is intended to include single-family homes, town homes, small 2-story apartment buildings, and various relatively low density community support facilities that are permitted in residentially zoned areas, including schools and churches. Also included in this general land use area are a number of small commercial and light industrial uses that are too small to map at this scale and are therefore included as non-conforming existing uses. Alternate development options which result in greater amounts of open space and common facilities may also be used. The gross density of residential units should generally be in the range of 5 to 8 units per acre or up to 10 units per acre for alternative development options that preserve open space. Also included within this area, as “grandfathered” residential uses, are a number of existing “medium density” apartment buildings. New medium density apartment buildings or condominiums should not be permitted in “Rural Residential” areas.

3. Agriculture

Lands with agricultural value by virtue of current agricultural use or high value for future agricultural use, including those areas identified as Prime, Unique, or Other Important lands on the Agricultural Lands Important to the State of Hawai'i (ALISH) maps. "Agriculture" includes lands suitable for crop growing, grazing and livestock raising, flower cultivation, nurseries, orchards, aquaculture, or similar activities.

Included as Agriculture lands are existing "Country" zoned subdivisions with minimum lot sizes of one acre. The "Country" zoned subdivisions have been included in the Agricultural lands because many of the lots in these subdivisions are used for part-time agricultural pursuits.

Under the state constitution, the state is to identify important agricultural lands (IAL). Once identified, these lands cannot be rezoned except under a "super majority" vote. To date, IAL lands have not been identified. In 2005, Act 183 was adopted to address this mandate. It established a two-step process: first, incentives to assure the long term use and protection of IAL. Second, with adequate state funding, the counties would prepare maps identifying IAL lands to be adopted by the State Land Use Commission. Act 233, enacted in 2008, adopted the incentive programs. To date, no state funding has been appropriated to the counties for the mapping. Lands identified for agricultural purposes by this Plan can serve as the basis for the county mapping process.

4. Preservation

Preservation lands include those lands not valued primarily for agriculture, but that form an important part of a region's open space fabric. They possess natural, cultural, or scenic resource values, and include important wildlife habitat, cultural sites, significant landforms, views, or hazard areas. They include the following types of land:

- Lands necessary for protecting watersheds, water resources, and water supplies.
- Lands necessary for the conservation, preservation, and enhancement of sites with scenic, historical, archaeological, or ecological significance.
- Lands necessary for providing and preserving park lands, wilderness and beach reserves, and for conserving natural ecosystems of endemic plants, fish, and wildlife, for forestry, and other related activities to these uses.
- Lands having an elevation below the maximum inland line of the zone of wave action; and marine waters, fish ponds, and tide pools of O'ahu unless otherwise designated on the development plan land use map.

- All offshore and outlying islands of O‘ahu unless otherwise classified.
- Lands with topography, soils, climate, or other related environmental factors that may not be normally adaptable or presently needed for urban, rural, or agricultural use.
- Lands with general slopes of 20 percent or more which provide for open space amenities and/or scenic values.
- Lands susceptible to floods and soil erosion, lands undergoing major erosion damage and requiring corrective attention by the State or Federal Government, and lands necessary for the protection of the health, safety, and welfare of the public by reason of soil instability or the lands’ susceptibility to landslides and/or inundation by tsunami and flooding.
- Lands used for national, state, or city parks.
- Lands suitable for growing of commercial timber, grazing, hunting, and recreation uses, including facilities accessory to such uses when said facilities are compatible with the natural physical environment.

5. Golf Courses

Golf courses that are existing, or were approved as of November 2009, are included in this designation. These golf courses include: the Mākaha East golf course, the expansion area for an additional nine holes at the Mākaha East course, and the Mākaha West golf course. No other golf courses are designated on the Land Use Map, and no additional golf courses are provided for in the Wai‘anae Sustainable Communities Plan land use policies.

A.1 LAND USE MAP

The **LAND USE MAP** illustrates both existing land uses within the Waiʻanae District as well as the desired long-range future land use pattern that is in concert with the VISION and policies for the Waiʻanae Coast. **The Land Use Map thus includes the following elements:**

A.1.1 Medium Density Residential

There are only two areas on the Land Use Map that have been designated as Medium Density Residential: the site of the existing Mākaha Towers project, and the site of the existing Mākaha Plantation project. Both of these parcels are currently zoned “A-2,” which allows a maximum density of 1.9 Floor Area Ratio (FAR) for lots of 40,000 square feet or more. Medium density residential development on Oʻahu generally has a gross density of 12 to 30 units per acre. The Plan’s Land Use Map thus recognizes the existence of these two zoned projects. However, it is the intent of the Waiʻanae Sustainable Communities Plan that no other lands within the Waiʻanae District be designated for “medium density”, which is a relatively urban residential density.

A.1.2 Resort

The Land Use Map recognizes the existence of two projects in Mākaha Valley that are at present zoned “Resort”: the site of the Mākaha Resort, and the site of the proposed Mākaha Conference Center. No other lands within the Waiʻanae District are designated for new Resort use on the Land Use Map.

A.1.3 Mākaha Special Area Plan

A grey dashed line on the Land Use Map defines Mākaha Valley as a “Special Area Plan.” This designation indicates the need for the development of a more detailed plan for future land use and land preservation. Accordingly, the Mākaha Special Area Plan was developed and finalized in 2009.

A.1.4 Rural Community Commercial Center

Smaller colored circles denote “Rural Community Commercial Centers” for the sub-communities of Nānākuli, Māʻili, and Mākaha. The location of these Centers is schematic in nature. This designation is intended to encourage the development of smaller-scale concentrations of commercial establishments and community services in a physical configuration that will help to provide a stronger physical identity for these subcommunities.

A.1.5 Country Town

A small-scale, low-rise, mixed-use center of commerce and community activity in rural character and setting in which principal establishments are oriented on the street. Land use mixtures may include retail, office, and dining establishments, compatible service businesses and light industry, and residential uses. Commercial activity is concentrated along street frontages in typically “Mainstreet” settings.

The Land Use Map shows the approximate location of the existing Wai‘anae town center, which extends roughly from the Wai‘anae Mall to the Wai‘anae Community Center. The intent of this designation is to recognize the traditional and contemporary importance of Wai‘anae town center as the primary commercial hub of the Wai‘anae Coast. The related policies encourage the renovation and development of this town center into a multi-faceted “Country Town” center for the District.

A.1.6 Industrial

The Wai‘anae District Land Use Map includes two “Industrial” areas. The intent of these Industrial areas is to provide areas for the development of non-polluting, light industrial uses that would provide employment opportunities for local people. The first such area is in the vicinity of the Wastewater Treatment Plant and Wai‘anae Mall. Some commercial uses should also be allowed in this Industrial area, to provide for an economically viable mix of uses, and also to serve as a buffer between light industrial uses and nearby residential areas. It is the intent of this Industrial use that industrial-mixed use “IMX” be allowed as a compatible zoning designation.

The second Industrial area is in Lualualei Valley. This site is intended for light industrial uses that are not noxious or socially objectionable in nature. Light industrial lots at this location should be affordably priced for Wai‘anae businesses, and include vocational training and other facilities that will benefit the Wai‘anae community.

A.1.7 Military

The two large existing U.S. Navy installations and the U.S. Army’s training lands in Mākuā Valley have been shown on the Land Use Map with an overlay graphic texture. The intent of the Land Use Map is thus to recognize the existence of these military uses, but to show that the long-range vision for these lands are for agricultural, open space, and preservation uses that are compatible with the principal policies of the Wai‘anae Sustainable Communities Plan.

A.1.8 Farrington Highway Beautification

A dashed green line is used to symbolize the various proposed improvements for Farrington Highway, including safety improvements for vehicles and pedestrians, traffic-calming devices, sidewalks, bikeways, beautification, and improved lighting.

A.2 OPEN SPACE MAP

The Open Space Map is intended to illustrate the region's major open space patterns and resources as outlined in Chapter 3. It highlights major open space elements and resources, including agricultural and preservation lands, major recreational facilities, important "panoramic" views, natural stream corridors and drainageways, and important boundaries.

A.2.1 *Ahupua'a* Boundary

Ahupua'a boundaries, based on the traditional *ahupua'a* method of land organization, have been adopted for use and displayed in the Plan as a method of organizing land uses and enhancing community definition within the region.

The approximate boundaries of the nine traditional *ahupua'a* of the Wai'anae Coast are shown on the map. These boundaries have great cultural, historical, and ecological significance, and should therefore provide a framework for the open space plan for the District.

A.2.2 Stream Corridors

The major perennial and intermittent stream corridors are shown on the Open Space Map. These corridors should be protected and preserved in accordance with the policies and guidelines articulated in this Sustainable Communities Plan.

A.2.3 Concentrations of Archaeological Sites

The known and probable concentrations of archaeological and cultural sites in the District are shown by means of an overlay graphic texture. These areas should be protected and preserved, and appropriate public access should be provided.

A.2.4 *Heiau*

The approximate locations of known *heiau* are shown on the map with brown triangles.

A.2.5 Parks

Public and private parks and recreational facilities, including beach parks, playgrounds, playfields, district parks, botanical gardens, zoos, and golf courses. Neighborhood and beach parks are shown with a green circle.

A.2.6 Small Boat Harbor

The existing Wai'anae small boat harbor is shown with a blue circle. The harbor is an important facility for both recreational and commercial fishermen.

A.2.7 Gathering Places

The concept of community gathering places is presented in the Wai'anae Sustainable Communities Plan text. The location of future gathering places is schematically shown on the Open Space Map. These locations are subject to further planning by the various community groups that will take the lead in developing Gathering Places for their people.

A.3 PUBLIC FACILITIES MAP

The Public Facilities Map illustrates major existing and future public facilities and privately owned facilities for public use. Its purpose is to display the public resources or assets available in the region. When the Plan is adopted, a separate “Public Infrastructure Map,” which will focus on and display facilities eligible for City Capital Improvements Program funding, will also be developed. For the Wai’anae Region, the following types of facilities are displayed:

- Wastewater Treatment Plant
- Police Station
- Fire Stations
- High Schools
- Intermediate Schools
- Elementary Schools
- Small Boat Harbor
- Landfill

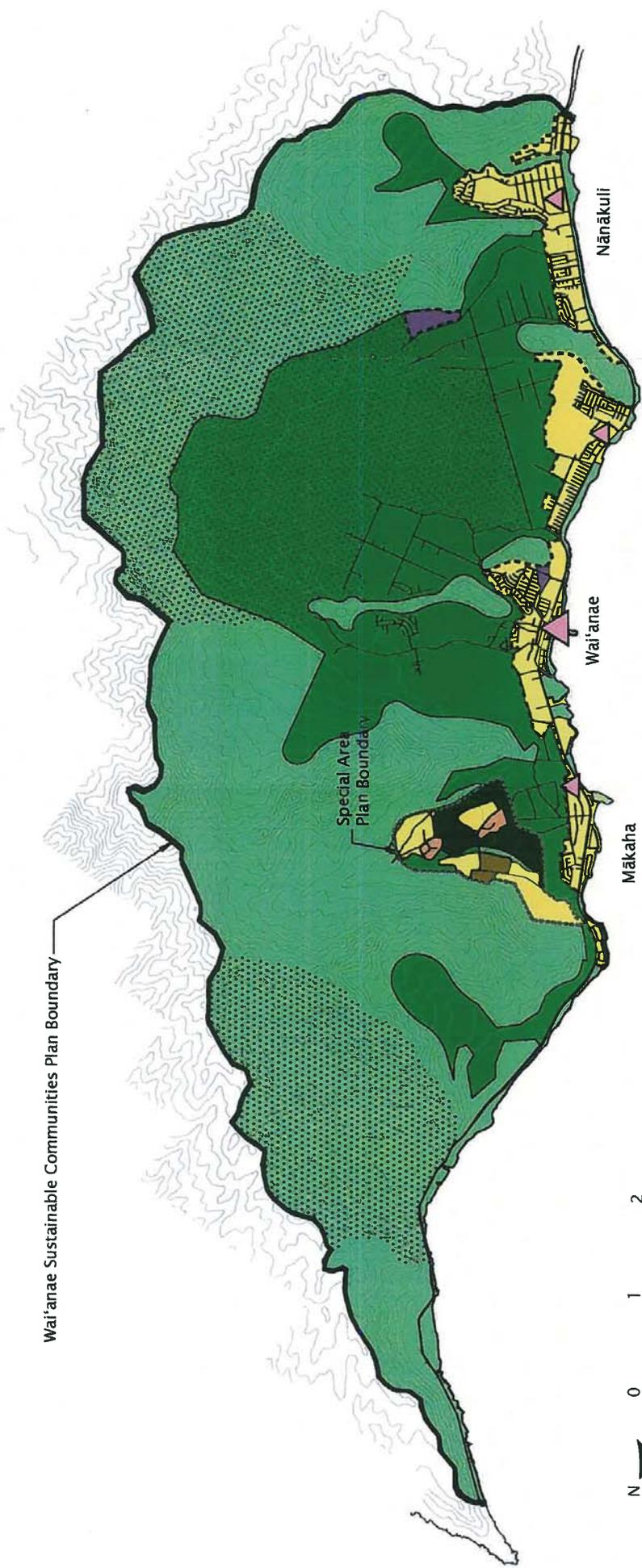
The Public Facilities Map for the Wai’anae District also includes a conceptual alignment for bicycle lanes and bicycle routes:

- Bikeways on Farrington Highway
- Major valley roads designated and improved to accommodate bicycle routes
- Multi-purpose beach path

Legend

-----	Community Growth Boundary	■	Golf Course
.....	Special Area Plan Boundary	■	Agriculture
■	Rural Residential	■	Preservation
■	Medium Density Residential	■	Military
■	Resort	▲	Country Town
■	Industrial	▲	Rural Community Commercial Center

Wai'anae Sustainable Communities Plan Boundary



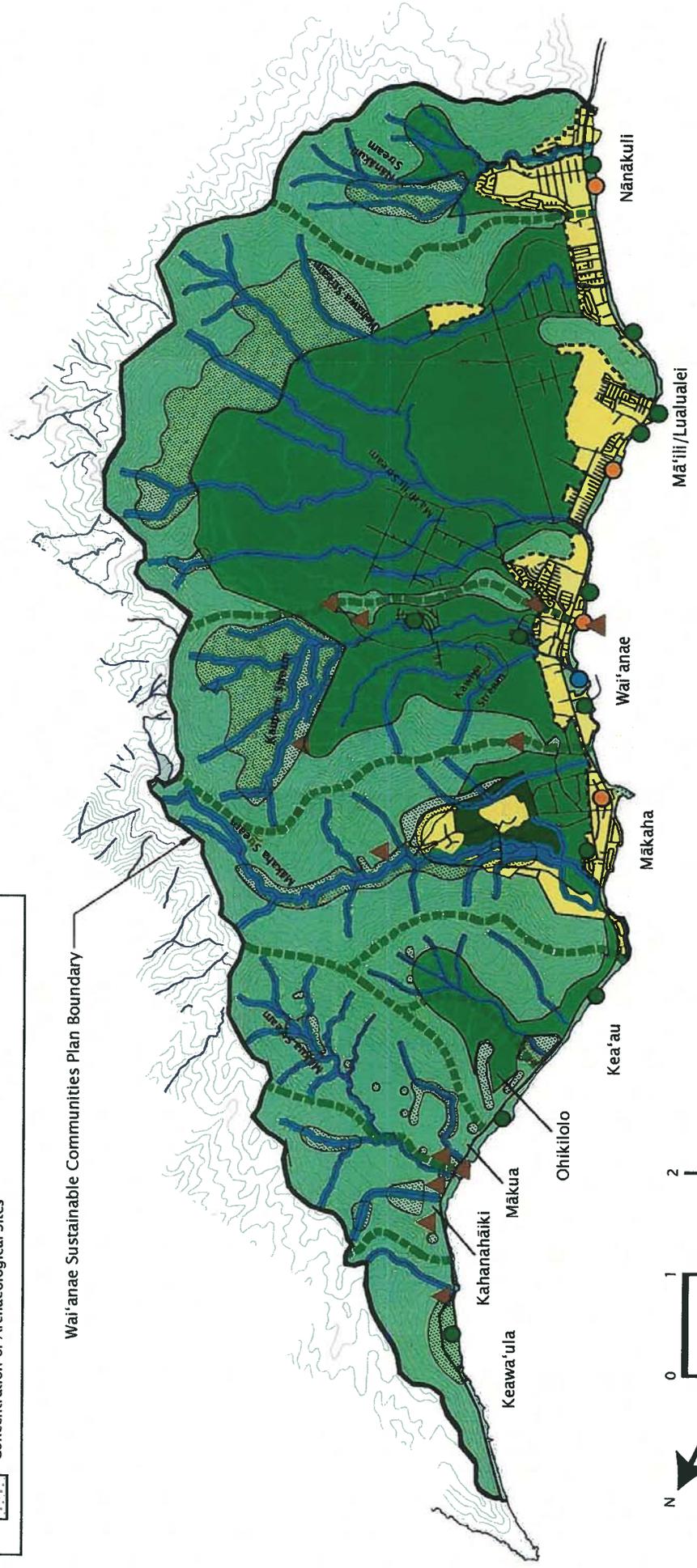
OPEN SPACE MAP



Legend

--- Community Growth Boundary	● Community Gathering Place
■■■ Ahupua'a Boundary	● Park
■ Rural Community	● Small Boat Harbor
■ Golf Course	▲ Heiau
■ Agriculture	■ Stream Corridor
■ Preservation	
■ Concentration of Archaeological Sites	

Wai'anae Sustainable Communities Plan Boundary



PUBLIC FACILITIES MAP



Legend

-----	Community Growth Boundary	- - - - -	Proposed Walking/Jogging/Biking Path
=====	Farrington Highway	=====	Wai'anae Coast Emergency Access Road
■	Rural Community	■	Wastewater Treatment Plant
■	Golf Course	■	Police Station
■	Agriculture	■	Fire Station
■	Preservation	■	High/Intermediate School
- . - . -	Bike Lane	■	Elementary School
=====	Bike Route	▲	Small Boat Harbor
		■	Landfill

Wai'anae Sustainable Communities Plan Boundary

