

STATE OF HAWAII

DEPARTMENT OF LAND AND NATURAL RESOURCES

LAND DIVISION P.O. BOX 621 HONOLULU, HAWAII 96809 FORESTRY AND WILDLIFE HISTORIC PRESERVATION LAND DIVISION STATE PARKS
WATER RESOURCE MANAGEMENT

CONVEYANCES

AQUACULTURE DEVELOPMENT PROGRAM AQUATIC RESOURCES BOATING AND OCEAN RECREATION CONSERVATION AND RESOURCES ENFORCEMENT

99 SEF 28 A10:34

SEP 28 1999

QUALIFY COST.

File: HA-2932

<u>MEMORANDUM</u>

Ref .: PB: THE

To:

Genevieve Salmonson, Director

Office of Environmental Quality Control

From:

Dean Y. Uchida, Administrator

Land Division, Department of Land and Natural Resources

Subject:

Final Environmental Assessment (EA)/Finding of No Significant Impact (FONSI) for reconstruction of five Kohala Mountain Streamgages, TMK 6-3-01:4, South Kohala,

Hawaii

The Department of Land and Natural Resources has reviewed the comments received during the 30-day public comment period that began on May 23, 1999 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 October 8, 1999 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 Planning Branch at 587-0439 if you have any questions.

Enclosures

cc: Barry Hill (USGS)

1999-10-08-HA-FEA-



FINAL ENVIRONMENTAL ASSESSMENT AND CONSERVATION DISTRICT USE APPLICATION

★KOHALA MOUNTAINS STREAMGAGERECONSTRUCTION **→**

County of Hawaii, South Kohala District TMK 6-3-01-4

submitted by:

U.S. Geological Survey

Honolulu, Hawaii

September 22, 1999

FINAL ENVIRONMENTAL ASSESSMENT

1. Identification of applicant or proposing agency

John Klein, Acting 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 August 6, 1998:

County of Hawaii

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 and responses are included as Appendix 1.

The Department of Land and Natural Resources has provided us with copies of memos from five state agencies responding to the Draft Environmental Assessment. Copies of these letters and our responses are included in Appendix 1.

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

The U.S. Geological Survey has operated streamflow gages on three streams tributary to Wailoa Stream in the Waipio Valley, as well as two gages on the Upper Hamakua Ditch, which carries water diverted from these three streams, for more than 30 years. These gages provide valuable data on water resources in the South Kohala and Hamakua Districts on the island of Hawaii. These gages have gradually deteriorated over the years, and are now at the point that they must be reconstructed in order to remain operational. The action proposed here is to reconstruct these gages so that continuous records of flow in the streams and ditch system are maintained.

TECHNICAL--

We propose to reconstruct all five gages as stilling well gages, similar to their original construction. Stilling well gages consist of a concrete pad on the streambed, a wooden stilling well bolted to the pad, and an instrument shelter above the stilling well (see Figure 3). Communication between stilling well and stream is provided by intake pipes or holes drilled in the streamward side of the well.

Most of the work would be done by hand. Gas generators, power saws, and drills would be needed for short periods during construction. Helicopter sling loads would be necessary to deliver materials. Excavation within the channels would total approximately one cubic yard for all three stream gages to allow pouring of concrete pads. Because these pads 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. Fill in the channel would be limited to the previously-described concrete pads, totalling about 0.75 cubic yards for all three streamgages. The two ditch gages do not require construction of concrete pads.

The instrument shelters would be painted to blend into the surrounding vegetation, using water-soluble paint. The stilling wells would not be painted. No toxic materials would be used. No concrete, paint, or wash water would be allowed to mix with the water in the streams.

Periodic maintenance of the streamgage would be required. Maintenance normally would be performed every 6 to 8 weeks, and would include downloading of data, servicing of instruments and stilling well, and manual cutting of encroaching vegetation. Less frequently, repainting of the instrument shelter would be required.

ECONOMIC--

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The gage reconstruction 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 reconstruction would provide for a continuation of streamflow data collection and publication for the upper tributaries of Waipio Valley. 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 or plantation agriculture 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 and resource management actions by other agencies. The streamgages could potentially be modified to provide flood warning capabilities, although at present, plans do not include such capabilities. Streamflow data may be of use to farmers, fishermen, and recreational boaters.

ENVIRONMENTAL--

The proposed reconstruction would affect small areas of channel bed and banks. Effects on channel stability and water quality would be negligible owing to the small areas affected. An inspection of the gage locations by a USGS biologist determined that no threatened or endangered plant or animal species would be adversely affected (species lists are provided as Appendix 2). Aethetics would be affected to a very minor degree. The gages would be less dilapidated and therefore more aesthetically pleasing. The State Historic Preservation Division expects that the proposed activity will not adversely affect cultural resouces (see attached letter). A Best Management Practices Plan has been prepared as part of the Section 401 Water Quality Certification process and is summarized below under item 7.

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

The gage reconstruction would directly affect a total area of roughly 250 square feet, including areas used for sling loading of materials. The proposed activity involves replacing existing structures, therefore, very little undisturbed area and very little vegetation would be affected.

The affected environment includes:

streambeds--generally bedrock or boulder and cobble with moss growth, about 50 square feet streambanks--generally fine organic rich soils with some rock, vegetated with grasses, forbs, ferns, and shrubs, about 50 square feet

lined ditch channels--concrete and stone masonry, unvegetated, about 30 square feet sling-load landing and pick-up sites--vegetated upland areas with shrubs, ferns, and forbs, about 120 square feet

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

IMPACTS:

The proposed reconstruction would affect small areas of streambed and banks. Effects on channel stability and water quality would be negligible owing to the small areas affected. About 0.75 cubic yard of concrete, in total, would be added to the three stream channels. Some vegetation would be cut to facilitate sling loading.

ALTERNATIVES CONSIDERED:

- 1. Discontinue streamgages--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 streamgages.
- 2. Continue to operate gages without reconstruction—This alternative would not result in any short-term disturbance of the environment, but the gages would eventually collapse into the channels and ditches. The accuracy of the streamflow records until that time would be reduced beyond generally acceptable levels.

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 supsended 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 partially within flood plains but is unlikely to incur serious damage and will not adversely affect the environment or substantially increase flood stages.
- 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. No known sites of cultural importance would be damaged.
- 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
- 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 purposes.
- 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.
- 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 eliminate 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 Hilo and the trail-head. The gage itself would be solar-powered, and would not require consumption of fuel or electricity.

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 16, 1999, provisional nationwide permit issued June 7, 1999.

Section 401 Water Quality Certification-revised application submitted to Department of Health on April 6, 1999.

Stream Channel Alteration Permit-application to Commission on Water Resource Management submitted July 20, 1999.

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

Coastal Zone Management Permit--not required (see letter from State Office of Planning and our response in Appendix 1).

12. Responses to comments received under early consultation provisions

Letters received in the early consultation process are attached to this draft environmental assessment as Appendix 1, and where appropriate, our responses are included.

APPENDIX 1A--LETTERS RECEIVED DURING EARLY CONSULTATION PROCESS AND REPLIES

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BENJAMIN J. CAYETANO GOVERNOR OF HALVAH



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

August 19, 1998

U.S. GEOLOGICAL SURVEY WATER RESOURCES DIVISION PICHOLLII U. HAMAII

LAWRENCE MIKE

AUG 26 1998

98-177/epo

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

Dear Mr. Hill:

Pre-Environmental Assessment Subject:

Reconstruction of Three Stream Gages and

Two Ditch Gages

Kohala Forest Reserve, Hawaii

TMK: 6-3-1: 4

Thank you for allowing us to review and comment on the subject. project. We do not have any comments to offer at this time. However, we would appreciate receiving a copy of the Draft Environmental Assessment.

sincerely,

quue yoshiota

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

U.S. OPDIOGICAL SURVEY WATER RESOURCES DIVISION HONOLULU, HAWAII 8 1998

PHONE (808) 594-1888



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

September 3, 1998

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

PC (98) 1

Preliminary Comments for Draft Environmental Assessment (DEA) for the reconstruction of three stream gages and two ditch gages in the Kohala Forest Reserve, TMK 6-3-01-4

Dear Mr. Hill,

Thank you for your letter of August 6, 1998, informing the Office of Hawaiian Affairs (OHA) of your intent to prepare a Draft Environmental Assessment (DEA) for the reconstruction of three stream gages and two ditch gages in the Kohala Forest Reserve, TMK 6-3-01-4. We appreciate the opportunity to provide preliminary comments for your DEA.

First, the issue of ceded lands must be addressed. The site you have identified is classified as ceded lands. Therefore, any efforts to use, modify, or destroy ceded lands must be cleared by Native Hawaiians.

In addition to discussing the issue of Native Hawaiian archaeological, historical, or cultural resources that may be located in the vicinity of the project site, OHA would also like your document to address the possibility that native Hawaiian gathering rights may exist on the property. A recent Hawaii Supreme Court decision makes it clear that the existence of native rights must be addressed. We suggest that the preparers seek expert opinion among the Hawaiian community.

OHA urges the applicant to seek consultation with the Organization to address the issue of ceded lands as well as traditional and customary access and rights of Native Hawaiian.

Should you have any questions concerning our comments, please contact Richard Messier, Acting Land and Natural Resources Divison Officer, or Nami Ohtomo, Acting

Mr. Barry Hill
Assistant District Chief
U.S. Geological Survey
Water Resources Division
September 3, 1998
Page two

Natural Resource Specialist at 594-1755. When contacting our office about this matter, please include in your future communications the reference number noted at the top of this letter.

Sincerely,

Randall Ogata Administrator Richard Messier

Acting LNR Division Officer

cc:

Board of Trustees CAC, Island of Hawaii



United States Department of the Interior

U.S. GEOLOGICAL SURVEY

Water Resources Division 677 Ala Moana Blvd., Suite 415 Honolulu, Hawaii 96813

February 16, 1999

Ms. Joanne Sterling, Chairperson Native Hawaiian Historic Preservation Council 370-B Kawaihae Street Honolulu, Hawaii 96825

Dear Ms. Sterling:

The U.S. Geological Survey is seeking the necessary permits to reconstruct five streamgages in the Kohala Mountains on the island of Hawaii. As part of the early consultation process for a Draft Environmental Assessment, we requested comments from the Office of Hawaiian Affairs (enclosure 1). OHA, in its response (enclosure 2), encouraged us to consult with members of the Native Hawaiian community in order to address possible effects on archaeological, historical, or cultural resources and on gathering rights. I therefore contacted Mr. Kalani Flores of your organization, and he suggested that I write to you to request comments on our proposed reconstruction.

I have enclosed our Draft Environmental Assessment (enclosure 3) in order to provide background and technical information. I hope that our project can be discussed at your next board meeting.

Thank you in advance for your assistance. If you have any questions, or if you would like to arrange a visit to the streamgages, please feel free to contact me at (808) 522-8290 or our Hilo Field Office Chief, Dale Nishimoto, at (808) 933-6920.

Sincerely,

Barry Hill

Assistant District Chief

Enclosures



United States Department of the Interior

U.S. GEOLOGICAL SURVEY

Water Resources Division 677 Ala Moana Blvd., Suite 415 Honolulu, Hawaii 96813

February 24, 1999

Ms. Nami Ohtomo Office of Hawaiian Affairs 711 Kapiolani Boulevard, Suite 500 Honolulu, Hawaii 96813

Dear Ms. Ohtomo:

In response to the letter of September 3, 1998, from Mr. Ogata and Mr. Messier of your office (reference number PC(98)1), I would like to inform you that we have requested comments from Ms. Joanne Sterling of the Native Hawaiian Historic Preservation Council (NHHPC) on the proposed reconstruction of stream and ditch gages in the Kohala Mountains on the island of Hawaii. Comments received from the NHHPC will be addressed along with comments received from other agencies and organizations in our final environmental assessment.

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

Sincerely,

Barry Hill

Assistant District Chief

BENJAMAN J. CAYETANO COVERNOR OF HAWAI



U.S. OCOLOGICAL SURVEY WATER RESOURCES DIVISION HONOLULU, HAWAII

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MICHAR D. WESON, CHUMBREON BOAD OF LAND AND HATURE RESOURCES

GILBERT COLOMA-AGAMM 37:

STATE OF HAWAII

DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION 33 SOUTH KING STREET, 6TH FLOOR HONOLULU, HAWAK 96813 SEP 1 4 1998

AGUACULTURE DEVELOPMENT

AQUATIC RESOURCES CONSERVATION AND

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FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
DIVISION
LAND MANAGDIENT
ETATE PARE WATER AND LAND DEVELOPMENT

LOG NO: 22067 ~

DOC NO: 9808ms06

Mr. Bill Hill, Assistant District Chief United State Department of the Interior U.S. Geological Survey, Water Resources Division

677 Ala Moana Blvd., Suite 415 Honolulu, Hawaii 96814

Dear Mr. Hill:

REF:HP-AMK

National Historic Preservation Act Review (Section 106)- Reconstruction of SUBJECT:

Three Stream Gauges and Two Ditch Gauges in the Kohala Forest Reserve

Puukapu, South Kohala, Hawaii Island

TMK: (3)6-3-001:004

This is in response to your August 6, 1998, letter requesting our comments concerning the proposed rebuilding of three stream gauges and two ditch gauges in the South Kohala Forest Reserve.

Our Historic Preservation Division staff have reviewed this proposal and conclude that this project, which consists of rebuilding existing stream and ditch gauges, will have "no effect" on significant historic sites. If you have further questions please call Pat McCoy at 587-0006 (Honolulu), or Marc Smith at 933-0482 (Hilo).

Aloha,

MICHAEL D. WILSON, Chairperson and State Historic Preservation Officer

MS:amk

Stephen K. Yamashiro Mayor



County of Halvaii

August 24, 1998

PLANNING DEPARTMENT
25 Aupuni Street, Room 109 • Hilo, Hawaii 96720-4252
(808) 961-8288 • Fax (808) 961-8742

Virginia Goldstein Director

Russell Kokubun Deputy Director

WATER RESOURCES DIVISI HONOLUM, HAWAII

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

Dear Mr. Hill:

Preliminary Comments Regarding the Preparation of a Draft Environmental Assessment for the Reconstruction of Stream and Ditch Gauges in the Kohala Forest Reserve TMK: 6-3-01: Portion of 4: Kohala Forest Reserve, South Kohala, Hawaii

Thank you for your letter dated August 6, 1998, requesting our comments regarding the above-described project.

We have no objections to the proposed project. The subject property, situated within the Kohala Forest Reserve, is designated Conservation by the State Land Use Commission and does not maintain a County zoning classification. The subject property is not situated within the County's Special Management Area.

Thank you for allowing our office the opportunity to provide these comments. We will not require the review of the draft environmental assessment since the County has no jurisdiction over the use of Conservation lands.

Sincerely,

Planning Director

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Mr. Barry Hill
Assistant District Chief
Water Resources Division
U.S. Geological Survey
United States Department of the Interior
Page 2
August 24, 1998

c: Mr. Dale Nishimoto USGS P.O. Box 1660 Hilo, HI 96721

DLNR-Land Management (Hilo)



DEPARTMENT OF WATER SUPPLY . COUNTY DECEMBED

MATER RESOURCES DIVISION HONOLUM, HAWAIII

AUG 1 9 1998

25 AUPUNI STREET + HILO, HAWAII 96720 L TELEPHONE (808) 961-8660 + FAX (808) 961-8657

August 17. 1998

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

PRELIMINARY COMMENTS
DRAFT ENVIRONMENTAL ASSESSMENT (DEA)
REHABILITATION OF STREAM AND DITCH GAGES ALONG UPPER HAMAKUA DITCH (UHD)

This is in response to your letter of August 6. 1998 concerning the subject DEA., Although this Department does not regularly divert water from the UHD. it has been a source of domestic water for our Waimea Water System during drought situations.

Therefore, although we have no comments to offer for the preparation of the DEA, we do support the rehabilitation of the gages to maintain a hydrologic history of this source.

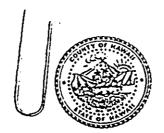
If you have any further questions, please contact our Water Resources and Planning Branch at 961-8660.

Milton D. Pavao, P.E.

Manager

GGA:gms

Stephen K. Yamashiro Mayor



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Donna Fay K. Kiyosaki Chief Engineer

> Jiro A. Sumada Deputy Chief Engineer

County of Auwaii

DEPARTMENT OF PUBLIC WORKS

25 Aupuni Street, Room 202 • Hilo, Hawaii 96720-4252 (808) 961-8321 • Fax (808) 961-8630

August 19, 1998

MR BARRY HILL ASSISTANT DISTRICT CHIEF U S GEOLOGICAL SURVEY WATER RESOURCES DIVISION 677 ALA MOANA BLVD SUITE 415 HONOLULU HAWAII 96813

SUBJECT:

DRAFT ENVIRONMENTAL ASSESSMENT

STREAM GAGE STATIONS

Kohala Forest Reserve, South Kohala, Hawaii

TMK: 3/6-3-01:4

We acknowledge receipt of your letter concerning the subject matter, and have no objections or comments concerning the reconstruction of the three stream gages and the two ditch gages. We support all your efforts in restoring stream gages in the County of Hawaii.

Should there be any questions concerning this matter, please feel free to contact Mr. Casey Yanagihara in our Engineering Division at (808)961-8327.

Galen M. Kuba, Division Chief

Engineering Division

CKY

APPENDIX 1B--LETTERS RECEIVED IN RESPONSE TO DRAFT EA AND REPLIES



U.S. GEOLG BICAL SURVEY WATER RESOURCES DIVISION HOMOLULU, HAWAII

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RECEIVED

STATE OF HAWAII

DEPARTMENT OF LAND AND NATURAL RESOURCES

LAND DIVISION P.O. BOX 621 HONOLULU, HAWAII 96809

JUN 3 0 1999

File: CDUA HA-2932D

AQUACULTURE DEVELOPMENT PROGRAM

CONVEYANCES FORESTRY AND WILDLIFE HISTORIC PRESERVATION

BOATING AND OCEAN RECREATION CONSERVATION AND RESOURCES ENFORCEMENT

LAND DIVISION STATE PARKS WATER RESOURCE MANAGEMENT

Ref.:P8:THE

Barry Hill, Assistant District Chief U.S. Geological Survey 677 Ala Moana Blvd., Suite 415 Honolulu, Hawaii 96813

Dear Mr. Hill:

Subject: Draft Environmental Assessment for reconstruction of five Kohala Mountain Streamgages, TMK 6-3-01:4, South

Kohala, Hawaii

Enclosed for your consideration and use are copies of comments we have received from solicited agencies regarding the subject Environmental Assessment (EA). As you may know, pursuant to the rules for EAs (Section 11-200, Hawaii Administrative Rules [HAR]), comments received during the public comment period, which ended June 22, 1999, need to be addressed and included in the Final EA you are preparing for the project. Negative action on your CDUA may be expected if the Final EA is not submitted to us at least 60 days prior to the 180-day expiration date of November 3, 1999.

Please contact Tom Eisen of our Planning Branch at 587-0439 should you have any questions.

Sincerely,

DEAN UCHIDA, Administrator

Land Division

enclosures

cc: Hawaii Board member

BENJAMIN J. CAYETANO GOVERNOR OF HAWAII



STATE OF HAWAII DEPARTMENT OF HEALTH P.O. BOX 3378 HONOLULU, HAWAII 96801 BRUCE S. ANDERSON, Ph.D., M.P.H. DIRECTOR OF HEALTH

> In reply, please refer to: File;

June 7, 1999

98-177A/epo

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acofived Division of D managener:

TO:

Dean Y. Uchida, Administrator

Land Division

Department of Land and Natural Resources

FROM:

Gary Gill

Deputy Director for Environmental Health

SUBJECT: CONSERVATION DISTRICT USE APPLICATION

Applicant:

U.S. Geological Survey

File No.:

HA-2932

Request:

Reconstruction of Five (5) Kohala

Mountains Stream Gages

Location:

Kohala Forest Reserve, Hawaii

TMK: 6-3-01: 4

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

Water Pollution

- 1. The applicant should contact the Army Corps of Engineers to identify whether a federal permit (including a Department of Army permit) is required for this project. If a federal permit is required, then a Section 401 Water Quality Certification is required from the State Department of Health, Clean Water Branch.
- 2. A National Pollutant Discharge Elimination System (NPDES) general permit is required for the following discharges to waters of the State:
 - a. Storm water discharges relating to construction activities, such as clearing, grading, and excavation, for projects equal to or greater than five acres;
 - b. Storm water discharges from industrial activities;
 - c. Construction dewatering activities;

Dean Y. Uchida June 7, 1999 Page 2

98-177A/epo

- d. Noncontact cooling water discharges less than one million gallons per day;
- e. Treated groundwater from underground storage tank remedial activities;
- f. Hydrotesting water;
- g. Treated effluent from petroleum bulk stations and terminals; and
- h. Treated effluent from well drilling activities.

Any person requesting to be covered by a NPDES <u>general</u> permit for any of the above activities should file a Notice of Intent with the Department's Clean Water Branch at least 30 days prior to commencement of any discharge to waters of the State.

Any questions regarding these comments should be directed to Mr. Denis Lau, Branch Chief, Clean Water Branch at 586-4309.

c: CWB



United States Department of the Interior

U.S. GEOLOGICAL SURVEY

Water Resources Division 677 Ala Moana Blvd., Suite 415 Honolulu, Hawaii 96813

September 21, 1999

Mr. Gary Gill, Deputy Director State of Hawaii Department of Health P.O. Box 3378 Honolulu, Hawaii 96801

Dear Mr. Gill:

I have received a copy of your memo to Mr. Dean Uchida, Department of Land and Natural Resouces, Land Division, regarding our Conservation District Use Application for reconstruction of five gaging stations (three on streams and two on ditches) in the Kohala Mountains. I am writing to provide you with the following information in response to the comments included in your memo:

1. We were issued a provisional nationwide Department of the Army (DA) permit on June 7, 1999. This permit will become effective when we are issued a Section 401 Water Quality Certification (WQC) by your department. Our completed applications for WQC for each of the three streamgages were submitted to the Clean Water Branch on April 6, 1999. WQC applications were not submitted for the two ditch gages.

As you know, we are in the process of applying for a general DA permit and WQC for streamgage construction and repair throughout the State. As discussed with Mr. Ed Chen of the Clean Water Branch on July 28, 1999, we are willing to await processing of the general permit rather than pursue the individual WQCs if the general permit can be issued by October 31, 1999. If the general permit is not issued by that date, I will request that our three individual WQC applications be processed.

2. None of the discharges requiring a National Pollutant Discharge Elimination System general permit will result from the proposed gaging station repairs.

I appreciate your comments on our proposed project. A copy of your memo and this letter will be included in the Final Environmental Assessment. If you have any questions, please feel free to contact me at 522-8290.

Sincerely,

Barry Hill

Assistant District Chief

B- Nill



DEPARTMENT OF BUSINESS, ECONOMIC DEVELOPMENT & TOURISM

BENJAMIN J. CAYETANO
GOVERNOR
SELJIF, NAYA
DIRECTOR
BRADLEY J. MOSSMAN
DEPUTY DIRECTOR
DAVID W. Blane XDUNKEODED
DIRECTOR, OFFICE OF PLAINING

OFFICE OF PLANNING

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

Ref. No. P-8098

May 25, 1999

Tel.: (808) 587-2846

Fax: (808) 587-2824

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

Dear Mr. Hill:

Subject: Hawaii Coastal Zone Management (CZM) Program Review for Kohala Mountains Streamgages Reconstruction

At the request of the State Department of Land and Natural Resources for the Conservation District Use Application, we reviewed your proposal to reconstruct five streamgages in the Kohala Mountains on the island of Hawaii. In addition, we also earlier reviewed the proposal for the three streamgages at Kawainui, Kawaiki and Alakahi Streams in conjunction with the U.S. Army Corps of Engineers permit.

Although we do not have any objections and are <u>not</u> requiring that a CZM federal consistency determination be submitted for our approval, we wish to clarify the requirements for CZM federal consistency. The environmental assessment for the project, dated April 2, 1999, incorrectly identifies that a "Coastal Zone Management Permit" is not applicable (section 11). The Coastal Zone Management Act of 1972 [307(c)(1)(A)] and the Code of Federal Regulations, Title 15, Part 930 [15 CFR 930.33(c)(1)], require that federal activities affecting any land or water use or natural resource of the coastal zone shall be carried out in a manner which is consistent to the maximum extent practicable with State CZM programs. While it may be true that the project sites are not within the County of Hawaii Special Management Area, they are within the Hawaii CZM area which includes the entire land area of the State as defined in Chapter 205A, Hawaii Revised Statutes.

Mr. Barry Hill Page 2 May 25, 1999

i 1

If you have any questions, please call John Nakagawa of our CZM Program at 587-2878.

Sincerely,

David W. Blane Director

Office of Planning

c: U.S. Army Corps of Engineers, Regulatory Branch
U.S. National Marine Fisheries Service, Pacific Area Office

U.S. National Marine Fisheries Scivice, Pacific Islands Ecoregion
U.S. Fish and Wildlife Service, Pacific Islands Ecoregion

Department of Health, Clean Water Branch Department of Land & Natural Resources,

Tom Eisen, Planning & Technical Services Branch
Commission on Water Resource Management
Planning Department, County of Hawaii



United States Department of the Interior

U.S. GEOLOGICAL SURVEY

Water Resources Division 677 Ala Moana Blvd., Suite 415 Honolulu, Hawaii 96813

September 21, 1999

Mr. David W. Blane, Director
Office of Planning
State of Hawaii Department of Business, Economic Development, and Tourism
P.O. Box 2359
Honolulu, Hawaii 96804

Dear Mr. Blane:

Thank you for your letter of May 25, 1999, regarding Hawaii Coastal Zone Management (CZM) Program Review for Kohala Mountains gaging station reconstruction. We have changed the text of our Environmental Assessment to indicate that a CZM permit is not required for our proposed project, rather than stating that such a permit is not applicable. As you noted, the entire State is included in the CZM area. I believe that the proposed gaging station reconstruction is consistent with the Hawaii CZM program.

Thank you for correcting our statement regarding CZM consistency in our Draft Environmental Assessment (EA). A copy of your letter and our response will be included in our Final EA. If you have any questions, please feel free to contact me at 522-8290.

Sincerely,

Barry Hill

Assistant District Chief

BENJAMIN J. CAYETANO



PROUBLE / ED

TIMOTHY E. JOHNS

BRUCE S. ANDERSON RICHARD H. COX ROBERT G. GIRALD DAVID A. NOBRIGA HERBERT M. RICHARDS, JR.

EDWIN T. SAKODA

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

JUN - 2 1999

TO:

Mr. Dean Y. Uchida, Administrator

Land Division

FROM:

Edwin T. Sakoda, Acting Deputy Director

Commission on Water Resource Management

SUBJECT:

CDUA, Reconstruction of five Kohala Mountain Streamgages

Kohala Forest Reserve, HA-2932(D), TMK 6-3-01:04

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

The Commission will be processing a stream channel alteration permit for the proposed gages when the EA is accepted.

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

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

DH:ss

STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES

Land Division Planning Branch Honolulu, Hawaii

MAY I R 1990

Ref:PB:THE

File Number: HA-2932(D)

Acceptance Date: May 7, 1999 180-Day Exp. Date: Nov. 3, 1999

SUSPENSE DATE: 21 Days

MEMORANDUN	<u>1</u>
	_

TO:

Aquatic Resources, Engineering Branch, Forestry and Wildlife,

Historic Preservation, HDLO, Commission on Water Resource

Management

FROM:

Dean Y. Uchida, Administrator

Land Division

SUBJECT:

REQUEST FOR COMMENTS

Conservation District Use Application (Departmental Permit)

APPLICANT:

U.S. Geological Survey

FILE No.:

HA-2932 (Departmental Permit)

REQUEST:

Reconstruction of five Kohala Mountain streamgages

LOCATION:

Kohala Forest Reserve, South Kohala, Hawaii

TMK:

6-3-01:por 4

PUBLIC HEARING:

YES .

NO_X_

If no response is received by the suspense date, we will assume there are no comments.

Should you require additional information, please call Tom Eisen at 587-0439.

(X) COMMENTS ATTACHED

Attachment

Signed: Lim T. Yusa for
ANDREW M. MONDEN, Chief Engineer

Date:_____JN 4 1999

ENGINEERING BRANCH

COMMENTS

Our current projects are not effected by the proposed streamgage reconstruction.

DIRECTOR Syspense Date: COM FISHER (Draft Lealy VIAS DE POR Reply Direct П AO RECR'N Comments STAFF SVCS alormation STATE OF HAWAII Comp Act & File DEPARTMENT OF LAND AND NATURAL RESOURGERS Return to: AFRC Land Division Copies to: EDUCATION Remarks: Planning Branch BECRETARY Honolulu, Hawaii 94-1808 OFFICE SVCS

Ref:PB:THE

MAY I 8 1000

File Number: HA-2932(D)

DIVISION OF AQUATED RESOURCES

Acceptance Date: May 7, 1999 180-Day Exp. Date: Nov. 3, 1999

SUSPENSE DATE: 21 Days

MEMORANDUM

TO:

Aquatic Resources, Engineering Branch, Forestry and Wildlife,

Historic Preservation, HDLO, Commission on Water Resource

Management

FROM:

Dean Y. Uchida, Administrator

SUBJECT:

REQUEST FOR COMMENTS

Conservation District Use Application (Departmental Permit)

APPLICANT:

U.S. Geological Survey

FILE No.:

HA-2932 (Departmental Permit)

REQUEST:

Reconstruction of five Kohala Mountain streamgages

LOCATION:

Kohala Forest Reserve, South Kohala, Hawaii

TMK:

6-3-01:por 4

PUBLIC HEARING:

YES_

NO_<u>X</u>_

If no response is received by the suspense date, we will assume there are no comments.

Should you require additional information, please call Tom Eisen at 587-0439.

No Objections

1.14 lon

DIV. AQUATIC RESOURCES

APPENDIX 2--LIST OF PLANT AND ANIMAL SPECIES AT STREAM-GAGE LOCATIONS

BY DR. ANNE BRASHER, AQUATIC ECOLOGIST, U.S. GEOLOGICAL SURVEY

On 28 September 1998 Brian Farm (BRD) and myself were accompanied by Gary Sanchez to look at the stream gage sites where repair work is planned along the Kohala Ditch trail: Kawaiki Gage, Kawainui Gage and and Upper Hamakua Ditch Below Kawaiki Gage, Following the survey, my conclusion is that planned repairs to the gage structures are acceptable and will not have a negative impact on the flora or fauna in the stream or along the banks. Brian and I prepared a list of species (plants and animals) that we observed at each of the three gage sites and also collected numerous specimens for identification by other experts. Linda Pratt from Hawaii Volcanoes National Park identified plants, Lloyd Loope and Patty Welton of Haleakala National Park provided assistance with nomenclature, and David Preston of the Bishop Museum identified aquatic insects. We didn't find any snails or see any fish. Below are the lists of plants and aquatic insects that were found at the sites. Aloha, Anne

Aquatic Insects

(ORDER, Family, Genus species)
COLEOPTERA, Dytiscidae, Rhantus pacificus
DIPTERA, Dolichopodidae, Eurynogaster
HEMIPTERA, Mesoviliidae, Mesovilia mulsanti
HETEROPTERA, Saldidae, Saldula exulans
ODONATA, Aeshnidae, Anax strenous

Coenagrionidae, Megalagrion blackburni Megalagrion calliphya

Plants

(Family, Genus species, common name)

FERNS AND MOSSES

Blechnaceae, Sadleria pallida, fern Dicanaceae, Campylopus sp., moss

Dicksoniaceae, Cibotium sp., tree fern (hapuu)

Gleicheniaceae, Dicranopteris sp., stag horn fern (uluhe)

Lindsaeaceae, Odontosoria chinensis, fern

Lycopodiaeceae, Lycopodium venustulum, club moss (wawaeiole)

Spagnaceae, Sphagnum palustre, spagnum

MONOCOTS

Juncaceae, Juncus ensifolius, sedge Poaceae, Deschampsia nubigena, sterile grass

DICOTS

Asteraceae, Crassocephalum crepidiodes
Hypochoeris radicata, composite

Ericaceae, Vaccinium ?calycinum, ohelo
Geraniaceae, Geranium homeanum, geranium
Hyperiaceae, Hypericum mutilum, herb
Lythraceae, Cuphea carthagenesis, tarweed
Malvaceae, Modiola caroliniana, mallow
Melostomatoceae, Tibouchina herbacea
Myrtaceae, Metrosideros collina sp., ohia

Oxalidaceae, Oxalis corniculata, wood sorrel (ihiai) Plantaginaceae, Plantago major, plantain (laukahi) Polygonaceae, Polygonum punctatum Rosaceae, Rubus rosaefolius, thimble berry Scrophulariaceae, Veronia serpyllifolia, snap dragon Thymelaeaceae, Wikstroemia sp., akia Urticaceae, Pilea peploides, herb

On 18 January 1999 I went to the stream gage site at Alakahi, Near Kamuela (along the Kohala Ditch trail) where repair work is planned. Following the survey, my conclusion is that planned repairs to the gage structures are acceptable and will not have a negative impact on the flora or fauna in the stream or along the banks. I prepared a list of species (plants and animals) that I observed at the gage site and also collected numerous specimens for identification by other experts. This list can be combined with the list I prepared for the 28 September 1998 survey of the other three gage sites to be repaired: Kawaiki Gage, Kawainui Gage and and Upper Hamakua Ditch Below Kawaiki Gage. Brian Farm (BRD), and Rick Warshauer from Hawaii Volcanoes National Park assisted in plant identification. Lloyd Loope of Haleakala National Park provided assistance with nomenclature. I didn't find any aquatic snails nor see any fish, and no odonate (dragonflies and damselflies) naiads were present in this section of the stream (although adults were observed). The stream near the gage was barely flowing, the predominant habitat a shallow pool with tannic water. Filamentous algae (Cladophora) was abundant. Tree ferns, ohia, and Kahili ginger were the predominant riparian vegetation, although the area directly surrounding the gage structure was primarily grass and sedges. Below are the lists of plants and aquatic insects that were found at the sites. Aloha, Anne

Aquatic Insects

(ORDER, Family, Genus species)

ODONATA, Aeshnidae, Anax strenous Coenagrionidae, Megalagrion blackburni Megalagrion calliphya Libellulidae, Pantala flavescens

Plants

(Family, Genus species, common name)

FERNS AND MOSSES

Blechnaceae, Sadleria sp., fern
Dicanaceae, Campylopus sp., moss
Dicksoniaceae, Cibotium sp., tree fern (hapuu)
Lindsaeaceae, Odontosoria chinensis, fern
Lycopodiaeceae, Lycopodium venustulum, club moss (wawaeiole)
Lycopodium ceruum, moss
Spagnaceae, Sphagnum palustre, spagnum
?, Vesplinium lobelatum, fern

MONOCOTS

Juncaceae, Juncus accuminatus, alien sedge Juncus plantofolius, native sedge

Luzula hawaiiensis, native sedge Poaceae, Deschampsia nubigena, sterile grass Sataria palmifolia, palm grass

DICOTS

Apiaceae, Hydrocotyle venticillata
Companulaceae, Clermontia sp., oha-wai
Cyanea sp., haha
Ericaceae, Vaccinium ?calycinum, ohelo
Melostomatoceae, Tibouchina herbacea
Myrsinaceae, Myrsinea sandwicensis, kolea laulii
Myrtaceae, Metrosideros collina sp., ohia
Onegreceae, Ludwigia palustris
Piperaceae, Peperomia cookiana
Peperomia papaluea
Plantaginaceae, Plantago major, plantain (laukahi)
Polygonaceae, Polygonum punctatum
Rosaceae, Nertera grandensis, epiphyte
Rubus hawaiiensis, ocala

CONSERVATION DISTRICT USE APPLICATION--KOHALA MOUNTAINS STREAMGAGE RECONSTRUCTION

		Dec. 1994
ĊONS	STATE OF HAWAII ARIMENT OF LAND AND NATURAL RESCURCES P. O. BOX 621 HONOLULU, HAWAII 96809 SERVATION DISTRICT USE APPLICATION FORM	FOR DLNR USE ONLY Reviewed by Date Accepted by Date Docket/Fine No. 180-Day Exp. EIS Required PH Required Board Approved Disapproved
,		Y PAGE
ī.	IANDOWNER (If State land, to be filled by State of Hawaii or government entity with management control over parcel.)	Name U.S. Geological Survey Address 677 Ala Moana Blvd., #415 Honolulu, Hawaii 96813
	Name	
:	Address	Telephone No. (808) 522-8290 Interest in Property Federal/State
	Telephone No	Basic Data Collection (Indicate interest in property; submit written evidence of this interest.)
	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	*SIGNATURE P. 23/959 *If for a Corporation, Partnership, Agency or Organization, must be signed by an authorized officer. AGENT Name Address Telephone No.
	ownership of the parcel(s).	

III. TYPE OF PER	MIT	IV.	LAND PARCEL	LOCATION
	ntal permit (see section		Island	Hawaii
13-5-3	3);	4)	County	<u> Hawaii</u>
4	y permit (see section 13- y variance (see section	-5-35)	District	South Kohala
12_5_7	6) orming uses (see section		Tax Nap Ke	y(s) <u>6-3-01-4</u>
12_5_3	171		Area of Pa	rcel 250 sq. ft.
12 5-7	n approval (see section 88); or			(Indicate in acres or sq. ft.)
(7) Manageme 13-5-3	ent plan (see section 39)		Term (if 1	ease) <u>N/A</u>

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 VI. ENVIRONMENTAL REQUIREMENTS (See attached Draft EA).

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:

- 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.

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: October 12, 1999			
	COMPLETION DATE: July 14, 2000			
ıx.	CITE AND DESCRIBE IN DETAIL THE PROPOSED IDENTIFIED LAND USE: (Refer to Title 13-5, HAR. Attach additional sheets as needed.) See attached sheets			
x.	AREA OF PROPOSED USE: 250 sq. ft. (Indicate in acres or sq. ft.)			
XI.	NAME AND DISTANCE OF NEAREST TOWN OR LANDVARK:			
Kamuela, 4 miles south				
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.			

- 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.)
- 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. Enclosed purchase order
- XV. <u>PLANS</u>. 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. Attached
 - 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.
 - 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.)
 - 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.
 - 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.
 - E. Management Plans: If required, refer to Section 13-5-39, HAR, and Exhibit 3, entitled "Management Plan Requirements, dated September 6, 1994.
 - 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.

CONSERVATION DISTRICT USE APPLICATION (Rev. 12/94)

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

- The proposed land use is consistent with the purpose of the Conservation District;
- 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 sheets

CONSERVATION DISTRICT USE PERMIT APPLICATION KOHALA MOUNTAINS STREAMGAGE RECONSTRUCTION U.S. GEOLOGICAL SURVEY

SUPPLEMENTAL INFORMATION

VII. DESCRIPTION OF PARCEL

A. Existing structures/use

The existing gages (Figure 1) include five stilling well streamgages constructed of wood.

B. Existing utilities

None.

C. Existing access

See Figure 1. Access is controlled by the State of Hawaii Department of Land and Natural Resources, which owns the land, and by the County of Hawaii Department of Water Supply, which operates a treatment plant along the road between Kamuela and the gages and has locked gates on the road. All gages are accessible by unpaved road and then by trail along the Upper Hamakua Ditch. The Kawaiki and Kawainui gages require an additional 0.5 mile hike along unimproved trails.

D. Flora and fauna--see Appendix 2 of accompanying Draft EA

E. Topography

See Figure 1.

F. N/A (not a shoreline area)

G. All gages are on State land.

H. Historic sites affected

None.

IX. PROPOSED IDENTIFIED LAND USE

The proposed land use is classified as basic data collection involving a land use with incidental ground disturbance (C-1), 13-5-22 HAR. The proposed land use and its potential impacts are fully described in the Draft Environmental Assessment that accompanies this CDUA.

XVI. Consistency with Conservation District use criteria

- 1. The proposed land use is consistent with the purpose of the Conservation District. Data collected at the gaging stations would enhance the ability of State agencies to manage and protect water and aquatic resources.
- 2. The proposed land use is consistent with the purpose of the Protective Subzone. Data collected at the gaging station would enhance the ability of State agencies to manage and protect water and aquatic resources.
- 3. The proposed land use complies with the provisions and guidelines contained in Chapter 205A, HRS, entitled "Coastal Zone Management". The proposed action is outside of the Special Management Area and therefore does not require an SMA permit from the County of Hawaii Department of Planning. The project location is not on a shoreline, and therefore shoreline setbacks do not apply. The proposed action would not have substantial effects on recreational or historic resources, scenic and open space resources, coastal ecosystems, managing development, public participation, beach protection, or marine resources. The proposed action would potentially have positive effects on economic uses and reduction of coastal hazards related to stream flooding.
- 4. The proposed land use directly affects a very small area and would have a negligible impact on terrestrial and aquatic biota, water quality, and channel stability.
- 5. The proposed land use would not significantly alter the physical conditions and capabilities of the parcel.
- 6. The net effect of the proposed land use would be to preserve the natural beauty of the land.
- 7. N/A

8. The gages would continue to be secured to prevent injury to the public.

SUMMARY FOR OEQC BULLETIN AND CDUA PERMIT

The U.S. Geological Survey (USGS) proposes to reconstruct three streamgages and two ditch gages on state-owned land within the Kohala Forest Reserve, South Kohala District, County of Hawaii, TMK 6-3-01-4. These gages, which have been operated on the Upper Hamakua Ditch and on streams diverted by the ditch, have been operated since the mid-1960's and are now in deteriorated condition. Reconstruction is needed for continued operation of the gages, which provide streamflow data used for managing the ditch, assessing the effect of the ditch on natural streamflow regimen, and evaluating regional hydrology.

Reconstruction would involve replacement-in-kind of the wooden stilling wells and instrument shelters. About 0.75 cubic yards of concrete would be placed within the stream channels to anchor the stilling wells. Most work would be done by hand, however, helicopters would be needed to transport materials, and some power tools would be used. A Best Management Practices Plan and Water Quality Monitoring Plan would be followed.

No rare, threatened, or endangered plants or animals, and no sites of cultural importance, would be affected by the reconstruction.

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 16, 1999, provisional nationwide permit issued June 7, 1999.

Section 401 Water Quality Certification--revised application submitted to Department of Health on April 6, 1999.

Stream Channel Alteration Permit--application to Commission on Water Resource Management submitted July 20, 1999.

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

Coastal Zone Management Permit--not required.

Office of Environmental Quality Control						
The Environmental Notice PUBLICATION FORM (ver. 6-98)						
(See instructions below)						
1 Project Name: Kohala Mountains Streamgage Reconstruction						
Island: Hawaii						
District:South Kohala						
Tax Map Key Number:6-3-01-4						
2 Type of Action agency action _X_ applicant action Type of Document: draft EA _X final EA draft EIS final EIS Other						
Legal Authority: _X_ State law (HRS 343)						
Applicable sections:X use of state or county lands or funds						
X use of conservation district lands						
use of shoreline area						
use of historic site or district						
use of land in the Waikiki district						
amendment to county general plan						
reclassification of conservation lands						
construction or modification of helicopter facilities						
Federal law (NEPA)						
County law (ROH CH. 25)						
Other:						
gency determination: Anticipated FONSI FONSI EIS Prep. Notice Final EIS Acceptance						

3 Proposing Agency or Applicant:U.S. Geological Address:677 Ala Moana Boulevard Suite 415 Honolulu, Hawaii 96813	
Contact: Barry Hill	Phone: 522-8290
4 Approving Agency or Accepting Authority: DLNR Address:P.O. Box 621 Honolulu, Hawaii 96809	
Contact: Tom Eisen	Phone: 587-0386
5 Consultant:n/aAddress:	
Contact:	
6 Public Comment Deadline: Permits required prior to Implementation:Dept.or Channel Alteration Permit, CDUA Project Summary (name of file on attached disk) file and sent as email to OEQC Public Library where document will be available Public Library, Kamuela, Hawaii This form prepared by: Barry Hill	: text file attached to this

Office of Environmental Quality Control State of Hawaii 235 S. Beretania Street, Suite 702 Honolulu, Hawaii 96813 ph. 586-4185 fax. 586-4186 E-Mail: oeqc@pixi.com

SUMMARY FOR OEQC BULLETIN AND CDUA PERMIT

The U.S. Geological Survey (USGS) proposes to reconstruct three streamgages and two ditch gages on state-owned land within the Kohala Forest Reserve, South Kohala District, County of Hawaii, TMK 6-3-01-4. These gages, which have been operated on the Upper Hamakua Ditch and on streams diverted by the ditch, have been operated since the mid-1960's and are now in deteriorated condition. Reconstruction is needed for continued operation of the gages, which provide streamflow data used for managing the ditch, assessing the effect of the ditch on natural streamflow regimen, and evaluating regional hydrology.

Reconstruction would involve replacement-in-kind of the wooden stilling wells and instrument shelters. About 0.75 cubic yards of concrete would be placed within the stream channels to anchor the stilling wells. Most work would be done by hand, however, helicopters would be needed to transport materials, and some power tools would be used. A Best Management Practices Plan and Water Quality Monitoring Plan would be followed.

No rare, threatened, or endangered plants or animals, and no sites of cultural

importance, would be affected by the reconstruction.

RELATED PERMITS

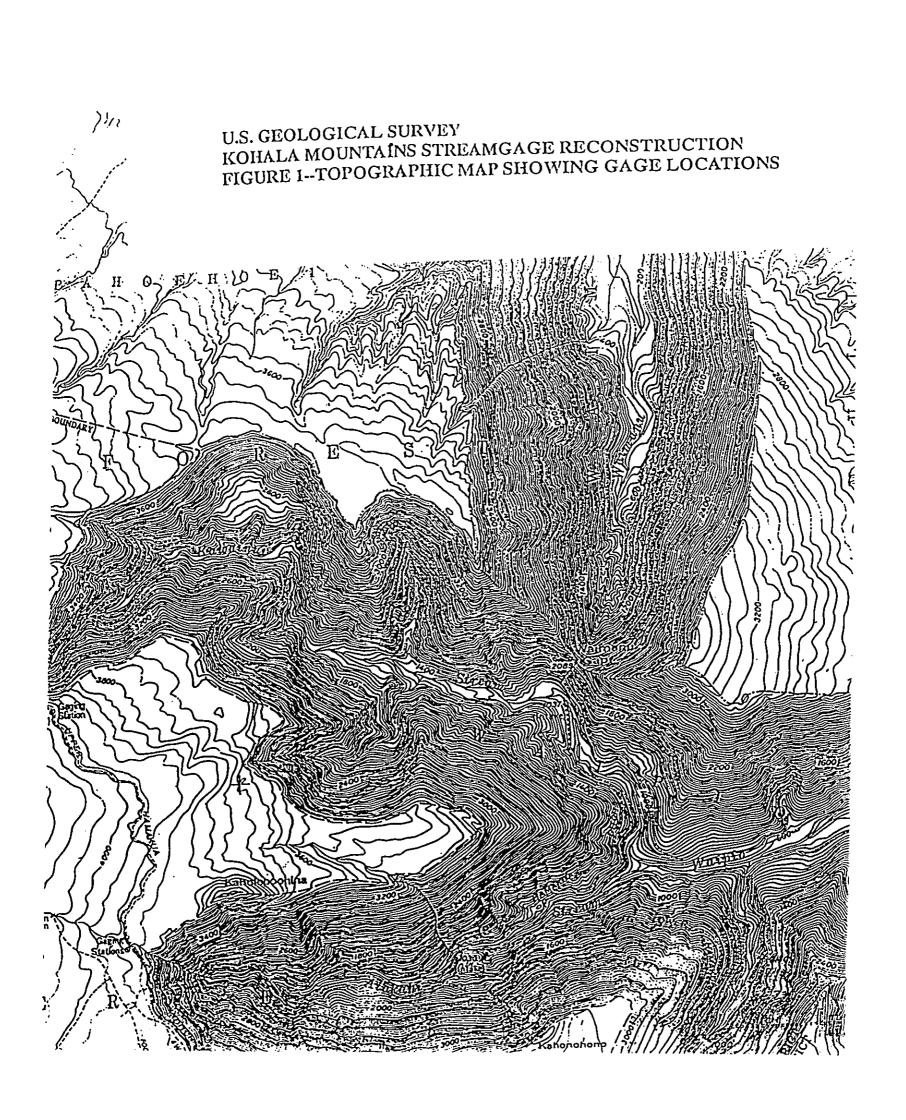
Department of the Army permit, NWP authorization 33 CFR Part 325, Appendix A, Paragraph B.5, Scientific Measuring Devices—application submitted to Corps of Engineers on February 16, 1999, provisional nationwide permit issued June 7, 1999.

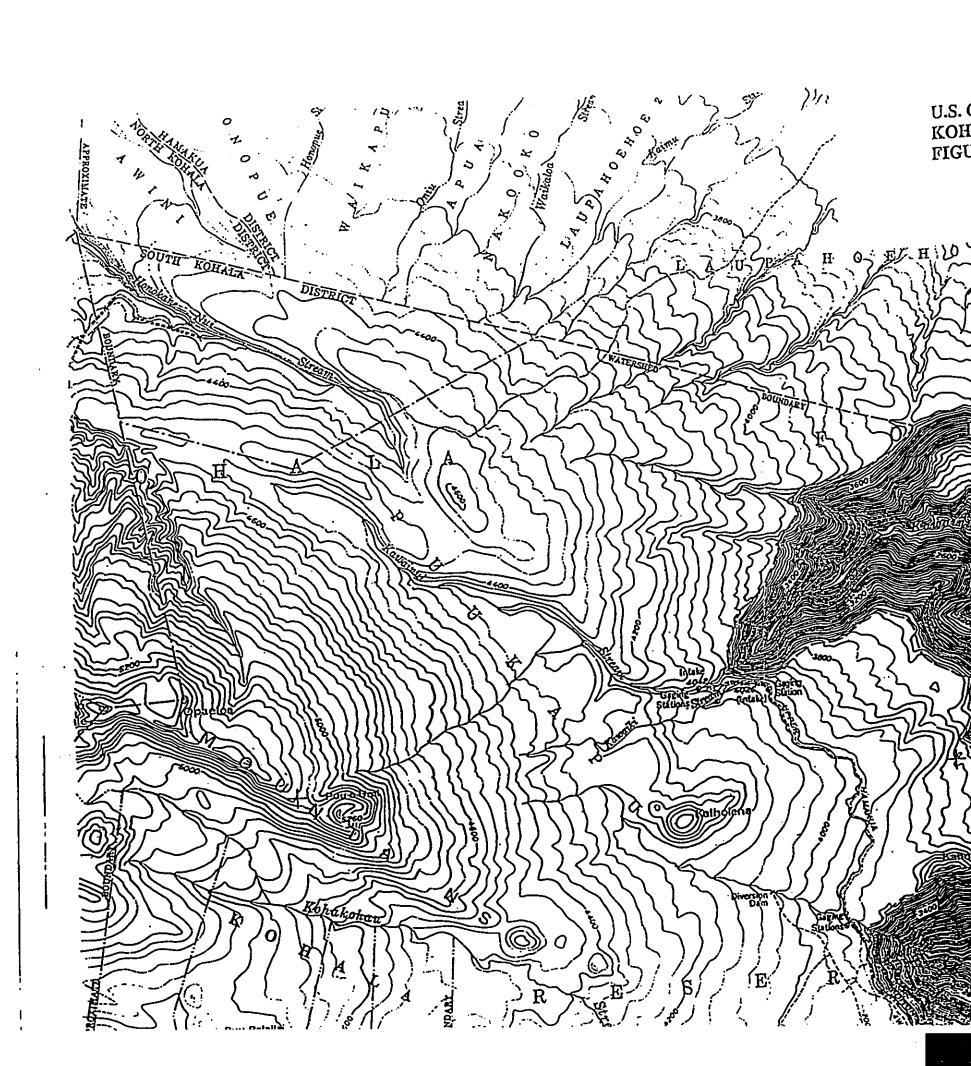
Section 401 Water Quality Certification--revised application submitted to Department of Health on April 6, 1999.

Stream Channel Alteration Permit--application to Commission on Water Resource Management submitted July 20, 1999.

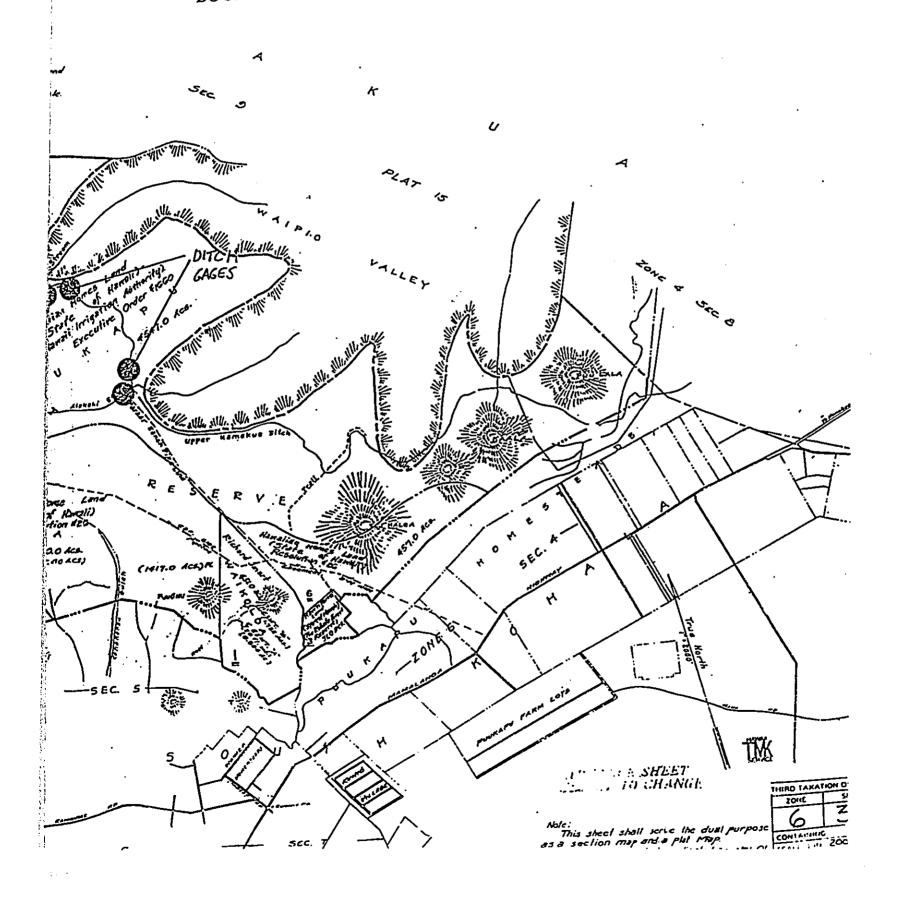
County of Hawaii Special Management Area Permit--not applicable.

Coastal Zone Management Permit -- not required.





U.S. GEOLOGICAL SURVEY
KOHALA MOUNTAINS STREAMGAGE RECONSTRUCTION
KOHALA MOUNTAINS STREAMGAGE RECONSTRUCTION
FIGURE 2--TAX MAP SHOWING GAGE LOCATIONS AND PROPERTY
BOUNDARIES (approximate gage locations marked with filled circle symbol)



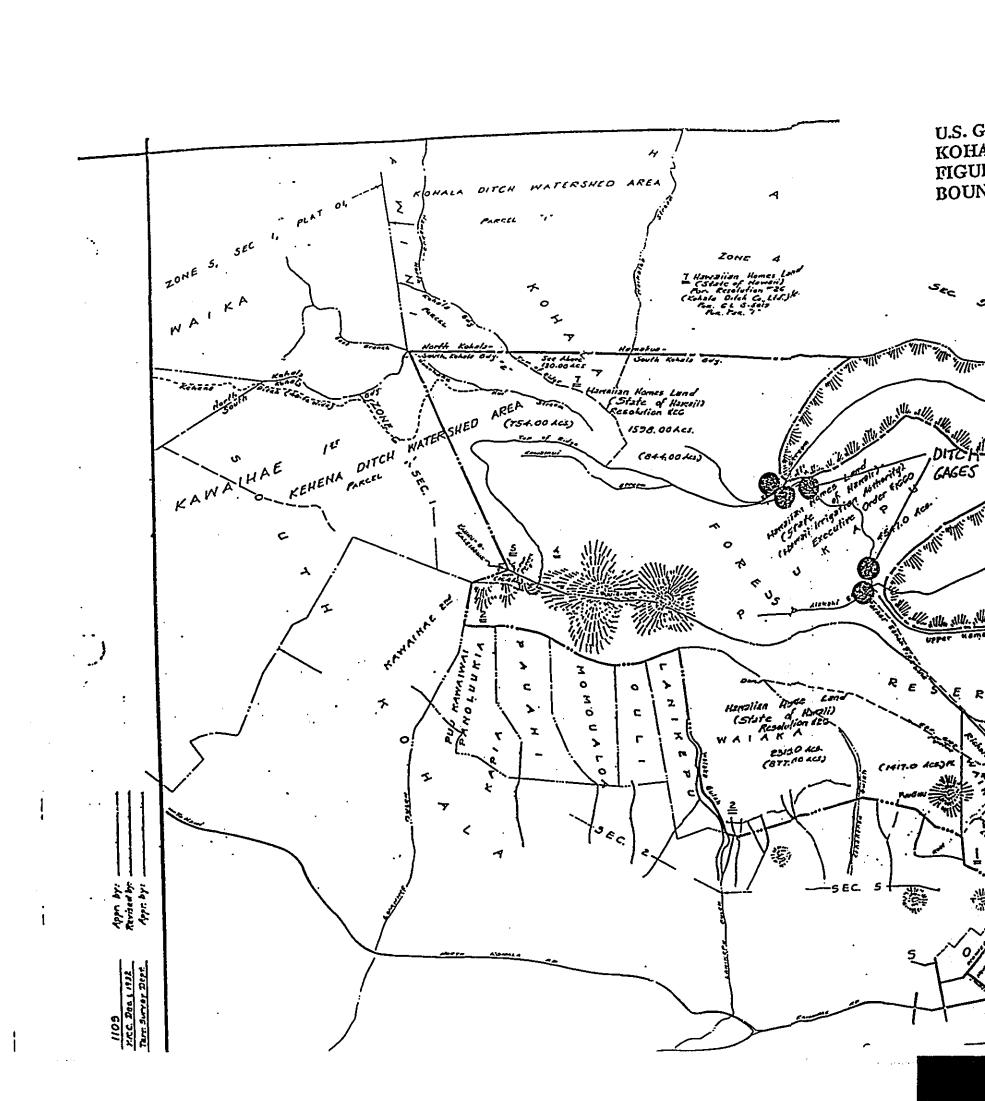


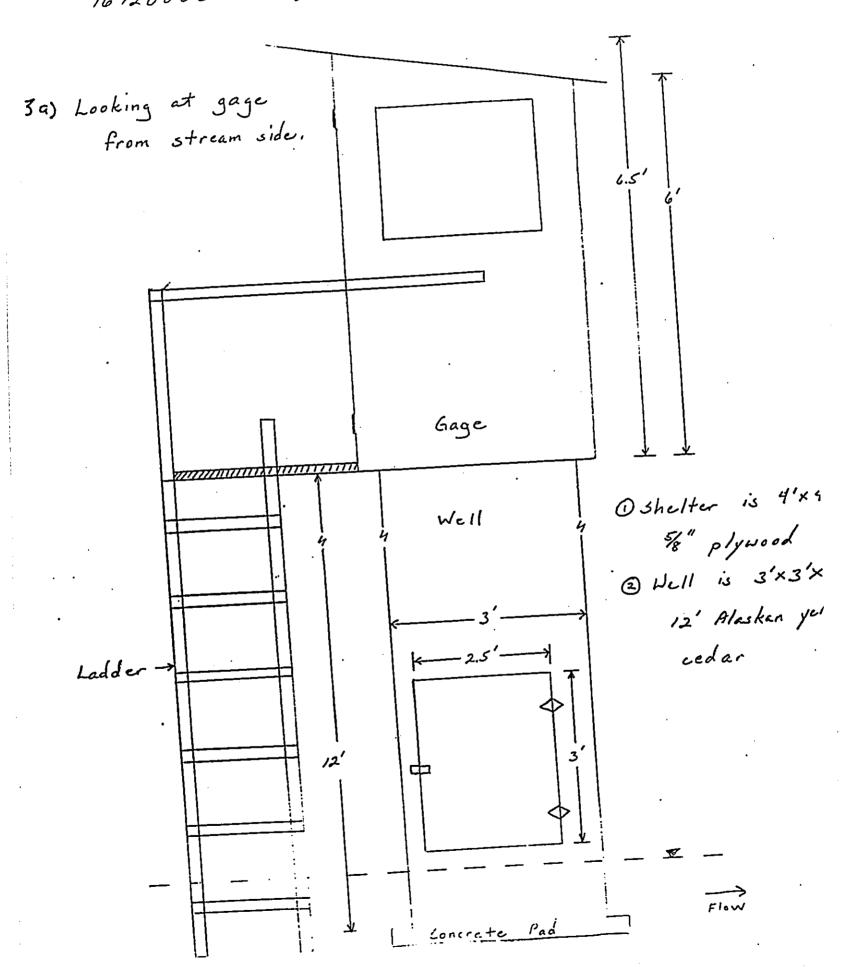
FIGURE 3: CROSS-SECTION PLANS FOR THREE STREAMGAGES

- a. Kawainui gage viewed from stream
- b. Kawainui gage viewed from upstream
- c. Kawaiki gage viewed from stream
- d. Kawaiki gage viewed from downstream
- e. Alakahi gage viewed from stream

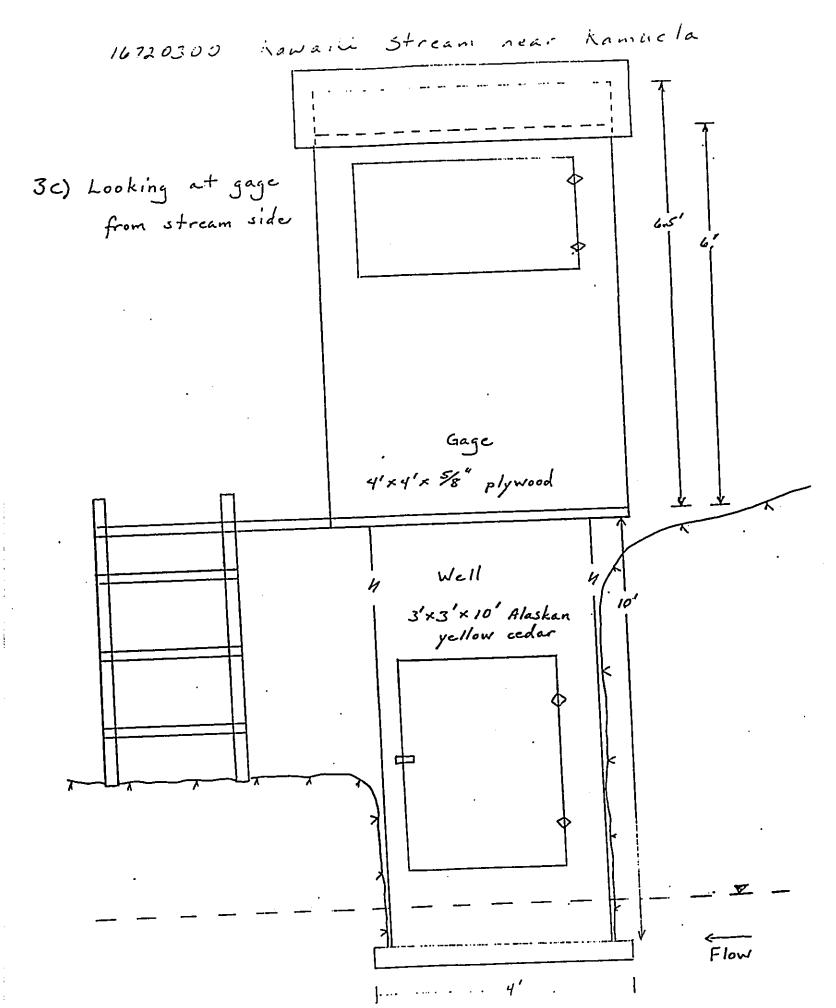
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f. Alakahi gage viewed from upstream

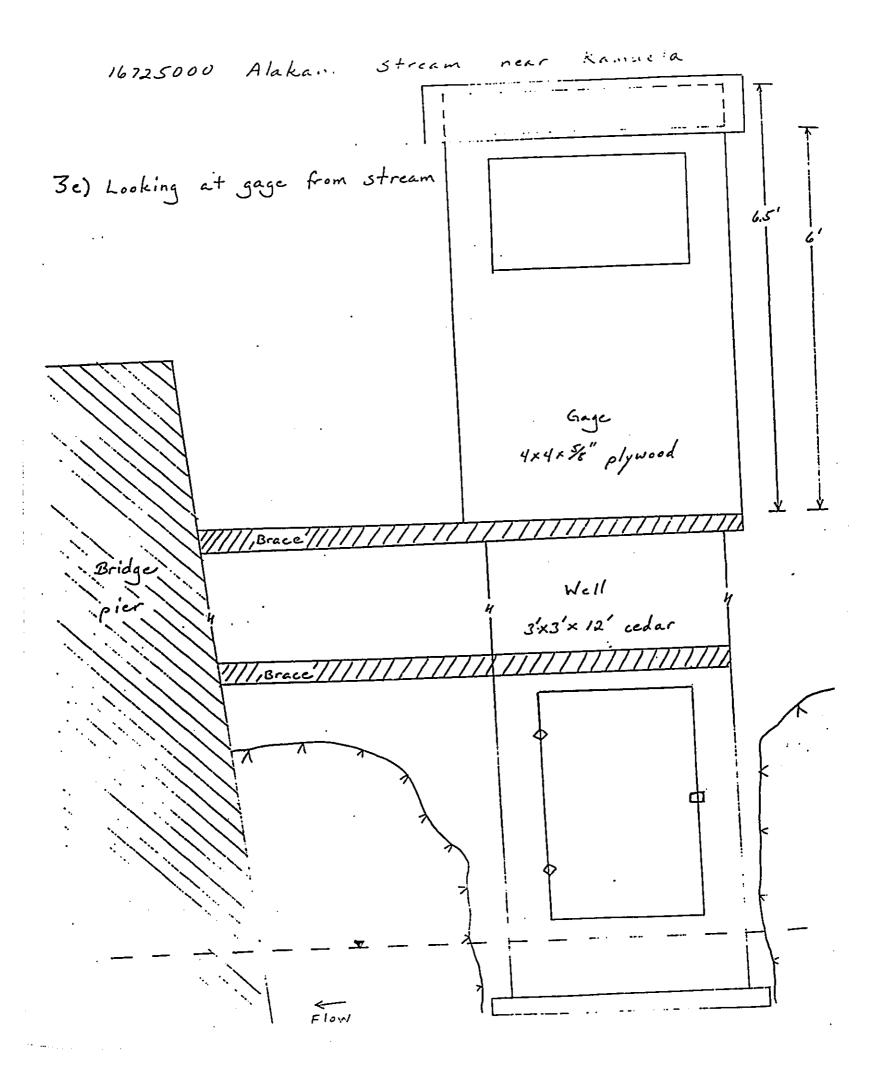
16720000 Kowamui Stream near Kamuela



near Kammela 1672000) Kawainui Stream . 中 13"x3" angk iron 4"x6"pos+-> 36) Looking downstream at gage



16-120300 Kawaiki Stream 3 d) Looking upstream at gage Gage Well



16725000 Alakahi Stream: near Kamuela 3f) Looking downstream at gage Gage Well