Bernard P. Carvalho, Jr. Mayor



Deputy County Engineer

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Lyle Tabata

Acting County Engineer

Wallace G. Rezentes, Jr. Managing Director

DEPARTMENT OF PUBLIC WORKS

County of Kaua'i, State of Hawai'i 4444 Rice Street, Suite 275, Līhu'e, Hawai'i 96766 TEL (808) 241-4992 FAX (808) 241-6604

July 11, 2016

Mr. Scott Glenn, Director Office of Environmental Quality Control Department of Health, State of Hawai'i 235 South Beretania Street, Room 702 Honolulu, Hawai'i 96813

Dear Mr. Glenn:

With this letter, the County of Kaua'I, Department of Public Works, Wastewater Management Division hereby transmits the final environmental assessment and finding of no significant impact (FEA-FONSI) for the Waimea Wastewater Treatment Plant R-1 Recycled Water Distribution System, situated at TMK: (4) 1-2-006: 036, 009 (por.), in the Waimea District on the island of Kaua'i for publication in the next available edition of the Environmental Notice.

The County of Kaua'i, Department of Public Works, Wastewater Management Division has included copies of comments and responses that it received during the 30-day public comment period on the draft environmental assessment and anticipated finding of no significant impact (DEA-AFONSI).

Enclosed is a completed OEQC Publication form, two copies of the FEA-FONSI, an Adobe Acrobat PDF file of the same, and an electronic copy of the publication form in MS Word. Simultaneous with this letter, we have submitted the summary of the action in a text file by electronic mail to your office.

If there are any questions, please contact me at (808) 241-4084.

Verv truly yours.

EDWARD TSCHUPP, Chief Wastewater Management Division

cc: Mr. Eassie Miller Mr. Milton Arakawa

Enclosures:

An Equal Opportunity Employer

17-014



Project Name:	Waimea Wastewater Treatment Plant R-1 Recycled Water Distribution System
Project Short Name:	Waimea R-1 Water Distribution System
HRS §343-5 Trigger(s):	County lands and funds
Island(s):	Kauaʻi
Judicial District(s):	Waimea
TMK(s):	(4) 1-2-006:036, 009 (por.)
Permit(s)/Approval(s):	Department of the Army Section 404 Permit
	Section 7 of the Endangered Species Act
	National Environmental Policy Act Categorical Exclusion
	Section 401 Water Quality Certification
	National Pollutant Discharge Elimination System Permit
	Coastal Zone Management Federal Consistency Certification
	State Department of Transportation Oversize/Overweight Load Limit
	Section 106 of the National Historic Preservation Act
	Chapter 6E, Hawai'i Revised Statutes
	Grading/Grubbing Permit
	Building Permit
Proposing/Determining	County of Kaua'i Department of Public Works Division of Wastewater Management
Contact Name, Email.	Edward Tschupp
Telephone, Address	etschupp@kauai.gov
	(808) 241-4084
	4444 Rice Street, Suite 275
	Līhu'e, Kaua'i 96766
Accepting Authority:	(for EIS submittals only)
Contact Name, Email,	
Telephone, Address	
Consultant:	Wilson Okamoto Corporation
Contact Name, Email,	Milton Arakawa
Telephone, Address	marakawa@wilsonokamoto.com
	(808) 946-2277
	1907 South Beretania Street, Suite 400
	Honolulu, Hawai'i 96826
Charles (as last sure)	
Status (select one)	Submittal Requirements
DEA-AFINSI	Submit 1) the proposing agency notice of determination/transmittal letter on agency letternead, 2)
	This completed DEQC publication form as a word file, 3) a hard copy of the DEA, and 4) a searchable
	PDP of the DEA; a so-day comment period follows from the date of publication in the Notice.
X FEA-FONSI	Submit 1) the proposing agency notice of determination/transmittal letter on agency letterhead, 2)
	this completed OEQC publication form as a Word file, 3) a hard copy of the FEA, and 4) a searchable
	PDF of the FEA; no comment period follows from publication in the Notice.
FFA-FISPN	Submit 1) the proposing agency notice of determination/transmittal letter on agency letterhead 2)
	this completed QEQC publication form as a Word file. 3) a hard conv of the FEA, and 4) a searchable
	PDE of the FEA: a 30-day comment period follows from the date of publication in the Notice.
Act 172-12 EISPN	Submit 1) the proposing agency notice of determination letter on agency letterhead and 2) this
("Direct to EIS")	completed OEQC publication form as a Word file; no EA is required and a 30-day comment period
	follows from the date of publication in the Notice.
DEIS	Submit 1) a transmittal letter to the OEQC and to the accepting authority, 2) this completed OEQC
	publication form as a Word file, 3) a hard copy of the DEIS, 4) a searchable PDF of the DEIS, and 5) a
	searchable PDF of the distribution list; a 45-day comment period follows from the date of publication

Office of Environmental Quality Control

	in the Notice.
FEIS	Submit 1) a transmittal letter to the OEQC and to the accepting authority, 2) this completed OEQC publication form as a Word file, 3) a hard copy of the FEIS, 4) a searchable PDF of the FEIS, and 5) a searchable PDF of the distribution list; no comment period follows from publication in the Notice.
FEIS Acceptance Determination	The accepting authority simultaneously transmits to both the OEQC and the proposing agency a letter of its determination of acceptance or nonacceptance (pursuant to Section 11-200-23, HAR) of the FEIS; no comment period ensues upon publication in the Notice.
FEIS Statutory Acceptance	Timely statutory acceptance of the FEIS under Section 343-5(c), HRS, is not applicable to agency actions.
Supplemental EIS Determination	The accepting authority simultaneously transmits its notice to both the proposing agency and the OEQC that it has reviewed (pursuant to Section 11-200-27, HAR) the previously accepted FEIS and determines that a supplemental EIS is or is not required; no EA is required and no comment period ensues upon publication in the Notice.
Withdrawal	Identify the specific document(s) to withdraw and explain in the project summary section.
Other	Contact the OEQC if your action is not one of the above items.

Project Summary

Provide a description of the proposed action and purpose and need in 200 words or less.

The County of Kaua'i Department of Public Works Division of Wastewater Management proposes to install an R-1 recycled water distribution system in Waimea, Kaua'i. Construction of the system would involve installing a 400,000 gallon recycled water storage tank, and a recycled water pump station on the existing Waimea Wastewater Treatment Plant (WWTP) site. The storage tank will be approximately 55 feet in diameter and 25 feet in height located in the southeast corner of the WWTP site. The water pump will be located adjacent to the tank and would be a maximum of 44 inches by 44 inches and 60 inches in height. Associated improvements involve replacing a portion of an existing pipeline and adding new service laterals and water meters to connect to customer property. The approximately 1,950 foot distribution line will be located within an existing sewer easement and will provide R-1 recycled water for irrigation to Waimea Canyon Middle School and Waimea Athletic Field.

FINAL ENVIRONMENTAL ASSESSMENT – FINDING OF NO SIGNIFICANT IMPACT

WAIMEA WASTEWATER TREATMENT PLANT R-1 RECYCLED WATER DISTRIBUTION SYSTEM

District of Waimea, Island of Kaua'i, State of Hawai'i

Tax Map Key: (4) 1-2-006: 036, 009 (por.)



Prepared For:

COUNTY OF KAUA'I DEPARTMENT OF PUBLIC WORKS WASTEWATER MANAGEMENT DIVISION

KENNEDY/JENKS CONSULTANTS

Prepared By:

WILSON OKAMOTO CORPORATION

FINAL ENVIRONMENTAL ASSESSMENT – FINDING OF NO SIGNIFICANT IMPACT

WAIMEA WASTEWATER TREATMENT PLANT R-1 RECYCLED WATER DISTRIBUTION SYSTEM

District of Waimea Island of Kaua'i, State of Hawai'i

Tax Map Keys: (4) 1-2-006: 036, 009 (por.)

Prepared For:

County of Kaua'i Department of Public Works Wastewater Management Division 4444 Rice Street, Suite 500 Līhu'e, Hawai'i 96766

Kennedy/Jenks Consultants AIPA Building 3375 Koapaka Street, Suite F227 Honolulu, Hawai'i 96819

Prepared By:

Wilson Okamoto Corporation Engineers and Planners 1907 South Beretania Street, Suite 400 Honolulu, Hawai'i 96826 WOC Job No. 10183-01

JULY 2016

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PREFACE

This Draft Final Environmental Assessment (EA) / Finding of No Significant Impact (FONSI) is prepared pursuant to Chapter 343, Hawai'i Revised Statutes (HRS), and Title 11, Chapter 200, Hawai'i Administrative Rules (HAR), State Department of Health. Proposed is an agency action by the County of Kaua'i Department of Public Works (DPW) Division of Wastewater Management (DWM) to install an R-1 recycled water distribution system on the existing site of the <u>Waimea Wastewater Treatment Plant (WWTP)</u> and on portions of an existing easement located in the Waimea District, Island of Kaua'i, Hawai'i. The purpose of the proposed system is to provide the Waimea community with an effective means to store and distribute R-1 recycled water in order to manage wastewater disposal and reduce potable water usage.

Construction of the system would involve installing a 400,000 gallon R-1 recycled water storage tank, and a R-1 recycled water pump station on the existing WWTP site. Associated improvements involve replacing a portion of the existing pipeline and adding new service laterals and water meters to connect to customer property. The project requires the use of County funds and lands; therefore, the project is subject to the State environmental review process. This EA is proposing a Finding of No Significant Impact (FONSI) as no significant impacts are anticipated as a result of implementing the proposed project.

Construction of this project will also be funded possibly by Federal grant funds through the Environmental Protection Agency as well as State or Federal Water Pollution Control Revolving Fund monies under the jurisdiction of the State Department of Health (DOH). Separate environmental review documentation will be prepared for the proposed project to satisfy the requirements of the National Environmental Policy Act (NEPA) of 1969, as amended, (Pub. L. 91-190, 42 U.S. Code 4321-4347), Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of NEPA, (40 Code of Federal Regulations 1500-1508), and 23 Code of Federal Regulations Part 771, Environmental Impact and Related Procedures. It is anticipated that categorical exclusion documentation will be prepared to comply with Federal environmental review requirements.

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SUMMARY

Proposing Agency:	County of Kaua'i Department of Public Works Division of Wastewater Management 4444 Rice Street, Suite 500 Līhu'e, Island of Kaua'i, Hawai'i 96766
Approving Agency:	County of Kaua'i Department of Public Works 4444 Rice Street, Suite 275 Līhu'e, Island of Kaua'i, Hawai'i 96766
Location:	Waimea Ahupua'a, Kona District, Island of Kaua'i, Hawai'i
Tax Map Keys (TMKs):	(4) 1-2-006: 036, 009 (por.)
Recorded Fee Owners:	County of Kauaʻi (TMK: (4) 1-2-006: 036)
	Mauka Villages Condominium (TMK: (4) 1-2-006: 009)
Existing Use:	Wastewater treatment plant, passive open space.
State Land Use Classification:	Agricultural District
County Zoning:	Agriculture District
Special Management Area (SMA):	Proposed action not located within the SMA
Proposed Action:	In order to provide the Waimea community with an effective means to store and distribute R-1 recycled water, the County of Kaua'i Department of Public Works (DPW) Division of Wastewater Management (DWM) proposes to install an R-1 recycled water distribution system. Construction of the system would involve installing a 400,000 R-1 gallon recycled water storage tank, and a R-1 recycled water pump station on the existing WWTP site. The storage tank will be 55 feet in diameter and 25 feet in height and located in the southeast corner of the WWTP site in an area currently graded, grassed, and mowed. The water pump will be located adjacent to the tank and would be a maximum of 44 inches by 44 inches and 60 inches in height.

	Associated improvements involve replacing a portion of the existing pipeline and adding new service laterals and water meters to connect to customer property. The approximately 1,950 foot distribution line will be located within an existing sewer easement and will provide R-1 recycled water for irrigation to Waimea Canyon Middle School (WCMS) and Waimea Athletic Field.
	This Draft Final EA has been prepared to satisfy the requirements of Chapter 343, HRS, and Title 11, Chapter 200, HAR, State Department of Health, since County lands and funds will be used for the design and construction of the proposed improvements.
	Construction of this project will also be funded possibly by Federal grant funds through the Environmental Protection Agency as well as State or Federal Water Pollution Control Revolving Fund monies under the jurisdiction of the State Department of Health. Separate environmental review documentation will be prepared for the proposed project to satisfy the requirements of the National Environmental Policy Act (NEPA) of 1969, as amended, (Pub. L. 91-190, 42 U.S. Code 4321-4347), Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of NEPA, (40 Code of Federal Regulations 1500-1508), and 23 Code of Federal Regulations Part 771, Environmental Impact and Related Procedures.
Impacts:	No significant adverse impacts are anticipated from the construction and operation of the proposed improvements. Construction activities are anticipated to have short-term noise and air quality impacts in the surrounding area. Construction impacts will be minimized by using best management practices (BMPs) and by adhering to applicable State Department of Health rules. No significant adverse long-term environmental or community impacts in the vicinity of the project site are anticipated.
Anticipated Determination:	Finding of No Significant Impact (FONSI)
Permits & Approvals Which May Be Required:	<u>Federal</u> <u>Department of the Army</u> • <u>Section 404 Permit</u>

Environmental Protection Agency (EPA)

 National Environmental Policy Act (NEPA) Categorical Exclusion

U.S. Fish & Wildlife Services

• Section 7 of the Endangered Species Act

State of Hawai'i

Department of Health

- Section 401 Water Quality Certification
- National Pollutant Discharge Elimination System (NPDES) Permit Form C (Stormwater Associated with Construction)

Office of Planning

 Coastal Zone Management (CZM) Federal Consistency Certification

Department of Transportation

Oversize/Overweight Load Permit

State Historic Preservation Department

- Section 106 of the National Historic Preservation Act
- Chapter 6E, HRS

County of Kaua'i

Department of Public Works

- Grubbing and Grading Permit
- Building Permit

Agencies Consulted In Pre-Assessment Process:

Federal

U.S. Army Corps of Engineers, Regulatory Branch

<u>State of Hawai'i</u> Department of Accounting and General Services Department of Business, Economic Development & Tourism Department of Business, Economic Development & Tourism, Office of Planning Department of Education (DOE) Department of Health (DOH) Department of Health, Office of Environmental Quality Control

	 Department of Health, Environmental Management Division Department of Health, Environmental Planning Office Department of Health, Clean Water Branch Department of Health, Wastewater Branch Department of Land and Natural Resources (DLNR) Department of Land and Natural Resources, Engineering Division Department of Land and Natural Resources, Land Division Department of Land and Natural Resources, Historic Preservation Division Department of Transportation (DOT)
	Office of Hawaiian Affairs (OHÀ)
	<u>County of Kaua'i</u> Department of Planning Department of Public Works (DPW) Department of Water (KDOW) Department of Parks and Recreation
	<u>Others</u> Kīkīaola Land Company, Ltd. West Kauaʻi Business and Professional Association
Draft Environmental	
<u>Consultation:</u>	The Draft Environmental Assessment for the Waimea Wastewater Treatment Plant R-1 Recycled Water Distribution System was published in the Office of Environmental Quality Control Environmental Notice of May 23, 2016. Publication initiated a 30-day public review period ending on June 23, 2016. Comments were received from the Department of Health Environmental Planning Office. Office of Environmental Quality Control

and Kīkīaola Land Company.

1. INTRODUCTION

1.1 Project Background

This Environmental Assessment (EA) is prepared pursuant to Chapter 343, Hawai'i Revised Statutes (HRS) and Title 11, Chapter 200, Hawai'i Administrative Rules (HAR) and will assess the impacts related to the installation of an R-1 recycled water distribution system and associated improvements.

The County of Kaua'i Department of Public Works (DPW) Division of Wastewater Management (DWM) proposes to install an R-1 recycled water distribution system in Waimea, Kaua'i (TMK) No. (4) 1-2-006: 036, 009 (por.) (See Figure 1-1). The system would include a 400,000 gallon recycled water storage tank and a recycled water pump station located on the site of the Waimea Wastewater Treatment Plant (WWTP). Distribution lines would extend from the WWTP site providing R-1 recycled water to users in the Waimea area. The project is intended to promote and further encourage the use of R-1 recycled water for a broad range of uses within the Waimea area.

The Waimea WWTP was first built in the early 1970's and reached near capacity in the 1990's, restricting development in the Waimea area. The Waimea WWTP was upgraded in 2011 in accordance with the County's Facility Plan. The plant capacity was increased from 300,000 gallons per day (GPD) to 700,000 GPD adding treatment processes such as a membrane bioreactor, a mixed bed biofilm reactor and other similar processes. A second back up injection well was also added in the event of need.

The quality of the effluent was also upgraded from R-2 recycled water to R-1 recycled water to allow for greater flexibility in reuse of the effluent. R-1 recycled water is the highest level, as defined in the State of Hawai'i, Department of Health, *Guideline for the Treatment and Use of Recycled Water* (May 15, 2002). The improved water quality poses less of a safety risk to the public and allows for broader reuse applications, such as for industrial use, landscaping, crop and open space irrigation. A full list of applications can be found within the aforementioned guidelines.

Statewide efforts to manage and preserve potable water resources have included water reuse. Water reuse has been practiced for many years in Hawai'i and has gradually increased after the Department of Health (DOH) developed Hawai'i's first reuse guidelines in 1993. Since then, recycled water has become more of a viable solution for both water supply and wastewater disposal concerns. The County of Kaua'i has the highest percentage of recycled water used in the State of Hawai'i, due in part to proximity of its users. The proposed project will help to continue this trend and support efforts to manage and preserve potable water resources.

1.2 Project Need

The purpose of the proposed system is to provide the Waimea community with an effective means to store and distribute R-1 recycled water in order to manage wastewater disposal and reduce potable water usage. The recycled water would be available to current and





FIGURE 1-1

prospective customers that are in close proximity to the Waimea WWTP and can be used for a broad range of use applications, including irrigation of parks, schools, and commercial properties. The expanded use of R-1 recycled water would help contribute to the County's efforts towards more sustainable water resource management.

1.3 Existing Uses

The Waimea WWTP is a public facility and is located in an agriculturally designated area. The WWTP provides wastewater collection and treatment for the surrounding Waimea community, including residents and businesses. Facility activities include wastewater intake, wastewater treatment, regular monitoring, recycled water conveyance, and backup effluent disposal. The R-1 recycled water storage tank and R-1 recycled water pump station will be located within the grounds of the existing WWTP facility. The proposed project site is located in a flat, grassy area in the southeast corner of the property (See Figure 1-2). The proposed distribution line would be installed within an existing easement that is currently being used for the same purpose.

Currently, all recycled water is conveyed to the Kīkīaola Irrigation Company (KIC) open storage reservoir where it is mixed with stored surface water; this is the primary effluent disposal method. The mixed water is left to evaporate through natural processes. The backup disposal alternative for excess recycled water and/or off-spec effluent consists of two (2) injection wells that are located adjacent to Kaumuali'i Highway (TMK: (4) 1-2-006:037, Lot 13-C). Conveyance of the recycled water is done using existing pumps and a 10-inch transite transmission pipeline.

1.4 Surrounding Uses

The WWTP is located at least 650 feet north of the Kaumuali'i Highway, the main arterial coastal highway, and is a fair distance from existing developed areas. A surrounding network of unpaved roads and irrigation ditches in the immediate area are remnants of previous land use for sugar cane cultivation. With the cessation of sugar operations years ago, the land surrounding the WWTP remained vacant and/or leased for agricultural use. Other nearby land uses includes public facilities, open space, residential development, parks and a resort. The Waimea Plantation Cottages, Kīkīaola Baseyard, ranch, and scattered residential development are located makai of the highway in the general vicinity. Located approximately 1,100 feet to the east of the WWTP is Waimea Canyon Middle School (WCMS) and Waimea Athletic Field. Single family residences in Waimea Town are located approximately 1,400 feet to the northeast of the WWTP. The open storage reservoirs are located nearby single family residences and are approximately 2,200 feet away from the WWTP facility (See Figure 1-3).

Views of Storage Tank Site near Southeast Corner of WWTP

(Photos dated 3/1/2016)



Looking North



Looking Northeast





FIGURE 1-2 PHOTO OF STORAGE TANK SITE



SURROUNDING USES



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2. PROPOSED ACTION

2.1 **Project Description**

The Proposed Action, by the County of Kaua'i's DWM, is to install an R-1 recycled water distribution system, consisting of a 400,000 gallon recycled water storage tank, a recycled water pump station, a distribution line, laterals, and water meters on the existing site of the WWTP and on portions of an existing sewer easement in Waimea, Kaua'i. The Waimea WWTP site (TMK No. (4) 1-2-006:036) is owned and operated by the County of Kaua'i. The distribution line extends through an existing sewer easement located within a portion of property (TMK No. (4) 1-2-006:009) owned by the Mauka Village Condominium. See Figure 2-1.

The proposed distribution system would collect and store any R-1 recycled water produced by the WWTP on-site and then distribute the recycled water to customers for use.

The proposed storage tank will be 55 feet in diameter and 25 feet in height located in the southeast corner of the WWTP site. The tank would be of glass-fused-to-steel construction with a geodesic dome cover. The proposed site for the recycled water storage tank is a portion of grassy, open space currently maintained by the WWTP staff. Since the current average of R-1 recycled water production is 180,000 GPD, a 400,000 gallon tank would provide two (2) days' worth of storage to account for varying recycled water production by the WWTP and usage by the customers. See Figure 2-2.

The pump station is proposed to occupy a maximum of 44 inches by 44 inches in area and reach 60 inches in height. The pump station will be located adjacent to the tank. The pump station will regulate water pressure on the distribution system to a setpoint that is 10 pounds per square inch (psi) lower than the potable water distribution system.

The proposed distribution line will follow the existing pipeline alignment. A portion, approximately 1,700 feet, of the existing 10-inch transmission pipeline will be either replaced in the same pipeline trench with a Polyvinyl chloride (PVC) pipe or relined using Cured in Place Pipe (CIPP) technology. This portion extends in an easterly direction approximately 1,100 feet from the WWTP, then turns in a northeasterly direction approximately 600 feet to provide a connection with the WCMS. At the eastern end of the 1,100 foot segment adjacent to the WCMS, another portion of the distribution line extends southwesterly approximately 250 feet within an existing sanitary sewer easement adjacent to the Waimea Athletic Field. Connections to WCMS and Waimea Athletic Field, which will allow R-1 recycled water to be used for irrigation at both facilities, will be provided by the new distribution line.

Service laterals and water meters will be installed to connect and meter recycled water to each customer property. Each customer's private irrigation systems after the recycled water meter will be owned and maintained by the customer. The recycled water user responsibilities will be driven by WMD Rules and the State DOH Water Reuse Guidelines. Key responsibilities include complete disconnection of the recycled water system from the customer's potable water system, training of employees, maintenance of recycled water use logs, and annual reporting to the DOH.





FIGURE 2-1 TAX MAP KEYS: (4) 1-2-006:036 and 009 (POR.)





FIGURE 2-2 WAIMEA WASTEWATER TREATMENT PLANT

Waimea WWTP R-1 Recycled Water	
Distribution System	Final Environmental Assessment

The section of the existing transmission pipeline which extends beyond the WCMS up to the existing reservoirs will be abandoned. The existing KIC open storage reservoirs will be disconnected from the DWM's recycled water system and future use of the reservoirs will be under the discretion of the landowner, Kīkīaola Land Company.

Future demand for recycled water is estimated to increase in Waimea due to projected population growth and planned residential and commercial development in the area. An expansion of the distribution system could occur at a later date to accommodate the additional growth and an increase in wastewater flows to the Waimea WWTP. The intent is to develop the recycled water distribution system in phases based on available recycled water. The first phase would include the WCMS and the Waimea Athletic Field. These customers were selected based on the greatest benefit to the community and the close proximity to the Waimea WWTP. Potential future customers include the Kaua'i Veterans Memorial Hospital and Waimea Plantation Cottages. The implementation of future phases will be dependent on availability of additional recycled water which is tied to new wastewater connections to the Waimea WWTP. Since details are unknown at this time, a separate environmental review will be completed for expansion as more information becomes available.

2.2 Project Cost and Schedule

Construction of the proposed project is anticipated to commence as soon as the 4th quarter of 2016, with completion approximately 12 months later. The project cost is estimated at \$4.51 million. The accuracy of the projected cost is based on the level of detail known about the project at the time and cost estimates could be revised as more detailed information becomes available.

3. DESCRIPTION OF EXISTING ENVIRONMENT, IMPACTS, AND MITIGATION MEASURES

3.1 Climate

The climate of Hawai'i is moderate and can be generally characterized into two seasons: *kau*, the warm season when the sun is almost directly overhead, and the winds blow reliably from the northeast, and *ho'oilo*, the season of cooler temperatures, a lower sun, more variable winds, and extensive rains. Summer is usually defined as the period from May through September and winter from October through April.

Kaua'i's climate varies by terrain but is relatively uniform year round with mild temperatures, moderate humidity, and relatively consistent northeasterly trade winds. Regional topography and exposure to trade winds and sun create a variety of micro-climates found across the island. Waimea is located on the warmer and drier leeward side of the island of Kaua'i. The average annual temperature at Kekaha (which is the closest weather recording station to the project site) varies between 71 degrees F (coolest month) and 79 degrees F (warmest month).

The importance of the orographic effect is shown clearly with Wai'ale'ale receiving maximum rainfall along its windward slopes. Rainfall near the summit of Wai'ale'ale is about 450 inches per year while the average annual rainfall at the project site is approximately 21 inches.

Impacts and Mitigation Measures

No significant impacts on climate in the project area are anticipated. Construction and operation of the proposed project are not anticipated to affect temperatures, wind, or rainfall levels in the project area.

3.2 Physiography

3.2.1 Geology and Topography

Geology of the project site reflects the volcanic nature of the Island of Kaua'i at the eastern end of the Mānā plain. Sediments 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 it.

The project site is mauka of the underground injection control line. The site is approximately 2,000 feet from the shoreline and approximately 6 feet above sea level. The site is generally flat.

Impacts and Mitigation Measures

In the short- and long-term, no significant impacts on geology or topography are anticipated during construction or operation of the proposed project.

3.2.2 Soils

According to the Soil Conservation Service's "Soil Survey of Islands of Kaua'i, O'ahu, Maui, Moloka'i, and Lāna'i, State of Hawai'i" dated August 1972, soils in the vicinity of the project site include Nohili clay (Nh) and Fill land (Fd). See Figure 3-1.

Nohili clay (Nh) consists of poorly drained soils on Kaua'i's coastal plains. The soils were developed in alluvium deposited over marly lagoon deposits. In a representative profile, the surface layer is dark reddish-brown clay about 18 inches thick. The subsoil, about 15 inches thick, is mottled, dark brown, very dark gray, and grayish brown clay that has an angular blocky structure. The substratum is marly clay that is underlain in places by dark gray noncalcareous clay. The surface layer is mildly to moderately alkaline. Permeability is moderately slow. Runoff is slow and there is no erosion hazard.

Fill land (Fd) consists mostly of areas filled with bagasse and slurry from sugar mills. A few areas are filled with material from dredging and soil excavations. Generally, these materials are dumped and spread over marshes, low lying areas along the coastal flats, coral sand, coral limestone, or areas shallow to bedrock.

The State of Hawai'i Department of Agriculture classification system "Agricultural Land of Importance to the State of Hawai'i" (ALISH) classifies lands into four agricultural types, Prime Lands, Unique Lands, Other Lands, and Unclassified. According to the ALISH, most of the project site is classified as Prime lands with a small portion of the waterline alignment being classified as Other. See Figure 3-2. Prime Lands consist of land best suited for the production of food, feed, forage and fiber crops. The land has the soil quality, growing season, and moisture supply needed to produce sustained high yields of crops economically when treated and managed, including water management, according to modern farming methods.

The Detailed Land Classification – Island of Kaua'i, published by the University of Hawai'i, Land Study Bureau (LSB), evaluates the quality or productive capacity of certain lands on the island using a five-class productivity rating system, with "A" representing the class of the highest productivity and "E" the lowest. Under this system, most of the project site is rated as "B" land. Mauka portions of the waterline alignment are rated as "A" land. See Figure 3-3.

Impacts and Mitigation Measures

In the short- and long-term, no significant adverse impacts on soils and agriculture are anticipated as a result of the construction and operation of the proposed project. The project site is currently used as a wastewater treatment plant and it is unlikely that a portion of the site could be utilized for active agricultural use.

Construction activities will involve land disturbing activities such as grubbing, clearing, grading, and excavation that may result in some soil erosion which, in turn, may result in impact to the quality of receiving surface and coastal waters downstream of the project site. Various mitigative measures will be incorporated into the project's





FIGURE 3-1





FIGURE 3-2 AGRICULTURAL LAND OF IMPORTANCE TO THE STATE OF HAWAII





FIGURE 3-3 LAND STUDY BUREAU MAP

construction plans to minimize soil disturbance and potential short-term erosion and siltation impacts during construction. Excavation and grading activities associated with construction of the proposed project will be regulated by the County's grading ordinance.

3.3 Hydrology

3.3.1 Surface Water

The closest stream is Waimea Stream located approximately 1 mile to the east of the project site. The town of Waimea is located between the project site and the stream.

According to the Hawai'i Stream Assessment, Waimea Stream is a candidate stream for protection with outstanding cultural, recreation, and riparian values. It is recognized as a perennial stream with continuous flows to the sea throughout the year.

The State DOH's inland waters classification for Waimea Stream is class 2. Pursuant to Hawai'i Administrative Rules (HAR) Title 11, Chapter 54, Water Quality Standards:

"The objective of class 2 waters is to protect their use for recreation purposes, the support and propagation of aquatic live, agricultural and industrial water supplies, shipping, and navigation. The uses to be protected in this class of waters are all uses compatible with the protection and propagation of fish, shellfish, and wildlife, and with recreation in and on these waters. These waters shall not act as receiving water for any discharge which has not received the best degree of treatment or control compatible with the criteria established for this class." (Section 11-54-3(b)(2), HAR)

Impacts and Mitigation Measures

In the short- and long-term, no significant impacts on the surface waters of Waimea Stream are anticipated during construction or operation of the proposed project.

Construction activities will involve minimal land disturbing activities such as grubbing, clearing, grading, and excavation. Various mitigation measures will be incorporated into the project's construction plans to minimize soil disturbance and potential short-term erosion and siltation impacts during construction. Excavation and grading activities associated with construction of the proposed project will be regulated by the County's grading ordinance.

3.3.2 Groundwater

The State Department of Land and Natural Resources (DLNR), Commission on Water Resource Management (CWRM) has established a groundwater hydrologic unit and coding system for groundwater resource management. The proposed project site is located within the Kekaha Aquifer Sector although the Waimea Aquifer System is located in close proximity.

As estimated in 2008, the Kekaha Aquifer System has a sustainable yield of 10 million gallons per day while the Waimea Aquifer System has a sustainable yield of 37 million gallons per day.

Impacts and Mitigation Measures

In the short- or long-term, no significant impacts to groundwater resources associated with the project site are anticipated during construction or operation of the proposed project. Construction activities are not likely to introduce to, nor release from the soils, any materials which could adversely affect groundwater. Construction material wastes will appropriately be disposed of to prevent any leachate from contaminating groundwater resources.

3.3.3 Coastal Waters

The nearest coastal waters downstream of the project site is approximately 2,000 feet to the south. The State Department of Health's marine waters classification for these coastal waters is class A. Pursuant to Hawai'i Administrative Rules (HAR) Title 11, Chapter 54, Water Quality Standards:

"It is the objective of class A waters that their use for recreational purposes and aesthetic enjoyment be protected. Any other use shall be permitted as long as it is compatible with the protection and propagation of fish, shellfish, and wildlife, and with recreation in and on these waters. These waters shall not act as receiving waters for any discharge which has not received the best degree of treatment or control compatible with the criteria established for this class. No new sewage discharges will be permitted within embayments. No new industrial discharges shall be permitted within embayments, with the exception of:

- (A) Acceptable non-contact thermal and drydock or marine railway discharges, in the following water bodies:
 - (i) Honolulu Harbor, Oʻahu;
 - (ii) Barbers Point Harbor, Oʻahu;
 - (iii) Keehi Lagoon Marina Area, Oʻahu;
 - (iv) Ala Wai Boat Harbor, O'ahu; and
 - (v) Kahului Harbor, Maui.
- (B) Storm water discharges associated with industrial activities (defined in 40 CFR sections 122.26 (b)(14) and (b)(15), except (b)(15)(i)(A) and (b)(15)(i)(B)) which meet, at the minimum, the basic water quality criteria applicable to all waters as specified in section 11-54-4, and all applicable requirements specified on the chapter 11-55, titled "Water Pollution Control"; and
- (C) Discharges covered by a NPDES general permit, approved by the U.S. Environmental Protection Agency and issued by the Department in accordance with 40 CFR section 122.28 and all applicable requirements specified in chapter 11-55, titled "Water Pollution Control"."

Impacts and Mitigation Measures

In the short- and long-term, no significant impacts on coastal waters in the project vicinity are anticipated during construction or operation of the proposed project.

Construction activities will involve minimal land disturbing activities such as grubbing, clearing, grading, and excavation. Various mitigation measures will be incorporated into the project's construction plans to minimize soil disturbance and potential short-term erosion and siltation impacts during construction. Excavation and grading activities associated with construction of the proposed project will be regulated by the County's grading ordinance.

In the long term, the R-1 recycled water stored in the tank is intended to be utilized for irrigation purposes. The project not only preserves scarce water resources but also provides storage for R-1 recycled water use in an environmentally beneficial manner. No R-1 recycled water will be discharged directly into coastal waters.

3.4 Natural Hazards

3.4.1 Flood and Tsunami Hazard

According to the Flood Insurance Rate Map (FIRM) Number 1500020258F, prepared by the Federal Emergency Management Agency (FEMA), the proposed storage tank, pump station and a portion of the distribution line are located within Zone AH where the flood elevation is 8 feet above mean sea level. Remaining portions of the distribution line are located in Zone X. See Figure 3-4. Zone AH includes areas of flood depths of 1 to 3 feet (usually areas of ponding), base flood elevations determined. Zone X includes areas determined to be outside of the 0.2 % annual chance flood.

According to the Tsunami Evacuation Zone maps for Kaua'i, the project site is located within the tsunami evacuation zone. See Figure 3-5.

Impacts and Mitigation Measures

In the short- and long-term, no significant impacts on flood hazards in the project area are anticipated as the proposed improvements will be designed and constructed in full compliance with the floodplain management requirements set forth in Section 15-1.5, Kaua'i County Code.

The project will also comply with the rules and regulations for the National Flood Insurance Program (NFIP) present in Title 44, of the Code of Federal Regulations (44CFR), as the project is within a Special Flood Hazard Area.

In the future, changing weather patterns may result in localized increased precipitation severity. Although the WWTP site is already subject to flood depths of 1 to 3 feet during significant rainfall, key components of the WWTP are protected from the potential flood waters. Also, the WWTP is located in an area of sheet flow. This



FIGURE 3-4 FLOOD INSURANCE RATE MAP







FIGURE 3-5 TSUNAMI EVACUATION ZONE

should minimize possible plant damage when compared to a site within or near a defined drainageway. Electrical systems (other than sealed underground conduits) are all situated above flood elevations, and the facility operation is automated. The primary issue experienced with flooding has been access to the facility. After flooding subsides, access is restored and any necessary cleanup ensues.

3.5 Flora and Fauna Resources

The proposed storage tank site is an open, grassy portion of the existing property that is maintained by County staff by regular mowing. There are no trees or shrubs on the proposed site. The distribution line will be installed along the existing pipe alignment within an existing easement. A biological survey was conducted by Rana Biological Consulting of the project site. The survey notes that the pipe alignment is currently overgrown with a dense secondary growth of alien grass and weedy species with natural vegetation, which includes koa haole (Leucaena leucocephala), kiawe (Prosopis pallida), Guinea grass (Urochloa maxima), California grass (Urochloa mutica), opiuma (Pithecellobium dulce), Christmas berry (Schinus terebinthifolius), saltbush (Pluchea carolinensis) and similar invasive species. klu, and fingergrass. Other vegetation in the vicinity of the project include common palm, grass and weed varieties. There are no known rare, threatened, or endangered plant species in the vicinity of the project.

Regarding fauna, there are likely to be field mice or rats in the general vicinity. Common field birds and feral chickens do exist in the area and there may be occasional overflights by seabirds. There are no known endangered or threatened wildlife species in the vicinity of the project.

According to the Rana Biological Consulting survey, avian diversity and densities were in keeping with the location of the property and the habitats presently on the site. Four species Zebra Dove (*Geopelia striata*), Common myna (*Acridotheres tritis*), Red Junglefowl (*Gallus gallus*) and Japanese White-eye (*Zosterops japonicus*) accounted for 56% of all birds recorded during station counts.

During the course of the survey, 18 species were recorded during point counts and as incidental observations. One of the species detected as an incidental observation were two Hawaiian sub-species of the Black-necked Stilt. This sub-species is listed as an endangered species under both Federal and State of Hawai'i endangered species statutes. The other native species recorded was the Black-crowned Night-Heron, which is a water obligate indigenous resident breeding species commonly found in and around water and water features across the State. The remaining 16 avian species detected are alien to the Hawaiian Islands.

No migratory shorebird species were detected during the course of the survey (May 2016). The vast majority of these annual visitors leave the Hawaiian Islands to return to their Arctic breeding grounds at the end of April and beginning of May. It is likely that Pacific Golden-Plover (*Pluvialis fulva*) and possibly Ruddy Turnstone (*Arenaria intrepres*) use resources
within the grassy area within the WWTP during the winter months as both species are regularly seen foraging at the Waimea Athletic Field.

Although not detected during the survey, the endangered Hawaiian petrel (*Pterodroma* sandwichensis) and the threatened endemic Newell's Shearwater (*Puffinus newelli*) have been recorded over-flying the general project area between April and the end of November each year. Additionally, both species have been recovered from the general Waimea area over the past three decades.

Four terrestrial mammalian species were detected during the survey. All of the species detected are common alien mammalian species found through the Island of Kaua'i. Hawaiian hoary bats were not recorded during the survey although they are widely distributed in and around almost all areas that have dense vegetation.

Impacts and Mitigation Measures

No protected botanical species occur on the property. Thus, the construction and operation of the proposed facility and associated infrastructure is not expected to result in deleterious impacts to any protected botanical species.

The principal potential impact that construction of the proposed R-1 facility and associated infrastructure poses to protected seabirds is the increased threat that birds will be downed after becoming disoriented by lights associated with the project during the nesting season. However, there will be no night time construction planned as part of this project nor any night facility lighting. Thus, the proposed project is not expected to result in deleterious impacts to listed seabird species.

It is likely that Hawaiian hoary bats overfly the project area on a seasonal basis. During the pupping season, females carrying their pups may be less able to rapidly vacate a roost site as the vegetation is cleared. Additionally, adult female bats sometimes leave their pups on the roost tree while they forage. Very small pups may be unable to flee a tree that is being felled. Potential adverse effects from such disturbance can be avoided or minimized by not clearing woody vegetation taller than 4.6 meters (15) feet, between June 1 and September 15, the period in which bats are potentially at risk from vegetation clearing. However, there are no suitable roost trees within the proposed project site. Thus, it is not expected that the project will result in deleterious impacts to this listed mammalian species. It is recommended that barbed wire not be used on the top of any perimeter fences as this can potentially snag foraging bats.

No short- or long-term significant impacts on flora or fauna species are anticipated due to the construction and operation of the proposed project.

Construction activities will involve land disturbing activities such as grubbing, clearing, grading, and excavation that may result in some soil erosion which, in turn, could impact the quality of receiving surface and coastal waters downstream of the project site. Various mitigation measures will be incorporated into the project's construction plans to minimize soil disturbance and potential short-term erosion and siltation

impacts during construction. All construction activities will occur during daylight hours. Excavation and grading activities associated with construction of the proposed project will be regulated by the County's grading ordinance.

3.6 Historic and Archaeological Resources

An archaeological assessment survey was conducted by Aki Sinoto Consulting in 2008 for the proposed expansion of the WWTP. The scope of the study included the grounds of the 4 acre area within the grounds of the existing WWTP as well as another 0.12 acre site immediately north of the Kaumuali'i Highway at the junction of the access road to the existing facility. It is noted that the proposed R-1 recycled water tank and pump station are located within the grounds of the existing facility.

The assessment noted that 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 field procedure. The archival search also 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 1970's were preceded by commercial sugar cane cultivation, which would have extensively impacted the immediate project area.

The assessment recommended that no further historic preservation-related procedures, including archaeological monitoring during construction, are recommended in conjunction with the project. However, should inadvertent discoveries occur during the course of construction activities, the appropriate agencies shall be contacted for consultation.

The existing distribution line extends through lands previously utilized for commercial sugar cane cultivation. The proposed work on the approximately 1,700 foot distribution line involves either relining the existing 10-inch line using CIPP technology or replacing it within the same pipeline trench with a polyvinyl chloride (PVC) pipeline. In addition, there is another 250 foot long segment within an existing sanitary sewer easement. This also involves lands which were previously utilized for sugar cane cultivation.

In addition to the Sinoto study, Cultural Surveys Hawai'i also provided general background research in the Waimea area. They noted that the development of Kikiaola lands through most of the twentieth century focused on the growing sugar industry. Plantation railroad lines were constructed across the 'ili connecting Waimea and Kekaha. The Kekaha Sugar Company saw expansion after 1907 when the construction of the plantation's major irrigation ditch was completed. The engineering feat brought water to the areas from eight miles up the Waimea River via a series of ditches, flumes, tunnels and siphons.

Cultural Surveys Hawai'i cites one completed archaeological report involving land in the vicinity. A letter report (Sinoto 1993) summarizes results of monitoring, surface survey, and backhoe testing completed within a parcel adjacent to the grounds of the present Waimea Plantation Cottages. No surface or subsurface remains were noted. However, locations of

two burial sites on the grounds of the Waimea Plantation Cottages were shown on the plan map, and are recorded as State sites 50-30-05-1853 and 50-30-05-1854.

A review of the State Historic Preservation Division archaeological and historic site inventory map of Waimea done by Cultural Surveys Hawai'i indicates that the only recorded sites in the vicinity are one Heiau (identified by Wendell Bennett as "Keali'i on the west side of the Waimea River"), Cook Landing (the purported site of Captain James Cook's first landfall in Waimea), Fort Elizabeth (the 19th century Russian military emplacement), and seven historic buildings. Only one of these buildings – the Gulick-Rowell house – is directly adjacent to the study area on its east side.

Impacts and Mitigation Measures

No short- or long-term significant impacts on historic and archaeological resources are anticipated due to the construction and operation of the proposed project.

During any development activity involving modification of the land surface, there is always the possibility, however remote, that previously unknown or unexpected subsurface cultural features, deposits or burials might be encountered. Should any archaeologically significant features, deposits or burials, be uncovered, all work will cease immediately and the appropriate agencies, including the DLNR Historic Preservation Division and OHA, will be contacted in accordance with applicable regulations.

3.7 Air Quality

The State DOH Clean Air Branch, monitors the ambient air in the State for various gaseous and particulate air pollutants. The primary purpose of the statewide monitoring network is to measure ambient air concentrations of these pollutants and ensure that these air quality standards are met.

The only air quality monitoring station on Kaua'i is located in Niumalu where air quality is described as "Good". Although there is no specific information available for the project site, air quality at the project site is generally considered to be good due to the presence of tradewinds throughout most of the year and the absence of significant industrial sources of air contamination.

Impacts and Mitigation Measures

The proposed project will have short-term construction-related impacts in air quality, including the generation of dust and emissions from construction vehicles, equipment and commuting construction workers. The contractor will be responsible for complying with State DOH Administrative Rules, Title 11, Chapter 60-11.1 regarding "Air Pollution Control" specifically Section 11-60.1-33 regarding fugitive dust and the prohibition of visible dust emissions at property boundaries.

Mitigation measures to address short-term impacts include controlling the generation of fugitive dust through frequent watering of unpaved areas of exposed soil and

planting landscaping as soon as possible on completed areas. As a county agency, any landscaping, if needed, will include native vegetation as governed by Act 233, Session Laws of Hawai'i, 2015.

3.8 Noise

In general, low noise levels at the project site are typical, which can be attributed to no commercial, industrial or residential development and a low density traffic pattern. Intermittent fixed noise in the vicinity is generated by machinery at the WWTP. Ambient noise in the general project area is predominantly attributed to occasional vehicular traffic traveling along Kaumuali'i Highway and adjacent roadways. Also contributing to the acoustic environment is noise from wind and birds.

Impacts and Mitigation Measures

In the short-term, noise from construction of the R-1 recycled water distribution system will result in a temporary increase which will vary according to the particular phase of construction. Noise may also increase as a result of operation of heavy vehicles and other power equipment during the construction period.

Construction noise impacts will be mitigated by compliance with provisions of the State DOH Administrative Rules, Title 11, Chapter 46, "Community Noise Control" regulations. These rules require a noise permit if the noise levels from construction activities are expected to exceed the allowable levels stated in the State DOH Administrative Rules. It shall be the contractor's responsibility to minimize noise by properly maintaining noise mufflers and other noise-attenuating equipment, and to maintain noise levels within regulatory limits. Also, the guidelines for heavy equipment operation and noise curfew times, as set forth by the State DOH noise control rules, will be adhered to; or if necessary a noise permit shall be obtained. It is noted that all construction is intended to occur during weekday daylight hours.

In the long-term, no significant noise impacts are anticipated once the construction of the proposed project has been completed.

3.9 Traffic

The Waimea WWTP generates very little traffic, only employees and occasional maintenance and service vehicles travel down the dirt roads leading to the WWTP facility.

Impacts and Mitigation Measures

During the construction period, there may be additional traffic due to construction workers and equipment traversing to and from the site. Staging of equipment and vehicles will occur on the existing WWTP site. The extent of additional traffic is anticipated to be temporary and limited. After completion of construction, the project should not result in a reduction or increase in traffic volumes. Short term and long term additional adverse traffic impacts resulting from the R-1 recycled water distribution system are not anticipated.

3.10 Visual Resources

Waimea is a low rise community noted for its low-key development, dry and sunny climate, and rural lifestyle. Waimea is the civic center of the West Side on the Island of Kaua'i. It houses several historic buildings and structures; and community facilities, such as Waimea Theater, Kaua'i Veterans Memorial Hospital, and Waimea High School, as well as a variety of restaurants and retail stores.

Impacts and Mitigation Measures

The proposed R-1 recycled water storage tank will be 55 feet in diameter and 25 feet in height and located near the southeast corner of the WWTP site. The height of the pump station will be a maximum of 60 inches. The existing WWTP abuts vacant lands. The WWTP is located at least 650 feet north of Kaumuali'i Highway, the main arterial coastal highway. The Waimea Plantation Cottages, Kikiaiola Baseyard and scattered residential development are located makai of the highway in the general vicinity. WCMS and Waimea Athletic Field are located approximately 1,100 feet to the southeast. The closest single family residences in Waimea Town are located approximately 1,400 feet to the northeast, near the KIC open storage reservoirs. The WWTP and the proposed R-1 recycled water storage tank are located in an agriculturally designated area and it is a fair distance away from existing developed areas. The project would have a negligible impact on significant views.

3.11 Socio-Economic Characteristics

The project site is located within the Waimea Census Designated Place (CDP). The following is a comparison of the selected socio-economic characteristics of the Waimea CDP and the County of Kaua'i as shown in Table 3-1.

Table 3-1 Selected Demographic Characteristics of the Waimea CDP and County of Kauaʻi			
<u> </u>	Waimea CDP	County of Kaua'i	
POPULATION	1,814	67,872	
AGE			
Persons under 5 years, percent	9.4%	6.5%	
Persons 5 to 19 years, percent	14.7%	17.9%	
Persons 20 to 64 years, percent	61.6%	60.0%	
Persons 65 years and over, percent	14.4%	15.6%	
RACE			
White persons, percent	19.3%	33.4%	
Black persons, percent	0.0%	0.5%	
American Indian and Alaska Native persons, percent	0.0%	0.2%	

	Waimea	County of
	CDP	Kaua'i
Asian persons, percent	56.9%	35.7%
Native Hawaiian and Other Pacific Islander, percent	20.3%	9.9%
Persons reporting two or more races, percent	3.4%	19.8%
Persons of Hispanic or Latino origin, percent	0.9%	9.9%
SOCIAL CHARACTERISTICS		
Average household size	2.87	2.99
Percent high school graduate or higher	92.7%	90.1%
Percent bachelor's degree or higher	25.0%	25.1%
Born in the United States, percent	91.3%	83.6%
Foreign born, percent	8.2%	15.1%
Language other than English spoken at home, percent	13.4%	20.9%
HOUSING CHARACTERISTICS		
Homeowner vacancy rate, percent	2.7%	3.1%
Rental vacancy rate, percent	5.3%	17.3%
Owner-occupied housing unit, percent	47.9%	62.6%
Renter-occupied housing unit, percent	52.1%	37.4%
Median value, owner-occupied housing units	\$370,400	\$484,500
Housing units with a mortgage, median	\$2,125	\$2,227
Housing units without a mortgage, median	\$411	\$457
ECONOMIC CHARACTERISTICS		
Percent unemployed	3.6%	7.2%
Median household income	\$67,500	\$62,052
Percentage of people whose income in the past 12 months is	15.1%	11.2%
below poverty level		

Source: 2009-2013 American Community Survey 5-Year Estimates

Based on 2009-2013 American Community Survey 5-Year Estimates, the Waimea CDP contains 1,814 persons or approximately 2.7% of the population within the County of Kaua'i. The age distribution of persons within the Waimea CDP is fairly similar to the County of Kaua'i as a whole. In terms of race, there is a lower percentage of White persons (19.3%) than the County as a whole (33.4%). Asians comprise 56.9% of the population in the Waimea CDP compared to 35.7% for the County as a whole. Native Hawaiian and Other Pacific Islanders also have a higher percentage in the Waimea CDP (20.3%) than the County as a whole (9.9%). Within the Waimea CDP, persons reporting two or more races (3.4%) are quite low in relation to the County of Kaua'i as a whole (19.8%). Percentages of persons of Hispanic or Latino origin are also quite small (0.9%) compared to the County as a whole (9.9%).

Regarding social characteristics, the average household size, percentage of high school graduates or higher and bachelor degrees or higher percentages are similar between the

Waimea CDP and the County of Kaua'i as a whole. A higher percentage of Waimea CDP residents are born in the United States (91.3%) than the County as a whole (83.6%).

The homeowner vacancy rate for the Waimea CDP and the County of Kaua'i are similar. However, the rental vacancy rate for the Waimea CDP is quite low (5.3%) compared to the County as a whole (17.3%). However, owner-occupied housing units are lower in Waimea CDP (47.9%) compared to the County as a whole (62.6%). The median value of owner-occupied housing units are lower in the Waimea CDP (\$370,400) than the County as a whole (\$484,500).

The Waimea CDP has a relatively low unemployment rate (3.6%) compared to the County as a whole (7.2%). Median household income in the Waimea CDP (\$67,500) is slightly higher than the County as a whole (\$62,052). Percentages of people whose income was below poverty level in the past 12 months was higher in the Waimea CDP (15.1%) than the County as a whole (11.2%).

Impacts and Mitigation Measures

In the short term, the project will confer positive economic benefits in the local area. Direct economic benefits will result from construction expenditures both through the purchase of material from local suppliers and through the employment of local labor, thereby stimulating that sector of the economy. Indirect economic benefits may include benefits to local retailing businesses resulting from construction activities.

Construction activities associated with the proposed project will create minimal short term impacts such as unavoidable noise impacts, and air quality impacts.

In the long-term, the proposed project will have a beneficial socio-economic impact by providing more reliable storage and supplying R-1 recycled water to the Waimea community. Initial users include WCMS and Waimea Athletic Field. The project provides an invaluable irrigation source for nearby development, helps preserve scarce potable water supplies and encourages additional agriculture use.

3.12 Public Services and Facilities

Police and fire facilities are provided by the County of Kaua'i along Kaumuali'i Highway at its intersection with Menehune Road.

Medical services are provided by the KVMH located at 4643 Waimea Canyon Drive approximately 2,000 feet to the east of the Waimea WWTP. KVMH is a full service Critical Access Hospital with a hospital outpatient clinic and a medical office building with additional medical services.

Schools in the Waimea area include the WCMS which serves grades 6-8 and Waimea High School serving grades 9-12. WCMS is located approximately 1,100 feet to the southeast of the Waimea WWTP. The County's 11.73 acre Waimea Athletic Field is located adjacent to the middle school facility. Waimea High School is located two blocks further east.

Impacts and Mitigation Measures

Construction of the proposed project is not anticipated to result in negative impacts upon public services and facilities. In the longer term, the R-1 recycled water distribution system provides additional opportunities for public services and facilities. Since several facilities are in fairly close proximity to the WWTP, use of R-1 recycled water for irrigation purposes may be seriously considered to take advantage of the sustainable resource.

3.12.1 Solid Waste Collection and Disposal

The Kekaha Landfill is the County of Kaua'i's sole permitted landfill. It has been in operation since 1953. Various vertical and lateral expansions have incrementally increased landfill capacity. The 2007 Phase II lateral expansion provided 12 years of additional landfill capacity assuming continuation of past filling rates. Because of the limited capacity of the Kekaha Landfill, the County is currently seeking approvals for another landfill site.

Impacts and Mitigation Measures

The project is not anticipated to have significant impacts to solid waste in the short and long term. There may be minor excavation to provide the footing for the R-1 recycled water storage tank. Excavated materials will likely be used on-site as cover. Any construction debris will be properly disposed of at the Kekaha Landfill.

3.13 Infrastructure and Utilities

3.13.1 Water and Wastewater Systems

The County of Kaua'i Department of Water (KDOW) is a semi-autonomous agency responsible for the management, control and operation of the island's municipal water system. It supplies water to 13 geographic areas, each of which is served by a single system or linked subsystems. Waimea Town is served by the Waimea-Kekaha subsystem.

Wastewater service in the Waimea area is provided by the County of Kaua'i Department of Public Works, Division of Wastewater Management. The Waimea WWTP is responsible for wastewater intake, wastewater treatment, recycled water conveyance, backup effluent disposal, and regular monitoring. The quality of the recycled water produced by the WWTP is monitored regularly on-site. In the event the recycled water is not to <u>R-1 recycled water</u> specification, the treated effluent is directed to the State DOH-permitted injection wells. The injection wells are also monitored regularly pursuant to State regulations. <u>In the unlikely event that recycled water not to specification is transmitted to end users, the on-site pump will be stopped immediately which will stop transmission to end users. Both end users, Waimea Middle School and Waimea Athletic Field, will be notified immediately regarding any possible corrective measures needed.</u>

Impacts and Mitigation Measures

In the short-term, no significant impacts on water and wastewater systems in the area are anticipated as the proposed improvements will be designed and constructed in compliance with HAR, Chapters 11-54, 11-55, and 11-62.

During construction, there will be no significant impact to existing water and wastewater operations. In the long term, the proposed project provides storage for R-1 recycled water which is a valuable resource to the community. Since R-1 recycled water can be utilized for a broad range of applications such as crop and open space irrigation, expanded use of R-1 recycled water helps reduce the County's reliance on potable water for irrigation. However, even with expanded use of R-1 recycled water, the proposed R-1 recycled water storage tank would still be needed in order to account for daily fluctuations in the amount of wastewater processed by the WWTP.

4. RELATIONSHIP TO PLANS, POLICIES, AND CONTROLS

This section discusses the State of Hawai'i and County of Kaua'i land use plans, policies and controls relating to the proposed project.

4.1 State and County Land Use Plans and Policies

4.1.1 Hawai'i State Plan

The Hawai'i State Plan, Chapter 226, HRS, provides goals, objectives, policies, and priorities for the State. The Hawai'i State Plan also provides a basis for determining priorities, allocating limited resources, and improving coordination of State and County Plans, policies, programs, projects, and regulatory activities. It establishes a set of themes, goals, objectives, and policies that are meant to guide the State's long-range growth and development activities. The proposed project is consistent with the following applicable objectives and policies:

Sec. 226-15 Objectives and policies for facility systems – solid and liquid wastes.

- (a) Planning for the State's facility systems with regard to solid and liquid wastes shall be directed towards the achievement of the following objectives:
 - (1) Maintenance of basic public health and sanitation standards relating to treatment and disposal of solid and liquid wastes.
 - (2) Provision of adequate sewerage facilities for physical and economic activities that alleviate problems in housing, employment, mobility and other areas.
- (b) To achieve the solid and liquid waste objectives, it shall be the policy of this State to:
 - (2) Promote re-use and recycling to reduce solid and liquid wastes and employ a conservation ethic.

Sec. 226-16 Objectives and policies for facility systems – water.

- (a) Planning for the State's facility systems with regard to water shall be directed towards achievement of the objective of the provision of water to adequately accommodate domestic, agricultural, commercial, industrial, recreational, and other needs within resource capacities.
- (b) To achieve the facility systems water objective, it shall be the policy of this State to:
 - (3) Reclaim and encourage the productive use of runoff water and waste water discharges.

(4) Assist in improving the quality, efficiency, service, and storage capabilities of water systems for domestic and agricultural use.

Discussion

The proposed R-1 recycled water storage tank and distribution system promotes and further encourages the use of R-1 recycled water for potentially a broad range of uses. A general growth of population and limited potable water resources reduces the availability and quality of drinking water supplies. In addition, some public concern persists regarding the disposal of wastewater. Thus, wastewater management practices that protect, conserve, and fully utilize water resources are vital. Increasing the safe use of recycled water greatly assists in meeting water requirements of the State, enhance the environment, and benefit public health by preserving resources upon which public health protection is based.

4.1.2 State Land Use

The State Land Use Law, Chapter 205, HRS, is intended to preserve, protect and encourage the development of lands in the State for uses that are best suited to the public health and welfare of Hawai'i's people. Under Chapter 205, HRS, all lands in the State of Hawai'i are classified by the State Land Use Commission (LUC) into four major categories referred to as State Land Use Districts. These districts are identified as the Urban District, Agricultural District, Conservation District, and Rural District. The LUC's Land Use District Boundary map for the Island of Kaua'i depicts the project area within the State Agricultural District. See Figure 4-1. The proposed project is permissible under the current classification.

4.1.3 County Land Use and Zoning

To preserve rural character and provide for growth in jobs, businesses and households, the County intends to support development within planned urban centers and residential communities. The County of Kaua'i General Plan provides guidance for land use regulations, the location and character of new development and facilities, and planning for County and State facilities and services. As a part of the 1998-2000 update of the County of Kaua'i General Plan, some of the land uses in the vicinity of the proposed project were redesignated to resort and residential community land uses from residential and agricultural land uses, respectively. The intent is to provide future expansion of Waimea Town by redesignating "islands" of land to Residential Community. The County of Kaua'i General Plan Land Use Map designates the WWTP as a "Wastewater Treatment Plant". See Figure 4-2.

The proposed project is consistent with the following County of Kaua'i General Plan policies relating to building public facilities and services, specifically wastewater treatment:

7.5.4 Policy

(a) The County and private utilities shall develop and operate wastewater collection, treatment and disposal systems as necessary to serve urban areas for the purposes of safeguarding public health, potable water supplies, and the quality of stream and ocean waters.





FIGURE 4-1 STATE LAND USE DISTRICTS

WAIMEA WASTEWATER TREATMENT PLANT R-1 RECYCLED WATER DISTRIBUTION SYSTEM



FIGURE 4-2 GENERAL PLAN LAND USE MAP

WAIMEA WASTEWATER TREATMENT PLANT R-1 RECYCLED WATER DISTRIBUTION SYSTEM

(b) The County and private developers should coordinate planning, development, and operation and management of wastewater systems in accordance with long-range facility plans.

(c) Wastewater effluent shall be reused for irrigation wherever economically feasible, in order to avoid costly and disposal facilities and to conserve potable water supplies.

The County zoning for the site is Agriculture District. See Figure 4-3. A WWTP is considered a private and public utility facility in the Agriculture District. The existing facility has been granted a County Use Permit.

Discussion

The proposed R-1 recycled water storage tank and distribution system are consistent with the goals of the County of Kaua'i General Plan by providing an invaluable irrigation source for nearby development, helping preserve scarce potable water supplies and encouraging additional agriculture use. The proposed project will coincide with the site's current land use designation as a wastewater treatment plant and help manage increased wastewater flow to the WWTP while extending service to new users.

4.1.4 Hawai'i Coastal Zone Management Program

Hawai'i's Coastal Zone Management (CZM) Program, established pursuant to Chapter 205A, HRS, as amended, is administered by the State Office of Planning (OP) and provides for the beneficial use, protection and development of the State's coastal zone. The objectives and policies of the Hawai'i CZM Program encompass broad concerns such as impact on recreational resources, historic and archaeological resources, coastal scenic resources and open space, coastal ecosystems, coastal hazards, and the management of development. The Hawai'i CZM area includes all lands within the State and the areas seaward to the extent of the State's management jurisdiction. Hence, the proposed project site is located in the CZM area. A discussion of the project's consistency with the applicable objectives and policies of the CZM Program is provided below.

(2) <u>Historic Resources</u>

Objective:

(A) Protect, preserve and, where desirable, restore those natural and manmade historic and prehistoric resources in the coastal zone management area that are significant in Hawaiian and American history and culture.

<u>Policies</u>:

- (A) Identify and analyze significant archaeological resources;
- (B) Maximize information retention through preservation of remains and artifacts or salvage operations; and







WAIMEA WASTEWATER TREATMENT PLANT





(C) Support state goals for protection, restoration, interpretation, and display of historic resources.

Discussion

An archaeological assessment survey was conducted by Aki Sinoto Consulting in 2008 for the proposed expansion of the Waimea WWTP. The scope of the study included the grounds of the 4 acre area within the grounds of the existing WWTP as well as another 0.12 acre site immediately north of the Kaumuali'i Highway at the junction of the access road to the existing facility. It is noted that the proposed R-1 recycled water storage tank and pump station are located within the grounds of the existing facility.

The assessment noted that neither significant archaeological or historic remains nor other evidence of past human activities were encountered within the boundaries of the subject project area during the field procedure. The archival search also 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 1970's were preceded by commercial sugar cane cultivation, which would have extensively impacted the immediate project area.

The assessment recommended that no further historic preservation-related procedures, including archaeological monitoring during construction, are recommended in conjunction with the project. However, should inadvertent discoveries occur during the course of construction activities, the appropriate agencies shall be contacted for consultation.

The existing distribution line extends through lands previously utilized for commercial sugar cane cultivation. The proposed work on the distribution line involves either relining the existing 10-inch line using CIPP technology or replacing it within the same pipeline trench with a PVC pipeline. In addition, there is an approximately 250 foot long waterline segment which extends southwesterly from the existing distribution line alignment to provide service to the Waimea Athletic Field. This also involves lands which were previously utilized for sugar cane cultivation.

During any development activity involving modification of the land surface, there is always the possibility, however remote, that previously unknown or unexpected subsurface cultural features, deposits or burials might be encountered. Should any archaeologically significant features, deposits or burials, be uncovered, all work will cease immediately and the appropriate agencies, including the DLNR Historic Preservation Division and OHA, will be contacted in accordance with applicable regulations.

(3) <u>Scenic and Open Space Resources</u>

<u>Objective</u>:

(A) Protect, preserve, and where desirable, restore or improve the quality of coastal scenic and open space resources.

Policies:

- (B) Ensure that new developments are compatible with their visual environment by designing and locating such developments to minimize the alteration of natural landforms and existing public views to and along the shoreline;
- (C) Preserve, maintain, and, where desirable, improve and restore shoreline open space and scenic resources; and

Discussion

The proposed R-1 recycled water storage tank will be 55 feet in diameter and 25 feet in height and located near the southeast corner of the WWTP site. The height of the pump station will be a maximum of 60 inches. The proposed structures are similar to existing structures already on the WWTP site. The existing WWTP abuts vacant lands. The WWTP is located at least 650 feet north of the Kaumuali'i Highway, the main arterial coastal highway. The Waimea Plantation Cottages, Kikiaola Baseyard, a ranch and scattered residential development are located makai of the highway in the general vicinity. WCMS and Waimea Athletic Field are located approximately 1,100 feet to the southeast. The closest single family residences in Waimea Town are located approximately 1,400 feet to the northeast. The WWTP and the proposed R-1 recycled water storage tank are located in an agriculturally designated area and it is a fair distance away from existing developed areas. The project would have a negligible impact on significant views.

(4) <u>Coastal Ecosystems</u>

Objective:

(A) Protect valuable coastal ecosystems, including reefs, from disruption and minimize adverse impacts on all coastal ecosystems.

<u>Policies</u>:

- (A) Exercise an overall conservation ethic, and practice stewardship in the protection, use, and development of marine and coastal resources;
- (C) Preserve valuable coastal ecosystems, including reefs, of significant biological or economic importance;
- (D) Minimize disruption or degradation of coastal water ecosystems by effective regulation of stream diversions, channelization, and similar land and water uses, recognizing competing water needs; and
- (E) Promote water quantity and quality planning and management practices that reflect the tolerance of fresh water and marine ecosystems and maintain and enhance water quality through the development and implementation of point and nonpoint source water pollution control measures.

Discussion

The nearest coastal waters downstream of the project site is approximately 2,000 feet to the south. The State DOH's marine waters classification for these coastal waters is class A.

In the short- and long-term, no significant impacts on coastal waters in the project vicinity are anticipated during construction or operation of the proposed project.

Construction activities will involve minimal land disturbing activities such as grubbing, clearing, grading, and excavation. Various mitigation measures will be incorporated into the project's construction plans to minimize soil disturbance and potential short-term erosion and siltation impacts during construction. Excavation and grading activities associated with construction of the proposed project will be regulated by the County's grading ordinance.

In the long term, the R-1 recycled water stored in the tank is intended to be utilized for irrigation purposes. The R-1 recycled water not only preserves scarce water resources but also provides storage for R-1 recycled water use in an environmentally beneficial manner. No R-1 recycled water will be discharged directly into coastal waters.

(6) <u>Coastal Hazards</u>

Objective:

(A) Reduce hazard to life and property from tsunami, storm waves, stream flooding, erosion, subsidence, and pollution.

<u>Policies</u>:

- (B) Control development in areas subject to storm wave, tsunami, flood, erosion, hurricane, wind, subsidence, and point and nonpoint pollution hazards;
- (C) Ensure that developments comply with requirements of the Federal Flood Insurance Program;
- (D) Prevent coastal flooding from inland projects.

Discussion

According to the Flood Insurance Rate Map (FIRM) prepared by the Federal Emergency Management Agency (FEMA), the project site is located within Zone AH where the flood elevation is 8 feet above mean sea level. Due to the generally flat topography and relatively low site elevations, the access road and WWTP floods during intense storms making the WWTP inaccessible.

In the short- and long-term, no significant impacts on flood hazards in the project area are anticipated as the proposed improvements will be designed and constructed in full compliance with the flood plain and tsunami management requirements of the County.

(7) <u>Managing Development</u>

<u>Objective</u>:

(A) Improve the development review process, communication, and public participation in the management of coastal resource and hazards.

Policy:

(C) Communicate the potential short- and long-term impacts of proposed significant coastal developments early in their life cycle and in terms understandable to the public to facilitate public participation in the planning and review process.

Discussion

This Environmental Assessment (EA) is being prepared and processed pursuant to Chapter 343, HRS, which provides opportunities for agency consultation and coordination as well as for public notification and participation.

(8) <u>Public Participation</u>

<u>Objective</u>:

(A) Stimulate public awareness, education, and participation in coastal management.

Policies:

- (A) Promote public involvement in coastal zone management processes;
- (B) Disseminate information on coastal management issues by means of educational materials, published reports, staff contact, and public workshops for persons and organizations concerned with coastal issues, developments, and government activities; and

Discussion

This Environmental Assessment (EA) is being prepared and processed pursuant to Chapter 343, HRS, which provides opportunities for agency consultation and coordination as well as for public notification and participation.

(10) <u>Marine Resources</u>

Objective:

(A) Promote the <u>protection</u>, use, and development of marine and coastal resources to assure their sustainability. (emphasis added)

Discussion

The nearest coastal waters downstream of the project site is approximately 2,000 feet to the south. The State DOH's marine waters classification for these coastal waters is class A.

In the short- and long-term, no significant impacts on marine and coastal resources in the project vicinity are anticipated during construction or operation of the proposed project.

Construction activities will involve minimal land disturbing activities such as grubbing, clearing, grading, and excavation. Various mitigation measures will be incorporated into the project's construction plans to minimize soil disturbance and potential short-term erosion and siltation impacts during construction. Excavation and grading activities associated with construction of the proposed project will be regulated by the County's grading ordinance.

In the long term, the R-1 recycled water stored in the tank is intended to be utilized for irrigation purposes. The R-1 recycled water not only preserves scarce water resources but also provides storage for R-1 recycled water use in an environmentally beneficial manner. No R-1 recycled water will be discharged directly into coastal waters.

4.1.5 County of Kaua'i Special Management Area

Pursuant to the Hawai'i CZM Program, Chapter 205A, HRS, the counties have enacted ordinances establishing Special Management Areas (SMA). Any "development" within the SMA requires an SMA Use Permit administered by the County of Kaua'i Planning Department. Through the SMA permit system, the County assesses and regulates developments proposed for areas located within the SMA and the proposed developments are evaluated for compliance with the CZM objectives and policies and SMA guidelines set forth in Chapter 205A, HRS. The proposed project is not located within the County SMA. See Figure 4-4.

4.2 Permits and Approvals

The following is a list of permits, approvals, and reviews that may be required prior to construction and operation of the proposed project.

Federal

Department of the Army

Section 404 Permit

Environmental Protection Agency (EPA)

- National Environmental Policy Act (NEPA) Categorical Exclusion
- U.S. Fish & Wildlife Service
 - Section 7 of the Endangered Species Act

State of Hawai'i

Department of Health (DOH)

Section 401 Water Quality Certification





SPECIAL MANAGEMENT AREA

WAIMEA WASTEWATER TREATMENT PLANT R-1 RECYCLED WATER DISTRIBUTION SYSTEM

FIGURE 4-4

• National Pollutant Discharge Elimination System (NPDES) Permit Form C (Stormwater Associated with Construction)

Office of Planning

• Coastal Zone Management (CZM) Federal Consistency Certification Department of Transportation (DOT)

Oversize/Overweight Load Permit

Department of Land and Natural Resources (DLNR)

- Section 106 of the National Historic Preservation Act
- Chapter 6E, HRS

County of Kaua'i

Department of Public Works

- Grading/Grubbing Permit
- Building Permit

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5. ALTERNATIVES

This EA will discuss three build alternatives considered for the R-1 recycled water distribution system, in addition to an alternative of no action. The major components of the alternatives vary in system ownership options, storage scenarios, and recycled water distribution (pipe) routing.

5.1 No Action Alternative

Under the no action alternative, the R-1 recycled water distribution system would not be pursued and the storage tank and recycled water pump station would not be installed (see Figure 5-1). Environmental impacts would be avoided, construction costs spared, and the need for permits precluded. The R-1 recycled water produced at Waimea WWTP would continue to be conveyed to the KIC open storage reservoir, mixed with stored water, and left to evaporate through natural processes. Any excess R-1 recycled water and/or off-spec effluent would continue to go to one of two (2) injection wells. The state of the existing conveyance infrastructure would continue to deteriorate and the existing transite pipe, which has experienced main breaks, could cause maintenance issues in the future.

This alternative was not selected because it would not provide a reliable, long-term solution for the storage and distribution of R-1 recycled water that would serve as an alternative water source for the Waimea community. In addition, future issues that could arise as a result of the deterioration of the current infrastructure would not be mitigated.

5.2 Alternative 1 – On-site Storage with Pressurized Distribution System

This alternative proposes a R-1 recycled water storage tank and pump station be installed on the existing Waimea WWTP property. System improvements would also include replacing a portion of the existing transite pipeline and adding a service lateral that will extend from the existing pipe alignment which serves WCMS and the Waimea Athletic Field (see Figure 5-2).

This alternative was selected as the preferred alternative and was assessed to have minimal to no significant impacts on all economic, social and environmental characteristics. It has also received support from the surrounding community as expressed in public meetings. This alternative also has minimal requirements for implementation. The storage tank and pump station would be located within the WWTP site and remain under the control of the WMD enabling easily accessible operation and maintenance. Moreover, use of existing sewer easement for installation of new recycled water conveyance infrastructure is proposed. This alternative has the smallest area of potential effect. Positive benefits on the surrounding community include short-term economic benefits from the activity stemming from construction and long-term socio-economic benefits from the reliable storage of R-1 recycled water and conservation of potable water resources.

5.3 Alternative 2 – Off-site Storage Reservoir (Kīkīaola Concrete Reservoir)

This alternative proposes a R-1 recycled water pump station be installed on the existing WWTP property and using the existing KIC concrete reservoir to store recycled water. The existing KIC concrete reservoir is located approximately 475 feet to the east of the earthen

WAIMEA WASTEWATER TREATMENT PLANT R-1 RECYCLED WATER DISTRIBUTION SYSTEM

NO ACTION ALTERNATIVE EXISTING RECYCLED WATER INFRASTRUCTURE

OKAMOTO

FIGURE 5-1



W:/10183-01/Planning/Graphics/Working

ON-SITE STORAGE WITH PRESSURIZED DISTRIBUTION SYSTEM **ALTERNATIVE 1**

WILSON OKAMOTO

FIGURE 5-2



W:\10183-01/Planning/Craphics/Working

upper storage reservoir. The existing KIC concrete reservoir is currently used to store surface water from the Kekaha ditch irrigation system. Improvements would include replacing a portion of the existing transite pipeline and extending it to convey R-1 recycled water to the KIC concrete reservoir. From the KIC concrete reservoir, an existing 8-inch cast iron distribution line within Waimea Canyon Drive will be used as the primary transmission line for the blended recycled/surface water. In addition, a new service lateral, extending from the existing distribution pipeline within Waimea Canyon Drive, would be installed to convey water to WCMS and the Waimea Athletic Field. Blended water would also be delivered via the existing non-potable waterline to Waimea Plantation Cottages (see Figure 5-3).

Advantages of Alternative 2 would include use of the existing KIC gravity storage tank and KIC distribution system, and extending the system further east into the community.

This alternative was not selected for reasons including effluent quality, regulatory compliance, area of potential effect, and costs. The R-1 recycled water produced by the WWTP would be blended with water from the Kekaha Ditch in the KIC concrete reservoir. Therefore, the quality of the blended water cannot be guaranteed. A treatment system for the ditch water may need to be designed and installed. The 25,000 gallon capacity of the existing KIC concrete reservoir is also well below the estimated demand for the recycled water customers. Recycled water levels at the existing KIC reservoir would need to be maintained with level sensors and pumping equipment. Additional permits and easements would be needed for proposed construction and may require involvement of multiple landowners. Proposed construction of portions of the new pipeline are located in previously undisturbed lands which would possibly require additional archaeological and biological review. The existing cast iron piping is also over 50 years old and its condition is suspect. Additionally, management responsibilities for the distribution system would need to be determined between the County and KIC, as KIC's private infrastructure would be used. Although this alternative is estimated to be the lowest in cost due to the fact that a new storage tank would not be constructed, additional costs may be incurred depending on the condition of the existing infrastructure.

5.4 Alternative 3 – Off-site Storage Reservoir (New Reservoir)

This alternative proposes a R-1 recycled water pump station be installed on the existing WWTP property and installing a new off-site storage reservoir for recycled water storage. System improvements would also include replacing a portion of the existing transite pipeline and extending it to convey water to the new storage tank. The new off-site storage reservoir would need to be high enough to provide adequate pressure to recycled water customers. The volume of the new reservoir would be 400,000 gallons. One recycled water line will serve as both the supply piping for the off-site storage reservoir and the distribution piping for customers. The service lateral would be extended from the existing pipe alignment to convey water to WCMS and the Waimea Athletic Field (see Figure 5-4).

This alternative was not selected for reasons including regulatory compliance, area of potential effect, and costs. Additional permits and easements would be needed for proposed construction and may require involvement of multiple landowners. Land would need to be

ALTERNATIVE 2 OFF-SITE STORAGE RESERVOIR (KIKIALOA CONCRETE RESERVOIR)

FIGURE 5-3



W:\10183-01/Planning/Craphics/Working

ALTERNATIVE 3 OFF-SITE STORAGE RESERVOIR (NEW RESERVOIR)

WILSON OKAMOTO

FIGURE 5-4



W:/10183-01/Planning/Graphics/Working

Waimea WWTP R-1 Recycled Water Distribution System

acquired for the new reservoir. Proposed construction of the new reservoir and portions of the new pipeline are located in previously undisturbed lands which would possibly require additional archaeological and biological review. This alternative was estimated to be the highest in cost of all the alternatives.

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6. ANTICIPATED DETERMINATION

Based on the significance criteria set forth in Chapter 200, Title 11, State of Hawai'i DOH Administrative Rules, it is anticipated that the proposed Project will not have a significant effect on the environment, and that a Finding of No Significant Impact (FONSI) will be filed with the State Office of Environmental Quality Control following the public consultation period. The reasons supporting this anticipated determination are described below according to these significance criteria.

1) Involves an irrevocable commitment to loss or destruction of any natural or cultural resource;

Development of the proposed Project will require an irrevocable commitment of energy, labor, capital, and materials for construction. However, the management of wastewater and the potential to use recycled water as an alternative water source offers long-term benefits to both the public and the environment that align with the objectives, policies, and goals of the county and the state.

An archaeological assessment survey conducted by Aki Sinoto Consulting in 2008 for the proposed expansion of the Waimea WWTP noted that no significant archaeological or historic remains nor other evidence of past human activity were encountered within the boundaries of the subject project area during the field procedure. The archival search also 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 1970's were preceded by commercial sugar cane cultivation, which would have extensively impacted the immediate project area.

Cultural Surveys Hawai'i also provided general background research in the Waimea area. They noted that the development of Kikiaola lands through most of the twentieth century focused on the growing sugar industry. Plantation railroad lines were constructed across the 'ili connecting Waimea and Kekaha. The Kekaha Sugar Company saw expansion after 1907 when the construction of the plantation's major irrigation ditch was completed. The engineering feat brought water to the areas from eight miles up the Waimea River via a series of ditches, flumes, tunnels and siphons.

Cultural Surveys Hawai'i cites one completed archaeological report involving land in the vicinity. A letter report (Sinoto 1993) summarizes results of monitoring, surface survey, and backhoe testing completed within a parcel adjacent to the grounds of the present Waimea Plantation Cottages. No surface or subsurface remains were noted. However, locations of two burial sites on the grounds of the Waimea Plantation Cottages were shown on the plan map, and are recorded as State sites 50-30-05-1853 and 50-30-05-1854.

A review of the State Historic Preservation Division archaeological and historic site inventory map of Waimea done by Cultural Surveys Hawai'i indicates that the only recorded sites in the vicinity are one Heiau (identified by Wendell Bennett as "Keali'i on the west side of the Waimea River"), Cook Landing (the purported site of Captain James Cook's first landfall in Waimea), Fort Elizabeth (the 19th century Russian military emplacement), and seven historic

buildings. Only one of these buildings – the Gulick-Rowell house – is directly adjacent to the study area on its east side.

During any development activity involving modification of the land surface, there is always the possibility, however remote, that previously unknown or unexpected subsurface cultural features, deposits or burials might be encountered. Should any archaeologically significant features, deposits or burials, be uncovered, all work will cease immediately and the appropriate agencies, including the DLNR Historic Preservation Division and OHA, will be contacted in accordance with applicable regulations.

There is no reported ongoing traditional gathering or hunting practices occurring within the Project area itself. It is anticipated that the proposed Project will have no adverse impact on traditional cultural properties or practices, gathering rights, or access. However, there will be ongoing Section 106 consultation with Native Hawaiian organizations and other organizations and individuals.

No short- or long-term significant impacts on flora or fauna species are anticipated due to the construction and operation of the proposed project.

2) Curtails the range of beneficial uses of the environment;

The intention of the proposed Project is to commit the Project Site to the proposed use over the long-term. Beneficial uses of the Project Site and environment would not be curtailed since the site had been utilized for wastewater treatment and distribution uses for over 40 years.

3) Conflicts with the State's long-term environmental policies or goals and guidelines as expressed in Chapter 344, HRS, and any revisions thereof and amendments thereto, court decisions, or executive orders;

The proposed project does not conflict with long-term environmental policies, goals, and guidelines of the State of Hawai'i. As presented in this EA, the project's potential adverse impacts are associated only with short-term construction-related activities and can be mitigated through adherence to standard construction mitigation practices.

4) Substantially affects the economic, social welfare, or cultural practices of the community or State;

In the short term, the Project will confer positive benefits in the local area. Direct economic benefits will result from construction expenditures both through the purchase of material from local suppliers and through the employment of local labor, thereby stimulating that sector of the economy. Indirect economic benefits may include benefits to local retailing businesses resulting from construction activities.

There are no significant adverse long term socio-economic impacts anticipated with the proposed Project. The proposed Project is not expected to increase traffic or induce growth beyond that which is anticipated for the region. In the long-term, the proposed project will

have a beneficial socio-economic impact by accommodating a projected increase in wastewater flow and by providing more reliable storage and supply of R-1 recycled water to the Waimea community. The project would provide an invaluable irrigation source for nearby development, help preserve scarce potable water supplies, and encourage additional agriculture use.

There is no reported ongoing traditional gathering or hunting practices occurring within the project area. The proposed Project is not anticipated to have an adverse impact on traditional cultural properties or practices, gathering rights, or access. However, there will be ongoing Section 106 consultation with Native Hawaiian organizations and other organizations and individuals.

5) Substantially affects public health;

Concerns regarding safety and perceived risk to public health have been associated with the use of recycled water. However, the quality of recycled water produced is monitored daily for adherence to State DOH regulations. Recycled water that does not meet specifications will not be distributed. It will be directed to State DOH-permitted injection wells. Research has also shown that exposure to trace concentrations of chemicals still present in the recycled water, known as Pharmaceuticals and Personal Care Products (PPCPs), are significantly less than what we would be exposed to in our daily lives (WaterReuse, 2011). Moreover, it would take a few to as much as a million years of exposure to R-1 recycled water to reach the same exposure that we would normally get in a single day. Therefore, no significant adverse short- or long-term impacts are anticipated as a result of the proposed project. The proposed Project would benefit the health of residents and visitors of Waimea in the long-term by providing an effective means to manage wastewater disposal and store and distribute recycled water for irrigation purposes that would otherwise use valuable potable water sources.

6) Involves substantial secondary impacts, such as population changes or effects on public facilities;

No secondary effects are anticipated with the construction and operation of the proposed project. The proposed project is not anticipated to induce growth beyond that which is anticipated for the region and should not have a major influence on future population and land use patterns in Waimea. Rather, the facility is proposed to fulfill an essential community need by providing an alternative water source.

7) Involves a substantial degradation of environmental quality

The proposed Project is not anticipated to involve a substantial degradation of environmental quality.

There are potential short-term impacts to noise and air quality in the immediate project vicinity. With the incorporation of mitigation measures during the construction period, the project will not result in long-term degradation to environmental quality.

8) Is individually limited but cumulatively has a considerable effect upon the environment or involves a commitment for larger actions.

No cumulative effects are anticipated, inasmuch as the proposed project involves installing a recycled water storage alternative, replacing an existing pipeline, and adding a minor extension within an area with uses that are consistent with County land use plans and designations. Details of possible future recycled waterline extensions are not known at the present time. If pursued, it will be subject to regulations in effect at the time. The proposed project does not imply or involve a commitment for larger actions.

9) Substantially affects a rare, threatened or endangered species, or its habitat;

The natural vegetation in the vicinity of the project area are all common, mostly introduced species, characteristic of lowland areas in the Hawaiian Islands. There are no known rare, threatened, or endangered plant species in the vicinity of the project.

Avian diversity and densities are in keeping with the location of the property and the habitats presently on the site. During point counts and incidental observations, 18 species were recorded. Two are native species. The Black-necked Stilt, an endangered sub-species under both Federal and State of Hawai'i statutes and the Black-crowned Night Heron, an indigenous resident breeding species were recorded. No endangered Hawaiian Petrel (*Pterodroma sandwichensis*) or threatened endemic Newell's Shearwater (*Puffinus newelli*) were detected during the survey. It is noted that there is no night time construction anticipated nor any night facility lighting so the project is not expected to result in deleterious impacts to listed seabird species. There are also no suitable roost trees within the project site so the project is not expected to result in deleterious impacts to the Hawaiian hoary bat, a listed mammalian species. The fauna in the vicinity of the project area are all common species, mostly associated with species found in cane fields. Flight patterns of occasional overflights by seabirds would not be impacted by the proposed project. There are no known endangered or threatened wildlife species in the vicinity of the project.

The project will not adversely affect any rare, threatened or endangered species, or its habitat.

10) Detrimentally affects air and water quality or ambient noise levels;

In the short-term, operation of construction equipment and construction-related activities would temporarily elevate ambient noise and concentrations of exhaust emissions and fugitive dust in the immediate vicinity of the project site. Any potential impacts during construction will be mitigated through best management practices and compliance with State and County regulations, including State DOH Administrative Rules, Title 11, Chapter 60-11.1 regarding "Air Pollution Control" specifically Section 11-60.1-33 regarding fugitive dust and the prohibition of visible dust emissions at property boundaries. Mitigation measures to address short-term impacts include controlling the generation of fugitive dust through frequent watering of unpaved areas of exposed soil and planting landscaping as soon as possible on completed areas. Operation of the proposed project will have no significant long-term impact on air quality or ambient noise levels in the vicinity.

No short- or long-term impacts on water quality within the project area are anticipated as a result of construction and operation of the proposed project. Any potential water quality impacts will be mitigated by adherence to HAR, Chapters 11-54, 11-55, and 11-62 regarding water quality standards, water pollution control, and wastewater systems, respectively.

11) Affects or is likely to suffer damage by being located in an environmentally sensitive area such as a flood plain, tsunami zone, beach, erosion-prone area, geologically hazardous land, estuary, fresh water, or coastal waters;

No short- or long-term significant adverse impacts are anticipated as the project site is not located within an environmentally sensitive area. Any potential damage will be mitigated by adherence to applicable design and construction standards and regulations.

According to FIRM Map Number 1500020258F prepared by FEMA, the Project Site is located within Zone AH and X. The proposed storage tank, pump station and a portion of the distribution line are located within Zone AH where the flood elevation is 8 feet above mean sea level. Remaining portions of the distribution line are located in Zone X. Zone AH includes areas of flood depths of 1 to 3 feet (usually areas of ponding), base flood elevations determined. Zone X includes areas determined to be outside of the 0.2 % annual chance flood.

According to the Tsunami Evacuation Zone maps for Kaua'i, the project site is located within the tsunami evacuation zone.

The proposed improvements will be designed and constructed in full compliance with the building and construction regulations for floodplain management as set forth in Section 15-1.5, Kaua'i County Code.

The project will also comply with the rules and regulations for the National Flood Insurance Program (NFIP) present in Title 44, of the Code of Federal Regulations (44CFR), as the project is within a Special Flood Hazard Area.

12) Substantially affects scenic vistas and viewplanes identified in county or state plans or studies;

In the short- and long-term, the proposed project will have negligible impacts on significant views, viewplanes, and visual resources. The project site is located in an agriculturally designated area and is a fair distance away from existing developed areas and major roads. The dimensions of the proposed R-1 recycled water storage tank and pump station will not exceed that of the existing WWTP. The distribution line will be located below ground level. The proposed project will not affect scenic vistas and viewplanes during its construction and operation.

13) Requires substantial energy consumption;
Waimea WWTP R-1 Recycled Water Distribution System

Construction and operation of the proposed Project will not require substantial increases in energy consumption. Renewable sources of energy, specifically a photovoltaic (PV) solar energy field, are currently being used on-site and will continue to be used during the construction and operation of the proposed project.

7. CONSULTATION

7.1 Pre-Assessment Consultation

The following agencies and organizations were consulted during the preparation of the Draft EA. Those who formally replied are indicated by an asterisk (*). All written comments and responses are included in Appendix A.

Federal

- U.S. Army Corps of Engineers (COE)
- COE, Regulatory Branch

State of Hawai'i

- * Department of Accounting and General Services
 - Department of Business, Economic Development & Tourism (DBEDT)
- * DBEDT, Office of Planning
- * Department of Education (DOE)
- Department of Health (DOH)
- * DOH, Office of Environmental Quality Control
- DOH, Environmental Management Division
- * DOH, Environmental Planning Office
- * DOH, Clean Water Branch
- * DOH, Wastewater Branch
- Department of Land and Natural Resources (DLNR)
- * DLNR, Engineering Division
- * DLNR, Land Division Kaua'i County
- * DLNR, Historic Preservation Division
- * Department of Transportation (DOT)
- * Office of Hawaiian Affairs (OHA)

County of Kaua'i

Department of Planning Department of Public Works Department of Water Department of Parks and Recreation

<u>Others</u>

Kīkīaola Land Company, Ltd. West Kaua'i Business and Professional Association

7.2 Draft Environmental Assessment Consultation

The Draft Environmental Assessment for the Waimea Wastewater Treatment Plant R-1 Recycled Water Distribution System was published in the Office of Environmental Quality Control Environmental Notice of May 23, 2016. Publication initiated a 30-day public review period ending on June 23, 2016. Three comments were received:

Department of Health

DOH, Office of Environmental Quality Control DOH, Environmental Planning Office Kīkīaola Land Company

Comments and responses are included in Appendix B.

8. REFERENCES

Aki Sinoto Consulting, Archaeological Assessment Report: Proposed Expansion of the Waimea Wastewater Treatment Facility Waimea, Kaua'i Island (TMK:(4)1-2-06:36 & 37), June 2008.

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County of Kaua'i Division of Wastewater Management, Department of Public Works, *Waimea Wastewater Treatment Plant Facility Plan*, 2008.

Department of Geography, University of Hawai'i at Hilo, Atlas of Hawai'i, Third Edition, 1998.

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Ripperton JC, Hosaka EY, *Vegetation Zones of Hawai'i*. Honolulu, HI: Hawai'i Agricultural Experiment Station, University of Hawai'i. 60 p. (Bulletin No. 89), 1942.

Simeonova, N, "Doubling Up: Hawai'i plant upgrade to provide expanding services, meet future wastewater treatment demands and stimulate job creation," *Water & Wastes Digest,* August 2010.

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State of Hawai'i Department of Health, *Hawai'i Administrative Rules, Title 11 Department of Health,* amended and compiled May 27, 2009.

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U.S. Census Bureau, American Community Survey Demographic and Housing Estimates, 2009-2013 American Community Survey 5-Year Estimates, http://factfinder.census.gov/.

U.S. Department of Agriculture Soil Conservation Service in cooperation with the University of Hawai'i Agricultural Experiment Station, Soil Survey of the Islands of Kaua'i, O'ahu, Maui, Moloka'i, and Lāna'i, State of Hawaii, Issued August 1972.

U.S. Environmental Protection Agency, *2012 Guidelines for Water Reuse*, September 2012, retrieved from http://nepis.epa.gov/Adobe/PDF/P100FS7K.pdf>.

WaterReuse Research Foundation, *Recycled Water: How Safe is It?*, June 3, 2011, retrieved from http://www.ddsd.org/home/showdocument?id=402>.

APPENDIX A

Pre-Assessment Consultation Comment and Response Letters



DEPARTMENT OF THE ARMY HONOLULU DISTRICT, U.S. ARMY CORPS OF ENGINEERS FORT SHAFTER, HAWAII 96858-5440

February 11, 2016

SUBJECT: Waimea Wastewater Treatment Plant, R-1 Recycled Water Distribution System located in Waimea, Kaua'i, Hawaii; Department of the Army File Number POH-2016-00030

Wilson Okamoto Corporation Attn: Milton Arakawa, AICP 1907 South Beretania Street, Suite 400 Honolulu, Hawaii 96826

Dear Mr. Arakawa:

The Honolulu District, U.S. Army Corps of Engineers (Corps), has received your letter dated January 5, 2016 for the proposed Waimea Wastewater Treatment Plant, R-1 Recycled Water Distribution System located in Waimea, Kaua'i, Hawaii. Your project has been assigned Department of the Army (DA) file number POH-2016-00030. Please reference this number in all future correspondence.

Please be advised, if the proposed project involves work in waters of the U.S., a DA authorization may be required. Under Section 10 of the Rivers and Harbors Act, structures and/or work in or affecting the course, location, condition, or capacity of navigable waters of the U.S. require DA authorization. Navigable waters of the U.S. are waters subject to the ebb and flow of the tide.

Under Section 404 of the Clean Water Act, DA authorization is required for discharges of dredged or fill material into waters of the U.S., including wetlands. Generally, discharges of fill material include materials that change the bottom elevation of a water of the U.S. and includes rock, sand, soil, debris, overburden, etc. Waters of the U.S. include navigable waters of the U.S. and other waters including wetlands, rivers, streams, lakes, and ponds.

Thank you for your cooperation with the Honolulu District Regulatory Program. Please contact this office if you have any questions. You may contact me at 808-835-4306 or kate.m.bliss@usace.army.mil.

Sincerely,

Kate Blin

Kate Bliss Senior Project Manager Regulatory Office



1907 South Beretania Street
Artesian Plaza, Suite 400Ms. Kate Bliss, Senior Project ManagerHonolulu, Hawali, 96826 USA
Phone: 808.946.2277
Fax:: 808.946.2253
www.wilsonokamoto.comMs. Kate Bliss, Senior Project ManagerU.S. Army Corps of Engineers
Honolulu DistrictHonolulu District

 ⁷⁷ Department of the Army
 ⁷³ U.S. Army Corps of Engineers Honolulu District Fort Shafter, Hawai'i 96858-5440
 Subject: Pre-Assessment Consultation Draft Environmental Assessment

Draft Environmental Assessment (EA) for the Waimea Wastewater Treatment Plant R-1 Recycled Water Distribution System Waimea, Kaua'i, Hawai'i TMK: (4) 1-2-006: 036 (por.), 009 (por.) File No. POH-2016-00030

Dear Ms. Bliss:

Thank you for your letter dated February 11, 2016 (POH-2016-00030) regarding the subject project. We offer the following responses to your letter.

We appreciate the information provided on the applicability of Section 10 of the Rivers and Harbors Act and Section 404 of the Clean Water Act. We intend to work cooperatively with your office to obtain any authorization required by the Department of the Army.

Your letter, along with this response, will be reproduced and included in the forthcoming Draft EA. We appreciate your participation in the pre-assessment consultation review process.

Sincerely,

Milton Arakawa, AICP Project Manager

cc: Eassie Miller, Kennedy/Jenks Consultants, Inc.



DOUGLAS MURDOCK Comptroller AUDREY HIDANO

Deputy Comptroller

(P)1029.6

STATE OF HAWAII DEPARTMENT OF ACCOUNTING AND GENERAL SERVICES P.O. BOX 119, HONOLULU, HAWAII 96810-0119

FEB 1 7 2016

Mr. Milton Arakawa, AICP Wilson Okamoto Corporation 1907 South Beretania Street, Suite 400 Honolulu, Hawaii 96826

Dear Mr. Arakawa:

Subject: Environmental Assessment Pre-Assessment Consultation for Waimea Wastewater Treatment Plant R-1 Recycled Water Distribution System Waimea, Kauai, Hawaii TMK: (4) 1-2-006: 036

Thank you for the opportunity to comment on the subject project. We offer the following comments to be addressed in the Environmental Assessment:

- 1. Where are the anticipated recycled water lines and meters to be located for State properties, including schools?
- 2. There are safety concerns regarding recycled water to be used at schools. In particular, if there are problems at the treatment plant or with the distribution system, what are the notification procedures to the end users?

If you have any questions, your staff may call Ms. Gayle Takasaki of the Public Works Division at 586-0584.

Sincerely,

DOUGLAS MURDOCK Thats

Comptroller

c: Mr. Duane Kashiwai, DOE FDB PWA Mr. Eric Agena, District Engineer, KDO

DAVID Y. IGE



1907 South Beretania Street
Artesian Plaza, Suite 400Mr. Douglas Murdock, ComptrollerHonolulu, Hawaii, 96826 USA
Phone: 808.946.2277State of Hawai'i
Department of Accounting and General Services
P.O. Box 119www.wilsonokamoto.comHonolulu, Hawai'i 96810-0119

Subject: Pre-Assessment Consultation Draft Environmental Assessment (EA) for the Waimea Wastewater Treatment Plant R-1 Recycled Water Distribution System Waimea, Kaua'i, Hawai'i TMK: (4) 1-2-006: 036 por.), 009 (por.)

Dear Mr. Murdock:

Thank you for your letter dated February 17, 2016 regarding the subject project. We offer the following responses to your letter.

We appreciate your comments and will discuss details regarding the anticipated water line and meter location for State properties in the Draft EA.

In addition, we understand the safety concerns regarding recycled water to be used at schools. We will discuss these concerns, including notification procedures to the end users, in the Draft EA.

Your letter, along with this response, will be reproduced and included in the forthcoming Draft EA. We appreciate your participation in the pre-assessment consultation review process.

Sincerely,

L M.

Milton Arakawa, AICP Project Manager

cc: Eassie Miller, Kennedy/Jenks Consultants, Inc.



OFFICE OF PLANNING **STATE OF HAWAII**

235 South Beretania Street, 6th Floor, Honolulu, Hawaii 96813 Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804

Ref. No. P-15035

February 2, 2016

DAVID Y. IGE GOVERNOR

LEO R. ASUNCION DIRECTOR OFFICE OF PLANNING

Telephone: (808) 587-2846 (808) 587-2824 Fax: Web: http://planning.hawaii.gov/

Mr. Milton Arakawa, AICP Project Manager Wilson Okamoto Corporation Honolulu, Hawaii 96826

1907 South Beretania Street, Suite 400

FRUD

Dear Mr. Arakawa:

Subject:

Waimea Wastewater Treatment Plant R-1 Recycled Water Distribution System, Environmental Assessment Pre-Assessment Consultation, Waimea, Kauai, Hawaii; TMK: (4) 1-2-006:036

Thank you for the opportunity to provide comments on the pre-assessment consultation request for the Waimea Wastewater Treatment Plant R-1 Recycled Water Distribution System project, located in West Kauai. The pre-consultation review material was transmitted to our office by letter dated January 5, 2016.

It is our understanding that the County of Kauai, Department of Public Works, Wastewater Management Division is proposing to install an R-1 recycled water distribution system. The system would include recycled water pipelines, service laterals, and water meters to provide recycled water to irrigation customers.

The water system improvements, which include a 400,000 gallon water storage tank, and on-site improvements, will also comprise of a new recycled water pump station that will regulate water pressure. The recycled water would be distributed to places such as the Waimea Canyon Middle School and the Waimea Regional Sport field.

The Office of Planning (OP) has reviewed the transmitted material and has the following comments to offer:

1. Pursuant to the Hawaii Administrative Rules (HAR) § 11-200-10(4) – general description of the action's technical, economic, social, and environmental characteristics; this project must demonstrate that it is consistent with a number of State environmental, social policies, economic goals, and policies for land use. OP provides technical assistance to State and county agencies in administering the statewide planning system in Hawaii Revised Statutes (HRS) Chapter 226, the Hawaii State Plan. The Hawaii State Plan provides goals, objectives, policies, and priority

Mr. Milton Arakawa, AICP February 2, 2016 Page 2

> guidelines for growth, development, and the allocation of resources throughout the State in areas of state interest including but not limited to the economy, agriculture, the visitor industry, federal expenditure, the physical environment, facility systems, socio-cultural advancement, climate change adaptation, and sustainability.

> The Draft Environmental Assessment (Draft EA) should include an analysis that addresses whether the proposed project conforms to or is in conflict with the goals, objectives, policies, and priority guidelines listed in the Hawaii State Plan.

2. The coastal zone management (CZM) area is defined as "all lands of the State and the area extending seaward from the shoreline to the limit of the State's police power and management authority, including the U.S. territorial sea" see HRS § 205A-1 (definition of "coastal zone management area").

HRS § 205A-5(b) requires all State and county agencies to enforce the CZM objectives and policies. The Draft EA should include an assessment as to how the proposed project conforms to the CZM objectives and its supporting policies set forth in HRS § 205A-2. The assessment on compliance with HRS § 205A-2 is an important component for satisfying the requirements of HRS Chapter 343. These objectives and policies include recreational resources, historic resources, scenic and open space resources, coastal ecosystems, economic uses, coastal hazards, managing development, public participation, beach protection, and marine resources.

3. The material reviewed states that the project may use federal revolving fund monies to fund the project. If funded as such, the project may require a Federal Consistency evaluation. The National Coastal Zone Management Act requires direct federal activities, and development projects to be consistent with approved state coastal programs enforceable policies to the maximum extent practicable. Federal actions are defined by this Act as activities performed by a Federal agency or contractor for the benefit of a Federal agency; activities not performed by a Federal agency, but requiring federal permits or approval; or State and local government projects that receive Federal financial assistance.

OP is the lead state agency in charge of conducting Federal Consistency evaluations. Please contact our office on the procedures for this review.

4. Pursuant to HAR § 11-200-10(6) – identification and summary of impacts and alternatives considered; in order to ensure that the coastline and water resources near West Maui remain protected, the negative effects of stormwater inundation ensuing from development activities should be evaluated in the Draft EA. The project area is

Mr. Milton Arakawa, AICP February 2, 2016 Page 3

> a heavily vegetated undeveloped area. It is unclear what level of drainage infrastructure is in place within the area. It appears that the land that the proposed project site is situated upon is in its natural state, with few man-made structures in the area. During heavy storm events, the natural contours of the land and drainage infrastructure may transport upslope sediment, land-based pollutants, and toxicantload contributions into nearshore waters of Waimea Bay.

> The Draft EA should examine potential benefits and/or negative impacts resulting from this project on coastal and marine resources. Issues that may be examined in the Draft EA include, but are not limited to, project site characteristics in relation to erosion controls on flood prone areas, undeveloped open spaces, and the absorption characteristics of the soil. Furthermore, it should differentiate between the existing permeable surfaces versus hardened surfaces in the area. These items, as well as the marine water quality classification, should be considered when developing mitigation measures to protect the coastal ecosystem.

> The enclosed map of this project, as well as resources available to us, indicate that this project is located approximately $\frac{1}{2}$ - mile from the coastline of Waimea Bay. The project site is located within an area classified as State Land Use Agricultural District. The site itself is largely open and undeveloped. An unpaved dirt access road links the site to Kaumualii Highway. Furthermore, the land is within Flood Hazard Zone AH.

The Draft EA should examine the cumulative impact on coastal resources from landbased polluted runoff and sediment loss. It should take into account any of the natural features in the area, undeveloped open spaces, down-sloping topography, hardened non-permeable surfaces that have a cumulative effect on the volume and speed of storm runoff, and soil absorption rates.

OP has a number of resources available to assist in the development of projects which ensure sediment and stormwater control on land, thus protecting the nearshore environment. OP recommends consulting these guidance documents and stormwater evaluative tools when developing strategies to address polluted runoff. They offer useful techniques to keep land-based pollutants and sediment in place and prevent contaminating nearshore waters, while considering the practices best suited for this project. These three evaluative tools that should be used during the design process include:

• <u>Hawaii Watershed Guidance</u> provides direction on mitigation strategies in urban areas that will safeguard Hawaii's watersheds and implement watershed plans <u>http://files.hawaii.gov/dbedt/op/czm/initiative/nonpoint/HI Watershed</u> Mr. Milton Arakawa, AICP February 2, 2016 Page 4

Guidance Final.pdf

- Stormwater Impact Assessments can be used to identify and evaluate information on hydrology, stressors, sensitivity of aquatic and riparian resources, and management measures to control runoff, as well as consider secondary and cumulative impacts to the area http://files.hawaii.gov/dbedt/op/czm/initiative/stomwater_imapct/final_storm water impact assessments guidance.pdf
- Low Impact Development (LID), A Practitioners Guide covers a range of structural best management practices (BMP's) for stormwater control management, roadway development, and urban layout that minimizes negative environmental impacts http://files.hawaii.gov/dbedt/op/czm/initiative/lid/lid_guide_2006.pdf

If you have any questions regarding this comment letter, please contact Josh Hekekia of our office at (808) 587-2845.

Sincerely,

Profy Ib



b Leo R. Asuncion Director



1907 South Beretania Street
Artesian Plaza, Suite 400Mr. Leo R. Asuncion, DirectorHonolulu, Hawaii, 96826 USAState of Hawai'iPhone: 808.946.2277
Fax:: 808.946.2253Office of Planning
P.O. Box 2359www.wilsonokamoto.comHonolulu, Hawai'i 96804

Subject: Pre-Assessment Consultation Draft Environmental Assessment (EA) for the Waimea Wastewater Treatment Plant R-1 Recycled Water Distribution System Waimea, Kaua'i, Hawai'i TMK: (4) 1-2-006:036 (por.), 009 (por.) Ref. No. P-15035

Dear Mr. Asuncion:

Thank you for your letter dated February 2, 2016 regarding the subject project. We offer the following responses to your letter:

- 1. An analysis that addresses whether the proposed project conforms to or is in conflict with the goals, objectives, policies and priority guidelines listed in the Hawai'i State Plan will be provided in the Draft EA.
- 2. An assessment as to how the proposed project conforms to the coastal zone management (CZM) objectives and its supporting policies set forth in HRS § 205A-2 will be provided in the Draft EA.
- 3. If the subject project is funded using federal revolving fund monies, we intend to work with your office to conduct a Federal Consistency evaluation as required by the National Coastal Zone Management Act.
- 4. An evaluation of the effects of stormwater inundation and the potential benefits and/or negative impacts on coastal and marine resources ensuing from development activities will be provided in the Draft EA.

We appreciate your comments and intend to work cooperatively with your office, as well as consult with the provided guidance documents and stormwater evaluative tools, when developing strategies to address polluted runoff.



10183-01 Letter to Mr. Leo Asuncion Page 2 May 9, 2016

Your letter, along with this response, will be reproduced and included in the forthcoming Draft EA. We appreciate your participation in the pre-assessment consultation review process.

Sincerely,

tu LAr~

Milton Arakawa, AICP Project Manager

cc: Eassie Miller, Kennedy/Jenks Consultants, Inc.



STATE OF HAWAI'I

DEPARTMENT OF EDUCATION

P.O. BOX 2360 HONOLULU, HAWAI`I 96804

OFFICE OF SCHOOL FACILITIES AND SUPPORT SERVICES

January 28, 2016

Mr. Milton Arakawa, AICP Wilson Okamoto Corporation 1907 South Beretania Street, Suite 400 Honolulu, Hawaii 96826

WILSON UKAMOTO CORPORATION

Re: Environmental Assessment Pre-Assessment Consultation for Waimea Wastewater Treatment Plant R-1 Recycled Water Distribution System, County Contract No. 9054 Waimea, Kauai, Hawaii

Dear Mr. Arakawa:

The Department of Education (DOE) has reviewed your request for an environmental assessment pre-assessment consultation for the proposed installation of an R-1 recycled water distribution system.

As your letter acknowledges, the proposed project is situated near the Waimea Canyon Middle School and will be included in the first phase of the recycled water distribution system. The DOE does not have any comment at this time. We would appreciate the opportunity to review the proposed improvements and environmental impacts that will result from this project.

Thank you for the opportunity to provide comment. If you have any questions, please call Heidi Meeker of the Planning Section, Facilities Development Branch at (808) 377-8301.

Respectfully

Kenneth G. Masden II Public Works Manager Planning Section

KGM:jmb



 1907 South Beretania Street
 Artesian Plaza, Suite 400

 Artesian Plaza, Suite 400
 Mr. Kenneth G. Masden II, Public Works Manager

 Honolulu, Hawaii, 96826 USA
 Planning Section

 Phone: 808.946.2277
 State of Hawai'i

 State of Hawai'i
 Department of Education

 P.O. Box 2360
 Honolulu, Hawai'i 96804

Subject: Pre-Assessment Consultation Draft Environmental Assessment (EA) for the Waimea Wastewater Treatment Plant R-1 Recycled Water Distribution System Waimea, Kaua'i, Hawai'i TMK: (4) 1-2-006:036 (por.), 009 (por.)

Dear Mr. Masden:

Thank you for your letter dated January 28, 2016 regarding the subject project. We offer the following responses to your letter.

We acknowledge that the DOE does not have any comments at this time. We appreciate your continuing review of the proposed improvements.

Your letter, along with this response, will be reproduced and included in the forthcoming Draft EA. We appreciate your participation in the pre-assessment consultation review process.

Sincerely,

Milton Arakawa, AICP Project Manager

cc: Eassie Miller, Kennedy/Jenks Consultants, Inc.



OFFICE OF ENVIRONMENTAL QUALITY CONTROL

DEPARTMENT OF HEALTH, STATE OF HAWAI'I 235 South Beretania Street, Suite 702, Honolulu, HI 96813 DAVID Y. IGE GOVERNOR

SCOTT GLENN INTERIM DIRECTOR

Phone: (808) 586-4185 Email: oeqchawaii@doh.hawaii.gov

February 5, 2016

Milton Arakawa, AICP Wilson Okamoto Corporation 1907 S. Beretania Street, Suite 400 Honolulu, HI 96826

Dear Mr. Arakawa:

SUBJECT: Waimea Wastewater Treatment Plant R-1 Recycled Water Distribution System, Environmental Assessment Pre-Consultation, County Contract No. 9054

Having reviewed the information contained in your January 5, 2016, letter on the subject project the Office of Environmental Quality Control (OEQC) offers the following comments for your consideration.

- 1. Environmental setting: Please discuss the land use zonings in the project area, current and future projects, regional hydrogeology, direct, indirect and cumulative impacts on the environment of the subject action,
- 2. Best Management Practices (BMPs): Before construction work, the OEQC strongly encourages the County of Kaua'i Department of Public Works Wastewater Management Division to consult with the State Department of Health Clean Water Branch and the Clean Air Branch regarding BMPs to minimize air emissions and water runoff from the project site.
- 3. Native vegetation: As a county agency, the use of native vegetation in landscaping is governed by Act 233, Session Laws of Hawaii, 2015.

Thank you for the opportunity to review and comment. If there any questions, please contact Leslie Segundo of our office at (808) 586-4185.

Sincerely,

Scott Glenn Interim Director



1907 South Beretania Street Honolulu, Hawaii, 96826 USA State of Hawai'i

Artesian Plaza, Suite 400 Mr. Scott Glenn, Interim Director Phone: 808.946.2277 Fax: 808.946.2253 Department of Health www.wilsonokamoto.com Office of Environmental Quality and Control 235 South Beretania Street, Suite 702 Honolulu, Hawai'i 96813

> Subject: **Pre-Assessment Consultation** Draft Environmental Assessment (EA) for the Waimea Wastewater Treatment Plant **R-1** Recycled Water Distribution System Waimea, Kaua'i, Hawai'i TMK: (4) 1-2-006:036 (por.), 009 (por.)

Dear Mr. Glenn:

Thank you for your letter dated February 5, 2016 regarding the subject project. We offer the following responses to your letter.

Regarding comments on environmental setting, additional details such as land use zonings in the project area, current and future projects, regional hydrogeology, direct, indirect and cumulative impacts on the environment of the subject project will be discussed in the Draft EA.

Regarding comments on Best Management Practices (BMPs), we intend to work cooperatively with the County of Kaua'i Department of Public Works Wastewater Management Division and the State Department of Health Clean Water Branch and the Clean Air Branch regarding BMPs to minimize air emissions and water runoff from the project site.

Regarding comments on native vegetation, we acknowledge that the use of native vegetation in landscaping is governed by Act 233, Session Laws of Hawaii, 2015.

Your letter, along with this response, will be reproduced and included in the forthcoming Draft EA. We appreciate your participation in the pre-assessment consultation review process.

Sincerely,

Milton Arakawa, AICP **Project Manager**

cc: Eassie Miller, Kennedy/Jenks Consultants, Inc. DAVID Y. IGE GOVERNOR OF HAWAII



VIRGINIA PRESSLER, M.D. DIRECTOR OF HEALTH

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

January 25, 2016

Mr. Milton Arakawa, AICP Wilson Okamoto Corporation 1907 Spouth Beeretania Street, Suite 400 Honolulu, Hawaii 96826

Dear Mr. Arakawa:

SUBJECT: Pre-Assessment Consultation (PAC) for Waimea Wastewater Treatment Plant Waimea, Kauai

The Department of Health (DOH), Environmental Planning Office (EPO), acknowledges receipt of your PAC to our office on January 12, 2016. Thank you for allowing us to review and comment on the proposed project. The PAC was routed to the District Health Office on Kauai, the Wastewater Branch and the Environmental Resource Office. They will provide specific comments to you if necessary. EPO recommends that you review the standard comments and available strategies to support sustainable and healthy design provided at: http://health.hawaii.gov/epo/landuse. Projects are required to adhere to all applicable standard comments.

EPO also encourages you to examine and utilize the Hawaii Environmental Health Portal. The portal provides links to our e-Permitting Portal, Environmental Health Warehouse, Groundwater Contamination Viewer, Hawaii Emergency Response Exchange, Hawaii State and Local Emission Inventory System, Water Pollution Control Viewer, Water Quality Data, Warnings, Advisories and Postings. The Portal is continually updated. Please visit it regularly at: https://eha-cloud.doh.hawaii.gov

We request that you utilize all of this information on your proposed project to increase sustainable, innovative, inspirational, transparent and healthy design.

Mahalo nui loa,

Laura Leialoha Phillips McIntyre, AIOP Program Manager, Environmental Planning Office

LM:nn

Attachments: Historic Sugarcane Lands Map Viewer - <u>http://health.hawaii.gov/epo/egis/sugarcane</u> OEQC viewer - <u>http://eha-web.doh.hawaii.gov/oeqc-viewer</u> U.S. EPA EJSCREEN Map 3 page report - <u>http://www2.epa.gov/ejscreen</u>

c: DHO Kauai, WWB, ERO {via email only}

In reply, please refer to: File:

EPO 16-016

WILSON OKAMOTO CORPORATION



SUGARCANE ON KAUAI 1900-1937

MAP INTENDED FOR ILLUSTRATIVE PURPOSES ONLY.





EJSCREEN Report



for 1 mile Ring Centered at 21.963416,-159.678181, HAWAII, EPA Region 9

Approximate Population: 1031

Selected Variables	State Percentile	EPA Region Percentile	USA Percentile	
EJ Indexes				
EJ Index for PM2.5	N/A	N/A	N/A	
EJ Index for Ozone	N/A	N/A	N/A	
EJ Index for NATA Diesel PM*	N/A	N/A	N/A.	
EJ Index for NATA Air Toxics Cancer Risk*	N/A	N/A	N/A	
EJ Index for NATA Respiratory Hazard Index*	N/A	N/A	N/A	
EJ Index for NATA Neurological Hazard Index*	N/A	N/A	N/A	
EJ Index for Traffic Proximity and Volume	49	59	79	
EJ Index for Lead Paint Indicator	72	69	81	
EJ Index for Proximity to NPL sites	20	39	62	
EJ Index for Proximity to RMP sites	18	40	63	
EJ Index for Proximity to TSDFs	19	39	64	
EJ Index for Proximity to Major Direct Dischargers	26	51	69	



This report shows environmental, demographic, and EJ indicator values. It shows environmental and demographic raw data (e.g., the estimated concentration of ozone in the air), and also shows what percentile each raw data value represents. These percentiles provide perspective on how the selected block group or buffer area compares to the entire state, EPA region, or nation. For example, if a given location is at the 95th percentile nationwide, this means that only 5 percent of the US population has a higher block group value than the average person in the location being analyzed. The years for which the data are available, and the methods used, vary across these indicators. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJSCREEN documentation for discussion of these issues before using reports.

January 25, 2016



EJSCREEN Report



for 1 mile Ring Centered at 21.963416,-159.678181, HAWAII, EPA Region 9

Approximate Population: 1031





EJSCREEN Report



for 1 mile Ring Centered at 21.963416,-159.678181, HAWAII, EPA Region 9

Approximate Population: 1031

Selected Variables	Raw Data	State Avg.	%ile in State	EPA Region Avg.	%ile in EPA Region	USA Avg.	%ile in USA
Environmental Indicators	Shell States						
Particulate Matter (PM 2.5 in µg/m³)	N/A	N/A	N/A	9.95	N/A	9.78	N/A
Ozone (ppb)	N/A	N/A	N/A	49.7	N/A	46.1	N/A
NATA Diesel PM (µg/m³)*	NIA	N/A	N/A	N/A	N/A	N/A	N/A
NATA Cancer Risk (lifetime risk per million)*	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NATA Respiratory Hazard Index	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NATA Neurological Hazard Index	NIA	NIA	N/A	N/A	NIA	N/A	N/A
Traffic Proximity and Volume (daily traffic count/distance to road)	89	280	53	190	52	110	71
Lead Paint Indicator (% Pre-1960 Housing)	0.42	0.17	85	0.25	72	0.3	69
NPL Proximity (site count/km distance)	0.0053	0.092	17	0.11	5	0.096	1
RMP Proximity (facility count/km distance)	0.032	0.18	8	0.41	3	0.31	6
TSDF Proximity (facility count/km distance)	0.0052	0.092	14	0.12	1	0.054	10
Water Discharger Proximity (facility count/km distance)	0.085	0.33	18	0.19	33	0.25	29
Demographic Indicators							
Demographic Index	58%	51%	73	46%	68	35%	81
Minority Population	83%	77%	50	57%	73	36%	86
Low Income Population	34%	25%	73	35%	53	34%	55
Linguistically Isolated Population	1%	6%	27	9%	22	5%	48
Population With Less Than High School Education	13%	10%	71	18%	47	14%	55
Population Under 5 years of age	7%	6%	67	7%	58	7%	62
Population over 64 years of age	18%	14%	72	12%	83	13%	79

* The National-scale Air Toxics Assessment (NATA) environmental indicators and EJ indexes, which include cancer risk, respiratory hazard, neurodevelopment hazard, and diesel particulate matter will be added into EJSCREEN during the first full public update after the soon-to-be-released 2011 dataset is made available. The National-Scale Air Toxics Assessment (NATA) is EPA's ongoing, comprehensive evaluation of air toxics in the United States. EPA developed the NATA to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that NATA provides broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. More information on the NATA analysis can be found at: http://www.epa.gov/ttn/atw/natamain/index.html.

For additional information, see: www.epa.gov/environmentaljustice

EISCREEN is a screening tool for pre-decisional use only. It can help identify areas that may warrant additional consideration, analysis, or outreach. It does not provide a basis for decision-making, but it may help identify potential areas of EI concern. Users should keep in mind that screening tools are subject to substantial uncertainty in their demographic and environmental data, particularly when looking at small geographic areas. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EISCREEN documentation for discussion of these issues before using reports. This screening tool does not provide data on every environmental impact and demographic factor that may be relevant to a particular location. EISCREEN outputs should be supplemented with additional information and local knowledge before taking any action to address potential EI concerns.

January 25, 2016



1907 South Beretania Street
Artesian Plaza, Suite 400Ms. Laura Leialoha Phillips McIntyre, AICP, Program Manager
Environmental Planning OfficeHonolulu, Hawaii, 96826 USA
Phone: 808,946.2277
Fax:: 808,946.2253Ms. Laura Leialoha Phillips McIntyre, AICP, Program Manager
Environmental Planning OfficeWww.wilsonokamoto.comDepartment of Health
P.O. Box 3378
Honolulu, Hawai'i 96801-3378

Subject: Pre-Assessment Consultation Draft Environmental Assessment (EA) for the Waimea Wastewater Treatment Plant R-1 Recycled Water Distribution System Waimea, Kaua'i, Hawai'i TMK: (4) 1-2-006:036 (por.), 009 (por.)

Dear Ms. McIntyre:

Thank you for your letter dated January 25, 2016 regarding the subject project. We offer the following responses to your letter.

We appreciate your recommendation to review the standard comments and available strategies to support sustainable and healthy design and acknowledge that adherence to all applicable standard comments are required.

In addition, we appreciate the information about the Hawai'i Environmental Health Portal and look forward to working with your office as we move forward with the Draft EA.

Your letter, along with this response, will be reproduced and included in the forthcoming Draft EA. We appreciate your participation in the pre-assessment consultation review process.

Sincerely,

Milton Arakawa, AICP Project Manager

cc: Eassie Miller, Kennedy/Jenks Consultants, Inc.

DAVID Y. IGE GOVERNOR OF HAWAI



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

January 13, 2016

MA

VIRGINIA PRESSLER, M.D. DIRECTOR OF HEALTH

> In reply, please refer to: EMD/CWB

01020PCTM.16

Mr. Milton Arakawa, AICP Project Manager Wilson Okamoto Corporation 1907 South Beretania Street, Suite 400 Honolulu, Hawaii 96826

JAN 1 9 2016

Dear Mr. Arakawa:

SUBJECT: Comments on the Environmental Assessment Pre-Assessment Consultation for Waimea Wastewater Treatment Plant R-1 Recycled Water Distribution System Waimea, Island of Kauai, Hawaii

The Department of Health (DOH), Clean Water Branch (CWB), acknowledges receipt of your letter, dated January 5, 2016, requesting comments on your project. The DOH-CWB has reviewed the subject document and offers these comments. Please note that our review is based solely on the information provided in the subject document and its compliance with the 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://health.hawaii.gov/epo/files/2013/05/Clean-Water-Branch-Std-Comments.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 may be required to obtain National Pollutant Discharge Elimination System (NPDES) permit coverage for discharges of wastewater, including storm water runoff, into State surface waters (HAR, Chapter 11-55).

Mr. Milton Arakawa January 13, 2016 Page 2

5 1

For NPDES general permit coverage, a Notice of Intent (NOI) form must be submitted at least 30 calendar days before the commencement of the discharge. An application for a NPDES individual permit must be submitted at least 180 calendar days before the commencement of the discharge. To request NPDES permit coverage, you must submit the applicable form ("CWB Individual NPDES Form" or "CWB NOI Form") through the e-Permitting Portal and the hard copy certification statement with the respective filing fee (\$1,000 for an individual NPDES permit or \$500 for a Notice of General Permit Coverage). Please open the e-Permitting Portal website located at: https://eha-cloud.doh.hawaii.gov/epermit/. You will be asked to do a one-time registration to obtain your login and password. After you register, click on the Application Finder tool and locate the appropriate form. Follow the instructions to complete and submit the form.

3. If your project involves work in, over, or under waters of the United States, it is highly recommended that you contact the Army Corp of Engineers, Regulatory Branch (Tel: 835-4303) regarding their permitting requirements.

Pursuant to Federal Water Pollution Control Act [commonly known as the "Clean Water Act" (CWA)], Paragraph 401(a)(1), a Section 401 Water Quality Certification (WQC) is required for "[a]ny applicant for Federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities, which may **result** in any discharge into the navigable waters..." (emphasis added). The term "discharge" is defined in CWA, Subsections 502(16), 502(12), and 502(6); Title 40 of the Code of Federal Regulations, Section 122.2; and Hawaii Administrative Rules (HAR), Chapter 11-54.

- 4. Please note that all discharges related to the project construction or operation activities, whether or not NPDES permit coverage and/or Section 401 WQC 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.
- 5. It is the State's position that all projects must reduce, reuse, and recycle to protect, restore, and sustain water quality and beneficial uses of State waters. Project planning should:
 - a. Treat storm water as a resource to be protected by integrating it into project planning and permitting. Storm water has long been recognized as a source of irrigation that will not deplete potable water resources. What is often overlooked is that storm water recharges ground water supplies and feeds streams and estuaries; to ensure that these water cycles are not disrupted, storm water cannot be relegated as a waste product of impervious surfaces. Any project planning must recognize storm water as an asset that sustains and protects

Mr. Milton Arakawa January 13, 2016 Page 3

> natural ecosystems and traditional beneficial uses of State waters, like community beautification, beach going, swimming, and fishing. The approaches necessary to do so, including low impact development methods or ecological bio-engineering of drainage ways must be identified in the planning stages to allow designers opportunity to include those approaches up front, prior to seeking zoning, construction, or building permits.

- b. Clearly articulate the State's position on water quality and the beneficial uses of State waters. The plan should include statements regarding the implementation of methods to conserve natural resources (e.g. minimizing potable water for irrigation, gray water re-use options, energy conservation through smart design) and improve water quality.
- c. Consider storm water Best Management Practice (BMP) approaches that minimize the use of potable water for irrigation through storm water storage and reuse, percolate storm water to recharge groundwater to revitalize natural hydrology, and treat storm water which is to be discharged.
- d. Consider the use of green building practices, such as pervious pavement and landscaping with native vegetation, to improve water quality by reducing excessive runoff and the need for excessive fertilization, respectively.
- e. Identify opportunities for retrofitting or bio-engineering existing storm water infrastructure to restore ecological function while maintaining, or even enhancing, hydraulic capacity. Particular consideration should be given to areas prone to flooding, or where the infrastructure is aged and will need to be rehabilitated.

If you have any questions, please visit our website at:<u>http://health.hawaii.gov/cwb/</u>, or contact the Engineering Section, CWB, at (808) 586-4309.

Sincerely,

InWon ALEC WONG, P.E., CHIEF

Clean Water Branch

CTM:bk

c: EPO [via e-mail only]



1907 South Beretania Street Phone: 808.946.2277 Fax: 808.946.2253 State of Hawai'i

Artesian Plaza, Suite 400 Mr. Alec Wong, P.E., Chief Honolulu, Hawaii, 96826 USA Clean Water Branch www.wilsonokamoto.com Department of Health P.O. Box 3378 Honolulu, Hawai'i 96801-3378

> Subject: **Pre-Assessment Consultation** Draft Environmental Assessment (EA) for the Waimea Wastewater Treatment Plant **R-1** Recycled Water Distribution System Waimea, Kaua'i, Hawai'i TMK: (4) 1-2-006: 036 (por.), 009 (por.)

Dear Mr. Wong:

Thank you for your letter dated January 13, 2016 regarding the subject project. We offer the following responses to your letter.

We appreciate the information provided on the applicability of the Hawai'i Administrative Rules (HAR), Chapters 11-54 and 11-55 and any other additional requirements related to your program. We look forward to continue working with your office as we move forward with the Draft EA.

We have also consulted with the Army Corps of Engineers and intend to work with them toward fulfilling applicable regulatory requirements.

Your letter, along with this response, will be reproduced and included in the forthcoming Draft EA. We appreciate your participation in the pre-assessment consultation review process.

Sincerely,

Milton Arakawa, AICP **Project Manager**

Eassie Miller, Kennedy/Jenks Consultants, Inc. cc:

DAVID Y. IGE GOVERNOR OF HAWAII



STATE OF HAWAII DEPARTMENT OF HEALTH P. O. BOX 3378 HONOLULU, HI 96801-3378 VIRGINIA PRESSLER, M.D. DIRECTOR OF HEALTH

> In reply, please refer to: File:

LUD – 4 1 2 006 036 Waimea WWTP R-1 RecWater EA-ID2584

January 14, 2016

Mr. Milton Arakawa, AICP Project Manager Wilson Okamoto Corporation 1905 South Beretania Street 4th Floor Honolulu, Hawaii 96826

JAN 19 2016

MILSON OKAMUTU CORPORATION

Dear Mr. Arakawa:

Subject: Waimea Wastewater Treatment Plant R-1 Recycled Water Distribution System Environmental Assessment Pre-Assessment Consultation 9275 Kaumualii Highway, Waimea, Kauai 96752 TMK (4) 1-2-006: 036

Thank you for allowing us the opportunity to provide comments on the above subject project. We have the following information to offer.

The subject project is located in the critical wastewater disposal area as determined by the Kauai County Wastewater Advisory Committee. Please be informed that if the County of Kauai is seeking the use of Clean Water State Revolving Loan Funds for this project, they will be required to comply with Section 106 of the National Historic Preservation Act in addition to declaring a project exemption.

In addition, please ensure that the project is designed and constructed in accordance with applicable provisions of our chapter 11-62, Hawaii Administrative Rules, Wastewater Systems.

Should you have any questions, please contact Sue Liu of our office at (808) 586-4294.

Sincerely,

SINA PRUDER, P.E., CHIEF Wastewater Branch

LM/MST:Imj

Ms. Laura McIntyre, DOH-Environmental Planning Office, via email
 Ms. Lori Vetter, DOH-WWB's Kauai Staff, via email
 Mr. Eassie Miller, Kennedy/Jenks Consultants



Phone: 808.946.2277 State of Hawai'i Fax: 808.946.2253

Artesian Plaza, Suite 400 Ms. Sina Pruder, P.E., Chief Honolulu, Hawaii, 96826 USA Wastewater Branch www.wilsonokamoto.com Department of Health P.O. Box 3378 Honolulu, Hawai'i 96801-3378

> Subject: Pre-Assessment Consultation Draft Environmental Assessment (EA) for the Waimea Wastewater Treatment Plant **R-1** Recycled Water Distribution System Waimea, Kaua'i, Hawai'i TMK (4) 1-2-006: 036 (por.), 009 (por.)

Dear Ms. Pruder:

Thank you for your letter dated January 14, 2016 regarding the subject project. We offer the following responses to your letter.

We acknowledge that the subject project is located in the critical wastewater disposal area and compliance with Section 106 of the National Historic Preservation Act is required in addition to declaring a project exemption.

In addition, we intend to work cooperatively with your office regarding the applicable provisions of Chapter 11-62, Hawai'i Administrative Rules, Wastewater Systems.

Your letter, along with this response, will be reproduced and included in the forthcoming Draft EA. We appreciate your participation in the pre-assessment consultation review process.

Sincerely,

 $\left(\begin{array}{c} c \end{array} \right)$

Milton Arakawa, AICP **Project Manager**

cc: Eassie Miller, Kennedy/Jenks Consultants, Inc. DAVID Y. IGE GOVERNOR OF HAWAII





SUZANNE D. CASE CHAIRPERSON BOARD OF LAND AND NATURAL RESOURCES COMMISSION ON WATER RESOURCE MANAGEMENT

STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES LAND DIVISION

POST OFFICE BOX 621 HONOLULU. HAWAII 96809

February 4, 2016

Wilson Okamoto Corporation Attention: Mr. Milton Arakawa, AICP 1907 South Beretania Street, Suite 400 Honolulu, Hawaii 96826

via email:

marakawa@wilsonokamoto.com

Dear Mr. Arakawa:

SUBJECT: Environmental Assessment Pre-Assessment Consultation for the Waimea Wastewater Treatment Plant

Thank you for the opportunity to review and comment on the subject matter. The Department of Land and Natural Resources' (DLNR) Land Division distributed or made available a copy of your report pertaining to the subject matter to DLNR Divisions for their review and comments.

At this time, enclosed are comments from the (a) Engineering Division and (b) Land Division – Kauai District on the subject matter. Should you have any questions, please feel free to call Lydia Morikawa at 587-0410. Thank you.

Sincerely,

Russell Y. Tsuji Land Administrator

Enclosure(s) cc: Central Files

DAVID Y. IGE GOVERNOR OF HAWAII





SUZANNE D. CASE CHAIRPERSON BOARD OF LAND AND NATURAL RESOURCES COMMISSION ON WATER RESOURCE MANAGEMENT

STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES LAND DIVISION

POST OFFICE BOX 621 HONOLULU, HAWAII 96809

January 13, 2016

MEMORANDUM

70: FR'.

DLNR Agencies:

Div. of Aquatic Resources

Div. of Boating & Ocean Recreation

X Engineering Division

Div. of Forestry & Wildlife

Div. of State Parks

- X Commission on Water Resource Management
- Office of Conservation & Coastal Lands
- X Land Division Kauai District
- X Historic Preservation



ussell Y. Tsuji, Land Administrator Environmental Assessment Pre-Assessment Consultation for the Waimea Wastewater Treatment Plant

Waimea, Island of Kauai; TMK: (4) 1-2-006:036

County of Kauai, Department of Public Works, Wastewater Management Division

Transmitted for your review and comment is information on the above referenced project. Please submit any comments by February 3, 2016.

If no response is received by this date, we will assume your agency has no comments. If you have any questions about this request, please contact Lydia Morikawa at 587-0410. Thank you.

Attachments

We have no objections.

We have no comments.

Comments are attached.

Signed:

Date:

Print Name:

Carty S. Chang, Chief Engineer 20

Central Files cc:

LOCATION:

APPLICANT:

t
DEPARTMENT OF LAND AND NATURAL RESOURCES ENGINEERING DIVISION

LD/ Russell Tsuji

Ref.: Environmental Assessment Pre-Assessment Consultation for the Waimea Wastewater Treatment Plant

Kauai.001

COMMENTS

- () We confirm that the project site, according to the Flood Insurance Rate Map (FIRM), is located in Flood Zone
- (X) Please take note that the project site, according to the Flood Insurance Rate Map (FIRM), is located in Zone AH. The National Flood Insurance Program regulates developments within Zone AH as indicated in bold letters below.
- () Please note that the correct Flood Zone Designation for the project site according to the Flood Insurance Rate Map (FIRM) is .
- Please note that the project must comply with the rules and regulations of the National Flood Insurance Program (NFIP) presented in Title 44 of the Code of Federal Regulations (44CFR), whenever development within a Special Flood Hazard Area is undertaken. If there are any questions, please contact the State NFIP Coordinator, Ms. Carol Tyau-Beam, of the Department of Land and Natural Resources, Engineering Division at (808) 587-0267.

Please be advised that 44CFR indicates the minimum standards set forth by the NFIP. Your Community's local flood ordinance may prove to be more restrictive and thus take precedence over the minimum NFIP standards. If there are questions regarding the local flood ordinances, please contact the applicable County NFIP Coordinators below:

- () Mr. Mario Siu Li at (808) 768-8098 of the City and County of Honolulu, Department of Planning and Permitting.
- () Mr. Carter Romero (Acting) at (808) 961-8943 of the County of Hawaii, Department of Public Works.
- () Ms. Carolyn Cortez at (808) 270-7253 of the County of Maui, Department of Planning.
- (X) Mr. Stanford Iwamoto at (808) 241-4896 of the County of Kauai, Department of Public Works.
- () The applicant should include project water demands and infrastructure required to meet water demands. Please note that the implementation of any State-sponsored projects requiring water service from the Honolulu Board of Water Supply system must first obtain water allocation credits from the Engineering Division before it can receive a building permit and/or water meter.
- (X) The applicant should provide the water demands and calculations to the Engineering Division so it can be included in the State Water Projects Plan Update.
- () Additional Comments:
- () Other:

Should you have any questions, please call Mr. Rodney Shiraishi of the Planning Branch at 587-0258.

Signed:	(MAX
	CARTY S. CHANG, CHIEF ENGINEER
Date:	1/20/16





Flood Hazard Assessment Report

www.hawaiinfip.org

DEA Waimea Wastewater TP

Property Information

COUNTY:	KAUAI
TMK NO:	(4) 1-2-006:036
WATERSHED:	KAPILIMAO
PARCEL ADDRESS:	9275 KAUMUALII HWY WAIMEA, HI 96796

Flood Hazard Information

FIRM INDEX DATE:
LETTER OF MAP CHANGE(S):
FEMA FIRM PANEL:
PANEL EFFECTIVE DATE:

- 61	
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	ULUU.

×

NOVEMBER 26, 2010 NONE 1500020258F NOVEMBER 26, 2010

THIS PROPERTY IS WITHIN A TSUNAMI EVACUTION ZONE: YES FOR MORE INFO, VISIT: http://www.scd.hawaii.gov/

THIS PROPERTY IS WITHIN A DAM EVACUATION ZONE: NO FOR MORE INFO, VISIT: http://dlnreng.hawaii.gov/dam/



Disclaimer: The Hawaii Department of Land and Natural Resources (DLNR) assumes no responsibility arising from the use, accuracy, completeness, and timeliness of any information contained in this report. Viewers/Users are responsible for verifying the accuracy of the information and agree to indemnify the DLNR, its officers, and employees from any liability which may arise from its use of its data or information.

If this map has been identified as 'PRELIMINARY', please note that it is being provided for informational purposes and is not to be used for flood insurance rating. Contact your county floodplain manager for flood zone determinations to be used for compliance with local floodplain management regulations.

FLOOD HAZARD ASSESSMENT TOOL LAYER LEGEND (Note: legend does not correspond with NFHL)

SPECIAL FLOOD HAZARD AREAS (SFHAs) SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD - The 1% annual chance flood (100year), also know as the base flood, is the flood that has a 1% chance of being equaled or exceeded in any given year. SFHAs include Zone A, AE, AH, AO, V, and VE. The Base Flood Elevation (BFE) is the water surface elevation of the 1% annual chance flood. Mandatory flood insurance purchase applies in these zones:

	Zone A: No BFE determined.			
	Zone AE: BFE determined.			
	Zone AH: Flood depths of 1 to 3 feet (usually areas of ponding); BFE determined.			
	Zone AO: Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined.			
	Zone V: Coastal flood zone with velocity hazard (wave action); no BFE determined.			
	Zone VE: Coastal flood zone with velocity hazard (wave action); BFE determined.			
	Zone AEF: Floodway areas in Zone AE. The floodway is the channel of stream plus any adjacent floodplain areas that must be kept free of encroachment so that the 1% annual chance flood can be carried without increasing the BFE.			
NON-SPE flood zon but covera	NON-SPECIAL FLOOD HAZARD AREA - An area in a low-to-moderate risk flood zone. No mandatory flood insurance purchase requirements apply, but coverage is available in participating communities.			
	Zone XS (X shaded): Areas of 0.2% annual chance flood; areas of 1% annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 1% annual chance flood.			
	Zone X: Areas determined to be outside the 0.2% annual chance floodplain.			
OTHER FL				

Zone D: Unstudied areas where flood hazards are undetermined, but flooding is possible. No mandatory flood insurance purchase apply, but coverage is available in participating communities. DAVID Y. IGE GOVERNOR OF HAWAII





SUZANNE D. CASE CHAIRPERSON BOARD OF LAND AND NATURAL RESOURCES COMMISSION ON WATER RESOURCE MANAGEMENT

STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES LAND DIVISION

POST OFFICE BOX 621 HONOLULU, HAWAII 96809

January 13, 2016

MEMORANDUM

TO:

DLNR Agencies:

Div. of Aquatic Resources

Div. of Boating & Ocean Recreation

X Engineering Division

Div. of Forestry & Wildlife

Div. of State Parks

X Commission on Water Resource Management

___ Office of Conservation & Coastal Lands

X Land Division – Kauai District

X Historic Preservation

FROM: SUBJECT:

APPLICANT:

Russell Y. Tsuji, Land Administrator Environmental Assessment Pre-Assessment Consultation for the Waimea Wastewater Treatment Plant

LOCATION: Waimea, Island of Kauai; TMK: (4) 1-2-006:036

> County of Kauai, Department of Public Works, Wastewater Management Division

Transmitted for your review and comment is information on the above referenced project. Please submit any comments by February 3, 2016.

If no response is received by this date, we will assume your agency has no comments. If you have any questions about this request, please contact Lydia Morikawa at 587-0410. Thank you.

Attachments

() Weha (★) Weha	ave no objections. ave no comments.	
() Comr	ments are attached	· 아이아
Print Name:	MARVIN MIKASA	JAN 15'16
Date:	Jun. 20, 2016	DENR KDLO ROVO

Central Files cc:



10183-01 May 9, 2016

1907 South Beretania Street
Artesian Plaza, Suite 400Mr. Russell Y. Tsuji, Land Administrator
Land DivisionHonolulu, Hawaii, 96826 USA
Phone: 808.946.2277
Fax: 808.946.2253Mr. Russell Y. Tsuji, Land Administrator
Land Divisionwww.wilsonokamoto.comState of Hawai'i
Department of Land and Natural Resources
P.O. Box 621
Honolulu, Hawai'i 96809

Subject: Pre-Assessment Consultation Draft Environmental Assessment (EA) for the Waimea Wastewater Treatment Plant R-1 Recycled Water Distribution System Waimea, Kaua'i, Hawai'i TMK: (4) 1-2-006:036 (por.), 009 (por.)

Dear Mr. Tsuji:

Thank you for your letter dated February 4, 2016 regarding the subject project. We offer the following responses to your letter.

Regarding comments from the Engineering Division, we acknowledge that the project site is located within Flood Zone AH, and that compliance with applicable National Flood Insurance Program rules and regulations and local flood ordinances are required. Water demands and calculations will be provided to the Engineering Division of DLNR as designs are formulated for construction.

We appreciate the Land Division – Kaua'i District's review of the subject project and acknowledge that the agency has no comments at this time.

Your letter, along with this response, will be reproduced and included in the forthcoming Draft EA. We appreciate your participation in the pre-assessment consultation review process.

Sincerely,

Milton Arakawa, AICP Project Manager

cc: Eassie Miller, Kennedy/Jenks Consultants, Inc.

DAVID Y. IGE GOVERNOR OF HAWAII





SUZANNE D. CASE CHAIRPERSON BOARD OF LAND AND NATURAL RESOURCES COMMISSION ON WATER RESOURCE MANAGEMENT

KEKOA KALUHIWA

JEFFREY T. PEARSON 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

STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION KAKUHIHEWA BUILDING 601 KAMOKILA BLVD, STE 555 KAPOLEI, HAWAII 96707

January 28, 2016

Larry Dill County of Kaua'i Department of Public Works

Dear Mr. Dill:

SUBJECT: Chapter 6E-8 and National Historic Preservation Act (NHPA) Section 106 Review – R-1 Recycled Water Distribution System Waimea Ahupua'a, Kona District, Island of Kaua'i TMK: (4) 1-2-002:036

Thank you for your pre-consultation regarding the County of Kaua'i's proposed installation of a 400,000 gallon storage tank and recycled water pump station at the site of the Waimea Wastewater Treatment Plant (WWTP) located in Waimea. The project also includes installation of recycled water pipelines, service laterals, and water meters, which will provide recycled water for irrigation to customers, as well as proposed installation of a R-1 recycled water distribution system on the subject property. This project a federal undertaking in accordance with 36CFR Part 800 due to federal funding. Wilson Okamoto Corporation has been delegated by the County of Kaua'i Department of Public Works (DPW) Wastewater Management Division (WMD) to conduct pre-assessment consultation for the project. We received your correspondence on January 14, 2016 in our Kapolei office.

A preliminary search indicates our records do not include an archaeological inventory survey (AIS) for the subject TMK. It's likely that due to the date of construction, archaeological work was not conducted prior to the installation of the wastewater treatment plant. Historic properties listed on the State Inventory of Historic Places (SIHP) in the vicinity include the Waimea Town Complex (Site 3250) and the Waimea Ditch (Site 2271). Both sites appear to be at least 400 meters from the subject property. The Waimea Wastewater Treatment Plant (WWTP) was constructed in the 1970s.

In order to provide a recommendation regarding archaeological work needed to identify historic properties, please provide the following project details:

- 1) Total acreage of the project area(s), as well as a graphic showing the Area of Potential Effect (APE). The APE must include staging and access areas, and the extent of the installation of subsurface water pipelines. Please indicate if the installation of waterlines is entirely within the subject TMK and, if not, any other TMKs included in the APE.
- 2) A project summary that includes identification of the source of funding, including identification of the Lead Federal Agency;
- 3) A detailed scope of work for the project, including depth and extent of ground disturbance for the installation of the storage tanks, water pipelines, and laterals; and
- 4) A description and map showing the extent and depth of previous ground disturbance associated with construction of the WWTP.

LOG NO: 2015.00045 DOC NO: 1601MN18 Archaeology Mr.Dill January 28, 2016 Page 2

We look forward to continued consultation with you throughout the Chapter 6E and the NHPA Section 106 historic preservation review processes. Please contact Kaua'i Lead Archaeologist Mary Jane Naone at (808) 271-4940 or at <u>Maryjane.naone@hawaii.gov</u> for questions regarding this letter.

Aloha,

len In

Alan S. Downer, Ph.D. Administrator, State Historic Preservation Division Deputy State Historic Preservation Officer

cc.

Milton Arakawa Wilson Okamoto Corporation woc@wilsonokamoto.com



10183-01 May 9, 2016

1907 South Beretania Street www.wilsonokamoto.com State of Hawai'i

Artesian Plaza, Suite 400 Mr. Alan S. Downer, Ph.D., Administrator Honolulu, Hawaii, 96826 USA State Historic Preservation Division Phone: 808.946.2277 Fax: 808.946.2253 Deputy State Historic Preservation Officer Department of Land and Natural Resources Kakuhihewa Building 601 Kamokila Boulevard, Suite 555 Kapolei, Hawai'i 96707

> Chapter 6E-8 and National Historic Preservation Act (NHPA) Subject: Section 106 Review -Waimea Wastewater Treatment Plant **R-1** Recycled Water Distribution System Waimea, Kaua'i, Hawai'i TMK (4) 1-2-006: 036 (por.), 009 (por.)

Dear Mr. Downer:

Thank you for your letter dated January 28, 2016 regarding the subject project. We offer the following responses to your letter.

We appreciate the information regarding the subject project. The project details requested in your letter will be provided as part of the Section 106 review and will be forthcoming. We look forward to working with your office throughout the Chapter 6E and the NHPA Section 106 historic preservation review processes.

Your letter, along with this response, will be reproduced and included in the forthcoming Draft EA. We appreciate your participation in the pre-assessment consultation review process.

Sincerely,

Milton Arakawa, AICP **Project Manager**

Eassie Miller, Kennedy/Jenks Consultants, Inc. cc:

DAVID Y. IGE GOVERNOR

Deputy Directors JADE T. BUTAY ROSS M. HIGASHI EDWIN H. SNIFFEN

FORD N. FUCHIGAMI

DIRECTOR

STATE OF HAWAII DEPARTMENT OF TRANSPORTATION 869 PUNCHBOWL STREET HONOLULU, HAWAII 96813-5097

January 20, 2016

DARRELL T. YOUNG

IN REPLY REFER TO: STP 8.1924

Mr. Milton Arakawa, AICP Project Manager Wilson Okamoto Corporation 1907 South Beretania Street, Suite 400 Honolulu, Hawaii 96826

JAN 28 2016

Dear Mr. Arakawa:

Subject: Waimea Wastewater Treatment Plant **R-1** Recycled Water Distribution System Environmental Assessment Pre-Assessment Consultation Waimea, Kauai, Hawaii TMK: (4) 1-2-006:036

Our Department of Transportation's (DOT) comments on the subject project are as follows:

The subject project is not expected to significantly impact the State highway facility. However, a permit from DOT Highways Division, Kauai District Office is required for the transport of oversized and/or overweight materials and equipment on State highway facilities.

If there are any questions, please contact Mr. Norren Kato of the DOT Statewide Transportation Planning Office at telephone number (808) 831-7976.

Sincerely,

FORD N. FUCHIGAMI

Director of Transportation



10183-01 May 9, 2016

1907 South Beretania Street
Artesian Plaza, Suite 400Mr. Ford N. Fuchigami, Director of TransportationHonolulu, Hawaii, 96826 USAState of Hawai'iPhone: 808.946.2277Department of TransportationFax: 808.946.2253869 Punchbowl StreetWww.wilsonokamoto.com869 Punchbowl StreetHonolulu, Hawai'i 96813-5097

Subject: Pre-Assessment Consultation Draft Environmental Assessment (EA) for the Waimea Wastewater Treatment Plant R-1 Recycled Water Distribution System Waimea, Kaua'i, Hawai'i TMK: (4) 1-2-006:036 (por.), 009 (por.)

Dear Mr. Fuchigami:

Thank you for your letter dated January 20, 2016 regarding the subject project. We offer the following responses to your letter.

We appreciate the information that DOT does not expect any significant impact to the State highway facility. We acknowledge that a permit for the transport of oversized and/or overweight materials and equipment on State highway facilities is required and intend to work cooperatively with the DOT Highways Division, Kaua'i District Office on this matter.

Your letter, along with this response, will be reproduced and included in the forthcoming Draft EA. We appreciate your participation in the pre-assessment consultation review process.

Sincerely,

Milton Arakawa, AICP Project Manager

cc: Eassie Miller, Kennedy/Jenks Consultants, Inc.

PHONE (808) 594-1888





STATE OF HAWAI'I OFFICE OF HAWAIIAN AFFAIRS 560 N. NIMITZ HWY., SUITE 200 HONOLULU, HAWAI'I 96817

HRD15-3795B

February 9, 2016

Milton Arakawa, AICP Project Manager Wilson Okamoto Corporation 1907 South Beretania Street, Suite 400 Honolulu, HI 96826 RECEIVED FEB 2 5 2016

Re: Pre-Consultation on Environmental Assessment Waimea Wastewater Treatment Plant Waimea Ahupua'a, Kona Moku, Kaua'i Mokupuni Tax Map Key: (4) 1-2-006-036

Aloha e Milton Arakawa:

The Office of Hawaiian Affairs (OHA) is in receipt of your December 22, 2015 request for comments ahead of a draft environmental assessment (DEA) for the County of Kaua'i's Department of Public Works (DPW) Wastewater Management Division (WMD). The DPW is proposing to install a R-1 recycled water distribution system, including a 400,000 gallon storage tank, and recycled water pump station at the Waimea Wastewater Treatment Plant (WWTP).

According to your letter, the DPW WMD proposes to construct an above ground recycled water storage tank, which will provide approximately two days' worth of storage for recycled water production at the Waimea WWTP site. This first phase of the recycled water distribution system includes State Department of Education Waimea Canyon Middle School and the County Department of Parks Waimea Regional Sports fields.

OHA has no specific comments at this time. As this project moves forward, OHA looks forward to reviewing the DEA. OHA request assurances that should iwi kūpuna or Native Hawaiian cultural deposits be identified during ground altering activities, all work in the area will immediately cease and the appropriate agencies, including OHA, will be contacted pursuant to applicable law.

Milton Arakawa February 9, 2016 Page 2

Thank you for initiating consultation at this early stage. Should you have any questions, please contact Kathryn Keala at (808) 594-0272 or kathyk@oha.org.

'O wau iho nō me ka 'oia 'i'o,

mangono Calle

Kamana'opono M. Crabbe, Ph.D. Ka Pouhana, Chief Executive Officer

KC:kk

*Please address replies and similar, future correspondence to our agency: Dr. Kamana'opono Crabbe Attn: OHA Compliance Enforcement 560 N. Nimitz Hwy, Ste. 200 Honolulu, HI 96817



10183-01 May 9, 2016

1907 South Beretania Street Phone: 808.946.2277 Fax: 808.946.2253 State of Hawai'i

Artesian Plaza, Suite 400 Dr. Kamana'opono M. Crabbe Honolulu, Hawaii, 96826 USA Attn: OHA Compliance Enforcement www.wilsonokamoto.com Office of Hawaiian Affairs 560 N. Nimitz Highway, Suite 200 Honolulu, Hawai'i 96817

> Subject: **Pre-Assessment Consultation** Draft Environmental Assessment (EA) for the Waimea Wastewater Treatment Plant **R-1** Recycled Water Distribution System Waimea, Kaua'i, Hawai'i TMK: (4) 1-2-006: 036 (por.), 009 (por.)

Dear Dr. Crabbe:

Thank you for your letter dated February 9, 2016 regarding the subject project. We offer the following responses to your letter.

We acknowledge that OHA does not have any specific comments at this time. The forthcoming Draft EA will include a review of historical and archaeological resources within the subject project area. The EA will also note that should any iwi kūpuna or archaeologically significant features, deposits or burials, be uncovered, all work in the area will immediately cease and the appropriate agencies, including OHA, will be contacted pursuant to applicable law. We appreciate your continued interest in the project.

Your letter, along with this response, will be reproduced and included in the forthcoming Draft EA. We appreciate your participation in the pre-assessment consultation review process.

Sincerely,

Milton Arakawa, AICP Project Manager

cc: Eassie Miller, Kennedy/Jenks Consultants, Inc.



MA

April 28, 2016

MAY 0 5 2016

Mr. Milton Arakawa Wilson Okamoto Corporation 1907 South Beretania Street, Suite 400 Honolulu, HI 96826

Dear Mr. Arakawa:

Subject: Pre-Assessment Consultation for Draft Environmental Assessment: Waimea Wastewater Treatment Plant R-1 Recycled Water Distribution System, TMK: 1-2-06:036, Waimea, Kauai

This is in regard to your letter dated January 5, 2016. We have no objections to the proposed Draft Environmental Assessment. The following are our comments to the subject Draft Environmental Assessment for the proposed Waimea Wastewater Treatment Plant R-1 Recycled Water Distribution System.

Any actual subdivision or development of this area will be dependent on the adequacy of the source, storage, and transmission facilities existing at that time.

At the present time, water service will be limited to the existing water meter serving this parcel. Any request for additional water meters or an increase in water meter size will be dependent on the adequacy of the source, storage, and transmission facilities existing at that time.

If you have any questions, please contact Mr. Joel Bautista at (808) 245-5441.

Sincerely,

Edward Do.

Edward Doi Chief of Water Resources and Planning Division

Draft EA, 1-2-06-036, T-17883, Arakawa/JB:mlm



10183-01 May 9, 2016

1907 South Beretania Street
Artesian Plaza, Suite 400Mr. Edward DoiHonolulu, Hawaii, 96826 USA
Phone: 808.946.2277
Fax: 808.946.2253Chief of Water Resources and Planning Division
Department of Water
County of Kaua'i
4398 Pua Loke Street
P.O. Box 1706
Līhu'e, Hawai'i 96766

Subject: Pre-Assessment Consultation Draft Environmental Assessment (EA) for the Waimea Wastewater Treatment Plant R-1 Recycled Water Distribution System Waimea, Kaua'i, Hawai'i TMK: (4) 1-2-006:036 (por.), 009 (por.)

Dear Mr. Doi:

Thank you for your letter dated April 28, 2016 regarding the subject project. We offer the following responses to your letter.

We appreciate that the Department of Water has no objections to the Draft Environmental Assessment. We do acknowledge that any actual subdivision or development of this area will be dependent on the adequacy of the source, storage, and transmission facilities existing at the time. Moreover, we do understand that water service is limited to the existing water meter serving this parcel.

Your letter, along with this response, will be reproduced and included in the forthcoming Draft EA. We appreciate your participation in the pre-assessment consultation review process.

Sincerely,

Milton Arakawa, AICP Project Manager

cc: Eassie Miller, Kennedy/Jenks Consultants, Inc.

APPENDIX B

Draft EA Comments and Responses

DAVID Y. IGE GOVERNOR OF HAWAII



VIRGINIA PRESSLER, M.D. DIRECTOR OF HEALTH

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

In reply, please refer to: File:

EPO 16-165

June 1, 2016

Mr. Milton Arakawa Wilson Okamoto Corporation 1907 South Beretania Street, Suite 400 Honolulu, Hawaii 96826 Email: marakawa@wilsonokamoto.com

Dear Mr. Arakawa:

SUBJECT: Draft Environmental Assessment (DEA) for Waimea Wastewater Treatment Plant R-1 Recycled Water Distribution System, Waimea, Kauai TMK: (4) 1-2-006: 036, 009 (por.)

The Department of Health (DOH), Environmental Planning Office (EPO), acknowledges receipt of your DEA to our office via the OEQC link:

http://oeqc.doh.hawaii.gov/Shared%20Documents/EA_and_EIS_Online_Library/Kauai/2010s/2016-05-23-KA-5B-DEA-Waimea-Wastewater-Treatment-Plant.pdf

EPO strongly recommends that you review the standard comments and available strategies to support sustainable and healthy design provided at: <u>http://health.hawaii.gov/epo/landuse</u>. Projects are required to adhere to all applicable standard comments. EPO has recently updated the environmental Geographic Information System (GIS) website page. It now compiles various maps and viewers from our environmental health programs. The eGIS website page will be continually updated so please visit it regularly at: <u>http://health.hawaii.gov/epo/landuse</u>.

EPO also encourages you to examine and utilize the Hawaii Environmental Health Portal at: <u>https://eha-cloud.doh.hawaii.gov</u>. This site provides links to our e-Permitting Portal, Environmental Health Warehouse, Groundwater Contamination Viewer, Hawaii Emergency Response Exchange, Hawaii State and Local Emission Inventory System, Water Pollution Control Viewer, Water Quality Data, Warnings, Advisories and Postings.

We suggest you review the requirements for the National Pollutant Discharge Elimination System (NPDES) permit. We recommend contacting the Clean Water Branch at (808) 586-4309 or <u>cleanwaterbranch@doh.hawaii.gov</u> after relevant information is reviewed at:

- 1. http://health.hawaii.gov/cwb
- 2. http://health.hawaii.gov/cwb/site-map/clean-water-branch-home-page/standard-npdes-permit-conditions
- 3. http://health.hawaii.gov/cwb/site-map/clean-water-branch-home-page/forms

Please note that all wastewater plans must conform to applicable provisions of the Department of Health's Administrative Rules, Chapter 11-62, "Wastewater Systems". We do reserve the right to review the detailed wastewater plans for conformance to applicable rules. Should you have any questions, please review online guidance at: <u>http://health.hawaii.gov/wastewater</u> and contact the Planning and Design Section of the Wastewater Branch at 586-4294.

Mr. Milton Arakawa Page 2 June 1, 2016

A phase I Environmental Site Assessment (ESA) and site investigation should be conducted for residential development or redevelopment projects on formerly and currently zoned agricultural land used for growing sugar, pineapple or other agricultural products. If the investigation shows that a release of petroleum, hazardous substance, pollutants or contaminants may have occurred at the site, the site should be properly characterized through an approved Hawaii State Department of Health (DOH)/Hazard Evaluation and Emergency Response Office (HEER) soil and/or groundwater sampling plan. Please refer to Sections 3 and 4 of the HEER Office Technical Guidance Manual http://www.hawaiidoh.org/. If the site is found to be contaminated, then all removal and remedial actions to clean up hazardous substance or oil releases by past and present owners/tenants must comply with Chapter 128D, Environmental Response Law, HRS, and Title 11, Chapter 451, HAR, State Contingency Plan. To identify HEER records related to the property, visit http://eha-web.doh.hawaii.gov/eha-cma/Leaders/HEER/public-records

You may also wish to review the draft Office of Environmental Quality Control (OEQC) viewer at: <u>http://eha-web.doh.hawaii.gov/oeqc-viewer</u>. This viewer geographically shows where some previous Hawaii Environmental Policy Act (HEPA) {Hawaii Revised Statutes, Chapter 343} documents have been prepared.

In order to better protect public health and the environment, the U.S. Environmental Protection Agency (EPA) has developed a new environmental justice (EJ) mapping and screening tool called EJSCREEN. It is based on nationally consistent data and combines environmental and demographic indicators in maps and reports. EPO encourages you to explore, launch and utilize this powerful tool in planning your project. The EPA EJSCREEN tool is available at: http://www.epa.gov/ejscreen.

We request that you utilize all of this information on your proposed project to increase sustainable, innovative, inspirational, transparent and healthy design. Thank you for the opportunity to comment.

Mahalo nui loa,

Laura Leialoha Phillips McIntyre, AICP Program Manager, Environmental Planning Office

LM:nn

- Attachment 1: EPO Draft Environmental Health Management Map Kauai
- Attachment 2: Clean Water Branch: Water Quality Standards Map Kauai
- Attachment 3: Wastewater Branch: Recycled Water Use Map of Project Area
- Attachment 4: Historic Sugarcane Map of Project Area
- Attachment 5: OEQC Viewer Map of Project Area
- Attachment 6: U.S. EPA EJSCREEN Report for Project Area
- c: Edward Tschupp, County of Kauai, Dept. of Public Works {via email: <u>etschupp@kauai.gov</u>} DOH: DHO Kauai, CWB, WWB, HEER {via email only}







HISTORIC SUGARCANE LANDS MAP VIEWER







EJSCREEN Report for 1 mile Ring around the Corridor HAWAII, EPA Region 9 Approximate Population: 1594



Waimea Wastewater Treatment Plant R-1 Recycled Water Distribution System

Selected Variables	Percentile in State	Percentile in EPA Region	Percentile in USA	
EJ Indexes				
EJ Index for Particulate Matter (PM 2.5)	N/A	N/A	N/A	
EJ Index for Ozone	N/A	N/A	N/A	
EJ Index for NATA Diesel PM*	N/A	N/A	N/A	
EJ Index for NATA Air Toxics Cancer Risk*	N/A	N/A	N/A	
EJ Index for NATA Respiratory Hazard Index*	N/A	N/A	N/A	
EJ Index for NATA Neurological Hazard Index*	N/A	N/A	N/A	
EJ Index for Traffic Proximity and Volume	52	60	80	
EJ Index for Lead Paint Indicator	72	69	81	
EJ Index for NPL Proximity	21	40	62	
EJ Index for RMP Proximity	19	41	64	
EJ Index for TSDF Proximity	21	39	65	
EJ Index for Water Discharger Proximity	27	52	69	



This report shows environmental, demographic, and EJ indicator values. It shows environmental and demographic raw data (e.g., the estimated concentration of ozone in the air), and also shows what percentile each raw data value represents. These percentiles provide perspective on how the selected block group or buffer area compares to the entire state, EPA region, or nation. For example, if a given location is at the 95th percentile nationwide, this means that only 5 percent of the US population has a higher block group value than the average person in the location being analyzed. The years for which the data are available, and the methods used, vary across these indicators. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJSCREEN documentation for discussion of these



----- Dictized Line

0 0.01 0.025 0.07 mi 0 0.02 0.025 0.07 mi 0 0.02 0.06 0.12 km 0 0.02 0.05 0.07 mi

Selected Variables	Raw data	State Average	%ile in State	EPA Region Average	%ile in EPA Region	USA Average	%ile in USA
Environmental Indicators				Sector Sector			
Particulate Matter (PM 2.5 In µg/m²)	N/A	N/A	N/A	9.95	N/A	9.78	N/A
Ozone (ppb)	N/A	N/A	N/A	49.7	N/A	46.1	N/A
NATA Diesel PM (ug/m²)*	N/A	N/A	N/A	N/A	N/A	N/A	NA
NATA Air Toxics Cancer Risk (risk per MM)*	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NATA Respiratory Hazard Index*	N/A	N/A	N/A	N/A	N/A	N/A	N/A
NATA Neurological Hazard Index*	/N/A	N/A	N/A	N/A	N/A	N/A	N/A
Traffic Proximity and Volume (daily traffic count/distance to road)	97	280	55	190	55	110	73
Lead Paint Indicator (% pre-1960s housing)	0.39	0.17	83	0.25	70	0.3	67
NPL Proximity (site count/km distance)	0.0053	0.092	17	0.11	5	0.098	1
RMP Proximity (facility countilism distance)	0.033	0.18	8	0.41	3	0.31	6
TSDF Proximity (facility count/km distance)	0.0053	0.092	14	0.12	1	0.054	10
Water Discharger Proximity (count/km)	0.086	0.33	18	0.19	33	0.25	30
Demographic Indicators							
Demographic Index	5996	51%	74	46%	69	35%	81
Minority Population	8296	77%	48	57%	72	36%	86
Low Income Population	38%	25%	76	35%	56	34%	58
Linguistically Isolated Population	2%	6%	35	9%	26	5%	54
Population with Less Than High School Education	1296	10%	71	18%	47	14%	55
Population under Age 5	8%	6%	71	7%	61	796	66
Population over Age 64	18%	14%	70	12%	82	13%	78

"The National-Scale Air Toxlos Assessment (NATA) environmental indicators and EJ indexes, which include cancer risk, respiratory hazard, neurodevelopment hazard, and diesel particulate matter will be added into EJSCREEN during the first full public update after the scon-to-be-released 2011 dataset is made available. The National-Scale Air Toxlos Assessment (NATA) is EPA's ongoing, comprehensive evaluation of air toxics in the United States. EPA developed the NATA to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that NATA provides broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. More information on the NATA analysis can be found at: https://www.epa.gov/hational-air-loxics-assesement.

For additional information, see: www.epa.gov/environmentaljustice

ELISCREEN is a screening tool for pre-decisional use only. It can help identify areas that may warrant additional consideration, analysis, or outreach. It does not provide a basis for decisionmaking, but it may help identify potential areas of EJ concern. Users should keep in mind that screening tools are subject to substantial uncertainty in their demographic and environmental data, particularly when looking at small geographic areas. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJISCREEN documentation for discussion of these issues before using reports. This screening tool does not provide data on every environmental limpact and demographic factor that may be relevant to a particular location. EJISCREEN outputs should be supplemented with additional information and local knowledge before taking any action to address potential EJ concerns. Bernard P. Carvalho, Jr. Mayor



Lyle Tabata Acting County Engineer

Deputy County Engineer

Wallace G. Rezentes, Jr. Managing Director

DEPARTMENT OF PUBLIC WORKS

County of Kaua'i, State of Hawai'i

4444 Rice Street, Suite 275, Līhu'e, Hawai'i 96766 TEL (808) 241-4992 FAX (808) 241-6604

July 11, 2016

Ms. Laura Leialoha Phillips McIntyre, AICP, Program Manager Environmental Planning Office State of Hawai'i Department of Health P.O. Box 3378 Honolulu, Hawai'i 96801-3378

Subject: Draft Environmental Assessment (EA) for the Waimea Wastewater Treatment Plant R-1 Recycled Water Distribution System Waimea, Kaua'i, Hawai'i TMK: (4) 1-2-006:036 (por.), 009 (por.)

Dear Ms. McIntyre:

Thank you for your letter dated June 1, 2016 regarding the subject project. We would like to take this opportunity to provide a response.

We appreciate your recommendation to review the standard comments and available strategies to support sustainable and healthy design and acknowledge that adherence to all applicable standard comments are required.

We appreciate the reference regarding the Hawai'i Environmental Health Portal. We will also review National Pollutant Discharge Elimination System provisions for possible applicability to this project.

We are working closely with the Wastewater Branch of the DOH and will conform with applicable provisions of Hawai'i Administrative Rules, Chapter 11-62, "Wastewater Systems".

We appreciate the information on the Department of Health Hazard Evaluation and Emergency Response Office. The project involves construction of an R-1 recycled water storage tank and pump station within an existing Wastewater Treatment Plant site, as well as a proposed distribution line which follows an existing WWTP effluent pipeline alignment. The recycled water distribution line will either replace the existing effluent line within the same trench, or the existing line will be relined using Cured In Place Pipe (CIPP) technology. The proposed project involves minimal changes to lands which have been previously developed for the same purpose.

An Equal Opportunity Employer

Ms. Laura Leialoha Phillips McIntyre July 11, 2016 Page No. 2

Moreover, there has been no evidence of any release of petroleum, hazardous substances, pollutants, or contaminants within the project area, as historically these lands were cultivated in sugarcane.

Your letter, along with this response, will be included in the forthcoming Final EA. We appreciate your participation in the environmental assessment review process.

Very truly yours,

EDWARD TSCHUPP, Chief Wastewater Management Division

cc: Mr. Eassie Miller Mr. Milton Arakawa



OFFICE OF ENVIRONMENTAL QUALITY CONTROL

DAVID Y. IGE GOVERNOR

SCOTT GLENN DIRECTOR

DEPARTMENT OF HEALTH | 235 South Beretania Street, Suite 702, Honolulu, HI 96813 | oeqchawaii@doh.hawaii.gov

(808) 586-4185

June 16, 2016

Edward Tschupp County of Kaua'i Department of Public Works Division of Wastewater Management 4444 Rice Street, Suite 275 Līhu'e, Kaua'i 96766

Dear Mr. Tschupp,

SUBJECT: Draft Environmental Assessment (EA) for Waimea Wastewater Treatment Plant R-1 Recycled Water Distribution System

The Office of Environmental Quality Control (OEQC) has reviewed the draft EA prepared for the subject project and offers the following comments for your consideration:

 The draft does not include a direct response to an early consultation comment submitted by the Department of Accounting and General Services – specifically, they requested information regarding notification procedures to end users in the event of a problem. OEQC recommends addressing this concern in the final EA.

 In general, the OEQC recommends considering climate change for this and all future projects. Changing weather patterns in the Pacific are projected to result in localized increased precipitation severity, such as periodic extreme heavy downpours. Please consider the fact that accelerating climate change may result in higher flood levels than those identified in section 3.4.1 of the assessment. More information can be found at https://www3.epa.gov/climatechange/impacts/islands.html.

Thank you for the opportunity to comment on the draft EA. We look forward to a response that will also be included in the final EA. If you have any questions, please contact our office at (808) 586-4185.

Sincerely,

Scott Glenn, Director

cc: Milton Arakawa, Wilson Okamoto Corporation

Bernard P. Carvalho, Jr.

Mayor



Lyle Tabata Acting County Engineer

Deputy County Engineer

Wallace G. Rezentes, Jr. Managing Director

DEPARTMENT OF PUBLIC WORKS

County of Kaua'i, State of Hawai'i

4444 Rice Street, Suite 275, Līhu'e, Hawai'i 96766 TEL (808) 241-4992 FAX (808) 241-6604

July 11, 2016

Mr. Scott Glenn, Director State of Hawai'i Office of Environmental Quality Control 235 South Beretania Street, Suite 702 Honolulu, Hawai'i 96813

Subject: Waimea Wastewater Treatment Plant R-1 Recycled Water Distribution System Draft Environmental Assessment Waimea, Kaua'i, Hawai'i TMK: (4) 1-2-006:036 (por.), 009 (por.)

Dear Mr. Glenn:

Thank you for your letter dated June 16, 2016 regarding the proposed project.

Regarding a response to a comment from the Department of Accounting and General Services regarding notification procedures to end users in the event of a problem, this issue will be addressed in the Final EA. Generally, the Waimea Wastewater Treatment Plant (WWTP) is responsible for wastewater intake, wastewater treatment, recycled water conveyance, backup effluent disposal, and regular monitoring. The quality of the recycled water produced by the WWTP is monitored regularly on-site. In the event the recycled water is not to R-1 recycled water specification, the treated effluent is directed to the State DOH-permitted injection wells. The injection wells are also monitored regularly pursuant to State regulations. In the unlikely event that recycled water not to specification is transmitted to end users, the on-site pump will be stopped immediately which will stop transmission to end users. Both end users, Waimea Middle School and Waimea Athletic Field, will be notified immediately regarding any possible corrective measures needed.

We appreciate the information that changing weather patterns may result in localized increased precipitation severity. Although the WWTP site is already subject to flood depths of 1 to 3 feet during significant rainfall, key components of the WWTP are protected from the potential flood waters. Also the WWTP is located in an area of sheet flow. This should minimize possible plant damage when compared to a site within or near a defined drainageway. Electrical systems (other than sealed underground conduits) are all situated above flood elevations, and the facility operation is automated. The primary issue experienced with flooding has been access to the facility. After flooding subsides, access is restored and any necessary cleanup ensues.

Mr. Scott Glenn July 11, 2016 Page No. 2

Your letter, along with this response, will be included in the forthcoming Final EA. We appreciate your participation in the environmental assessment review process.

Very truly yours,

Edward For

EDWARD TSCHUPP, Chief Wastewater Management Division

cc: Mr. Eassie Miller Mr. Milton Arakawa From: Faye, Chris [mailto:Chris Faye@intuit.com]
Sent: Monday, June 20, 2016 12:28 PM
To: Ed Tschupp; marakawa@wilsonkamoto.com
Subject: EA for the Waimea Wastewater Treatment Plant R-1 Recycled Water Distribution System

Hi Ed,

Thank you for your time with Kikiaola Land Company (KLC) the other day. We have some comments to the recent EA published May 23, 2016 for the Waimea Wastewater Treatment Plant R-1 Recycled Water Distribution System. As you know, currently waste water from WWTP is stored in KLC reservoirs identified in Figure 1-3 of the EA.

We are very supportive of the plan to move to an R-1 distribution system, and believe it will provide great benefits to Waimea. The current plan does not appear to address the disposition of the reservoirs or allocation of the R-1 water. We believe that the plan should contemplate at least the following:

1 – That certain "Agreement Pertaining To Waimea Wastewater Treatment Plant Effluent Disposal" (the Agreement) between KLC and the county of Kauai has expired. We should renew and amend that Agreement to enable the continuing storage in the reservoirs during this project, and to make clear that the county is responsible for any maintenance, liability, and indemnity with respect to the reservoirs.

2 – The plan, and the Agreement, should be updated to include a plan for the county to decommission the reservoirs, e.g., draining the reservoir, removing any contamination, if necessary, and filling the reservoir.

3 – As an enabler of the project, we also propose that a reasonable amount of R-1 water be allocated to KLC for the purposes of irrigating on its land, such as for landscaping at Waimea Plantation Cottages.

Please let me know if you would like to discuss further.

Thank you,

Christopher Faye Board Member Kikiaola Land Company Bernard P. Carvalho, Jr. Mayor



Wallace G. Rezentes, Jr. Managing Director

DEPARTMENT OF PUBLIC WORKS

County of Kaua'i, State of Hawai'i

4444 Rice Street, Suite 275, Līhu'e, Hawai'i 96766 TEL (808) 241-4992 FAX (808) 241-6604 July 11, 2016

Mr. Chris Faye, Board Member Kikiaola Land Company P. O. Box 367 Waimea, Hawai'i, 96796

Subject: Waimea Wastewater Treatment Plant R-1 **Recycled Water Distribution System** Draft Environmental Assessment Waimea, Kaua'i, Hawai'i TMK: (4) 1-2-006:036 (por.), 009 (por.)

Dear Mr. Faye:

Thank you for your email communication of June 20, 2016.

We appreciate the support of Kīkīaola Land Company for the project and agree that it will be beneficial to the West Side in particular, and Kaua'i in general.

We agree that the "Agreement Pertaining to Waimea Wastewater Treatment Plant Effluent Disposal" should be renewed between the County and Kikiaola Land Company. The renewed agreement can provide for continuing storage in the reservoirs, as well as maintenance, reservoir closure, liability, and indemnity issues. The County is also open to discussing future allocation of R-1 water to Kīkīaola Land Company.

As always, we appreciate your support for the project and also the long term partnership developed over the years on environmental and water resource management issues in Waimea.

Your email, along with this response, will be included in the forthcoming Final EA. We appreciate your participation in the environmental assessment review process.

Very truly yours.

EDWARD TSCHUPP, Chief Wastewater Management Division

cc: Mr. Eassie Miller Mr. Milton Arakawa

Lyle Tabata Acting County Engineer

Deputy County Engineer

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