

1 expeditious processing, or other provisions that would reduce the cost of agricultural
2 subdivision and enable tenants to obtain financing.

- 3
- 4 • Promote the development and provision of quality water resources that support bona
5 fide agricultural operations and activities by providing economic incentives for farmers
6 and landowners.
- 7
- 8 • Consider alternatives to the current tax rate structure to afford tax relief for farmers.
- 9
- 10 • Plan for the future of O‘ahu’s agricultural industry and develop an island-wide
11 comprehensive agricultural development plan.
- 12

13 **3.2.2 Guidelines**

14

15 The following guidelines carry out the policies for agriculture.

16

17 **3.2.2.1 AGRICULTURAL LANDS**

- 18
- 19 • Enforce permitted uses on agricultural lands to ensure that the use is contributing to
20 meaningful and credible agricultural production on the same or nearby properties.
- 21
- 22 • Cluster and locate dwellings near similar uses to preserve open space, maximize the
23 use of productive agricultural lands, and reduce infrastructure costs, when planned as
24 part of an agricultural activity.
- 25
- 26 • Design and site buildings and other facilities that are accessory to an agricultural
27 operation to minimize the visual impact on nearby areas and views from arterial and
28 major collector roads.
- 29
- 30 • Adopt development standards and permitting procedures that simplify and streamline the
31 permitting requirements for uses that support the growth of agriculture, including
32 agricultural support facilities and agriculture-based tourism.
- 33
- 34 • Maintain adequate physical buffers between agricultural land uses and surrounding land
35 uses.
- 36
- 37 • Base any subdivision of agricultural lands on the most appropriately sized, viable
38 economic unit for agricultural production.
- 39

- 1 • Identify and implement – as an immediate high priority action item at the State and
2 County levels – appropriate economic incentives designed to promote and facilitate the
3 growth of diversified agriculture.
4
- 5 • Support agricultural research and development activities targeted towards increasing
6 operational efficiencies, economic returns, and the effective utilization of agricultural
7 lands and supporting infrastructure, which enables sustainable usage of agricultural
8 resources.
9
- 10 • Assist residents to develop skills in agriculture and related specialized industries so that
11 residents can seek local employment in the area.
12
- 13 • Support a mentor program for area teens to learn about agricultural practices,
14 economics, and business so that interest and commitment to agriculture may continue
15 on to future generations.
16
- 17 • Support the expansion and diversification of aquaculture in the region, including the
18 continued cleanup of the former Dillingham Quarry site in Mokolē'ia and expansion of
19 existing aquaculture operations in the area.
20
- 21 • Identify potential sites for aquaculture or mariculture parks.
22
- 23 • Encourage agricultural producers to develop Conservation Plans, in conjunction with the
24 West O'ahu Soil and Water Conservation District, to manage and protect natural
25 resources.
26
- 27 • Assist governmental agencies and landowners to upgrade and maintain existing
28 infrastructure networks, including roads and irrigation systems.
29
- 30 • Improve the quality of irrigation water from Lake Wilson.
31
- 32 • Work with the State to identify and protect Important Agricultural Lands as defined by Act
33 183 (Session Laws Hawai'i, 2005).
34

35 **3.2.2.2 AGRICULTURAL SUPPORT FACILITIES**

- 36
- 37 • Develop agricultural support facilities in Waialua and Kawaihoa.
38
- 39 • Ensure that permitted agricultural support facilities do not adversely affect agricultural
40 production in the area or present health hazards or nuisances to adjacent areas.

- 1
- 2 • Require all agricultural support facilities in the region to maintain a direct relationship to
- 3 local agricultural production.
- 4
- 5 • Site and design facilities to minimize development impacts and maximize the amount of
- 6 farmland preserved.
- 7

8 **3.2.2.3 AGRICULTURE-BASED TOURISM**

9

- 10 • Allow agricultural, recreational and educational programs, and limited outdoor
- 11 recreational or other uses if the activity is complementary to the primary agricultural use
- 12 of the land and it does not interfere with the agricultural use of the site.
- 13
- 14 • Monitor tourism-related activities conducted on agricultural lands to ensure that such
- 15 activities do not adversely impact on-site or adjacent agricultural activities or other
- 16 resources.
- 17
- 18 • Provide technical and business development support for visitor-related proposals.
- 19
- 20 • Identify and develop a convenient, suitable location in or near Hale‘iwa and/or Waialua
- 21 Town to establish a farmers’ market where farmers can market products locally.
- 22
- 23 • Identify and develop a permanent site in the Sunset Beach vicinity to promote the North
- 24 Shore Country Market.
- 25
- 26 • Develop an agricultural museum that includes a demonstration area showing various
- 27 crops in different stages of growth and processing.
- 28

29 **3.2.3 Relation to Open Space Map and Public Facilities Map**

30

31 Agricultural lands are located both within and outside the Community Growth Boundary, as

32 indicated on both maps.

33

34 The Public Facilities Map identifies two future areas for agricultural support facilities. The site

35 *makai* of the Waialua Mill up to the former cane haul road and Goodale Avenue/Waialua Beach

36 Road is intended to accommodate 20 to 25 acres of agricultural support uses, and is designated

37 as the primary agricultural support area for the region. A secondary area of 10 to 15 acres in

38 Kawailoa near the Alluvion Nursery (i.e., the area *mauka* of Kamehameha Highway across from

39 Papailoa Road and Laniākea Beach Park) is intended to accommodate similar support facilities

40 for products cultivated in Kawailoa.

1 Existing DPR beach/shoreline parks on the North Shore are shown in Table 3-5. Kawaiiloa
 2 Beach Support Park, Leftovers Beach Park, and Uppers Beach Park, have been added to the
 3 City Park system for development for future park use. In addition, the City maintains a number
 4 of right-of-ways which provide access to the shoreline.
 5

Table 3-5
City and County of Honolulu Beach Parks

Park	Acreage
Mokulē'ia Beach Park	38.5
Makaleha Beach Park	27.7
'Āweoweo Beach Park	1.4
Kaiaka Bay Beach Park	52.8
Hale'iwa Ali'i Beach Park	19.3
Hale'iwa Beach Park	15.7
Laniākea Beach Support Park	3.0
Chun's Reef Beach Support Park	3.0
Kawaiiloa Beach Park	0.4
Waimea Bay Beach Park	22.2
Kahawai Beach Community Park	1.5
Pūpūkea Beach Park	36.6
Banzai Rock Beach Support Park	2.3
'Ehukai Beach Park	1.2
Sunset Beach Park	17.7
Sunset Beach Support Park	2.1
Sunset Point Beach Park	0.9
Waiale'e Beach Park	25.7

6

1 Community-based parks are intended to provide for active recreation and consist of
2 neighborhood, community and district parks. The DPR standard for community-based parks is
3 two acres per 1,000 resident population, although this may vary according to each region's
4 situation. Community-based parks provide courts and playing fields for various sports and
5 serve a wide array of active sports leagues. Existing community-based parks on the North
6 Shore are Kamananui Neighborhood Park, Sunset Beach Neighborhood Park, and Waiialua
7 District Park. To expand active recreational opportunities in the region, two island-based beach
8 parks (Hale'iwa and Pūpūkea Beach Parks) are equipped with ball fields.

9
10 There is currently a shortage of community-based parks in the North Shore Sustainable
11 Communities Plan area. Based on projected population for the year 2035, DPR anticipates that
12 there will be a need for an additional community park (average 10 acres) and two additional
13 neighborhood parks (average 4 to 6 acres) for the North Shore. Hale'iwa Beach Park Mauka
14 and Pu'uiki Park are identified as potential community-based parks to address the shortage of
15 these parks on the North Shore, although Hale'iwa Beach Park Mauka is less than 4 acres, and
16 a portion of the property is designated as a wetland. Therefore, development potential is limited.

17
18 Following the downzoning of the Pūpūkea-Paumalū lands (the former Lihi Lani property), the
19 City acquired about 25 acres of land adjoining Kamehameha Highway for future park
20 development. The community supports the long-term expansion of the Sunset Beach
21 Neighborhood Park in this area. There are no regional parks on the North Shore.

22
23 There are no existing or planned public golf courses on the North Shore.
24

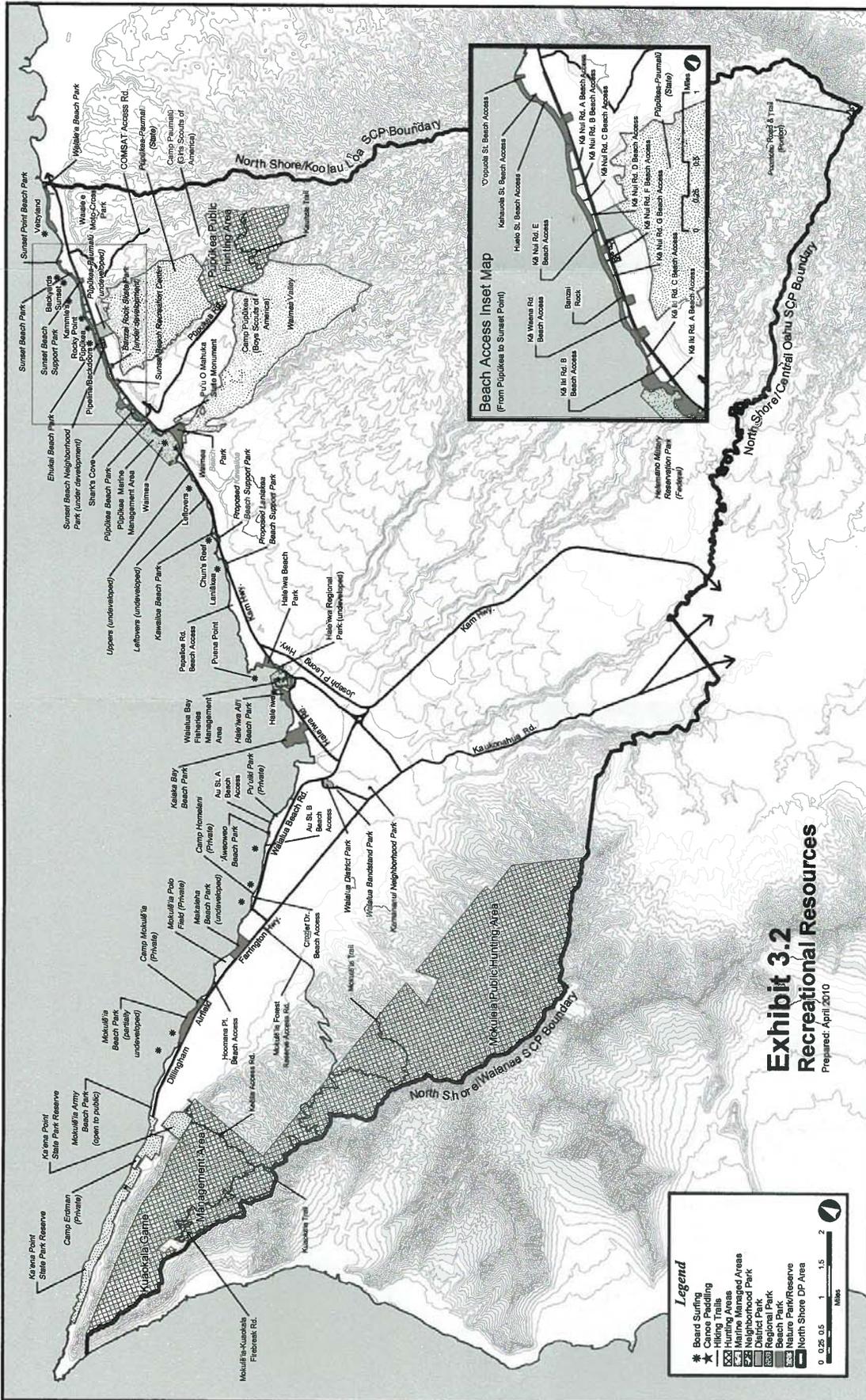


Exhibit 3.2
Recreational Resources
 Prepared: April 2010

1 **State Parks.** The State DLNR manages three parks in the region: Ka'ena Point State Park,
2 Pu'u o Mahuka Heiau State Monument, and the Pūpūkea-Paumalū State Park Reserve. The
3 Ka'ena Point State Park extends from Dillingham Airfield around Ka'ena Point to Mākua Valley
4 on the west side of the Wai'anae Range. It is located at the end of Farrington Highway on 779
5 acres of land, offering opportunities for picnicking, hiking and shore fishing along a relatively
6 remote wilderness coastline. Pu'u o Mahuka Heiau State Monument is situated on 5.7 acres
7 overlooking Waimea Bay Beach Park off Pūpūkea Road. A low-walled, platform-type temple
8 with two adjoining structures, Pu'u o Mahuka is O'ahu's largest *heiau*. It is the reputed sacrifice
9 site of Captain George Vancouver's watering party of 1793. The Pūpūkea-Paumalū State Park
10 Reserve consists of 1,119 acres of *mauka* land at Sunset Beach, surrounded by the residential
11 communities *mauka* of Kamehameha Highway and along Pūpūkea Heights, Sunset Beach
12 Elementary School, and the Pūpūkea Boy Scout Camp, U.S. Army Kahuku Training Area, and
13 the Girl Scout Camp Paumalū. The property was transferred to the State DLNR in 2007
14 following efforts by the North Shore Community Land Trust, the Trust for Public Land, and other
15 supporters to raise funds and purchase the former Lihi Lani property. Preparation of the
16 *Pūpūkea-Paumalū Long-Range Resources Management Plan* (Public Review Draft, October
17 2009) is ongoing, with a level of community support for resource protection and preservation,
18 native plant restoration, and recreational opportunities such as nature study, hiking, biking and
19 scenic viewing.

20
21 **Other State Recreational Facilities.** The Hale'iwa Boat Harbor is the only recreational boat
22 harbor facility in the North Shore region. The facility is owned by the State and managed by the
23 DLNR, Division of Boating and Ocean Recreation. The harbor is located in Waialua Bay at the
24 north end of Hale'iwa Town near the mouth of the Anahulu River. It encompasses
25 approximately 7.4 acres of protected water, with a 600-foot-long, 120-foot-wide, 12-foot-deep
26 entrance channel that provides access to two inner basins. A two-lane boat launching ramp is
27 located on the west side of the harbor. A single lane launch ramp, loading dock and fish hoist
28 are located on the southeast side of the harbor. A harbor master's office is also on the
29 premises. The harbor contains 107 in-water berthing spaces, 45 dry storage berths, and 13
30 temporary mooring spaces. There is a demand for these spaces, with approximately 80
31 individuals on the waiting list for in-water berthing and more than 50 individuals on the dryland
32 storage waiting list.

33
34 As the only boat launching facility on the North Shore, the harbor plays an important role in
35 meeting the demand for protected berthings and moorings to facilitate recreational and
36 commercial fishing pursuits. It also provides facilities for trailered vessels and other marine-
37 related recreational activities such as equipment rentals and land-based fishing. There are no
38 plans to expand the harbor breakwater or increase the harbor footprint. Any additional slips, if
39 accommodated, would be constructed within the harbor's existing footprint. However, additional
40 land in close proximity to the harbor is needed to expand existing dryland storage facilities.

41

1 The U.S. Army Corps of Engineers has a project pending to dredge the Hale'iwa Boat Harbor. If
2 sand dredged from the harbor is suitable, it may be used to nourish nearby eroding beaches,
3 such as at Hale'iwa Beach Park.

4
5 Securing the harbor and its facilities is also a major concern. Vandalism, trespassing, loitering,
6 camping and illegal drinking/drugs around the harbor and park area are issues of concern for
7 the community. Additional resources to increase the ability to secure the harbor, together with
8 State and City enforcement, should bring a stop to the unwanted, illegal activities.

9
10 **Institutional and Private Facilities.** The YMCA Camp Erdman, Camp Mokolē'ia, and Camp
11 Homelani are private facilities which provide educational and recreational activities. Other
12 quasi-public recreation facilities include the A. Wallace Scout Reserve, Camp Kawaioloa Uka,
13 Camp Paumalū, and Camp Pūpūkea that are used primarily as Scout Camps. The Mokolē'ia
14 Polo Field and Dillingham Ranch Pony Club are also located in the North Shore area.

15
16 Waimea Valley is a 1,800-acre cultural and ecological park under the recent ownership of the
17 State of Hawai'i Office of Hawaiian Affairs. Occupying the entire *ahupua'a* of Waimea, the park
18 provides access to one of the last undeveloped *ahupua'a* on O'ahu. Waimea Valley is known
19 for its natural beauty and cultural significance, featuring more than 6,000 rare species of plants
20 and numerous Native Hawaiian archaeological sites. Park amenities include a visitor center,
21 shops, restaurant and meeting space, an arboretum, botanical gardens, educational resources,
22 Hawaiian cultural preservation areas, and hiking trails. The park is accessible to the public for a
23 modest fee.

24 25 **3.3.1 Policies**

26
27 The following policies relate to parks and recreational resources for the North Shore.

- 28
- 29 • Provide safe, suitable sites and facilities to meet resident and island-wide recreational
30 needs for a variety of recreational activities on the North Shore.
 - 31
32 • Expand recreational opportunities by providing greater access to recreational resources
33 in the mountains, at the shoreline and in the ocean. Acquire and maintain additional
34 lands for beach park development and *mauka* camping and hiking areas, as
35 opportunities occur.
 - 36
37 • Maintain and improve existing recreational areas and facilities to provide high quality
38 recreational experiences for residents and visitors.
- 39

- 1 • Base governmental expenditures for natural resources management and protection,
2 including shoreline maintenance and improvements, on actual site usage (including
3 visitors) rather than on resident population ratios or land values.
4
- 5 • Ensure that parks, recreational resources and recreational activities are compatible with
6 the preservation and protection of open space, rural character, scenic, historic and
7 cultural resources, and environmental quality. Wilderness and wildlife activities should
8 be explored and promoted if appropriate.
9
- 10 • Provide safe and convenient access to parks and recreational resources.
11
- 12 • Ensure that parks and recreational resources are compatible with surrounding land uses.
13

14 **3.3.2 Guidelines**

15
16 The following guidelines implement the policies for the recreational resources listed above.
17

18 **3.3.2.1 COMMUNITY AND NEIGHBORHOOD PARKS AND FACILITIES**

- 19
20 • Develop Hale'iwa Beach Park Mauka as a community-based park to expand active
21 recreational facilities for North Shore residents.
22
- 23 • Acquire Pu'uiki Park for community use.
24
- 25 • Expand Waialua District Park by acquiring agricultural land across Goodale Avenue.
26
- 27 • If new residential development occurs, it should provide land for open space and
28 recreation purposes at a minimum of two acres per 1,000 residents. Community-based
29 parks (and associated service radius) include miniparks (one-half mile), neighborhood
30 parks (one-half mile), community parks (one mile), and district parks (two miles).
31
- 32 • Locate community and neighborhood parks which emphasize intensive uses such as
33 ball fields, playing courts, and community buildings in or adjacent to the neighborhoods
34 or communities they serve, in order to maximize accessibility.
35
- 36 • Provide more youth activities, programs and facilities on the North Shore.
37

1 **3.3.2.2 MAUKA AREAS**

2
3 Additional guidelines for recreational resources in *mauka* areas are described in Section 3.1.2.1
4 pertaining to Mountain Areas. It should be noted that the State of Hawai'i is the main owner of
5 these potential recreational lands and would be the most appropriate entity to implement these
6 guidelines.

- 7
8 • Expand public access to the upland or *mauka* areas for appropriate types of recreational
9 activities that are low-impact, resource-sensitive and do not compromise significant
10 environmental resources and important agricultural activities. These would include
11 nature-based activities such as picnicking, camping, hiking, mountain biking, hunting and
12 the appreciation of scenic, natural and cultural resources.
13
14 • Acquire and maintain public and/or private campgrounds and hiking trails in the *mauka*
15 areas.
16
17 • Develop a system of *mauka* trails and paths to interconnect the major recreational areas
18 of the North Shore for use by non-motorized transportation modes, e.g., walking, biking,
19 horseback riding.
20
21 • Coordinate planned private and public actions pertaining to trails and access. Identify
22 historic trails and old government roads of cultural and recreational value to the public.
23

24 **3.3.2.3 BEACH PARKS AND SHORELINE AREAS**

25
26 Additional guidelines for recreational uses in shoreline areas can be found in Section 3.1.2.2
27 pertaining to Shoreline Areas.

- 28
29 • Limit new developments along the shoreline to parks and other compatible open space
30 uses.
31
32 • Improve and expand public access to the shoreline at approximately one-half-mile
33 intervals in rural areas of the North Shore, or at closer intervals of not more than one-
34 quarter mile where justified by public demand, traditional use patterns, the quality of the
35 recreational resources, emergency services response time, or to bypass natural barriers
36 that impede public access to the shoreline.
37
38 • Maintain and expand lateral access along the coast, especially in areas with high
39 recreational or scenic value, including the shoreline along Sunset Beach and Kawaiiloa
40 where access to popular sandy beaches and surf spots is in demand.

- Limit uses within beach parks and nearshore ocean area uses to preserve overall environmental quality, rural character, scenic views, and open space.
- Provide adequate public parking and related support facilities (such as rest rooms and showers) at popular beach parks, including lifeguard equipment storage facilities in anticipation of increased lifeguard services needed at those parks. Improvements are planned for North Shore beach parks at Pu'uiki Beach, Laniākea, Chun's Reef, Kawailoa, Leftovers, Uppers, Kahawai, Banzai Rock, Kaunala, and Waiale'e.
- Acquire shoreline properties as opportunities arise or obtain public use easements and maintenance agreements with private landowners, especially lands adjacent to existing public parks.

3.3.2.4 MAINTENANCE AND MANAGEMENT OF PARKS, RECREATION AREAS AND RECREATIONAL RESOURCES

- Provide sufficient resources – including funding and manpower – to ensure that public facilities are adequately maintained.
- Base expenditures for the maintenance and management of existing parks and recreation areas on actual usage (including visitors) rather than on resident population ratios.
- Identify limitations on recreational resources and implement policies to regulate and mitigate impacts to these resources.
- Establish and enforce rules and regulations to mitigate conflicts among recreational activities.
- Engage public and private organizations in partnership with government agencies to maintain recreational resources.

3.3.2.5 SITE DESIGN OF RECREATIONAL FACILITIES

- Incorporate natural and/or cultural features of the site and use landscape materials that are indigenous to the area, where feasible, into the design of recreation facilities and areas.

- 1 • Locate uses which generate high noise levels away from existing and planned
2 residential areas.
- 3
- 4 • Design and site improvements and landscaping to enhance the rural character and the
5 aesthetic value of open space elements and natural resources.
- 6
- 7 • Provide pedestrian and bicycle pathways from surrounding streets to parks, to facilitate
8 convenient access to the parks.
- 9
- 10 • Site parks and recreational attractions intended for regional or island-wide uses along or
11 near regional roadways.
- 12
- 13 • Minimize environmental impacts (such as siltation, pesticide and fertilizer runoff) of
14 recreational facilities and activities. Expansive recreational facilities, such as community
15 and regional parks, should comply with State Department of Health guidelines related to
16 ground and nearshore water quality.
- 17

18 **3.3.2.6 RECREATIONAL ACTIVITIES THAT SUPPORT THE NORTH SHORE'S** 19 **ECONOMY**

- 20
- 21 • Promote recreational and specialty events such as surf meets, fishing tournaments, bike
22 tours, races and other competitions which contribute to the North Shore's economy.
23 Such events shall meet State and City rules and regulations for park and ocean uses to
24 avoid conflict with recreational uses.
- 25
- 26 • Manage impacts to the recreational resource and surrounding communities (such as
27 noise, parking, traffic, etc.) associated with special events.
- 28
- 29 • Promote instructional programs, training clinics and other activities that cater to the
30 health and recreation industry and which will not impact the North Shore's rural
31 character.
- 32
- 33 • Explore the potential of equestrian activities, such as trail rides and riding adventures, as
34 an adjunct to the area's attractions.
- 35
- 36 • Support equine activities through a variety of means, including establishment of well-
37 designed, safe riding trail networks linking destinations in the rural communities and in
38 the *mauka* areas that have long been used by riders. Cooperative agreements for the
39 development and maintenance of such networks should be forged through public-private
40 partnerships.

1
2 **3.3.3 Relation to Open Space Map and Land Use Map**
3

4 Major park sites are shown on the Open Space Map in Appendix A. While smaller
5 neighborhood or support parks are not mapped, they are included in Exhibit 3.2 and cited where
6 appropriate in the text.
7

8 **3.4 HISTORIC AND CULTURAL RESOURCES**
9

10 The North Shore contains several different types of historic and cultural sites and resources
11 which are representative of its precontact, early history, and plantation eras. These sites and
12 features are valuable as historic records and cultural resources. Table 3-6 lists historic features
13 that are listed on the National and State Registers of Historic Places (also shown on Exhibit
14 3.1). In addition to these, the State Historic Preservation Division's maps and inventory of
15 significant historic and cultural features, as well as the inventory maintained by the O'ahu Island
16 Burial Council, list additional sites which may merit protection. These sources should be
17 consulted for further information.
18

19 In addition to these resources, the Hale'iwa Special District and Waialua Town are historic and
20 cultural resources. Policies and guidelines for these areas are included in Section 3.6.3 on
21 Commercial Areas.
22

Table 3-6
National and State Register of Historic Places

Tax Map Key	Site Name	Site Number	Hawai'i Register	National Register
5-8-01:15, 55	Kalou Fishpond	80-01-257	1/30/81	
5-9-05:68	Pu'u o Mahuka Heiau	80-01-249	1/29/81	12/29/62 1996 NHL*
6-6-13:12 (Portion)	Waialua School (Hale'iwa Elementary School)	80-04-1348	5/3/80	8/11/80
6-1-05:16	Kupopolo Heiau	80-01-241	9/5/78	6/4/73
6-2-01:02	Hale'iwa Beach Park	80-14-1388	6/9/88	
6-6-07:07	Pōhaku Lanai	80-04-226	11/26/86	
6-6-09:23	Waialua Courthouse	80-04-1334	2/20/79	
6-6-13:03 (Portion)	Waialua Fire Station	80-14-1346	7/19/80	12/2/80
6-9-02:06, 09	Ka'ena Complex	80-03-1183	6/9/88	
8-6-08:17	Keali'i o Ka Malu Church	80-04-9834	8/26/00	

* NOTE: Pu'u o Mahuka Heiau was designated as a National Historic Landmark in 1996.

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3.4.1 Policies

The following are policies for historic and cultural resources.

- Emphasize physical references to North Shore’s history and cultural roots to help foster the area’s unique sense of place.
- Protect existing visual landmarks and support the creation of new, culturally appropriate landmarks.
- Preserve and protect significant cultural and historic features from earlier periods.
- Retain, whenever possible, significant vistas associated with archaeological features.
- Respect significant historic resources by applying appropriate management policies and practices. Such practices may range from total preservation to integration with contemporary uses.
- Restore or keep intact sites with cultural and/or religious significance out of respect for their inherent cultural and religious values.
- Encourage public access and use of historic and cultural resources, where appropriate and feasible.

3.4.2 Guidelines

The treatment of a particular historic or cultural site should depend upon its characteristics and potential value. Appropriate treatments range from direct physical access and/or use of a site to limited visual contact. In some cases, adaptive reuse may be the only feasible way to preserve a site. In other cases, however, it may be highly advisable to restrict access to protect the physical integrity or sacred value of the site. The following guidelines should be used to determine appropriate treatment for cultural and archaeological sites.

- Implement in situ preservation and appropriate protection measures for sites that have high preservation value because of their good condition or unique, historic, cultural and archaeological features, and for which the State Historic Preservation Division has recommended such treatment.

- 1 • Consider the particular qualities of a site and its relationship to its physical surroundings
- 2 when determining the appropriate treatment for a site. Determine the following on a site-
- 3 by-site basis in consultation with the State Historic Preservation Division:
- 4 - appropriate preservation methods;
- 5 - appropriate delineation of site boundaries and setbacks; and
- 6 - appropriate restrictions on uses and development of adjacent lands.
- 7
- 8 • Include input from all pertinent community resources in the development of a site
- 9 preservation plan.
- 10
- 11 • Include sight lines and view planes that are significant to the original purpose and
- 12 value of the site in criteria for adjacent use restrictions.
- 13
- 14 • Determine the appropriateness of public access on a site-by-site basis in consultation
- 15 with the State Historic Preservation Division, Hawaiian cultural organizations, and the
- 16 owner of the land on which the site is located.
- 17

18 **3.5 RESIDENTIAL COMMUNITIES**

19

20 Vital, contemporary communities oriented toward meeting the needs of their residents often

21 offer a network of amenities to facilitate and enhance individual, family, and community life. At

22 their best, they may offer parks and landscaped public open spaces, churches, community

23 centers, and other places for social and civic functions, residences or other facilities for persons

24 with special needs, and safe, pleasant bicycle and pedestrian connections that link homes and

25 important destinations. While this plan refrains from prescribing what the specific ingredients of

26 any given community should be, it takes this opportunity to cite the need, in each community, for

27 appropriate elements which aid and enhance the overall quality of life of the community.

28

29 Residential areas on the North Shore are concentrated around the former plantation towns of

30 Hale‘iwa and Waialua, with smaller clusters of residential neighborhoods scattered between

31 Mokolē‘ia, Kawaioloa, Sunset Beach and the uplands above Pūpūkea. The Community Growth

32 Boundary is intended to contain the spread of development away from significant agriculture

33 and preservation areas. The need for additional housing on the North Shore will be met

34 primarily by “infill” development of existing vacant lands within the Community Growth

35 Boundary.

36

37 Table 3-7 presents North Shore housing trends from the 1990 and 2000 U.S. Census. Between

38 1990 and 2000, the North Shore’s housing inventory increased by about 25 percent, with nearly

39 1,400 new homes constructed during that period. The homeownership rate declined slightly, as

40 indicated by the decrease in the percentage of owner-occupied units and the increase in the

1 percentage of renter-occupied units. In comparison to the housing growth between 1990 and
 2 2000, the North Shore’s resident population increased by 2,651 persons (from 15,729 to 18,380
 3 people), representing a 16.9 percent growth rate. In general, the difference between the
 4 housing and population growth rates supports the increased number of vacant units and smaller
 5 household size reported in 2000.
 6

Table 3-7
North Shore Housing Trends: 1990 to 2000

Housing Data Category	1990	2000
Total Housing Units	5,287	6,648
Occupied Units	4,825 (91.3%)	5,893 (88.6%)
Owner-occupied Units	2,279 (43.1%)	2,595 (39.0%)
Renter-occupied Units	2,546 (48.2%)	3,298 (49.6%)
Vacant Units	462 (8.7%)	755 (11.4%)
Homeownership Rate	47.2%	44.0%
Household Size	3.18	3.05

7
 8 According to the 2000 U.S. Census, the North Shore’s housing inventory is comprised of mostly
 9 older homes. Slightly more than one-fourth (27 percent or 1,799 units) of the structures are
 10 greater than fifty years old, and another one-third (35 percent or 2,328 units) are more than 25
 11 years old. Considering that the average age of the typical single-family home is 41 years old, a
 12 trend towards an increase in the number of home renovation and/or replacement projects in the
 13 near future is expected.

14
 15 The median price of a single-family home sold on O’ahu in 2000 was \$295,000 and the median
 16 condominium price was \$125,000. In 2000, the median family income for the island of O’ahu
 17 was \$60,142, which was about \$11,000 over the median family income for the North Shore
 18 (\$48,948). Between 2000 and 2005, the median sales price of a single-family home on O’ahu
 19 increased nearly 103 percent to \$590,000 and the median condominium price increased nearly
 20 115 percent to \$269,000.⁸ Despite fluctuations in the real estate market, home prices on the
 21 North Shore have remained high, as the median price of a single-family home sold on the North
 22 Shore during the second quarter of 2009⁹ was \$754,500 and the median condominium price
 23 was \$255,000. In contrast, an “affordable” single-family home for a family of four with an annual
 24 income of \$76,100 (80 percent of O’ahu’s median income) would be priced at \$365,000,

⁸ Honolulu Board of Realtors. “Annual Residential Resales Data for O’ahu 1985 - 2007.”

⁹ Honolulu Board of Realtors. “2009 2nd Quarter Residential Resales Statistics.” Released July 1 2008.

1 assuming a 10 percent down payment and financing at 5.4 percent.¹⁰ Under the same
2 conditions, a family of four earning an annual income of \$95,125 (100 percent of O‘ahu’s
3 median income) would be expected to afford a home priced at \$470,017, while a family of four
4 with an annual income of \$114,150 (120 percent of O‘ahu’s median income) would be expected
5 to afford a home priced at \$574,587.

6
7 Inflated real estate values and the lack of affordable housing on the North Shore have made it
8 difficult for many North Shore residents to purchase a home. In many cases, families that are
9 unable to purchase homes are either moving away from the North Shore or resorting to multi-
10 generational living arrangements – adding rooms to existing homes to accommodate extended
11 families – as a way to afford the cost of housing.

12
13 Current real estate trends have also affected the availability of affordable long-term rentals.
14 With homeowners choosing to sell their rental properties and/or convert them into illegal short-
15 term vacation rentals that bring in additional income, the supply of available rental units has
16 decreased and rents have increased. Faced with a shortage of rental housing units, many
17 residents who depend on rental housing are no longer able to afford to live on the North Shore
18 and are moving to other parts of O‘ahu. As the North Shore continues to develop as a major
19 visitor destination, the increased demand for visitor accommodations will further exacerbate the
20 current problem of illegal vacation rental units (short-term vacation rentals and bed and
21 breakfast establishments (B&Bs)) supplanting opportunities for long-term rentals.

22
23 Attached, multifamily housing development concentrated around Hale‘iwa and Waialua Town
24 centers is desired to ensure affordable and appropriately priced housing for existing residents,
25 including low- and moderate-income groups and the “gap group” (e.g., those that make too
26 much to qualify for affordable housing but cannot afford to purchase a home at the current
27 market rate). Although single-family homes are the dominant housing type on the North Shore,
28 multifamily building forms are necessary to provide housing options that allow existing families
29 to stay on the North Shore without altering the integrity and density of existing neighborhoods.
30 There is also strong community sentiment for the elimination of illegal vacation rental units in
31 order to free up some percentage of those units for long-term rentals, thus adding to the
32 available housing inventory without the need for excessive overbuilding.

33

¹⁰ City and County of Honolulu Department of Planning and Permitting. “2009 Affordable Housing Income Limits and Maximum Prices by Income Groups and Household Size.” April 15, 2009 Memorandum.

1 Housing forecasts prepared by the Department of Planning and Permitting indicate the need for
2 an additional 1,504 housing units by the year 2035 to support the projected population growth¹¹
3 (about 2,000 more people between 2005 and 2035). Despite a strong community desire for
4 housing that is affordable to the average North Shore family, the development of an additional
5 1,504 new homes is not preferred because it would result in a significant growth in housing
6 (nearly 25 percent more than the number of units in 2000). Community concerns include the
7 potential impacts that the increased housing and population may have on the rural character,
8 and open space and scenic resources.

10 **3.5.1 Policies**

11
12 The following policies are intended primarily to maintain and promote rural character in existing
13 and new residential development:

- 15 • Maintain sufficient inventory of land within the Community Growth Boundary to
16 accommodate existing and future housing needs.
- 17
18 • Direct future residential development to Hale'iwa and Waialua within the Community
19 Growth Boundary, including new apartment districts adjacent to Hale'iwa and Waialua
20 Towns where increased densities that address affordability may be desired, subject to
21 community and agency review.
- 22
23 • Preserve and protect the rural character and natural features and setting of the North
24 Shore by establishing appropriate development and subdivision standards for buildings,
25 roadways and infrastructure systems, in contrast to existing urban standards.
26 Incorporate rural standards that require development to be sensitive to and have minimal
27 impact on the area's rural character.
- 28
29 • Provide a mix of housing types and prices to meet the needs of existing residents,
30 including accommodations which are affordable to low- and moderate-income, gap
31 group, and elderly households, and other special needs populations.
- 32
33 • Ensure safe and efficient circulation networks that provide bicycle and pedestrian travel
34 between residential areas and neighborhood destinations such as schools, parks and
35 neighborhood commercial facilities.

¹¹ It is assumed that only a small fraction of the 1,504 potential units will be built out, as development occurs at different rates in response to changing market conditions and housing development on the North Shore is constrained by infrastructure adequacy. In the unlikely event that all potential units are constructed, the North Shore's population for the year 2035 will be more than 1.8% of O'ahu's island-wide population, which is above the General Plan's population distribution policy for the North Shore (1.7% of the island-wide population).

- Support the development of sustainable communities through the use of low-impact development principles and technologies.

3.5.2 Guidelines

Except for small pockets of existing apartments in Mokolē'ia, almost all the housing on the North Shore consists of single-family residences. This plan recognizes three categories of residential development: Rural, Rural Residential, and Low-Density Apartment. Table 3-8 gives an overview of the density and height guidelines for planned and existing residential developments.

**Table 3-8
Density and Height Guidelines by Residential Category**

Residential Category	Density (Housing Units)	Building Height
Rural	1 unit/acre	not over two stories/25 feet
Rural Residential	5-8 units/acre	not over two stories/25 feet
Low-Density Apartment	10-20 units/acre	not over three stories/40 feet

It is important that residential areas exhibit the physical characteristics of a rural context, including:

- Smaller building footprints, less lot coverage, and greater open space than encountered in more urbanized areas
- Alternative development patterns such as clustering and traditional compact layouts to preserve open space and minimize infrastructure demands
- Low-rise structures, generally not exceeding two stories
- Plantation style architecture
- Relatively narrow roadway widths
- Minimal amount of paved driveway surfaces
- Landscaping and design alternatives that reduce impervious surfaces, such as grassed swales rather than curbs and gutters, and

- Rural-oriented landscaping and fencing.

The City should utilize appropriate subdivision standards for roads and utilities in rural residential subdivisions. For example, current City subdivision rules and regulations require curb/gutter/sidewalks for most new subdivisions. These standards are essentially urban or suburban standards, but may not be appropriate for most “Country” subdivisions with one-acre lots or for subdivisions with R-20 or R-10 zoning located in rural areas. Standards for rural residential subdivisions should be studied. These rural type standards could result in less cost for the development of these subdivisions, and thus, more affordable lot prices for local families, as well as be more in keeping with the North Shore’s rural character.

3.5.2.1 RURAL

This category consists of single-family homes on relatively large lots (e.g., lots of one acre or more). Development is low density and generally consists of single-family homes, ancillary structures if necessary, low site coverage, and a large predominance of landscaped open space.

This designation allows agricultural activities and can also serve as a land use transition from the more densely developed rural residential neighborhoods to agricultural uses. Rural areas on the North Shore are within the Community Growth Boundary and consist of existing lands in the Country zoning district and a few infill parcels in Sunset Hills, Pūpūkea, and parts of Hale‘iwa. Single-family homes surrounded by open landscapes such as fields or tree cover, and largely unobstructed views and rural roadways are the principal visual qualities of these communities. Agricultural subdivision standards currently apply to country-zoned lands. As there is sufficient capacity on existing Country-zoned lands within the North Shore Sustainable Communities Plan area, no new Country lots should be allowed for the North Shore.

- Utilize a traditional density of one unit per acre with lots ranging in size from one to three acres, although alternative layouts that promote clustering are encouraged. Limit buildings to two stories or 25 feet, although the height may vary according to required flood elevation, slope, and roof form.
- Ensure compatibility between country-district uses and adjacent agricultural lands, natural resources, views, or cultural features.

3.5.2.2 RURAL RESIDENTIAL

This category is intended to describe the bulk of existing and new residential developments located within the Community Growth Boundary. Rural Residential areas are intended to

1 consist of single-family homes in rural settings, as well as higher densities (e.g., smaller lot
2 sizes, multifamily homes) around Waialua and Hale'iwa Town cores. Typical residential lot
3 sizes range from just less than one acre to about 5,000 square feet. Alternate development
4 forms which result in greater amounts of open space and common facilities or higher densities
5 that support affordable housing may also be used.

6
7 A majority of the homes on the North Shore consist of low-density one- and two-story single-
8 family attached and/or detached dwellings, ranging in size from 5,000-square-foot lots to
9 20,000-square-foot lots. New residential single-family development may occur through infill
10 development on existing residential-zoned vacant lots and larger residential-zoned parcels that
11 can be subdivided, or in areas designated for new residential development contiguous to
12 Waialua and Hale'iwa Towns. The Waialua Town Master Plan (2005) calls for 400-500 new
13 homes in former plantation fields surrounding Waialua Town that lie within the Community
14 Growth Boundary, including lands *mauka* of the mill camp between Pu'uiki Road and Goodale
15 Avenue. In Hale'iwa, a maximum of 350 new housing units is to be accommodated on lands
16 outside the flood plain north of Pa'ala'a Road.

17
18 The expanded residential areas in Waialua and Hale'iwa are intended to respond to existing
19 housing needs of residents and accommodate residential needs generated by anticipated long-
20 term job growth in diversified agriculture and other industries. The intent of directing residential
21 development to these areas is not to promote larger lots, which may make them unaffordable to
22 area residents, or may encourage sprawl, but to allow for more site flexibility, integration of open
23 space and neighborhood parks, and a joint infrastructure system for cost efficiency.

24
25 The intent of the Rural Residential designation is to distinguish rural from urban residential
26 development. It is anticipated that Rural Residential will carry development standards for
27 roadways, building envelope, or other features that will convey rural rather than urban character.
28 Although existing residential districts island-wide generally allow for a range of 3,500- to 20,000-
29 square-foot lots (2 to 10 or 12 units per acre), the new rural residential areas in Hale'iwa and
30 Waialua are intended to support densities ranging from 5 to 10 units per acre, so that they
31 remain affordable and at the same time maintain the rural character, by adhering to the
32 following guidelines:

- 33
- 34 • Densities range from five to eight units per acre, or up to 10 units per acre for alternative
35 development options which enhance rural character and maximize consolidated, usable
36 open space. Lot sizes range from 5,000 square feet to 10,000 square feet, allowing the
37 application of optional design standards. For smaller lot developments of less than
38 5,000 square feet, alternative clustering is encouraged.
 - 39 • Use rural development standards to determine appropriate scale and character, smaller
40 building footprints, greater setbacks, and more landscaping (use of hedges to create
41

1 walls and grassed front yards, and rural roadways with no sidewalks, curbs, and
2 gutters).

- 3
- 4 • Avoid monotonous rows of garages and driveways along neighborhood street frontages
5 by employing features such as varied building setbacks and shared driveways.
6
- 7 • Plan and design new or infill housing development, as well as modifications to existing
8 homes, to be generally compatible with the predominant form and character of existing
9 homes on adjacent properties and with the neighborhood as a whole.
10
- 11 • Use plantation architectural features such as pitched roofs in varied forms, exterior
12 colors and finishes, building orientation, floor plans and architectural details to provide
13 visual interest and individual identity and accentuate the rural setting. In general,
14 buildings are to be less than two stories or 25 feet, although the height may vary in
15 response to required flood elevation, slope, or other physical site constraints.
16
- 17 • Support affordable housing initiatives in areas designated for new housing development.
18

19 **3.5.2.3 LOW-DENSITY APARTMENT**

20
21 This category consists of predominately two- to four-story townhouse complexes, stacked flats,
22 or low-rise apartment buildings. The existing apartment-zoned districts in Mokulē'ia are
23 recognized. No new apartment districts in Mokulē'ia are recommended, although new
24 apartment districts may be appropriate adjacent to Waiialua and Hale'iwa town centers, where
25 increased densities that address affordability are desired.
26

- 27 • Maintain the existing apartment district boundaries.
28
- 29 • Densities range from 10 to 20 units per acre. Buildings should not be more than three
30 stories or exceed 40 feet in height.
31
- 32 • Where possible, enhance the compatibility of development within apartment districts with
33 adjacent residential uses.
34
- 35 • Employ building form, orientation, location of entries and landscape screening that
36 reflects single-family residential character and provides greater privacy and individual
37 identity for housing units.
38
- 39 • Ensure compatibility of building scale, roof form and the quality of materials with those of
40 adjacent residential areas.

1
2 **Low-Density Apartment.** Concentrated primarily in Mokulē‘ia, apartment areas are recognized
3 where they occur as a preexisting zoned use, but they are not designated on the Land Use
4 Map. No new apartment areas are planned in Mokulē‘ia. New apartment districts may be
5 allowed adjacent to Waialua and Hale‘iwa town centers subject to project-by-project review for
6 compatibility with surrounding uses.

7
8 **Special Needs Housing.** This land use is not specifically designated on the Land Use Map,
9 but it is allowed in residential areas subject to project-by-project review for compatibility with
10 surrounding uses.

11
12 Nonresidential uses that are not specifically designated on the Land Use Map but are allowed in
13 all residential areas include: elementary schools, parks, churches, community centers, child
14 care centers, and other public facility and utility uses serving the area. It should be noted that
15 some of these uses do require project review and/or public hearings and issuance of permits
16 before they can be developed within a residential area.

17 18 **3.6 COMMERCIAL AREAS**

19
20 A variety of commercial areas are present throughout the North Shore. These vary in size and
21 type from small, individual, freestanding stores, groups of small stores along a main street in
22 Hale‘iwa and Waialua, to small commercial centers. For purposes of this Sustainable
23 Communities Plan, the various types of commercial uses are defined and designated in three
24 categories: Country Town, Rural Community Commercial Center, and Country Store.

25
26 As the largest of the three commercial types, country towns are the region’s primary commercial
27 districts, and include a wide range of commercial establishments and civic activities to serve
28 both area residents and visitors. The rural community commercial center is a smaller cluster of
29 retail and service businesses, and country stores are freestanding neighborhood
30 establishments. Both the rural community commercial center and country stores emphasize
31 convenient and essential services to meet the needs of the surrounding community. Pedestrian
32 and bicycle access is important for all commercial areas, while transit access is important for
33 country towns and rural community commercial centers.

34 35 **3.6.1 Policies**

36
37 The following policies apply to all commercial areas, including the expansion or renovation of
38 existing commercial areas as well as to the development of new commercial facilities.

- 1 • **Scale and Purpose.** Ensure that commercial uses are appropriately scaled to be
2 compatible with the region’s rural character and surrounding land uses, with an
3 emphasis on locally-owned small businesses. Maintain Hale‘iwa as the region’s primary
4 commercial center and visitor attraction, with Waialua Town serving the local community.
5
- 6 • **Physical Linkages and Accessibility.** Promote pedestrian, bicycle, and transit access.
7
- 8 • **Appropriate Building Scale and Architectural Style.** Promote compatibility between
9 the building mass of a commercial area and its rural and natural setting. The
10 architectural character and scale of commercial areas should respect the surrounding
11 rural and natural features, particularly when located adjacent to a residential area or
12 significant natural or historic feature.
13
- 14 • **Environmental Compatibility.** Emphasize environmental compatibility in the
15 development and operation of commercial areas. Direct commercial enterprises to
16 locate within existing commercial districts, and utilize sustainable building design and
17 resource conservation measures as much as possible, including the use of solar panels,
18 passive solar design strategies, landscaping features, and water constrictors, as well as
19 on-site collection/storage areas to encourage individual property owners to recycle.
20

21 **3.6.2 Country Towns**

22
23 Country towns are generally distinguishable from their larger, often newer, urban counterparts
24 by their compactness, small scale, and mixture of different land uses located in close proximity
25 to each other. Buildings are usually one to two stories in height and built to the front property
26 line. Commercial activity is often along the street frontage or in similar “main street” settings.
27 Rural communities often take their identities from the character of their particular town center.
28

29 The country town districts for Hale‘iwa and Waialua identify the general area where commercial
30 establishments as well as public services and civic activities are concentrated (see Exhibit 3.3).
31 Hale‘iwa serves as the region’s primary commercial attraction. Waialua Town’s commercial
32 area provides Waialua and Mokolē‘ia residents with convenient access to goods and services at
33 a rural community scale and character. Although both are designated similarly as country
34 towns, they have their own distinct attributes and character and are discussed separately below.
35

36 **Hale‘iwa.** Situated along Kamehameha Highway between Hale‘iwa Beach Park and Weed
37 Junction, the town serves as gateway to the North Shore as well as the region’s major
38 commercial center and attraction for visitors. The Anahulu Stream Bridge and Pacific Ocean
39 are distinct physical elements that enhance the sense of character of Hale‘iwa Town. The
40 distant Ko‘olau and Wai‘anae Mountain Ranges and expansive plateaus of agricultural lands

1 present the image of a quaint rural town surrounded by agriculture and open space. The
2 boundary for the Hale'iwa Country Town is generally coterminous with the Hale'iwa Special
3 District, except for agricultural areas adjacent to Hale'iwa Beach Park, Hale'iwa Beach Park
4 Mauka, and Loko Ea Pond which will remain outside the Country Town District. Current land
5 uses within the Country Town District include a wide range of retail stores, restaurants, specialty
6 shops, service establishments and professional offices. The continued success of Hale'iwa as a
7 town center and visitor attraction will be dependent on its ability to preserve its rural town
8 character while accommodating economic development and growth.

9
10 **Waiialua.** Waiialua is a former plantation town oriented around the Waiialua Mill site. The town
11 core is concentrated around the existing shopping center and Dole office buildings and consists
12 of shopping and civic facilities surrounded by residential neighborhoods, many of which are
13 remnants of the old plantation camps. Centered around the intersection of Goodale Avenue
14 and Kealohanui Street, the town core is anchored by the historic Bank of Hawai'i Building, the
15 Waiialua Public Library, and the Waiialua Park and new Waiialua Bandstand, which helps to form
16 an entrance to the Waiialua Mill site. With the closing of the Waiialua Sugar Company in 1996,
17 Waiialua's future lies in strengthening its residential communities, retaining and highlighting the
18 rich social, cultural and industrial heritage associated with the plantation industry, establishing
19 agricultural support businesses as part of the overall development of diversified agricultural
20 industry, promoting technology training within its schools and community, and revitalizing its
21 town core through economic development that is compatible with the rural character of this
22 community.

23
24 The Waiialua Town Master Plan was completed in 2005 to address future development and
25 economic revitalization opportunities. The Plan recommends a series of physical improvements
26 and actions – including revitalization of the existing shopping center, new public buildings,
27 expansion of the farmers market, landscaping and pedestrian-oriented improvements, and infill
28 and new residential development – to ensure the long-term viability of the town center and the
29 larger Waiialua community.

1 **3.6.2.1 POLICIES**

- 2
- 3 • Maintain Hale‘iwa and Waialua Towns as the main commercial districts on the North
- 4 Shore. Encourage landowners to invest in the physical and economic revitalization of
- 5 the towns’ commercial cores.
- 6
- 7 • Preserve and enhance the historic rural “small town” character and allow for a
- 8 compatible mix of commercial, service industrial and residential uses that complement
- 9 the rural town context. Encourage multifamily housing (low-density apartment districts)
- 10 and housing for resident senior citizens in close proximity to both Hale‘iwa and Waialua
- 11 town centers.
- 12
- 13 • Allow for a diverse range of civic, retail, office, and light industrial uses that meet the
- 14 needs of residents and visitors.
- 15
- 16 • Support the continued viability of locally-owned small businesses, while prohibiting large
- 17 commercial “big box” retailers that are contradictory to the region’s rural character.
- 18
- 19 • Maintain the low-rise (one to two stories) human-scale and physical organization of
- 20 buildings arranged along the traditional “main street”.
- 21
- 22 • Preserve scenic views of agricultural fields and open spaces of surrounding areas seen
- 23 from Hale‘iwa and Waialua Towns.
- 24
- 25 • Ensure that architectural and landscaping features are compatible with the rural
- 26 character.
- 27
- 28 • Protect and enhance natural resources and ecosystems, such as wetlands and streams,
- 29 fishponds, mature trees and open space areas, within the country town areas.
- 30
- 31 • Protect, preserve and – where feasible – restore historic and cultural features that reflect
- 32 the North Shore’s heritage and contribute to the town’s identity.
- 33
- 34 • Allow for the development of small-scale visitor accommodations in Hale‘iwa Town.
- 35

36 **3.6.2.2 GUIDELINES – HALE‘IWA COUNTRY TOWN**

- 37
- 38 • Limit building heights to two stories, and employ building design elements which reflect
- 39 the architectural characteristics of the early 1900-period architecture identified in the
- 40 Hale‘iwa Special District Design Guidelines.

- 1
- 2 • Incorporate generous, functional, public and open spaces reflective of the town’s
- 3 agricultural heritage.
- 4
- 5 • Encourage commercial and related activities that are conducive to the pedestrian
- 6 character to locate at the sidewalk level along Kamehameha Highway. Encourage less
- 7 pedestrian-dependent and conducive activities (such as manufacturing areas for
- 8 products and compatible light industrial uses, residences, services, etc.) to locate behind
- 9 or above commercial activities so as not to detract from the commercial retail character
- 10 of Kamehameha Highway.
- 11
- 12 • Focus the town’s commercial core around a mix of compatible activities such as
- 13 recreation, marine-related enterprises, farmers’ markets, historic and cultural attractions,
- 14 “clean” light industrial, small businesses and offices, civic and governmental services,
- 15 businesses and retail activities for both residents and visitors.
- 16
- 17 • Upgrade drainage, wastewater, and water infrastructure within Hale’iwa Town, as
- 18 needed.
- 19
- 20 • Support home-based businesses and “Mom and Pop” type stores within the town center.
- 21
- 22 • Concentrate new development near existing built areas emphasizing redevelopment and
- 23 infill along Kamehameha Highway, *makai* of the Hale’iwa Bypass Road (Joseph P.
- 24 Leong Highway). Provide adequate landscaped buffer adjacent to the bypass.
- 25
- 26 • Ensure that commercial uses adjoining the Kamehameha Highway corridor include
- 27 support facilities such as parking lots and rest rooms that can adequately accommodate
- 28 the planned commercial activities.
- 29
- 30 • Support the expansion and enhancement of Hale’iwa Harbor. If possible, integrate the
- 31 harbor’s attractions and facilities with commercial activities in Hale’iwa Town.
- 32
- 33 • Expand indoor recreational and educational facilities and programs (museums, movie
- 34 theater, gym, and cultural performance theaters) and historical, cultural, and arts
- 35 programs to further enrich Hale’iwa’s civic core.
- 36
- 37 • Provide improved, expanded, and continuous pedestrian walkways linking commercial
- 38 establishments within Hale’iwa, including connections between farmers’ markets or other
- 39 kinds of agricultural product and retail outlets, and open space and environmental
- 40 resources (such as beach parks, Hale’iwa Harbor and Loko Ea Pond).

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- Enhance the attractiveness and general landscaped open space character of the area by providing roadway improvements, street trees, streetlights, street furniture, and signage compatible with the rural character of Hale'iwa Town.
- Continue to use and support production of the visitors' map showing attractions and services in Hale'iwa.
- Maintain Kamehameha Highway as a two-lane thoroughfare through Hale'iwa Town.
- Consolidate off-street parking to areas behind buildings, while retaining existing on-street parking wherever possible and appropriate. As needed, parking should be rearranged to accommodate the pedestrian walkway system along Kamehameha Highway.
- Provide signage and other forms of orientation to help direct motorists through the town to major facilities and to off-street parking facilities.
- Improve conditions for transit and bicycling through Hale'iwa Town by providing better designed and located bus stops, and a designated bike lane through the town.
- Enhance Weed Junction and Kamehameha Highway/Joseph P. Leong Junction, which are entry points to Hale'iwa, in a manner which conveys their gateway functions through appropriate design, landscaping, signage and painting.
- Encourage private and community-based initiatives to protect and enhance the streams, wetlands, and other natural resources within Hale'iwa Town. Retain the agricultural use adjacent to Weed Junction and the Preservation designation at Loko Ea Pond.

3.6.2.3 GUIDELINES - WAIALUA COUNTRY TOWN

- Ensure new developments are consistent with the Waialua Town Master Plan recommendations for the town center (Chapter 4.0 of the Waialua Town Master Plan).
- Integrate neighborhood parks and community-oriented recreation areas into new residential development.
- Locate churches and public services in or near the town.

- 1 • Retain large, readily accessible open spaces where outdoor recreation facilities and
2 neighborhood gardens create open vistas and green spaces. Retain open space
3 entrances to the town core, including Weed Junction, Thompson Corner, and Waialua
4 Beach Road, with Waialua Park as the entrance to the country town district.
5
- 6 • Incorporate significant historic features from the plantation era and earlier periods into
7 new developments, where feasible and appropriate. Existing buildings of historical,
8 cultural and/or architectural significance, such as the surviving elements of the Waialua
9 Mill, should be preserved and maintained through rehabilitation and adaptive reuse.
10 Where feasible, adapt and highlight these structures as landmarks and icons
11 representative of Waialua's plantation town history.
12
- 13 • While buildings in the commercial core may be two stories in height, one-story heights
14 should be emphasized, in keeping with the area's historic scale and to preserve the
15 prominence and views of existing mill structures.
16
- 17 • New commercial buildings should be similar in architectural character, scale and
18 materials to historic structures such as the former Waialua Sugar Company offices and
19 the Waialua Library.
20
- 21 • Use design guidelines described in the Waialua Town Master Plan to promote and
22 develop a special image for Waialua's commercial and industrial core that reflects the
23 town's historic character and reinforce the town's role as the cultural and business
24 center for Waialua. Encourage renovations and new construction in accordance with the
25 design guidelines.
26
- 27 • Provide pedestrian and bicycle access between surrounding residential neighborhoods
28 and Waialua's commercial core.
29
- 30 • Encourage infill development and new commercial development around Kealohanui
31 Street to strengthen the town core and provide the critical mass necessary in developing
32 a healthy town center.
33
- 34 • Direct new residential development outside but adjacent to the town core, as generally
35 indicated on the Land Use Map.
36
- 37 • Locate industrial uses around the former sugar mill (see Section 3.7 Industrial Areas for
38 applicable policies and guidelines).
39

- 1 • Promote agricultural support activities at the agricultural support area adjacent to the mill
2 site.
- 3
- 4 • New housing units should incorporate rural features (such as small building footprints,
5 larger setbacks, and more landscaping) and be sited and organized to give a strong
6 sense of community.
- 7
- 8 • Work with developers to establish housing programs that place high priority on the
9 needs of existing Waialua residents.
- 10
- 11 • Provide job or entrepreneurial opportunities for area residents, and make available
12 training programs for new jobs and businesses.
- 13
- 14 • Promote historical and cultural attractions such as museums or activity centers that
15 illustrate the history of the community or feature current agricultural operations near the
16 mill site to encourage visitors to Waialua Town.
- 17
- 18 • Encourage computer-oriented, high technology business, health care, and medical
19 services to locate in Waialua.
- 20
- 21 • Provide for safe and pleasant pedestrian circulation along the storefronts. As it
22 redevelops, emphasize pedestrian circulation along Kealohanui Street. Retain a
23 distinctive pedestrian-oriented commercial area for residents and visitors through the
24 use of signage, street furniture, and street tree plantings to encourage walking and
25 biking.
- 26
- 27 • Support production of a map showing services in Waialua and attractions in the region,
28 such as Ka'ena Point and nearby beach parks.
- 29
- 30 • Promote Kealohanui Street as a pedestrian-oriented promenade in Waialua.
- 31
- 32 • Link proposed pedestrian walkways to the Waialua Town core, including linkages to
33 farmers' markets and other kinds of agricultural products and retail outlets.
- 34
- 35 • Provide convenient parking that should be landscaped and screened from roadways.
- 36
- 37 • Enhance Waialua Beach Road and Farrington Highway as gateways to Waialua Town
38 through signage and landscaping.
- 39

- Plant street trees to enhance the pedestrian experience and to create a strong streetscape image. A detailed street tree and planting plan should be developed and implemented as part of the right-of-way plan.

3.6.3 Rural Community Commercial Center

The rural community commercial center is a small cluster of commercial and service businesses located on major thoroughfares that provide a range of goods and services to meet the needs of the surrounding residential communities. Located along highways and major thoroughfares, these centers also attract visitors and residents from outside the immediate community. Commercial establishments may include grocery stores, sundries stores, restaurants and other services and shops catering to residents and visitors to the region. They are generally one- and two-story in height and equivalent in size to neighborhood grocery stores. With fewer business establishments and services than a country town, the rural community commercial center typically covers less land area and has less commercial floor area than a country town. The area between the existing Foodland market and the adjacent commercially zoned properties between Pūpūkea Road and Pāhoe Road is designated as a Rural Community Commercial Center.

3.6.3.1 POLICIES

- Cluster commercial uses within a more concentrated, but small-scale commercial center on existing Commercial-zoned lands, rather than dispersing them along the highway.
- Ensure that commercial buildings reflect the rural character and are compatible with adjacent residential areas.
- Promote safe and convenient transit, pedestrian, and bicycle access between commercial centers and surrounding areas.
- Emphasize commercial and civic establishments that serve the immediate residential community.

3.6.3.2 GUIDELINES

- Limit rural community commercial centers to existing zoned areas between Pūpūkea Road and Pahoe Road that currently serve the commercial needs of residents and visitors.

- 1 • Design rural community commercial centers to provide a compact and efficient
2 organization of various commercial services which primarily serve the immediate
3 community.
- 4
- 5 • Rural community commercial centers should be designed to provide a compact and
6 efficient organization of various commercial services.
- 7
- 8 • Architectural scale and character should respect the surrounding natural features, and
9 adjacent residential areas. Buildings should reflect a rural character compatible with
10 surrounding open spaces and adjacent residential uses.
- 11
- 12 • Limit building heights to no more than two stories.
- 13
- 14 • Locate parking behind buildings or provide parking that is landscaped. Parking should
15 be visually screened from the street and adjacent residential lots, by planting a
16 landscaped screen of trees and hedges along street frontages and property lines and
17 planting shade trees throughout the parking lot.
- 18
- 19 • Incorporate pedestrian and bicycle facilities, including bicycle paths and storage racks,
20 and off-site improvements such as crosswalks.
- 21
- 22 • Site bus stops in close proximity to rural community commercial centers.
- 23

24 **3.6.4 Country Stores**

25
26 This category generally refers to freestanding retail or eating establishments located on
27 commercially zoned lands or which exist as nonconforming uses. Its purpose is to recognize
28 such establishments and to provide guidance for renovation, reconstruction, or minor expansion
29 of these facilities. It is not intended to provide for new country stores. Existing country stores
30 include stand-alone retail or eating establishments on Commercial-zoned lands and /or
31 nonconforming uses. They include Ted's Bakery, Sunset Beach Store/Restaurant, Sharks Cove
32 Shell Station, Chun's Market, Pa'ala'a Kai Center, Otake Store and Waialua Service. With
33 storeowners retiring and rising operating costs affecting businesses, several country stores
34 have closed in recent years, including Kammie's Market and Sagara Store in Waialua.

35
36 Country stores are typically single, stand-alone establishments. They are usually one-story in
37 height and are generally equivalent in size to a small neighborhood grocery store, such as those
38 mentioned immediately above, that provides convenience goods and services to the
39 surrounding community. Building character is typically residential in scale and generally
40 harmonious with adjacent development and setting in form, material, finishes, and color.

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3.6.4.1 POLICIES

- Prohibit the establishment of new sites for country stores.
- Ensure that proposals for renovations or reconstruction of existing country stores complement the needs of the surrounding community and are compatible with adjacent residential communities.
- Support the long-term viability and existence of country stores.

3.6.4.2 GUIDELINES

- Design country stores to be small-scale, freestanding, compact commercial facilities. Prohibit country stores from expanding to larger, continuous commercial strip types of developments along arterial roads.
- Limit country stores primarily to retail uses that provide services to the surrounding community.
- Architectural scale and character should respect the surrounding natural features, and adjacent residential areas. Buildings should reflect a rural character compatible with surrounding open spaces and adjacent residential uses.
- Limit building heights to one story.
- Locate parking behind buildings, or provide parking that is landscaped. Parking should be visually screened from the street and adjacent residential lots, by planting a landscaped screen of trees and hedges along street frontages and property lines and planting shade trees throughout the parking lot.
- Promote pedestrian and bicycle access to country stores.
- Assist business owners with maintaining their financial stability to ensure that country stores remain in operation.

3.6.5 Relation to Land Use Map

Commercial areas are shown conceptually on the Land Use Map in Appendix A as follows:

1
2 **Country Towns.** This land use designation identifies the two primary country town districts on
3 the North Shore: Hale'iwa and Waialua.

4
5 **Rural Community Commercial Center.** The single rural community commercial center
6 identified on the Land Use Map is the area between Pūpūkea Road and Pāhoehoe Road which
7 consists of the Foodland store and adjacent Commercial-zoned property.

8
9 **Country Stores.** This land use designation refers to existing country stores that provide
10 commercial services to the surrounding communities. Due to their relatively small scale, their
11 locations are not depicted on the Land Use Map.

12 13 **3.7 INDUSTRIAL AREAS**

14
15 The North Shore, especially Waialua Town, was built and populated primarily to service the
16 sugar industry, which for many decades was the predominant economic force in the region until
17 recent years. While most of the agricultural lands were used for cultivation, some lands were
18 dedicated to related operations such as harvesting and processing, and were thus designated
19 industrial. Industrial lands provide for activities and services such as manufacturing, food and
20 agricultural processing, boat and car repair, and the storage of materials and products. They
21 provide employment opportunities for area residents as well as goods and services for
22 consumption. Industrial uses can help revitalize the area's economy and maximize residents'
23 choice of employment opportunities in the region.

24
25 The industrial site at the former Waialua Sugar Mill is no longer used for sugar processing and
26 has been renovated for other industrial uses, including diversified agriculture-related light
27 industrial uses, clothing and souvenir manufacturing, surfboard manufacturing and repair,
28 warehousing, wholesale activities, and other compatible industrial-type uses. The long-term
29 goal is to ensure that the supply of industrial-zoned lands is adequate to accommodate the mix
30 of industrial, light industrial, retail and service-oriented uses that would benefit from locating
31 within the Sugar Mill site. Appropriate types of light industrial uses that complement
32 commercial-related activities can also be accommodated in Hale'iwa and Waialua Country
33 Town Districts.

34 35 **3.7.1 Policies**

36
37 The following policies are applicable for industrial areas:

- 38
39
 - Encourage compatible industrial uses that help diversify and revitalize the economic
40 base of the region. Industrial uses should be compatible with the rural character, with

1 minimal impact on the natural environment, cultural resources, open spaces and scenic
2 views.

- 3
- 4 • Promote industries that provide employment opportunities as well as goods and services
5 for area residents.
- 6
- 7 • Establish the former Waialua Mill site as the North Shore’s main industrial center. Direct
8 industrial activities, including boat repair, auto body and fender shops, to the Waialua
9 Mill site.
- 10
- 11 • Promote forms of economic development and business enterprises that offer training
12 and technical skill development to area residents. Promote agricultural support activities
13 such as food processing and packaging, as well as “quiet” industries, such as cold
14 storage and clothing manufacturing, computer hardware or software development, or
15 other forms of high technology enterprises that provide job or entrepreneurial
16 opportunities for area residents and are compatible with the rural character.
- 17

18 **3.7.2 Guidelines**

19
20 The following guidelines are applicable to industrial development.

- 21
- 22 • Maintain adequate open buffer zones between industrial activities and residential
23 districts.
- 24
- 25 • Minimize impacts (views, noise and smells) and reduce the visibility of large building
26 masses, machinery elements, parking, storage areas, industrial equipment and
27 operation areas through proper site planning and landscape plantings.
- 28
- 29 • Encourage uses which have few environmental impacts and those which complement
30 the development scale of the surrounding community.
- 31
- 32 • Allow low-impact, service industrial uses in enclosed buildings within the Hale’iwa and
33 Waialua Country Town Districts, so as not to detract from the pedestrian-oriented
34 commercial/retail character of roadways, such as Kamehameha Highway, Kealohanui
35 Street, and Goodale Avenue. These could include manufacturing of clothing, arts and
36 crafts and surfboard repair.
- 37
- 38 • Building height and form should reflect the contexts of their sites. At the Waialua Mill
39 site, they should follow guidelines reflecting the Mill’s image. In Hale’iwa Town, they
40 should follow the Hale’iwa Special District Design Guidelines. In Waialua Town, they

1 should be consistent with guidelines of this document and the Waialua Town Master
2 Plan. In general, buildings should be designed to reflect the architectural character of
3 Hale'iwa or Waialua Town. Basic design principles, texture, construction materials, and
4 colors should be compatible with the styles from the era and surrounding buildings.
5

- 6 • Where taller vertical structures are required as part of an industrial operation, site and
7 design such structures to minimize impacts on view planes and reduce visibility from
8 scenic vistas, public roadways, residential areas, commercial areas, parks, and other
9 significant open space areas.
- 10
- 11 • Limit industrial uses located along the shoreline to water-dependent activities (such as
12 boat repair and maritime-related activities). Consider environmental, visual, and noise
13 impact during the permit application process.
- 14
- 15 • Maintain and upgrade infrastructure to support industrial facilities.
16

17 **3.7.3 Relation to Land Use Map**

18
19 One industrial area is shown conceptually at the Waialua Mill site on the Land Use Map in
20 Appendix A. Future expansion of the industrial area should be accommodated *makai* of the mill
21 site. In addition to the industrial-designated lands, compatible types of light industrial uses may
22 also be permitted within the country town districts at Hale'iwa and Waialua if they meet the
23 policies and guidelines described in this section and in Section 3.6 relating to Commercial
24 Areas.
25

26 **3.8 VISITOR ACCOMMODATIONS**

27
28 The availability of existing legal overnight accommodations for visitors on the North Shore is
29 limited, consisting of a small inn/hostel offering budget accommodations (Backpackers Vacation
30 Inn and Plantation Village), several privately operated camps with campgrounds and cabins,
31 B&B establishments, and vacation rentals (both homes and condominium properties). The only
32 hotel along O'ahu's northern shoreline is the Turtle Bay Resort, a four-star luxury property at
33 Kawela Bay, which is located within the Ko'olau Loa Sustainable Communities Plan area.
34

35 An increase in the number of visitors seeking affordable vacation opportunities on the North
36 Shore, combined with the limited inventory and absence of moderate-priced, mid-quality
37 overnight accommodations, has resulted in the growth of illegal short-term vacation rentals.
38 Many North Shore residents are concerned that using homes as vacation rentals results in
39 noise, traffic and parking problems for neighboring homes, and disrupts the stability and
40 character of a community due to the transient nature of the tenants. Due to the incompatible

1 nature of vacation rentals, real estate market pressures (e.g., increased real estate values and
2 rental prices, reduced availability of long-term rental units), and the limited capacity of existing
3 infrastructure systems and public services – including overly crowded roads, wastewater issues,
4 and limited police presence – the community expects, if not insists on, appropriate regulatory
5 and enforcement mechanisms for the vacation rental industry. Furthermore, the community
6 feels strongly that any additional overnight accommodations for visitors in the North Shore
7 Sustainable Communities Plan area should be prohibited until community concerns about illegal
8 vacation rentals are resolved and enforcement mechanisms to eliminate the current illegal
9 operations are in place.

10
11 In general, residents support the concept of affordable, short-term accommodations for tourists,
12 local families and off-island contractors needing lodging in the area (noting that overnight
13 accommodations would keep visitors in the region longer, eliminate the evening commute to
14 hotels/lodging in other parts of the island, and provide choices for the cost-conscious traveler).
15 Any new visitor accommodations should be small in scale and compatible with the rural
16 character of the built environment and adjacent natural features. An appropriate type of visitor
17 accommodation would be located within the boundaries of the Hale‘iwa Country Town District
18 and be similar in scale as the historic Hale‘iwa Hotel. The Hale‘iwa Hotel opened in 1899 on 40
19 acres of land at the mouth of the Anahulu River (where the Hale‘iwa Joes Restaurant now sits).
20 Commissioned by Benjamin Dillingham, owner of the OR&L Company Railroad, the hotel was a
21 popular weekend “country retreat” for Honolulu’s affluent at the turn of the century. Hotel guests
22 would travel the three-hour, 56-mile journey from Honolulu to Hale‘iwa on the OR&L Company’s
23 train, and stay overnight at the resort destination. The main Victorian-style two-story building
24 featured 14 guest rooms with deluxe accommodations, and several guest cottages. Following
25 the hotel’s closure in 1928, the property was reopened in 1931 as an exclusive private club (the
26 Hale‘iwa Beach Club). It was used as an officer’s club during World War II, and eventually torn
27 down in 1952.¹²

28
29 Considering that Hale‘iwa has been a tourist destination since 1899 when the Hale‘iwa Hotel
30 was first opened, the return of a similar country inn in Hale‘iwa can serve as a valuable link that
31 honors Hale‘iwa’s heritage, adding to the town’s historic character and further promoting efforts
32 to revitalize the town’s core. Although the community opposes large-scale visitor
33 accommodations and resort zoning on the North Shore, small-scale visitor accommodations
34 may be allowed within Hale‘iwa Town and Waialua Town Center provided that any such projects
35 should not be allowed through a conditional use permit or through any other permitting process
36 that does not require approval of the City Council under a process to be created under the Land
37 Use Ordinance which includes opportunity for public input and public hearings and based on
38 specific criteria which are outlined in the policies and guidelines below.

39

¹² Hibbard, Don. Designing Paradise: The Allure of the Hawaiian Resort. New York, 2006.

1 It is the general desire of the North Shore community not to have more than one small country
2 inn in Haleiwa and no more than one small country inn in Waialua.

3
4 Resort zoning is not appropriate for the North Shore.

5 6 **3.8.1 Policies**

7
8 The following policies are applicable to visitor accommodations:

- 9
- 10 • Integrate small-scale visitor accommodations in the form of a small country inn (no more
11 than one in Hale'iwa and one in Waialua) with the social and economic life of the
12 surrounding communities and to be compatible with adjacent uses.
 - 13
 - 14 • Avoid degradation or elimination of public access to public lands or resources by visitor
15 accommodations.
 - 16
 - 17 • Prohibit amenities and necessary activities typically associated with destination-style full-
18 service resorts, such as nightclubs, convention centers, shopping facilities and banquet
19 facilities.
 - 20
 - 21 • Prohibit the proliferation of visitor accommodation projects that would take over the
22 social and economic character of Hale'iwa Town and Waialua Town Center.
 - 23
 - 24 • Prevent the expansion of the B&B and vacation rental industry on the North Shore.
 - 25

26 **3.8.2 Guidelines**

27
28 The following are guidelines pertaining to visitor accommodations. Other forms of overnight
29 visitor accommodations that do not meet these guidelines are generally not complementary to
30 the North Shore's rural character, and are not desired in the community – and are not to be
31 permitted.

- 32
- 33 • Allow a small country inn only in Hale'iwa Town and the Waialua Town Center to help
34 restore and promote the historic character of the towns.
 - 35
 - 36 • Design the small country inn in Hale'iwa to be consistent with the Hale'iwa Special
37 District Design Guidelines. In general, the small country inn should be small in scale
38 (limited to two stories in height), be compatible with the architectural style and character
39 of Hale'iwa Town, and observe the same building envelopes and design standards of
40 adjacent buildings.

- 1
- 2 • Any proposed small country inn must follow all ordinances pertaining to zoning, density
- 3 and other applicable rules. As there is no ordinance currently governing small country
- 4 inns in either Haleʻiwa or Waialua Towns, such an ordinance must be in place and
- 5 approved by the City Council prior to any approvals for either small country inn to be
- 6 built.
- 7
- 8 • Establish locational, spacing or density limits to control the overall proliferation of visitor
- 9 accommodations.
- 10
- 11 • Provide convenient and safe access for pedestrians and vehicles.
- 12
- 13 • Incorporate mixed use that caters to pedestrian activity located on the ground floor and
- 14 visitor accommodations provided on the upper floor.
- 15
- 16 • Provide adequate off-street parking which is landscaped and screened from public
- 17 roadways.
- 18
- 19 • Address the streetscape and provide a setting that is conducive to pedestrian activity,
- 20 when located along pedestrian-oriented streets.
- 21
- 22 • Ensure that existing and/or proposed infrastructure can adequately accommodate the
- 23 proposed development and associated visitor population.
- 24
- 25 • Minimize impacts (noise, traffic, parking, visual) on surrounding activities/properties and
- 26 from public roadways.
- 27
- 28 • Prohibit the granting of new permits, including nonconforming use certificates, for B&B
- 29 and vacation rental operations on the North Shore.
- 30

31 **3.8.3 Relation to Land Use Map**

32
33 The visitor accommodations described above are not shown on the Land Use Map in Appendix
34 A. As specified, they should be allowed only within the Haleʻiwa Country Town District and in
35 the Waialua Town Center, subject to policies and guidelines outlined in the preceding section
36 and in accordance with applicable criteria and standards.
37

1 **3.9 INSTITUTIONAL USES**

2
3 The purpose of designating lands for institutional uses is to provide areas for public and
4 quasi-public institutions such as schools, airports, harbors, major health care facilities; major
5 utility plants and substations; landfill sites, corporation yards, and maintenance yards of public
6 agencies; religious, social, and social service institutions; and other public services.
7

8 **3.9.1 Policies**

9
10 Public facilities and institutions should provide convenient public services or functionally support
11 other governmental activities. These facilities should be planned and developed in a manner
12 consistent with the rural character of the region and sensitive to the surrounding community land
13 uses.
14

15 **3.9.2 Guidelines**

16
17 The following guidelines implement the policies for institutional facilities listed above.
18

- 19 • Colocate neighborhood or community parks with elementary or intermediate schools and
20 coordinate design of facilities when efficiencies in development and use of athletic,
21 meeting and parking facilities can be achieved.
22
- 23 • Colocate social, social service institutions, and other public service agencies to provide
24 convenient one-stop services to the region.
25

26 **3.9.3 Relation to Land Use and Public Facilities Maps**

27
28 Institutional areas and major public facilities (both existing facilities and future improvements)
29 are identified by appropriate symbols on the Public Facilities Map located in Appendix A.
30 Religious, social, social service institutions, and other public service uses are not conceptually
31 shown on the Land Use Map but are permitted within the commercial areas and residential
32 communities if the uses comply with the City's Land Use Ordinance.
33

34 **3.10 MILITARY**

35
36 Military areas include all lands used for military and military support purposes including
37 residential, commercial, industrial and park uses. The Helemano Military Reservation, with its
38 existing and planned military housing, related community facilities and industrial uses, and the

1 Kawaiiloa Training Area and Dillingham Military Reservation are lands owned and leased by the
2 military on the North Shore.

3 4 **3.10.1 Policies**

5
6 Applicable policies for residential, industrial, commercial, and other related uses should be
7 applied to military lands.

8 9 **3.10.2 Guidelines**

- 10
11 • Encourage all government agencies (City, State and Federal) to coordinate efforts with
12 the U.S. military, especially where the Kahuku and Kawaiiloa Training Areas overlap with
13 environmentally sensitive areas.
14
15 • Encourage the military to provide appropriate infrastructure services to support military
16 uses on their lands and minimize any potential impacts to the region.
17
18 • Work with the military to allow use of Drum Road as an emergency access bypass route
19 during natural disasters or other emergency incidents.
20
21 • Encourage low-rise military facilities that support educational and recreational programs
22 and are compatible with the region on Military Reservation lands such as Dillingham
23 Airfield.

24 25 **3.10.3 Relation to Land Use Map**

26
27 Helemano Military Reservation and Dillingham Airfield are shown conceptually on the Land Use
28 Map in Appendix A. Other military uses within the region not specified on the Land Use Map
29 should be compatible with the policies and guidelines of the specific land use designation shown
30 on the Land Use Map. Military-owned lands that are leased or licensed to others on a full-time
31 basis for non-military uses are excluded from this designation.
32

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4. PUBLIC FACILITIES AND INFRASTRUCTURE POLICIES AND GUIDELINES

The vision for the North Shore described in Chapter 2 will be implemented in part through application of the policies and guidelines for public facilities and infrastructure which are presented in the following sections.

The provision of adequate infrastructure and public facilities and services is essential to maintaining the quality lifestyle that residents desire. For the North Shore, this means that infrastructure systems, public facilities and services are properly maintained and operated, that they are sufficient to meet current requirements, and that they have the capacity to accommodate future system demands without negatively impacting any of the region's resources. A key concern for area residents is that the design of infrastructure systems – including roadways and wastewater treatment systems – reflect the rural qualities of the region, with particular emphasis on how such systems are sized. As a corollary concern, the impacts of development that occur beyond the North Shore Sustainable Communities Plan's boundaries are important considerations when analyzing entitlement requests that affect North Shore infrastructure. Thus, the North Shore community expressed its concerns about any further expansion of resort accommodations in the Turtle Bay complex because of the potential adverse impacts such development may have on the North Shore's infrastructure, particularly on Kamehameha Highway, and on its quality of life.

A survey conducted by the State of Hawai'i Department of Economic Development and Tourism for two separate time periods – Winter 2003 and Summer 2005 – indicates that more than half (51%) of all visitors to O'ahu in 2003 and 2005 visited the North Shore.¹³ This translates into an estimated 2.4 million tourists per year visiting the North Shore, or almost 7,000 visitors per day on average,¹⁴ which is about 40% of the total number of residents living on the North Shore in 2005 (about 18,400 residents).¹⁵ Although the effect is economically positive, the dramatic influx of tourists to the North Shore has significantly stressed the community's infrastructure with increasing traffic congestion, overcrowded beaches and park facilities, and insufficient rest room facilities in Hale'iwa Town.

¹³ State of Hawai'i Department of Business, Economic Development and Tourism. "Visitor Behavior and Satisfaction O'ahu's North Shore: A "Tack On" Survey to the 3rd Quarter 2005 and 4th Quarter 2003 Visitor Satisfaction Survey."

¹⁴ The 2005 Annual Visitor Research Report prepared by the State of Hawai'i Department of Business, Economic Development and Tourism indicates 4,731,843 visitors to O'ahu in 2005 (Table 37).

¹⁵ City and County of Honolulu Department of Planning and Permitting. "2000-2030 Socioeconomic Projections in 5 Year Intervals by Development Plan Area." November 2007.

1 Chapter 4 is organized under the following headings:
2

3 SECTION

- 4 4.1 TRANSPORTATION SYSTEMS
- 5 4.2 WATER SYSTEMS
- 6 4.3 WASTEWATER TREATMENT
- 7 4.4 ELECTRICAL SYSTEMS
- 8 4.5 SOLID WASTE HANDLING AND DISPOSAL
- 9 4.6 DRAINAGE SYSTEMS
- 10 4.7 SCHOOL FACILITIES
- 11 4.8 PUBLIC SAFETY FACILITIES
- 12 4.9 OTHER COMMUNITY FACILITIES

13
14 **4.1 TRANSPORTATION SYSTEMS**

15
16 This section describes the existing road, transit, and bikeway network on the North Shore, as
17 well as plans and proposals for future improvements, followed by policies and guidelines to
18 guide future transportation system development in the North Shore. These elements are shown
19 in the Public Facilities Map in Appendix A.
20

21 Act 54 (Session Laws Hawai'i, 2009) requires State and County transportation departments to
22 adopt and implement a complete streets policy and establishes a task force to determine
23 necessary standards and guidelines. The intent of a complete streets policy is to create and
24 configure a connected street system that provides for all users, including but not limited to,
25 pedestrians, bicyclist and transit passengers of all ages and abilities.
26

27 **4.1.1 Roadway Network**

28
29 The only major arterial on the North Shore is Kamehameha Highway, a two-lane thoroughfare
30 which links North Shore communities with Central O'ahu and Ko'olau Loa. It is a scenic
31 highway which traverses the coastline from Hale'iwa through the communities of Kawaihoa,
32 Waimea, Pūpūkea, and Sunset Beach.
33

34 Minor arterials on the North Shore include Kaukonahua Road and Farrington Highway.
35 Kaukonahua Road is a narrow two-lane roadway which goes from Wahiawā north to Thompson
36 Corner and continues as Farrington Highway past Waialua and Mokulē'ia to Ka'ena Point.
37 Numerous local streets, including Hale'iwa Road, Goodale Avenue, Waialua Beach Road, and
38 Pūpūkea Road, serve the rural residential communities. Kamehameha Highway, except for the
39 segment from Weed Junction to Hale'iwa Beach Park, Farrington Highway, and Kaukonahua
40 Road from Thompson Corner to Weed Junction, are under State jurisdiction. Except for former

1 cane haul roads, most of the remaining streets in the North Shore Sustainable Communities
2 Plan area are under City and County of Honolulu jurisdiction.

3
4 Planning and development of major roadways is the shared responsibility of the State
5 Department of Transportation (DOT) and the City Department of Transportation Services (DTS).
6 The planning and use of federal transportation funds is coordinated through the O'ahu
7 Metropolitan Planning Organization (OMPO), a joint City-State agency.

8
9 The O'ahu Regional Transportation Plan 2030 (April 2006)¹⁶ indicated that the morning peak-
10 hour traffic volume in the North Shore corridor is at an acceptable level and will continue to be at
11 an acceptable level in the year 2030. However, North Shore residents regularly experience
12 "bottleneck" traffic congestion at Waimea, and near Laniākea on weekend days and during
13 periods of high surf. While congestion along Kamehameha Highway has been historically
14 limited to the winter months when spectators travel slowly through the area to observe the high
15 surf, traffic delays in the vicinity of Hale'iwa Town and Laniākea Beach have become frequent
16 throughout the year. In addition, segments of Kamehameha Highway along the North Shore are
17 sometimes closed during periods of high surf and flooding when roads are hazardous to
18 travelers, or as a result of rock slides.

19
20 With traffic delays increasing in frequency, the community is concerned that traffic conditions
21 along Kamehameha Highway are reaching a critical stage, especially when considering that the
22 highway has not been greatly improved since it was first built in the late 1920s¹⁷. Community
23 concerns include limitations that the existing two-lane highway is unable to accommodate any
24 additional cars, and that the bottlenecks negatively affect emergency vehicle response time.
25 Roadway improvements that correct safety deficiencies, promote alternative modes of
26 transportation, and minimize the number of vehicles on the road are desired. Increasing
27 highway capacity to accommodate more cars is not supported, unless considered necessary for
28 safety reasons. Providing secondary/emergency access bypass routes into and out of the
29 region to facilitate access when Kamehameha Highway is closed is also of significant concern.

30
31 Several improvement projects are identified in the FY 2008-2013 State Transportation
32 Improvement Program (STIP) for Kamehameha Highway: (1) Bridge Rehabilitation, Kawaiiloa
33 Stream Bridge (Project No. OS51); (2) Rockfall Protection, Waimea Bay (Project No. OS73); (3)
34 Shoreline Protection, Vicinity of Kawaiiloa Beach (Project No. OS77); (4) Traffic Improvements,
35 Kahalu'u to Waimea Bay (Project No. OS78); and (5) Wetland Enhancement, Vicinity of 'Uko'a
36 Pond (Project No. OS79)¹⁸. The STIP is presently being updated. The O'ahu Regional

¹⁶ OMPO's Regional Transportation Plan (ORTP) is currently being updated to the year 2035. OMPO expects completion of the plan in 2011.

¹⁷ C.W. Windstedt was given a contract in 1929 to build Kamehameha Highway from Waimea Bay to Kahuku.

¹⁸ It should be noted that although projects are identified, individually, they may not necessarily be pursued because the actual phase or time frame of a project is not strictly defined and may change for various reasons.

1 Transportation Plan 2030 identifies one proposed State improvement project for future
2 consideration: Kamehameha Highway Safety Improvements from Hale'iwa to Kahalu'u,
3 including improvements such as turn lanes, guardrails, signage, crosswalks, etc. No future
4 highway capacity improvement projects are identified for the North Shore.

5
6 Other proposed projects for roadway improvements identified by the City DTS include
7 improvements to Kamehameha Highway, Hale'iwa Road, Waialua Beach Road, Pūpūkea Road,
8 Alapi'o Road, Kaukonahua Road, and Wilikina Drive.

9
10 Resolution of the traffic congestion at Laniākea is a high priority for the community, especially
11 when City and State improvements currently being planned for the area are taken into
12 consideration. (i.e., The City is planning beach support facilities on the *mauka* side of the
13 highway, which would encourage more pedestrian crossings and further aggravate the safety
14 concerns and traffic slowdowns under the current roadway configuration. The State DOT has a
15 project to rehabilitate the Kawailoa Stream Bridge.) Possible alternatives include either highway
16 realignment (re-routing the segment of Kamehameha Highway that passes Laniākea Beach
17 inland) or construction of a new bypass road between Laniākea Beach and Ashley Road. While
18 a new bypass road would improve traffic flow along the highway, realignment would allow future
19 beach support facilities to be built on the beach, thereby providing the additional benefits of a
20 healthier and wider shoreline/beach area and protection for pedestrians. As a result of strong
21 community support, the State DOT is conducting a planning study for the Laniākea
22 Realignment/ Bypass Route.

23 24 **4.1.2 Transit (Bus Service) System**

25
26 Fixed route bus service is provided through the City DTS, which currently contracts with O'ahu
27 Transit Services (OTS) for operation of TheBus. OTS also operates the Handi-Van system,
28 which provides transportation service for individuals who are unable to independently use
29 TheBus due to a disability under the Americans with Disabilities Act.

30
31 According to the O'ahu Regional Transportation Plan 2030 (April 2006), TheBus system
32 provides 100 numbered bus routes island-wide with a fleet of 531 buses, including five bus
33 routes to service the North Shore.

34
35 In addition to the DTS service, there is a state-operated school bus system that provides both
36 fixed route and curb service transportation for students of Hale'iwa Elementary, Waialua
37 Elementary, Sunset Beach Elementary, and Waialua Intermediate and High Schools.

38
39 There are no plans to extend or expand the number of bus routes on the North Shore. DTS
40 continues to monitor community needs and ridership, and makes non-cost adjustments to

1 existing services for the North Shore. The introduction of new service will be contingent on
2 available funding.

4 4.1.3 Bikeway System

5
6 Bike Plan Hawai'i (2003), a State DOT master plan for bikeways, identifies 145.7 miles of
7 existing bikeways on O'ahu, and 258.9 miles of proposed bikeways island-wide to bring O'ahu's
8 total bikeway network to 394.6 miles. The timetable for development will depend upon
9 construction feasibility (including right-of-way acquisition) and funding. Bike Plan Hawai'i
10 defines the various types of bikeways, as follows.

- 11
12 • **Signed Shared Roadway.** Any street or highway specifically designated by signs for
13 the shared use of bicycles and motor vehicles and/or pedestrians. Such facilities are of
14 two types: a widened curb lane in an urban-type area or a paved right shoulder in a
15 rural-type area. The Signed Shared Roadway, according to the Bike Plan Hawaii, is "...the
16 preferred route for bicycle use," when mainly due to land width or other mitigating
17 factors.
- 18
19 • **Bicycle Lane.** A portion of a roadway designated by striping, signing, and/or pavement
20 markings for the preferential or exclusive use of bicycles. The right-of-ways assigned to
21 bicyclists and motorists are delineated to provide for more predictable movements of
22 each. Only crossflows by motor vehicles or pedestrians to gain access to driveways or
23 parking facilities or bus stops are allowed.
- 24
25 • **Shared Use Path.** A bikeway that is physically separated from motorized vehicular
26 traffic by an open space or barrier, and is either within the highway right-of-way or has
27 an independent right-of-way. Often shared with pedestrians, skaters, joggers and other
28 non-motorized users.

29
30 The State's bikeway master plan indicates a North Shore bikeway system that includes the
31 existing Ke Ala Pūpūkea Bike Path; a coastline route with links to Central O'ahu, the Ko'olau
32 Loa District, and around Ka'ena Point to Wai'anae; a route through Hale'iwa Town; an existing
33 leg along the Joseph P. Leong Highway (Hale'iwa Bypass Road); and along Hale'iwa Road and
34 Waialua Beach Road. Additional potential bikeways, including one along Pa'ala'a Road in
35 Hale'iwa, and three in Waialua (Pu'uiki Street, Cane Haul Road (Extension), and Kealohanui
36 Street, respectively) are also included in this Sustainable Communities Plan. Existing and
37 proposed bikeways are shown on Exhibits 4.1 and 4.2.

(Source: Draft O'ahu Bike Plan, July 2009)

Legend	
Existing	Proposed
Bicycle Route	
Bicycle Lane	
Bicycle Path	

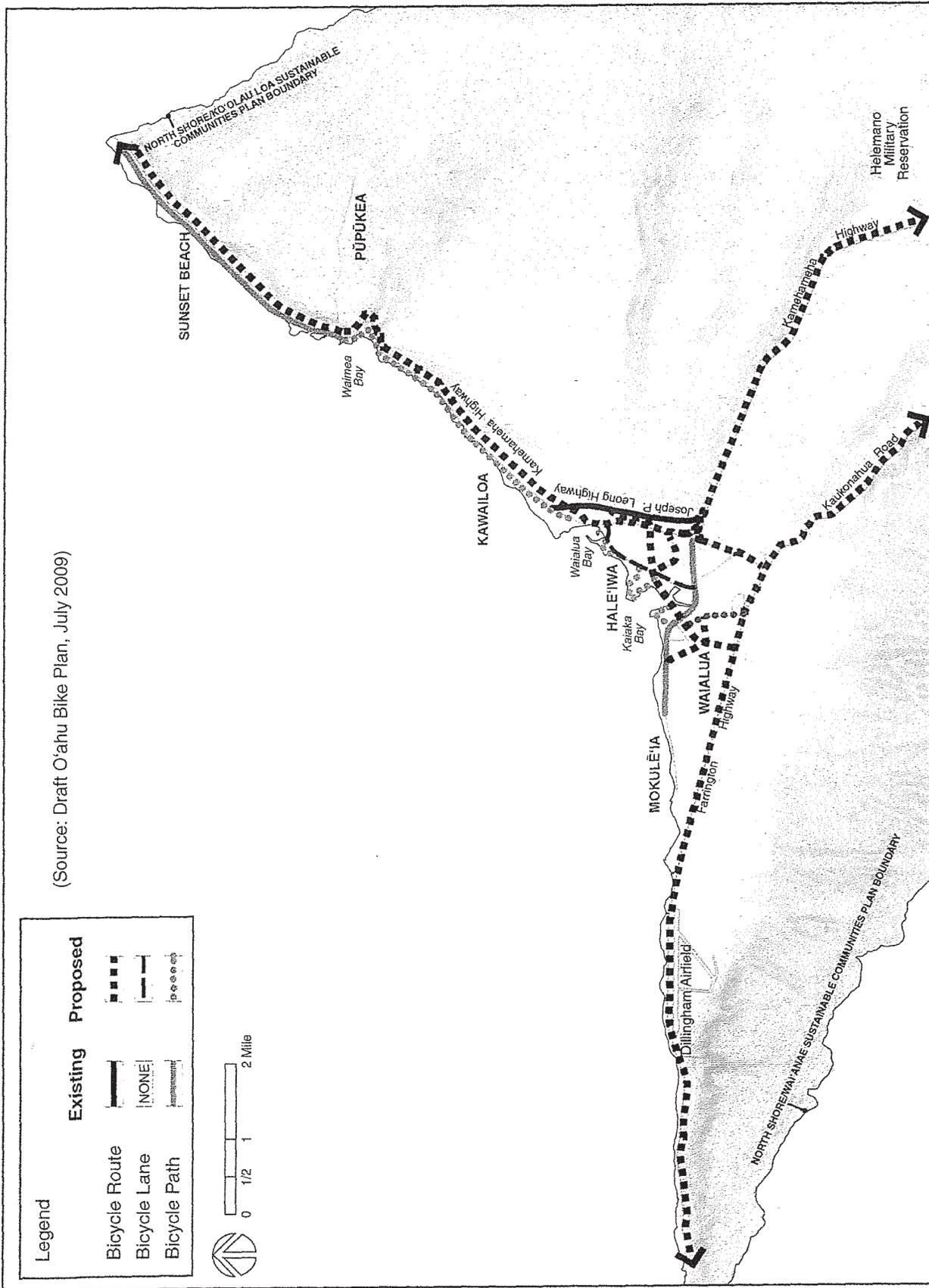
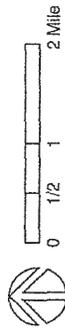


Exhibit 4.1: North Shore Bikeway System

North Shore Sustainable Communities Plan

April 2011

Public Facilities and Infrastructure Policies and Guidelines

EXHIBIT A, BILL 61 (2010), CD2

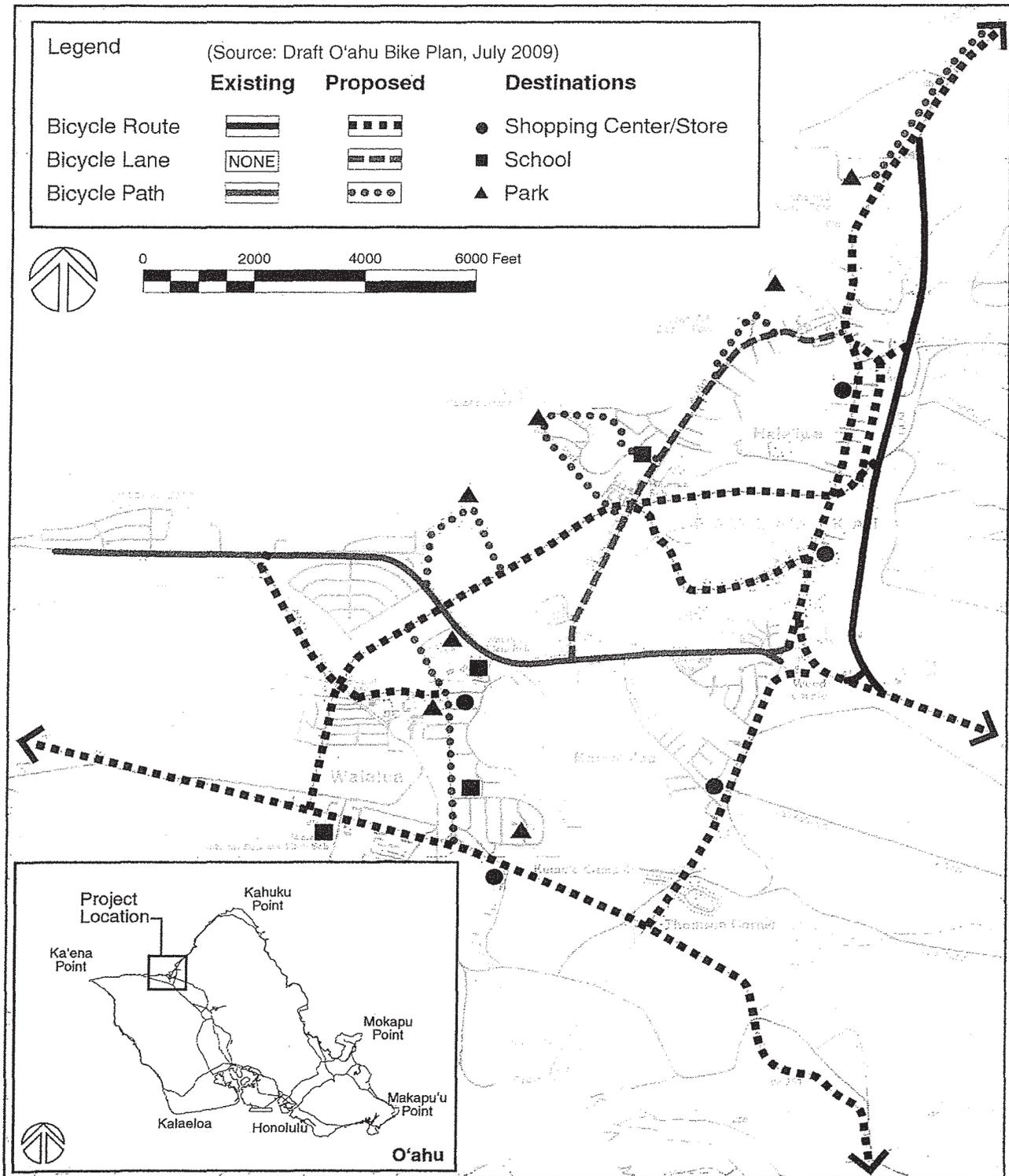


Exhibit 4.2: Waialua - Hale'iwa Pedestrian/Bikeway System

1 The City DTS is in the process of updating the 1999 Honolulu Bicycle Master Plan. While the
2 scope of the current plan is limited to Honolulu’s urban core between Kahala and Pearl City, the
3 updated plan will cover the entire island of O’ahu.

4 5 **4.1.4 Other Transportation Facilities**

6
7 **Airports.** Dillingham Airfield in Mokolē‘ia is the only public airport facility located on the North
8 Shore. The U.S. Army owns the field, but it is used jointly by the U.S. Army and the State of
9 Hawai‘i. The airfield consists of one 5,000-foot-long runway, hangars and tie-downs for smaller
10 aircraft, facilities for air-taxi services, and storage.

11
12 The airport services general aviation demands for small aircraft including civilian-powered
13 flights, sailplane/glider flights, and parachute activities, as well as, military flights. Air traffic is
14 limited to daytime operations, as a condition of the lease DOT has with the Army, and the
15 existing airfield can satisfy only a portion of general aviation demands for O’ahu. The State
16 DOT has indicated that no major expansion is planned for Dillingham Airfield, except for
17 improvements to existing facilities and construction of additional hangars. General aviation
18 demands will instead be met by existing airport facilities at Kalaeloa Airport (formerly the
19 Barbers Point Naval Air Station).

20
21 **Harbors.** The Hale‘iwa Boat Harbor is the only recreational boat harbor facility in the North
22 Shore region. The facility is managed by the DLNR, Division of Boating and Ocean Recreation.
23 Policies and guidelines pertaining to Hale‘iwa Boat Harbor are included in Section 3.3.

24 25 **4.1.5 Policies**

26
27 The following are policies for transportation systems on the North Shore.

- 28
- 29 • Retain both Kamehameha Highway and Farrington Highway as two-lane thoroughfares,
30 to maintain the North Shore’s rural character. Provide roadway improvements to
31 promote pedestrian and vehicular safety and traffic efficiency.
 - 32
 - 33 • Improve mobility and connectivity between residences, jobs, shopping, and recreation
34 areas on the North Shore.
 - 35
 - 36 • Ensure safe and efficient access to adjacent areas, especially to Central O’ahu.
 - 37
 - 38 • Support a multi-modal transportation system to reduce automobile dependency. Provide
39 more opportunities and support facilities for convenient and safe alternative modes of

1 transportation, including bus, pedestrian and bicycle travel, and other modes of personal
2 transportation.

- 3
- 4 • Ensure that existing regional roadways are adequate to accommodate proposed
5 development proposals, prior to the construction of such developments.
- 6

7 **4.1.6 Guidelines**

8

9 The following guidelines relate to transportation systems for the North Shore.

- 10
- 11 • Establish rural streetscape design and development standards within residential areas
12 consistent with the rural character of the region. Allow for rural elements that reduce the
13 amount of impervious surfaces, such as minimum pavement widths to support traffic
14 demands and emergency vehicle access, shared driveways, reduced parking
15 requirements, more landscaping, and grassed swales as an alternative to sidewalks with
16 curbs and gutters.
- 17
- 18 • Emphasize accessibility from residential streets to bus routes, parks, schools and
19 commercial centers. Design roadways to facilitate the use of alternative transportation
20 forms, including bicycle and pedestrian travel, and personal motorized devices.
- 21
- 22 • Provide scenic lookout points to minimize hazards created by slower sightseeing traffic
23 and to enhance the appreciation of the region's scenic resources.
- 24
- 25 • Provide appropriately sited and designed off-street parking areas at popular beach parks
26 wherever feasible, including parking in support parks *mauka* of the highway.
- 27
- 28 • Study the safety and feasibility of developing passing zones on Kamehameha Highway
29 and Kaukonahua Road from Hale'iwa/Waialua to Wahiawā to reduce traffic delays due
30 to slower moving vehicles, and to improve safety conditions.
- 31
- 32 • Provide safety improvements along Kaukonahua Road and Kamehameha Highway from
33 the Joseph P. Leong Highway (Hale'iwa Bypass Road) to Wahiawā and beyond.
- 34
- 35 • Promote the development of emergency runaway vehicle ramps on Kamehameha
36 Highway and Kaukonahua Road, from Wahiawā to Hale'iwa/Waialua.
- 37
- 38 • Approve new residential and commercial development only if the State DOT and the City
39 DTS confirm that adequate transportation access can be provided.
- 40

- 1 • Continue to include the daily visitor population that visits the North Shore in determining
2 allocations of resources and facilities for the North Shore.
3
- 4 • Promote the use of transportation demand management strategies, including measures
5 such as ride-sharing (car/van pooling), improved bus service and routes, the use of non-
6 vehicular travel modes, modified work hours and teleworking to reduce commutes.
7
- 8 • Protect the natural resources of Ka'ena Point from potentially damaging vehicular traffic.
9 Prohibit construction of a roadway around Ka'ena Point.
10
- 11 • Provide pedestrian-friendly walkways, off-street parking, bus pull-outs, tour bus
12 maneuvering areas, and drainage improvements in Hale'iwa Town.
13
- 14 • Improve the main roadways within Hale'iwa and Waialua Country Town Districts with
15 shade trees, landscaping, sidewalks, street furniture, and signage to promote pedestrian
16 orientation within these country towns.
17
- 18 • Create a regional pedestrian/bikeway system linking the parks, schools and town
19 centers in Hale'iwa and Waialua with outlying communities, as shown in Exhibits 4.1 and
20 4.2.
21
- 22 • Coordinate bikeway development with responsible State and City agencies and private
23 landowners to ensure that safety, liability, and a mixture of use issues are adequately
24 addressed.
25
- 26 • Locate bus stops to be convenient and accessible to residential areas and hubs of
27 community activity.
28
- 29 • Design bus shelters to provide weather protection for bus passengers and complement
30 the natural setting.
31
- 32 • Explore the possibility of a Historic Hale'iwa Trolley as an alternative for visitors to
33 experience the North Shore.
34
- 35 • Encourage the State to upgrade, maintain, and expand the boating facilities at Hale'iwa
36 Harbor to meet the needs of recreational and commercial fishing and leisure boating
37 activities.
38

- 1 • Maintain small aircraft, general aviation and other recreational, commercial, or other
2 military uses at Dillingham Airfield in cooperation with the U.S. Army. As necessary,
3 upgrade and maintain facilities to support airfield use.
4
- 5 • Limit uses in the vicinity of Dillingham Airfield to those that are compatible with aircraft
6 noise levels and overflights from the airfield.
7
- 8 • Identify and maintain former cane haul roads and other *mauka* roads to provide for the
9 safe and quick evacuation of residents and the movement of emergency response
10 personnel (e.g., fire, police, ambulance) in the event that the primary highways become
11 impassable due to natural disasters or other emergency incidents. Investigate the use of
12 the following for safety and emergency access: the cane haul road system *mauka* of
13 Farrington Highway in Mokolē'ia; the roads connecting with Drum Road including cane
14 haul road (Twin Bridge Road) in Hale'iwa, Kawailoa Road, Ashley Road, Pūpūkea Road
15 and Motocross/Kaunala Road. COMSAT/Girl Scout Camp (Paumalū) Road does not
16 connect with Drum Road and would be for evacuation use only.
17

18 4.2 WATER SYSTEMS

19
20 Groundwater, which is water found beneath the earth's surface, is one of Hawai'i's most
21 important natural resources. Used for agricultural, industrial, and domestic purposes,
22 groundwater is the principal source of O'ahu's municipal water supply. Statewide, groundwater
23 provides about 99 percent of Hawai'i's domestic water and about 50 percent of all the
24 freshwater used in the State.¹⁹ Consequently, protecting the quality and quantity of
25 groundwater resources is essential to Hawai'i's future well-being.
26

27 In 1987, the State enacted the Water Code (HRS Chapter 174-C) in order to protect, control,
28 and regulate the use of the State's water resources for the benefit of its people. Under the
29 Code, the City is responsible for preparing the water use and development plan for the City and
30 County of Honolulu.
31

32 This plan, called the Oahu Water Management Plan (OWMP), is prepared by the Department of
33 Planning and Permitting with the assistance of the State Commission on Water Resource
34 Management (CWRM) and the Board of Water Supply, and approved by the City Council
35 following extensive public review and comment. The OWMP was adopted by the CWRM and
36 the City Council in 1990. The most recent revision of the Technical Reference Document for the
37 OWMP (December 1998) includes updated supporting data, analyses, and conclusions, which
38 reflect the closing of Oahu Sugar Company and Waialua Sugar Company and the most recent

¹⁹ U.S. Geological Survey. "Groundwater in Hawai'i: Fact Sheet 126-00." Prepared by Gingerich, S.B. and Oki, D.S.

1 data and analytical review. Future revisions to the OWMP shall be submitted to the City Council
 2 for its review and approval.

3
 4 The OWMP is currently being updated using the watershed approach to water resource
 5 management to account for watershed protection and water use and development. To improve
 6 the integration of land use and water resources, the OWMP has been divided into eight
 7 watershed management plans (WMP), which coincide with the eight Development Plan and
 8 Sustainable Communities Plan areas. The goal of the WMP for each planning area is to
 9 formulate an environmentally holistic, community-based, and economically viable WMP
 10 balancing: (1) the preservation and management of O‘ahu’s watersheds; and (2) sustainable
 11 ground and surface water use and development to serve present users and future generations.
 12 Each WMP shall be submitted to the City Council for adoption by ordinance.

13
 14 The Board of Water Supply OWMP overview section of the WMP, 2009, evaluated available
 15 water supplies and the water development needs of the existing and new residential and
 16 commercial development (including retail, office, resort, recreational, and industrial) likely by
 17 2030 as a result of implementation of the City’s Development Plans and Sustainable
 18 Communities Plans. There is available water supply to accommodate projected water needs
 19 through the 2030 planning horizon. The North Shore Watershed Management Plan will provide
 20 guidance for the sustainable management and use of all water resources in the watershed (both
 21 surface and ground water resources).

22
 23 CWRM has adopted sustainable yields to protect groundwater resources and regulate water
 24 use by water use permits. The following table summarizes the available water in aquifers
 25 underlying the North Shore area.

26
Table 4-1
2005 Groundwater Use by Aquifer (mgd)

Aquifer Sector	Aquifer System	Previous Sustainable Yield (SY)	Revised 2008 Sustainable Yield (SY)	2005 Water Permits Issued	Unallocated Sustainable Yield	Existing Water Use July 2005	SY Minus Pumpage
North	Mokuleia	12	8	8.301	-0.301	0.303	7.697
	Waialua	40	25	30.311	-5.311	3.020	21.980
	Kawailoa	39	29	1.549	27.451	0.682	28.318
Total North		91	62	40.161	21.839	4.005	57.995

27 Reference: Oahu Water Management Plan: Overview Section 2009

28
 29 Groundwater resources within the region are comprised of the three distinct aquifer systems
 30 that comprise O‘ahu’s North Aquifer Sector: the Mokulē‘ia, Waialua and Kawailoa Aquifer

1 Systems. This aquifer sector is designated by CWRM as a water management area, and
 2 approval of water use permits from CWRM are required to withdraw water from these systems.
 3 The Hawai'i Water Plan Water Resources Protection Plan (2008) indicates the sustainable yield
 4 of the three aquifer systems in 2005 about 62 million gallons per day (mgd). In 2005, water use
 5 permit allocations for the three aquifer systems accounted for about 40 mgd, while water
 6 withdrawals were estimated at about 4 mgd. A significant amount of water is allocated to
 7 agricultural water use permits that remain unused due to the closure of plantation agriculture.

8
 9 Based on CWRM's 2005 basal permitted uses of groundwater on O'ahu (estimated at about 295
 10 million mgd, there is approximately 112 mgd of unallocated sustainable yield remaining in the
 11 island-wide groundwater supply that could be developed.

12
 13 The BWS supplies municipal water service to most of the North Shore, with the exception of
 14 Mokolē'ia which is served by a private water company. Municipal water demand for the North
 15 Shore in 2000 was approximately 2.8 mgd, of which 2.5 mgd were withdrawn from sources
 16 within the region and 0.3 mgd were imported from Ko'olau Loa. BWS projections forecast that
 17 water demand for the area will increase to about 3.4 mgd by the year 2030.²⁰ The BWS
 18 considers the water supply from existing wells on the North Shore more than adequate to meet
 19 current and future demand in the region. Agricultural irrigation demand for nonpotable water for
 20 the 20,000 acres of prime agricultural land on the North Shore is estimated at 35.8 mgd.

21
 22 The following tables indicate potential potable and nonpotable sources of water to meet future
 23 demands in the North Shore area. BWS is proposing the increase of permitted use for the
 24 existing Waialua Wells potable water source in the Waialua aquifer of the North Shore area.
 25 This increased withdrawal from an existing source will be pursued as part of the BWS's
 26 development and operation of an integrated island-wide water system.

27
Table 4-2
Potential Groundwater Sources of Potable Water for the North Shore

Ground Water Source	Current Permitted Use (mgd)	Additional Permitted Use Requested (mgd)	Total Permitted Use Requested (mgd)	CWRM Aquifer System Area
Waialua Wells	1.73	0.27	2.00*	Waialua

28 *Pending CWRM approval of BWS Water Use Permit Increase Application January 26, 2010

29
²⁰ City and County of Honolulu Board of Water Supply. O'ahu Water Management Plan Overview.

**Table 4-3
Potential Alternative Nonpotable Water for the North Shore**

Resource	Minimum Estimate (mgd)	Maximum Estimate (mgd)	SCP Area Served
Wahiawa Reservoir	8.5	22.0	North Shore Central O'ahu
Recycled Water: Army, City, Wahiawa WWTP	2	4	North Shore Central O'ahu
Kawailoa Irrigation System (Data coming from Kamehameha Schools)	-	-	North Shore

2 Kaukonahua Stream minimum average month = 8.5 mgd; 2002 annual average = 22 mgd. Wahiawa Reservoir
3 storage capacity = 9,200 acre-feet or 3.066 mg

4
5 The CWRM has authority in all matters regarding administration of the State Water Code. By
6 City Charter, the BWS has the authority to manage, control and operate the water systems of
7 the City, and therefore should coordinate the development and allocation of potable and
8 nonpotable water sources and systems intended for municipal use on O'ahu as guided by the
9 City's land use plans and the OWMP.

10
11 The BWS Six-year Capital Improvement Program (CIP) for FY2010-FY2015 contains several
12 projects for the North Shore, including a proposed 16-inch main along Kamehameha Highway
13 from Pūpūkea to Waiale'e, and three other projects to replace aging waterlines. The existing
14 private water transmission system serving Mokolē'ia was built in the 1930s, and is in need of
15 replacement/upgrades to address water contamination issues and meet current fire protection
16 standards. BWS has indicated that the private owner would need to upgrade the system to
17 meet current standards before the BWS could consider acquiring the system. Consideration
18 has also been given for BWS to provide a water service connection with the system remaining
19 private.

21 4.2.1 Policies

22
23 The following policies seek to maintain an adequate supply of good quality water, retain
24 sufficient acreage in watersheds to insure infiltration into groundwater aquifers, and strengthen
25 the protection of water sources and watersheds.

- 26
27 • Protect and preserve the region's water resources, including groundwater, streams,
28 wetland areas, natural drainage systems, watershed areas and the shoreline and coastal
29 areas. Ensure that the high quality of the region's nearshore and coastal waters is

1 maintained to benefit recreation, the economy, the region's natural biological systems,
2 and future generations.

- 3
- 4 • Protect and manage the water resources that support wetland farming (taro and lotus
5 root) and diversified agriculture to ensure sufficient quantity and quality.
- 6
- 7 • Integrate management of all potable and nonpotable water sources, including
8 groundwater, surface water, storm water, and reclaimed water following City
9 development of plans and adoption of appropriate management processes in
10 accordance with City and State mandates.
- 11
- 12 • The BWS will either indicate that adequate potable and nonpotable water is available,
13 deny, or will require/recommend conditions that should be included as part of any
14 application for zone changes, master plans, subdivisions, and building permit approvals
15 for a new residential or commercial development on the North Shore, in order to assure
16 water service adequacy, dependability and efficiency.
- 17
- 18 • All developments are required to conserve water supplies by implementing water
19 efficiency and conservation measures, such as monitoring water use and water loss,
20 fixing leaks, installing low flow plumbing fixtures, drought tolerant landscaping, sub-
21 metering, and soil moisture sensors in irrigation systems.
- 22
- 23 • Rain catchments connected to roof gutters should be promoted in the North Shore for
24 landscape irrigation to supplement municipal water supplies. Rain catchments also
25 reduce stormwater runoff into streams and nearshore waters.
- 26
- 27 • An adequate supply of nonpotable water should be developed and required for irrigation
28 of large landscaped areas and other suitable uses on the North Shore, if available, in
29 order to conserve the natural water supplies of potable water for future generations.
- 30
- 31 • A sufficient amount of water should be allocated to meet the diversified agricultural
32 needs for the North Shore for the long-term support of a viable agricultural industry. The
33 agricultural industry's water needs are uncertain and substantial, yet important, to
34 support O'ahu's growing population by providing locally and organically grown produce,
35 Asian-based specialty crops, niche and off-season fruits and vegetables for export, and
36 bio-fuels for renewable energy systems. Future water demand depends on the types of
37 crops cultivated, the climate and the number of acres in cultivation.
- 38