

Hanalei River Streamgage  
Relocation



STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
LAND DIVISION  
P.O. BOX 621  
HONOLULU, HAWAII 96809

AQUACULTURE DEVELOPMENT  
PROGRAM  
AQUATIC RESOURCES  
BOATING AND OCEAN RECREATION  
CONSERVATION AND  
RESOURCES ENFORCEMENT  
CONVEYANCES  
FORESTRY AND WILDLIFE  
HISTORIC PRESERVATION  
LAND DIVISION  
STATE PARKS  
WATER RESOURCE MANAGEMENT

Ref.:PB:THE

NOV 10 1998

File: KA-2889

MEMORANDUM

To: Gary Gill, Director  
Office of Environmental Quality Control (OEQC)

From: Dean Y. Uchida, Administrator *Uchida*  
Land Division, Department of Land and Natural Resources

Subject: Final Environmental Assessment (EA)/Finding of No  
Significant Impact (FONSI) for Hanalei River Streamgage  
Relocation, Kauai; TMK parcels: (4)5-3-01:3, and 5-4-  
02:16 & 31.

The Department of Land and Natural Resources has reviewed the comments received during the 30-day public comment period that began on June 23, 1998 for the subject project. We have determined that this project will not have significant environmental effects, and have therefore issued a FONSI. Please publish this notice in the November 23, 1998 OEQC Environmental Notice. ✓

We have enclosed a completed OEQC Bulletin Publication Form and four copies of the Final EA for the project. The summary for this project has not changed from that noted in the Publication Form for the draft EA. Please contact Tom Eisen of our Land Divisions's Planning Branch at 587-0386 if you have any questions.

Enclosures

c: Barry Hill

ENVIRONMENTAL  
QUALITY CONTROL

NOV 10 12:37 '98

RECEIVED

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1998-11-23-KA-FEA-Hanalei River  
Streamgauge Relocation  
FINAL ENVIRONMENTAL ASSESSMENT

NOV 23 1998

**FILE COPY**

**HANALEI STREAMGAGE RELOCATION**

County of Kauai, Hanalei District  
TMK 5-4-02-16, 5-4-02-31, 5-3-01-3

submitted by:

**U.S. Geological Survey**

**Honolulu, Hawaii**

**October 28, 1998**

### **1. Identification of applicant or proposing agency**

William Meyer, District Chief  
U.S. Geological Survey  
677 Ala Moana Blvd., Suite 415  
Honolulu, HI 96813  
(808) 522-8290

### **2. Identification of approving agency, if applicable**

State of Hawaii  
Department of Land and Natural Resources  
Land Management Division  
P.O. Box 621  
Honolulu, HI 96809

### **3. Identification of agencies consulted in making assessment**

Letters requesting comments on the proposed project were sent to the following agencies on December 22, 1997:

#### County of Kauai

Fire Department  
Planning Department  
Department of Public Works  
Water Department

#### State of Hawaii

Department of Health  
Department of Land and Natural Resources, Division of Historic Preservation  
Office of Hawaiian Affairs

Replies have been received from the County of Kauai Fire Department, Planning Department, Department of Public Works, and Water Department, and from the State Department of Health and Office of Hawaiian Affairs. Copies of these replies are attached.

Nancy McMahon of the State Division of Historic Preservation has inspected the proposed gage location and provided a written summary of her findings (attached).

Copies of letters or memos from five agencies commenting on the Draft Environmental Assessment were made available to us by the Department of Land and Natural Resources. These letters and memo, and our responses, are also included as attachments. In response to an agency comment, we consulted with the U.S. Department of Agriculture Natural Resources Conservation Service in Lihue by telephone (contact: Mr. Ron Peyton).

#### **4. General description of the action's technical, economic, social, and environmental characteristics**

The U.S. Geological Survey (USGS) has operated a streamgage on the Hanalei River continuously since 1962 (Figure 1). This gage is operated in cooperation with the State of Hawaii Commission on Water Resource Management, and provides data that are used in monitoring river conditions and allocating water rights. The Hanalei River is presently diverted immediately downstream of the gage for taro production and wildlife habitat. The river flows through a National Wildlife Refuge downstream of the gage, and is heavily used for recreation. The Hanalei River was designated an American Heritage River by President Clinton in July, 1998.

During a flood in November, 1995, the river overtopped its banks and carved a new channel that bypassed the streamgage. Presently, about one-third of the river's flow is diverted into this new bypass channel. The existing gage is therefore of limited use in determining the total flow of the river.

The USGS proposes to relocate the streamgage to a site approximately 3,000 feet upstream of the present location so that the entire flow of the river can be measured. The proposed location (Figure 1) is the only site along the river that has adequate gaging conditions and flow comparable to the existing gage prior to the bypass. This relocation would allow the USGS to once again provide accurate streamflow data for this important river.

##### **TECHNICAL--**

The proposed gage would be similar to the existing gage, which uses a gas-feed pressure transducer sensing system housed in a wooden shelter. Dimensions and plans for the proposed gaging structures are shown in Figures 2 and 3. Property boundaries are shown on Figure 4. Structures would include a fiberglass or aluminum gage house on the left bank of the river, a metal conduit for the gas (nitrogen) line leading from the gage house to the river, a concrete anchor for the gas orifice and outside staff plate at the streambank, a crest-stage gage consisting of a 2-inch metal pipe installed vertically along the streambank and set into concrete, and a cableway for high-flow measurements anchored on the right bank to a large mango tree and anchored on the left bank to an A-frame truss with a backstay set in concrete. A trail about 300 feet in length would be needed to connect the streamgage to the existing trail used by hikers and hunters.

Most of the work would be done by hand. Chain saws, gas generators, and power saws and drills would be needed for short periods during construction. Helicopter sling loads would be necessary to deliver concrete. Excavation within the channel would total approximately one cubic yard to allow pouring of concrete anchors for the gas orifice and crest-stage gage. Because these anchors

would extend below the low-flow water surface, the forms would be built to prevent release of wet concrete into the river. The forms would extend above the water surface and would be caulked and sealed. An excavation of roughly 10 cubic yards would be needed for the cableway backstay anchor, about 50 feet away from the streambank. Fill in the channel would be limited to the previously-described concrete anchors, totalling about one cubic yard. The gage house would be prefabricated from fiberglass or aluminum siding and bolted to a concrete pad. Dimensions of the gage house would be 4' x 4' x 8'. The gage house would be painted to blend into the surrounding vegetation, using water-soluble paint. No concrete, paint, or wash water would be allowed to mix with the water in the river.

Equipment to be kept within the gage house includes a nitrogen tank, gas regulator, pressure transducer, electronic data logger, gel-cell batteries, and solar panels.

The cableway would be built to standard USGS specifications to ensure the safety of USGS personnel. The cable would be a 1 1/8" wire rope stretched between a mango tree on the right bank and a steel A-frame on the left bank. The A-frame would be secured by 1/2" wire rope backstay set into a 10-cubic yard mass anchor. Because the site is not accessible by backhoe, the excavation for the mass anchor would be done manually, and the excavated material stored on site. The cable would be tightened with a cable hoist until the correct amount of sag is obtained. The cable would be secured with saddle clamps, 5 on each end of the cable, torqued to 250 foot-pounds each. The cable car would be kept locked to prevent use by unauthorized persons. A wooden landing platform would be built next to the A-frame on the left bank.

The existing gage house, gas line, and cableway would be removed from the present streamgage location. All salvaged materials would be used at the new upstream site.

Periodic maintenance of the streamgage would be required. Maintenance normally would be performed every 6 to 8 weeks, and would include changing of nitrogen tanks and manual cutting of encroaching vegetation. Occasionally, repainting of the gage house and cable marks would be required.

#### ECONOMIC--

The relocation of the streamgage would itself have very limited direct economic impacts. A few building supply and aircraft service businesses would have increased income totalling a few thousand dollars. However, the streamgage relocation would provide for a continuation of streamflow data collection and publication for the Hanalei River. These data could potentially have economic effects because decisions on water allocations are often based on streamflow records. For example, the Commission on Water Resource Management might allow increased diversions for taro production if streamflow records indicated that the diversions would be small relative to total streamflow. However, the actual economic effects of having streamflow data available for this river cannot be predicted.

## SOCIAL--

Social impacts of the proposed action would also be very minor, except indirectly as streamflow data collected at the station affect social conditions through regulatory actions by other agencies. The streamgage could potentially be modified to provide flood warning capabilities, although at present the relocation plans do not include such capabilities. Streamflow data may be of use to recreational boaters. The recent designation of the Hanalei River as an American Heritage River will likely increase public attention and interest in streamflow data for this river.

## ENVIRONMENTAL--

The proposed relocation would affect small areas of the river bed and banks. Effects on channel stability and water quality would be negligible owing to the small areas affected. Vegetation at the new location and along the trail, primarily native Hau trees, would be trimmed. An inspection of the proposed gage location by a USGS biologist determined that no threatened or endangered plant or animal species would be adversely affected by the gage relocation. Aesthetics would be affected at both the existing and proposed sites. No archaeological sites were noted at the proposed gage location during an inspection by Nancy McMahan of the State Historic Preservation Division. A Best Management Practices Plan has been prepared as part of the Section 401 Water Quality Certification process, and is listed below. This plan would minimize adverse environmental effects.

### **5. Summary description of the affected environment, including suitable and adequate location and site maps**

The affected environment includes both the existing and proposed streamgage locations (Figures 1 and 4; photos 1-4). Both locations are in undeveloped forest areas with mixtures of native and introduced vegetation. The existing gage is within 1,000 feet of several residences. The proposed gage location is about 1,500 feet from the nearest home. Neither location is accessible by vehicle. An existing trail passes within about 300 feet of the proposed gage location.

The Hanalei River in the area of the existing and proposed gages flows through an alluvial channel with extensive floodplain development. The land surface on the flood plain is very gently sloping. The hillslopes on both sides of the flood plain are forested and steep. The river has a meandering channel form. Banks are between 4 and 12 feet high and are generally steep on the outside of meander bends and gently sloping on the point bars on the inside of bends. The steep banks on the outside of the meander bends are composed of cobbles in a matrix of clay, support hau and Java plum, and are moderately erodible. Banks on the point bars are composed of gravel and sand, and support thick growths of grass and forbs. The channel bed has a pool-riffle structure. Bed material consists of predominantly cobbles and boulders with some gravel and smaller amounts of sand. The streambed is approximately 100 feet wide, and is wide enough that streamside vegetation does not provide 100% shade canopy cover.

As noted in item 4, no threatened or endangered plants or animals, and no archaeological sites,

would be affected by the proposed relocation. The U.S. Fish and Wildlife has classified the area around the existing gage as palustrine emergent persistent seasonal and riverine upper perennial open water permanent wetland (National Wetlands Inventory, Hanalei quadrangle). The area around the proposed gage is classified as palustrine forested broad-leaved evergreen seasonal and riverine upper perennial open water permanent wetland.

## **6. Identification and summary of major impacts and alternatives considered, if any**

### **IMPACTS:**

The proposed relocation would affect small areas of the river bed and banks. Effects on channel stability and water quality would be negligible owing to the small areas affected. One cubic yard of concrete would be added to the stream channel and about 6 cubic yards would be used on the flood plain surface. On-site disposal of excavated material would result in minor increases in flood-plain elevations at disposal sites. Vegetation at the new location and along the trail, primarily native Hau trees, would be trimmed. Aesthetics would be affected at both the existing and proposed sites.

### **ALTERNATIVES CONSIDERED:**

1. Discontinue streamgage--This alternative would have little direct impact on the physical and biological environment, but would not provide for continued collection of streamflow data, which may be of great importance in future resource management decisions. This alternative would still require some disturbance of the river for removal of the existing streamgage.
2. Continue to operate gage in its existing location--This alternative would have the least disturbance to the river and associated habitat, but would leave a significant and variable amount of water flowing unmeasured around the streamgage. High-flow measurements could not be made because the field crew cannot cross the bypass channel at high flow. The accuracy of the streamflow records would be reduced beyond generally acceptable levels. It is likely that within a few years the river will deepen the bypass channel and increasingly divert water from the meander bend where the gage is presently located. If this happens, the gage will become useless.
3. Relocate station but abandon cableway--This alternative would involve some disturbance to the river and associated habitat, but would avoid the additional disturbance related to cableway construction. On-site disposal of excavated material would be minimized. Concrete fill on the banks would not be necessary except for the gage house pad. However, without a cableway, medium and high flow measurements would have to be made by indirect methods, which are more expensive and less accurate than direct methods.

## **7. Proposed mitigation measures, if any**

### **Best Management Practice Plan**

1. All work in the stream channel shall be done during low-flow conditions.
2. Forms for the concrete work in the stream will extend above the water surface, and be sealed to prevent release of wet concrete into the river.
3. Fine-mesh filter cloth shall be deployed by hand so as to surround the construction site and entrap any concrete that escapes from the form. The cloth will be unrolled, stretched around the site, lowered to the streambed, and anchored with rocks. Wooden or metal stakes will then be used to raise the unanchored edge of the cloth to the stream surface. The decrease in stream velocity resulting from the placement of the cloth will cause much of the suspended solids to be deposited on the stream bed or on the cloth itself, where they can be removed with shovels and plastic buckets, placed in plastic containers, and removed from the site.
4. Mixing of concrete and paint will be done at least 30 feet from the streambank. No concrete or paint wash water will be allowed to enter the stream.
5. Surface preparation and painting shall only be done during dry weather.
6. Applicant will ensure that all excess construction materials are removed from the site upon completion of construction.
7. Applicant will provide personnel to regularly maintain the gaging station.
8. No chemicals will be stored on site, and no herbicides will be used to control vegetation.

## **8. Determination (based on Significance Criteria of 11-200-12 HAR)**

1. The proposed action does not involve an irrevocable commitment to loss or destruction of any natural or cultural resource.
2. The proposed action does not curtail the range of beneficial uses of the environment.
3. The proposed action does not conflict with the state's long-term environmental policies, which, as set forth in Chapter 344, HRS, include conservation of natural resources, enhancing the quality of life, improvement of the quality of life through diverse economic activities, establishing communities in harmony with the natural environment, and establishing a commitment to protect and enhance Hawaii's environment.
4. The proposed action does not substantially affect the economic or social welfare of the community or state.



5. The proposed action does not substantially affect public health.
6. The proposed action does not involve substantial secondary impacts, such as population changes or effects on public facilities.
7. The proposed action does not involve a substantial degradation of environmental quality.
8. The proposed action does not have a cumulatively considerable effect upon the environment or involve a commitment for larger actions.
9. The proposed action does not substantially affect a rare, threatened, or endangered species or its habitat.
10. The proposed action will not detrimentally affect air or water quality or ambient noise levels except for brief periods during construction.
11. The proposed action is within a flood plain but is unlikely to suffer serious damage and will not adversely affect the environment.
12. The proposed action will not substantially affect scenic vistas.
13. The proposed action will not require substantial energy consumption.

## **9. Findings and reasons supporting determination**

1. The proposed action does not involve an irrevocable commitment to loss or destruction of any natural or cultural resource. The action will not adversely affect sites of ecological or cultural significance. Flora and fauna have been surveyed, and no rare, threatened or endangered species were observed within the project area. The project location was examined for sites of cultural significance, and none were found.
2. The proposed action does not curtail the range of beneficial uses of the environment. The action would not affect any current or likely beneficial use of the environment. The area affected by the project action is small, and does not include ecologically or culturally sensitive features. The action would not limit water quality, aquatic habitat, terrestrial habitat, or recreational use of the area.
3. The proposed action does not conflict with the state's long-term environmental policies, which, as set forth in Chapter 344, HRS, include conservation of natural resources, enhancing the quality of life, improvement of the quality of life through diverse economic activities, establishing communities in harmony with the natural environment, and establishing a commitment to protect and enhance Hawaii's environment. The data provided by the proposed action would in fact benefit natural resource conservation and economic activities by providing the Commission on Water Resource Management with improved streamflow information for planning and regulatory pur-

poses.

4. The proposed action does not substantially affect the economic or social welfare of the community or state. A positive effect on economic and social welfare is a likely result of the proposed action, which will provide improved hydrologic data for flood and water-resource management.

5. The proposed action does not substantially affect public health. The existing cableway will be dismantled so as to remove a potential public-safety threat, and the relocated cableway will be secured to deter use by unauthorized persons. Flood information provided by the proposed action could increase public safety in the Hanalei Valley.

6. The proposed action does not involve substantial secondary impacts, such as population changes or effects on public facilities. No population changes are anticipated as a result of gage relocation. No public facilities are located near the existing or proposed gage locations.

7. The proposed action does not involve a substantial degradation of environmental quality. The proposed action would affect a very small area in relation to the size of the watershed. The degree of land disturbance and the amounts of materials involved are not large enough to substantially degrade environmental quality.

8. The proposed action does not have a cumulatively considerable effect upon the environment or involve a commitment for larger actions. The proposed action would not create a need for additional streamgages on the same stream.

9. The proposed action does not substantially affect a rare, threatened, or endangered species or its habitat. A field survey by Anne Brasher, PhD., USGS biologist, indicated no rare, threatened, or endangered species in the project location.

10. The proposed action will not detrimentally affect air or water quality or ambient noise levels except for brief periods during construction. Power equipment and helicopters would be used, and these would temporarily increase ambient noise levels. Water quality will be protected with a Best Management Plan that is expected to prevent unintended discharges to the stream.

11. The proposed action is within a flood plain but is unlikely to suffer serious damage and will not adversely affect the environment. Stream gages, by nature of their function, must be located near streams, frequently on flood plains. It is unlikely, but possible, that a flood flow could reach a stage high enough to destroy the proposed gaging structures. This would require replacement of the structures, but would not threaten human life or private property.

12. The proposed action will not substantially affect scenic vistas. The gage would be located in thick vegetation along the stream, and would be difficult to see from more than 100 feet away.

13. The proposed action will not require substantial energy consumption. Small amounts of fuel would be needed during construction for power equipment, motor vehicles, and helicopters. Bimonthly field visits would require small amounts of fuel for travel between Lihue and the trail-head. The gage itself would be solar-powered, and would not require consumption of fuel or elec-

tricity.

#### **10. Agencies to be consulted in the preparation of the EIS, if applicable**

N/A

#### **11. List of all permits and approvals (federal, state, county)**

Department of the Army permit, NWP authorization 33 CFR Part 325, Appendix A, Paragraph B.5, Scientific Measuring Devices--application submitted to Corps of Engineers on February 6, 1998, approved July 7, 1998.

Section 401 Water Quality Certification--application submitted to Department of Health on February 6, 1998, approved July 7, 1998.

Stream Channel Alteration Permit--application submitted to Commission on Water Resource Management on February 6, 1998.

County of Kauai Special Management Area Permit--not applicable.

Coastal Zone Management Permit--not applicable.

#### **12. Responses to comments received under early consultation provisions**

Letters received in the early consultation process are attached to this draft environmental assessment. Our responses are listed below.

Department of Health: We have submitted an application for Section 401 water-quality certification to the Department of Health. This application includes a Best Management Plan and a monitoring plan.

Office of Hawaiian Affairs: No comments at this time, no response needed.

State Historic Preservation Division: Letter indicates proposed project will have no effect on significant historic sites, no response needed.

Kauai County Department of Water: Letter indicates no objections, no response needed.

Kauai County Department of Public Works: The proposed project is intended to comply with flood plain management regulations. We have contacted the agencies suggested in the letter.

Kauai County Fire Department: Letter indicates no negative impacts for proposed project, no

response required.

Kauai County Planning Department: Project locations are outside of the Special Management Area (SMA), and no SMA permit is required.

**FIGURES**

C I F I C O C E A N

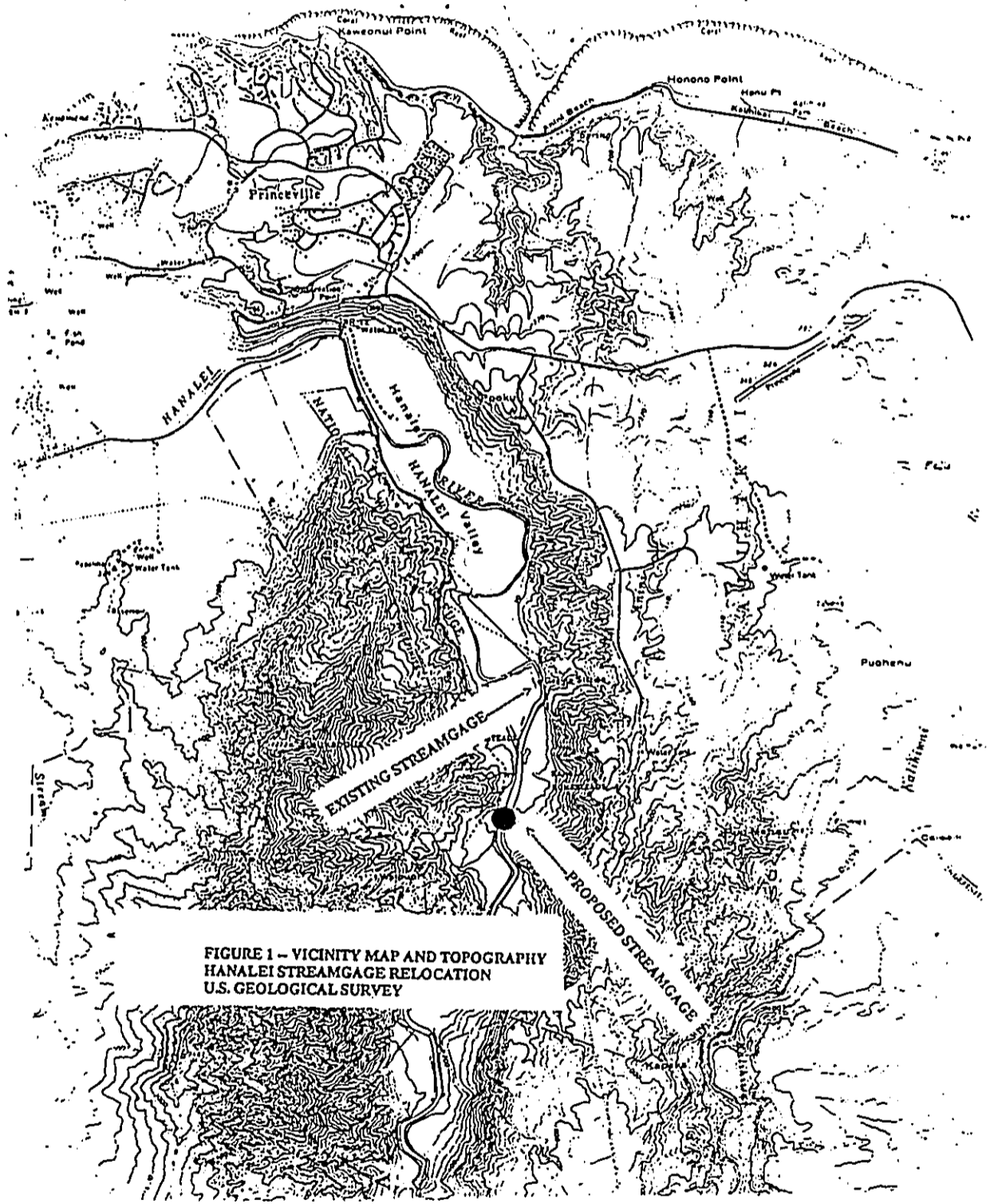


FIGURE 1 - VICINITY MAP AND TOPOGRAPHY  
HANAIEI STREAMGAGE RELOCATION  
U.S. GEOLOGICAL SURVEY

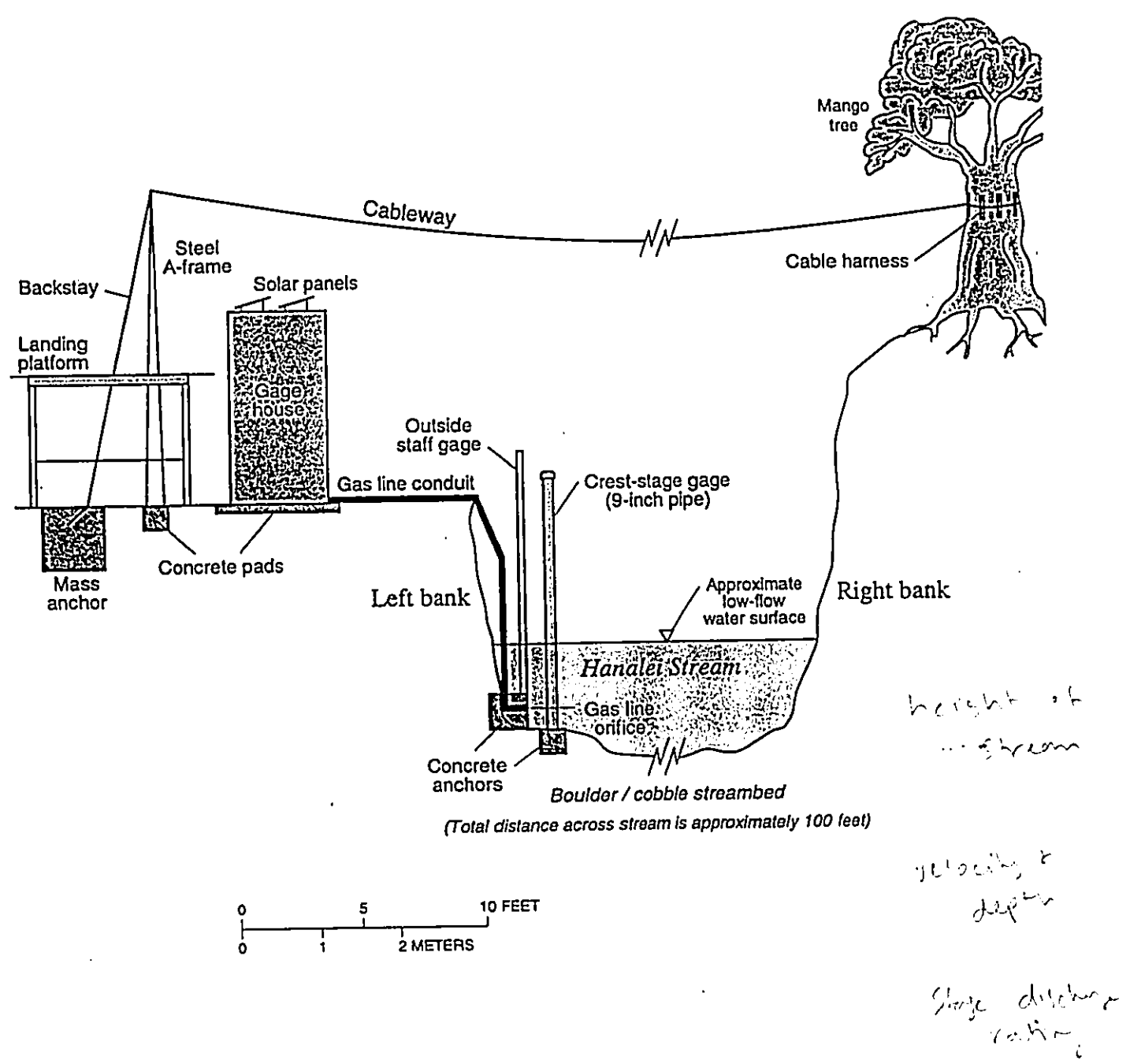


Figure 2. Typical cross section (view downstream) U.S. Geological Survey Hanalei River stream gage relocation.

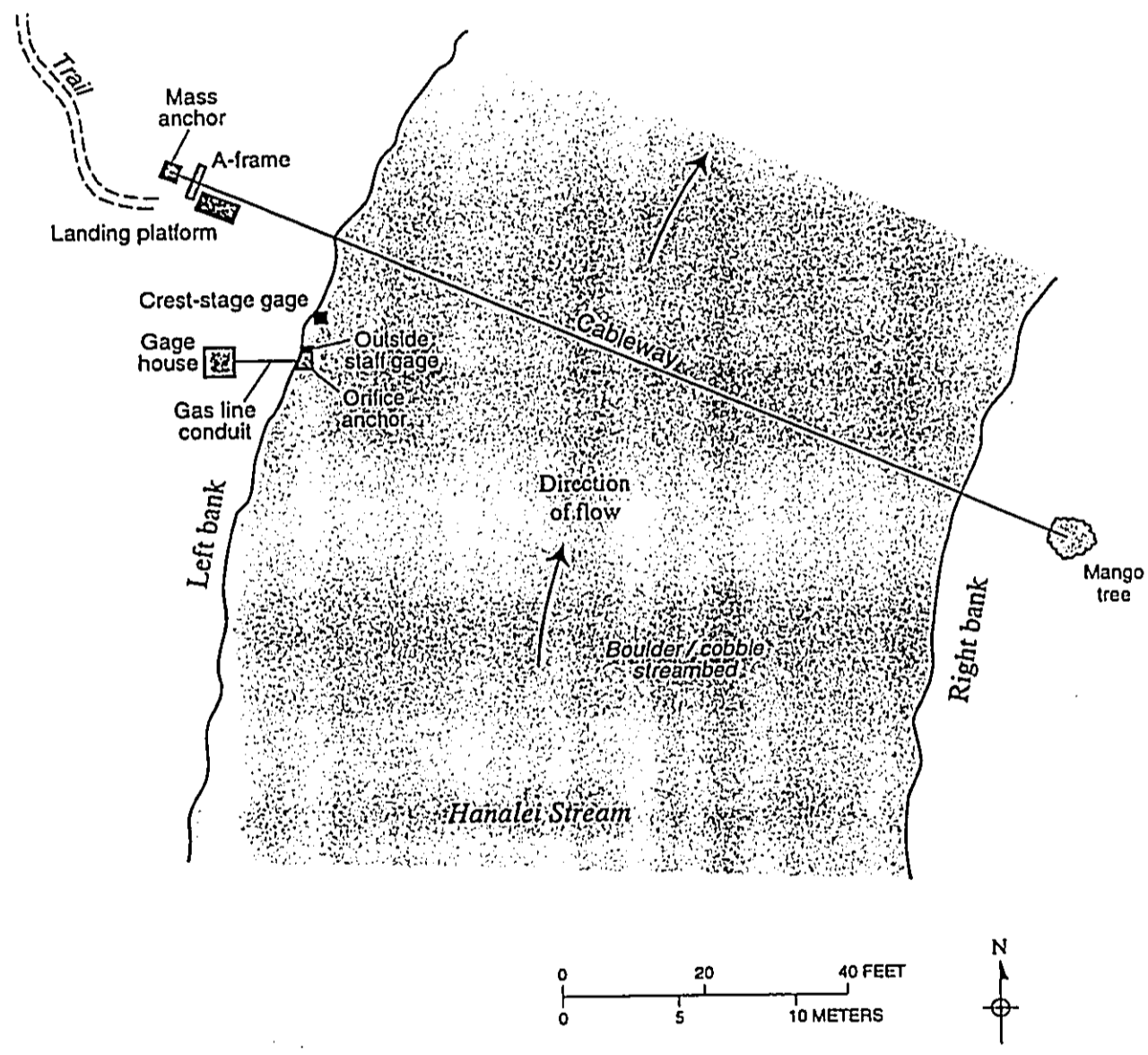
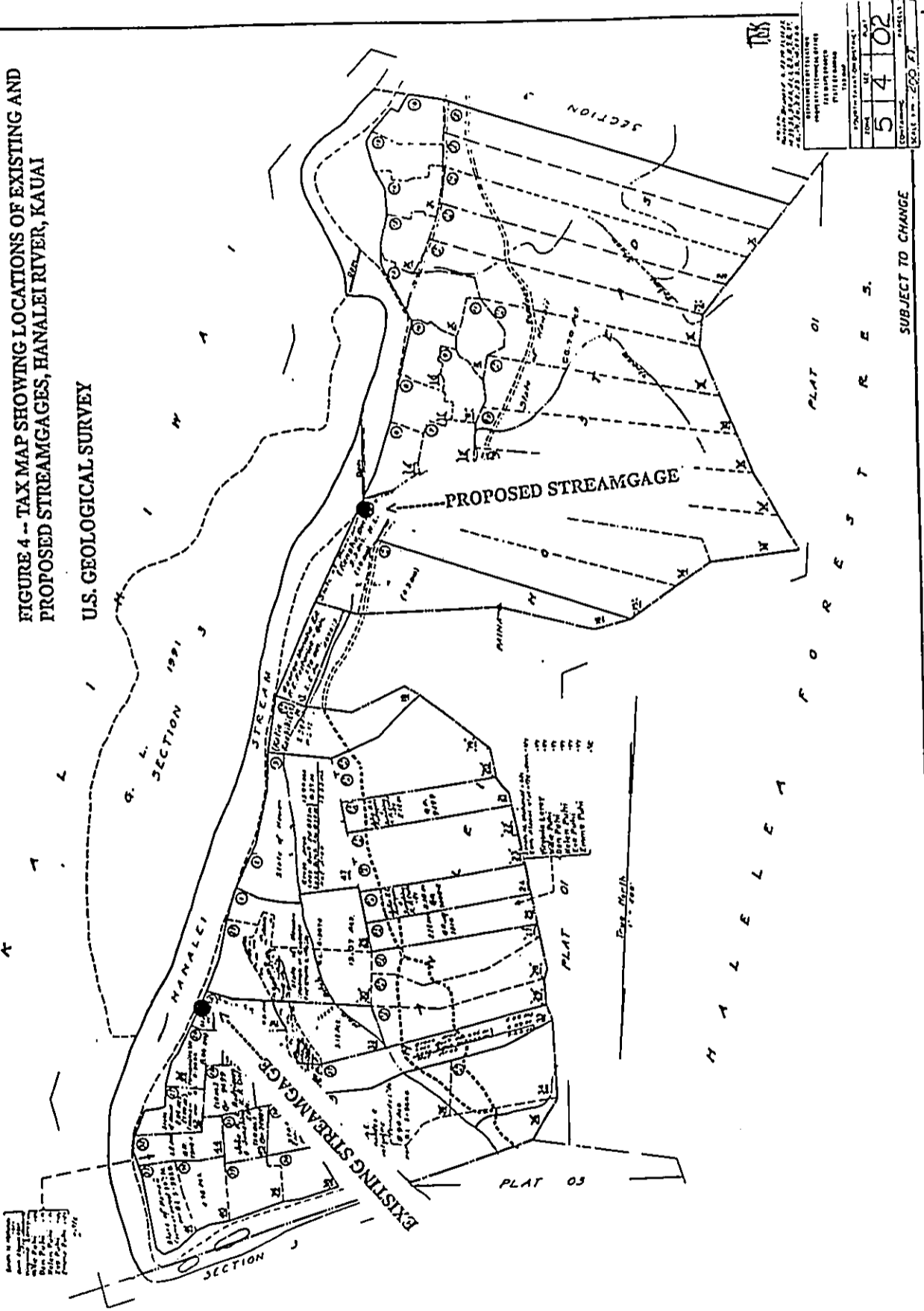


Figure 3. Plan view drawing U.S. Geological Survey Hanalei River stream gage relocation.



FIGURE 4 -- TAX MAP SHOWING LOCATIONS OF EXISTING AND PROPOSED STREAMGAGES, HANAIEI RIVER, KAUAI  
U.S. GEOLOGICAL SURVEY



SUBJECT TO CHANGE

HANAIEI RIVER, KAUAI  
460

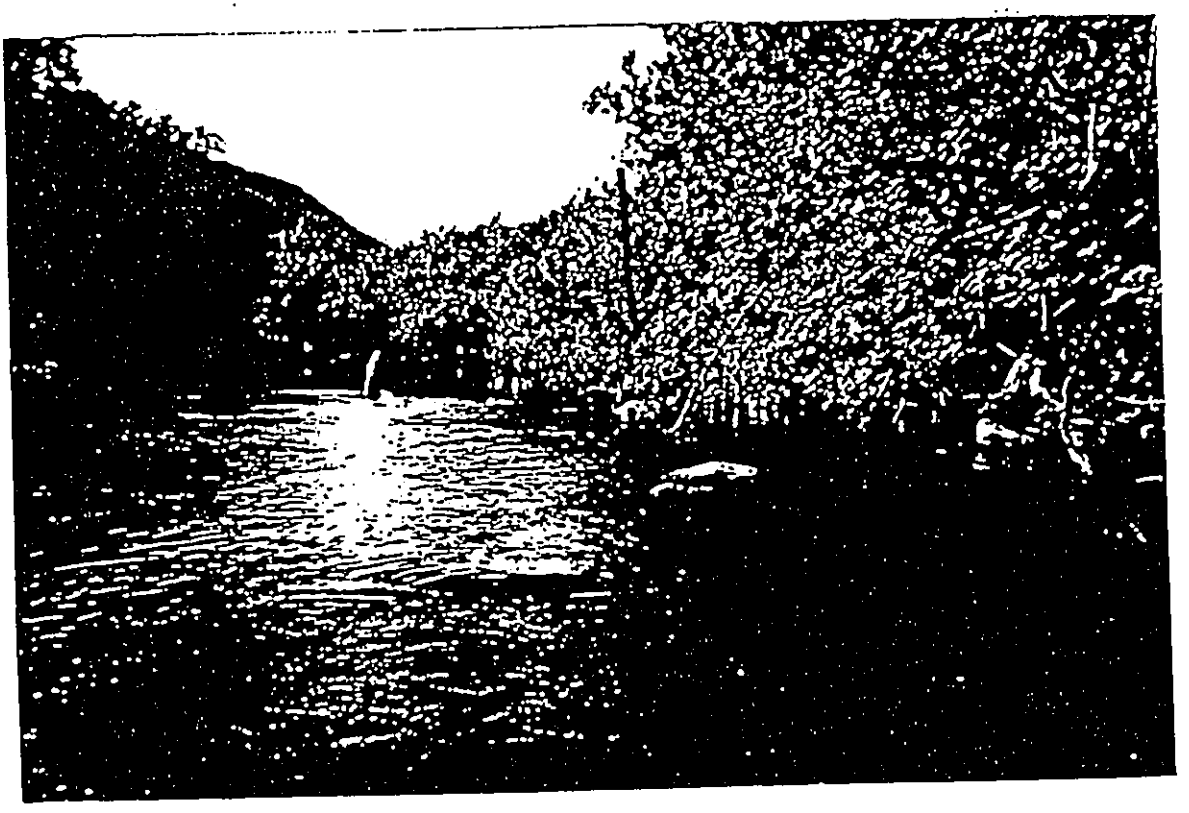
Source: Tax Map Bureau & Bureau of Land Management  
of the Department of the Interior

## PHOTOGRAPH CAPTIONS

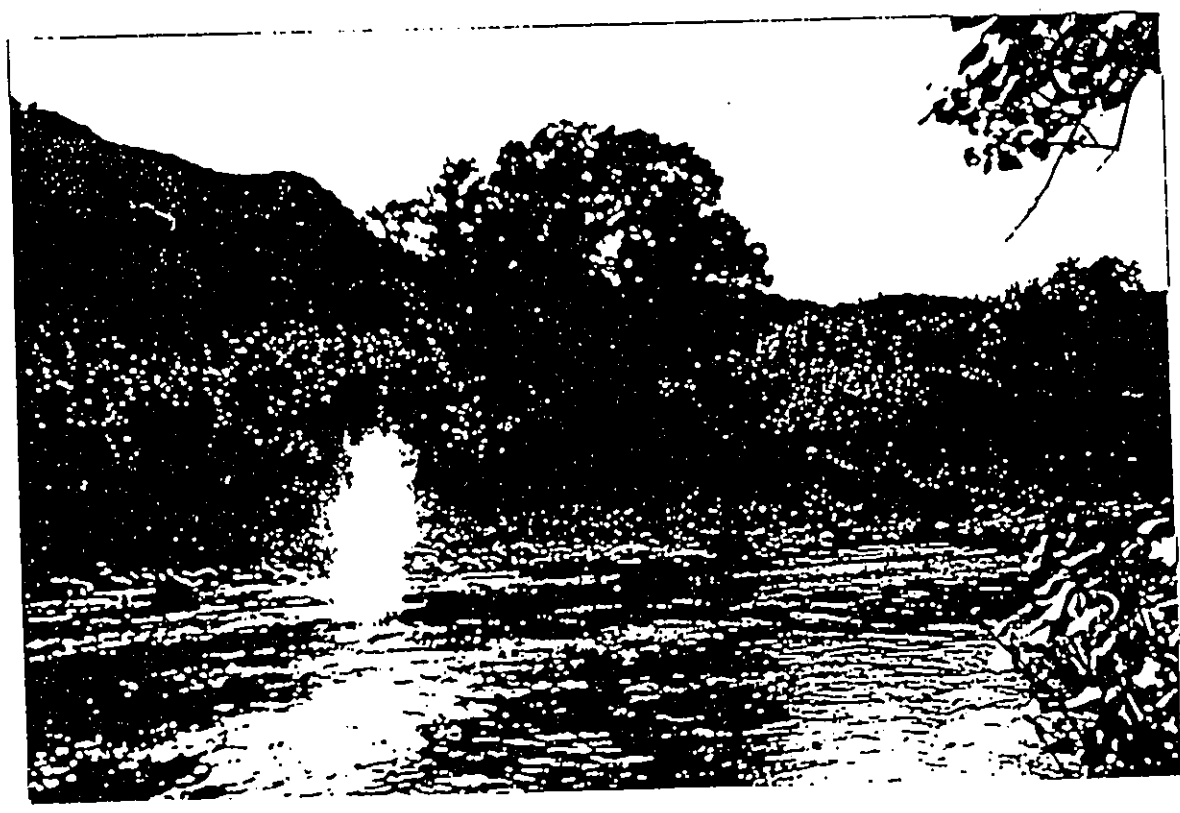
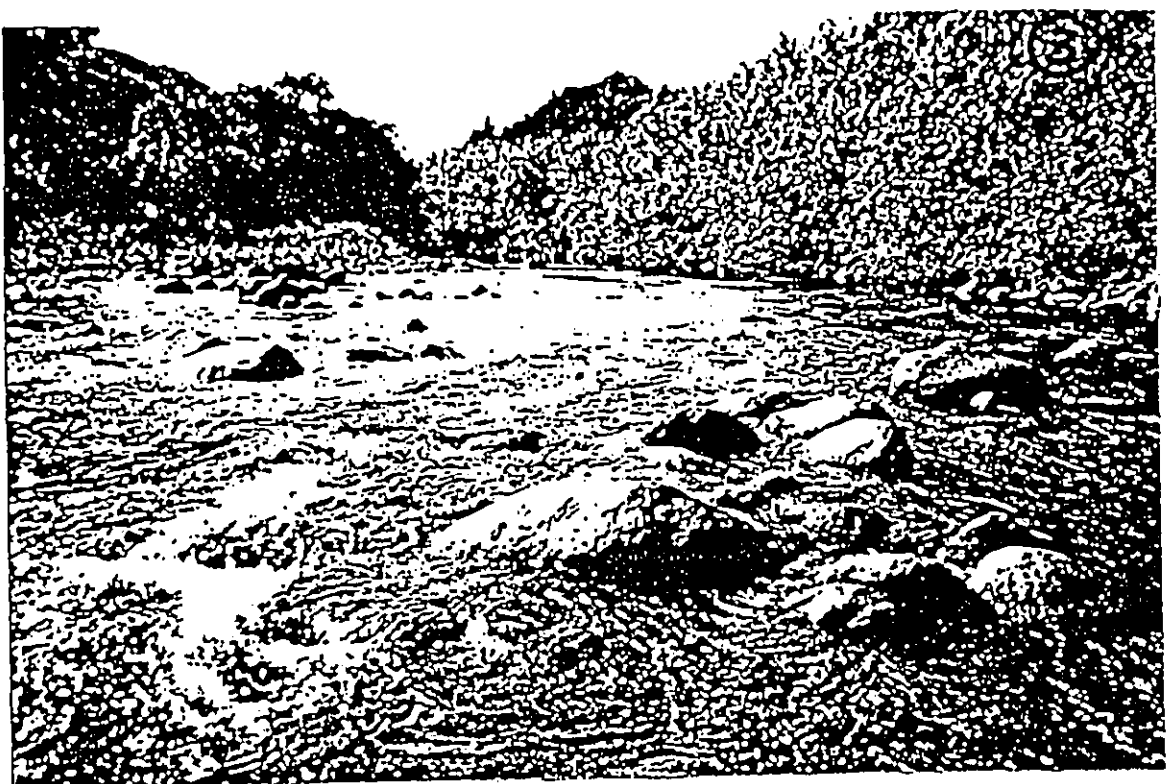
1. West (left) bank of river, arrow marks location of gas-line orifice, gage house would be built on the bank above the arrow.
2. View upstream, arrow marks approximate gage location.
3. View upstream toward proposed gage location, showing general character of channel.
4. Mango tree on east (right) bank to be used as cableway anchor.

(all photos by R.I. Taogoshi, USGS; originals submitted with Draft Environmental Assessment to Land Division, DLNR)

DOCUMENT CAPTURED AS RECEIVED



DOCUMENT CAPTURED AS RECEIVED



**LIST OF PLANTS**

To: Barry Hill, Asst District Chief  
 From: Anne Brasher, Aquatic Ecologist  
 Subject: Survey of proposed gage site on Hanalei River, 1/23/98

The predominant plant species covering the bank in this area was Hau (Hibiscus tiliaceus). Additional plant species observed are listed below. I also checked for native damselfly larvae (Megalagrion sp.) and native snails (Lymnaeidae), but found none.

Family	Species	Common name
<b>FERNS</b>		
Dennstaedtiaceae	Microlepia strigosa	palapalai
Gleicheniaceae	Dicranopteris linearis	staghorn fern
Polypodiaceae	Phymatosorus scolopendria	laua'e
<b>MONOCOTS</b>		
Commelinaceae	Commelina diffusa	honohono
Gramineae	Coix lachryma-jobi	Job's tears
Orchidaceae	Spathoglottis plicata	orchid
Zingiberaceae	Hedychium sp.	ginger
<b>DICOTS</b>		
Malvaceae	Hibiscus tiliaceus	hau
Melastomataceae	Clidemia hirta	clidemia
Myrtaceae	Syzygium cumini	Java plum
Verbenaceae	Lantana camara	lantana

**COPIES OF LETTERS RECEIVED DURING EARLY CONSULTATION**

MARYANNE W. KUSAKA  
MAYOR

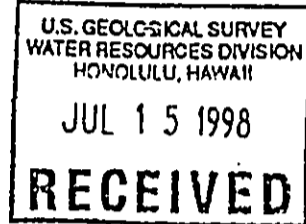


PLANNING DEPARTMENT

DEE M. CROWELL  
PLANNING DIRECTOR  
IAN K. COSTA  
DEPUTY PLANNING DIRECTOR  
TELEPHONE (808) 241-6677  
FAX (808) 241-6699

July 7, 1998

Barry Hill  
U.S. Geological Survey  
Water Resources Division  
677 Ala Moana Blvd., Suite 415  
Honolulu, HI 96813



Subject: Conservation District Use Application KA-2889  
Relocation of Hanalei River Streamgage, Kauai

Dear Mr. Hill:

Thank you for the opportunity to comment on the above referenced project. The existing streamgage location, and the proposed relocation site are outside of the County of Kauai Special Management Area (SMA), and therefore, an SMA Permit is not required from our agency.

Please be advised that there may be additional government agency requirements, and it shall be the applicant's responsibility to resolve those requirements with the respective agencies. Feel welcome to contact George Kalisik of my staff at 241-6677 if you have any questions.

Sincerely,

A handwritten signature in cursive script, appearing to read "Dee M. Crowell".

Dee M. Crowell  
Planning Director

c: Tom Eisen, DLNR-Land



MARYANNE W. KUSAKA  
MAYOR



DAVID K. SPROAT  
FIRE CHIEF

COUNTY OF KAUA'I

FIRE DEPARTMENT  
MO'IKEHA BUILDING  
4444 RICE STREET, SUITE 295  
LIHU'E, KAUA'I, HAWAII

January 26, 1998

Mr. Barry Hill  
Assistant District Chief  
United States Department of the Interior  
U.S. Geological Survey  
Water Resources Division  
677 Ala Moana Blvd., Suite 415  
Honolulu, Hawaii 96813

RE: Relocation of Hanalei River Streamgage

Dear Mr. Hill:

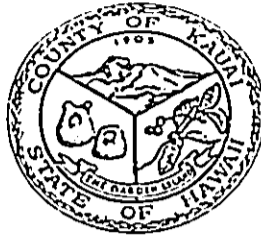
I am in agreement with the need to relocate the Hanalei River streamgage to its proposed new site and foresee no negative impacts regarding this move.

I concur and support this project based on your history of good work.

Sincerely,

David K. Sproat  
Fire Chief

MARYANNE W. KUSAKA  
MAYOR



CESAR C. PORTUGAL  
COUNTY ENGINEER  
TELEPHONE 241-6600

RUSSELL SUGANO  
ACTING DEPUTY COUNTY ENGINEER  
TELEPHONE 241-6631

AN EQUAL OPPORTUNITY EMPLOYER  
COUNTY OF KAUAI

DEPARTMENT OF PUBLIC WORKS  
4444 RICE STREET  
MO'IKEHA BUILDING, SUITE 275  
LIHU'E, KAUAI, HAWAII 96766

PW12.208

January 14, 1998

United States Department of Interior  
U.S. Geological Survey  
Water Resources Division  
677 Ala Moana Blvd., Suite 415  
Honolulu, Hawaii 96813

Attention: Mr. Barry Hill

Gentlemen:

SUBJECT: HANAIEI RIVER STREAM GAGE RELOCATION

Reference is made to your letter dated December 19, 1997 which requests our comments on the subject stream gage relocation. The stream gage, shelter and appurtenant facility is not considered a building and no building permit will be required. However, your agency as well as the County is mandated by federal laws under the National Flood Insurance Program to provide proper flood plain management especially when work is in the floodway of the Hanalei River. Consequently, we are requesting that your agency assess and develop the project to comply with the flood plain management regulations. We also recommend that you consult with other agencies such as the Department of Land and Natural Resources, Department of Health and the Corp of Engineers for requirements to develop a project in the waterway of the Hanalei River.

Thank you for the opportunity to offer our comments. Should you have any questions, please feel free to contact Mr. Wallace Kudo of my staff at (808) 241-6620.

Very truly yours,

  
CESAR C. PORTUGAL  
County Engineer

WK/cu

## DEPARTMENT OF WATER

County of Kauai

*"Water has no Substitute -- Conserve It!"*

January 2, 1998

Mr. Barry Hill, Assistant District Chief  
U.S. Geological Survey  
Water Resources Division  
677 Ala Moana Blvd., Suite 415  
Honolulu, HI 96813

Dear Mr. Hill:

SUBJECT: U.S. Geological Survey -- Draft Environmental Assessment, Relocation  
of Hanalei River Streamgauge, Hanalei Valley, Kauai, Hawaii

Thank you for the opportunity to provide comments on the proposed Draft  
Environmental Assessment (EA).

The existing County Hanalei Water System service area is located makai of Kuhio  
Highway, including Hanalei town and the coastal area of Hanalei Bay. At the  
present time, we do not have any objections to the proposed action.

If you have any questions, please call Gregg Fujikawa at (808) 245-5416.

Sincerely,



Ernest Y. W. Lau  
Manager and Chief Engineer

GF:ls  
C:\-ls\hillusgs.doc

BENJAMIN J. CAYetano  
GOVERNOR OF HAWAII



STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
STATE HISTORIC PRESERVATION DIVISION  
33 SOUTH KING STREET, 6TH FLOOR  
HONOLULU, HAWAII 96813

MICHAEL D. WILSON, CHAIRPERSON  
BOARD OF LAND AND NATURAL RESOURCES

DEPUTIES

GILBERT COLOMA-AGARAN

AQUACULTURE DEVELOPMENT  
PROGRAM

AQUATIC RESOURCES  
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RESOURCES ENFORCEMENT  
CONVEYANCES

FORESTRY AND WILDLIFE  
HISTORIC PRESERVATION

DIVISION

LAND DIVISION

STATE PARKS

WATER AND LAND DEVELOPMENT

REF:HP-AMK

FEB - 9 1998

Mr. Barry Hill  
USGS  
677 Ala Moana Blvd., Ste. 415  
Honolulu, Hawaii 96813

LOG NO: 20923  
DOC NO: 9801NM07

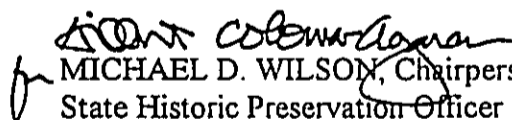
Dear Mr. Hill:

SUBJECT: National Historic Preservation Act Review - Section 106  
Compliance, and Draft EA for USGS  
Installation of Stream Gage, Hanalei River, Kauai

On January 23, 1998, our staff archaeologist and USGS staff inspected the project area. Based on the locations for the gage (along the shoreline bank of Hanalei River, where no historic sites exist), we concur with your determination that this project will have "no effect" on significant historic sites.

If you have any questions, please call Nancy McMahon 742-7033.

Aloha,

  
MICHAEL D. WILSON, Chairperson and  
State Historic Preservation Officer

NM:amk

c. Advisory Council, Western Region



STATE OF HAWAII  
OFFICE OF HAWAIIAN AFFAIRS  
711 KAPI'OLANI BOULEVARD, SUITE 500  
HONOLULU, HAWAII 96813-5249  
PHONE (808) 594-1888  
FAX (808) 594-1865  
January 06, 1998

Mr. Barry Hill  
U.S. Geological Survey  
Water Resources Division  
677 Ala Moana Blvd., Suite 415  
Honolulu, HI 96813

**Subject:** Preparation of a Draft Environmental Assessment (DEA) for relocation of  
Hanalei River streamgauge

Dear Mr. Hill:

Thank you for your letter requesting comments for the preparation of a Draft Environmental Assessment (DEA) for the relocation of the Hanalei River streamgauge.

The Office of Hawaiian Affairs (OHA) has no comments at this time to the proposed relocation. But OHA intends to thoroughly review the DEA once the document is available for public review. Please contact Colin Kippen (594-1938), Officer of the Land and Natural Resources Division, or Luis A. Manrique (594-1758), should you have any questions on this matter.

A handwritten signature in black ink, appearing to read "Randall Ogata".

Randall Ogata  
Administrator

Sincerely yours,

A handwritten signature in black ink, appearing to read "Colin Kippen".

Colin Kippen  
Officer,  
Land and Natural  
Resources Division

cc Board of Trustees

BENJAMIN J. CAYETANO  
GOVERNOR OF HAWAII



STATE OF HAWAII  
DEPARTMENT OF HEALTH  
P.O. BOX 3378  
HONOLULU, HAWAII 96801  
January 26, 1998

LAWRENCE MIKE  
DIRECTOR OF HEALTH

In reply, please refer to

98-001/epo

Mr. Barry Hill  
U.S. Geological Survey  
Water Resources Division  
677 Ala Moana Boulevard, Suite 415  
Honolulu, Hawaii 96813

Dear Mr. Hill:

Subject: PRE-ENVIRONMENTAL ASSESSMENT  
Relocation of the Hanalei River Streamgage  
Hanalei River, Kauai, Hawaii

Thank you for allowing us to review and comment on the subject project. We have the following comments to offer:

Clean Water Branch

The present and proposed locations of the streamgage are both classified by the Department of Health as "Class 1.b, Inland Waters" in accordance with Hawaii Administrative Rules (HAR), Chapter 11-54, "Water Quality Standards," Section 11-54-05.1(b).

Site-specific Best Management Practices (BMPs) shall be properly implemented for the removal and installation of the gage facilities to minimize the potential adverse impacts resulting from the construction activities. An applicable monitoring plan shall also be implemented to properly evaluate the adequacy of the applied BMPs and to identify any adverse construction impacts to the Hanalei River at both the present and the new locations.

An individual Section 401 Water Quality Certification application is required for this project. For further details, please contact Mr. Edward Chen of the Clean Water Branch at 586-4309.

Sincerely,

A handwritten signature in cursive script, appearing to read "Bruce S. Anderson".

BRUCE S. ANDERSON, Ph.D.  
Deputy Director for Environmental Health

c: CWB

**COPIES OF LETTERS AND MEMOS COMMENTING ON DRAFT ENVI-  
RONMENTAL ASSESSEMENT, AND RESPONSES**

## Division of Forestry & Wildlife

1151 Punchbowl Street, Rm. 325 • Honolulu, HI 96813 • (808) 587-0166 • Fax (808) 587-0160

June 25, 1998

### MEMORANDUM

TO: Tom Eisen, Planner  
Division of Land Management

THRU: Dean Uchida, Administrator  
Division of Land Management

FROM: *fn* Michael G. Buck, Administrator  
Division of Forestry and Wildlife

*Paul J. Conroy*

JUN 26 3 57 PM '98  
DIVISION OF FORESTRY & WILDLIFE

SUBJECT: CDUA (Departmental Permit) File #KA-2889 (D), Relocation of Hanalei River Stream gauge, Hanalei, Kauai TMK 5-4-02:16 & 31; 5-3-01:03.

We have reviewed this proposal with respect to its impacts on the natural resources and endangered species in particular. The draft EA shows no threatened and endangered plant or animal species will be affected by the stream gauge relocation. Therefore, we have no objections to the proposed relocation of Hanalei River Stream gauge by the U.S. Geological Survey.

C: Kauai DOFAW





United States Department of the Interior

U.S. GEOLOGICAL SURVEY  
Water Resources Division  
677 Ala Moana Blvd., Suite 415  
Honolulu, Hawaii 96813

October 23, 1998

Mr. Michael Buck, Administrator  
State of Hawaii Department of Land and Natural Resources  
Division of Forestry and Wildlife  
1151 Punchbowl Street, Room 325  
Honolulu, Hawaii 96813

Dear Mr. Buck:

I have received a copy of your memo to Mr. Tom Eisen, Department of Land and Natural Resources, Land Division, regarding our application for a Conservation District Use Permit for the relocation of the Hanalei River streamgage. I understand from that memo that you have no objections to the issuance of the Conservation District Use Permit. Our Final Environmental Assessment will include a copy of your memo.

Thank you for your response to our Conservation District Use Permit application. If you have any questions, please feel free to call me at 522-8290.

Sincerely,

Barry Hill  
Assistant District Chief

BENJAMIN J. CAYETANO  
GOVERNOR OF HAWAII



STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
COMMISSION ON WATER RESOURCE MANAGEMENT  
P. O. BOX 621  
HONOLULU, HAWAII 96809

July 14, 1998

MICHAEL D. WILSON  
CHAIRPERSON

ROBERT G. GIRALD  
DAVID A. NOBRIGA  
LAWRENCE H. MIKE  
RICHARD H. COX  
HERBERT M. RICHARDS, JR.

TIMOTHY E. JOHNS  
DEPUTY DIRECTOR

TO: Mr. Dean Y. Uchida, Administrator  
Land Division

FROM: Timothy E. Johns, Deputy Director *Timothy E. Johns*  
Commission on Water Resource Management

SUBJECT: CDUA, Proposed Relocation of Hanalei River Streamgage  
TMK: 4-4-02:16, 31; 5-3-01:3

Thank you for allowing us to comment on the subject CDUA.

The Commission is processing a stream channel alteration permit for the proposed gage.

We have no objections to the issuance of the Conservation District Use Permit subject to obtaining the stream channel alteration permit.

If you have any questions, please call David Higa at 587-0249.

DH:ss

JUL 17 9 18 AM '98



United States Department of the Interior

U.S. GEOLOGICAL SURVEY  
Water Resources Division  
677 Ala Moana Blvd., Suite 415  
Honolulu, Hawaii 96813

October 23, 1998

Mr. Timothy Johns  
Deputy Director  
State of Hawaii Department of Land and Natural Resources  
Commission on Water Resource Management  
P.O. Box 621  
Honolulu, Hawaii 96809

Dear Mr. Johns:

I have received a copy of your memo to Mr. Dean Uchida, Department of Land and Natural Resources, Land Division, regarding our application for a Conservation District Use Permit for the relocation of the Hanalei River streamgage. I understand from that memo that you have no objections to the issuance of the Conservation District Use Permit as long as we obtain a Stream Channel Alteration Permit (SCAP) for the gage relocation. Our Final Environmental Assessment will note that the Commission on Water Resource Management is processing our SCAP application.

Thank you for your response to our Conservation District Use Permit application. If you have any questions, please feel free to call me at 522-8290.

Sincerely,

Barry Hill  
Assistant District Chief

STATE OF HAWAII  
DEPARTMENT OF LAND AND NATURAL RESOURCES  
Division of Aquatic Resources

July 22, 1998

TO: William S. Devick, Acting Administrator *WSD*  
Division of Aquatic Resources

THROUGH: Brian Kanenaka/Annette Tagawa, Aquatic Biologists *AT*

FROM: *DH(AT)*  
Donald Heacock, Aquatic Biologist - Kauai

SUBJECT: CDUA Permit Request, File No. KA-2889, and Draft Environmental  
Assessment for a USGS relocation of a stream gauge on the Hanalei  
River.

I have reviewed the above referenced documents and offer the following comments regarding the relocation of the Hanalei River stream gauge:

1. The applicant should work with the USDA's National Resource Conservation Service in order to validate and implement the proposed Best Management Plan in order to minimize soil erosion and maximize the re-vegetation and bank stabilization at both old and new stream gauge sites.
2. A stream alteration permit may be required from the Commission on Water Resources Management since the proposed relocation will entail about 1 cubic yard of concrete added to the stream channel and another 6 cubic yards added to the floodplain.
3. Cement, which is toxic to aquatic organisms, should not be allowed to flow, leach or in any way be discharged into the Hanalei River.



United States Department of the Interior

U.S. GEOLOGICAL SURVEY  
Water Resources Division  
677 Ala Moana Blvd., Suite 415  
Honolulu, Hawaii 96813

October 23, 1998

Mr. William Devick, Acting Administrator  
State of Hawaii Department of Land and Natural Resources  
Division of Aquatic Resources  
1151 Punchbowl Street  
Honolulu, Hawaii 96813

Dear Mr. Devick:

I have received a copy (enclosed) of a memo to you from Mr. Donald Heacock, Division of Aquatic Resources, regarding our application for a Conservation District Use Permit for the relocation of the Hanalei River streamgage. My responses to the concerns raised by Mr. Heacock follow:

1. I contacted Mr. Ron Peyton of the Natural Resources Conservation Service in Lihue and discussed our Best Management Practices (BMPs) with him. He indicated that our BMP plan should be adequate to minimize erosion and maximize bank stabilization, given the small area that will be disturbed.
2. We have submitted an application for a Stream Channel Alteration Permit to the Commission on Water Resource Management.
3. Our BMP plan is intended to prevent any cement from mixing with the water in the river.

Thank you for your response to our Conservation District Use Permit application. If you have any questions, please feel free to call me at 522-8290.

Sincerely,

Barry Hill  
Assistant District Chief

Enclosure

PHONE (808) 594-1888

FAX (808) 594-1865



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

July 14, 1998

Mr. Dean Y. Uchida  
Land Division  
DLNR  
P.O. Box 621  
Honolulu, HI 96809

**Subject:** Conservation District Use Permit Application for the Relocation of a  
Hanalei River Streamgage, Hanalei, Island of Kauai

Dear Mr. Uchida:

Thank you for the opportunity to review the Conservation District Use Permit Application for the Relocation of a Hanalei River Streamgage, Hanalei, Island of Kauai. The U.S. Geological Service (USGS) is planning to relocate an existing streamgage to a site approximately 3000 feet upstream of its present location. The relocation would allow the USGS to improve the accuracy of streamflow measurements.

The Office of Hawaiian Affairs (OHA) has reviewed the Conservation District Use Permit Application and has no concerns at this time. Please contact Colin Kippen (594-1938), LNR Officer, or Luis Manrique (594-1758), should you have any questions on this matter.

Sincerely yours,

A handwritten signature in black ink, appearing to read "R. Ogata".

Randall Ogata  
Administrator

A handwritten signature in black ink, appearing to read "Colin Kippen".

Colin Kippen  
Officer,  
Land and Natural  
Resources Division

cc: Board of Trustees  
CAC, Island of Kauai

JUL 16 9 36 AM '98



United States Department of the Interior

U.S. GEOLOGICAL SURVEY  
Water Resources Division  
677 Ala Moana Blvd., Suite 415  
Honolulu, Hawaii 96813

October 23, 1998

Mr. Colin Kippen, Land and Natural Resources Officer  
State of Hawaii  
Office of Hawaiian Affairs  
711 Kapiolani Boulevard, Suite 500  
Honolulu, Hawaii 96813

Dear Mr. Kippen:

I have received a copy of your letter to Mr. Dean Uchida, Land Division Administrator, Department of Land and Natural Resources, concerning our application for a Conservation District Use Permit for relocation of our Hanalei River streamgage. I understand that at this time you have no concerns with this project. I appreciate your response to our application. Our Final Environmental Assessment will include a copy of your letter.

If you have any questions, you are welcome to call me at 522-8290.

Sincerely,

Barry Hill  
Assistant District Chief

BENJAMIN J. CAYETANO  
GOVERNOR OF HAWAII



LAWRENCE MIIKE  
DIRECTOR OF HEALTH

LD

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

In reply, please refer to

July 16, 1998

98-001A/epo

TO: The Honorable Michael Wilson, Chairperson  
Department of Land and Natural Resources

FROM: Lawrence Miike *Lawrence Miike*  
Director of Health

SUBJECT: CONSERVATION DISTRICT USE APPLICATION

Applicant: U. S. Geological Survey  
File No.: KA-2897(D)  
Request: Relocate Hanalei River Streamgage  
Location: Hanalei, Kauai  
TMK: 5-4-02: 16 and 31

JUL 21 7 37 AM '98

Thank you for allowing us to review and comment on the subject request. We have the following comments to offer:

Clean Water Branch

A Section 401 Water Quality Certification has been issued to the United States Geological Survey (USGS) for the proposed activity. Enclosed is a copy of the Section 401 Water Quality Certification dated July 7, 1998.

Should you have any questions regarding this matter, please contact Mr. Shane Sumida, Engineering Section of the Clean Water Branch, 586-4309.

Encl.

c: CWB

Department of Health  
State of Hawaii

JUL 20 11 31 59





United States Department of the Interior

U.S. GEOLOGICAL SURVEY  
Water Resources Division  
677 Ala Moana Blvd., Suite 415  
Honolulu, Hawaii 96813

October 23, 1998

Dr. Lawrence Miike, Director  
State of Hawaii Department of Health  
P.O. Box 3378  
Honolulu, Hawaii 96801

Dear Dr. Miike:

I have received a copy of your memo to Mr. Michael Wilson, Chairperson, Department of Land and Natural Resources, concerning our application for a Conservation District Use Permit for the relocation of our Hanalei River gage. I appreciate your response to our application. Our Final Environmental Assessment will include a copy of your memo.

If you have any questions, please feel free to call me at 522-8290.

Sincerely,

Barry Hill  
Assistant District Chief

**CONSERVATION DISTRICT USE APPLICATION**

STATE OF HAWAII  
 DEPARTMENT OF LAND AND NATURAL RESOURCES  
 P. O. BOX 621  
 HONOLULU, HAWAII 96809  
 CONSERVATION DISTRICT USE APPLICATION FORM

Dec. 1994

FOR DLNR USE ONLY  
 Reviewed by \_\_\_\_\_  
 Date \_\_\_\_\_  
 Accepted by \_\_\_\_\_  
 Date \_\_\_\_\_  
 Docket/Fine No. \_\_\_\_\_  
 180-Day Exp. \_\_\_\_\_  
 EIS Required \_\_\_\_\_  
 PH Required \_\_\_\_\_  
 Board Approved \_\_\_\_\_  
 Disapproved \_\_\_\_\_

(Print or Type)

SUMMARY PAGE

I. LANDOWNER

(If State land, to be filled by State of Hawaii or government entity with management control over parcel.)

Name \_\_\_\_\_

Address \_\_\_\_\_

Telephone No. \_\_\_\_\_

SIGNATURE \_\_\_\_\_

DATE \_\_\_\_\_

NOTE: Signature of an authorized representative of DLNR under this section is not to be construed as an approval or as an application which shall be submitted separately with the appropriate fee. Also, for private lands with multiple owners, the application shall be signed by landowners whose property interests constitute or exceed 85% of the fee ownership of the parcel(s).

II. APPLICANT

Name U.S. Geological Survey

Address 677 Ala Moana Blvd., #415

Honolulu, Hawaii 96813

Telephone No. (808) 522-8290

Interest in Property Federal/State

Basic Data Collection  
 (Indicate interest in property; submit written evidence of this interest.)

\*SIGNATURE B. Hill

Date 2/5/98

\*If for a Corporation, Partnership, Agency or Organization, must be signed by an authorized officer.

AGENT

Name \_\_\_\_\_

Address \_\_\_\_\_

Telephone No. \_\_\_\_\_

CONSERVATION DISTRICT USE APPLICATION (Rev. 12/94)

III. TYPE OF PERMIT

- (1) Departmental permit (see section 13-5-33);
- (2) Board permit (see section 13-5-34)
- (3) Emergency permit (see section 13-5-35)
- (4) Temporary variance (see section 13-5-36)
- (5) Nonconforming uses (see section 13-5-37)
- (6) Site plan approval (see section 13-5-38); or
- (7) Management plan (see section 13-5-39)

IV. LAND PARCEL LOCATION

Island Kauai  
 County Kauai  
 District Hanalei  
 Tax Map Key(s) 5-4-02-16131, 5-3-01-3  
 Area of Parcel 1.0 acre  
 (Indicate in acres or sq. ft.)  
 Term (if lease) N/A

- V. SUMMARY OF PROPOSED IDENTIFIED LAND USE: (Cite applicable section of Title 13-5, HAR. Attach additional sheet(s) as needed.) (13-5-22)  
 Basic data collection involving a land use with incidental ground disturbance. See attached draft EA.
- VI. ENVIRONMENTAL REQUIREMENTS

Pursuant to Chapter 343, Hawaii Revised Statutes, and in accordance with Title 11; Chapter 200, Environmental Impact Statement Rules for applicant actions, a Draft Environmental Assessment of the proposed use must be attached. The Draft Environmental Assessment shall include, but not be limited to the following:

- (1) Identification of applicant or proposing agency;
- (2) Identification of approving agency, if applicable;
- (3) Identification of agencies consulted in making assessment;
- (4) General description of the action's technical, economic, social, and environmental characteristics;
- (5) Summary description of the affected environment, including suitable and adequate location and site maps;
- (6) Identification and summary of major impacts and alternatives considered, if any;
- (7) Proposed mitigation measures, if any;
- (8) Determination;
- (9) Findings and reasons supporting determination; and
- (10) Agencies to be consulted in the preparation of the EIS, if applicable.

Following the end of a 30-day review period for the Draft Environmental Assessment, any comments received along with their responses must be incorporated into the Final Environmental Assessment. If appropriate, the text, figures, tables, maps, and other ancillary parts of the Environmental Assessment should be revised.

CONSERVATION DISTRICT USE APPLICATION (Rev. 12/94)

VII. DESCRIPTION OF PARCEL See attached sheets.

- A. Existing structures/use. (Attach description or map and one set of original photographs. Also, if applicable, include any previously obtained Federal, State and/or County permit approvals.)
- B. Existing utilities. (If available, indicate size and location on map. Include electricity, water, telephone, drainage, and sewerage.)
- C. Existing access. (Provide map showing roadways, trails, if any. Give street name. Indicate width, type of paving and ownership.)
- D. Flora and Fauna. (Describe and provide map showing location and types of flora and fauna. Indicate if rare or endangered native plants and/or animals are present.)
- E. Topography; if ocean area, give depths. (Submit contour maps for ocean areas and areas where slopes are 40% or more. Contour maps will also be required for uses involving tall structures, gravity flow and other special cases.)
- F. If shoreline area, describe shoreline. (Indicate if shoreline is sandy, muddy, rocky, etc. Indicate cliffs, reefs, or other features such as access to shoreline.)
- G. Existing covenants, easements, restrictions. (If State lands, indicate present encumbrances.)
- H. Historic sites affected. (If applicable, attach map and descriptions.)

VIII. COMMENCEMENT DATE: 6/1/98

COMPLETION DATE: 6/30/98 for construction, gage to be operated for 10 years

IX. CITE AND DESCRIBE IN DETAIL THE PROPOSED IDENTIFIED LAND USE: (Refer to Title 13-5, HAR. Attach additional sheets as needed.) See attached sheet.

X. AREA OF PROPOSED USE: 0.5 acres  
(Indicate in acres or sq. ft.)

XI. NAME AND DISTANCE OF NEAREST TOWN OR LANDMARK:

Hanalei, 2.6 miles northwest

XII. LAND USE COMMISSION BOUNDARY INTERPRETATION: If the area is within fifty feet of the boundary of the Conservation District, include a map showing the interpretation of the boundary by the State Land Use Commission.

CONSERVATION DISTRICT USE APPLICATION (Rev. 12/94)

- XIII. SUBZONE BOUNDARY DETERMINATION: Prior to the department receiving for processing any application for a permit, if the applicant's proposed land use lies within fifty feet of a subzone boundary, the applicant shall first notify the department of the intended use and seek a determination of the precise boundary of the subzone with respect to the parcel in question. (Refer to Section 13-5-17, HAR.) N/A
- XIV. FEES. Each application shall be accompanied by such filing fees as specified in Chapter 13-5, HAR. All fees shall be in the form of cash, certified or cashier's check, and payable to the State of Hawaii. Attached.
- XV. PLANS. All applications shall contain associated plans such as a location map, site plan, floor plan, elevations and landscaping plans drawn to scale. Additionally, all plans should include a north arrow and graphic scale.
- A. Area Plan. Area plan should include but not be limited to relationship of proposed uses to existing and future uses in abutting parcels; identification of major existing facilities; names and addresses of adjacent property owners. See attached tax map (Figure 4).
- B. Site Plan: Site plan (maps) should include, but not be limited to, dimensions and shape of lot; metes and bounds, including easements and their use; existing features, including vegetation, water area, roads, and utilities. (For Site Plan Approvals, see Section 13-5-38, HAR.) See attached topographic map (Figure 1).
- C. Construction Plan: Construction plans should include, but not be limited to, existing and proposed changes in contours; all buildings and structures with indicated use and critical dimensions (including floor plans); open space and recreation areas; landscaping, including buffers; roadways, including widths; offstreet parking area; existing and proposed drainage; proposed utilities and other improvements; revegetation plans; drainage plans including erosion sedimentation controls; and grading, trenching, filling, dredging or soil disposal. (See attached schematic drawings (Figures 2 and 3)).
- D. Maintenance Plans: For all uses involving power transmission, fuel lines, drainage systems, unmanned communication facilities and roadways not maintained by a public agency, plans for maintenance shall be included. N/A
- E. Management Plans: If required, refer to Section 13-5-39, HAR, and Exhibit 3, entitled "Management Plan Requirements, dated September 6, 1994. N/A
- F. Historic or Archaeological Site Plan. Where there exists historic or archaeological sites on the State or Federal Register, a plan must be submitted including a survey of the site(s); significant features; protection, salvage, or restoration plans. N/A

CONSERVATION DISTRICT USE APPLICATION (Rev. 12/94)

XVI. DEMONSTRATE THAT THE PROPOSED USE IS CONSISTENT WITH THE FOLLOWING CRITERIA:

1. The proposed land use is consistent with the purpose of the Conservation District;
2. The proposed land use is consistent with the objectives of the subzone of the land on which the use will occur;
3. The proposed land use complies with provisions and guidelines contained in Chapter 205A, Hawaii Revised Statutes (HRS), entitled "Coastal Zone Management," where applicable;
4. The proposed land use will not cause substantial adverse impact to existing natural resources within the surrounding area, community or region;
5. The proposed land use, including buildings, structures and facilities, shall be compatible with the locality and surrounding areas, appropriate to the physical conditions and capabilities of the specific parcel or parcels;
6. The existing physical and environmental aspects of the land, such as natural beauty and open space characteristics, will be preserved or improved upon, whichever is applicable;
7. Subdivision of land will not be utilized to increase the intensity of land uses in the Conservation District; and
8. The proposed land use will not be materially detrimental to the public health, safety and welfare.

See attached sheet.

**CONSERVATION DISTRICT USE PERMIT APPLICATION  
HANALEI RIVER STREAMGAGE RELOCATION  
U.S. GEOLOGICAL SURVEY**

**SUPPLEMENTAL INFORMATION**

**VII. DESCRIPTION OF PARCEL**

**A. Existing structures/use**

The existing gage (Figure 1) includes a 8' x 8' x 8' wooden shelter on the right bank of the river, a metal conduit and plastic gas (nitrogen) line running from the shelter to the stream, a concrete orifice anchor, and a cableway spanning the river that is attached to two mango trees.

No structures are presently at the proposed gage location (Figure 1).

**B. Existing utilities**

None.

**C. Existing access**

See Figure 1. At present, neither the existing gage nor the proposed gage site are accessible by trail, however, a trail maintained by the State Division of Forestry and Wildlife passes within 300 feet of the proposed gage site. The existing gage is reached on foot from the Hanalei Valley road by crossing the new bypass channel and crossing an overgrown pasture.

**D. Flora and fauna**

Vegetation is primarily hau and Java plum on the stream banks. One large mango tree grows on the right bank. No threatened or endangered species were noted during an inspection by a USGS biologist.

**E. Topography**

See Figure 1.

**F. N/A (not a shoreline area)**

G. Both existing and proposed gage sites are on State land. The proposed gage site is within a parcel designated as homestead land.

**H. Historic sites affected**

None.



OEQC BULLETIN PUBLICATION FORM

TITLE OF PROJECT: Hanalei River Streamgage Relocation

LOCATION: ISLAND Kauai DISTRICT Hanalei

TAX MAP KEY : 5-4-02-16,31 5-3-01-3

PLEASE CHECK THE FOLLOWING CATEGORIES:

Type of Action: AGENCY \_\_\_\_\_ APPLICANT X

Applicable State or Federal Statute:

X Chapter 343, HRS \_\_\_\_\_ Chapter 205A, HRS \_\_\_\_\_ NEPA (Federal Actions Only)

Type of Document:

\_\_\_\_\_ Draft Environmental Assessment (Negative Declaration anticipated) \_\_\_\_\_ Draft EIS \_\_\_\_\_ NEPA NOP  
X Final Environmental Assessment (Negative Declaration) \_\_\_\_\_ Final EIS \_\_\_\_\_ NEPA Draft EIS  
\_\_\_\_\_ Final Environmental Assessment (EIS Preparation Notice) \_\_\_\_\_ NEPA FONSI \_\_\_\_\_ NEPA Final EIS

Type of Revision (if applicable):

\_\_\_\_\_ Revised \_\_\_\_\_ Supplemental \_\_\_\_\_ Addendum \_\_\_\_\_ Other (please explain)

Prior to general distribution, please submit to OEQC: 4 copies of the Draft EA, Final EA (Negative Declaration or EIS Preparation Notice), 4 copies of the Draft EIS or Final EIS (For Draft and Final EISs an additional copy is mailed to OEQC.)

PROPOSING AGENCY OR APPLICANT SHOULD SUBMIT COPIES OF THE DOCUMENTS TO THE APPROVING AGENCY OR ACCEPTING AUTHORITY PRIOR TO SUBMITTING COPIES TO OEQC.

APPROVING AGENCY OR

ACCEPTING AUTHORITY:

Department of Land and Natural Resources, Land Division

ADDRESS:

P.O. Box 621

Honolulu, Hawaii 96809

CONTACT:

Tom Eisen PHONE: (808) 587-0386

PROPOSING AGENCY OR APPLICANT:

U.S. Geological Survey

ADDRESS:

677 Ala Moana Blvd., #415

Honolulu, Hawaii 96813

CONTACT:

Barry Hill PHONE: 522-8290

CONSULTANT:

N/A

ADDRESS:

CONTACT:

PHONE: \_\_\_\_\_

COMMENT PERIOD END DATE: \_\_\_\_\_

CONDITIONS WHICH TRIGGERED THE EIS LAW. PLEASE CHECK ALL THAT APPLY TO THE PROPOSED ACTION.

- Use of State or County lands or funds  
HRS 343-5(a)(1)
- Use of Conservation District Lands  
HRS 343-5(a)(2)
- Use of Shoreline Setback Area  
HRS 343-5(a)(3)
- Use of Historic Site or District  
HRS 343-5(a)(4)
- Use of lands in the Waialae Special District  
HRS 343-5(a)(5)
- Amendment to a County General Plan  
HRS 343-5(a)(6)
- Reclassification of Conservation Lands  
HRS 343-5(a)(7)
- Construction or modification of helicopter facilities  
HRS 343-5(a)(8)

OTHER CONDITIONS:

- Use of Special Management Area (City & County of Honolulu)
- Other: \_\_\_\_\_

\* If the project does not trigger HRS 343, please explain why document is being submitted to OEOC.

**SUMMARY** of the proposed action or project to be published in the OEOC Bulletin. Please submit it as a summary ready for publication. The description should be brief (300 words or less), yet provide sufficient detail to convey the full impact of the proposed action.

see attached.

NOTE: Since the deadline for EIS submittal is so close to the publication date for the OEOC Bulletin, please assist us by bringing the Document for Publication Form and a computer disk with the project description (size 3 1/2" or 5 1/4" disk are acceptable; preferably WordPerfect 5.1 or ASCII text format) to the Office of Environmental Quality Control as early as possible. Thank you.

## SUMMARY FOR OEQC BULLETIN AND CDUA PERMIT

The U.S. Geological Survey (USGS) has operated a streamgage on the Hanalei River continuously since 1962. During a flood in November, 1995, the river bypassed the streamgage and cut a new channel. Presently, about one-third of the river's flow is diverted into this new bypass channel. The existing gage is therefore of limited use in determining the total flow of the river. The USGS proposes to relocate the streamgage to a site approximately 3,000 feet upstream of the present location so that the entire flow of the river can be measured.

The proposed gage would be similar to the existing gage, which uses a gas-feed pressure transducer sensing system. Structures would include a fiberglass or aluminum gage house on the left bank of the river, a metal conduit for the gas (nitrogen) line leading from the gage house to the river, a concrete anchor for the gas orifice and outside staff plate at the streambank, a crest-stage gage consisting of a 2-inch metal pipe installed vertically along the streambank and set into concrete, and a cableway for high-flow measurements anchored on the right bank to a large mango tree and anchored on the left bank to an A-frame truss with a backstay set in concrete. A trail about 300 feet in length would be needed to connect the streamgage to the existing trail used by hikers and hunters.

Most of the work would be done by hand. Chain saws, gas generators, and power saws and drills would be needed for short periods during construction. Helicopter sling loads would be necessary to deliver concrete. Excavation within the channel would total approximately one cubic yard to allow pouring of concrete anchors for the gas orifice and crest-stage gage.

Construction would require roughly one month. The streamgage is intended to be operated for at least 10 years. The streamgage would be visited bimonthly for streamflow measurements and maintenance.

## RELATED PERMITS

Department of the Army permit, NWP authorization 33 CFR Part 325, Appendix A, Paragraph B.5, Scientific Measuring Devices--application submitted to Corps of Engineers on February 6, 1998, approved July 7, 1998.

Section 401 Water Quality Certification--application submitted to Department of Health on February 6, 1998, approved July 7, 1998.

Stream Channel Alteration Permit--application submitted to Commission on Water Resource Management on February 6, 1998.

County of Kauai Special Management Area Permit--not applicable.

Coastal Zone Management Permit--not applicable.