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January 19, 1999

(OFF. OF ENVIRONMENTAL
QUALITY CONTROL)

Mr. Gary Gill
Director
Office of Environmental Quality Control
235 S. Beretania Street
State Office Tower, Suite 702
Honolulu, HI 96813

Dear Mr. Gill:

**Final Environmental Assessment (EA) for
Molokai Irrigation System
After-the-Fact Pipeline Connection
Kualapuu, Molokai, Hawaii**

We have reviewed all comments received on the draft EA for the Molokai Irrigation System Pipeline Connection and have completed the Final EA accordingly. A Finding of No Significant Impact is declared for the project. Please publish notice of the Final EA in the February 8, 1999 issue of the Environmental Notice.

Enclosed is a completed OEQC publication form and four copies of the Final Environmental Assessment. Also enclosed is a 3.5 diskette containing the project description in the publication form (WordPerfect 5.1 document).

Please contact Paul Matsuo, Administrator-Chief Engineer of the Agricultural Resource Management Division, at 973-9473 if you have any questions.

Sincerely,

JAMES J. NAKATANI
Chairperson, Board of Agriculture

Encs.



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Final Environmental Assessment

***MOLOKAI IRRIGATION SYSTEM
AFTER-THE-FACT PIPELINE CONNECTION***

Kualapuu, Molokai, Hawaii
TMK: 5-2-10:1

Proposing Agency:

State of Hawaii
Department of Agriculture
1428 South King Street
Honolulu, Hawaii 96814

Prepared By:

Water Resource Associates
1188 Bishop Street, Suite 1708
Honolulu, Hawaii 96813

Final Environmental Assessment

Submitted pursuant to
Chapter 343, Hawaii Revised Statutes

**MOLOKAI IRRIGATION SYSTEM WITH
AFTER-THE-FACT PIPELINE CONNECTION**

Kualapuu, Molokai, Hawaii
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January 1999

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Final Environmental Assessment
MOLOKAI IRRIGATION SYSTEM
AFTER-THE-FACT PIPELINE CONNECTION
Kualapuu, Molokai, Hawaii

SECTION 1. SUMMARY INFORMATION

Pursuant to Chapter 343, Hawaii Revised Statutes (HRS) for Environmental Assessment:

PROPOSING AGENCY: Department of Agriculture
APPROVING AGENCY: Board of Agriculture
LOCATION: Kualapuu, Molokai, Hawaii, TMK: 5-2-10:1
DETERMINATION: Finding of No Significant Impact (FONSI)
STATE LAND USE DESIGNATION: Agriculture
COMMUNITY PLAN DESIGNATION: Agriculture
COUNTY ZONING: Interim
LANDOWNER: Hawaiian Homes Land
AGENCIES CONSULTED: State of Hawaii, Department of Agriculture
State of Hawaii, Commission on Water Resource Management
State of Hawaii, Land Use Commission
County of Maui, Planning Department

SECTION 2. PROJECT DESCRIPTION

2.1 Background

In May 1996 the Department of Agriculture (DOA) requested the Office of Environmental Quality Control (OEQC) to review work performed at the Molokai Irrigation System (MIS) under Exemption Class (2), sub-class (5), "Replace or reconstruct..., pipe and channels in the same location and to a size commensurate with the existing system and source capacities to provide service in existing irrigation systems." in an exemption list that was approved on October 25, 1995 by the Environmental Council. The work consisted of installing approximately 200 lineal feet of 8-inch pipeline to connect Molokai Ranch's existing 8-inch pipeline to the Molokai Irrigation System's existing 30-inch pipeline northwest of Puu Luahine (see Figure 1). The new pipeline connection at the MIS' existing blowoff valve included a new control valve, water meter, and pipe reducers and fittings that allowed a change in direction of flow. Very little excavation occurred at the site where both pipelines are shallow and cross over each other. The 200-feet of pipe was the shortest distance required to connect Molokai Ranch's existing pipeline to the existing MIS blowoff valve.

In June 1996, the OEQC responded with a determination that the work did not fall under the cited exemption class because several new major components were involved, namely:

- (1) New 200-foot pipeline.
- (2) New source of water for the MIS.
- (3) New agricultural use (coffee).

Accordingly, the OEQC recommended that an environmental assessment be prepared.

2.2. Molokai Irrigation System (MIS)

The MIS was built by the State of Hawaii with Federal and State funds and was designed to be used exclusively for agricultural purposes. The initial phase of the MIS

project was completed in 1962. The MIS water supply comes from three sources. The first source consists of high-level, dike-confined ground water intercepted by the 5-mile long MIS tunnel. The second source consists of high-level, dike-confined ground water pumped from drilled wells—one located inside the tunnel and the others located in Waikolu Valley. The third source consists of surface water diverted from Waikolu Stream at two on-stream locations and two tributary locations in Waikolu Valley. At the upper on-stream location (main dam) and the two tributary locations (Dams #2 and #3) surface water is diverted by gravity flow into the tunnel. At the fourth location (lower Pump Station Dam) surface water is diverted by a dam into an offstream pump station which lifts the water to the tunnel. All of the above-mentioned sources have been registered with and/or permitted by the Department of Land and Natural Resources (DLNR). No further diversions of water in Waikolu Valley or elsewhere have occurred as a result of the MIS after-the-fact pipeline connection project.

The surface water and dike-confined ground water developed in Waikolu Valley by the MIS are transported via the 5-mile long tunnel and a 30-inch transmission pipeline from the wet northern or windward section of Molokai to the Central Plain of Hoolehua. A 1.4 billion gallon lined, open reservoir at Kualapuu stores the water prior to its entering a distribution network which extends from Hoolehua to Mahana. The distribution system network, which extends to Hawaiian Home Lands in Hoolehua and the Agricultural Park south of the airport, comprises approximately twenty-two miles of main feeder and distribution pipelines.

2.3. Molokai Ranch (MR) System

Six existing mountain stream diversions and one existing tunnel located in the leeward watersheds of Kawela, Kamoku and Lualohei basins, which are not in Waikolu Valley, supply the Molokai Ranch (MR) water system. All of these existing water sources have been registered with the Commission on Water Resource Management (CWRM) and are unrelated to "Waikolu waters".

The diverted water from these intake sources varies substantially from dry to wet seasons, with the minimum flow estimated to be about 110,000 gallons per day (see Figure 10A). The water flows westward by gravity through a pipeline to a reservoir located at an approximate elevation of 2600 feet on the western slopes of East Molokai (see Figure 10B). From this reservoir, water is conveyed by pipeline across Central Molokai to another reservoir located in West Molokai, which serves Maunaloa Village.

2.4 MIS Pipeline Connection Project

The MIS pipeline connection project is located approximately 0.7 mile northwest of Puu Luahine, where the existing Molokai Ranch pipeline crosses the existing MIS pipeline. The project lies at an elevation of approximately 800 feet (see Figure 1) on land owned by the Department of Hawaiian Homes Land (DHHL) (see Figure 2). The project site also lies within existing pipeline easements to Molokai Ranch and the MIS (responsibilities and rights of DHHL License Agreement No. 210 to DLNR for the MIS were transferred to the DOA by Act 306, Session Laws of Hawaii, 1987).

The project included the above-ground installation of an 8-inch butterfly control valve, two pressure-reducing valves (PRV) connected in series, and a 6-inch water meter at an existing blowoff valve of the MIS (see Figures 5 and 6). A schematic of the above-ground part of the pipeline connection is shown in Figure 3. The below-ground part of the project consisted of the installation of approximately 200 ft. of buried 8-inch ductile iron pipe to connect the surface appurtenances to Molokai Ranch's existing 8-inch pipeline (see Figure 7A). Figure 7B shows the shallow excavation that was possible because the chosen site was located at an existing MIS blowoff valve and where Molokai Ranch's 8-inch pipeline could be easily exposed, all within an existing roadway.

The MIS pipeline connection project involves merely connecting one existing water system (Molokai Ranch's old, existing water system into another existing water system (Molokai Irrigation System). There is no increase in diversion, no new sources tapped, no new diversions opened, and no new operations started because of this project. The same amount of water passes through the systems, the same size pipes remain, and both water systems continue to service the same areas.

Water can only flow in one direction—from the Molokai Ranch system into the MIS: (1) because the two pressure-reducing valves act as check valves and (2) because the hydraulic head in the Molokai Ranch system is much greater than that in the MIS. For example, on September 30, 1998, the pressure gage read 465 psi on the incoming side of the first PRV, 210 psi between the two PRV's and 20 psi on the outgoing side of the second PRV. The first PRV is pre-set to reduce the in-line pressure, while the second PRV is adjustable.

As a result of the pipeline connection, a metered amount of Molokai Ranch water will be added to the MIS and a like amount of water will be available for irrigating coffee crops on former irrigated pineapple lands located within the MIS service area. These

lands, owned by Molokai Ranch, will be leased for coffee growing and are located adjacent to or near existing coffee fields leased and operated by Coffees of Hawaii, Inc.

No new water sources will be developed as a result of the pipeline connection and none of Molokai Ranch's current water use in the western part of Molokai will be affected.

2.5 Purpose and Need for Action

The purpose of the project is to make possible the transfer of water to the existing Molokai Irrigation System (MIS) from the existing Molokai Ranch system, which water was originally used to irrigate pineapple lands operated and leased by Dole Pineapple Co. in the Hoolehua-Naiwa area. After Dole ceased operations, part of this pipeline system was unused and part of it was taken over by Maui County's Department of Water Supply. MR had planned to abandon this unused part of their water system due to maintenance liabilities, but the DOA, with assistance from the MIS Water Users Advisory Board, negotiated a water use agreement with Molokai Ranch (see Appendix A). The need for the MIS pipeline connection was threefold: (1) MIS's Waikolu Valley water is reserved by statute to the DHHL Hoolehua Homesteaders; (2) MR owns extensive fallow agricultural lands (within the MIS existing service area), which could be made productive by irrigation; and (3) with the demise of third party leases, MIS needed to explore other potential water sources and uses to offset the anticipated decline in revenues. Thus, water made available from Molokai Ranch's existing water system to the MIS would support the conversion of former pineapple land to additional irrigated coffee planting areas which are just emerging on MR leased lands, currently irrigated by the MIS. Basically, the addition of Molokai Ranch water to the MIS permits the irrigation of additional Molokai Ranch leased land for coffee planting within the existing MIS service area.

As a result of the MIS pipeline connection, the Molokai Ranch water system will inject its water into the MIS system under a controlled management agreement between the two entities (see Appendix A). The connection will be activated only when Molokai Ranch has an excess capacity in their storage facilities. The existing Molokai Ranch system diverts surface flows from mountain streams in leeward watersheds; and during storms, collects the resulting flows in its storage reservoirs. Such storms, due to their torrential nature, dump a tremendous amount of water in a short period of time causing increased flows in the system. This then translates into excessive flows which, for lack of storage, has been released along their system at appropriate pressure relief sites. Now the

MIS will benefit from having these excess flows stored in its Kualapuu Reservoir, which has a capacity of 1,400 million gallons. This reservoir has never been at full capacity and would essentially conserve water by relieving the Molokai Ranch system from its overcapacity problem.

SECTION 3. DESCRIPTION OF THE ENVIRONMENT

3.1 Project Location

The pipeline connection project is located in the central Hoolehua Plains of Molokai, about one and a half miles southeast of Kualapuu Town in the Molokai District of the County of Maui. The project is located within an MIS pipeline easement on a parcel of land owned by Hawaiian Home Lands and designated as tax map key (TMK) 5-2-10:1 (see Figure 2). As a result of the project, water from the Molokai Ranch system will be made available to the MIS to irrigate potential coffee-growing lands located in the vicinity of Kualapuu within the existing MIS service areas (see Figure 4).

3.2 Land Classification

The project is situated in an area designated for Agricultural use by the State Land Use Commission, and County of Maui Molokai Community Plan. The current county zoning is interim, which means that zoning for this parcel has not yet been designated by the county. Land uses permitted under interim zoning are determined by the State land use designation.

3.3 Environmental Setting, Impacts, and Mitigation Measures

The project site has been previously cleared, grubbed, disturbed by heavy cultivation for pineapple, and used as an access roadway to install and maintain the MIS

transmission pipeline since the early 1980's. No extensive or deep excavation was required.

A. Topography, Climate, and Rainfall

The project site is located on land that slopes gently south towards the ocean at an elevation of approximately 800 feet. Median annual rainfall at the project site is an estimated 25 inches, based upon Raingage No. 533.10 located in Field 308, a half mile northwest. Most of the rainfall occurs between the months of November and March (Department of Land and Natural Resources, Circular C88, 1982). Median annual rainfall in the existing and potential coffee growing areas of the MIS service area ranges from 20 to 30 inches, as shown in Figure 4. The summers are hot and dry in the project site and coffee growing area. Although arid, the central Molokai plains contain large tracts of fertile land. Mean monthly temperatures at the Kualapuu station range from a low of about 68° F in February to a high of about 76° F in August, for an annual mean of about 72° F. Tradewinds are persistent throughout the year.

Impacts and Mitigation Measures

This project did not result in any impacts to the climate or rainfall. Because the excavation required was shallow, very little, and temporary, no impacts to the topography resulted. No mitigation measures are proposed or are required.

B. Geology and Soils

The island was formed by three volcanoes. East Molokai is the largest and highest volcano; west Molokai is the oldest volcano; and the central plains lie between the east and west volcanoes. The third volcano formed the low-lying Kalaupapa Peninsula on the central northern coast of the island.

The lavas of the upper member of the East Molokai volcanic series, which form a thin cap over the East Molokai basaltic shield volcano and are predominantly oligoclase andesite, underlie the project site. In a few specimens, the feldspar is sodic andesine. Trachytes have been identified at only two localities, but at other of the viscous domes in the wet summit area, the rocks are too weathered for certain identification (Stearns and MacDonald, 1947).

The Molokai-Lahaina Association of soils occur in the vicinity of the project. In general, these upland soils are deep, nearly level to moderately steep, well-drained and have a moderately fine textured or fine textured subsoil. These soils developed from weathered basic igneous rock (Soil Conservation Service, 1972).

Impacts and Mitigation Measures

Excavation for the pipeline connection was kept shallow and to a minimum by prudent site selection. Standard erosion control measures were used during the brief, temporary construction activities. The land has been restored to its prior condition. No mitigation measures are proposed or required.

C. Water Resources

The pipeline connection project involves only surface water emanating from Molokai Ranch's existing reservoir located approximately five miles east of Kualapuu at an elevation of 2600+ feet. No new sources of water will be developed, no existing sources will be modified to increase flows, and no new operations will be started because of the project. Everything that was in place before the project will remain in place; nothing changes, i.e., the same amount of water will pass through the systems and both systems will continue to service the same areas.

There are no perennial streams in the vicinity of the project, only dry gulches. The pipeline connection and service areas related to the project are located within the Kualapuu and Manawainui Aquifer Systems in the Central Hydrologic Sector. The Manawainui Aquifer System consists of brackish basal ground water and has an estimated sustainable yield of 2 million gallons per day (mgd). The Kualapuu Aquifer System consists largely of potable basal ground water and has a sustainable yield of 5 mgd.

Impacts and Mitigation Measures

No surface or ground water resources will be impacted by the project, because no new surface or groundwater sources will be developed as a result of this project and because irrigation use of water from the two systems will continue within the existing MIS service area which overlies nonpotable brackish basal groundwater aquifers. All sources of the Molokai Ranch system have been registered with the Commission on Water Resource Management. Consequently, no mitigation measures are proposed or required.

D. Biological Resources

The project area is not considered a critical habitat for endangered plants or animals. Since the land has been used for cultivation of pineapple in the past, any vegetation found in the area are foreign and introduced. Much of the lands have been disturbed by pineapple operations over a 25-year period.

Impacts and Mitigation Measures

Because the project area is not known to contain any rare or threatened plants or animals, adverse impacts were minimal. Therefore, no mitigation measures are proposed or required.

E. Air Quality and Noise

The project site is located in an isolated area, relatively absent of urban noises and air pollution. Very little noise or air pollution was generated by the project construction activities which lasted for a brief period.

Impacts and Mitigation Measures

Short-term noise and air quality impacts occurred during construction. Noise impacts were minimal because no homes are located within the immediate vicinity. Construction work was minimal and occurred during regular daytime work hours. All operations were in conformance with the Department of Health's regulations regarding noise. Short-term air quality impacts were associated with dust from vehicle movement. No long-term impacts resulted from this project. No mitigation measures are proposed or required.

F. Cultural Resources

No known cultural resources or historic sites exist within the project site or its vicinity and no evidence of artifacts, historic sites, or burials were encountered during construction.

Impacts and Mitigation Measures

No impacts to cultural resources occurred because none exist within the project area. Consequently, no mitigation measures are proposed or required.

SECTION 4. RELATIONSHIP TO LAND USE DESIGNATIONS AND CONTROLS

4.1 Hawaii State Plan

The Hawaii State Plan (Chapter 226, HRS) provides a guide for the future of Hawaii by setting forth a broad range of goals, objectives, and policies to serve as guidelines for the growth and development of the State. The project is consistent with the objectives and policies of the Hawaii State Plan. The following objectives and policies of the Hawaii State Plan are relevant to the project:

Sec. 226-6: Objectives and policies for the economy -- in general.

- (a)(2) A steadily growing and diversified economic base that is not overly dependent on a few industries, and includes the development and expansion of industries on the neighbor islands.
- (b)(4) Expand existing markets and penetrate new markets for Hawaii's products and services.
- (b)(7) Foster greater cooperation and coordination between the government and private sectors in developing Hawaii's employment and economic growth opportunities.
- (b)(10) Stimulate the development and expansion of economic activities which will benefit areas with substantial or expected employment problems.

Sec. 226-7: Objectives and policies for the economy -- agriculture.

- (a)(2) Growth and development of diversified agriculture throughout the State.
- (b)(10) Assure the availability of agriculturally suitable lands with adequate water to accommodate present and future needs.

Sec. 226-10: Objective and policies for the economy -- potential growth activities.

- (b)(1) Facilitate investment and employment in economic activities that have the potential for growth such as diversified agriculture,

Section 226-16: Objective and policies for facility systems -- water.

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

4.2 State Land Use Designation

The property is designated within the State Agricultural District. The agricultural use that would be supported by this project is consistent with the objectives and policies of the State Land Use Law, Chapter 205, HRS.

4.3 County of Maui Land Use Designation

According to the County of Maui Community Plan, the parcel is designated Agriculture. The current zoning designation is Interim, which means that zoning for this parcel has not yet been designated by the county. Land uses permitted under interim zoning are determined by the State land use designation. The agricultural use that would be supported by this project is consistent with the current Community Plan designation and county zoning.

The Molokai Working Group has recommended that water planning and management should consider that agriculture will continue to be the economic and cultural "heart" of Molokai (Commission on Water Resource Management, 1993). The agricultural use that would be supported by this project is consistent with the recommendations of the Molokai Working Group.

SECTION 5. ALTERNATIVES TO THE ACTION

The no action alternative would leave extensive tracts of prime agricultural land without adequate irrigation water. The policies and objectives of the Hawaii State Plan related to the economy, employment, and agriculture would not be supported. The County of Maui Community Plan designation for the agricultural lands that would benefit from this project would not be supported.

No other alternatives to the project were considered.

SECTION 6. DETERMINATION/FINDINGS OF NO SIGNIFICANT IMPACT (FONSI)

6.1 Determination

In accordance with Chapter 343, Hawaii Revised Statutes, this Final Environmental Assessment has characterized the technical and environmental issues of the project, identified potential impacts and their significance, and included discussion and responses to comments received on the Draft Environmental Assessment. Based upon the findings of this Final Environmental Assessment, the Hawaii Department of Agriculture concludes that the after-the-fact pipeline connection project does not have the potential to generate any significant environmental impacts and, therefore, does not require the preparation of an environmental impact statement.

6.2 Findings and Reasons Supporting the FONSI Determination

The overall and cumulative effects of the project were evaluated with respect to Hawaii Administrative Rules (HAR) Title 11, Department of Health, Chapter 200, Environmental Impact Statement Rules, Section 11-200-12 "Significance Criteria." The following findings and conclusions can be made in support of the FONSI determination.

- (1) *The project will not involve an irrevocable commitment to loss or destruction of any natural or cultural resource.*

The project site is located in a disturbed area of former pineapple fields and an existing dirt road. There are no known structures of historic or cultural significance present in the project site, which has been disturbed further by wildfire. There are no known indirect or cumulative impacts on Molokai Ranch's existing water sources as no additional water will be developed, no new intake structures will be installed, and no ground or surface water will be transported from Molokai Ranch's existing water sources to other areas of Molokai, except to the areas already being served by the Molokai Irrigation System.

- (2) *The proposed action will not curtail the range of beneficial uses of the environment.*

The pipeline connection is unobtrusive and located in an isolated area previously disturbed by pineapple cultivation and an existing dirt road. The area has been further disturbed by wildfire.

- (3) *The proposed action will not conflict 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 project complies with the environmental policies, goals and guidelines expressed in Chapter 344, HRS.

- (4) *The proposed action will not have a substantial negative effect on the economic or social welfare of the community or state.*

The pipeline connection project will have a positive effect on the economy and welfare of the community and state. The project will result in the following direct economic impacts: (1) more lands will be planted with coffee, resulting in increases in employment, business activity, purchasing, and transportation to market; (2) former irrigated pineapple lands will once again be put into active agricultural use which will remove the threat of wildfires and reduce non-point source pollution potential with controlled land treatment measures applied in the cultivation of coffee fields; (3) increase in coffee crop production will create more opportunities for businesses which will result in expanded activity for Molokai's economy; and (4) expansion of coffee processing will inevitably lead to increase in related business activities, such as roasting, value-added products, visitor center/gift shop, tour of coffee operations, etc., which now exist on a small scale. Much of these economic impacts will generate additional tax revenues to both the State and counties.

- (5) *The proposed action will not have a substantial negative effect on public health.*

Construction of the project resulted in the temporary generation of noise and dust. However, these impacts subsided upon completion of construction and there has been no long-term effect on public health.

- (6) *The proposed action will not involve substantial secondary impacts, such as population changes or effects on public facilities.*

The project does not involve any substantial secondary impacts. The project simply consisted of the connection of two existing water systems—the Molokai Irrigation System and the Molokai Ranch system. The project is expected to have a positive effect on the economy, but not to the extent of resulting in any substantial population changes.

- (7) *The proposed action does not involve substantial degradation of environmental quality.*

The project, which consisted of making a connection between two existing water systems, was carefully located in an area that would have minimal impact on the environment, that is, in a disturbed area (by pineapple cultivation) where no land clearing or deep excavation were required. The connection was made at an existing blowoff valve of the MIS pipeline that was located near the existing Molokai Ranch pipeline.

- (8) *The proposed action will not have a considerable cumulative effect upon the environment or involve a commitment for larger actions.*

Construction of the pipeline connection between the MIS and Molokai Ranch water systems was completed as a part of the routine operations and maintenance work schedule of the MIS. There is no known considerable cumulative effect upon the environment or commitment for larger action resulting from the project. Existing water sources are not affected and no new water sources will be developed as a result of the project. The resulting use of irrigation water for new coffee fields will not have a considerable cumulative effect. The lands considered for new irrigated coffee fields were once used for irrigated pineapple cultivation and have been located within the existing service boundaries of the MIS since the last 1960's. The cessation of pineapple production on these agricultural lands left a huge void in Molokai's economy. Subsequently, coffee was experimentally determined to be the best potential agricultural crop for these lands and presently about 800 acres of coffee lands have been developed with irrigation water provided by the MIS. However, within the MIS service boundaries approximately 1,000 additional acres are potentially suited to coffee production, but cannot be utilized for lack of sufficient MIS irrigation water. As a result of the pipeline connection,

these former pineapple lands can now be converted over to coffee production. It is environmentally suitable to have these lands in coffee production by providing the region with greenery that enhances tourism's claim of a tropical island setting (see Figures 8 and 9). There are no further plans relating to this project.

- (9) *The proposed action will not substantially affect a rare, threatened, or endangered species or its habitat.*

There have been no endangered species or habitats identified within the project site or its immediate vicinity.

- (10) *The proposed action will not detrimentally affect air or water quality or ambient noise levels.*

Air quality and ambient noise levels may have been temporarily impacted during construction activities. However, these impacts terminated upon completion of construction. There are no long-term negative impacts.

- (11) *The proposed action will not affect, nor is it likely to suffer damage by being located in an environmentally sensitive area such as a flood plain, beach, erosion-prone area, geologically hazardous land, estuary, fresh water, or coastal water.*

The project is located in an area which is not subject to any of the above-mentioned environmentally sensitive issues.

- (12) *The proposed action will not substantially affect scenic vistas or viewplanes identified in county or state plans or studies.*

The pipeline connection is not located within any scenic vista or viewplane. The increase in coffee planting areas will positively affect the scenic vista of the region with more greenery backdrop.

- (13) *The proposed action will not require substantial energy consumption.*

The project involves gravity-flow surface water from one water system to another and, therefore, will essentially require no energy consumption.

SECTION 7. REFERENCES (listed in Chronological Order)

The Hawaii State Plan, Office of Planning, Department of Business, Economic Development and Tourism, State of Hawaii, 1996

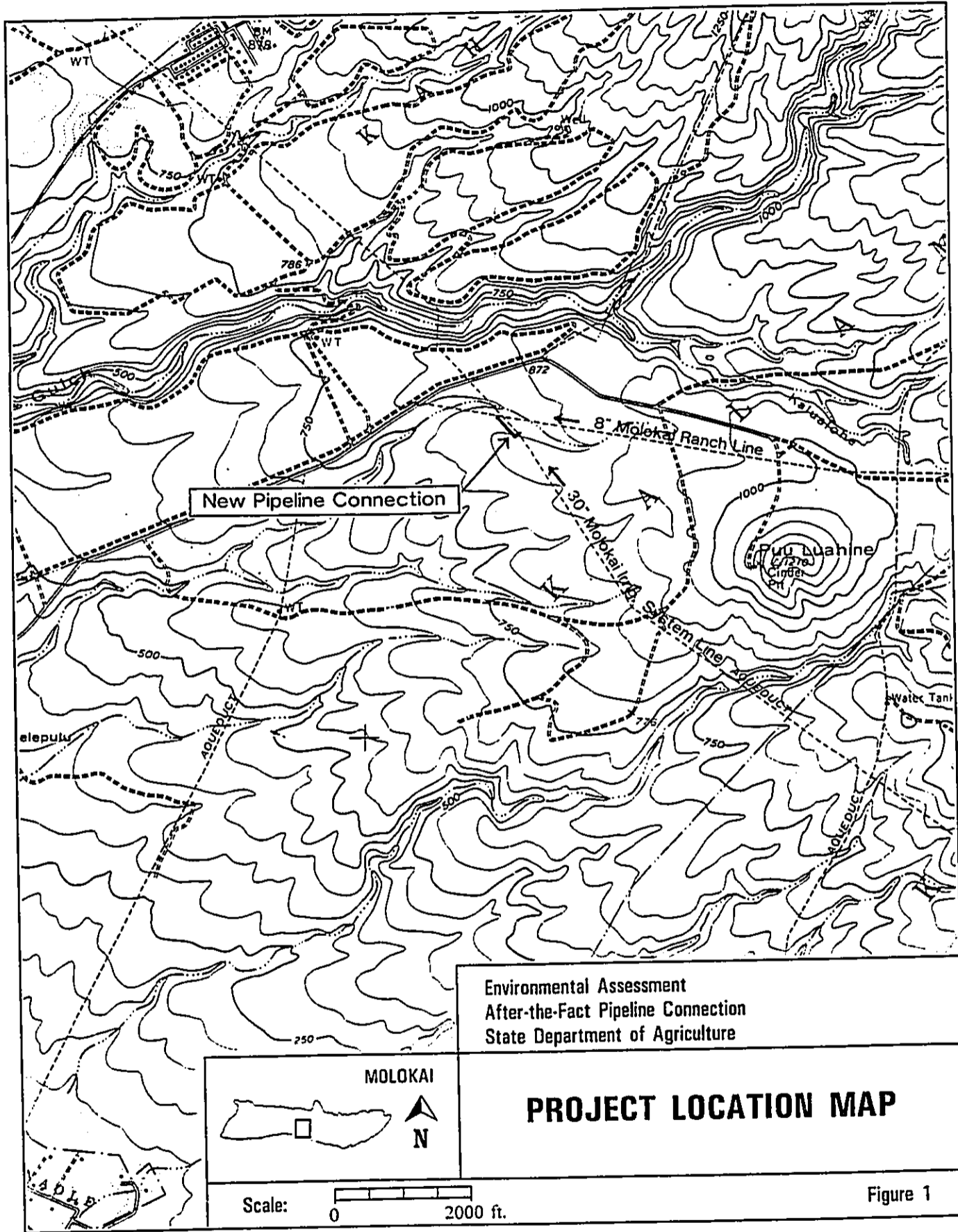
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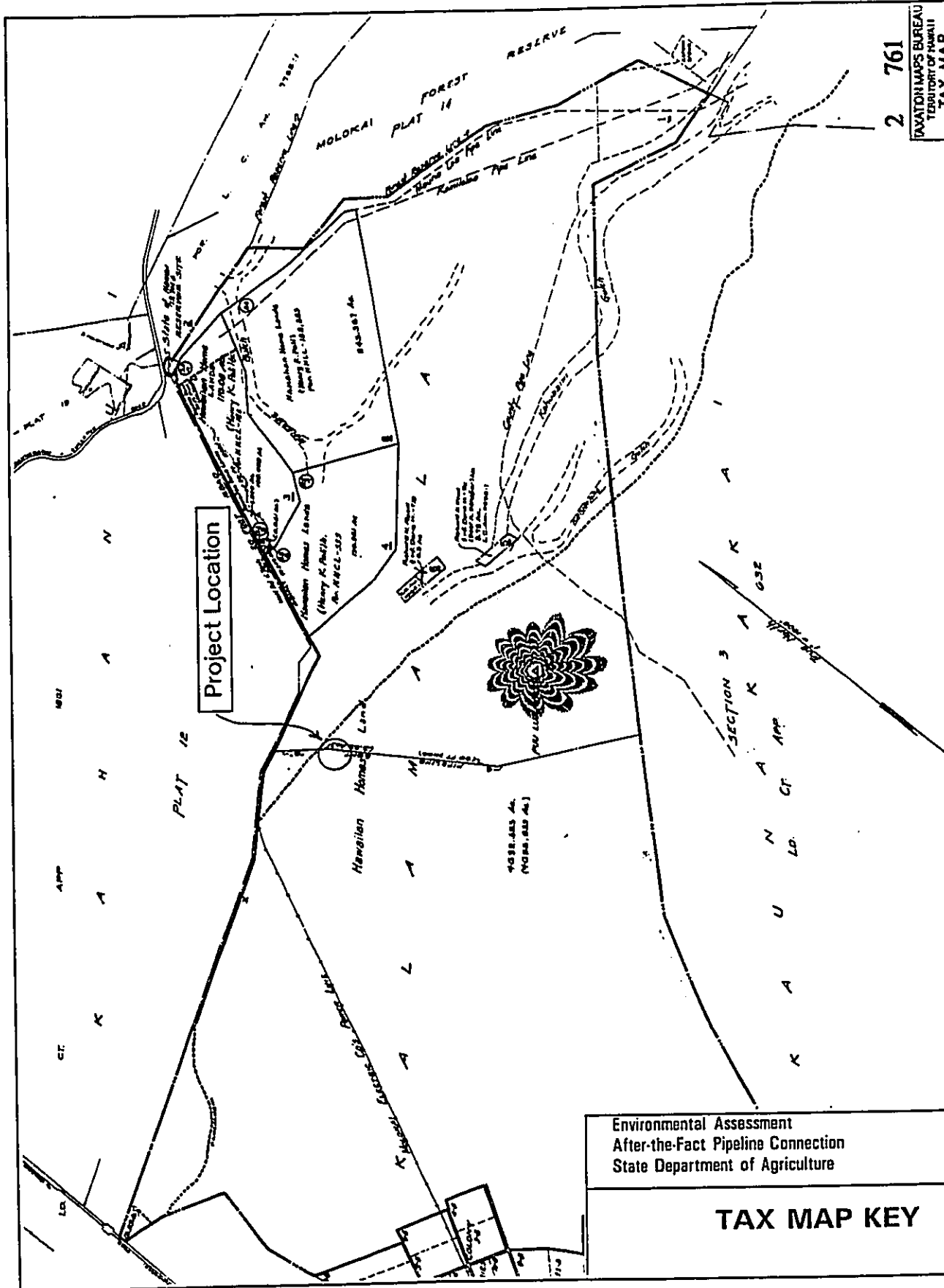
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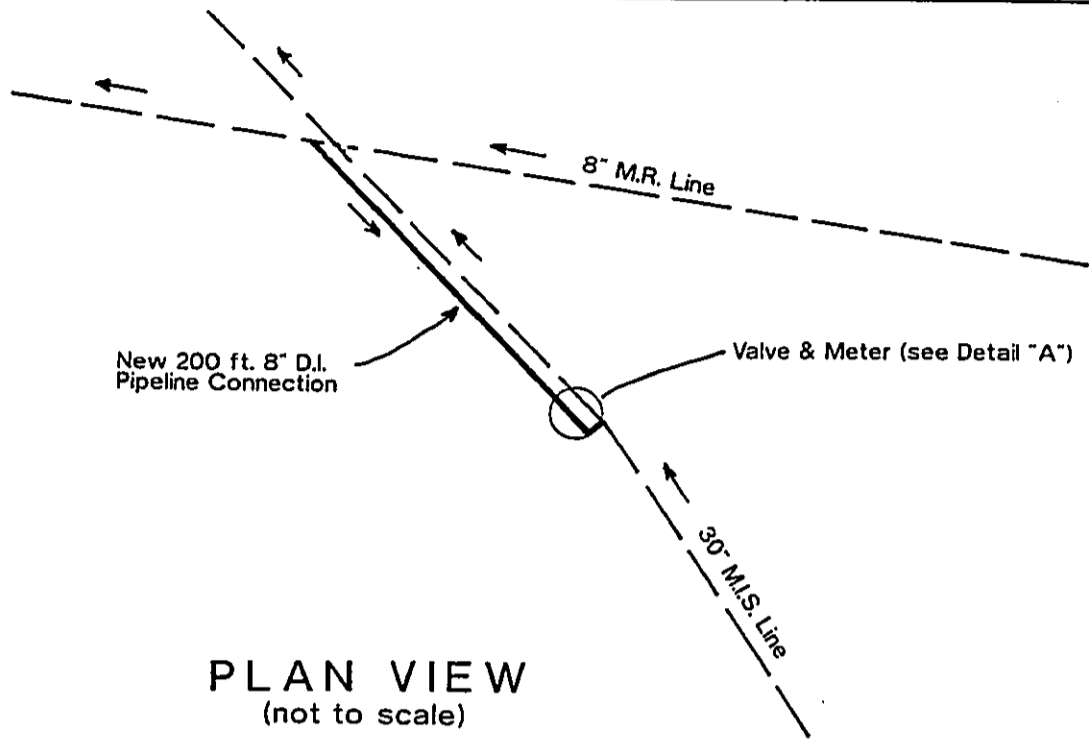
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SCALE: 1" = 1000' FT.

SUBJECT TO CHANGE.

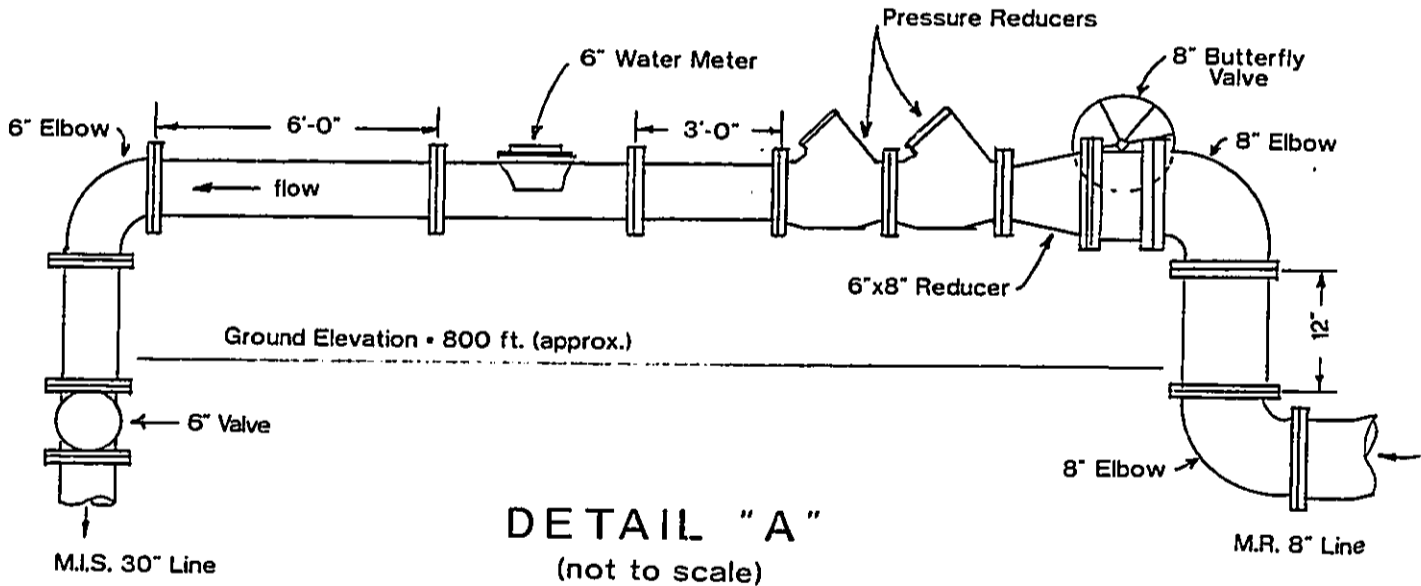
Environmental Assessment
 After-the-Fact Pipeline Connection
 State Department of Agriculture

TAX MAP KEY

Figure 2



PLAN VIEW
(not to scale)

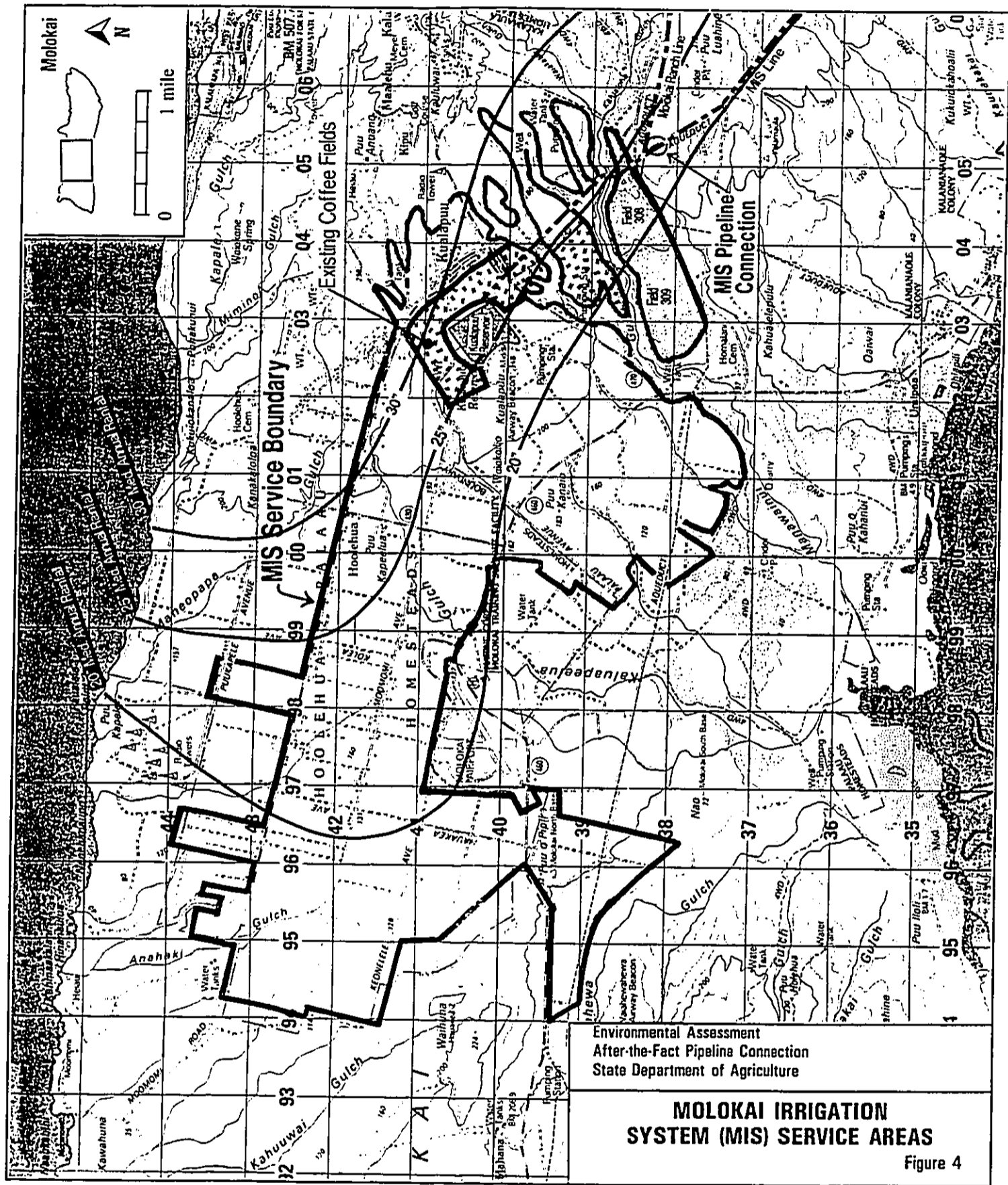


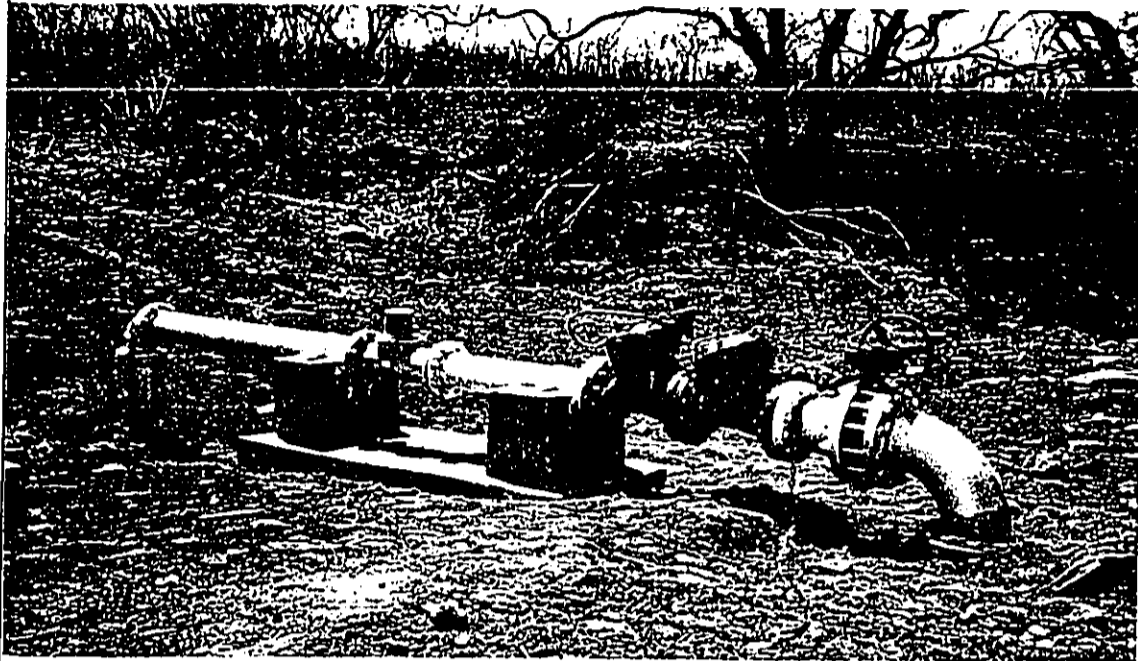
Environmental Assessment
After-the-Fact Pipeline Connection
State Department of Agriculture

PIPELINE CONNECTION

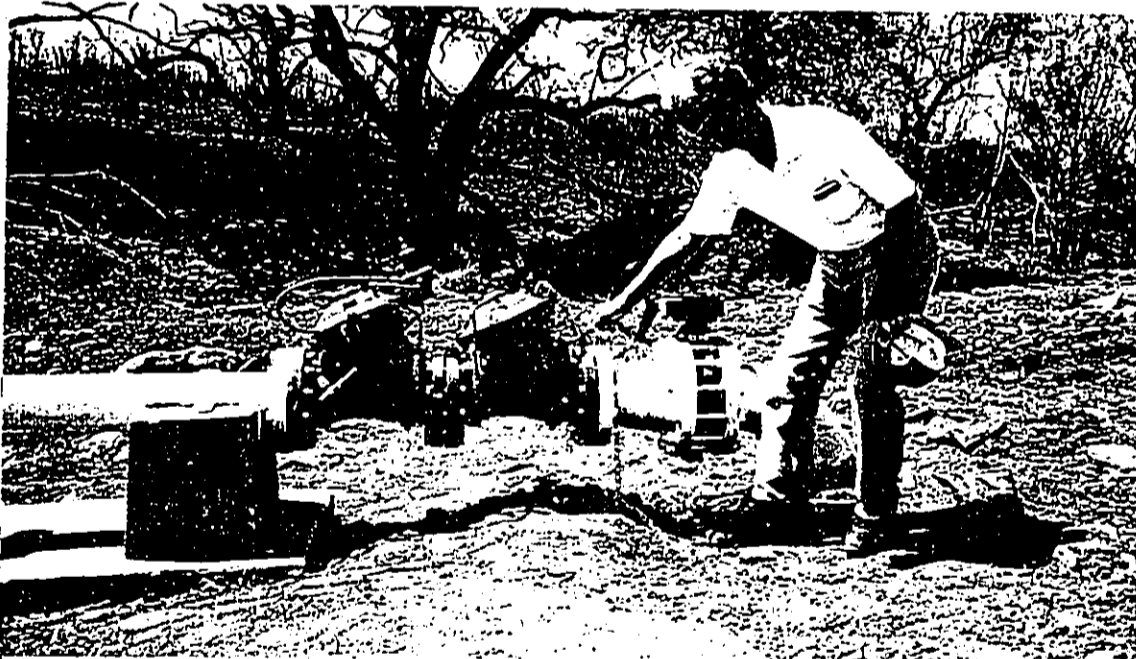
Figure 3

M.I.S. - Molokai Irrigation System
M.R. - Molokai Ranch





A. 8" Molokai Ranch line surfaces on right and connects to buried 30" MIS line on left, via a control valve, two pressure reducing valves, and a 6" water meter. Note area disturbed by wildfire.



B. Close-up view of the two pressure reducing valves. Note area disturbed by wildfire.

FIGURE 5. Molokai Irrigation System (MIS) Pipeline Connection



The above-ground butterfly valve, pressure-reducing valves, and water meter shown in Figure 5 were connected to an existing MIS blowoff valve. The existing pipe stub to which the MIS pipeline connection was made can be seen in the shallow trench.

FIGURE 6. Connection to Existing MIS Blowoff Valve



A. Molokai Ranch's Existing 8" Pipeline Exposed. This site for pipeline connection was selected to minimize impact to surroundings. Note shallow depth of excavation.

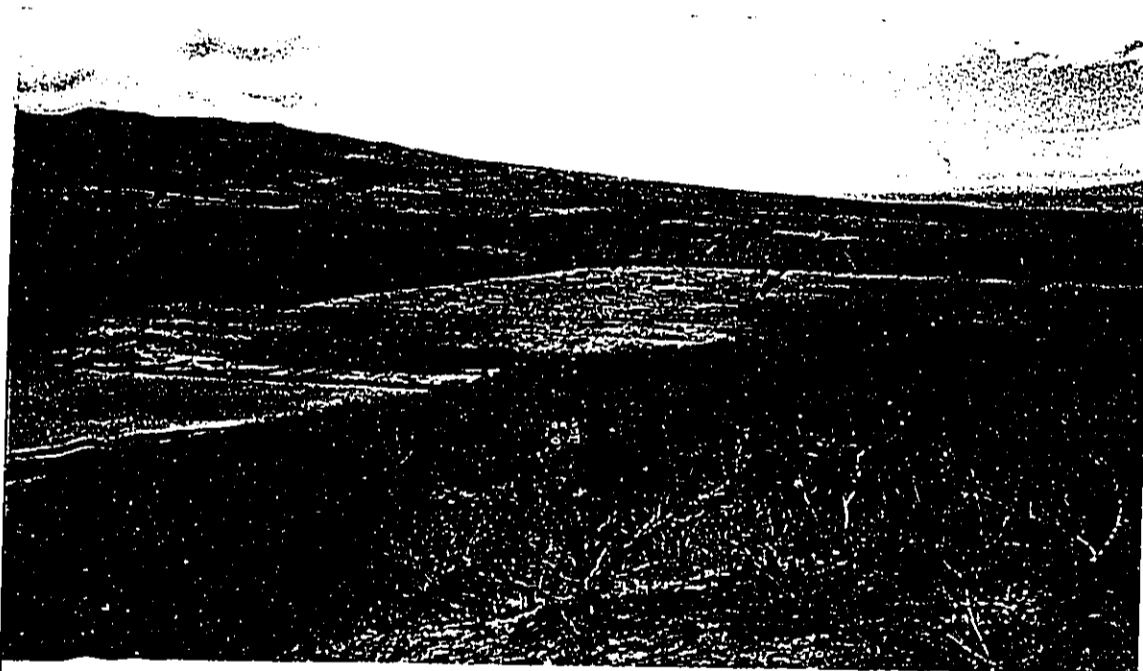


B. Photo showing shallow depth of excavation within existing dirt roadway to minimize impact to surroundings.

Figure 7. Excavation for Molokai Irrigation System Pipeline Connection



A. Close-up view of an existing coffee field near Kualapuu, Molokai.



B. Existing coffee fields and surrounding areas (arrows) suitable for future coffee plantings, on eastern side of Kualapuu Reservoir. Looking east from Kualapuu Hill.

FIGURE 8. Existing and Potential Coffee Planting Areas
Located Within MIS Service Area, Kualapuu, Molokai.

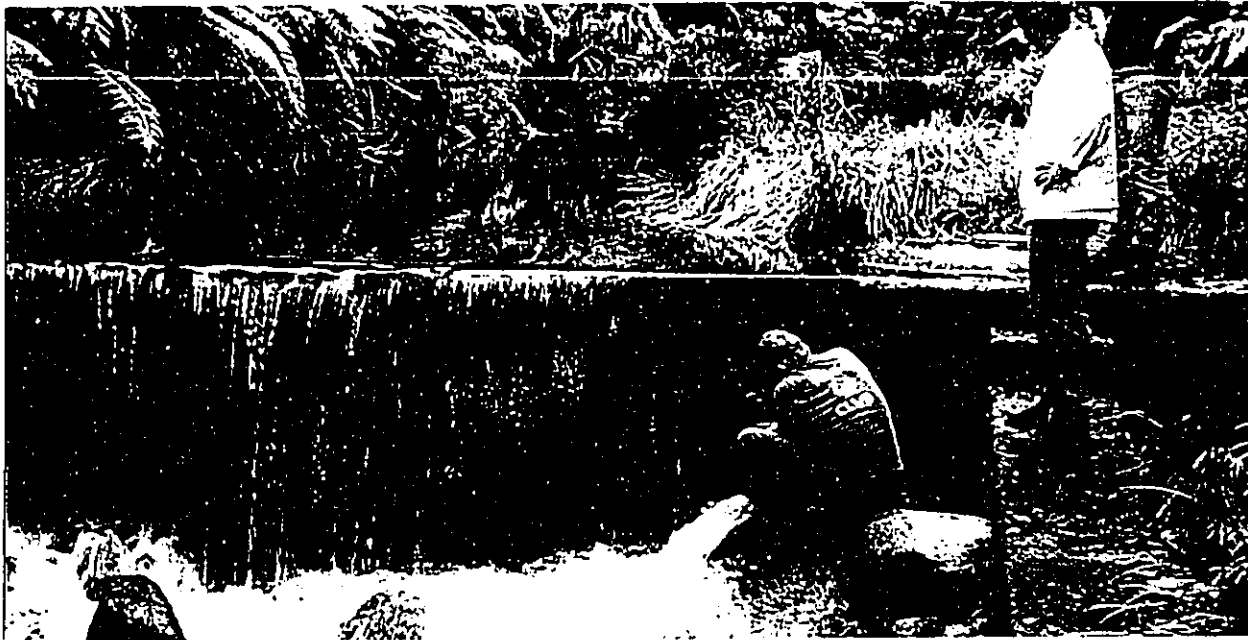


A. Arrows point to potential coffee planting areas on southern side of Kualapuu Hill. Kaunakakai in left background. Looking southeast from Kualapuu Hill.

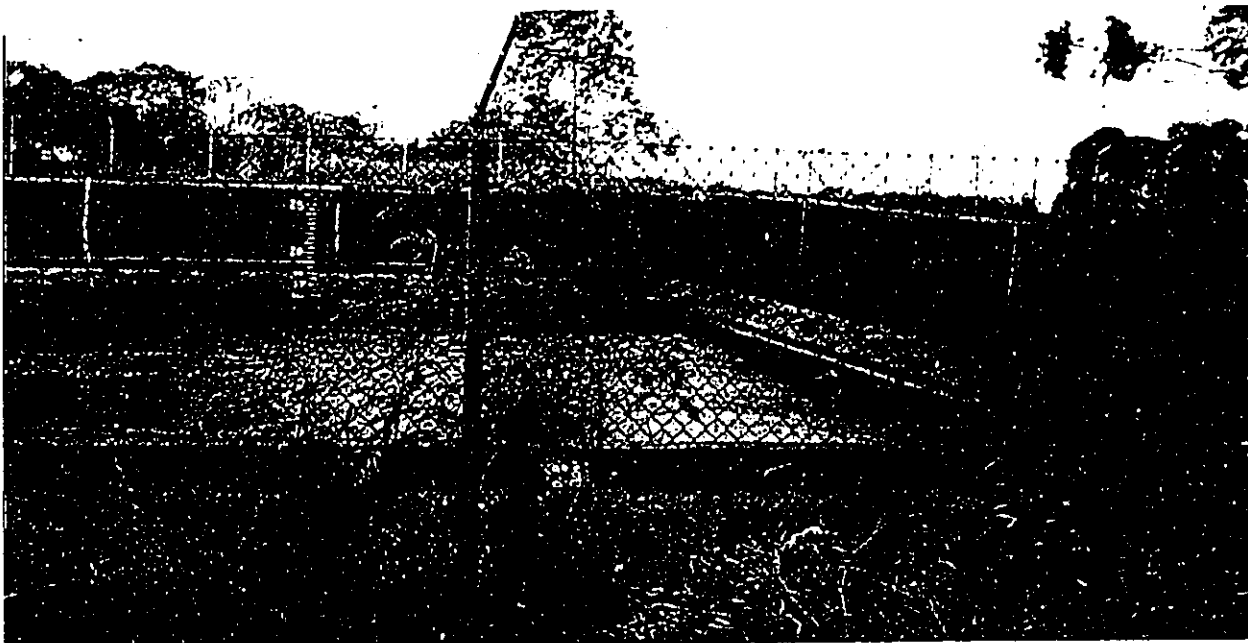


B. Arrow points to potential coffee planting area on western side of Kualapuu Hill. Looking northwest.

FIGURE 9. Potential Coffee Planting Areas located within MIS Service Area, Kualapuu, Molokai



A. Molokai Ranch's Kawela Intake. This is an existing surface water source which has not been altered in any way as a result of the Molokai Irrigation System pipeline connection.



B. Molokai Ranch's Existing Mountain Reservoir (elev. 2600+ ft.). This reservoir receives and stores gravity-flow water from the Kawela and other intakes. In effect, this reservoir serves as the source which determines the quantity of water to be released into the MIS pipeline.

FIGURE 10. Molokai Ranch's Existing Kawela Intake and Reservoir Related to the Molokai Irrigation System Pipeline Connection

APPENDIX A

Water Use Agreement Between MIS Water Users
Advisory Board and Molokai Ranch

IRRA:1628
DRAFT SENT TO ANNANDALE 11/10/94, 2nd draft on 12/14/94
Correction made 12/21/94 on Para. #4

AGREEMENT

THIS AGREEMENT, made and entered into this ____ day
of _____, 1994, between the Board of Agriculture on behalf
of the State of Hawaii, hereinafter called the "STATE", and the
Molokai Ranch, Limited, a Hawaii corporation, hereinafter
referred to as "RANCH", having its principal place of business
at Maunaloa, Molokai, and its mailing address as Post Office
Box 259, Maunaloa, Hawaii 96770.

W I T N E S S E T H :

WHEREAS, the STATE owns and operates on the island of
Molokai the Molokai Irrigation System to deliver irrigation
water for agricultural and other incidental uses; and

WHEREAS, the STATE has within its existing Molokai
Irrigation System facilities available space; and

WHEREAS, the RANCH presently owns and operates a surface
water catchment system and has water excess to current needs; and

WHEREAS, the RANCH desires to divert its surplus water to
beneficial use for the agricultural lands within the Molokai
Irrigation System's boundaries; and

WHEREAS, the STATE will charge for the water delivery as a
token management fee and will receive direct economic benefits
from such tolls; and the RANCH will enhance the

productivity of their lessees, all of which will expand employment opportunities at Hoolehua and assure the viability of the agricultural industry allowing for the expansion of the tax base of Molokai's economy.

NOW, THEREFORE, in consideration of the premises and covenants contained herein, the STATE and the RANCH agree as follows:

1. Definitions. As used herein, the following terms are construed to mean as defined below:
 - a. "State" means the State of Hawaii.
 - b. "Department" means the Department of Agriculture, State of Hawaii acting under the administrative direction of the Board.
 - c. "Board" means the Board of Agriculture, State of Hawaii, the governing body of the Department of Agriculture.
 - d. "Chairperson" means the person holding the office of the Chairperson of the Department of Agriculture acting directly or through his or her authorized representatives.
 - e. "Administrator-Chief Engineer" means the person holding the office of Administrator and Chief Engineer of the Division of Agricultural Resource Management, Department of Agriculture.
 - f. "Ranch" or "MRL" means the Molokai Ranch, Limited, a Hawaii Corporation.

- g. "Manager" means the person holding the position of Operations Director of the Molokai Ranch, Limited.
- h. "Molokai Irrigation System" or "MIS" means the wells, intake structures, tunnel, reservoirs, pipelines, valves, pumps, controls, and other appurtenant works comprising the facilities operated by the Department to deliver irrigation water within the project boundaries on land situated on the island of Molokai.
- i. "Ranch Water System" means stream intakes, tunnels, ditches, conveyance flumes, pipelines, valves, reservoirs, controls and other appurtenant works comprising the facilities operated by the Molokai Ranch, Limited, on lands situated on the island of Molokai.
- j. "Service Connection" means the pipeline tap, including all fittings, meters, and valves, from the Ranch water source to the Molokai Irrigation System transmission/distribution pipeline. A service connection may be either an "injection" or a "withdrawal" connection.

2. The MRL for and in consideration of a service connection into the MIS and of the terms, covenants, and conditions on the part of MRL to be kept, observed and performed does hereby permit the MIS the use of such injected water to provide water within its project boundaries.

3. The MIS for and in consideration of the injected quantity of water by the MRL and of the terms, covenants, and conditions of the part of MIS to be kept, observed and performed does hereby allow the non-exclusive right and privilege of such injected water for MRL's lessees within the boundaries of the MIS at the water delivery charge of sixteen cents per thousand gallons or at current prevailing rate during the term of this agreement. There will be no acreage assessment charged for the use of this water. There will be no charge assessed to MRL for injected water used within the MIS boundary by MRL lessees, but should future agreements concerning the western terminus be consummated, then charges for water withdrawn will negotiated at that time.

4. The MRL may with the concurrence of the STATE and the BOARD reopen this agreement for a service connection at the western terminus of the MIS boundary for withdrawal of the injected quantity of water pursuant to the terms, covenants, and conditions of the part of MRL to be kept, observed and performed for agricultural and agriculture-related uses except golf course and resort related irrigation uses. MRL shall develop short-term water use agreements with its lessees using this water, which will allow MRL to meet the terms of this agreement and shall not circumvent the purposes and objectives of the MIS in providing irrigation water. It shall be MRL responsibility to determine the allocation of this water to its lessees.

5. This agreement shall be subject to all applicable provisions of the rules, regulations, statutes, and any amendments thereto of the MIS, Department, Board or STATE, governing irrigation water service to consumers of the MIS which are now in force and which may hereinafter become in force.

6. Service connections. The injection service connection shall be made at the point of intersection between the MIS transmission pipeline and the MRL pipeline. The STATE agrees to allow the withdrawal service connection to be made at mutually agreeable locations convenient to MRL or its lessees, at current or newly uniquely designated locations within the boundary of the MIS, but the amount of water shall be limited to the quantity of injected water. All service connections shall be installed at the expense of MRL or its lessees in accordance with plans approved by the Administrator-Chief Engineer and will thereafter become the property of, and will be maintained by the MIS. Such service connections shall measure only the injected water and shall be separate from the MIS service connection.

7. Maximum withdrawal flow rate. It is agreed that the total quantity of water that can be withdrawn shall be limited to average annual inflow, less ten (10) per cent attributable to water system losses as provided for in section 12. There shall be no allowances for water banking of unused inflows, except during the interim period when this agreement is in process of being developed, such accumulated amount shall be distributed on a mutually agreed to method.

8. Unavoidable interruption of service. The MIS agrees to exercise reasonable diligence and care to maintain delivery of water to the point of withdrawal and to avoid interruptions in service whenever possible, but the State will not be held liable for any such occurrences, shortage or any loss or damage occasioned thereby. The MRL agrees to exercise reasonable diligence and care to maintain delivery of water to the point of injection and to avoid interruptions whenever possible, but in the event there is a stoppage of inflow, no withdrawal will be allowed by the MIS for the duration of the stoppage.

9. Temporary interruption of service. The MIS reserves the right to temporarily shut off the water from the pipelines with reasonable notice for the purpose of making repairs and alterations, or for other appropriate purposes.

10. Drought. In the event of drought caused by insufficient rainfall or for any other emergency conditions, the MIS reserves the right to set priorities and otherwise control the allocation of water; except for the MRL injected water which shall be allocated by MRL.

11. Limitation of use. The MIS reserves the right to limit the right and privilege to the use of the MIS facilities when the Department determines that the capacity has been reached, upon giving MRL one year prior written notice thereof. The MIS also reserves the right to limit the use of the injected water for only agricultural or agriculture-related activities, except golf course and resort related irrigation uses.

12. Compensation for system losses. To compensate for water system losses which include but may not be limited to evaporation from reservoir surface, undetected leaks, overflow or blowoff for preventive maintenance, etc., the MRL agrees that for purposes of determining the amount of water MRL may withdraw from the MIS facility, to reduce the quantity of injected water by ten (10) per cent on a daily basis from the daily recorded totals.

13. Quality control. The MIS will determine the location, size, and type of all meters and valves to be installed. The cost for purchasing and installing such service connection shall be borne by MRL, which is to be considered as part of the service connection by definition. MRL further agrees to install appropriate devices and/or adopt procedures, subject to Department approval, to monitor physical, chemical, and biological constituents of the injected water when required by the STATE. The Department reserves the right to limit or control any chemical, physical, or biological constituent of the injected water should it be found that an excessive concentration of such constituent is in violation of applicable health and safety rules and regulations.

14. Agreements with others. The STATE reserves the right to negotiate and enter into agreements, joint ventures, or memoranda of understanding with other federal, state, or county agencies or private parties without limitation, provided that

the same shall be subject to the terms hereas to the extent affecting or relating to the MIS.

15. Indemnity. MRL shall indemnify, defend, and hold harmless the STATE, its officers, employees and agents from and against (1) any and all claims and demands for loss, personal injury, and/or liabilities, property damages and/or deaths arising or resulting from any act or omission of MRL in the exercise of its rights and privileges conveyed by this agreement; (2) all actions, suits and claims for damages brought about or made by reason of non-observance or non-performance by MRL of any of the terms, covenants and conditions herein, or the rules, regulations, ordinances and laws of the federal, state, or county governments on its part to be observed or performed; and (3) all costs and expenses in connection with the defense of any of the aforementioned claims or demands unless caused, whole or in part, by the negligence or wilful misconduct of the MIS.

16. Liability Insurance. MRL shall procure at its own expense, and maintain during the entire period of this agreement, with an insurance company acceptable to the Department, a policy or policies of comprehensive public liability insurance, in an amount of three million dollars (\$3,000,000.00) insuring MRL and the STATE against all claims for personal injury, death and property damage. A certificate of insurance which names the STATE as additional insured shall be furnished and upon each renewal of such policy shall be furnished to replace the previous certificate. Further, the

policy shall contain or be accompanied by an assurance of the insurer to notify the Department of any intention to cancel any such policy prior to actual cancellation. Procurement of this policy shall not release or relieve MRL of its responsibility under this agreement as set forth herein or limit the amount of its liability under this agreement.

17. Western terminus service connection. MRL reserves the option to reopen this agreement with the consent of the MIS to install the withdrawal service connection as allowed in section 4. The terms, charges, and conditions shall be negotiated at the time of reopening and the use of the water withdrawn shall be restricted to agricultural and/or agriculture-related activities, except for golf course or resort related irrigation uses.

18. Assignment. MRL shall not transfer or assign this agreement or any right, privilege and obligation arising thereunder without prior written approval of the Board, except as provided herein; provided further that the specific terms and conditions of any such assignments shall be subject to the approval of the Board.

19. Upon the breach of any of the terms and conditions herein by MRL, the STATE reserves the right to cancel this agreement upon sixty (60) days written notice to MRL.

20. TO HAVE AND TO HOLD said right and privilege unto MRL for the term of ten (10) years, commencing on the ____ day of _____, 1994, up to and including the ____ day of _____, 2005, except that with mutual consent of both parties, this agreement may be reopened to extend for another period to be determined by negeotiation and shall commence six months preceding the termination date. Such reopening may include the new terms, conditions, and covenants from this agreement.

IN WITNESS WHEREOF, the parties hereto have caused this agreement to be executed upon the day, month and year first above written.

STATE OF HAWAII
BOARD OF AGRICULTURE

MOLOKAI RANCH, LIMITED

By _____
Its Chairperson -

By _____
Its President

APPROVED AS TO FORM:

Deputy Attorney General

Date: _____

APPENDIX B

Comments and Responses to the
Draft Environmental Assessment

NEHAJANON J. CAYETANO
GOVERNOR
STATE OF HAWAII



STATE OF H.
DEPARTMENT OF HAWAIIAN HOME LANDS
P. O. BOX 1879
HONOLULU, HAWAII 96805

Post-Net Fax Nrtn	7871	DATE	8/24/98	# OF PAGES	3
To	Ken Lum	From	Paul Matsuo		
Co-Op/Dept.	Water Resource Associate	EA	DLA-ARM/D		
Phone #		Phone #	973 9475		
Fax #	528-0808	Fax #	973-9467		

August 24, 1998

To: James J. Nakatani, Chair
Board of Agriculture

From: Kali Watson, Chairman *KW*
Hawaiian Homes Commission

Subject: Draft Environmental Assessment
Molokai Irrigation System
After-The-Fact Pipeline Connection

Thank you for the opportunity to provide comments on the subject draft environmental assessment (EA). The project consisted of installing approximately 200 feet of pipeline to connect Molokai Ranch's (MR) existing 8-inch pipeline to the Molokai Irrigation System's (MIS) existing 30-inch pipeline near Puu-Luahine.

The Department of Hawaiian Home Lands (DHHL) has concerns regarding the after-the-fact pipeline connection from the MR pipeline to the MIS. DHHL is the landowner of the project site located at TMK 5-2-10:01. According to our records, the Department of Land and Natural Resources (DLNR) has an easement with DHHL, License Agreement No. 210, for the "construction, maintenance, operation and removal of the licensee's appurtenances over, across and under the Easement area." The licensee under this easement is the DLNR. DHHL was not notified that a new pipeline was added within the easement area covered under this license agreement. The license does not grant the authority to the DOA to add a new pipeline within the easement area. The DOA and/or DLNR did not seek to amend the terms of the easement. Under what authority did the DOA act to construct a new pipeline across DHHL lands?

James J. Nakatani, Chair
August 24, 1998
Page 3

More information is needed on the ability of the MIS to supply water to the new MR coffee plantation. While the additional water sources may be registered to MR as an existing use, the EA should provide more information regarding the seasonal flow from the new sources, their contribution to the MIS reservoir, and the location where MR intends to withdraw the MIS water to irrigate their coffee plantation.

The MIS's water source in Waikolu Valley is reserved by statute to the DHHL. Hawaii Revised Statutes §168-4 provides in pertinent part:

[T]he Hawaiian homes commission and lessees of the Hawaiian homes commission shall at all times, upon actual need therefore being shown to the board of agriculture, have a prior right to two-thirds of the water developed for the Molokai irrigation and water utilization project by the tunnel development extending to Waikolu valley and groundwater developed west of Waikolu valley. (emphasis added).

The draft EA states on page 4 that Molokai Ranch lands, now fallow, could benefit from this surplus water. Does this "surplus water" refer to the Waikolu Valley water not reserved to the Hawaiian Homes Commission? A discussion of the amount of water needed for the coffee plantation and other users of the MIS would be helpful in the EA analysis.

More information is needed regarding the engineering drawings of the new connection between the MIS and the MR line. DHHL would like clarity regarding:

1. The elevation difference between the MR inlet and entry into the MIS.
2. The pressure differential, seasonal if needed, between the MR line and the MIS.
3. The apparent lack of a check valve to keep reverse flow from occurring (from the MIS to the MR system).
4. The need for pressure reducers on a gravity flow system. Why are there two pressure reducers going from an 8-inch to a 30-inch pipeline?
5. In general, water meters are calibrated to read in one direction only. DHHL would like assurance that the meter is calibrated correctly to read flow from the MR

James J. Nakatani, Chair
August 24, 1998
Page 3

line to the MIS, and that reverse flow is not occurring. If pressure reducers are needed, their proximity to the meter may cause turbulence and false readings.

6. DHHL would like assurance that Waikolu Valley water, reserved to the Hawaiian Homes Commission, is not being captured above the MIS reservoir and flowing into the MR system.

If you have any questions please call me at 586-3801 or have your staff call Rebecca Alakai of our Planning Office at 587-6423.

BENJAMIN J. CAYETANO
Governor



State of Hawaii
DEPARTMENT OF AGRICULTURE
1428 South King Street
Honolulu, Hawaii 96814-2512

COPY

JAMES J. NAKATANI
Chairperson, Board of Agriculture

LETITIA N. UYEHARA
Deputy to the Chairperson

Mailing Address:
P.O. Box 22159
Honolulu, Hawaii 96823-2159

Fax: (808) 973-9613

November 27, 1998

Mr. Kali Watson
Chairman
Hawaiian Homes Commission
P.O. Box 1789
Honolulu, Hawaii 96805

(106)

Dear Mr. Watson:

**Draft Environmental Assessment
Department of Agriculture's Molokai Irrigation System (MIS)
After-the-Fact Pipeline Connection, Kualapuu, Molokai (TMK 5-2-10:1)**

Thank you for reviewing and submitting comments on the Draft Environmental Assessment for the Molokai Irrigation System After-the-Fact Pipeline Connection.

We provide the following response to your concerns:

1. *DHHL was not notified under License Agreement No. 210 with the Department of Land and Natural Resources (DLNR), which agreement does not grant authority to the Department of Agriculture (DOA) to construct a new pipeline across DHHL lands.*

Act 306, Session Laws of Hawaii, 1987, was enacted to provide that the State Water Code functions be placed in the DLNR and that the "water purveyor" functions of the DLNR be transferred to the DOA. Under Section 20 of Act 306, the Legislature mandated "All rights, powers, functions, and duties of the Board of Land and Natural Resources (BLNR) relating to the Molokai Irrigation System, the Waimanalo Irrigation System, and the Lalamilo Irrigation System are transferred to the Board of Agriculture (BOA)." Thus under Act 306, the provisions of the Department of Hawaiian Homes Lands' (DHHL) License Agreement No. 210 with the DLNR were transferred to the DOA.

Further, under Section 21 of Act 306, the Legislature mandated "All



appropriations, assets...contracts...and all water facilities, including real property together with all improvements to the same, heretofore made, constructed, used, acquired, or held by the BLNR relating to the functions transferred to the BOA shall be transferred with the functions to which they relate." Thus, Act 306 clearly indicates that the project work was within the authority of the DOA. In addition, License Agreement No. 210 allows construction within the easement without any further notification or approvals as long as it is for the intended purpose of the license.

2. *More information is needed on the ability of the MIS to supply water to the growing of new coffee fields on Molokai Ranch (MR) lands and the location where MR intends to withdraw MIS water to irrigate new coffee fields.*

MIS water to irrigate new coffee fields will be withdrawn from the existing metered connection of the existing coffee plantation (Coffees of Hawaii, Inc.). The agreement between the MIS Advisory Board and Molokai Ranch merely allows the coffee plantation an increase in water use equivalent to the amount of water added to the MIS supply by the new pipeline connection. It is estimated that the amount of water supplied to the MIS will average approximately 250,000 gallons per day. A copy of the agreement will be included in the appendix of the Final EA.

3. We acknowledge that under Section 168-4 of the Hawaii Revised Statutes, the Hawaiian Homes Commission and lessees of the Hawaiian Homes Commission shall at all times, upon actual need therefore being shown to the Board of Agriculture, have a prior right to two-thirds of the water developed for the Molokai Irrigation and Water Utilization Project by the tunnel development extending to Waikolu Valley and ground water developed west of Waikolu Valley.

Our MIS records indicate that the MIS boundary encompasses 9,000 acres of DHHL lands, but only 2,500 acres of which are being actively cultivated. Furthermore, the water from Molokai Ranch consists of diversions of streams which have no connection to Waikolu Valley water or ground water developed west of Waikolu Valley.

4. *Does the "surplus water" mentioned on page 4 of the Draft EA refer to Waikolu Valley water not reserved to the Hawaiian Homes Commission.*

The "surplus water" referred to on page 4 of the Draft EA does not refer to Waikolu Valley water not reserved to the Hawaiian Homes Commission.

The Final Environmental Assessment will clarify the term, "surplus water"

mentioned on page 4 of the Draft Environmental Assessment to be the amount of Molokai Ranch surface water that is added to the MIS, as a result of the MIS pipeline connection.

5. *More information is needed regarding the engineering drawings of the new connection between the MIS and MR line.*

The new connection between the MIS and MR lines is shown schematically in Figure 3 and photographically in Figure 5 of the Final EA. The pipeline connection is located approximately 3/4 mile northwest of Puu Luahine at an elevation of roughly 800 feet. In order that the project remain within the MIS easement and connect to the nearest existing valved outlet of the 30" MIS line, approximately 200 ft. of new buried 8" pipeline was installed (see Plan View, Figure 3 of the Draft and Final EA). Near the existing MIS manhole, the 8" MR line surfaces to make a controllable, uni-directional metered connection with the MIS 30" line.

Fed by a 16 million gallon (MG) reservoir located approximately two miles east of the project at an elevation of 1844 feet, the 8-inch MR line is under high pressure (465 psi) at the inlet to two pressure-reducing (PR) valves (see figure 5B of the Final EA). The first PR valve reduces the pressure approximately 45%, or to 210 psi, and the second PR valve is needed to reduce the pressure further to approximately 20 psi before allowing water to enter the low-pressure MIS line. The above-mentioned pressures were read on September 30, 1998 from three pressure gauges installed on the PR valves. Because of the extreme pressure differential between the MR and MIS lines and because the PR valves are capable of acting as check valves, at no time is it possible for MIS water to backflow into MR's line.

Past the second PR valve, a 6-inch Water Specialty water meter is installed according to water works standards for accurate and reliable measurement of the amount of MR water that is added to the MIS. Appurtenant fittings reduce the 8-inch MR line to allow connection to the existing 6-inch valved outlet of the 30-inch MIS line. This model meter operates with a propeller driven indicator only in one direction; hence, the meter will malfunction if there is a reverse in the flow through the meter.

We assure you that at no time will the MIS Waikolu Valley water reserved to the Hawaiian Homes Commission flow into the MR system, as a result of the pipeline connection.

Mr. Kali Watson

-4-

November 27, 1998

Again, thank you for your review and comments. If you have any questions, please contact me at 973-9551 or have your staff contact Paul Matsuo, Administrator-Chief Engineer of the Agricultural Resource Management Division, at 973-9475.

Sincerely,



JAMES J. NAKATANI
Chairperson, Board of Agriculture



University of Hawai'i at Mānoa

Environmental Center
A Unit of Water Resources Research Center
Crawford 317 • 2550 Campus Road • Honolulu, Hawai'i 96822
Telephone: (808) 956-7361 • Facsimile: (808) 956-3980

September 8, 1998
FA:00181

Mr. Daniel Lum
Water Resources Associates
1188 Bishop Street, Suite 607
Honolulu, Hawaii 96813

Dear Mr. Lum:

Draft Environmental Assessment
Molokai Irrigation System After-The-Fact Pipeline Connection
Kualapu'u, Molokai

Approximately 200 lineal feet of 8-inch pipeline were installed to connect Molokai Ranch's existing 8 inch pipeline to the Molokai Irrigation System 30 inch pipeline near Pu'u Luabine. The new pipeline connection included new control valves, a water meter, and pipe reducers and fittings that allowed a change in direction of flow. The purpose of the new pipeline connection was to supply irrigation water from Molokai Ranch's existing system into the existing Molokai Irrigation System.

Molokai Ranch has extensive agricultural-zone lands within the MIS boundary and these lands are now available for new farming operation startups. The water would support further development of land converted to support the emerging coffee industry on Molokai Ranch's lands.

In 1996, the State Department of Agriculture (DOA) requested the Office of Environmental Quality Control (OEQC) to review work performed on the Molokai Irrigation system under an exemption rule list that had been approved on October 25, 1995, by the Environmental Council. However, the request for exemption was subsequently denied by the OEQC with the recommendation that an Environmental Assessment be made.

We reviewed this draft Environmental Assessment with the assistance of Jon Matsuoka, Social Sciences; Dave Penn, Geography; and Victoria Cullins of the Environmental Center.

Project Description

The document reports that the DOA requested a review of the completed project. One month later the OEQC responded that an EA must be prepared. Two years later the EA was submitted. Why was the time between EA request and submittal so extended, and did operations continue in the meantime?

An Equal Opportunity/Affirmative Action Institution

Mr. Daniel Lum
September 8, 1998
Page 2

The diverted surface water and high-level dike confined ground water from the Waikolu valley are transported to a 1.4 billion gallon reservoir at Kualapu'u. From Kualapu'u, the water is distributed to Hawaiian Homelands in Hoolehua. This water is reserved by the Hawaiian Homes Commission Act and the State Water Code to give first priority to "existing and foreseeable uses" of Hawaiian Homesteaders. Already, new homesteads are being built, and the water needs of additional homesteaders must be taken into consideration. Please describe in detail the relationship of the after-the-fact pipeline to these statutes, quantifying the amount of water from the Kualapu'u reservoir that is being used on Molokai Ranch lands.

Maps should be included showing the locations of all Molokai Ranch water sources. Is the water source originally used to service Dole Pineapple operations (page 4) the same source cited on page 3, under Molokai Ranch Mountain System? If not, what is the source of water for this pipeline?

The document needs to disclose the water use terms and agreements between the MIS Water Advisory Board and the Molokai Ranch, especially concerning water usage and limits. How many members of the MIS Water Advisory Board represent Molokai Ranch, and how many represent the Homesteaders? Page 4, also contains this statement, "This surplus water would support further development of land . . . to support the new coffee industry just emerging on MR's Lands." On an island designated a critical water resource management area, how is further development of commercial agriculture balanced against "existing and foreseeable uses" of Hawaiian Homesteaders?

Project Location

The physical location of the project is given on page 4. However, it is unclear how large an area will be affected by the project. If water is to be brought to arid areas of Molokai and used for agricultural purposes, how will this affect recharge? Are major water resources present on this part of the island to be recharged? What are the effects on the island and stream biota from diversions of mountain streams?

Permits

The draft EA fails to discuss obtained permits in sufficient detail. The document should specify what permits have been issued, the dates they were received, and the permits that are pending.

Environmental Setting

In general, the draft EA fails to discuss impacts outside of the immediate range of project. The governing administrative rules (Title 11, Chapter 200, HAR) state that secondary and tertiary

Mr. Daniel Lum
September 8, 1998
Page 3

impacts should be considered. The document fails to adequately describe where Field 308 is located, stating only that it is nearby. Annual rainfall for Kualapu'u is not given. Are we to assume that the rainfall is the same in both areas? What is the annual rainfall in the area where the coffee is to be grown? The Molokai Community Plan has outlined the need to reforest Molokai's west end so that the watershed can be replenished. What effect does the diversion of this water have on the future of this watershed?

Water Resources

Last year the Water Commission designated the sustainable yield of the MIS as 5 mgd, reduced from the original sustainable yield of 7 mgd. The document should compare the current rate of usage of this water to the rate before the project was completed. The impact on the perennial streams that have been diverted to supply water should be discussed. Dates of registration with the CWRM also should be disclosed.

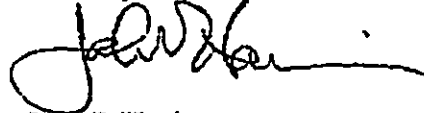
Conclusion

Our reviewers have found that the EA contains insufficient information to determine the environmental consequences of this project. The document lacks details on obtained and required permits. We suggest that these could be provided in a table. The document fails to discuss environmental settings, impacts, and mitigation measures adequately, limiting discussion to the immediate project area. Socio economics are not discussed at all. Our reviewers note that the scope of this project extends far beyond the immediate project location.

Molokai is a sole source aquifer and the entire island is designated a critical water resource management area. The scale of the proposed action requires a more thorough environmental analysis than is provided in the present EA. We suggest that the applicant use the existing document as a Preparation Notice (PN) for an Environmental Impact Statement (EIS). An EIS is appropriate, as the impacts of this project appear significant due to the cumulative effects of this project on the water needs of the community at large. The project also seems to constitute a commitment to larger actions, which should be addressed within this and subsequent documents.

Thank you for the opportunity to comment on this draft EA.

Sincerely,



John T. Harrison
Environmental Coordinator

cc: OEQC
Roger Fujioka
Department of Agriculture
Dave Penn
Victoria Collins

COPY

BENJAMIN J. CAYETANO
Governor



State of Hawaii
DEPARTMENT OF AGRICULTURE
1428 South King Street
Honolulu, Hawaii 96814-2512

JAMES J. NAKATANI
Chairperson, Board of Agriculture

LETTIA N. UYEHARA
Deputy to the Chairperson

Mailing Address:
P.O. Box 22159
Honolulu, Hawaii 96823-2159

Fax: (808) 973-9613

November 27, 1998

Mr. John T. Harrison
Environmental Coordinator
University of Hawaii
Environmental Center
2550 Campus Road
Honolulu, Hawaii 96822

Dear Mr. Harrison:

**Draft Environmental Assessment
Department of Agriculture's Molokai Irrigation System (MIS)
After-the-Fact Pipeline Connection, Kualapuu, Molokai (TMK 5-2-10:1)**

Thank you for reviewing and submitting comments on the Draft Environmental Assessment for the Molokai Irrigation System's After-the-Fact Pipeline Connection.

We provide the following response to your concerns:

1. *Why it took two years between the time (June 1996) that the Office of Environmental Quality Control (OEQC) denied the Department of Agriculture's (DOA) request for exemption and recommended that an Environmental Assessment (EA) be prepared, and the time (August 1998) that the DOA submitted the Draft EA to the OEQC.*

The two-year delay stems from the fact that funds for the EA were not programmed in the DOA's Capital Improvement Project (CIP) biennial budget for FY 1996-1997. Consequently, the DOA sought legislative authorization to expend special funds, which took five months (November 1995 to April 1996). Three months later, in July 1996, the Governor signed the Executive Budget bill. Then, two more months were required for approval of a request for allotment of the appropriated funds (September 1996).

The State Procurement Rules require that procedures for selection of consultants must follow Subchapter 7, Sections 3-122-64, 3-122-65, and 3-122-67,



Hawaii Administrative Rules, which require publishing a public notice, convening a review committee, qualifying applicants, convening a selection committee, and obtaining approval of a selection by the Chairperson of the Board of Agriculture; followed by development of the scope of work and negotiation of a fee--all of which took 11 months (September 1996 - August 1997).

The DOA then needed to conform with contract process procedures, including review of the consultant contract, approval as to form by the Office of the Attorney General, contract encumbrance procedures of the Department of Accounting and General Services (DAGS), and issuance of a notice to proceed. This took four months (August - December 1997).

The consultant then had to schedule field inspection, research the environmental matters, and write the Draft EA. Also, he had to schedule meetings with Molokai Irrigation System customers and allow time for the Department to review the draft. This took six months (December 1997 - June 1998).

Finally, the consultant made corrections, finalized the assessment and prepared for the DOA's submission of the Draft EA to the OEQC for inclusion in their bulletin. This covers the balance of time from June 1998 to August 1998.

2. *Giving first priority of "Waikolu water" to "existing and foreseeable" uses of Homesteaders under the Hawaiian Homes Commission Act and the State Water Code, and describing the relationship of the pipeline connection to these statutes.*

The reserving from the Molokai Irrigation System "Waikolu water" to Hawaiian Homesteaders is not covered by the State Water Code. Decisions of the State Commission on Water Resource Management (CWRM), under Section 174C-01, Hawaii Revised Statutes (HRS), may not amend or modify rights as provided for by the Hawaiian Homes Commission Act of 1920. The DOA, however, is bound by Section 168-4, HRS, to provide at all times the Hawaiian Homes Commission and its lessees "upon actual need therefore being shown to the Board of Agriculture...a prior right to two-thirds of the water developed... by the tunnel development extending to Waikolu Valley and ground water developed west of Waikolu Valley..." At the present time, Hawaiian homesteaders have 9,000 acres located within MIS boundaries, but cultivate approximately only 2,500 acres. To the best of our knowledge, no new Hawaiian homesteads are currently being built within the boundaries of the MIS, nor have any new water needs arisen from Hawaiian Homesteaders occupying the 9,000 acres.

The pipeline connection involves neither the water reserved to Hawaiian

Homesteaders nor affects their use thereof and, therefore, has no relationship to the statutes mentioned above.

3. *Is the water source originally used to serve Dole Pineapple operations (page 4) the same source on page 3. Maps of all Molokai Ranch sources should be included.*

The water source originally used to service former Dole Pineapple operations is the same source cited on page 3 under the section, "Molokai Ranch Mountain System." Molokai Ranch sources consist entirely of surface water diversion in the leeward watersheds of Kawela, Kamoku, and Lualohi; not in Waikolu Valley. Therefore, Molokai Ranch sources are unrelated to "Waikolu waters" and location maps are not included in the Final EA.

4. *The EA needs to disclose the terms and agreements of the MIS Water Users Advisory Board and Molokai Ranch.*

The agreement between the MIS Water Users Advisory Board and Molokai Ranch will be included in the appendix of the Final EA. The Advisory Board consists of six members. The Advisory Board consists of two representatives from DHHL, a DHHL homesteader and a designee of the DHHL, as mandated by Section 167-23(a)(1) and (6). The current members are Mrs. Noelani Joy and Mr. Greg Helms, Sr., the DHHL's Molokai manager, respectively. Two other members of the Board are of native Hawaiian ancestry—Mr. Paul Elia and Mr. George Maioho. Both are DHHL homesteaders. We believe that DHHL and Hawaiian homesteaders had ample representation on the project and there is no representation on the Advisory Board from Molokai Ranch. Molokai is designated as a management area for ground water, not surface water. Therefore, since no ground water is involved, the pipeline project bears no relationship to the "existing and foreseeable water use reserved" for Hawaiian homesteaders.

5. *How will water brought to arid areas of Molokai for agricultural use affect recharge. What are the effects from diversions of mountain streams.*

Any recharge that occurs from agricultural irrigation in arid central Molokai will be added to underlying brackish ground water resources. Molokai Ranch water comes from existing surface water diversions that have been operational for many years in the upper Kawela, Kamoku, and Lualohi mountain watersheds on the leeward slopes of East Molokai and their effects on the Island and stream biota remain unchanged by the pipeline connection. No new water sources have been developed for the pipeline connection.

6. *The draft EA fails to discuss obtained permits in sufficient detail.*

No permits were required for the pipeline connection which was installed as a part of normal MIS operation and maintenance work.

7. *The Draft EA fails to discuss impacts outside of the immediate range of the project. The document fails to adequately describe where Field 308 is located and does not give the annual rainfall for Kualapuu and where the coffee is to be grown. Also, what effect does the diversion of Molokai Ranch water sources have on the future of Molokai's west end watershed, which the Molokai Community Plan has outlined the need for reforestation.*

The pipeline connection merely allows a metered amount of Molokai Ranch water to be added to the MIS supply. As a result, it makes available a like amount of water for growing coffee on former pineapple lands located within MIS boundaries. These potential coffee-growing lands owned by Molokai Ranch are located next to existing coffee fields leased and operated by Coffees of Hawaii, Inc. No new agricultural lands will be developed as a result of the pipeline connection. The annual rainfall and location of existing and potential new coffee fields, including Field 308, will be included in the Final EA.

No new water sources have been developed as a result of the pipeline connection and none of Molokai Ranch's water currently available for use in the west end of the island will be affected; therefore, the future of Molokai's west end watershed will not be affected by the pipeline connection.

8. *Last year the Water Commission designated the sustainable yield of the MIS as 5 mgd...*

Last year, the Water Commission reduced the sustainable yield of the Kualapuu Aquifer, not the MIS, from 7 mgd to 5 mgd. The sustainable yield refers only to ground water, whereas the pipeline connection involves the use of only surface water which has not been designated for management by the Water Commission. Two petitions to designate surface water have been deferred indefinitely for lack of sufficient evidence.

In conclusion, we believe that the final environmental assessment will provide an adequate assessment of the MIS pipeline connection project, that no mitigation measures are necessary, and that a Finding of No Significant Impact for the project is justified.

If you have any questions, please contact Paul Matsuo, Administrator-Chief Engineer of the Agricultural Resource Management Division, at 973-9475. Mahalo.

Sincerely,


JAMES J. NAKATANI
Chairperson, Board of Agriculture

BENJAMIN J. CAYETANO
GOVERNOR



GARY GILL
DIRECTOR

STATE OF HAWAII
OFFICE OF ENVIRONMENTAL QUALITY CONTROL

235 SOUTH BERETANIA STREET
SUITE 702
HONOLULU, HAWAII 96813
TELEPHONE (808) 588-4188
FACSIMILE (808) 588-4188

September 8, 1998

Mr. Paul Matsuo
State of Hawai'i Department of Agriculture
1428 South King Street
Honolulu, Hawai'i 96814

Dear Mr. Matsuo:

Having reviewed the draft environmental assessment (DEA) entitled "Moloka'i Irrigation System, After the Fact Pipeline Connection," we submit the following comments for your response.

I. CONSULTATIONS WITH THE DEPARTMENT OF HAWAIIAN HOME LANDS AND THE OFFICE OF HAWAIIAN AFFAIRS

Please seek the comments of the Department of Hawaiian Home Lands. Also, please consult with the Office of Hawaiian Affairs concerning cultural impacts and resources.

II. ENVIRONMENTAL SETTINGS

After consulting as described in item I above, describe in the environmental assessment, the nature, extent and environmental setting for each of the following:

- A. The new source of water for the Moloka'i Irrigation System; and.
- B. The growing of coffee.

Please also provide topographic maps of the new water sources and the coffee growing areas.

II. IMPACTS AND MITIGATIVE MEASURES

Under the administrative rules there are three types of impacts a project may have on the environment: (1) direct; (2) indirect; and, (3) cumulative. After completing the environmental setting above in item II above, discuss each of these impacts and their corresponding mitigative measures as they relate to the new water source and the growing of coffee.

At a minimum, the discussion should address the following issues:

- A. Indirect and cumulative impacts of the connection on Moloka'i Ranch sources (including flora/fauna, ground and surface water emanating from this source to other areas of Moloka'i).
- B. Direct economic impacts to the State (revenue generated, costs for improvements, etc.).

Mr. Paul Matsuo
State of Hawai'i Department of Agriculture
September 8, 1998
Page 2 of 2


III. PHOTOGRAPHS

Please provide photographs of the following:

- A. Pipeline connection site;
- B. Area(s) containing the new water source(s);
- C. The coffee planting areas to be served by the new water source.

Thank you for the opportunity to comment. If there are any questions, please call Leslie Segundo, Environmental Health Specialist, at 586-4185.

Sincerely,


GARY GILL
Director

c: Mr. Dan Lum, Water Resource Associates

IRRA 1099

BENJAMIN J. CAYETANO
Governor



State of Hawaii
DEPARTMENT OF AGRICULTURE
1428 South King Street
Honolulu, Hawaii 96814-2512

JAMES J. NAKATANI
Chairperson, Board of Agriculture


LETITIA N. UYEHARA
Deputy to the Chairperson

Mailing Address:
P.O. Box 22159
Honolulu, Hawaii 96823-2159

Fax: (808) 973-9513

November 30, 1998

TO: Honorable Gary Gill
Director
Office of Environmental Quality Control

FROM:  Paul T. Matsuo, P.E.
Administrator-Chief Engineer
Agricultural Resource Management Division

SUBJECT: Response to Comments
Draft EA, "MIS After-the-Fact Pipeline Connection"

Thank you for your prompt comments to our proposed draft environmental assessment (EA) for the subject project. Our response to the points raised in your September 8, 1998 letter is listed below:

I. Consultations with the following agencies:

- A. Department of Hawaiian Home Lands ("DHHL"). As outlined in the draft EA, this project was conceived with the assistance of the Molokai Irrigation System ("MIS") Water Users Advisory Board. Under Act 131, Session Laws of Hawaii, 1992 (a copy is attached), the MIS Water Users Advisory Board is composed of six members. Among the members is "a designee of the Department of Hawaiian Home Lands" and presently that designee is Mr. Greg Helms, Sr., the DHHL Molokai Manager. Further, another member is "a homestead farmer"; presently, that person is Mrs. Wilma Noelani Joy. Other members of the board are Mr. Paul Elia and Mr. George Maiho, both native Hawaiian homesteaders holding DHHL leases. I do not believe that we need to do consultations if a representative of that department sits on the board that oversees the action and is actively involved; it promotes more bureaucratic red tape.



Honorable Gary Gill
Page 2
November 30, 1998

- B. Office of Hawaiian Affairs ("OHA"). As outlined in the draft EA, we do not believe that there are any impacts to cultural resources and while we agree that any action should be given a wide as possible exposure, we do not concur that this action is within OHA's jurisdiction. Nevertheless, in response to your request, a copy of the final EA will be provided to OHA with an opportunity for comments.

II. Environmental settings.

- A. The nature, extent, and environmental setting of the new source of water. There seems to be a mis-conception on your part that this is a "NEW" source of water. That is a failure on our part if we portrayed that concept (I have tried to explain it in the paragraphs below).

All this action accomplishes is to connect one existing water system (Molokai Ranch's old water system) into another existing water system (Molokai Irrigation System). There is no increase in diversion, no new sources tapped, no new diversions opened, and no new operations started because of this action. Everything that was in place before this action remains in place; nothing changes, i.e. the same amount of water passes through the systems, the same size pipes remain, and both water systems continue to service the same areas.

- B. The nature, extent, and environmental setting for the growing of coffee. The MIS presently serves irrigation water to approximately 800 acres of coffee lands, but the MIS's boundaries allow approximately another 1,000 acres of potential coffee cultivation which cannot be serviced because of the restriction placed on the system due to MIS's capacity. These existing lands were placed within the MIS's boundaries when the system was established in the late 1960's as these lands were in pineapple cultivation at the time. Subsequently, the pineapple company ceased operations, leaving a huge void in the economy. Coffee was determined to be the crop with the best potential and these lands were then "converted" over. The coffee crop provides job opportunities, supports

Honorable Gary Gill
Page 3
November 30, 1998

the local economy, and generates tax revenues. It is environmentally suitable by providing the region with a greenery backdrop to support tourism industry's claims of a tropical island setting.

A map showing the coffee fields (both existing and new) will be included in the final EA. However, no new maps are available for the water sources since, as explained, there is no new water source. Instead, we will include photos of the connection sites (between Molokai Ranch and the MIS pipeline crossing) and the reservoir which is the water source to be drawn in the final EA.

III. Impacts and mitigative measures.

- A. There are no known indirect and cumulative impacts on Molokai Ranch's water source as no additional water will be diverted, no new intake structures will be installed, no clearing/cleaning of the connection site will occur and no ground and surface water will be emanating from Molokai Ranch's existing water sources to other areas of Molokai, except to the areas presently being serviced by the existing water system.
- B. Following are the direct economic impacts to the State resulting from this action: (1) more lands will be planted with coffee, resulting in increases in employment, business activity, purchasing, and transportation to market; (2) present un-cultivated lands will be put into active use which will remove the threat of fire hazards and reduce non-point pollution potential with controlled land treatment measures applied in the cultivation methods for coffee; (3) increase in the coffee crop volume will create more opportunities for businesses which will result in expanded activity for Molokai's economy; and (4) with the expansion of coffee processing, it is inevitable that related businesses or manufacturing (such as roasting, value-added products, visitor center/gift shop, tour of coffee operations, etc.) will be created, which now exist on a small scale. Much of these impacts will generate additional tax revenues to both the State and counties.

Honorable Gary Gill
Page 4
November 30, 1998

IV. Photographs.

We will provide photos for the following: (A) pipeline connection site, (B) existing reservoir from which the water is drawn, and (C) coffee planting areas as requested in your letter.

As indicated above and as explained when I visited with your staff:

This action is not a major impact project. All it does is make a connection between two existing pipelines, except due to the difference in depth, the connections had to be "selected" at a convenient site which could be made without deep excavation and major clearing (hence, the 200 feet of pipe). The connection eventually was "selected" at a site where the MIS pipeline had a blowoff valve and Molokai Ranch's pipeline was easily exposed near the surface. The site was previously disturbed with pineapple cultivation, by wild fire, and by vehicle traffic uses on the existing access roadway for pipeline maintenance and forest/hunting management. The site is within the DHHL's pipeline easements of both pipeline systems.

Further, the Molokai water system will only inject its water into the MIS system under a controlled management agreement between the two agencies (a copy will be included in the final EA). The connection will be activated only when Molokai Ranch has an excess capacity in their storage facilities. The existing Molokai Ranch system diverts surface flows from streams in the upper reaches and during storms, collects the resulting flows. Such storm systems, due to its torrential nature, dumps a tremendous amount of water over a short period of time causing the excess capacity. This then translates into excessive flows within the Molokai Ranch's system which usually has been released along their system at appropriated pressure relief sites. Now the MIS will benefit by being allowed to take these excess quantities into its Kualapuu Reservoir which has a capacity of 1,400 million gallons (we have never had this reservoir at full capacity) and would relieve the Molokai Ranch's system from overcapacity problems.

Honorable Gary Gill
Page 5
November 30, 1998

If there are any questions, please feel free to call me at 973-9473. Our consultant will be making the necessary changes to our final EA and will be contacting you to submit the final EA to be published in the bulletin. Please provide them with the necessary assistance.

Attachment

c: / Water Resource Associates
Molokai Ranch (H. Edwards)
Chairperson, Board of Agriculture

RECEIVED SEP 11 1998



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION
P O BOX 621
HONOLULU, HAWAII 96803

AGRICULTURE
AQUATIC RESOURCES
CONSERVATION AND RECREATION
CONVEYANCES
LAND DIVISION
STATE PARKS
WATER RESOURCE MANAGEMENT

September 8, 1998

LD:NAV

Ref.: DEADOAMI.RCM

Honorable James J. Nakatani, Chairperson
Board of Agriculture
State of Hawaii
Department of Agriculture
1428 South King Street
Honolulu, Hawaii 96814-2512

Dear Mr. Nakatani:

SUBJECT: Review : Draft Environmental Assessment
Project : After-The-Fact Pipeline Connection
Molokai Irrigation System
Applicant: Department of Agriculture
Location : Kualapuu, Molokai, Hawaii
TAX MAP : 2nd/ 5-2-10: Parcel 01

Thank you for the opportunity to review and comment on the subject Draft Environmental Assessment.

Our Land Division Engineering Branch has informed us that the proposed project site, according to FEMA Community Map Numbers 150003 0140 C and 15003 0145 C, is located in Zone C. This is an area of minimal flooding.

It is our Commission on Water Resource Management's understanding that the pipeline connection is located after the Molokai Ranch's 1,844-foot storage reservoir. Since Molokai Ranch's diversions (East Kawela, East Kawela Tributary, West Kawela, Kamoku, Hanaliolio, Kalihi and Lualohe intake) free flow into the storage reservoir and because the pipeline is located after the reservoir, the surface water diversions will not be affected. The interim instream flow standard for streams with the diversions will not need to be amended pursuant to Hawaii Administration Rule 13-169-47.

The Department of Land and Natural Resources has no other comments to offer at this time. Should you have any questions, please feel free to contact Nicholas Vaccaro 587-0430.

Very truly yours,

Dean Y. Uchida
DEAN Y. UCHIDA
Administrator

c: Maui Land Board Member
Maui District Land Office

Post-It Fax Note	7671	Date	9/14/98	# of pages	1
To	Jan Lum	From	Paul Matsuo		
Co/Dept	Water Resource Services	Co.	NAH-ARM11		
Phone #		Phone #	973-9475		
Fax #	528-0808	Fax #	973-9467		

COPY

BENJAMIN J. CAYETANO
Governor



State of Hawaii
DEPARTMENT OF AGRICULTURE
1428 South King Street
Honolulu, Hawaii 96814-2512

JAMES J. NAKATANI
Chairperson, Board of Agriculture

LETITIA N. UYEHARA
Deputy to the Chairperson

Mailing Address:
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Fax: (808) 973-9613

November 27, 1998

Mr. Dean Uchida, Administrator
Land Division
Department of Land & Natural Resources
P.O. Box 621
Honolulu, Hawaii 96809

(106)

Dear Mr. Uchida:

**Draft Environmental Assessment
Department of Agriculture's Molokai Irrigation System (MIS)
After-the-Fact Pipeline Connection, Kualapuu, Molokai (TMK 5-2-10:1)**

Thank you for reviewing and submitting comments on the Draft Environmental Assessment for the Molokai Irrigation Systems After-the-Fact Pipeline Connection.

We acknowledge that the project is in an area of minimal flooding, according to FEMA Community Map Numbers 15003 0140C and 15003 0145C.

We further acknowledge that the project is located after Molokai Ranch's 1,844-foot storage reservoir and that Molokai Ranch's surface water diversions on the leeward mountain slopes of East Molokai at East Kawela, East Kawela Tributary, West Kawela, Kamoku, Hanaliolio, Kalihi, and Lualoki intakes flow by gravity into the 1,844-foot storage reservoir and, therefore, are not affected by the project.

If you have any questions, please contact Paul Matsuo, Administrator-Chief Engineer of the Agricultural Resource Management Division, at 973-9475.

Sincerely,

JAMES J. NAKATANI
Chairperson, Board of Agriculture





NATIVE
HAWAIIAN
LEGAL
CORPORATION

1164 BISHOP STREET • SUITE 1205 • HONOLULU, HAWAII 96813 • TELEPHONE (808) 521-2302 • FAX (808) 537-4268

September 8, 1998

Advance Copies Via VAX

Department of Agriculture
1428 South King Street
Honolulu, Hawaii 96814
(Attn: Paul Matsuo; FAX 973-9467)

Department of Agriculture
1428 South King Street
Honolulu, Hawaii 96814
(Attn: James Nakatani; FAX 973-9613)

Water Resource Associates
1188 Bishop Street, Suite 607
Honolulu, Hawaii 96813
(Attn: Daniel Lum; FAX 528-0808)

Re: Comments on Draft Environmental Assessment for Molokai
Irrigation System After-the-Fact Pipeline Connection

Gentlemen:

Pursuant to Chapter 343, HRS, and the announcement contained in the August 8, 1988, issue of The Environmental Notice I submit the following comments on the subject Draft Environmental Assessment (DEA).

1. Project Summary

The Department of Agriculture is identified as the "Proposing Agency" for the Project. Since the primary--and indeed only--beneficiary of the Project appears to be Molokai Ranch, a private for-profit entity, I question by what authority DOA--and not Molokai Ranch--is identified as the "Proposing Agency." An important indicator of the true beneficiary of the work done would be the source of funding for the Project. If State funds were used, rather than Molokai Ranch's private funds, the DEA should so state.

I note with considerable surprise that although the Project is identified in the "Project Summary" as being located on "Hawaiian Home Land," the Department of Hawaiian Home Lands is not included among the list of "Agencies Consulted" in the preparation of the DEA. While the DEA states, at 4, that the Project was constructed within an existing easement across DHHL's

DEA on MIS Pipeline Connection, Sept. 8, 1998, p. 2

lands, consultation with DHHL is essential to allow DHHL to make an independent determination of whether or not construction of the Project is authorized under the terms of the existing easement, or whether approval must be sought from DHHL or the Hawaiian Homes Commission to amend or modify the terms of the easement to permit construction to take place, assuming that such approval would be forthcoming.

2. Project Description

By building first and obtaining permits afterwards, DOA has frustrated the public disclosure function of Chapter 343. The DEA obscures the extent of the infraction, however, by failing to disclose the date of construction of the Project. Furthermore, since DOA has known since June 1996 that construction of the Project was not exempt from the disclosure requirements of Chapter 343, the subsequent delay of more than two years in submitting the DEA for public review is inexcusable. As I will demonstrate below, the DEA does not fulfill the legal requirements for approval under Chapter 343. Until such time as a proper EA is prepared, all use of the Project should cease immediately.

2.2 Purpose and Need for Action

This section is obscure and fails to clearly describe the purpose and effect of the Project. From a careful reading of it, however, it appears that the sole benefit of the Project is to provide a new water source for Molokai Ranch lands formerly cultivated in pineapple (and which must then have water from some other source) and which Molokai Ranch seeks to plant in coffee. If in fact this is the intent of the Project, that should be explained. Furthermore, the terms of the "water use agreement" should be described in the EA. Also, the EA should state why the Project is necessary since it appears that the lands to be served by it already have an alternative water source.

The Hawai'i Supreme Court has interpreted § 343-5(a) to require that an environmental assessment must address the environmental effects of the entire project of which an event triggering Chapter 343 review is a part, even if only a small portion of that overall project would, by itself, be subject to such review. Kahana Sunset Owners Ass'n v. County of Maui, 86 Hawai'i 66 (1997). The DEA treats construction of the 200-foot pipeline and the new connection between the Molokai Irrigation System and the Molokai Ranch system in isolation, assuming that the only impact of the Project will be limited to the small parcel of DHHL land on which the construction actually takes place. It does not identify either the impacts on the water source of the increased withdrawal necessary to place Molokai Ranch's coffee lands under irrigation, or the location of the Ranch lands that will benefit from the Project. Under Kahana

DEA on MIS Pipeline Connection, Sept. 8, 1998, p. 3

Sunset, this is impermissible, and the DEA is therefore legally insufficient. The EA must treat the entire project of which the pipeline connection is a part.

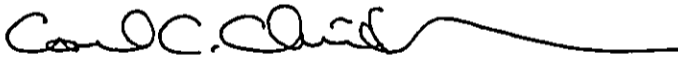
5. Alternatives to the Action

The DEA states that "[t]he no action alternative would leave extensive tracts of prime agricultural land without adequate irrigation water." Apparently, then, the Project will increase water use on those lands. This is flatly inconsistent with the assurances given in § 3.3.C ("Water Resources") that "[n]o water resources were impacted by the project," and that "[n]o additional water is being diverted as a result of this project." Since less water would be used on the benefitted lands if the Project were constructed, it is logically impossible to claim that the Project has no impact on water resources. The EA should identify the increase in water use that will result from the Project and should identify the water source and fully discuss the impacts on the source and on its biota.

Since the DEA indicates that the Molokai Ranch lands that are to be benefitted by the Project were previously under cultivation for pineapple and, in that use, received County water (DEA at 4), the discussion of alternatives should address the question of why continued irrigation of those lands with County water is not an acceptable alternative to the Project.

Thank you for this opportunity to comment on this Draft Environmental Assessment.

Very truly yours,



Carl C. Christensen
Staff Attorney

cc: OEQC

BENJAMIN J. CAYETANO
Governor



State of Hawaii
DEPARTMENT OF AGRICULTURE
1428 South King Street
Honolulu, Hawaii 96814-2512

COPY

JAMES J. NAKATANI
Chairperson, Board of Agriculture

LETITIA N. UYEHARA
Deputy to the Chairperson

Mailing Address:
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Fax: (808) 973-9613

November 27, 1998

Mr. Carl C. Christensen
Staff Attorney
Native Hawaiian Legal Corporation
1164 Bishop Street, Suite 1205
Honolulu, HI 96813

Dear Mr. Christensen:

**Draft Environmental Assessment
Department of Agriculture's Molokai Irrigation System (MIS)
After-the-Fact Pipeline Connection, Kualapuu, Molokai (TMK 5-2-10:1)**

Thank you for reviewing and submitting comments on the Draft Environmental Assessment (DEA) for the Molokai Irrigation System's After-the-Fact Pipeline Connection.

We provide the following response to your concerns:

1. *It appears that Molokai Ranch is the primary—and indeed only—beneficiary of the project.*

Molokai Ranch is neither the primary nor only beneficiary of the project. The pipeline project will add Molokai Ranch (MR) water to the MIS, and although some of it will be used for coffee growing, some of it will also be available to the rest of the lands within the MIS boundary. The MIS boundary encompasses lands owned by the Department of Hawaiian Home Lands (DHHL), the Department of Land and Natural Resources (DLNR), and Molokai Ranch (MR) all of which were originally leased to three pineapple companies (Del Monte, Dole, and Libby McNeil). The MIS was originally established to support the Island's principal agricultural activity at that time—the growing of pineapple, and was designed and constructed to benefit all lands within the system, not only MR lands. Thus, MR is not the sole beneficiary of the pipeline project.

Furthermore, Molokai Ranch will likely not be the primary beneficiary of



the project because they will not grow coffee themselves, but merely have leased their lands to Coffees of Hawaii, Inc. at a set lease rent.

2. *By what authority is the Department of Agriculture (DOA) identified as the proposing agency. An important indicator of the true beneficiaries of the pipeline project would be the source of funding for the project.*

The DOA, pursuant to Act 306, Session Laws of Hawaii (SLH) 1987, is the owner and operator of the MIS under authority of Chapter 168, Hawaii Revised Statutes (HRS). State funds and state-controlled lands were used to install the pipeline connection between the MIS and MR lines, although Molokai Ranch did donate some materials and equipment time as allowed under Section 168-5(b), HRS.

3. *Why was DHHL not included in the list of Agencies consulted.*

The MIS is mandated by Section 167-23, HRS, to meet with the MIS Water Users Advisory Board on Molokai on a periodical basis; and, in accordance with Section 167-23(b), the Board can participate in matters such as the pipeline project. Thus, the Board participated in the negotiations for the agreement with Molokai Ranch. The Advisory Board consists of two representatives from DHHL, a DHHL homesteader and a designee of DHHL, as mandated by Sections 167-23(a)(1) and (6). The current members are Mrs. Noelani Joy and Mr. Greg Helms, Sr., the DHHL's Molokai manager, respectively. Additionally, two other members of the Board are of Native Hawaiian ancestry—Mr. Paul Elia and Mr. George Maiho. Both are DHHL homesteaders. As Molokai is a small community, we believe that DHHL had ample representation on the project.

As these DHHL homesteaders were actively involved, there was no need to consult with DHHL. It was assumed that Mr. Helms, as the DHHL's representative, would have that function.

4. *It is essential to allow DHHL to determine if the project is authorized by the terms of the easement or approval is required.*

The DOA, pursuant to Act 306, SLH 1987, is the successor agency to a License Agreement (No. 210) between the Department of Land and Natural

Resources and the Hawaiian Homes Commission, which allows "construction, maintenance, operation, and removal of the licensee's appurtenances over, across, and under the Easement Area." It is our understanding that the pipeline project is covered under the License Agreement and that DHHL approval is not needed each time the DOA does any such work within the licensed area.

5. *Why it took two years between the time (June 1996) that the Office of Environmental Quality Control (OEQC) denied the Department of Agriculture's (DOA) request for exemption and recommended that an Environmental Assessment (EA) be prepared, and the time (August 1998) that the DOA submitted the Draft EA to the OEQC.*

The two-year delay stems from the fact that funds for the EA were not programmed in the DOA's Capital Improvement Project (CIP) biennial budget. Consequently, the DOA sought legislative authorization to expend special funds, which took five months (November 1995 to April 1996). Three months later, in July 1996, the Governor signed the Executive Budget bill. Then, two more months were required for approval of a request for allotment of the appropriated funds (September 1996).

The State Procurement Rules require that procedures for selection of consultants must follow Subchapter 7, Sections 3-122-64, 3-122-65, and 3-122-67, Hawaii Administrative Rules, which require publishing a public notice, convening a review committee, qualifying applicants, convening a selection committee, and obtaining approval of a selection by the Chairperson of the Board of Agriculture; followed by development of the scope of work and negotiation of a fee—all of which took 11 months (September 1996 - August 1997).

The DOA then needed to conform with contract process procedures, including review of the consultant contract, approval as to form by the Office of the Attorney General, contract encumbrance procedures of the Department of Accounting and General Services (DAGS), and issuance of a notice to proceed. This took four months (August - December 1997).

The consultant then had to schedule field inspection, research the environmental matters, and write the Draft EA. Also, he had to schedule meetings with Molokai Irrigation System customers and allow time for the Department to review the draft. This took six months (December 1997 - June 1998).

Finally, the consultant made corrections, finalized the assessment and prepared for the DOA's submission of the Draft EA to the OEQC for inclusion in their bulletin. This covers the balance of time from June 1998 to August 1998.

6. *The DEA does not fulfill the legal requirements for approval under Chapter 343.*

We acknowledge that the section, "Purpose and Need for Action," in the DEA does not clearly describe the purpose and need for the project. The final EA will include the agreement between the MIS Advisory Board and Molokai Ranch and will point out that Molokai Ranch is not the sole beneficiary of the project as explained above, and will explain that the project was necessary because the potential coffee-growing lands are located within the MIS service area boundaries and do not have an alternative water system in place.

7. *The EA must cover the entire project of which the pipeline connection is a part based upon "Kahana Sunset owners Association v. County of Maui," 86 Hawaii 66 (1997).*

We believe that the pipeline connection project is an independent action—connecting two existing pipelines—which does not meet the criteria for having to address the entire project. The court's decision you cite is based on the project satisfying conditions outlined in section 8, "Health and Environment," 86 Hawaii 66 (1997) page 67, the proposed drainage system "...which city planning commission had improperly determined fell within exemption to HEPA's EA requirements...was part of larger project, was necessary precedent for development, would have no independent utility, and would not be constructed except as part of larger development." As stated, the pipeline connection is an independent action that does not fit the criteria.

Further, the court provides additional criteria which must be satisfied as shown on page 74, section 5, second column, second paragraph, "...a group of actions proposed by an agency or an applicant shall be treated as a single action when: (1) the component actions are phases or increments of a larger total undertaking; [or] (2) An individual project is a necessary precedent for a larger project." We, again, believe the pipeline connection project does not conform to either of these two categories because the project is neither a phase of a larger undertaking nor a necessary precedent for a larger project.

November 27, 1998

8. *The pipeline connection will increase water use on land without adequate irrigation water and this is inconsistent with the Draft EA's statements that there is no impact on water resources and no additional water being diverted.*

There is no impact on water resources because Molokai Ranch's existing stream diversions, without any modifications, will supply the potential coffee growing areas within the MIS boundary with water from the MIS. These stream diversions, in place many years ago, are registered with the Commission on Water Resource Management (CWRM) and have been issued a Certificate of Water Use. No modifications to or increase in these stream diversions have been made, otherwise regulatory action by CWRM would have been required. Molokai Ranch has merely committed to a redistribution of a part of its excess water supply as a result of the pipeline connection. Molokai Ranch water being supplied to MIS through the pipeline connection largely represents heavy storm runoff diverted and stored in the MR system. With the pipeline connection, this storm flow water is prudently stored in the MIS's 1,400 million gallon Kualapuu storage reservoir for use during low rainfall periods.

Again, thank you for your review and comments and if you have any questions, please call Mr. Paul Matsuo, Administrator-Chief Engineer of the Agricultural Resource Management Division, at 973-9475.

Sincerely,



JAMES J. NAKATANI
Chairperson, Board of Agriculture