

2. THE VISION FOR EWA'S FUTURE

This chapter presents a statement of the vision for Ewa's future, discusses the key elements of the vision, and presents illustrative maps and tables.

2.1 VISION STATEMENT

This vision for Ewa has two horizons. The first is a 25 year horizon, extending from the present to the year 2020. This is the horizon that was used to project likely socio-economic change in Ewa and to assess the infrastructure and public facility needs that will have to be met over that period.

The Vision to 2020. By 2020, the Ewa Development Plan Area shown above in Exhibit 1.1 will have experienced tremendous growth, and will have made significant progress toward providing a Secondary Urban Center for Oahu. Population will have grown from 43,000 people in 1990 to almost 125,000. Nearly 28,000 new housing units will have been built in a series of master planned communities.

Job growth will be equally impressive, rising from 17,000 jobs to over 64,000 in 2020. Oahu residents and visitors will be attracted to Ewa by a new university campus, the Ko Olina resort, ocean and waterfront activities at Ewa Marina, a major super regional park, and a thriving City of Kapolei which has retail and commercial establishments and private and government offices.

Beyond 2020. In the course of the Development Plan revision, it became clear that there was value in looking beyond 2020 to identify what Ewa should look like when "fully" developed.

Such a perspective helped identify where open space should be preserved within the urbanized area, where the rapid transit corridor should be located, and where to set the limits to development in Ewa for the foreseeable future. As such, this second horizon might be called the "built-out" horizon and is probably 40 or 50 years in the future.

Creation of An Open Space Network

Urban growth will be contained within a boundary which will protect prime agricultural lands along Kunia Road and within the West Loch Naval Magazine Blast Zone for diversified agriculture. Preservation of prime agricultural lands above H-1 and on the Waianae side of Kunia road for use in diversified agriculture will help retain open space and views, in addition to supporting economic diversification.

Within the Urban Growth Boundary, Ewa will be built around a regional system of open space and greenways so that Ewa has the feel of a network of communities "within a garden", as opposed to an unbroken suburban sprawl from Ko Olina to Ewa Beach.

Residents of these communities will enjoy easy access to the ocean through two major marinas, numerous beaches and a shoreline walkway from Ko Olina to Ewa Beach. Those interested in boating and ocean fishing will be able to use marina facilities and boat ramps at Ko Olina, Kalaeloa, and Ewa Marina.

Residents will be able to easily access beaches and swimming and surfing spots all along the entire Ewa coastline by road or a network of pedestrian paths and bikeways. Linear shoreline access will be provided along the coast from Ko Olina to Ewa Beach. At its center will be a major new regional park and recreation complex at Kalaeloa (on the former Barbers Point Naval Air Station) which will provide access to the ocean and beaches as well as offering significant active and passive recreation facilities.

A network of greenways will link the communities together, with landscaping along major roads such as Kapolei Parkway, North-South Road, and Fort Weaver Road, and pedestrian and bike paths along grassed drainageways and utility corridors.

Open space will be preserved in parks, golf courses, and agricultural areas which will also help to protect significant views. Wildlife habitats will be located at BPNAS, Ewa Marina, and West Loch.

Development of the Secondary Urban Center

A key component of the vision is the Secondary Urban Center which will provide a wide range of jobs located at visitor units and activity centers in Ko Olina and Ewa Marina, in heavy and light industrial areas near the Barbers Point Deep Draft Harbor, in offices and retail centers located at the City of Kapolei and community and neighborhood centers in residential communities, and in diversified agriculture activities located along Kunia Road and around the West Loch Naval Magazine.

At the heart of the Secondary Urban Center will be the City of Kapolei with an urban mix of commercial, office and residential uses. By 2020, it is projected that the City of Kapolei will house over 7,000 residents and provide work sites for 25,000 private jobs and 5,000 City and State jobs (located at the City's Civic Center). The City Center will become a regional commercial center, attracting customers from all parts of Oahu.

Many of the jobs in the City of Kapolei will be supported by development of the University of Hawaii West Oahu campus which is expected to have 7,600 students and 800 staff and faculty by 2020. Continued expansion of industrial uses at Campbell Industrial Park, Barbers Point Deep Draft Harbor, and Kapolei Business Park; and growth of the Ko Olina Resort and Ewa Marina to include over 3,700 visitor units by 2020 will also provide basic jobs which will support office and commercial jobs in the City of Kapolei.

Natural, Historic, and Cultural Resources

The Ewa Development Plan provides a vision for preservation, conservation, and enhancement of community resources.

Natural resources will be conserved through retaining natural drainageways, protecting valuable plant and wildlife habitats, and by conserving potable water through development of a non-potable water system for irrigation and industrial use and re-use of sewage effluent.

Cultural and historical resources will be preserved by retaining visual landmarks and significant views, and by preserving significant historic, cultural, and archaeological features from Ewa's past.

Building Communities

Growth in Ewa will mean community building, not just project development. Substantial residential growth (almost 28,000 new units by 2020) will occur primarily in master planned communities including the City of Kapolei, East Kapolei, Ewa by Gentry, Ewa Marina, Ewa Villages, Ko Olina, Laulani, Makaiwa Hills, Makakilo, and the Villages of Kapolei.

The master plans and design of new developments must demonstrate how they would create communities which interact with and support the vision for development of the entire Ewa region.

These communities must be designed to meet the needs of a wide range of families and age groups. Ample housing should be provided for families needing affordable units and starter homes as well as for those seeking large multi-family and single family units. Housing for persons of all ages will be needed, including students going to school at the UH - West Oahu campus, young families seeking their first home, and senior citizens wanting a retirement home close to their grandchildren.

Separate identities should be created for existing and planned communities by utilizing concepts such as open space, architectural design concepts, streetscape treatments and landscaping which also is linked to the regional open space and greenway network.

Communities Designed to Reduce Automobile Usage

Ewa will be developed with a transportation system which provides easy access to transit, uses traffic calming design, and encourages people to walk and bike, reducing the need for use of the automobile.

High density housing and commercial development will be built along a rapid transit corridor extending from the City of Kapolei to Waipahu. The high density residential and commercial uses centered at nodes along the corridor will support efficient use of buses and other forms of mass transit along the corridor, allowing some residents to minimize automobile use.

Sufficient land will be reserved in the corridor so that an at-grade separated rapid transit system could be developed on the corridor at some point in the future. (An at-grade separated system would **not** be elevated and would have its own exclusive right-of-way.)

Adequate Infrastructure to Meet the Needs of New and Existing Development

Public agencies and private developers will work together to create adequate infrastructure to meet the needs of the residential and working population of the area. Current deficiencies in roads, schools, and parks will be addressed, and new developments will not be approved until availability of key infrastructure can be guaranteed. Public-private mechanisms for financing infrastructure will be developed to support concurrent development of infrastructure.

Public agencies' planning for infrastructure need will be guided by where the Development Plan indicates residential and commercial development should occur first. See the discussion of Phasing in Section 2.2.10.

2.2 KEY ELEMENTS OF THE VISION

The vision for Ewa's future will be implemented through the following key plan elements:

- ! The Urban Growth Boundary,
- ! Retention of Prime Agricultural Lands,
- ! The Network of Open Space and Greenways,
- ! A continuous Shoreline Park along the Ewa coastline,
- ! A major Regional Park and Recreation Complex at Kalaeloa (at the former Barbers Point Naval Air Station),
- ! The Secondary Urban Center,
- ! A Network of Master Planned Residential Communities, including a Revitalized Ewa Villages,
- ! Communities designed to support non-automotive travel,
- ! A Rapid Transit Corridor,
- ! Conservation of Natural Resources,
- ! Preservation and Enhancement of Cultural Resources, and
- ! Phased Development to Ensure Adequate Infrastructure.

Each of these elements is discussed below.

2.2.1 URBAN GROWTH BOUNDARY

The Urban Growth Boundary for Ewa was drawn to give long-range protection from urbanization for over 3,000 acres of prime agricultural land and for preservation of open space while providing adequate land for urban development in Ewa for the foreseeable future. The Urban Growth Boundary for Ewa is illustrated in Exhibit 2.1, shown in greater detail on the four conceptual maps in Appendix A, and is described below.

Boundary Description. The mauka portion of the boundary follows the Shoreline Management Area boundary around Kahe Point, runs along the northern boundary of the proposed Makaiwa Hills Phase II project and the existing Makakilo development, and then follows the proposed extension of Makakilo Drive to the H-1 Freeway. It then follows the H-1 Freeway to the intersection with Kunia Road and then up Kunia Road to the boundary between the Central Oahu Development Plan and Ewa Development Plan Areas.

The makai portion of the boundary encloses the blast zone for the West Loch Naval Magazine.

Protection for Prime Agricultural Land. The Urban Growth Boundary protects prime agricultural lands along Kunia Road from urban development for the foreseeable future, providing an incentive for landowners to give long term leases to farmers. No proposals for urban uses will be considered outside the Urban Growth Boundary.

Open Space Network. Within the Urban Growth Boundary, significant acreage will be retained in open space in parks, wildlife habitats, golf courses, and natural and grass-lined drainageways. (Of the estimated 23,000 acres within the Urban Growth Boundary, over 6,000 acres or 27 percent of the acreage will be in open space.)

Capacity for Growth. Even with the amount of land reserved for agriculture, parks, and open space, there is ample capacity within the Urban Growth Boundary for residential, commercial, and industrial development extending beyond the 25-year horizon (2020).

As shown in Table 2.2, almost 8,400 acres are available for residential development; almost 800 acres for retail and office development; and nearly 1,250 acres for industrial development. Providing this capacity allows for competition and promotes more affordable residential, commercial, and industrial development. Development will be approved in phases to match the provision of infrastructure.

It should be noted that a portion of the lands indicated for development are in the State Agriculture Land Use District, and will have to be approved for transfer to the State Urban District by the State Land Use Commission before they can be developed.

2.2.2 RETENTION OF AGRICULTURAL LANDS

The closure of the Oahu Sugar Company in 1995 raised serious questions about how thousands of acres of former sugar lands in Ewa should be used in the future. The Ewa Development Plan protects the highest value prime agricultural lands in Ewa from urban development.

These high value lands are located in two areas: lands mauka of H-1 Freeway and on the Waianae side of Kunia Road, and lands in the Blast Zone of the West Loch Naval Magazine. State agencies indicated that these prime agricultural lands should have the highest priority for retention of all the prime agricultural lands in Ewa.

These 3,000 acres have been rated, in the most authoritative studies, as potentially among the most productive lands for diversified agriculture in the State. The State Department of Agriculture's November 1977 study, *Agricultural Lands of Importance to the State of Hawaii (Revised)*, indicates that the Kunia lands and a portion of the Magazine lands are "prime" agricultural lands which generally produce the largest yields and the best quality crops for the least expenditure of energy. The University of Hawaii Land Study Bureau's December 1972 bulletin, *Detailed Land Classification -Island of Oahu*, rated

productive capacity of the Kunia lands as either A or B and the Magazine lands as B or C (An A rating was given to the highest productivity lands and E was given to the lowest.)

These prime agricultural lands have unique advantages in weather, soil productivity, infrastructure, water availability from the Waiahole Ditch, and access to the local markets of Honolulu and to export markets through Honolulu International Airport.

Successful agricultural operations are currently being pursued on the former sugar lands in the Kunia area, including vegetables, melons, and other truck crops. In addition, the Hawaiian Sugar Planters' Association research facility at the corner of H-1 and Kunia Road is conducting studies on vegetable crops and forage to help diversified agricultural activities in the area. The Navy plans to request proposals for agricultural activities on its lands surrounding the Naval Magazine in the near future.

By protecting agricultural lands from urban development, an opportunity is created for retention and development of diversified agriculture on small farms and agricultural parks. Public-private partnerships will be needed to solve problems of lease terms and tenure, access to capital, research, and marketing if this vision is to be realized.

2.2.3 OPEN SPACE AND GREENWAYS

A network of Open Space and Greenways will link the Secondary Urban Center and associated employment centers, new master planned residential developments and revitalized established communities, an Ewa shoreline park, and a major regional park and recreation complex at Kalaeloa (on the former Barbers Point Naval Air Station). See the Open Space Map in Appendix A.

Table 2.1 lists the major components of the Ewa Open Space and Greenways Network.

TABLE 2.1: EWA OPEN SPACE AND GREENWAYS NETWORK

Mountain and Agricultural Areas

Waianae Mountains Conservation District
(Including the Nature Conservancy's Honouliuli Preserve)
Pu'u Makakilo
Pu'u Palailai
Agricultural Lands Mauka of H-1 and Waianae side of Kunia Road
Agricultural Lands in the West Loch Naval Magazine Blast Zone

Natural Gulches and Drainageways

Honouliuli Stream
Kalo'i Gulch
Makalapa Gulch
Makakilo Gulch
Awanui Gulch
Palailai Gulch
Makaiwa Gulch
Keoneoio Gulch
Limaloa Gulch

Shoreline Areas

Ewa Shoreline Park (Lateral Public Access/Easement from Ko Olina to Pearl Harbor)
Wetlands and Wildlife Habitats
Honouliuli National Wildlife Refuge
Apokaa Ponds
Batis Salt Marsh at Ewa Marina
Kahe Point Beach Park
Tracks Beach Park
Ko Olina Beach Parks (2 planned)
Barbers Point Beach Park
Oneula Beach Park
Ewa Beach Park
Iroquois Point Park (military)
West Loch Shoreline Park

Continued on next page

TABLE 2.1: EWA OPEN SPACE AND GREENWAYS NETWORK
(Continued)

Regional and District Parks

Ewa Marina District Park
Kalaeloa Regional Park (proposed for Barbers Point Naval Air Station)
Ewa Makahiko District Park (planned expansion)
East Kapolei District Park (planned)
Kapolei Regional Park
Pu'u Palailai Regional Park (planned)
Makaiwa District Park (planned)

Golf Courses

Ko Olina (one existing, one planned)
Makaiwa Hills (planned)
Makakilo (planned)
Kapolei
Ewa Villages
Ewa Gentry (planned)
Barbers Point (military)
Ewa Marina (planned)
Hawaii Prince
Puuloa
West Loch

Greenway Corridors

Farrington Highway
Kapolei Parkway
Historic OR&L Railway/Bikeway Corridor
North-South Road
Fort Weaver Road

The Open Space and Greenways Network:

- ! connects existing and planned communities through a system of linear greenbelts, consisting of drainage, transportation, and utility corridors,
- ! creates separate identities for existing and planned communities through use of landscape buffers, golf courses, wildlife preserves, agricultural lands, regional parks, and other large open spaces at the urban edges.

An important new element in the Ewa Open Space and Greenways Network will be an Ewa Shoreline Park that will stretch along the Ewa coastline from Pearl Harbor to Ko Olina. It will be anchored by a major Regional Park and Recreation Complex planned at Kalaeloa (at the former Barbers Point Naval Air Station).

2.2.4 KALAELOA REGIONAL PARK AND RECREATION COMPLEX AND OTHER SPORTS COMPLEXES

A major Regional Park and Recreation Complex at Kalaeloa will provide needed open space, recreational opportunities, and access to the beaches and ocean.

The Kalaeloa Center is envisioned as a major nucleus of community and economic activity, attracting visitors from all of Oahu. To be developed on surplus lands at Barbers Point Naval Air Station, it will feature a regional park and commercial sports and recreation facilities. Taking advantage of its extensive land resources, cultural sites, and spectacular ocean setting, it will offer extensive community-oriented recreation facilities, commercial recreation enterprises, and public facilities. Ocean recreation areas at Kalaeloa will feature coastal lands providing a setting for ocean sports, beach activities, picnicking and family camping.

Future development of the area should also include a sports recreation complex and possible replacement facility for the Aloha Stadium. A sports recreation complex should be developed to sustain and support a professional and semi-professional baseball team and baseball fields for use by the community. In addition, a new sports facility to replace Aloha Stadium should be identified through a community based planning process, in

conjunction with the major landowners in the area. Both facilities should meet the necessary infrastructure needs for the area.

2.2.5 SECONDARY URBAN CENTER

The Secondary Urban Center will provide a wide range of employment opportunities by 2020 and consist of:

- ! A major office, retail, and residential center at the City of Kapolei (projected to have over 25,000 jobs by 2020),
- ! A Secondary Civic Center with main headquarters for some State and City agencies (projected to have over 5,000 jobs),
- ! A major resort destination area at Ko Olina (projected to have 2,700 hotel units and 600 resort condo units of the 4,000 visitor units permitted),
- ! A deep draft harbor and major industrial center at Campbell Industrial Park/Barbers Point (projected to have over 7,000 jobs),
- ! Civilian reuse of Barbers Point Naval Air Station compatible with the rest of Ewa (projected to have almost 6,000 jobs), and
- ! The University of Hawaii West Oahu (projected to have 800 faculty and staff and 7,600 students).

See the Ewa Urban Land Use Map in Appendix A.

An Enterprise Zone could be used in the area in order to promote and support job development by offering businesses tax incentives to develop within a zone.

2.2.6 MASTER PLANNED RESIDENTIAL COMMUNITIES

A network of master planned residential communities will provide a wide variety of housing and accommodate the need for affordable housing. Master plans will guide new developments in the City of Kapolei, East Kapolei, Ewa by Gentry, Ewa Marina, Ko Olina, Laulani, Makaiwa Hills, and the Villages of Kapolei and the rehabilitation of existing structures and development of new housing in Ewa Villages. (See Exhibit 2.2 for locations.)

These master plans will incorporate planning principles and guidelines to preserve historic and cultural values, establish open space and greenway networks, and create well-designed, livable communities.

2.2.7 COMMUNITIES DESIGNED TO SUPPORT NON-AUTOMOTIVE TRAVEL

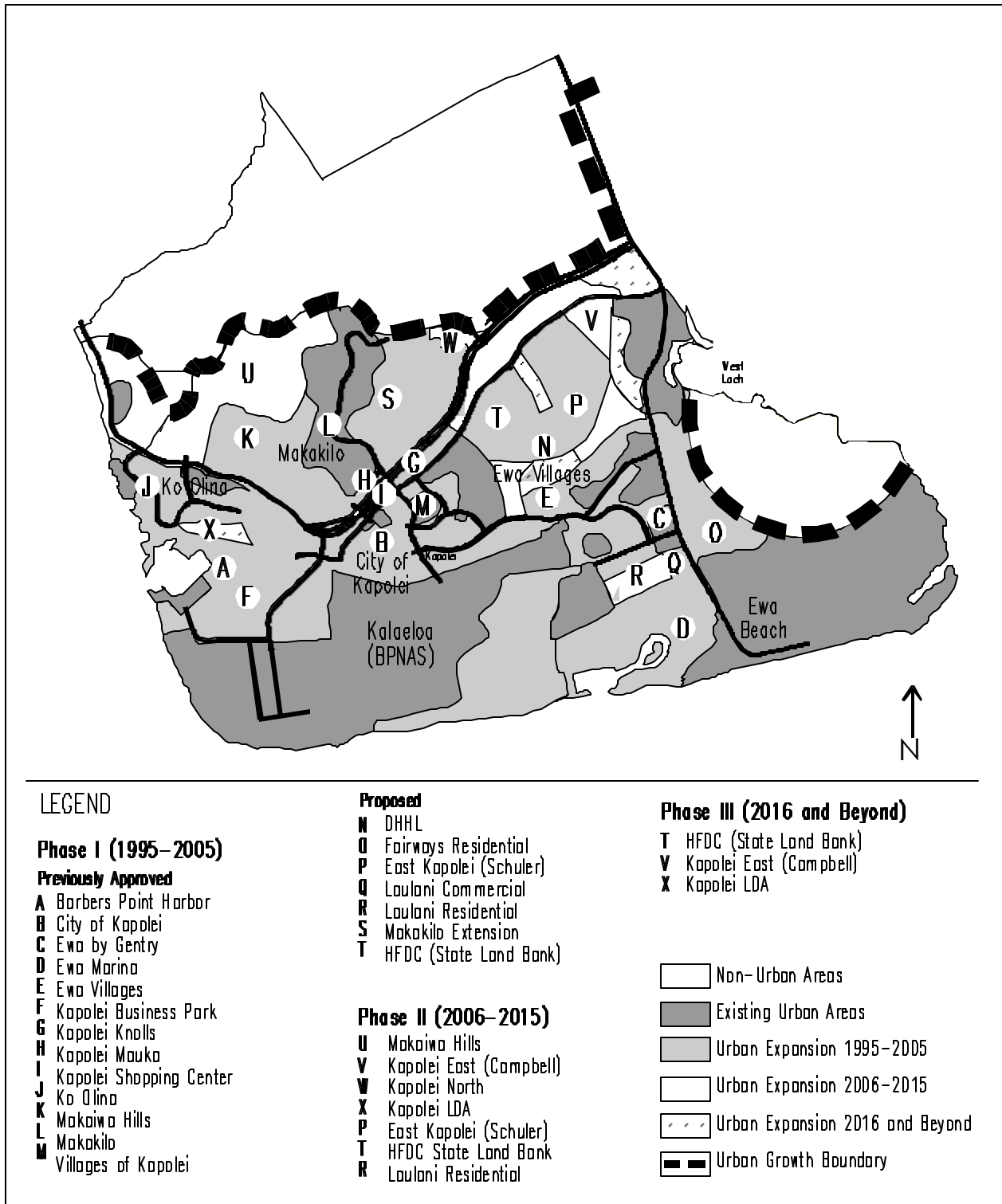
The master planned residential communities will be designed or redeveloped to support pedestrian and bike use within the community and transit use for trips outside of the community,

A Rapid Transit Corridor will link the City of Kapolei, the Villages of Kapolei, the UH West Oahu campus, and Waipahu. High density residential development will be built along the corridor within walking distance of the major nodes and transit stops.

High density residential and commercial development will be developed at six transit nodes whose general locations are indicated on the Public Facilities Map in Appendix A. Transit nodes are meant to be located at activity focal points which would serve as natural points for transferring from one transportation mode to another.

Through 2020, it is projected that transit service along the corridor will be provided by mass transit bus service running on roadways shared with other vehicles. However, sufficient right-of-way shall be reserved for the establishment, when needed in the future, of a separated at-grade rapid transit system. Such a system will require a 28 foot right of way along the route and a 75 foot right of way at transit station sites (at the transit nodes).

**Exhibit 2.2
Existing and New Master Planned Communities**



2.2.8 CONSERVATION OF NATURAL RESOURCES

Ewa Natural Resources, including potable water, coastal water quality, and wetlands and other wildlife habitat, will be conserved by:

- ! Developing a dual water distribution system with potable water for drinking and other clean water uses and non-potable water for irrigation and industrial use;
- ! Designing the regional drainage and wastewater treatment system to minimize non-point source pollution of the ocean and Pearl Harbor; and
- ! Protecting valuable habitats for endangered waterbirds located in Batis Salt Marsh at Ewa Marina and in the West Loch of Pearl Harbor and for endangered plants located within Barbers Point Naval Air Station and elsewhere.

See Exhibit 3.2 in Chapter 3 for a mapping of key natural resources.

2.2.9 PRESERVATION AND ENHANCEMENT OF HISTORIC AND CULTURAL RESOURCES

Ewa's Historic and Cultural Resources will be preserved and enhanced by:

- ! Preserving significant historic features from the plantation era and earlier periods, including:
 - [] The Ewa Villages and other remnants of the plantation era,
 - [] The OR&L right-of-way,
 - [] Lanikuhonua, and
 - [] Native Hawaiian cultural and archaeological sites; and by

- ! Retaining visual landmarks and significant vistas, including:
 - [] Distant vistas of the shoreline from the H-1 Freeway above the Ewa Plain,
 - [] Views of the ocean from Farrington Highway between Kahe Point and the boundary of the Waianae Development Plan Area,
 - [] Views of the Waianae Range from H-1 Freeway between Kunia Road and Kaloi Gulch and from Kunia Road,
 - [] Views of na pu'u at Kapolei, Palailai, and Makakilo,
 - [] Mauka and makai views, and
 - [] Views of central Honolulu and Diamond Head.

2.2.10 PHASED DEVELOPMENT

Phased development of Ewa will support the City of Kapolei's development and conserve scarce infrastructure dollars. It shall be characterized by:

- ! **Increased land supply** to support economic development and job creation and to accommodate major residential growth with an emphasis on providing affordable housing and a diversity of housing types;
- ! **Moderate growth of commercial centers in Urban Fringe Areas** to primarily serve the needs of the surrounding residential communities;
- ! **Phasing of Residential and Commercial development** to support development of the Secondary Urban Center. See the Ewa Phasing Map in Appendix A and Table 2.2 below;
- ! **Adequate Facilities Requirements** as a condition for zoning approval to ensure that development does not outpace infrastructure development; and
- ! **Coordinated Public-Private Infrastructure and Project Development** that supports the directed growth strategy of the General Plan. Examples of project development include construction of the State and City offices in the Kapolei Civic Center, and development of the University of Hawaii West Oahu Campus.

Table 2.2 shows the approximate land area and number of housing units of projects shown on the Land Use Map and Phasing Map in Appendix A. The projects are categorized by the time period or Phase in which they can apply for a zoning change.

It is important to emphasize that these projects are **not** necessarily expected to be completed within the phase in which they are listed. It is expected that housing development activities at many projects would continue for ten years or more after the

initial zoning approval, and that over half of the projected housing supply would be provided after 2005.

The table shows the projected number of housing units and the approximate gross acreage by land use category for previously approved and proposed projects. These represent general indicators of the land areas involved and possible densities. In determining actual land uses and densities, project planning and design and review of project zoning change applications should be directed by the planning principles and guidelines provided in Chapters 3 and 4.

TABLE 2.2: PHASING OF EWA DEVELOPMENT ⁽¹⁾

Project Area	Housing Units	Land Area (Gross Acres)				Total
		Resid.	Resort	Comm.	Ind.	
Phase I (1997 – 2005) ⁽²⁾						
Previously Approved						
Barbers Point Harbor					114	114
City of Kapolei	2,000	118		370		488
Ewa by Gentry	5,387	554			13	567
Ewa Marina	4,850	500	40	82	38	660
Ewa Villages	1,760	182				182
Kapolei Business Park					1,020	1,020
Kapolei Knolls	418	72				72
Kapolei Mauka	750	50		14		64
Kapolei Shopping Center				55		55
Ko'Olina	8,700	354	85	100		539
Makaiwa Hills	1,066	354		30		384
Makakilo	2,706	808		7		815
Villages of Kapolei	4,020	283		36		319
TOTAL	31,657	3,275	125	694	1,185	5,279
Proposed Projects						
DHHL	1,600	200				200
East Kapolei (Schuler)	4,000	350		10		350
Fairways Residential	900	100				100
HFDC (State Land Bank)	4,000	750				750
Laulani Commercial				20	30 ⁽⁵⁾	50
Laulani Residential	1,100	150				150
Makakilo Extension	200	100				100
CUMULATIVE TOTAL	43,400	4,900	130	720	1,220	7,000
Phase II (2006 – 2015) ⁽³⁾						
East Kapolei (Schuler)	4,000	350		10 ⁽⁶⁾		350
HFDC (State Land Bank)	3,700	300		20		350
Kapolei East (Campbell)	2,000	500		50		550
Kapolei LDA	500	50				50
Kapolei North	1,200	150				150
Makaiwa Hills	2,000	1,300				1,300
CUMULATIVE TOTAL	56,700	7,550	130	800	1,220	9,700
Phase III (2016 and beyond) ⁽⁴⁾						
Kapolei East (Campbell)	6,300	300				300
Kapolei LDA	1,300	50				50
CUMULATIVE TOTAL	64,300	7,950	130	800	1,220	10,050

NOTES:

(1) For proposed projects in all phases, housing units are rounded to the nearest 100; residential and total acreage to the nearest 50; all other acreage to the nearest 10. Parts may not sum to totals shown due to rounding.

(2) Lands included in the first phase of development (1997 – 2005) would be eligible for processing zoning changes and other development applications starting with adoption of the Plan.

For previously approved projects, acreages shown refer to the entire project area (including areas already built) whereas housing units exclude units built before July 1994.

(3) Lands in the second phase of development (2006 – 2015) would be eligible for processing zoning changes and other development applications far enough in advance so that housing construction could begin in 2006.

(4) Lands in the third phase of development (2016 and beyond) would be eligible for processing zoning changes and other development applications far enough in advance so that housing construction could begin in 2016.

(5) Intended for service-oriented light industrial use rather than heavy industrial.

(6) Intended for neighborhood commercial use rather than office commercial.