

FINAL ENVIRONMENTAL ASSESSMENT
WAIMEA WASTEWATER TREATMENT PLANT
EXPANSION, PHASE 1

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SUMMARY SHEET

Project: Waimea Wastewater Treatment Plant Expansion Phase 1, Waimea, Kauai, Hawaii. The purpose of this project is to construct a previously planned expansion of the existing WWTP (Wastewater Treatment Plant). The proposed expansion project would increase the capacity of the plant from an existing 300,000 GPD (gallons per day) to approximately 700,000 GPD by adding treatment processes such as a membrane bioreactor, a mixed bed biofilm reactor or other similar processes to the existing plant; adding a second backup injection well for effluent disposal in the event of need; upgrading the effluent quality to R-1 in order to provide the greatest number of reuse applications possible, particularly for irrigation; and consideration of expansion of the existing effluent isolation ditch and installation of additional monitoring wells. The project includes monitoring of groundwater. Structures would be built above base flood elevations.

Short-term Effects: Short term effects will occur during construction. Such effects may include noise, odors, dust and increases in traffic due to construction and transport of materials.

Long-term Effects: There are no significant long-term adverse or cumulative impacts to geology, hydrology, flora and fauna, water quality, historic resources, traditional or cultural practices, air quality, noise quality or socio-economic resources. There are no hazardous or toxic substances at this location. The areas adjacent to the project site have been previously modified by industrial cultivation of sugar cane or other crops for about 150 years. Exposed areas will be grassed and allowed to revegetate to restore surface areas after construction. The completed project will provide for the sanitary treatment of domestic and commercial wastes generated from the disposal of residential and commercial sewage in Waimea originating in urban developments which are included in the general plan of the County of Kauai. Such urban developments include initial phases of Kikiaola. The proposed project could potentially serve Kekaha if the sewer system should be extended from the Waimea WWTP to Kekaha in the future.

This Environmental Assessment concludes that the proposed action does not constitute an action which significantly affects the quality of the human environment. Therefore, neither a Federal nor a State of Hawaii environmental impact statement is required. This environmental assessment complies with the requirements of the federal Clean Water State Revolving Fund (CWSRF) and includes a finding of no significant impact (FONSI).

Location	Waimea, Kauai, County of Kauai
Tax Map Key	4-1-2-006:036, 037
Project Site	Approximately four acres.
State Land Use District & Zoning	Agriculture Land Use District; Interior zoning.
Ownership	County of Kauai
Approving Agency	Department of Public Works, County of Kauai, 4444 Rice Street, Suite 275, Lihue, Hawai'i 96766.
Proposing Agency	Department of Public Works, County of Kauai, 4444 Rice Street, Suite 275, Lihue, Hawai'i 96766.
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Required Permits and Approvals	DOH – Underground Injection Control Permit; DOH - Possible NPDES permits for dewatering and/or construction site more than one acre stormwater; DOH - General Permit and Engineering Plan Approval; County Planning Commission Use Permit; Building/grading permits.

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CHAPTER 1 - PURPOSE AND NEED FOR THE PROPOSED ACTION

1.1 INTRODUCTION

This Environmental Assessment (EA) is prepared in accordance with Chapter 343 of the Hawaii Revised Statutes. The EA considers the impacts of the Proposed Action on the environment and the community. The document states the purpose and need for the Proposed Action in Section 1.2. The Proposed Action and alternatives of the Proposed Action are described in Chapters 2 and 3. The affected environment in which the Proposed Action is situated is described in Chapter 4, while the environmental consequences of the alternatives of the Proposed Action are discussed in Chapter 5. Chapter 6 offers a summary of the environmental impacts related to the Proposed Action. Chapter 7 states the expected determination. Chapter 8 lists the agencies and persons consulted. Chapter 9 includes a list of references, a glossary of acronyms, and the EA preparers.

The Proposed Action, by the County of Kauai, is construction of a project to expand the existing Waimea Wastewater Treatment Plant (WWTP). The existing Waimea WWTP has a capacity of 300,000 GPD (gallons per day) and is presently operating at approximately 80 percent of its capacity. The existing capacity is insufficient to accommodate sewage flows from developments and land uses planned by the County which are identified in the Kauai General Plan.

Due to limited available WWTP capacity since the 1990's, the County Department of Public Works has restricted building permit issuance in Waimea to one residential housing unit per existing lot of record.

In order to meet the level of service required by the developments in the General Plan, an increase in capacity of the existing Waimea WWTP to 700,000 GPD is proposed as described in this Environmental Assessment.

In addition to an increase in capacity, the Proposed Action is to upgrade the quality of the treated wastewater (effluent) from its present quality of R-2 water to R-1 water, as defined in the State of Hawaii, Department of Health, *Guideline for the Treatment and Use of Recycled Water* (May 15, 2002). This upgrade will allow for greater flexibility in the reuse of the effluent, particularly for irrigation.

1.2 PURPOSE AND NEED

The purpose of the Proposed Action is for public health and safety by adding capacity to the existing WWTP to meet the requirements of treatment of wastewater from developments approved in the Kauai General Plan.

CHAPTER 2 - DESCRIPTION OF THE PROPOSED ACTION

2.1 Project Location

The project site is on the island of Kauai in the Hawaiian Islands, central Pacific Ocean. The project is located near Waimea, Island of Kauai, State of Hawaii. TMK (Tax Map Key) 4-1-2-006:036, 037; and latitude N21 degrees, 57", 48"; longitude W159 degrees, 40', 42"; just inland (800 feet north) of Kaunualii Highway, about 0.25 miles west of Waimea (Figure 1). Two land parcels, both owned by the County of Kauai, are involved (Figure 2). They are the existing WWTP (parcel 036, 4 acres) and the combined wastewater pump station (WWPS) and backup injection well (parcel 037, 0.12 acres, approximately 800 feet south of the WWTP).

2.2 Project Features

The existing Waimea WWTP (Figures 3 and 3A) capacity of 300,000 GPD (gallons per day) would be increased to 700,000 GPD adding treatment processes such as a membrane bioreactor, a mixed bed biofilm reactor or other similar processes to the existing plant; adding a second backup injection well for effluent disposal in the event of need; and upgrading the effluent quality to R-1 in order to provide the greatest number of reuse applications possible, particularly for irrigation.¹ The quality of the effluent would be upgraded from R-2 water to R-1 water to allow for greater flexibility in reuse of the effluent.² These improvements require modification of parts of the existing WWTP and addition of new structures including electrical and mechanical equipment. The footprint of the proposed expansion project is shown in Figure 2. Included in the expansion is: Construction of a second backup injection well on the County-owned site of the existing WWPS and backup injection well where additions would include the actual well itself and its associated piping; consideration of additional monitoring wells on private property; and consideration is being given to expansion of the existing effluent isolation ditch which is on private property.

The proposed project expansion would be constructed on the existing county-owned parcels of land which are presently used for the same purposes, wastewater treatment, backup effluent disposal, and monitoring well as the proposed project components. Additionally, expansion of the existing isolation ditch which is in private property nearby the existing WWTP would require the land owner's permission.

The existing WWTP and WWPS were constructed in 1972. The injection well including piping from the WWTP to this well was constructed in 2007. The WWTP provides "secondary" treatment to produce effluent at R-2 water quality by removal of solids, aeration, final settling, and chlorination. The chlorinated effluent is pumped to reservoirs and the sludge is routed to a holding tank for stabilization and then to a drying bed for dewatering with ultimate disposal at the landfill.

Effluent from the WWTP is pumped to the lower of Kikiaola's two existing reservoirs where it is mixed with stored water which originates from both storm water and an irrigation ditch. This mixed water is used for irrigation in the surrounding areas. This method of effluent disposal is shifting from the above-described method to use of an effluent isolation ditch (about 600 feet to the northwest of the WWTP) which is intended to reduce the risk of discharge of the reservoir-mix into the ocean during intense rainstorm events. The effluent isolation ditch isolates effluent and forms a source for irrigation water to be used on nearby field crops.

The existing backup injection well was installed to serve as a means of effluent disposal which could be required during intense rainstorms in the event that the effluent disposal ditch is not capable of handling the effluent. The proposed second backup injection well would serve the same purpose and would be needed because of the proposed increase in the WWTP capacity.

¹The decision on the process design would be made during selection of a design-build contractor.

²R-1 water is acceptable for the greatest number of reuse applications; R-2 for a lesser number. R-1 level of treatment was in the past known as tertiary treatment and R-2 as secondary treatment.

The effects on ground water from the disposal of effluent via the injection wells (which may occur during periods of severe storm events) will be monitored by an existing monitoring well. The addition of monitoring wells is under consideration and additional monitoring wells may be installed as part of the proposed project.

2.3 Project Schedule and Cost

Start of construction of the proposed project may be in 2009. This proposed schedule is dependent on permitting, agency approvals, funding authorizations and successful contract awards. Construction could start later. Construction is estimated to require less than two years duration. The cost of the proposed project is estimated to be approximately \$12 million and the anticipated source of funds would be County-issued general obligation bonds. The project may be eligible for, and the County may apply for, an SRF (State Revolving Fund) loan which are available per the federal Clean Water Act. This EA incorporates CWSRF (Clean Water State Revolving Fund) “cross-cutter” language and environmental assessment items to fulfill this requirement (Chapter 7).

2.4 State Revolving Fund (Clean Water Act)

This EA complies with the federal environmental authorities or “cross-cutter” regulations as they apply to the Clean Water State Revolving Fund (CWSRF) loan program. See Chapter 7 for a detailed discussion.

2.5 Required Permits and Approvals

Following is a list of formal permits and approvals required.

- A. State of Hawaii Department of Health (DOH). An Underground Injection Control (UIC) Permit is required for the proposed second backup injection well. An NPDES construction activity stormwater permit for an area greater than one acre is required. An NPDES construction activity for disposal of dewatering effluent might be required if dewatering is necessary, but such discharges might take place in surround agricultural fields where there are no state or federal waters in which case such a permit would not be required. A General Permit and Engineering Plan Review and approval is required for WWTP construction. An updated NGPC (Notice of General Permit Coverage) will be required.
- B. County of Kauai, Department of Public Works (possible grading and/or building permits); Planning Department/Planning Commission (possible use permit).

Coordination has been carried out or is underway³ with:

State of Hawaii, Department of Health.

County of Kauai, Department of Public Works and Planning Department.

Office of Hawaiian Affairs.

State of Hawaii, Historic Preservation Division.

³Coordination is underway via the Chapter 343 EA review process.

CHAPTER 3 - ALTERNATIVES CONSIDERED

The Kauai Department of Public Works has prepared a Wastewater Treatment Plant Facility Plan for the Waimea WWTP and this “FacPlan” is in the process of finalization. The “FacPlan” is the document which implements the requirements of the Kauai General Plan with regard to wastewater disposal for Waimea and surrounding areas. The alternatives described in this EA have their origin in the “FacPlan”.

A critical conclusion of “FacPlan” was that it was not feasible to increase the capacity of the Waimea WWTP to accommodate developments and land uses in Kekaha which are included in the Kauai General Plan. This alternative was rejected because of the high costs of providing a wastewater collection system within Kekaha, including several pump stations, and a transmission line from Kekaha to the Waimea WWTP. The engineering analysis in the “FacPlan” concluded that a lesser cost alternative would be to construct a separate WWTP at Kekaha. Therefore, the present EA pertains only to the Waimea WWTP does not address wastewater treatment for Kekaha.

The alternatives considered in this EA are discussed below.

- 3.1 NO ACTION** - The No-Action alternative is the existing condition whereby the Waimea WWTP is operating at approximately 80 percent capacity and will not be able to treat wastewater from land uses and developments which have been incorporated into the Kauai General Plan.⁴
- 3.2 ALTERNATIVE 1 – Minimal Expansion at the Waimea WWTP.** In Alternative 1, the proposed expansion project would increase capacity from 300,000 GPD to 360,000 GPD. This alternative would provide treatment for existing undeveloped parcels in Waimea. This alternative was not selected because it would not provide any treatment capacity for Kikiaola’s initial phases of development as provided for in the Kauai General Plan.
- 3.3 ALTERNATIVE 2 - (Recommended and Preferred Alternative) Moderate Expansion at the Waimea WWTP.** In Alternative 2, the proposed expansion project would increase capacity from 300,000 GPD to approximately 700,000 GPD to treat the increase in wastewater flows which can reasonably be expected to occur in the near-term future as projected by the Kauai General Plan. Such projections include initial phases of the Kikiaola development. Construction of the preferred alternative also allows and will not foreclose additional future expansion which could accommodate the ultimate build-out of proposed land uses and developments in the Kauai General Plan. Additional treatment capacity can be added to the proposed expansion project later on an as-needed basis. Additional monitoring wells may be installed.
- 3.4 ALTERNATIVE 3 - Maximum Expansion at the Waimea WWTP.** In Alternative 3, the increase in capacity would be from the existing level of 300,000 GPD to 1,360,000 GPD which would reflect the total build-out of all proposed land uses and developments in the Kauai General Plan. This alternative was not selected because of the high cost of providing a large wastewater treatment capacity which might not be required for many years into the future.

Alternative 2 is the recommended alternative for this proposed project because it is the most cost-effective solution to the present problem of limited capacity remaining at the Waimea WWTP, it

⁴The Kauai General Plan is discussed in Chapter 4 of this environmental assessment.

does not result in significant loss of environmental (natural, social or economic) values, it requires no additional land be acquired other than the existing parcels presently used for wastewater treatment at Waimea, it fulfills the needs of the Kauai General Plan for the present and near-term future, and it does not foreclose installation of additional capacity at a later date if and when such capacity is required to meet the full build-out which is projected based on the Kauai General Plan.

CHAPTER 4 - AFFECTED ENVIRONMENT

This Chapter presents a description of the environment which may be impacted by the Proposed Action. The descriptions are representative of the existing (baseline) environment and are based on historical knowledge, technical studies, previous environmental studies, and site visits.

4.1 Climate

The climate of Hawaii is moderate and can be characterized into two seasons: a) summer, from May 1 to October 31; and b) winter, from November 1 to April 30. The summer months are normally warm and dry with persistent Trade winds (northeasterly winds), while the winter months are wetter and cooler interspersed with Trade winds and Kona winds (southerly winds). In Hawaii trade winds typically have a range from 4 to 12 miles per hour, and rarely exceed 24 miles per hour, though peak gusts have been recorded to 51 miles per hour.

The average annual temperature at Kekaha (nearest weather recording station to the WWTP and similar in climate) varies between 71°F (coolest month) and 79°F (warmest month). Average annual rainfall at the project site is approximately 21 inches.⁵ Pan evaporation annually averages about 74 inches.

The project site is a dry, windswept area which can receive high intensity rainfall and which is subject to sheet flows overland during intense rainstorms.

4.2 Geology and Groundwater Sources; Underground Injection Control Line

Geology of the project site reflects the volcanic nature of the Island of Kauai at the eastern end of the Mana plain and is on sediments which form a caprock which is approximately 310 feet thick at the location of the WWTP. The caprock sediments have poor permeability and serve to contain the Napili aquifer beneath them.

The WWTP project site is mauka of, and the WWPS site with the injection well is makai of the underground injection control line (Figure 4) and the existing backup injection well has previously been approved by the State Department of Health.

4.3 Topography

The project site is located at an elevation about 6 feet above mean sea level on a wide and flat plain with very little relief and which is slightly sloped towards the ocean. There are no defined stream channels but there is an extensive ditch system. The entire surrounding area has been somewhat re-contoured over a 150 year period during the cultivation of sugar cane with irrigation via furrows and open ditches.

4.4 Flora

The project site (both land parcels) has only grass which is maintained about a one inch height by mowing. There are no trees or shrubs on the sites. Surrounding vegetation is largely cultivated fields of row crops including seed corn.

4.5 Fauna

No fauna were observed on the project site. There are likely to be field mice or rats, and common field birds in the area and there may be overflights by seabirds.

⁵Climate data source, State of Hawaii *Data Book 1995*. Kekaha is nearest station of record to Waimea and is similar in climate.

4.6 Endangered Species

The project area has been extensively disturbed in the past. There are no listed, threatened or endangered species at these locations and there are no critical habitats (Figure 5).

4.7 Historical and Archaeological Resources; Traditional and Cultural Practices; Public Access

There are no known historic sites or other undocumented archaeological surface remains at or near the proposed project area. There are no known pre-historic sites or burials at or near the proposed project. Roads from the highway are open and ungated allowing access, but the subject facilities are fenced and gated for security.

This area in general was probably traversed in ancient times, but may not have been a location of great activity or permanent settlement. For example, Pukui writes of people traveling from the uplands to the coast to the Keanapuka (Figure 6) Canoe Landing⁶ to exchange upland products such as taro for fresh fish.⁷

The land area of the proposed project and environs has been in cultivation of sugar cane from the 1850's until recent times. The site of the proposed project is located in the eastern edge of the Mana Plain which is a low-lying coastal area subject to flooding and not a location of prime habitation in the past. Pukui and Elbert in their definition of the place-name "Mana", wrote, "Dry western end of Kauai, where an older sister of Pele, Namakaokahai (the eyes of Kahai), introduced the *kaunaoa* dodder (Pukui & Elbert, p. 144)." Neal wrote, "In the old literature of Hawaii it [*kaunaoa* or dodder, *Cuscuta sandwichiana*, a parasitical vine] is often called 'the motherless plant' because it is a parasite. 'Kaunaoa, vine, vine of Mana; how I love that orphan vine' is a proverb applied to a loved individual who has no home or family (Neal, p. 710-711)."⁸

The area between Waimea and Kekaha (location of the existing WWTP and proposed project) was described in Handy (p. 408) quoting Captain George Dixon (1789) as: "...'very dry,' and 'the soil 'light red,' mostly covered with coarse grass". Again, Handy (p. 408) referring to Portlock (1789) notes that Portlock found nothing of significance: "...walking along the westward sea plain a month or two earlier in search of a sheltered harbor on this completely exposed coast, recorded nothing of significance, being disappointed in his purpose."

No modern cultural practices were observed or reported by persons familiar with the project sites or in the vicinity of the project sites. Access to the mountains or the shoreline is not impeded by the proposed projects which are adjacent to the highway or an open dirt road.

4.8 Watershed

The proposed project is located in the Kapilimao watershed which totals 3,982 acres (Figure 7). The project site is less than one tenth of one percent of the area of the total watershed. There are no defined stream channels at or near the project site. Prior industrial agriculture grading of the landscape has re-directed stream (all non-perennial) channels originating in the uplands into irrigation ditches which served to provide water for the open furrow type of irrigation used for sugar cane cultivation in the past. These ditches exist today and are used by farms for irrigation. The existing isolation ditch is intended to be the location where R-1 effluent from the WWTP can be accessed by agriculturalists or others for reuse of the R-1 water. The isolation ditch is isolated from the existing irrigation ditches. In the event of a severe rainstorm, the effluent would be disposed via

⁶A Keanapuka prehistoric site complex is described as being just south of Nohili Point (about 10 miles west along the coast from the Waimea WWTP) and it is likely that the Keanapuka Canoe Landing referred to by Pukui was at this location. See: U.S. Department of Energy, *Kauai Test Facility Environmental Assessment*, p. J.3.2..

⁷Pukui, No. 2910, p. 319, 1983.

⁸An "old literature" source for this phrase is found in Pukui, No. 986, p. 106, 1983.

the injection wells and not allowed to mix with other irrigation water, or with overland sheet flow of storm water runoff.

4.9 Plans, Land Use and Ownership

The project site is located in the State of Hawaii, Land Use District Classification of Agriculture (Figure 8), owned by the County of Kauai which has designated the two land parcels of the existing WWTP and pump station/back-up injection well as an “Interior” land use zone (Figure 9) which is appropriate for use as a public wastewater treatment facility. The surrounding lands are owned by Kikiaola Land Company

The Kauai General Plan incorporate’s projections of the required “...basic services that will be needed to support projected economic and population growth by the year 2020 (p. 7-1).” The Plan notes that:

- a) The Waimea WWTP is operating at full capacity and under existing conditions it is not able to accept additional users which and that this inability thus restricts new development in Waimea (p. 7-16);
- b) New facilities are needed at the Waimea WWTP to serve new developments in Waimea and Kikiaola (p. 7-18).

The General Plan shows the project site and surrounding lands as an “Open (Figure 10)”⁹ land use designation with land uses such as open space, parks, agriculture or conservation (Figure 11).¹⁰ The nearest “heritage resource” is the “scenic roadway corridor”.

The Kauai Department of Public Works has prepared a Wastewater Treatment Plant Facility Plan for the Waimea WWTP and this “FacPlan” is in the process of finalization. The “FacPlan” is the document which implements the requirements of the Kauai General Plan with regard to wastewater disposal for Waimea and surrounding areas. The proposed expansion projects as described in this EA have their origin in the “FacPlan” and the projects as described in this EA are those which are recommended in the “FacPlan”. All projections of need and descriptions of alternatives and recommended plans with regard to wastewater treatment at Waimea are described in the “FacPlan” which is available for review at the Department of Public Works, Wastewater Management Division office. Also, see the following section on “Population” for more discussion of population and dwelling unit forecasts.

4.10 Wetlands

There are no wetlands shown on the national wetlands inventory maps for this location.

4.11 Population

Surrounding areas are agricultural lands and the nearest populated or residential area is at Waimea a distance of about 0.3 mile from the project site. In the year 2000 census, the population of Waimea was 1,787 which was a decrease from the 1990 population of 1,840. The downward trend of the 1990 to 2000 decade is not anticipated to continue into the future based on the overall growth which has occurred from 2000 to the present on Kauai and in the State of Hawaii overall. Between 2000 and 2006, Kauai’s population increased from 58,305 to 63,004 for a total increase in that 6-year period of 8 percent, or about a 1.3 percent increase per year. The population at Waimea is likely to follow the island-wide trend of growth, though perhaps not at the same rate. In addition,

⁹Kauai General Plan, West Side Planning District Land use Map.

¹⁰Kauai General Plan, West Side Planning District Heritage Resources.

residential developments proposed for the Waimea WWTP service area include the proposed projects of Kikiaola of over 250 single family homes and up to 300 transient/hotel units during the initial phase of development. The following table compares the existing and projected units in Waimea and Kikiaola which are in the service area of the Waimea WWTP.

TABLE					
Existing & Projected Dwelling & Transient/Hotel Units - Waimea WWTP¹¹					
Year	Waimea		Kikiaola		Waimea & Kikiaola
	1994	2020	1994	2020	2020 Total
Single Family	469	497	--	253	750
Additional Units	--	70	--	--	70
Multi-Family	10	19	--	81	100
Transient/Hotel	47	47	--	303	350

4.12 Flood Hazard, Tsunami and Flood Classifications

The project site and surrounding areas are shown as Zone AH (Figure 12). The source of the Zone A designation is the Federal Emergency Management Office, Flood Insurance Rate Maps which define Zone AH which has a base flood elevation of 8 feet above mean sea level. Zone AH is an area of minimal flooding with flood depths of 1 to 3 feet.¹²

4.13 Hazardous and Toxic Wastes

There are no known Hazardous or Toxic Wastes disposal sites in the area. State of Hawaii Department of Health records¹³ do not list any toxic or contaminated releases in this area. The State of Hawaii Department of Health also does not list any reports of problems with leaking USTs (underground storage tanks) at the project location or vicinity.¹⁴

4.14 Air Quality

In general, outdoor air quality at the project site meets federal and state standards because of consistent trade winds and the absence of significant industrial sources of air contamination. Odors have not been a problem at this WWTP.

4.15 Noise

Low noise levels in this location are typical of agricultural fields where there is no commercial, industrial or residential development and with low density traffic patterns.

4.16 Water Quality

No surface water sources are present. The proposed project is seaward of the underground injection control line. Effluent in the isolation ditch is not allowed to mix with other surface irrigation

¹¹ *Waimea WWTP Facilities Plan*, 2008 rev., these are the present and anticipated units which make up the service area of the Waimea WWTP.

¹² Letters (see Appendix B) from the Kauai Building and Engineering Divisions per FIRM (Panel 258E September 16, 2005)

¹³ State of Hawaii, Department of Health, HEER (Hazard Evaluation and Emergency Response Office), database 1990 to present.

¹⁴ State of Hawaii, Department of Health, Hazardous and Solid Waste web site for leaking underground storage tanks.

water in surrounding ditches and in the event of a severe rainstorm, the effluent will be disposed via the injection wells.

4.17 Coastal Zone Management

The entire State of Hawaii (including all land area and extending three miles seaward from the shore) is within the coastal zone as designated by the National Oceanic and Atmospheric Administration and the State of Hawaii Coastal Zone Management Program. However, the project site (both parcels) is not within the special management area (SMA, Figure 13)) of the County of Kauai, and there is no requirement for a permit to perform construction in the SMA.

4.18 Traffic

The Waimea WWTP generates little traffic, only employees and occasional maintenance and service vehicles.

4.19 Solid Waste

There are no solid waste facilities in the project area or watershed. The nearest sanitary landfill is at Kekaha.

4.20 Sanitary Sewer

The project is part of a sanitary sewer system serving with Waimea community. There are lines serving the developed areas in Waimea.

4.21 Stream Water

There are no streams in the project area.

CHAPTER 5 - ENVIRONMENTAL CONSEQUENCES

5.1 Climate

None of the alternatives are anticipated to have any significant impacts on climate, regional or local. The proposed project does not require major alterations of the terrain, ecosystems or biological habitat.

5.2 Geology and Groundwater Sources

None of the alternatives are anticipated to have any significant impacts on geology or groundwater sources, regional or local. However, as a precautionary measure, a monitor well was constructed in the *mauka* (mountain-ward) northeast corner of the WWTP site to monitor any change in the groundwater quality that could be attributed to disposal of effluent into the backup injection well. The proposed second backup injection well will be at the same site as the existing injection well, which is seaward of the UIC line. These injection wells would only be used in the event that the primary method of disposal of reusing the effluent for irrigation becomes overloaded due to emergencies, such as severe rainstorms. Such occasions are expected to be infrequent. Installation of additional monitoring wells is under consideration and they would be installed as part of the proposed project. Testing of the monitoring well is planned annually, but has not yet been done because there has been no use of the existing injection well since its installation. The purpose of the monitoring well (and any additional wells) is to verify that there are no adverse effects on groundwater.

5.3 Topography

None of the alternatives are anticipated to have any significant impacts on topography, regional or local. There are no stream channels at the site and no streams or other topographical feature will be impacted because the site is quite flat.

5.4 Flora

None of the alternatives are anticipated to have any significant impacts on flora, regional or local. Flora at the site consists of mixed grasses and weeds where are mowed regularly. There are no shrubs or trees. Some of the grassed areas will be replaced by the proposed project components.

5.5 Fauna

None of the alternatives are anticipated to have any significant impacts on fauna, regional or local because there are no fauna present in the areas where construction will take place.

5.6 Endangered Species

None of the alternatives are anticipated to have any significant impacts on endangered species, regional or local because there are no such species or habit at the proposed project site.

5.7 Historical and Archaeological Resources, Traditional and Cultural Practices, Public Access

None of the alternatives are anticipated to have any significant impacts on historical or archaeological resources, regional or local. There are no historic sites at the project location (Appendix). If cultural deposits or burials are found during excavation, the State Historic Preservation Division will be immediately notified and appropriate procedures as mandated by Chapter 6E HRS and HAR Title 13 shall be instituted. Because the present WWTP facility does not impede public access to surrounding areas (such areas are all privately owned), if there are modern cultural practices taking place, they will not be impacted by the proposed project. The subject project is not anticipated to adversely impact any modern practices because if they occur, they do so outside of the APE (Area of Potential Effect, Figure 14).

5.8 Watershed

None of the alternatives are anticipated to have any significant impacts on the watershed which has been previously modified. The impacted area is less than one tenth of one percent of the entire watershed and is not a location of aquifer recharge because the site is below the UIC line and also in an area of very low rainfall and somewhat impermeable sediment geology. The proposed project will relocate the existing disposal location of effluent in the upland reservoirs to the nearby isolation ditch so that the R-1 water can be reused. The isolation ditch prevents mixing of the R-1 water with other irrigation water in surrounding ditches.

5.9 Plans, Land Use and Ownership

None of the alternatives are anticipated to have any significant impacts on land use or ownership, regional or local. The proposed increase in capacity is planned in response to plans and approvals as described in the Kauai General Plan. There is no change in ownership. The proposed project will not significantly alter the vertical profile of the Waimea WWTP in such a way as to adversely affect views from the “heritage resource scenic highway corridor”.

5.10 Wetlands

None of the alternatives are anticipated to have any significant impacts on wetlands which are not present at the proposed project site.

5.11 Population

The alternative of “No action” would not allow population growth in the Waimea WWTP area, which would be against the policies of the County of Kauai as expressed in the Kauai General Plan. The proposed project fulfills the objective of the Kauai General Plan to provide for the projected population growth.

5.12 Flood Hazard, Tsunami and Flood Classifications

None of the alternatives are anticipated to have any significant impacts on flood hazards, tsunamis or flood classifications, regional or local because only a very small physical area is impacted. However, because the WWTP is in a Zone AH area, all building floors and treatment structures will be sufficiently raised at least one foot above the base flood elevation.

5.13 Hazardous and Toxic Wastes

None of the alternatives are anticipated to have any significant impacts on hazardous or toxic wastes, regional or local, the proposed project does not produce hazardous or toxic wastes.

5.14 Air Quality

None of the alternatives are anticipated to have any significant impacts on air quality, regional or local.

Short term ambient air quality, may be slightly degraded due to implementation of the proposed plan. Such conditions would be due to emissions from the construction equipment and vehicles which may slightly and temporarily impact air quality in the area. The short-term construction impacts on air quality will be mitigated by compliance with the State of Hawaii, Department of Health rules and regulation on construction activities. Such activities include limitations on hours of operation during normal working hours (see next paragraph) and requirements that all equipment be maintained and operated according to manufacturer's specifications and in compliance with State and Federal laws. Dust control measures will include use of spot-watering, netting or screens as needed. Compliance with air quality rules are the responsibility of the contractor.

At present, odor is not a problem because there are no residences in the nearby vicinity of the WWTP. But, the development of Kikiaola (as shown in the General Plan) might have houses

adjacent to the WWTP. Therefore, the FacPlan states that, “The design of the expanded plant should include provisions for a future odor control unit, in anticipation of Kikiaola developing their land adjacent to the WWTP.” The sludge drying beds will be replaced with a mechanical dewatering unit, so the odors from the sludge should actually decrease after expansion. However, the sludge drying beds will be maintained for backup purposes if the new mechanical unit is out of operation.

5.15 Noise

Construction activities will cause short-term noise impacts in the area. However, these impacts are not expected to be significant. A noise permit could be required by the Department of Health if the proposed equipment to be used during construction would be operated outside of normal working hours (7:00 AM to 5:30 PM, weekdays) or at night. Noise impacts are mitigated by limitations on hours of operation and requirements that all equipment be maintained according to manufacturer’s specifications, including proper muffling of internal combustion engines. Compliance with noise rules are the responsibility of the contractor.

After expansion, there will be additional equipment, including perhaps a larger generator for backup power. The equipment will be housed within buildings, so the noise levels should not increase much, and would only occur during temporary operation of the generator unit during testing, maintenance, or when electrical power from the island’s system is not available.

There will be no ground-level noise generating mechanisms at the injection well location.

5.16 Water Quality

The methods of construction will prevent the release of material during excavation and construction. Temporary effects during construction include that the area to be impacted will be approximately two acres and will require an NPDES construction stormwater permit, and there may be a need for disposal of dewatering effluent which could require an NPDES construction dewatering permit, although it may be possible to discharge over surrounding agricultural fields, an action which might not trigger the NPDES requirement if no discharge occurred into State or Federal waters. There would be no long-term adverse effect on water quality.

5.17 Coastal Zone Management

These alternatives are not expected to affect Coastal Zone Management Area programs, activities, plans or policies and a Special Management Area permit is not required because the location of the proposed project is outside the SMA area. The contractor will be required to have erosion controls on the site during construction.

5.18 Traffic

All alternatives except No Action require use of trucks on public roadways to transport construction materials. There would be minor adverse but temporary impacts on traffic during those periods of transport which would primarily be during normal working hours. Normal working hours are considered to be between 6:30 AM and 5 PM week-days and excluding state, federal and local holidays.

5.19 Solid Waste

There would be no effect on solid waste facilities. There is not expected to be significant excess material remaining from excavation work. Excess excavated or demolition material will be disposed of at an approved landfill site.

5.20 Sanitary Sewer

There would be no impacts on the sanitary sewer system from any of the alternatives. The sewer system can handle existing demands. New developments to be constructed are required to have sanitary sewers and to be connected to the Waimea WWTP.

5.21 Stream Water

There are no streams in the area which can be impacted by the proposed project. The effluent isolation ditch effectively isolates effluent from the surrounding irrigation ditches to prevent mixing of that water with the effluent. In the event of severe rainstorms, effluent will be disposed in the injection wells. The proposed plan will relocate effluent disposal from the upland irrigation reservoirs which have overflowed in the past, causing mixing of effluent with stream water which entered State waters. One primary purpose of the proposed project is to prevent this situation from recurring and after construction of the proposed project, effluent which will have been upgraded to R-1 will no longer be disposed in the reservoirs, but will instead be disposed via the effluent isolation ditch where the R-1 water will be re-used for appropriate irrigation purposes.

CHAPTER 6 - MITIGATION

Mitigation is not required because the proposed project has no adverse environmental impacts.

The project includes consideration of additional monitoring wells to verify that there should be no adverse impacts to groundwater. Actual testing of the disposal of effluent via the injection well has yet to occur until such time of the disposal location from the upland reservoirs to the nearby effluent isolation ditch.

Prior to construction, the Contractor shall comply with permit requirements as described in this document or others which may be imposed as part of the construction contract. Such permit requirements may include State of Hawaii Department of Health's permits such as:

- a) Underground Injection Control;
- b) NPDES Permit associated with Construction Activity Dewatering may be required;
- c) NPDES Permit associated with stormwater discharge from Construction Activity of areas one acre or larger is likely to be required.
- d) Engineering review of plans for the facility.

Cultural resource protection will require that the contractor notify the contracting office, construction manager, and the State of Hawaii, Historic Preservation Office in the event that burials or archaeological artifacts are encountered.

Construction-related traffic will operate during normal working hours and will follow existing regulations regarding road clean-up (if necessary) resulting from this traffic and utilize traffic control devices to provide safe ingress and egress to the project site.

CHAPTER 7 - EXPECTED DETERMINATION

- 7.1 **Finding of No Significant Impact (FONSI).** The proposed expansion project will not have a significant effect on the environment and therefore preparation of an environmental impact statement is not required. This document constitutes a Notice of Negative Declaration/Finding of No Significant Impact for the proposed project. This determination was based on review and analysis of the “Significance Criteria” in Section 11-200-12 of the Hawaii’ Administrative Rules, as documented below.
- 7.2 **Findings and reasons supporting the determination including justifying evidence.**
- 7.2.1 *No irrevocable commitment to loss or destruction of any natural or cultural resource would result.* There are no sites within the project boundaries, nor would any sites outside the project boundaries be affected.
- 7.2.2 *The proposed project would not curtail the range of beneficial uses of the environment.* The proposed project will not change the lack of beneficial uses at present in the affected environment.
- 7.2.3 *The proposed project would not conflict with the state’s long-term environmental policies or goals and guidelines.* The state’s environmental policies and guidelines as set forth in Chapter 343, Hawaii’I Revised Statutes, “State Environmental Policy”, encompass two broad policies: conservation of natural resources, and enhancement of the quality of life. The proposed project does not take or alter natural resources, and the project enhances the quality of life by providing for public health and safety through the provision of sanitary sewer treatment and disposal.
- 7.2.4 *The proposed project will improve the economic and social welfare of the community and the state.* The proposed expansion project will add to the benefits available to residents by providing for economic development and social welfare of residents who will live and work in this community served by the Waimea WWTP.
- 7.2.5 *The proposed project would not substantially affect public health.* The proposed expansion project will benefit public health by providing for sanitary treatment and disposal of sewage.
- 7.2.6 *No substantial secondary impacts, such as population changes or effects on public facilities, are expected.* The project will not alter the present use of the area. Although population in the WWTP service area has declined slightly in the from 1990 to 2000, population is projected to increase and the County of Kauai through its Kauai General Plan is providing for the growth of population in this area primarily via the Kikiaola development plans.
- 7.2.7 *No substantial degradation of environmental quality is expected due to the proposed project.* Construction activities would have potential short-term impacts on ambient environmental quality, although these impacts are expected to be minor. In the long term, the completed project will improve the environmental quality of the surrounding community due to the availability of a modern wastewater treatment facility.
- 7.2.8 *No cumulative effect on the environment or commitment to larger actions will be involved.* The proposed expansion projects affect only the existing project and are

part of the required expansion of the facility due to the objectives of the Kauai General Plan. There are cumulative effects in that the Kikiaola development (as set out in the Kauai General Plan) will be enabled through the construction of the expanded WWTP.

7.2.9 *No rare, threatened or endangered species or their habitats are affected.* No impacts are anticipated on any candidate, proposed or listed endangered species or their habitats. There are no known threatened/endangered species or their habitats within the project limits.

7.2.10 *The proposed project will not detrimentally affect air or water quality or ambient noise levels.* Construction activities may cause short-term impacts to air, noise and water quality which will be mitigated to the extent practicable. Long-term impacts are unlikely and the proposed project includes features to minimize and avoid detrimental effects. The monitoring well (existing) or wells (under consideration as part of this project) will be used to sample ground water to verify that there are no adverse effects from injection of treated effluent via the injection well (one existing and one proposed as part of this project).

7.2.11 *The proposed project will not detrimentally affect environmentally sensitive areas such as flood plains, tsunami zones, beaches, erosion-prone areas, geologically hazardous lands, estuaries, fresh waters or coastal waters.* Monitoring wells are proposed to be constructed (subject to obtaining land owner permission for the monitoring well sites) to verify that there should be no adverse impacts on the aquifer from the occasional disposal of effluent into the backup injection wells.

7.2.12 *The proposed project will improve scenic vistas and view planes identified in county or state plans or studies.* The proposed expansion project will have little or no impact on scenic vistas. The WWTP can hardly be seen from the public highway because it is comprised of low-rise structures.

7.2.13 *There will be no requirement for substantial energy consumption.* Construction of the project will not require substantial energy consumption although there will be some increases in energy requirements.

7.3 **Compliance with the State of Hawai'i's Clean Water State Revolving Fund (CWSRF) Program Requirements.** This project may be funded by Federal funds through the State of Hawai'i's Clean Water State Revolving Fund (CWSRF) program. The following subsections address the proposed project's relationship to Federal "cross-cutting" authorities.

5.3.1 ARCHEOLOGICAL AND HISTORIC PRESERVATION ACT (16 U.S.C. § 469A-1) AND NATIONAL HISTORIC PRESERVATION ACT (16 U.S.C. § 470(F)). The project site is located in an area that has been used extensively for agriculture for many years and no known archaeological or historic features exist within the project site boundaries. The proposed project will be coordinated with the Office of Hawaiian Affairs (OHA) and the State of Hawai'i Historic Preservation Division, (SHPD) of the Department of Land and Natural Resources through the EA public and agency review process.

5.3.2 CLEAN AIR ACT (42 U.S.C. § 7506©). Air quality at the site of the proposed project is good. Only minor amounts of grading and excavation will be required for the project so that fugitive dust will not be a problem during construction. It is anticipated that a diesel-driven equipment will be used to during construction. Emissions from the diesels may

slightly degrade air quality for the short period of time they are in operation. However, all applicable emission and ambient air quality standards will continue to be met. Consequently, no adverse health effects from this source are anticipated. Because of the distance of the project from residential areas it is unlikely that odor from the diesel exhaust will be noticeable. Normal operation of the proposed facilities will not produce on-site air emissions, will not alter air flow in the vicinity, and will have no other measurable effect on the area's micro-climate.

5.3.3 COASTAL ZONE MANAGEMENT ACT (16 U.S.C. § 1456(c)(1)). Enacted as Chapter 205A, HRS, the Hawaii Coastal Zone Management (CZM) Program was promulgated in 1977 in response to the Federal Coastal Zone Management Act of 1972. The CZM area encompasses the entire state, including all marine waters seaward to the extent of the state's police power and management authority, including the 12-mile U.S. territorial sea and all archipelagic waters. The Hawai'i Coastal Zone Management Program focuses on ten policy objectives:

Recreational Resources. To provide coastal recreational opportunities accessible to the public and protect coastal resources uniquely suited for recreational activities that cannot be provided elsewhere.

Historic Resources. To protect, preserve, and where desirable, restore those natural and manmade I historic and prehistoric resources in the coastal zone management area that are significant in Hawaiian and American history and culture.

Scenic and Open Space Resources. To protect, preserve, and where desirable, restore or improve the quality of coastal scenic and open space resources.

Coastal Ecosystems. To protect valuable coastal ecosystems, including reefs, from disruption and to minimize adverse impacts on all coastal ecosystems.

Economic Uses. To provide public or private facilities and improvements important to the state's economy in suitable locations; and ensure that coastal dependent development such as harbors and ports, energy facilities, and visitor facilities, are located, designed, and constructed to minimize, adverse impacts in the coastal zone area.

Coastal Hazards. To reduce hazard to life and property from tsunami, storm waves, stream flooding, erosion, subsidence, and pollution.

Managing Development. To improve the development review process, communication, and public participation in the management of coastal resources and hazards.

Public Participation. To stimulate public awareness, education, and participation in coastal management; and maintain a public advisory body to identify coastal management problems and provide policy advice and assistance to the CZM program.

Beach Protection. To protect beaches for public use and recreation; locate new structures inland from the shoreline setback to conserve open space and to minimize loss of improvements due to erosion.

Marine Resources. To implement the state's ocean resources management plan. Other key areas of the CZM program include: a permit system to control development within a Special Management Area (SMA) managed by the Counties and the Office of Planning; a Shoreline Setback Area which serves as a buffer against coastal hazards and erosion, and protects view-planes; and the Marine and Coastal Affairs. Finally, a Federal Consistency provision requires that federal activities, permits and financial assistance be consistent with the Hawaii CZM program.

The proposed project is located several miles from the coastline and is not within the County's SMA. It does not involve the placement, erection, or removal of materials near the coastline. The type and scale of the activities that it involves typically do not have the potential to significantly affect coastal resources. Finally, it is consistent with the CZM objectives that are relevant to a project of this sort, a public wastewater treatment facility which serves and benefits public health and safety.

A copy of this EA was sent to the Office of Coastal Zone Management at the State of Hawai'i Department of Business, Economic Development, and Tourism and the Kauai Planning Department. The departments are expected to confirm the consistency of the project with the CZM Act.

5.3.4 ENDANGERED SPECIES ACT (16 U.S.C.1536(A)(2) AND (4)). The Endangered Species Act (16 U.S.C. §§ 1531-1544, December 28, 1973, as amended 1976-1982, 1984 and 1988) provides broad protection for species of fish, wildlife, and plants that are listed as threatened or endangered in the U.S. or elsewhere. The Act mandates that federal agencies seek to conserve endangered and threatened species and use their authorities in furtherance of the Act's 11 purposes. Provisions are made for listing species, as well as for recovery plans and the designation of critical habitat for listed species. The Act outlines procedures for federal agencies to follow when taking actions that may jeopardize listed species, and contains exceptions and exemptions.

Existing biota on and near the project site are discussed in this EA. The discussion documents the fact that there are no known rare or endangered species on or immediately around the site of the proposed project. Copies of the EA are provided to the State Department of Land and Natural Resources (DLNR) for review and comment.

5.3.5 FARMLAND PROTECTION POLICY ACT (7 U.S.C. § 4202(8)). The U.S. Congress adopted the Farmland Protection Policy Act (FPPA, Public Law 97-98) on December 22, 1981. The U.S. Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS) has national leadership for administering the FPPA. The effective date of the FPPA, rule (part 658 of Title 7 of the Code of Federal Regulations) is August 6, 1984. The stated purposes of the FPPA are to: (a) Minimize the extent to which Federal programs contribute to the unnecessary and irreversible conversion of farmland to nonagricultural uses and (b) Assure that Federal programs are administered in a manner that, to the extent practicable, will be compatible with State, unit of local government, and private programs and policies to protect farmland. "Farmland", as used in the FPPA, includes prime farmland, unique farmland, and land of statewide or local importance. "Farmland" subject to FPPA requirements does not have to be currently used for crop land. The proposed project does not take agricultural lands out of production. The WWTP and WWPS existing land areas are not increased. Consequently, the project is in substantial compliance with the FPPA.

5.3.6 FISH AND WILDLIFE COORDINATION ACT (16 U.S.C. § 662). The Fish and Wildlife Coordination Act, as amended, authorizes the Secretaries of Agriculture and Commerce to require consultation with the Fish and Wildlife Service and the fish and wildlife agencies of States where the "waters of any stream or other body of water are proposed or authorized, permitted or licensed to be impounded, diverted. . . or otherwise controlled or modified" by any agency under a Federal permit or license. Consultation is to be undertaken for the purpose of "preventing loss of and damage to wildlife resources."

The proposed project will not result in the diversion of any water body and will not result in impacts on fish or wildlife resources. The Department of Land and Natural Resources was asked to comment on the draft EA.

5.3.7 FLOODPLAIN MANAGEMENT (42 U.S.C. § 4321). Based on the latest available Flood Insurance Rate Map for the area, the proposed project site lies outside a defined floodplain. The project does not involve property acquisition, management, or construction within a 100-year flood plain (Zones A or V), and it does not involve a "critical action" within a 500-year flood plain. Consequently, it is consistent with applicable regulations and guidance relating to floodplain management.

5.3.8 SAFE DRINKING WATER ACT (42 U.S.C. § 300H-3). The Safe Drinking Water Act (SDWA) is the principal federal law that ensures the quality of the nation's drinking water. Under SDWA, EPA sets standards for drinking water quality and oversees the states, localities, and water suppliers who implement those standards. The Safe Drinking Water Act requires that all public water systems meet stringent water quality standards. These standards cover a long list of potential chemical, radiological and biological contaminants. The standards distinguish between surface water and groundwater sources, with the testing and monitoring requirements for surface water and GWUDI sources being far greater than those for groundwater sources. Monitoring wells are proposed to be constructed to verify that the proposed project should have no negative impact on drinking water sources.

5.3.9 PROTECTION OF WETLANDS (42 U.S.C. § 4321). There are no wetlands on or near the site. Neither are there food resources on the site that are important to wildlife that use wetlands elsewhere on the island. Copies of the EA are sent to the Department of Land and Natural Resources to ensure adequate consideration of this topic in the environmental review for this project.

5.3.10 WILD AND SCENIC RIVERS ACT (16 V.S.C.1271-1287). The purpose of this act, as stated in Section (b) of its preamble is as follows:

It is hereby declared to be the policy of the United States that certain selected rivers of the Nation which, with their immediate environments, possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values. shall be preserved in free-flowing condition. and that they and their immediate environments shall be protected for the benefit and enjoyment of present and future generations. The Congress declares that the established national policy of dam and other construction at appropriate sections of the rivers of the United States needs to be complemented by a policy that would preserve other selected rivers or sections thereof in their free-flowing condition to protect the water quality of such rivers and to fulfill other vital national conservation purposes.

The proposed project does not involve any streams or rivers which have been listed by the U.S. National Park Service as candidates for designation as Scenic Rivers and the project is therefore not subject to the provisions of this Act. The project does not have the potential

to affect the hydrology, water quality, or aquatic resources of any streams and therefore is consistent with the provisions of the Wild and Scenic Rivers Act.

5.3.11 WILDERNESS ACT (16 U.S.C. 1131) The purpose of this legislation is stated in Section 2(a) of the Act as follows:

In order to assure that an increasing population, accompanied by expanding settlement and growing mechanization, does not occupy and modify all areas within the United States and its possessions, leaving no lands designated for preservation and protection in their natural condition, it is hereby declared to be the policy of the Congress to secure for the American people of present and future generations the benefits of an enduring resource of wilderness. For this purpose there is hereby established a National Wilderness Preservation System to be composed of federally owned areas designated by Congress as "wilderness areas" and these shall be administered for the use and enjoyment of the American people in such manner as I will leave them unimpaired for future use and enjoyment as wilderness. and so as to provide , for the protection of these areas, the preservation of their wilderness character, and for the gathering and dissemination of information regarding their use and enjoyment as wilderness; and no Federal lands shall be designated as "wilderness areas" except as provided for in this chapter or by a subsequent Act.

There are no designated Wilderness Areas near the proposed project and therefore the project is consistent with the provisions of the Act.

CHAPTER 8 - AGENCIES AND PERSONS CONSULTED OR TO BE CONSULTED & PERMITS REQUIRED

The following agencies or groups have been or will be consulted with regard to the draft environmental assessment for the proposed project. The following permits or approvals are or may be required.

Agency or Person to be Consulted	Permit or Approval Required
State of Hawaii Department of Health	UIC Permit; an NPDES permit for construction dewatering may be required if there is a need for dewatering, although dewatering effluent might be disposed in adjacent agricultural fields where there are no state or federal waters; an NPDES permit for stormwater due to a construction impact area of greater than one acre would be required; engineering review of plans for the facility. Funding may include State Revolving Funds (SRF) and this EA discusses such requirements in Chapter 7.
State of Hawaii, Department of Land and Natural Resources, Historic Preservation Division	Coordination required with the State Historic Preservation Officer per the Federal & State Historic Preservation Acts through circulation of the EA.
County of Kauai; Planning Department, Planning Commission (Use Permit); Department of Public Works (Building, Grading Permits)	Approval of the EA, Use, Building, Grading Permits.
Community Groups	Coordination done through circulation of the EA for public comment.
Individuals	Coordination done through circulation of the EA for public comment.

The Final EA incorporates additional actions in response to the comments received. For example, a hydrogeologist consultant will be retained, additional monitoring wells and testing will be considered. In response to comments received, the County acknowledges expansion of the existing effluent isolation ditch along with the WWTP expansion should be considered. This will require agreement with the landowner along with a construction right of entry and an easement for the expanded isolation ditch. The County proposes to negotiate with the landowner for permission for work on the adjacent property consistent with the upgrades to the isolation ditch, along with agreement for use of ditch system water for hydrologic testing of the existing and proposed injection wells. Subject to landowner permission, the hydrologic testing may also involve construction of additional monitoring wells, of similar design to the existing on-site monitoring well.

The following section provides a brief summary of the comments received and the responses made during public review of the draft EA. For the full text of the comment and response letters, see Appendix B, Comments and Responses.

8.1 Kikiaola Land Company

Comment: The isolation ditch should be increased in size to accommodate the proposed increase in WWTP capacity rather than build another injection well.

Response: We will consider increasing the size of the isolation ditch and this would require consent of the landowner. The purpose of the ditch is to isolate the

treated effluent from the existing irrigation ditch system so that the treated effluent can be used for appropriate irrigation purposes such as landscaping or golf courses. The second injection well is required to provide sufficient capacity for effluent disposal if needed for example where there are severe rainstorms which may preclude use of the treated effluent for irrigation.

Comment: We are concerned about the proposed second injection well, the existing monitoring well, and groundwater.

Response: We will consider installation of additional monitoring wells and hydrologic testing for which we will require consent of the landowner.

Comment: There have been two severe rainstorms every year in the three years. How does this affect the proposed injection well?

Response: Use of the injection wells would occur during periods of sustained rainfall, not during most days of the year and the total amount of effluent which could be injected would be equal to the peak flow from the expanded WWTP.

Comment: Reuse of the effluent seems the best idea.

Response: We concur. The proposed project upgrades the existing effluent from R-2 (secondary treatment) to R-1 (tertiary treatment) and relocates disposal from the upland irrigation reservoirs to the effluent isolation ditch which makes the treated effluent available for appropriate irrigation uses. The injection wells are intended to serve as a back-up disposal method, and not as the primary means of disposal which is to be reuse via irrigation appropriate to R-1 treated effluent. The second injection well is required to provide capacity to match the proposed expansion capacity of the WWTP.

Comment: What about noise from the injection well?

Response: There are no ground level noise generating devices at the injection well site and none are proposed.

Comment: Is effluent quality to be upgraded?

Response: Effluent quality is proposed to be upgraded from R-2 (secondary) to R-1 (tertiary) as part of the proposed project.

8.2 Kauai Water Department

Comment: How often will the monitoring well be checked and if contaminants are found, what action or procedure will occur?

Response: Annual monitoring is anticipated. Installation of additional monitoring wells is being considered. A groundwater hydrogeologist is being retained for consultation. Additional monitoring or response actions will be evaluated during this consultation.

Comment: Will a request be made for another or larger water meter?

Response: Another or larger meter is not anticipated as part of the proposed project.

8.3 Kauai Engineering Division

Comment: A grading permit may not be required at the WWTP and injection well sites, but one may be required at borrow or disposal sites.

Response: We will comply with grading permit requirements.

Comment: Change EA to state that flood hazard is Zone AH with base flood elevations determined.

Response: The FEA incorporates this change. A copy of the FEA was provided to the County's flood plain coordinator. New construction in the proposed project will comply.

Comment: Kauai Planning Department regulates the Special Management Area and the EA statement regarding the SMA must be checked.

Response: No comments from the Kauai Planning Department were received.

- 8.4 Kauai Building Division
 Comment: Change EA to state that flood hazard is Zone AH with base flood elevations determined.
 Response: The FEA incorporates this change and all structures proposed will comply.
- 8.5 Office of Hawaiian Affairs
 Comment: The surrounding lands are designated Agriculture (State Land Use District). How is the proposed expansion appropriate and what are the plans of the landowner.
 Response: The landowner plans to develop these lands and the Kauai General Plan reflects the landowners and the County's intent. The proposed WWTP expansion is consistent with the General Plan.
 Comment: Are federal funds or permits involved?
 Response: It is not known at this time if federal funds will be involved, but there may be federal permits.
- 8.6 Environmental Planning Office, Department of Health
 Comment: Wastewater Branch has no objections to the proposed project, Safe Drinking Water Branch requires a UIC permit application for the proposed second injection well, EPO suggests review of the "Standard Comments".
 Response: We will apply for the UIC permit and review the "Standard Comments".
- 8.7 Wastewater Branch, Department of Health
 Comment: No objections to the proposed project and encourage use of R-1 water for irrigation and non-potable uses where possible.
 Response: Comments noted.
- 8.8 Clean Water Branch, Department of Health
 Comment: Review "Standard Comments."
 Response: We will review "Standard Comments".
 Comment: NPDES permits may be required and SHPD must be consulted.
 Response: We will apply for NPDES permits as required. See next paragraph (8.9) related to consultation with SHPD.
 Comment: Describe the status and situation surrounding the present and intended disposal of effluent with regards to existing or potential discharges to State waters.
 Response: The existing discharge is to irrigation reservoirs which have overflowed causing discharge of effluent to State waters. This method of disposal will be changed to irrigation of R-1 water via the effluent isolation ditch which isolates the effluent from surrounding irrigation ditches and prevents discharges of effluent to state waters in the event of a rainstorm because effluent will then be disposed via the injection wells.
 Comment: Are there potential discharges of stormwater associated with construction activity which might reach State waters?
 Response: Except under regional flood conditions, discharges of storm water will infiltrate on site due to the flat topography. BMPs during construction and future site operations will be used to mitigate storm water from the site which may have the potential to mix with flood waters of the region and thereby enter State waters.
 Comment: Will the proposed project exceed 1.0 MGD?
 Response: The proposed project does not expand the WWTP beyond 1.0 MGD.

Comment: Will any of the R-1 applications discharge to State waters?
Response: R-1 applications are not intended to discharge to State waters and those using R-1 effluent will be so advised.
Comment: The project must comply with State Water Quality Standards.
Response: All construction and operations will comply with State Water Quality Standards and contractors will be so advised.

8.9 Historic Preservation Division, Department of Land and Natural Resources

Comment: "No historic properties will be affected".
Response: We note your finding that no historic properties will be affected. We understand that should historic resources or human skeletal remains be found during construction that all work in the vicinity will cease and the Division will be immediately notified.

CHAPTER 9 - REFERENCES

- Blay, Chuck and Robert Siemers, *Kauai's Geologic History*, Updated Edition, 2004, TEOK Investigations.
- County of Kauai, Department of Public Works, *Waimea Wastewater Treatment Plant Facility Plan*, Austin Tsutsumi & Associates, Draft December 19, 2003, Revised March 17, 2008.
- County of Kauai, Department of Public Works, *Waimea Wastewater Treatment Plant Backup Injection Well, Final Underground Injection Control Report*, Austin Tsutsumi & Associates, December 3, 2007.
- County of Kauai, Department of Public Works, *Waimea Wastewater Treatment Plant Backup Injection Well Final Environmental Assessment*, Austin Tsutsumi & Associates, December 6, 2000.
- County of Kauai, Department of Public Works, *Waimea Wastewater Treatment Plant, Effluent Reuse/disposal Alternative Study*, Austin Tsutsumi & Associates, March 7, 1994.
- County of Kauai, Planning Department, *Kauai General Plan*, November 2000.
- County of Kauai, *Zoning, Tax Maps*, GIS.
- Handy, E. S. Craighill and Elizabeth Green Handy, *Native Planters in Old Hawaii*, Bishop Museum Press, Honolulu, Hawaii, 1972.
- Pukui, Mary Kawena, *Olelo Noeau*, Bishop Museum Press, 1983.
- Pukui, Mary Kawena, Samuel H. Elbert & Esther T. Mookini, *Place Names of Hawaii*, Revised and Expanded Edition, University of Hawaii Press, 1976.
- State of Hawaii, Department of Business, Economic Development and Tourism, Office of Planning, *Geographic Information System*.
- State of Hawaii, Department of Business, Economic Development and Tourism, Office of Planning, *2007 State Data Book* and *2000 U.S. Census of the Population*.
- State of Hawaii, Department of Health, *Guideline for the Treatment and Use of Recycled Water* May 15, 2002.
- University of Hawaii at Hilo, Department of Geography, *Atlas of Hawaii*, Third Edition, Sonia P. and James O. Jovic, Editors, University of Hawaii Press, Honolulu, 1998.
- United States Department of Energy, *Kauai Test Facility Environmental Assessment*, Sandia National Laboratories, Albuquerque, New Mexico, July 1992.
- United States Geologic Survey, Map, 2001.

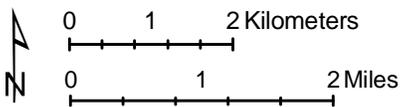
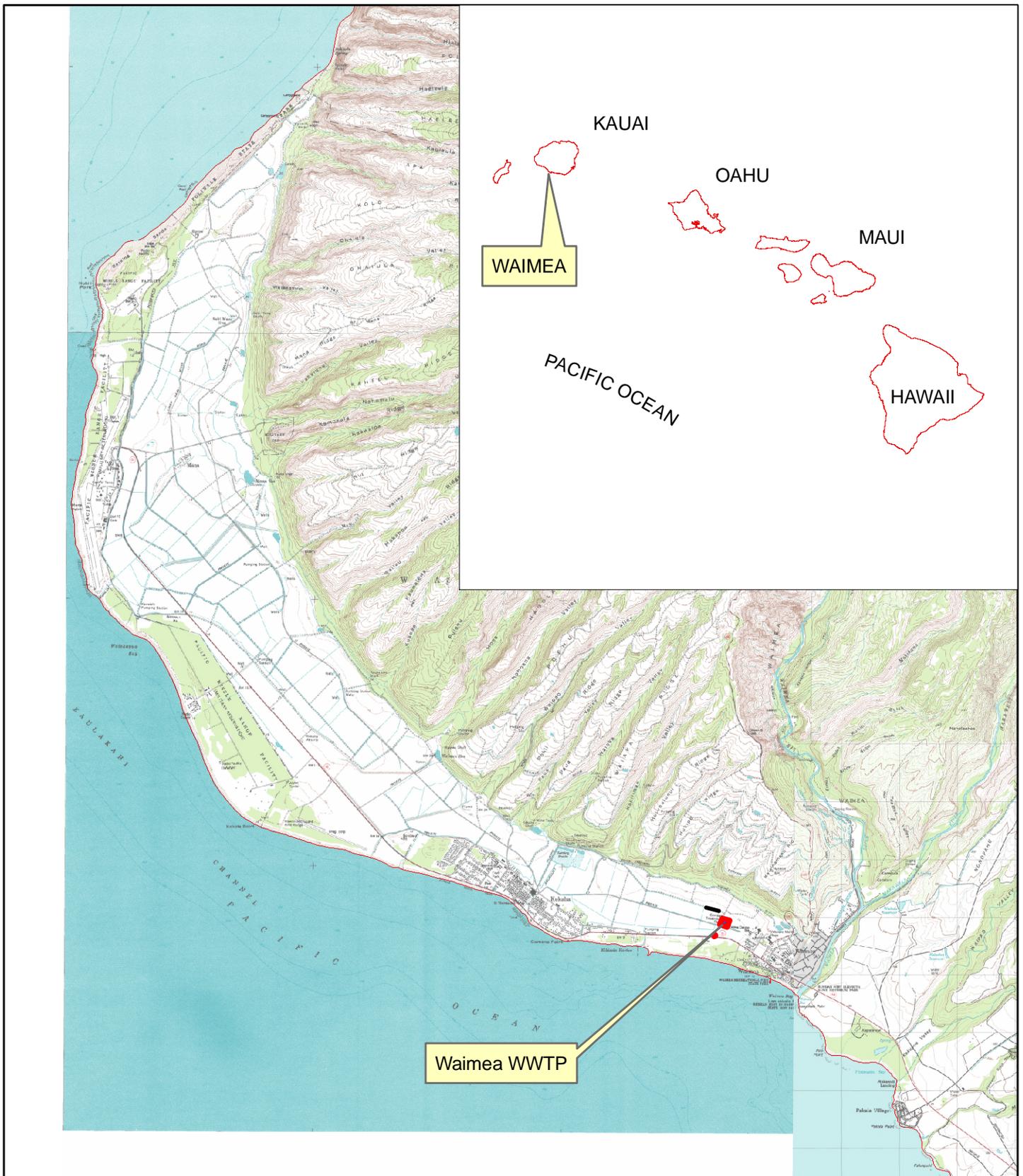
GLOSSARY

APE	Area of Potential Effect
BMP	Best Management Practices
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CFS	Cubic Feet per Second
COE, USACE	U.S. Army Corps of Engineers
CRM	Concrete Rubble Masonry
CWA	Clean Water Act
CWSRF	Clean Water State Revolving Fund (per federal Clean Water Act)
CZM	Coastal Zone Management
DLNR	Department of Land and Natural Resources, State of Hawaii
DOD	Department of Defense, U. S.
DOH	Department of Health, State of Hawaii
EA	Environmental Assessment
EIS	Environmental Impact Statement
FacPlan	<i>Waimea Wastewater Treatment Plant Facility Plan</i>
FIRM	Flood Insurance Rate Map
GPD	Gallons per Day
HEER	Hazard Evaluation and Emergency Response, DOH, State of Hawaii
MBR	Membrane Bioreactor
NGPC	Notice of General Permit Coverage
NMFS	National Marine Fisheries Service, U.S. Department of Commerce
NOI	Notice of Intent
NPDES	National Pollution Discharge Elimination System
R-1, R-2	R-1 (tertiary), R-2 (secondary) levels of wastewater treatment. R-1 is “higher”
Riprap	Rock which is rough, coarse, jagged, or angular, of an appropriate dimension
SHPO	State Historic Preservation Officer, DLNR, Historic Preservation Division
SMA	Special Management Area
SRF	State Revolving Fund (CWSRF)
TSS	Total Suspended Solids
UIC	Underground Injection Control
USFWS	U.S. Fish and Wildlife Service, Department of the Interior
WWPS	Wastewater Pumping Station
WWTP	Wastewater Treatment Plant

ENVIRONMENTAL ASSESSMENT PREPARER

CONSULTANT

Name: Eugene P. Dashiell
Company: Environmental Planning Services
Area of Expertise: Environmental Planning and Analysis
Years of Experience: 35 years

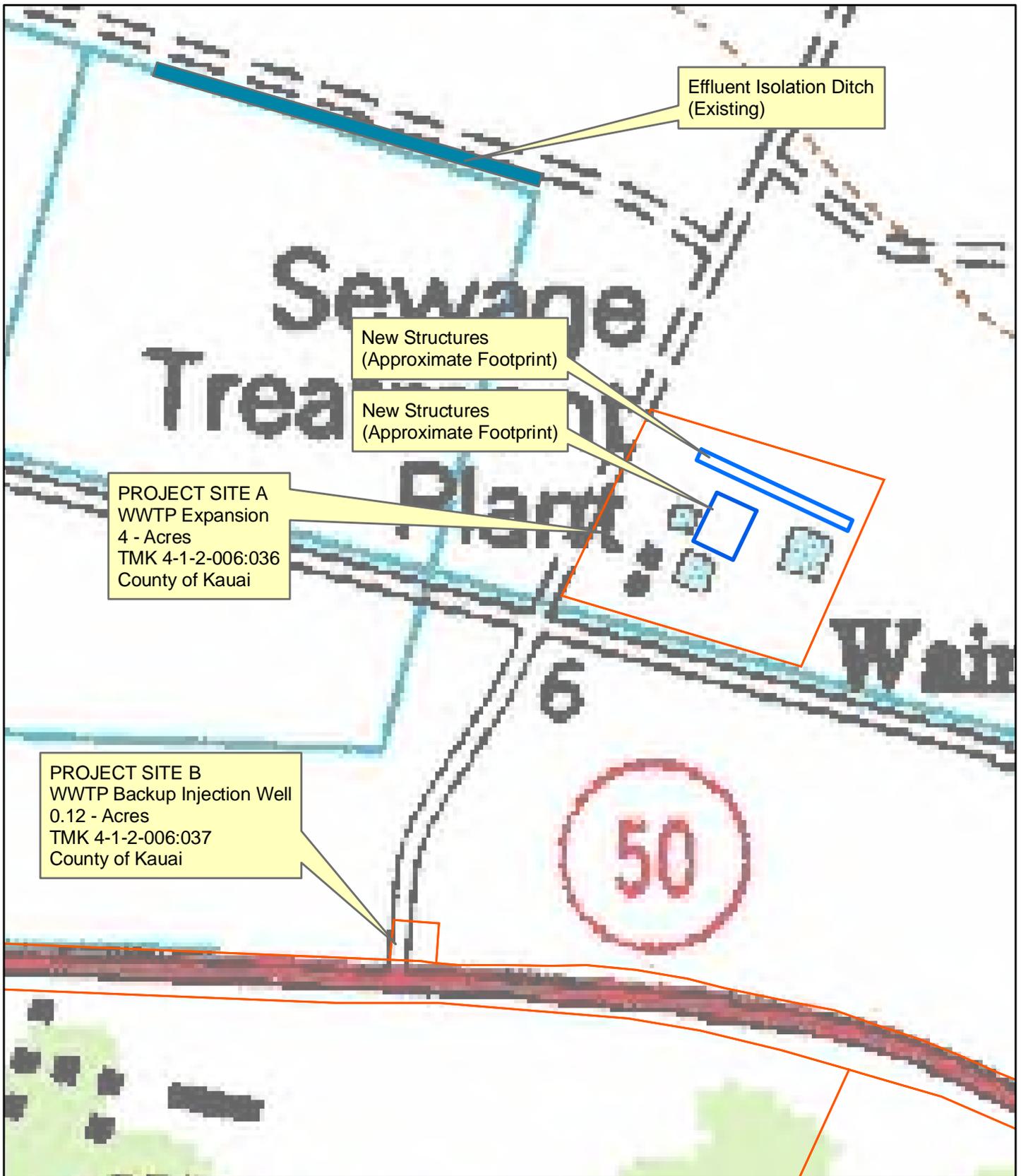


Location

Figure 1

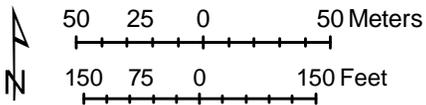
Eugene P. Dashiell, AICP
 Environmental Planning Services
 Honolulu, Hawaii
 June 2008

WAIMEA WWTP EXPANSION, PHASE I
 County of Kauai
 Division of Wastewater Management
 Department of Public Works
 Austin Tsutsumi & Assoc.



Project Land Parcels

Figure 2



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Figure 1. Effluent Isolation Ditch

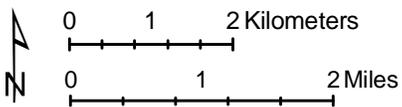
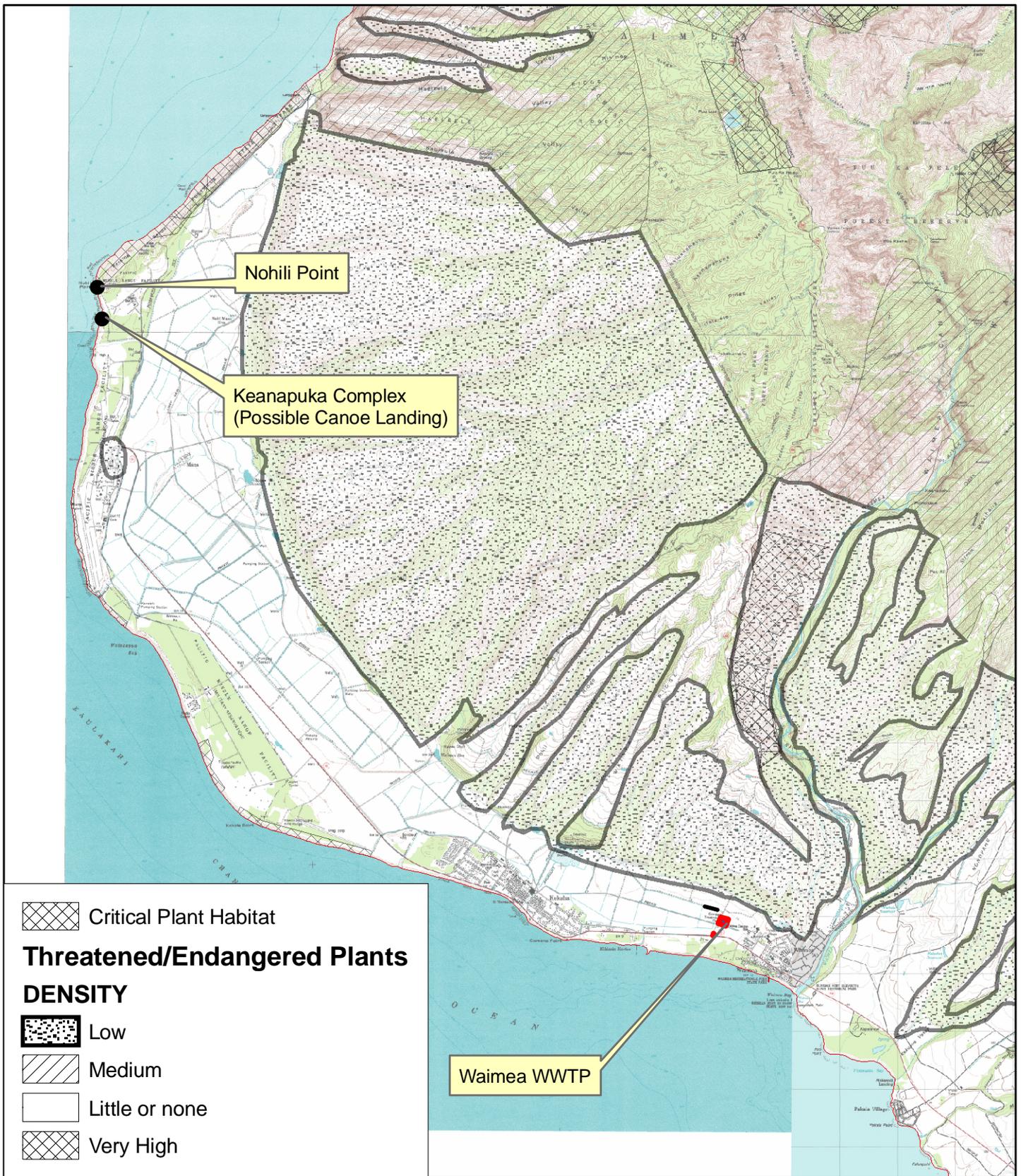


Figure 2. Existing Waimea WWTP. New structures for wastewater process to be placed here.

Photographs

Figure 3A

WAIMEA WWTP EXPANSION, PHASE 1

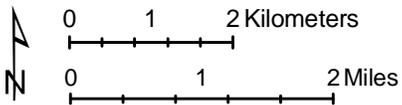
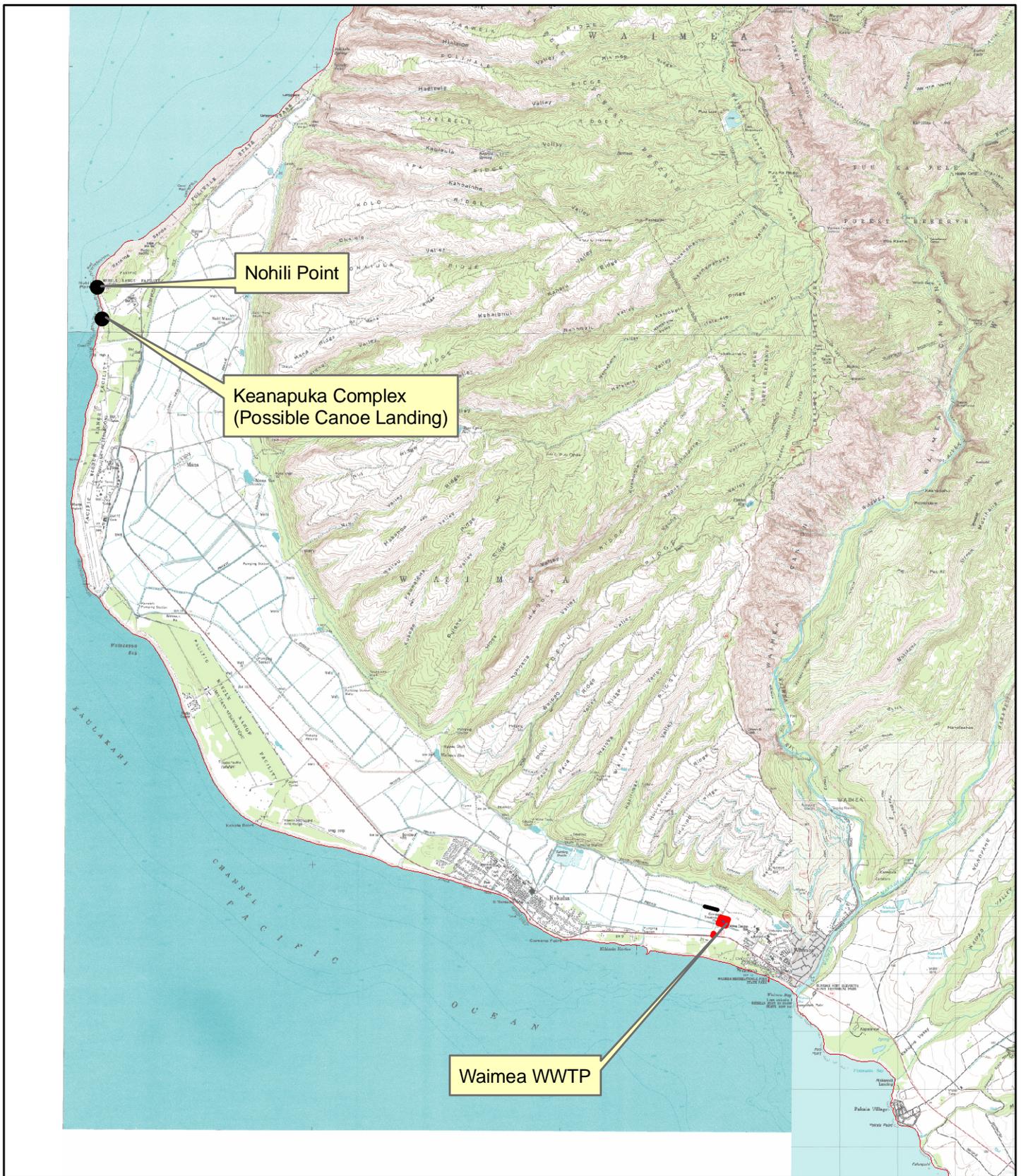


**Endangered Plants
Critical Habitat**

Figure 5

WAIMEA WWTP EXPANSION, PHASE I
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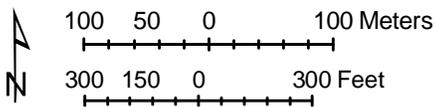
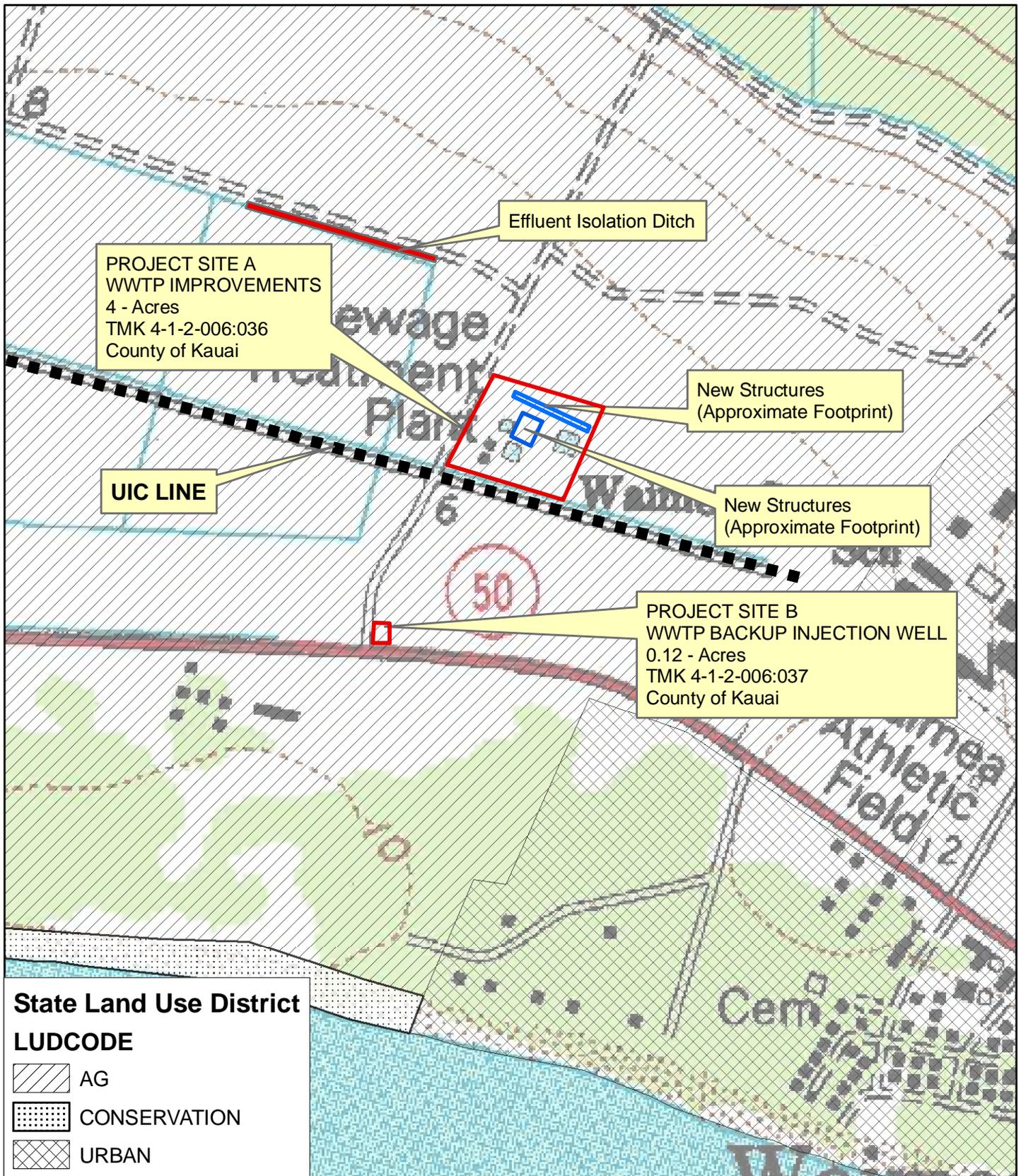


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Keanapuka Cultural Complex

Figure 6

WAIMEA WWTP EXPANSION, PHASE I
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State Land Use District

Figure 8

WAIMEA WWTP EXPANSION, PHASE I

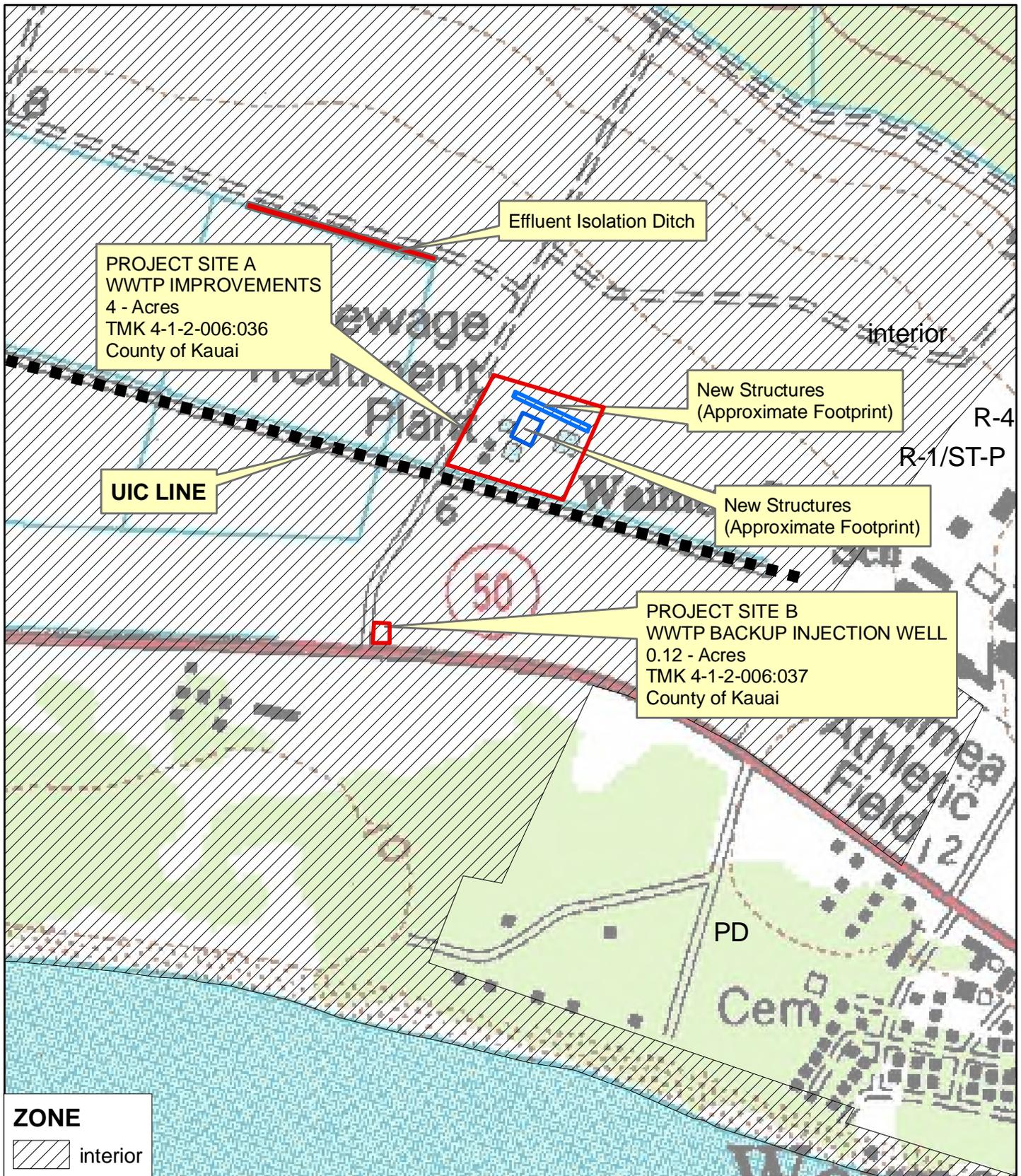
County of Kauai

Division of Wastewater Management

Department of Public Works

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 Environmental Planning Services
 Honolulu, Hawaii
 June 2008



County Zoning

Figure 9

WAIMEA WWTP EXPANSION, PHASE I

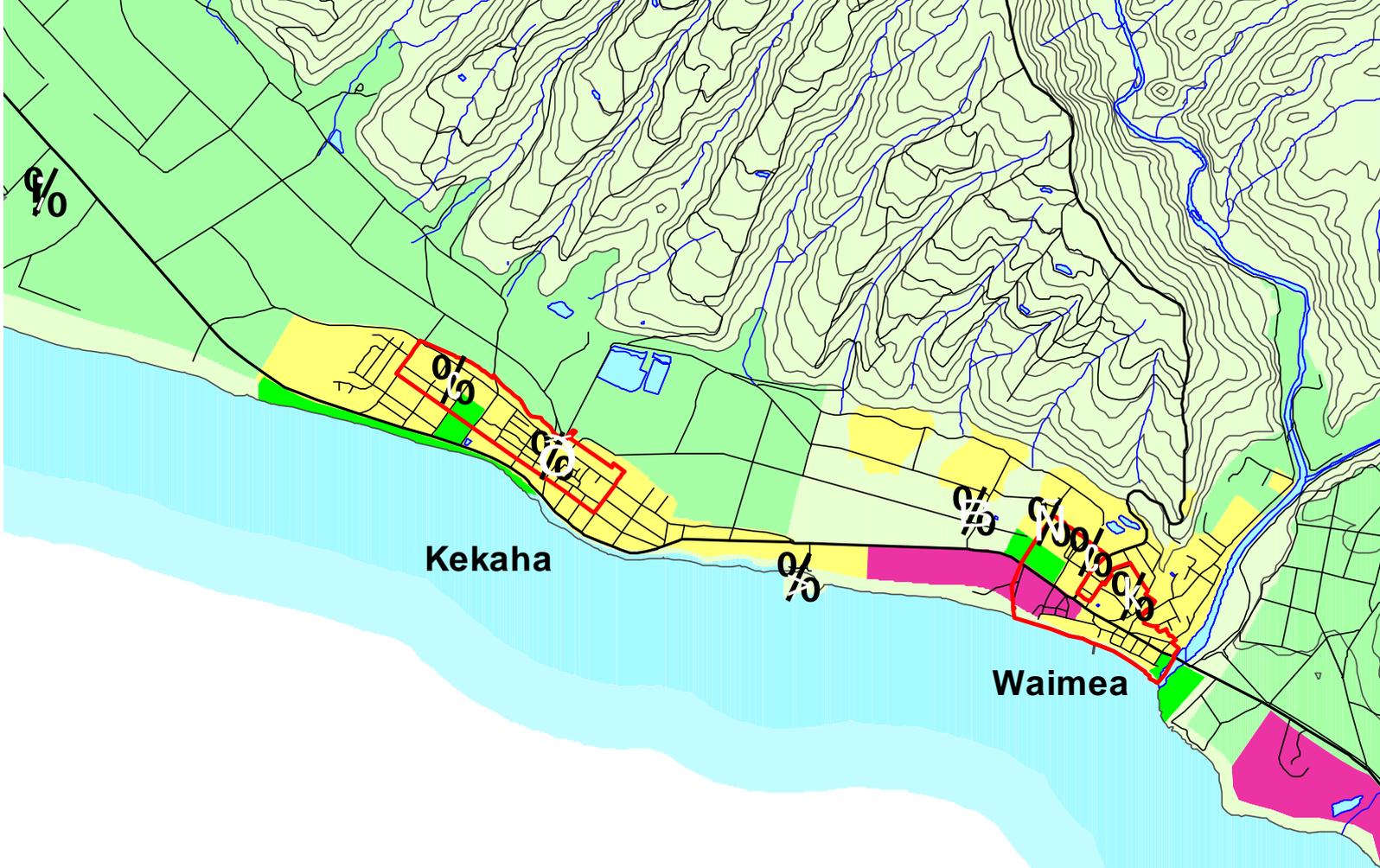
County of Kauai

Division of Wastewater Management

Department of Public Works

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 Honolulu, Hawaii
 June 2008



West Side Planning District Land Use Map

Legend

Land Use Designation

	Urban Center		Transportation
	Resort		Military
	Residential Community		Town Centers
	Agriculture		Major Roads
	Open		Minor Roads
	Park		Planned Roads*

Public Facilities

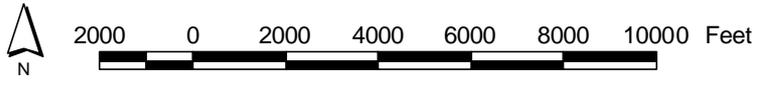
	Airport		Elementary School
	Civic Center		Intermediate/Middle School
	Commercial Harbor		High School
	Community College		Landfill
	Correctional Center		Hospital
	Electric Power Plant		Sugar Mill
	Electric Power (future)		Wastewater Treatment Plant
	Small Boat Harbor		

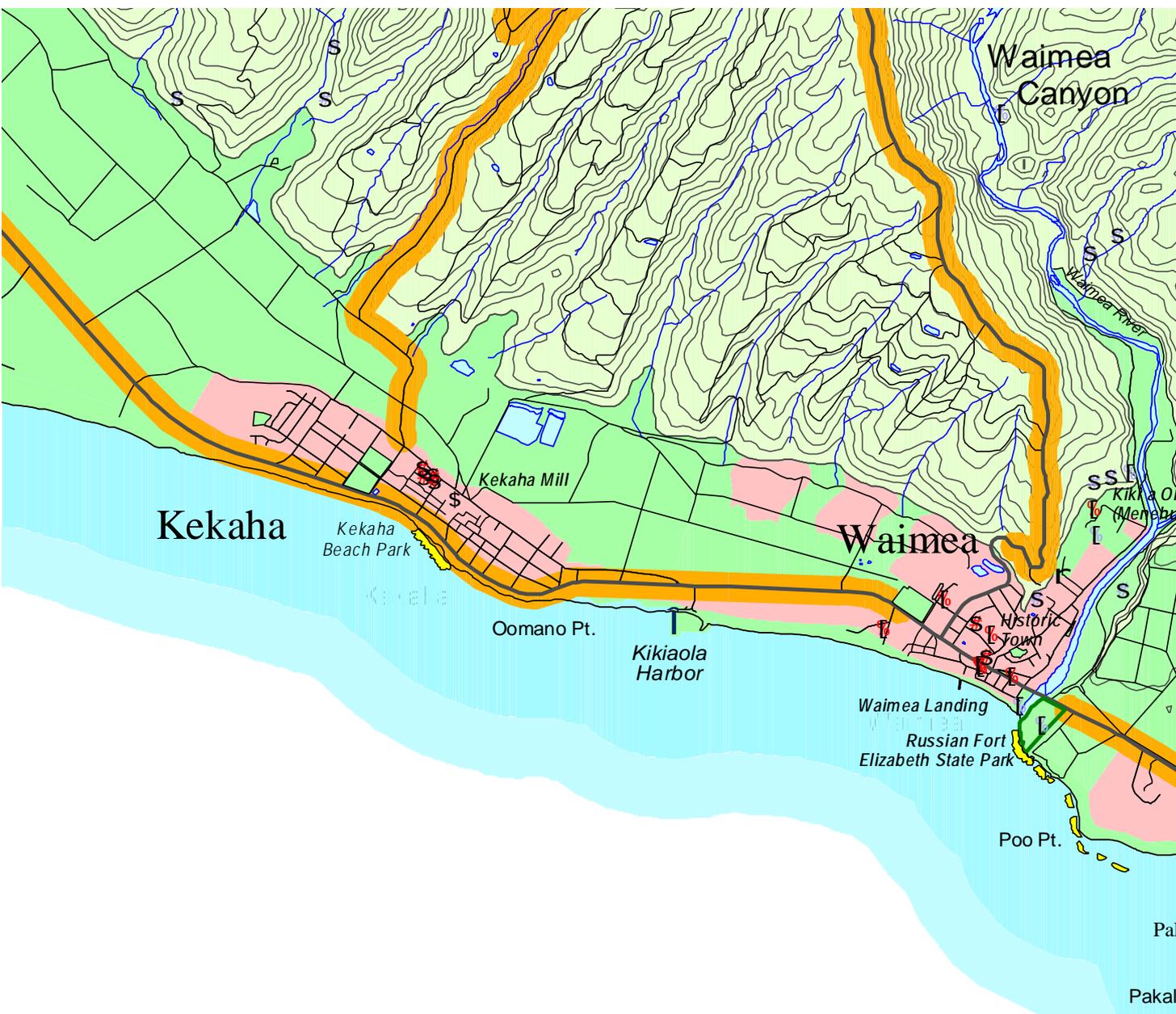
** actual alignment to be determined*

Figure 10

WAIMEA WWTP EXPANSION, PHASE 1

Source: Kauai General Plan





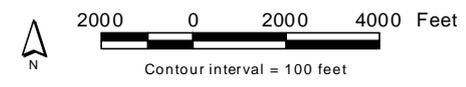
West Side Planning District Heritage Resources

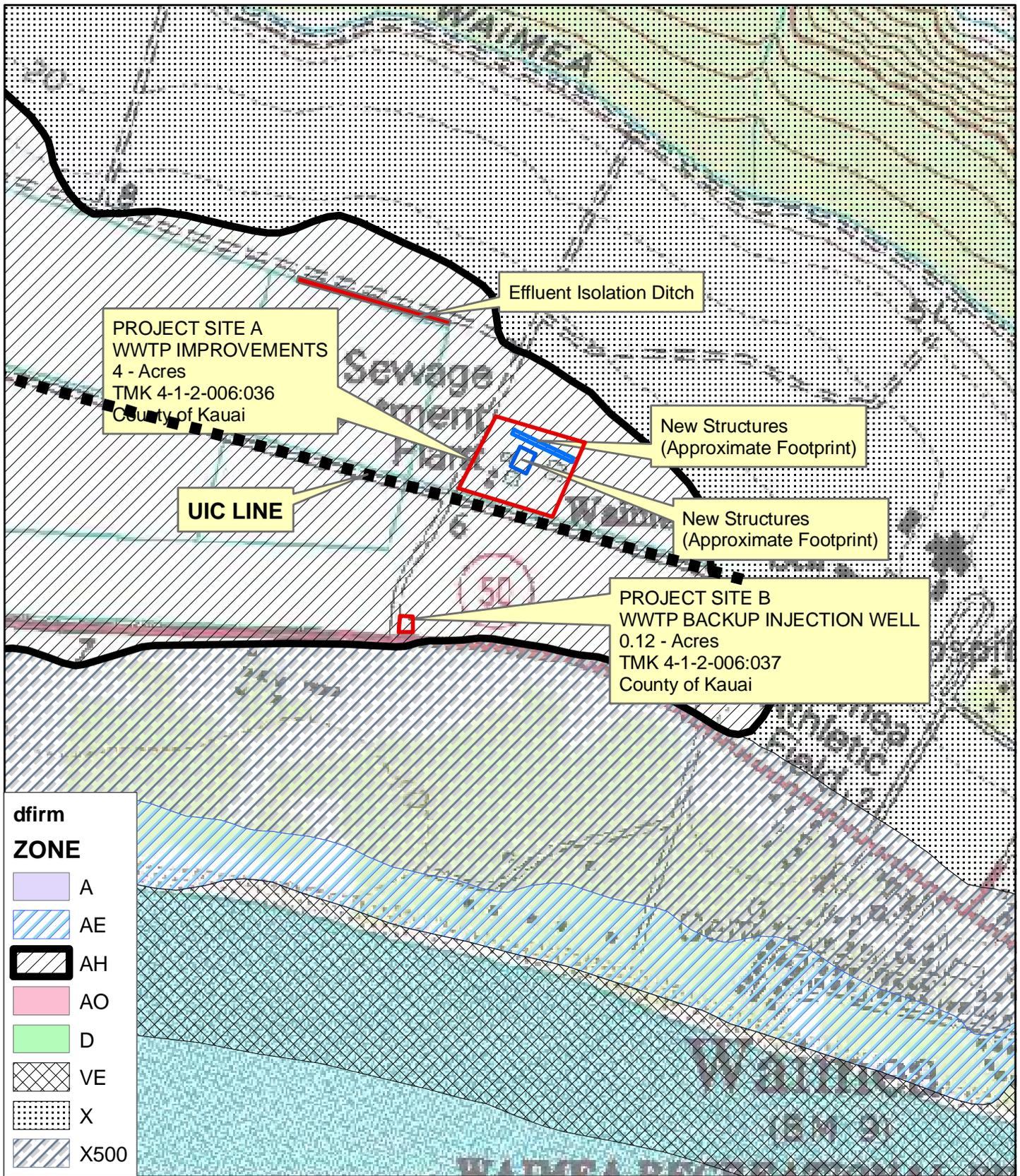


Figure 11

WAIMEA WWTP EXPANSION, PHASE 1

Source: Kauai General Plan

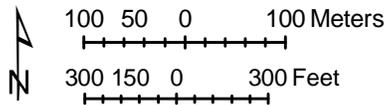




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ZONE

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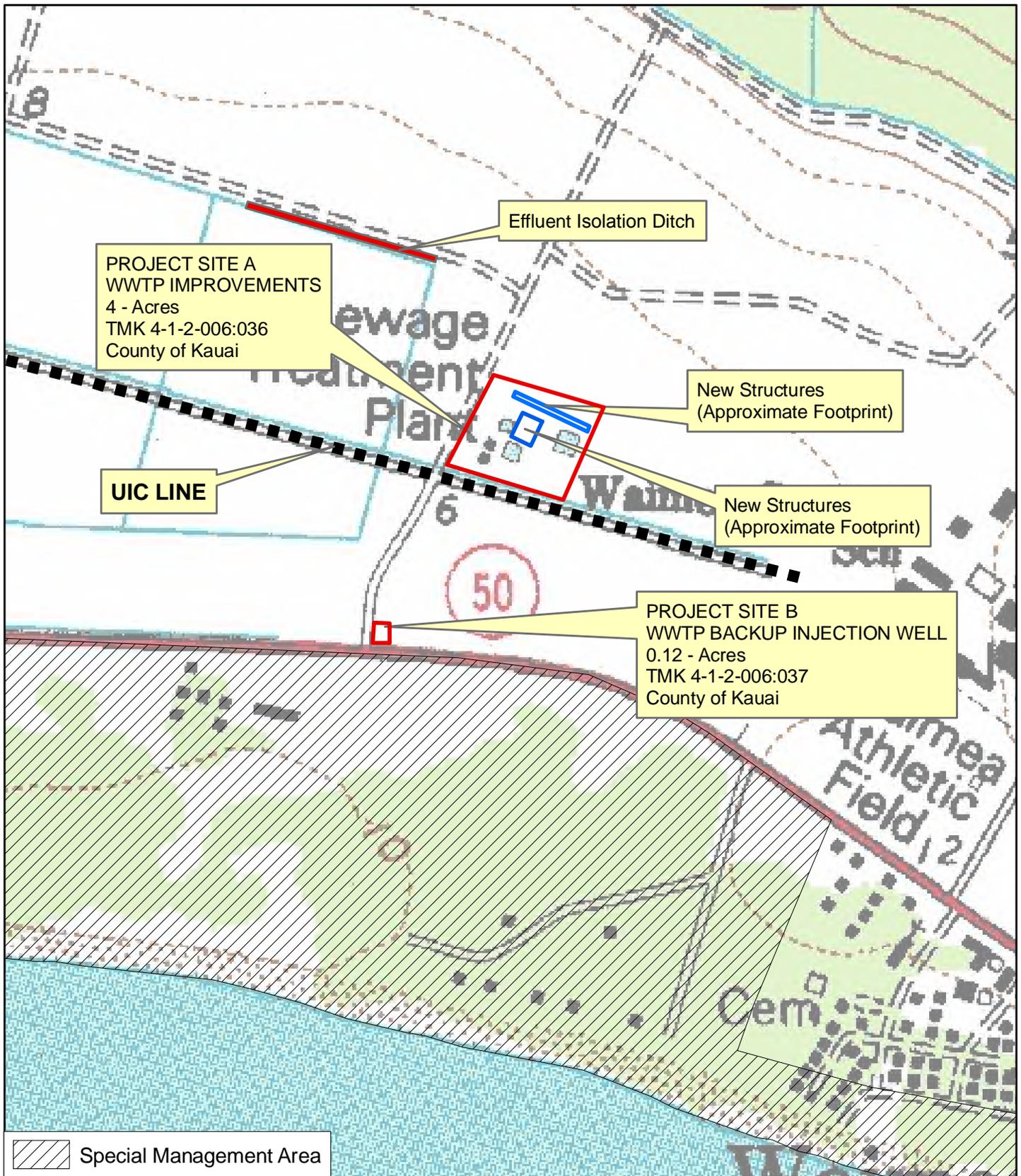


Flood Zone

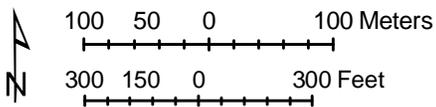
Figure 12

WAIMEA WWTP EXPANSION, PHASE I
 County of Kauai
 Division of Wastewater Management
 Department of Public Works
 Austin Tsutsumi & Assoc.

Eugene P. Dashiell, AICP
 Environmental Planning Services
 Honolulu, Hawaii
 June 2008



 Special Management Area



Special Management Area (SMA)

Figure 13

WAIMEA WWTP EXPANSION, PHASE I

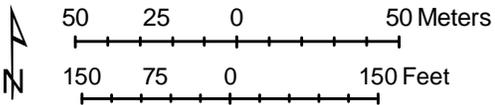
County of Kauai

Division of Wastewater Management

Department of Public Works

Austin Tsutsumi & Assoc.

Eugene P. Dashiell, AICP
 Environmental Planning Services
 Honolulu, Hawaii
 June 2008



Area of Potential Effect (APE)

Figure 14

Eugene P. Dashiell, AICP
Environmental Planning Services
Honolulu, Hawaii
June 2008

WAIMEA WWTP EXPANSION, PHASE I
County of Kauai
Division of Wastewater Management
Department of Public Works
Austin Tsutsumi & Assoc.

APPENDIX A

ARCHAEOLOGICAL ASSESSMENT REPORT

ASC061108

DRAFT
**Archaeological Assessment Report:
Proposed Expansion of the
Waimea Wastewater Treatment Facility
Waimea, Kaua`i Island
(TMK:(4)1-2-06:36 & 37)**



June 2008

Aki Sinoto Consulting
2333 Kapiolani Blvd., No. 2704
Honolulu, Hawai`i 96826

ABSTRACT

At the request of Austin Tsutsumi & Associates of Honolulu, representing the County of Kaua`i, Aki Sinoto Consulting of Honolulu, undertook an archaeological assessment survey in conjunction with the proposed Expansion of the Waimea Waste Water Treatment Facility. The purpose of the is to expand the capacity of the WWTP to meet the future demands imposed by the Kauai General Plan. The proposed improvements involve adding capacity to the existing WTP and adding a second backup injection well. There are two Areas of Potential Effect; one will be a portion of the 4 acre area within the grounds of the existing facility bounded by a perimeter fence and the other is within the 0.12 acre area bounded by a fence located immediately north of Kuhio Highway at the junction with the access road to the existing waste water facility.

No significant archaeological or historic remains nor other evidence of past human activities were encountered within the boundaries of the subject project area during the current field procedure. The archival search revealed no records of any previous significant findings as well. Mass grading and other ground surface alteration activities associated with the construction of the existing facility during the 1970s preceded by commercial sugar-cane cultivation would have extensively impacted the immediate project area.

Thus, based on the negative results of the current assessment, no further historic preservation-related procedures, including archaeological monitoring during construction, are recommended in conjunction with the proposed expansion project. However, should any inadvertent discoveries occur during the course of construction activities, the Kaua`i Office of the State Historic Preservation Division shall be contacted for consultation.

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INTRODUCTION

At the request of Austin Tsutsumi & Associates of Honolulu, representing the County of Kaua`i, Aki Sinoto Consulting undertook an archaeological assessment survey, in conjunction with the proposed expansion of the Waimea Waste Water Treatment Facility. The purpose of the proposed expansion is _____. The proposed improvements involve _____. The current undertaking, in accordance with Chapter 6E and HAR Title 13-276, involved standard archaeological assessment procedures.

PROJECT AREA

The project area, comprised of two separate parcels (TMK:(4)1-2-06:36 & 37) encompassing 4.12 acres, is located north of Kuhio Highway immediately past Waimea Town, in Waimea District on the leeward west side of Kaua`i Island (Fig. 1). There are two Areas of Potential Effect; one will be a portion of the 4.0 acre area within the grounds of the existing facility bounded by a perimeter fence and the other is within the 0.12 acre area occupied by an existing injection well assembly, bounded by a fence, located immediately north of Kuhio Highway at the junction with the access road to the existing waste water facility (Figs. 2 & 3).

ENVIRONMENT

The project area occurs on the flat, lowlying coastal lands of leeward, western Kaua`i. The predominant land use in the area was formerly sugar cane cultivation, and currently still agricultural. Vegetation within the project area consists of a lawn and a few exotic species commonly used for landscaping.

The annual rainfall is estimated to average 2.5 to 20 inches in Waimea, with January to April and October to December recording the higher numbers. The prevailing winds are northeasterly (tradewinds) ranging from 4 to 24 miles per hour. The generally moderate climate can be described as having two seasons; summer from May to September and winter from October to April. The winter months are generally cooler and wetter.

Two major soil groups, fill land and Nohili Clay, are represented in the area. The fill land consists of areas filled with soils from adjacent uplands or sugar mill slurry and used for sugar cane cultivation. The Nohili Clay consists of poorly drained lands that occur on coastal plains with alluvium deposited over a marly lagoon deposit. These soils are related to Kaloko soils which support irrigated sugarcane cultivation (Foote et al. 1972).

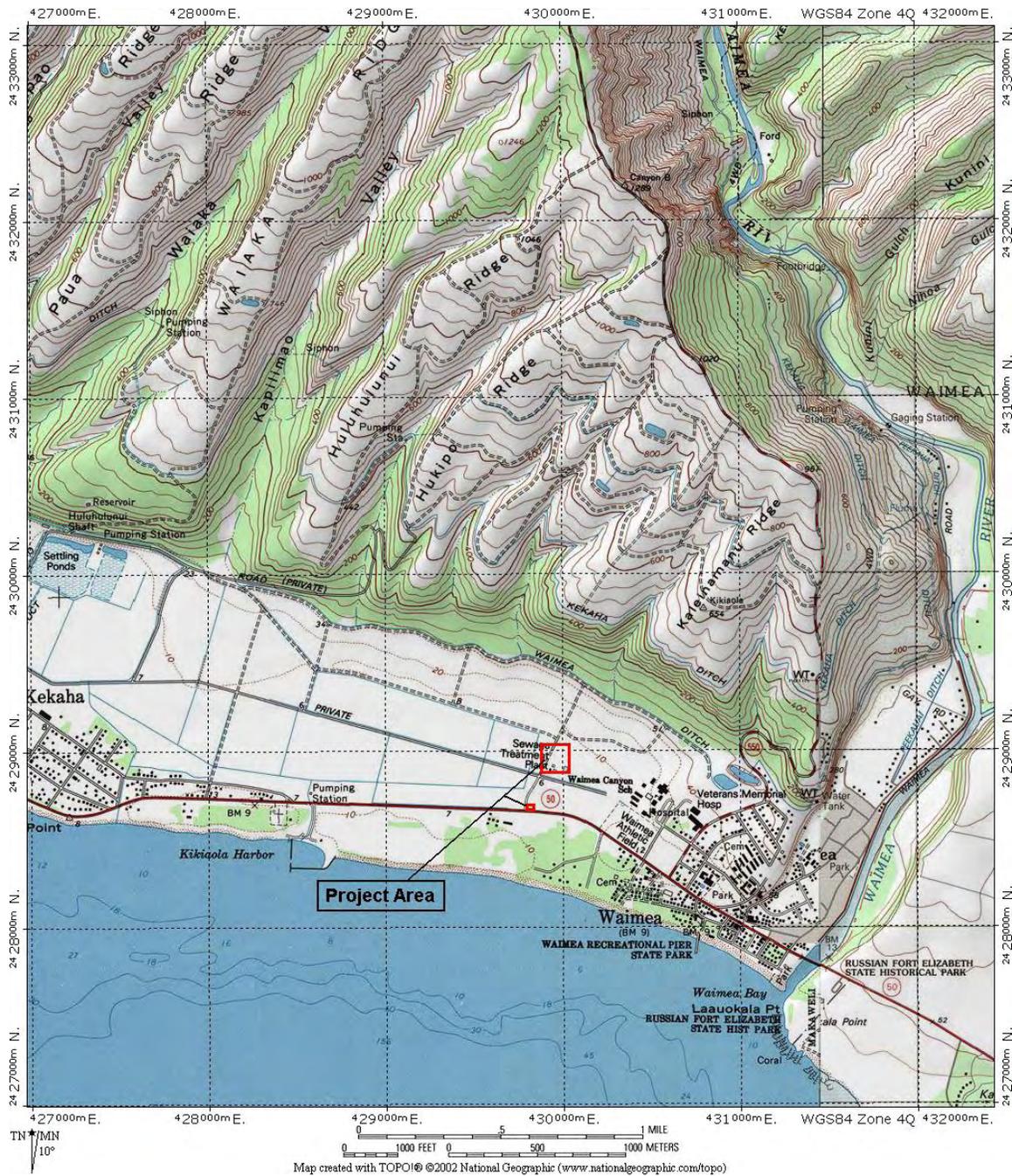


Figure 1. Location of Project Area on USGS Waimea Quadrangle



Figure 2: Overviews of the Waimea WWT Facility; Top: View to NE and Bottom: View to SW



Figure 3. Aerial View of Waimea WWT Facility Showing Elements of the Proposed Expansion (map by Eugene P. Dashiell)

METHODS

The current assessment procedure entailed a walk-through, on-site inspection of the immediate project area as well as the surrounding areas. The area within the perimeter fence was covered on foot and inspected. Areas in the surrounding vicinity, such as sidewalls of open ditches and backdirt berms were inspected for any exposed subsurface components or features. Since the study area has previously been extensively developed, literature and archival searches were conducted to obtain pertinent information regarding previous land-use, original topographic conditions, and archaeological data. No information regarding previous archaeological studies within the boundaries or in the immediate vicinity of the current project area was available. The fieldwork component of the current undertaking was conducted on March __, 2008. Eugene Dashiell, M.A. was the principal investigator and Aki Sinoto was the project director.

SURVEY RESULTS

No significant archaeological or historic remains or other evidence of past human activities were encountered within the boundaries or in the vicinity of the two parcels comprising the subject project area. Mass grading and other ground surface alteration activities compounded over the years in association with various agricultural endeavors, as well as the construction of the existing waste water facility and the injection well assembly, have all extensively impacted the immediate project area and its surrounding environs.

RECOMMENDATIONS

Based on the negative results of the current assessment procedure as well as the extensive previous modifications that took place during large-scale, historic through modern-period, agricultural endeavors and the construction of the existing facility; no further historic preservation-related procedures, including archaeological monitoring during construction, are recommended in conjunction with the proposed expansion project. However, should any subsurface remains be inadvertently exposed during construction, work shall be halted in the immediate vicinity of the discovery, and the Kaua'i Office of the State Historic Preservation Division shall be contacted for consultation regarding any subsequent mitigation measures that may be warranted.

BIBLIOGRAPHY

Armstrong, R. Warwick (ed.)

1973 *Atlas of Hawaii*. Dept. of Geography, University of Hawaii. University Press of Hawaii. Honolulu.

Bennett, Wendell C.

1931 *Archaeology of Kaua`i*. Bishop Museum Bulletin No.80. Bishop Museum Press. Honolulu.

Foote, Donald E.; Elmer L. Hill; Sakuichi Nakamura; and Floyd Stephens

1972 *Soil Survey of Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii*. Soil Conservation Service, U.S. Dept. of Agriculture in Cooperation with The University of Hawaii Agricultural Experiment Station. U.S. Government Printing Office. Washington D.C.

Handy, E.S. Craighill and Elizabeth G. Handy

1972 *Native Planters of Hawaii*. Bishop Museum Press. Honolulu

APPENDIX B
COMMENTS & RESPONSES

September 17, 2008

Eugene P. Dashiell, AICP
Environmental Planning Services
1314 South King Street, Suite 952
Honolulu, Hawaii 96814

Re: DRAFT ENVIRONMENTAL ASSESSMENT
WAIMEA WASTEWATER TREATMENT PLANT EXPANSION, PHASE I

Dear Mr. Dashiell:

Kikiaola Land Company does not want to unduly delay the wastewater treatment plant expansion; however, we have some serious concerns. Following are our preliminary comments on the above-mentioned assessment.

2.2 Project Features. We are concerned about the addition of a second backup injection well for effluent disposal “in the event of need.”

You state that the “method of effluent disposal is shifting from the ... (reservoirs)... “to use of an effluent isolation ditch ...which is intended to reduce the risk of discharge of the reservoir-mix into the ocean during intense rainstorm events.” You further state that an “existing backup injection well was installed to serve as a means of effluent disposal which could be required during intense rainstorms in the event that the effluent disposal ditch is not capable of handling the effluent,” and that “(t)he proposed second backup injection well would serve the same purpose and would be needed because of the proposed increase in the WWTP capacity.”

It would seem more appropriate to increase the size of the isolation ditch to accommodate the proposed increase in the WWTP capacity, than to build another expensive injection well that would obviously *have* to be used in every storm because of the increased WWTP capacity.

5.2 Geology and Groundwater Sources. We are not satisfied that a second injection well would not lead to negative consequences for the aquifer. Although as you state in 4.2 “the existing backup injection well has previously been approved by the State Department of Health,” there *was* significant controversy about the effect of an injection well on geology or groundwater sources, and as

stated in your report at 5.2 “as a precautionary measure, a monitor well was constructed in the mauka northeast corner of the WWTP site to monitor any change in the groundwater quality that could be attributed to disposal of effluent into the backup injection well.”

In your 5.2 footnote 14 you cite studies that were completed for the first injection well. You do not cite any studies subsequent to the completion of the first injection well that have been conducted or reported as a result of monitoring the groundwater quality by means of the monitor well. We believe that there should be more information included in the assessment to render the conclusion drawn in 7.2.11, that there “should be no adverse impacts” on the “aquifer underlying the caprock at the project site” more credible. (“Should” is not a sufficiently comforting word here when the quality of the aquifer is at stake.)

5.2 Frequency of severe rainstorms. Your report states that severe rainstorms are “very rare and infrequent.” We believe that a study of rainfall in the last three years will show that at least two severe rainstorms have occurred every year. Without enlarging the primary source of disposal (the isolation ditch), it will be inevitable that the second injection well will be used. We suggest that the amount of effluent expected to be injected into the well be quantified and reported in this assessment.

Isolation ditch alternative. Reuse of the effluent would seem to be a more environmentally sound method of effluent disposal than an injection well which provides an “out of sight, out of mind” solution with possible effects on the aquifer. There will be a natural tendency to use the injection wells as an easier option than maintaining the isolation ditch and reusing the water for irrigation. This has already become apparent because water from the isolation ditch is currently not being used for irrigation.

When first proposed, the isolation ditch was intended to be used for the irrigation of crops currently and in the future for the irrigation of a golf course proposed in Kikiaola’s master plan. Since then, the corn company now farming the land has developed an alternative method of irrigation using water from the ditch system which is filtered through a solar-powered filter system. In order to effectively use the effluent for irrigation, once it is mixed with ditch water in the irrigation ditch it needs to be filtered for irrigation purposes. We believe a report of the frequency of use of the existing injection well should be included in this study.

Before building a second injection well, it would seem worthwhile to study the alternative of enlarging the isolation ditch and providing a filtering system for

irrigation. In any event, as long as the isolation ditch is a primary source of disposal, a filtering system should be designed for the isolation ditch to be practically useful for irrigation.

Noise from the injection well. A report of the noise level generated by the existing injection well when in use (including frequency of use) should also be included in the study.

2.2 Upgrading effluent quality from R1 water to R2. The study fails to mention that the DOWW has an agreement with Kikiaola, that in order for Kikiaola to continue to accept the effluent the quality of the effluent will be upgraded within a certain amount of time, so there is more involved in this project feature than flexibility.

Respectfully submitted,

Linda Faye Collins
Kikiaola Land Co., Ltd.
Waimea, Kauai
HI 96796

Telephone: 808.338.1900

cc by email: Ivan Nakatsuka
Ed Tschupp

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LIHU'E, KAUA'I, HAWAII 96766-1340

October 13, 2008

Ms. Linda Faye Collins
Kikiaola Land Company, Ltd.
P.O. Box 367
Waimea, Hawaii 96796

SUBJECT: COMMENTS ON DRAFT ENVIRONMENTAL ASSESSMENT (EA) FOR
THE WAIMEA WASTEWATER TREATMENT PLANT (WWTP)
EXPANSION, PHASE 1, TMK: (4) 1-2-006:036 & 037

Dear Ms. Collins:

Thank you for your comments on the subject document. The Department of Public Works (County) offers the following responses, in the order your comments were presented.

1. The County appreciates your suggestion of expanding the capacity of the isolation ditch, and will consider such expansion in the project design. We will add a notation in the Final EA to indicate that work in this area may be included. As a practical matter, the isolation ditch presently has a capacity of not much more than a day of effluent storage, and we believe that a second back-up injection well is appropriate and prudent to provide for disposal of peak wet weather flow from the WWTP.

The isolation ditch serves the purpose of "isolating" the effluent from the existing network of irrigation ditches in the region, and allows for the effluent to be pumped out of the isolation ditch where and when needed for irrigation purposes. As previously mentioned, the storage capacity of the isolation ditch was not intended to be for much more than a day's worth of effluent produced by the WWTP. Therefore, expansion of the isolation ditch would be expected to be consistent with this intent. Effluent disposal does not occur in the isolation ditch, other than through evaporation or infiltration, which would not be rapid enough to dispose of the volume of effluent which is or will be treated by the WWTP.

The storage volume in a pond intended to be used to eliminate the need for a back-up effluent disposal system is on the order of 20 days of storage capacity, which at a rated capacity for the plant of 700,000 gallons per day, would require a pond on the order of 14 million gallons of storage capacity. A pond of this size is probably not feasible, and may

not even be feasible in the future, when the isolation ditch is converted to a golf course water feature as part of the anticipated development on the Kikiaola Land Co. property. Although the isolation ditch perimeter berms were designed and constructed to an elevation above the 100-year flood plain elevation, during severe and intense storms effluent would be disposed via the existing and proposed injection wells. These wells are necessary to prevent discharges to State waters of treated effluent, a situation that has historically occurred with the existing effluent disposal via the irrigation reservoirs. To increase the capacity of the Waimea WWTP, there must be sufficient capacity of the effluent disposal system, including the back-up injection well system.

2. The data that has been obtained from both the existing injection well and the monitor well were included in the *Final Underground Injection Control Report for the Waimea Wastewater Treatment Plant Backup Injection Well, December 3, 2007* prepared by Austin, Tsutsumi & Associates, Inc. for the County, and submitted to the State of Hawai'i, Department of Health (DOH) for use in the Underground Injection Control (UIC) permit for the well. This report includes the available data from March 2007, when the injection well capacity was tested, and follow-up data from September 2007. A copy of the report will be provided for your review.

The available data clearly indicate that both the injection well and monitor well are completed in a highly saline part of the aquifer. The groundwater gradient within the salt water aquifer is also flat. The County interprets these results to be indicative that backup effluent disposal using the existing permitted injection well is appropriate, and we believe the addition of a second well to ensure adequate backup disposal capacity consistent with the plant expansion is also appropriate.

More recent monitor well data are not available, and the existing injection well has not been used. At present, the method of effluent disposal continues to be via the irrigation reservoirs, and this method cannot continue indefinitely. The switchover from use of the irrigation reservoirs to the isolation ditch is pending coordination with the land owner and agricultural tenants. Use of the injection wells is not proposed excepting during severe rainfall-runoff events. Once the existing well is placed into service, future observation of salinity and water levels in the monitor well will provide more data for evaluation of whether or not any impacts on the aquifer can be observed.

3. The total amount of effluent which might be discharged via the two injections wells would be equal to the peak flow that can be expected from the proposed expanded WWTP, which would occur during a period of sustained rainfall, and not during most days in the year.
4. We concur that irrigation with the effluent is the best practical reuse of effluent for this WWTP. The existing injection well and proposed second injection well would only be used during severe storm events. Consistent with providing for effluent reuse for irrigation, the proposed WWTP expansion project includes upgrades needed to produce

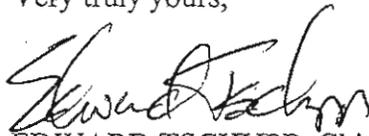
Ms. Linda Faye Collins
October 13, 2008
Page (3)

"R-1" reuse water from the facility which will enhance water quality and allowable uses for the resulting R-1 effluent.

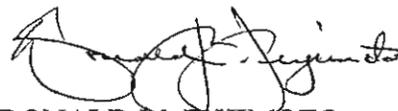
5. There are no ground level noise generating devices at the site of the existing injection well, and none are proposed.
6. As stated in the EA (para. 2.2), the existing effluent quality is R-2 (secondary treatment). The proposed level of treatment will be R-1 (tertiary treatment) which is suitable for many irrigation purposes, including landscaping and golf courses.

If you have questions, please contact Edward Tschupp (808-241-6258).

Very truly yours,


EDWARD TSCHUPP, Chief
Wastewater Management Division

CONCUR:


DONALD M. FUJIMOTO
County Engineer

cc: Eugene P. Dashiell, AICP
Ivan Nakatsuka



September 16, 2008

Mr. Edward Tschupp
County of Kauai – Public Works
Division of Wastewater Management
4444 Rice Street, Suite 275
Lihue, HI 96766

Dear Mr. Tschupp:

Subject: Draft Environmental Assessment for the Waimea Wastewater Treatment Plant Expansion Phase I, TMK: 1-2-06:036 and 1-2-06:037, Waimea, Kauai, Hawaii

This letter is in response to your August 22, 2008 letter concerning the August 2008 Draft Environmental Assessment for the Waimea Wastewater Treatment Plant Expansion Phase I, prepared for the County of Kauai by Eugene P. Dasheill, AICP, Environmental Planning Services through Austin Tsutsumi & Associates, Inc..

The proposed expansion project includes increasing the Waimea WWTP capacity from 300,000 GPD to 700,000 GPD, adding a second backup injection well for effluent disposal, and upgrading the effluent from R-2 water to R-1 water. Modification of parts of the existing WWTP and addition of new structures including electrical and mechanical equipment are proposed.

The Draft Environmental Assessment states that:

None of the proposed (including the recommended) alternatives are anticipated to have any significant impacts on geology or groundwater sources, regional or local.

The WWPS site with the injection well is makai of the underground injection control (UIC) line and the existing backup injection well has previously been approved by the State Department of Health.

Please provide the Department of Water (DOW) with a copy of the Engineer's report that these statements are based on.

The proposed injection well located on TMK: 1-2-06:037 is approximately 3,600 feet west of a public domestic water source that provides water to the area. Please elaborate more on the referenced monitoring well located on the project site (TMK: 1-2-06:036):

- How often will the monitoring well (groundwater) be checked/tested?
- If contaminants are found in the monitoring well, what action or procedure will occur?

Mr. Edward Tschupp
County of Kauai – Public Works
Division of Wastewater Management
Subject: Draft Environmental Assessment for the Waimea Wastewater Treatment Plant
Expansion Phase I, TMK: 1-2-06:036 and 1-2-06:037, Waimea, Kaua'i, Hawai'i
September 16, 2008
Page 2

Any request for additional or a larger sized water meter will be dependent on the adequacy of the source, storage, and transmission facilities existing at that time. All water meters to the site are required to install DOW approved backflow prevention assemblies.

Sincerely,



Gregg Fujikawa
Chief of Water Resources and Planning

KA:mll
ea- waimea wwtp expansn w1-2-06-036,37 T-10297

c: Eugene Dashiell, Environmental Planning Services

BILL "KAIPO" ASING
MAYOR

GARY K. HEU
ADMINISTRATIVE ASSISTANT



DONALD M. FUJIMOTO
COUNTY ENGINEER
TELEPHONE 241-4992

EDMOND P.K. RENAUD
DEPUTY COUNTY ENGINEER
TELEPHONE 241-4992

AN EQUAL OPPORTUNITY EMPLOYER
COUNTY OF KAUA'I

DEPARTMENT OF PUBLIC WORKS
4444 RICE STREET
MO'IKEHA BUILDING, SUITE 275
LIHU'E, KAUA'I, HAWAII 96766-1340

October 13, 2008

Mr. Gregg Fujikawa
Chief of Water Resources and Planning
County of Kaua'i, Department of Water
4398 Pua Loke Street
Lihu'e, Hawai'i 96766

SUBJECT: COMMENTS ON DRAFT ENVIRONMENTAL ASSESSMENT (EA) FOR
THE WAIMEA WASTEWATER TREATMENT PLANT (WWTP)
EXPANSION, PHASE 1, TMK: (4) 1-2-006:036 & 037

Dear Mr. Fujikawa:

Thank you for your comments on the subject document.

1. The documentation requested on both the existing injection well and the monitor well were included in the *Final Underground Injection Control Report for the Waimea Wastewater Treatment Plant Backup Injection Well, December 3, 2007* prepared by Austin, Tsutsumi & Associates, Inc. for the County, and submitted to the State of Hawai'i, Department of Health (DOH) for use in the Underground Injection Control (UIC) permit for the well. This report includes the available data from March 2007, when the injection well capacity was tested, and follow-up data from September 2007. A copy of the report will be provided for your review.

The available data clearly indicate that both the injection well and monitor well are completed in a highly saline part of the aquifer. The groundwater gradient within the salt water aquifer is also flat. The County interprets these results to be indicative that backup effluent disposal using the existing permitted injection well is appropriate, and we believe the addition of a second well to ensure adequate backup disposal capacity consistent with the plant expansion is also appropriate.

More recent monitor well data are not available, and the existing injection well has not been used. At present, the method of effluent disposal continues to be via the irrigation reservoirs, and this method cannot continue indefinitely. The switchover from use of the irrigation reservoirs to the isolation ditch is pending coordination with the land owner and agricultural tenants. Use of the injection wells is not proposed excepting during severe

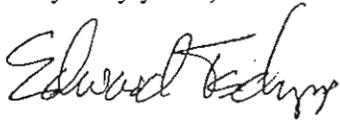
Mr. Gregg Fujikawa
October 13, 2008
Page (2)

rainfall-runoff events. Once the existing well is placed into service, future observation of salinity and water levels in the monitor well will provide more data for evaluation of whether or not any impacts on the aquifer can be observed. Monitoring using a temperature and salinity probe on an annual basis is anticipated, and a water level data recorder has been obtained for water level monitoring. Additional monitoring or response actions will be evaluated in consultation with a ground water hydrogeologist and the DOH, if indicated by the water level and salinity data following use of the injection well.

2. A request for an additional or larger sized water meter is not anticipated as part of the proposed project. The County shall comply with all DOW requirements for installation of backflow prevention assemblies.

If you have questions, please contact Edward Tschupp (808-241-6258).

Very truly yours,



EDWARD TSCHUPP, Chief
Wastewater Management Division

CONCUR:



DONALD M. FUJIMOTO
County Engineer

cc: Eugene P. Dashiell, AICP
Ivan Nakatsuka

BILL "KAIPO" ASING
MAYOR



DONALD M. FUJIMOTO
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TELEPHONE 241-4992

GARY K. HEU
ADMINISTRATIVE ASSISTANT

EDMOND P.K. RENAUD
DEPUTY COUNTY ENGINEER
TELEPHONE 241-4992

AN EQUAL OPPORTUNITY EMPLOYER
COUNTY OF KAUA'I
DEPARTMENT OF PUBLIC WORKS
4444 RICE STREET
MO'IKEHA BUILDING, SUITE 275
LIHU'E, KAUA'I, HAWAII 96766-1340

September 4, 2008

Mr. Eugene P. Dashiell
Environmental Planning Services
1314 South King Street, Suite 952
Honolulu, Hawai'i 96814

Dear Mr. Dashiell,

**SUBJECT: WAIMEA WASTEWATER TREATMENT PLANT EXPANSION, PHASE I
DRAFT EA REQUEST FOR REVIEW AND COMMENT PW 8.08.143**

We reviewed the subject draft environmental assessment. We offer the following comments:

A. GRADING PERMIT:

1. A grading permit is not required for this project so long as the grading is confined within tax map key 1-2-006-036 and 037. The Sediment and Erosion Control Ordinance No. 808 exempts the grading within a self contained government control area. However, we expect the Wastewater Division to monitor the grading activities as well as providing Best Management Practices (BMP's) to the maximum extent practicable to prevent damage by sedimentation, erosion or dust to streams, watercourses, natural areas and the property of others.
2. A separate grading permit may be required for the borrow site and disposal site. The borrow and disposal must also satisfy the Sediment and Erosion Control Ordinance No. 808. Grading and/or Stockpiling plans shall be submitted for our review and approval.

B. FLOOD HAZARD:

1. Section 4.12 states the project site and surrounding areas are shown as Zone A (Figure 12). Based on the Panel Nos. 254E and 258E of the Federal Insurance Rate Map (FIRM), dated September 16, 2005, the flood zoning is a Zone AH with a corresponding base flood elevation of 8 feet above mean sea level (MSL) rather than Zone A. The Final Draft EA needs to be amended. Zone AH is described as a Special Flood Hazard Area with flood depths of 1 to 3 feet (usually in ponding);

Environmental Planning Services

September 4, 2008

Page (2)

Base Flood Elevations determined. All new construction needs to be elevated to or above the determined base flood elevation. We request that a copy of the draft EA be submitted to the County's Flood Plain Coordinator for their review and comments.

2. Section 4.17 Coastal Zone Management: The last sentence reads "However, the project site (both parcels) is **not** within the special management area (SMA) of the County of Kaua'i and there is **no requirement for a permit to perform** construction in the SMA." Our Planning Department regulates the Special Management Area. The sentence needs to be rechecked. If the project site is not within the special management area, an SMA permit should not be required.

Thank you for this opportunity to provide our comments. We wish to remain on your mailing list in receiving a copy of the final EA. Should you have any questions please contact us at (808)241-4883.

Very truly yours,



Wallace Kudo, P.E.
Chief, Engineering Division

CONCUR:



DONALD M. FUJIMOTO, P.E.
County Engineer

WK

cc: Edward Tschupp, P.E., Chief, Division of Wastewater Management
Design and Permitting
Construction Inspection

BILL "KAIPO" ASING
MAYOR



DONALD M. FUJIMOTO
COUNTY ENGINEER
TELEPHONE 241-4992

GARY K. HEU
ADMINISTRATIVE ASSISTANT

EDMOND P.K. RENAUD
DEPUTY COUNTY ENGINEER
TELEPHONE 241-4992

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DEPARTMENT OF PUBLIC WORKS
4444 RICE STREET
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LIHU'E, KAUA'I, HAWAII 96766-1340

October 13, 2008

Wallace Kudo, P.E.
Department of Public Works
4444 Rice Street, Suite 275
Lihue, Hawaii 96766-1340

SUBJECT: COMMENTS ON DRAFT ENVIRONMENTAL ASSESSMENT (EA) FOR
THE WAIMEA WASTEWATER TREATMENT PLANT (WWTP)
EXPANSION, PHASE 1, TMK: (4) 1-2-006:036 & 037

Dear Mr. Kudo:

Thank you for your comments on the subject document.

1. We note that a grading permit will not be required so long as the proposed project is confined with TMK 1-2-006-036 and 037. Wastewater Division will monitor grading to assure that best management practices are followed to prevent damage by sedimentation, erosion or dust to streams, watercourses, natural areas and the property of others. Contractors will be required to meet these requirements and will be notified that a grading permit may be required for borrow or disposal sites and that activities at those sites must meet the requirements of the Sediment and Erosion Control Ordinance No. 808, and that Grading and/or Stockpiling plans must be submitted to the Engineering Division for review and approval.
2. The final EA will incorporate the flood determination correction that the site is in Zone AH with a base flood elevation of 8 feet. As part of the proposed project, the new office/laboratory (similar in size and scope to the existing facility) and any other structures housing electrical/mechanical equipment will be constructed with a raised floor that is a minimum of one foot above the base flood elevation. The draft EA was sent to the County's Flood Plain Coordinator in the Building Division and a response letter has been received.
3. We will recheck the sentence in Section 4.17 of the subject document related to the special management area and note that such a determination is made by the Planning Department.

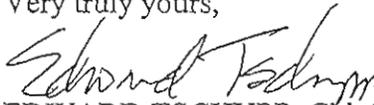
Mr. Wallace Kudo, P.E.

October 13, 2008

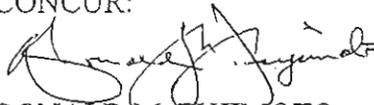
Page (2)

If you have questions, please contact Edward Tschupp (808-241-6258).

Very truly yours,


EDWARD TSCHUPP, Chief
Wastewater Management Division

CONCUR:


DONALD M. FUJIMOTO
County Engineer

cc: Eugene P. Dashiell, AICP
Ivan Nakatsuka

BILL "KAIPO" ASING
MAYOR

GARY K. HEU
ADMINISTRATIVE ASSISTANT



DONALD M. FUJIMOTO
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TELEPHONE 241-6800

EDMOND P.K. RENAUD
DEPUTY COUNTY ENGINEER
TELEPHONE 241-6840

AN EQUAL OPPORTUNITY EMPLOYER

COUNTY OF KAUI
DEPARTMENT OF PUBLIC WORKS
4444 RICE STREET
MO'IKEHA BUILDING, SUITE 275
LIHU'E, KAUI, HAWAII 96766-1340

September 3, 2008

Division of Wastewater Management
Department of Public Works
4444 Rice Street, Suite 275
Lihue, HI 96766
ATTENTION: Mr. Edward Tschupp, P.E., Chief

SUBJECT: Environmental Assessment (EA) Waimea Wastewater Treatment Plant Expansion,
Phase 1, Draft EA, TMK(4) 1-2-006: 036 & 037

Dear Mr. Tschupp:

We reviewed the subject Environmental Assessment dated August 2008. The flood determination in section 4.12, page [4-4] is incorrect when it says that the project site is in flood zone A. Panel 258E of the Flood Insurance Rate Map dated September 16, 2005 shows both parcel 36 and 37 to be located in flood zone AH, with a base flood elevation of 8 feet above mean sea level. Zone AH is an area of minimal flooding with flood depths of 1 to 3 feet. This is significant when planning the project since floodproofing or elevating equipment and occupied rooms is easily achieved in zone AH.

Should you have any questions, please contact Mario T. Antonio of my staff at (808)241-4873.

Very truly yours,


DOUGLAS HAIGH, P.E.
Chief of Building Division

MTA

Copies to: DONALD M. FUJIMOTO, P.E. County Engineer
EUGENE P. DASHIELL, AICP

BILL "KAIPO" ASING
MAYOR



DONALD M. FUJIMOTO
COUNTY ENGINEER
TELEPHONE 241-4992

GARY K. HEU
ADMINISTRATIVE ASSISTANT

EDMOND P.K. RENAUD
DEPUTY COUNTY ENGINEER
TELEPHONE 241-4992

AN EQUAL OPPORTUNITY EMPLOYER
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DEPARTMENT OF PUBLIC WORKS
4444 RICE STREET
MO'IKEHA BUILDING, SUITE 275
LIHU'E, KAUA'I, HAWAII 96766-1340

October 13, 2008

Douglas Haigh, P.E.
Chief of Building Division
Department of Public Works
4444 Rice Street
Moikeha Building, Suite 275
Lihue, Hawaii 96766-1340

SUBJECT: COMMENTS ON DRAFT ENVIRONMENTAL ASSESSMENT (EA) FOR
THE WAIMEA WASTEWATER TREATMENT PLANT (WWTP)
EXPANSION, PHASE 1, TMK: (4) 1-2-006:036 & 037

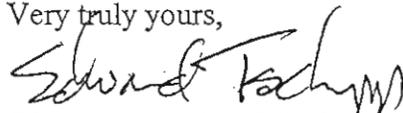
Dear Mr. Haigh:

Thank you for your comments on the subject document.

The final EA will incorporate the flood determination correction that the site is in Zone AH with a base flood elevation of 8 feet. As part of the proposed project, the new office/laboratory (similar in size and scope to the existing facility) and any other structures housing electrical/mechanical equipment will be constructed with a raised floor that is a minimum of one foot above the base flood elevation.

If you have questions, please contact Edward Tschupp (808-241-6258).

Very truly yours,


EDWARD TSCHUPP, Chief
Wastewater Management Division

CONCUR:


DONALD M. FUJIMOTO
County Engineer

cc: Eugene P. Dashiell, AICP
Ivan Nakatsuka



STATE OF HAWAII
OFFICE OF HAWAIIAN AFFAIRS
711 KAPI'OLANI BOULEVARD, SUITE 500
HONOLULU, HAWAII 96813

HRD08/3811

September 29, 2008

Edward Tschupp
Division of Wastewater Management
Department of Public Works
444 Rice Street, Suite 275
Lihu'e, Hawai'i 96766

RE: Request for comments on the proposed Waimea Wastewater Treatment Plant expansion phase 1 draft environmental assessment (DEA), Waimea, Kauai, TMK: 4-1-2-006:036, 037.

Aloha e Edward Tschupp,

The Office of Hawaiian Affairs (OHA) is in receipt of the above-mentioned letter dated August 22, 2008. OHA has reviewed the project and offers the following comments.

OHA notes that the DEA in section 1.2 *Purpose and Need* states, "The purpose of the Proposed Action is for public health and safety by adding capacity to the existing WWTP to meet the requirements of treatment of wastewater from developments approved in the Kauai General Plan." The introduction section also states that, "The existing capacity is insufficient to accommodate sewage flows from developments and land uses planned by the County which are identified in the Kauai General Plan."

OHA is concerned by this proposal. The *Purpose and Need* section refers to the Kauai General Plan as the reason for the proposal but does not specifically cite from it. OHA would like clarification as to how the Kauai General Plan justifies this proposal.

For example, the DEA states that "The General Plan shows the project site and surrounding lands as an 'Open land use designation with land uses such as open space, parks, agriculture or conservation.'" (DEA, page 4-3) The surrounding areas are zoned agriculture lands. (DEA, page 4-2) Development and houses are not designated uses in this area.

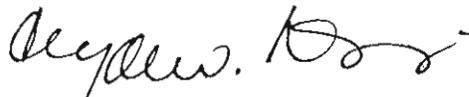
Therefore, OHA cannot understand how the County of Kauai Division of Wastewater Management is anticipating uses that are not appropriate for the area.

These concerns become alarming when we read that the proposal is to more than double the size of this facility. (DEA, page 1-1) OHA asks what developments are proposed that would necessitate this substantial commitment of scarce funds. We note that the surrounding lands are owned by Kikiaola Land Company (DEA, page 4-3) and ask if the landowner has any development proposals or land use re-designation applications online. If not, OHA is confused why this proposal is necessary, especially at this scale.

OHA also notes that the DEA refers to the Area of Potential Effect on page 5-2. This language is part of the Section 106 process and its implementing regulations (36 CFR § 800). OHA asks if any federal funds or permits will be required for this project that triggers Section 106.

Thank you for the opportunity to comment. If you have further questions, please contact Grant Arnold by phone at (808) 594-0263 or e-mail him at granta@oha.org.

'O wau iho nō me ka 'oia'i'o,



Clyde W. Nāmu'o
Administrator

- C: OHA Kaua'i CRC Office
- C: ✓ Eugene Dashiell
Environmental Planning Services
1314 S King Streer, Suite 952
Honoulu, Hawai'i 96814
- C: Land Use Commission
P.O. Box 2359
Honolulu Hawai'i 96804-2359
- C: County of Kauai Planning Department
4444 Rice Street, Suite 473
Līhu'e, Hawai'i 96766

BILL "KAIPO" ASING
MAYOR



DONALD M. FUJIMOTO
COUNTY ENGINEER
TELEPHONE 241-4992

GARY K. HEU
ADMINISTRATIVE ASSISTANT

EDMOND P.K. RENAUD
DEPUTY COUNTY ENGINEER
TELEPHONE 241-4992

AN EQUAL OPPORTUNITY EMPLOYER
COUNTY OF KAUAI

DEPARTMENT OF PUBLIC WORKS
4444 RICE STREET
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LIHU'E, KAUAI, HAWAII 96766-1340

October 13, 2008

Clyde W. Namuo
Administrator
Office of Hawaiian Affairs
711 Kapiolani Boulevard, Suite 500
Honolulu, Hawaii 96813

SUBJECT: COMMENTS ON DRAFT ENVIRONMENTAL ASSESSMENT (EA) FOR
THE WAIMEA WASTEWATER TREATMENT PLANT (WWTP)
EXPANSION, PHASE 1, TMK: (4) 1-2-006:036 & 037

Dear Mr. Namuo:

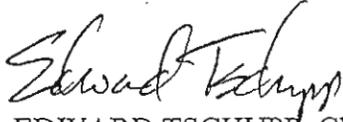
Thank you for your comments on the subject document.

1. Kauai General Plan. The subject document cites the Kauai General Plan, provides page numbering references to the General Plan, and includes the General Plan land use map. The subject project is in support of policy and land use decisions which have been made by the County of Kauai as stated in the General Plan. Specifically, the subject project will meet the waste water treatment needs as part of the "...basic services that will be needed to support projected economic and population growth by the year 2020." (as quoted in the subject document).
2. Land Uses in Waimea. The subject project supports existing lots in the Waimea area that cannot be built upon at this time because of the limitations of the existing WWTP capacity, and also provides for lands that are anticipated to be developed, as considered in the Kauai General Plan. The preparation of the Kauai General Plan was done in coordination with land owners as is the planning for the proposed project. The General Plan anticipates development of some of the lands in this area which are presently in a State Agriculture Land Use District and the proposed project is basic infrastructure which meets the General Plan objectives.
3. Area of Potential Effect (APE). That federal funds would be used for the proposed project is not known at this time, however, as stated in the subject document, permits and authorizations stemming from laws such as the federal Clean Water Act or Safe Drinking Water Act are likely to be required, thus identification of the APE.

Clyde W. Namuo
October 13, 2008
Page (2)

If you have questions, please contact Edward Tschupp (808-241-6258).

Very truly yours,



EDWARD TSCHUPP, Chief
Wastewater Management Division

CONCUR:



DONALD M. FUJIMOTO
County Engineer

cc: Eugene P. Dashiell, AICP
Ivan Nakatsuka



STATE OF HAWAII
DEPARTMENT OF HEALTH
P.O. Box 3378
HONOLULU, HAWAII 96801-3378

In reply, please refer to:
EPO-08-125

September 29, 2008

Mr. Eugene P. Dashiell, AICP
Environmental Planning Services
1314 South King Street, Suite 952
Honolulu, Hawaii 96814

Dear Mr. Dashiell:

SUBJECT: Draft Environmental Assessment for Waimea Wastewater Treatment Plant
Expansion, Phase 1, Waimea, Kauai, Hawaii
TMK: (3) 4-1-006: 036 and 037

Thank you for allowing us to review and comment on the subject application. The application was routed to the various branches of the Environmental Health Administration. We have the following Wastewater Branch, Safe Drinking Water Branch and General comments.

Wastewater Branch

The document proposes a project to expand the existing Waimea Wastewater Treatment Plant (WWTP). We have no objections to the upgrading of the existing wastewater treatment plant and recommend the upgrade. We further encourage the County to expand the use of R-1 water for irrigation and other non-potable water purposes wherever possible.

All wastewater plans must meet Department's Rules, HAR Chapter 11-62, "Wastewater Systems." We do reserve the right to review the detailed wastewater plans for conformance to applicable rules. If you have any questions, please contact the Planning & Design Section of the Wastewater Branch at 586-4294.

Safe Drinking Water Branch

Underground Injection Control (UIC)

Injection wells used for the subsurface disposal of wastewater, sewage effluent, or surface runoff are subject to environmental regulation and permitting under Hawaii Administrative Rules, Title

Mr. Dashiell
September 29, 2008
Page 2

11, Chapter 11-23, titled Underground Injection Control. The Department of Health's approval must be first obtained before any injection well construction commences. A UIC permit must be issued before any injection well operation occurs.

Authorization to use an injection well is granted when a UIC permit is issued to the injection well facility. The UIC permit contains discharge and operating limitations, monitoring and reporting requirements, and other facility management and operational conditions. A UIC permit-application form is needed to apply for a UIC permit.

A UIC permit can have a valid duration of up to five years. Permit renewal is needed to keep an expiring permit valid for another term.

Questions about UIC may be directed to Jaime Rimando or Chauncey Hew at 586-4258

General

We strongly recommend that you review all of the Standard Comments on our website: www.hawaii.gov/health/environmental/env-planning/landuse/landuse.html. Any comments specifically applicable to this application should be adhered to.

If there are any questions about these comments please contact Jiakai Liu with the Environmental Planning Office at 586-4346.

Sincerely,



KELVIN H. SUNADA, MANAGER
Environmental Planning Office

c: EPO
WWB
SDWB
EH-Kauai

BILL "KAIPO" ASING
MAYOR



DONALD M. FUJIMOTO
COUNTY ENGINEER
TELEPHONE 241-4992

GARY K. HEU
ADMINISTRATIVE ASSISTANT

EDMOND P.K. RENAUD
DEPUTY COUNTY ENGINEER
TELEPHONE 241-4992

AN EQUAL OPPORTUNITY EMPLOYER
COUNTY OF KAUA'I

DEPARTMENT OF PUBLIC WORKS
4444 RICE STREET
MO'IKEHA BUILDING, SUITE 275
LIHU'E, KAUA'I, HAWAII 96766-1340

October 13, 2008

Kelvin Sunada, Manager
Environmental Planning Office
Department of Health
PO Box 3378
Honolulu, Hawaii 96801-3378

SUBJECT: COMMENTS ON DRAFT ENVIRONMENTAL ASSESSMENT (EA) FOR
THE WAIMEA WASTEWATER TREATMENT PLANT (WWTP)
EXPANSION, PHASE 1, TMK: (4) 1-2-006:036 & 037

Dear Mr. Sunada:

Thank you for your comments on the subject document.

1. Wastewater Branch. We have received separate comments from the Wastewater Branch and are coordinating the subject project with them.
2. Safe Drinking Water Branch. We will coordinate with the Safe Drinking Water Branch. The subject document notes our intent to apply for a UIC permit for the proposed second injection well.
3. DOH Standard Comments. We will review the DOH Standard Comments.

If you have questions, please contact Edward Tschupp (808-241-6258).

Very truly yours,

EDWARD TSCHUPP, Chief
Wastewater Management Division

CONCUR:

DONALD M. FUJIMOTO
County Engineer

cc: Eugene P. Dashiell, AICP
Ivan Nakatsuka

LINDA LINGLE
GOVERNOR OF HAWAII



CHIYOME LEINAALA FUKINO, M.D.
DIRECTOR OF HEALTH

STATE OF HAWAII
DEPARTMENT OF HEALTH

P.O. BOX 3378
HONOLULU, HAWAII 96801

In reply, please refer to:
EMD / WB

LUD-K1 2 006 036&037.doc

September 3, 2008

Mr. Eugene P. Dashiell, AICP
Environmental Planning Services
1314 South King Street, Suite 952
Honolulu, Hawaii 96814

Dear Mr. Dashiell:

Subject: **Waimea Wastewater Treatment Plant Expansion, Phase 1,**
Draft EA - Request for Review & Comment
Waimea, County of Kauai
TMK: (4) 1-2-006: 036 and 037 approx. 4 acres

Thank you for allowing us the opportunity to review the above subject project which proposes the construction of a project to expand the existing Waimea Wastewater Treatment Plant (WWTP). We have the following comments and information on the above subject property:

We have no objections to the upgrading of the existing wastewater treatment plant and offer our recommendation for the upgrade. We further encourage the County to expand the use of R-1 water for irrigation and other non-potable water purposes wherever possible.

Should you have any questions, please contact the Planning & Design Section of the Wastewater Branch at telephone 586-4294.

Sincerely,


TOMAS S. SEE, P.E., CHIEF
Wastewater Branch

c: Mr. Edward Tschupp, P.E., Chief, Div. of WW Mgmt, C/Kauai
DOH's Environmental Planning Office Jiakai Liu

BILL "KAIPO" ASING
MAYOR



DONALD M. FUJIMOTO
COUNTY ENGINEER
TELEPHONE 241-4992

GARY K. HEU
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LIHU'E, KAUA'I, HAWAII 96766-1340

October 13, 2008

Tomas S. See, P.E., Chief
Wastewater Branch
Department of Health
P.O. Box 3378
Honolulu, Hawaii 96801

SUBJECT: COMMENTS ON DRAFT ENVIRONMENTAL ASSESSMENT (EA) FOR
THE WAJMEA WASTEWATER TREATMENT PLANT (WWTP)
EXPANSION, PHASE 1, TMK: (4) 1-2-006:036 & 037

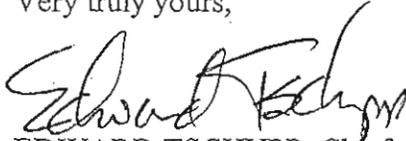
Dear Mr. See:

Thank you for your comments on the subject document.

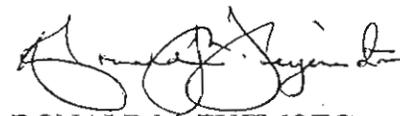
We note that you do not object to the proposed project and that you encourage the use of R-1 water for irrigation and other non-potable water purposes.

If you have questions, please contact Edward Tschupp (808-241-6258).

Very truly yours,


EDWARD TSCHUPP, Chief
Wastewater Management Division

CONCUR:


DONALD M. FUJIMOTO
County Engineer

cc: Eugene P. Dashiell, AICP
Ivan Nakatsuka



STATE OF HAWAII
DEPARTMENT OF HEALTH
P.O. BOX 3378
HONOLULU, HAWAII 96801-3378

In reply, please refer to:
EMD / CWB

08051PDCL.08

September 3, 2008

Mr. Edward Tschupp, P.E.
Chief, Division of Wastewater Management
Department of Public Works
4444 Rice Street, Suite 275
Lihue, Hawaii 96766

Dear Mr. Tschupp:

**Subject: Comments on Draft Environmental Assessment (EA) for the
Waimea Wastewater Treatment Plant (WWTP) Expansion, Phase 1
Waimea, Island of Kauai, Hawaii
TMK: (4) 1-2-006:036 & 037**

The Department of Health (Department), Clean Water Branch (CWB), acknowledges receipt of your memorandum, dated August 22, 2008, requesting comments on the Draft EA for the subject project. The CWB has reviewed the Draft EA and offers these comments on your project. Please note that our review is based solely on the information provided in the Draft EA and its compliance with Hawaii Administrative Rules (HAR), Chapters 11-54 and 11-55. You may be responsible for fulfilling additional requirements related to our program. We recommend that you also read our standard comments on our website at <http://www.hawaii.gov/health/environmental/env-planning/landuse/CWB-standardcomment.pdf>.

1. Any project and its potential impacts to State waters must meet the following criteria:
 - a. Antidegradation policy (HAR, Section 11-54-1.1), which requires that the existing uses and the level of water quality necessary to protect the existing uses of the receiving State water be maintained and protected.
 - b. Designated uses (HAR, Section 11-54-3), as determined by the classification of the receiving State waters.
 - c. Water quality criteria (HAR, Sections 11-54-4 through 11-54-8).

2. You are required to obtain a National Pollutant Discharge Elimination System (NPDES) permit for discharges of wastewater, including storm water runoff, into State surface waters (HAR, Chapter 11-55). For the following types of discharges into Class A or Class 2 State waters, you may apply for NPDES general permit coverage by submitting a Notice of Intent (NOI) form:
 - a. Storm water associated with construction activities, including excavation, grading, clearing, demolition, uprooting of vegetation, equipment staging, and storage areas that result in the disturbance of equal to or greater than one (1) acre of total land area. The total land area includes a contiguous area where multiple separate and distinct construction activities may be taking place at different times on different schedules under a larger common plan of development or sale. An NPDES permit is required before the start of the construction activities.
 - b. Construction dewatering effluent.

You must submit a separate NOI form for each type of discharge at least 30 calendar days prior to the start of the discharge activity, except when applying for coverage for discharges of storm water associated with construction activity. For this type of discharge, the NOI must be submitted 30 calendar days before to the start of construction activities. The NOI forms may be picked up at our office or downloaded from our website at:

<http://www.hawaii.gov/health/environmental/water/cleanwater/forms/genl-index.html>.

3. For types of wastewater not listed in Item 2 above or wastewater discharging into Class 1 or Class AA waters, you must obtain an NPDES individual permit. An application for an NPDES individual permit must be submitted at least 180 calendar days before the commencement of the discharge. The NPDES application forms may be picked up at our office or downloaded from our website at <http://www.hawaii.gov/health/environmental/water/cleanwater/forms/indiv-index.html>.
4. You must also submit a copy of the NOI or NPDES permit application to the State Department of Land and Natural Resources, State Historic Preservation Division (SHPD), or demonstrate to the satisfaction of the CWB that SHPD has or is in the process of evaluating your project. Please submit a copy of your request for review by SHPD or SHPD's determination letter for the project along with your NOI or NPDES permit application, as applicable.

5. Page 2-1 of the Draft EA indicates that effluent from the Waimea WWTP is pumped to two (2) existing reservoirs and an existing effluent isolation ditch for use as irrigation water. Please address the following:
 - a. Provide clarification to the existing irrigation water distribution system from the existing reservoirs and effluent isolation ditch.
 - b. Does Waimea WWTP effluent in the existing reservoirs and/or isolation ditch enter any of the irrigation ditch systems in the project area?
 - c. If Waimea WWTP effluent in the existing reservoirs and/or isolation ditch enters an irrigation ditch system, does this irrigation ditch system connect and/or overflow to State waters?
 - d. If Waimea WWTP effluent discharges to State waters, please provide a map or drawing showing the flow route of the wastewater effluent to the receiving State water.

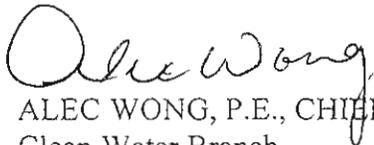
6. The Draft EA does not specify where any discharges of storm water associated with construction activity from the proposed project or discharges associated with construction activity dewatering from the proposed project may enter State waters. For your information, there are several water bodies in the vicinity of the project site (i.e. Waimea Stream, Waimea Estuary, and Waimea Bay Beach) that are identified as High Priority, Category 5, waters in the Clean Water Act, Section 303(d) list of impaired water bodies in Chapter IV of the *2006 State of Hawaii Water Quality Monitoring and Assessment Report*. Accordingly, Total Maximum Daily Load (TMDL) development analyses are currently in progress for these water bodies. Category 5 waters are characterized as having at least one (1) designated use of the water body not being supported or is threatened and a TMDL is needed.

Any NPDES permit(s) for discharges into these water bodies will incorporate the requirement for the Permittee to develop and implement a facility/project-specific Waste Load Allocation (WLA) implementation and monitoring plan when a TMDL which specifies WLAs applicable to the Permittee's project is approved by the U.S. Environmental Protection Agency (EPA). The Permittee shall incorporate and implement the facility/project-specific WLA implementation and monitoring plan as part of the project's Storm Water Pollution Control Plan or Site-Specific Best Management Practices Plan, as appropriate. The facility/project-specific WLA implementation and monitoring plan shall include Data Quality Objectives (DQO) and Quality Assurance (QA) and Quality Control (QC) methods. The purpose and goal of DQO process can be found at <http://www.hanford.gov/dgo>. Information on the DOH WLA Implementation and TMDLs are available on the DOH Environmental Planning Office website at <http://hawaii.gov/health/environmental/env-planning/wqm/wqm.html> (see *TMDL Technical Reports and Implementation Plans for approved TMDLs are available here for download in pdf format*).

7. Page 3-1 of the Draft EA indicates that Alternative 3 involves a treatment capacity increase from the existing level of 300,000 gallons per day (GPD) to 1,360,000 GPD or 1.36 million gallons per day (MGD). According to the Code of Federal Regulations, Title 40 (Protection of Environment), Part 122.26(b)(14), storm water discharges associated with industrial activity from treatment works (with a design flow of 1.0 MGD or more) used to treat domestic sewage are required to be covered by an NPDES permit. If Alternative 3 is chosen or if future upgrades increase the design flow to 1.0 MGD or more, an NPDES permit for storm water discharges associated with industrial activity will be required for the Waimea WWTP.
8. Please clarify if any of the proposed upgraded R-1 effluent reuse applications will result in discharges to State waters.
9. Please note that all discharges related to the project construction or operation activities, whether or not NPDES permit coverage and/or Section 401 Water Quality Certification are required, must comply with the State's Water Quality Standards. Noncompliance with water quality requirements contained in HAR, Chapter 11-54, and/or permitting requirements, specified in HAR, Chapter 11-55, may be subject to penalties of \$25,000 per day per violation.

If you have any questions, please visit our website at <http://www.hawaii.gov/health/environmental/water/cleanwater/index.html>, or contact the Engineering Section, CWB, at 586-4309.

Sincerely,


ALEC WONG, P.E., CHIEF
Clean Water Branch

c: Mr. Eugene P. Dashiell, Environmental Planning Services

BILL "KAIPO" ASING
MAYOR



DONALD M. FUJIMOTO
COUNTY ENGINEER
TELEPHONE 241-4992

GARY K. HEU
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AN EQUAL OPPORTUNITY EMPLOYER
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DEPARTMENT OF PUBLIC WORKS
4444 RICE STREET
MO'IKEHA BUILDING, SUITE 275
LIHU'E, KAUA'I, HAWAII 96766-1340

October 13, 2008

Mr. Alec Wong, P.E., Chief
Clean Water Branch
State of Hawai'i, Department of Health
P.O. Box 3378
Honolulu, Hawaii 96801-3378

SUBJECT: COMMENTS ON DRAFT ENVIRONMENTAL ASSESSMENT (EA) FOR
THE WAIMEA WASTEWATER TREATMENT PLANT (WWTP)
EXPANSION, PHASE 1, TMK: (4) 1-2-006:036 & 037

Dear Mr. Wong:

Thank you for your comments on the subject document.

1. The proposed WWTP expansion shall be designed to comply with all applicable water quality criteria and permit requirements. Additionally, during construction, the contractors will be required to meet all State laws and regulations including those which pertain to water quality.
2. NPDES permit(s) for (a) Storm water associated with construction, and/or (b) Construction dewatering effluent will be applied for as needed after a determination of their need has been made. Contractors will be notified of these requirements.
3. An individual NPDES permit will be applied for, if needed.
4. Copies of NPDES permit(s) applied for will be submitted to the State Department of Land and Natural Resources and the State Historic Preservation Division if required by the CWB. For your use and consideration, we have attached a copy of a letter (in response to the subject draft EA) from the SHPD (August 31, 2008) noting that "no historic properties will be affected".
5. Pumping of the WWTP effluent to the reservoirs will be discontinued as part of ongoing operations. The County will coordinate the switch-over from the reservoir system to the isolation ditch system with the landowner and their agricultural tenants. After switching to the isolation ditch system, the effluent will be pumped to the isolation ditch, which is

physically separate from existing irrigation ditches. Part of the isolation ditch system is a pipeline connection to the existing back-up injection well, which is activated via a float-controlled valve when water levels in the isolation ditch are at the maximum capacity.

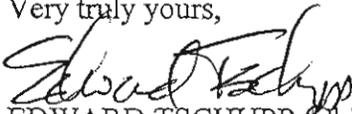
The current effluent disposal system involves pumping the effluent to the reservoir. We understand that the reservoir is connected by pipeline to irrigation users, with a gate controlled connection to the broader ditch system of the region, used during storm events to protect the reservoir from over-topping. This system has resulted in unpermitted discharge of effluent to state waters in the past during flood conditions. The isolation ditch and back-up injection well were designed and constructed in order to mitigate the problems that have occurred during flood conditions with the reservoir system.

The purpose of pumping the effluent to the isolation ditch is to provide an irrigation water source not connected to the ditch system and to prevent the discharge of effluent to State waters. The purpose of the existing injection well is to discharge effluent if the effluent isolation ditch capacity is exceeded, for example in the instance of a severe rainstorm. The proposed project includes a second injection well to provide additional capacity commensurate with the proposed WWTP capacity of 700,000 gallons per day.

6. Due to the flat topography of the WWTP site and the adjacent properties, discharges of storm water from the proposed project will infiltrate on-site, except under regional flood conditions. BMP's will be used during construction and future site operation to mitigate storm water from the site that has the potential during flood events to mix with flood waters of the region and enter State waters including Waimea Stream, Waimea Estuary or Waimea Bay. Contractors will be advised of this requirement.
7. The proposed project does not expand the WWTP capacity beyond 1.0 MGD.
8. R-1 effluent reuse applications are not intended to result in discharges to State waters and all future users of such effluent will be so advised.
9. All construction or operation activities will comply with State Water Quality Standards. Contractors will be so informed.

If you have questions, please contact Edward Tschupp (808-241-6258).

Very truly yours,


EDWARD TSCHUPP, Chief
Wastewater Management Division

CONCUR:


DONALD M. FUJIMOTO
County Engineer

cc: Eugene P. Dashiell, AICP
Ivan Nakatsuka

LINDA LINGLE
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
601 KAMOKILA BOULEVARD, ROOM 555
KAPOLEI, HAWAII 96707

LAURA H. THIELEN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

RUSSELL Y. TSUJI
FIRST DEPUTY

KEN C. KAWAHARA
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

August 31, 2008

Eugene Dashiell, AICO
Environmental Planning Services
1314 South King Street, Suite 952
Honolulu, Hawai'i 96814

LOG NO: 2008.3798
DOC NO: 0808NM44
Archaeology

Dear Mr. Dashiell:

**SUBJECT: Chapter 6E-8 Historic Preservation Review [County Department of PW] –
Waimea Wastewater Treatment Plant Expansion Phase I, DEA
Waimea, Island of Kaua'i
TMK: (4) 1-2-006: 036, 037**

The aforementioned is comments for DEA for the expansion of the Waimea Wastewater Treatment Plant.

We believe that “no historic properties will be affected,” because:

- Intensive cultivation has altered the land
- Residential development/urbanization has altered the land
- Previous grubbing/grading has altered the land
- An accepted archaeological inventory survey (AIS) found no historic properties
- SHPD previously reviewed this project and mitigation has been completed
- Other:

In the event that historic resources, including human skeletal remains, are identified during routine construction activities, all work needs to cease in the immediate vicinity of the find, the find needs to be protected from additional disturbance, and the State Historic Preservation Division, needs to be contacted immediately at (808) 692-8015.

If you have any questions, please call me, at 652-1510.

Aloha,

A handwritten signature in cursive script that reads "Nancy A. McMahon".

Nancy McMahon, Deputy SHPO/State Archaeologist
Historic Preservation Manager/Deputy Administrator
State Historic Preservation Division

NM:

Cc: Edward Tschupp P.E. Chief of Division of Wastewater Management, Department of Public Works,
County of Kauai, 4444 Rice Street, Suite 275, Lihue, HI 96766

BILL "KAIPO" ASING
MAYOR



DONALD M. FUJIMOTO
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LIHU'E, KAUA'I, HAWAII 96766-1340

October 13, 2008

Nancy McMahan
Deputy SHPO/State Archaeologist
Historic Preservation Manager/Deputy Administrator
State Historic Preservation Division
Department of Land and Natural Resources
601 Kamokila Boulevard, Room 555
Kapolei, Hawaii 96707

SUBJECT: COMMENTS ON DRAFT ENVIRONMENTAL ASSESSMENT (EA) FOR
THE WAIMEA WASTEWATER TREATMENT PLANT (WWTP)
EXPANSION, PHASE 1, TMK: (4) 1-2-006:036 & 037

Dear Ms. MacMahon:

Thank you for your comments on the subject document.

We note that you "...believe that 'no historic properties will be affected,' because: Intensive cultivation has altered the land [and] Previous grubbing/grading has altered the land".

We understand, and will so inform contractors, that if historic resources or human skeletal remains are found during construction, that work in the vicinity of such resources or remains will cease, that such remains or resources must be protected from further disturbance, and that the State Historic Preservation Division must be contacted immediately.

If you have questions, please contact Edward Tschupp (808-241-6258).

Very truly yours,

EDWARD TSCHUPP, Chief
Wastewater Management Division

CONCUR:

DONALD M. FUJIMOTO
County Engineer

cc: Eugene P. Dashiell, AICP
Ivan Nakatsuka