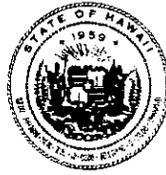


BENJAMIN J. CAYETANO  
GOVERNOR OF HAWAII



LAWRENCE MIKE  
DIRECTOR OF HEALTH

**STATE OF HAWAII**  
**DEPARTMENT OF HEALTH**

P.O. BOX 3378  
HONOLULU, HAWAII 96801-3378

In reply, please refer to:  
EMD/CWB

October 15, 1998

RC1007SP

Ron Williams, Co-Leader  
Unified Watershed Assessment Action Team  
USDA-Natural Resources Conservation Service

Geoffrey Grubbs, Co-Leader  
Unified Watershed Assessment Action Team  
U.S. Environmental Protection Agency  
401 M Street SW (45035)  
Washington, D.C. 20460

Dear Mr. Williams and Mr. Grubbs:

We are pleased to submit our maps and watershed catalogue for Hawaii's final Unified Watershed Assessment (UWA) and Watershed Restoration Priorities (WRP) per the federal Clean Water Action Plan. These maps delineate the major islands in the island chain, watersheds by island, Category 1 watersheds in relation to the island and Priority 1 watersheds. As a result of finalizing the maps we have made slight modifications to the listing of watersheds within tables 2 and 3.

For ease of clarity, we are resubmitting the entire Hawaii Unified Watershed Assessment document which includes all the maps and revised listings for tables 2 and 3.

We again thank the Federal Workgroup for their comments and support. If you have questions or concerns regarding these maps or our assessment, please feel free to contact me at (808) 586-4309. On behalf of Hawaii's Interagency UWA Committee and the three major agency sponsors, NRCS; State DBEDT, Office of Planning; and the Department of Health.

Sincerely,

DENIS R. LAU, P.E., CHIEF  
Clean Water Branch

SP:ml

Enclosures



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

In reply, please refer to

September 29, 1998

Ron Williams, Co-Leader  
Unified Watershed Assessment Action Team  
USDA-Natural Resources Conservation Service  
Madison, Wisconsin

Geoffrey Grubbs, Co-Leader  
Unified Watershed Assessment Action Team  
U.S. Environmental Protection Agency  
Washington, D.C.

Dear Mr. Williams and Mr. Grubbs:

We are pleased to submit Hawaii's final Unified Watershed Assessment (UWA) and Watershed Restoration Priorities (WRP) per the federal Clean Water Action Plan. This submittal builds upon agency and public comments that have been subsequently submitted since our draft submittal on August 1. On August 27 we received comments from the Unified Watershed Assessment Federal Workgroup. We thank the Federal Workgroup for the review and support. You will find that we have incorporated or addressed many of the suggestions.

The UWA process has augmented the positive movement in getting many local agencies together to discuss common priorities for watershed and habitat restoration and preservation.

Please note that the maps for our submittal are in the process of being finalized and will be sent to you shortly. If you have further questions or concerns about our submittal, please feel free to contact us.

On behalf of the Hawaii's Interagency UWA Committee,

  
Dr. Bruce Anderson, Ph.D.  
Deputy Director  
Department of Health  
P.O. Box 3378  
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Director  
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DBEDT  
P.O. Box 2359  
Honolulu, HI 96804  
(808) 587-2809

# **The Hawai'i Unified Watershed Assessment**

October 1, 1998

**State of Hawaii, Department of Health  
Clean Water Branch  
Polluted Runoff Control Program**

**State of Hawaii, Department of Business,  
Economic Development, and Tourism,  
Office of Planning-Coastal Zone Management Program**

**U.S. Department of Agriculture  
Natural Resources Conservation Service**

## **Introduction**

On October 18, 1997, the 25th Anniversary of the 1972 Clean Water Act, the Honorable Albert Gore, Jr., Vice President of the United States directed the U.S. Environmental Protection Agency (EPA) and the U.S. Department of Agriculture (USDA) to work with other federal agencies, state agencies and the public to develop a Clean Water Action Plan (CWAP) that charts a course toward fulfilling the original goal of the Clean Water Act - "fishable and swimmable" waters for all Americans.

A key element in the CWAP is a new cooperative approach to watershed protection called the Unified Watershed Assessment (UWA), in which state, tribal, federal and local governments, and the public first identify the watersheds with the most critical water quality problems and then work together to focus resources and implement effective strategies to solve these problems.

Based on the watershed restoration priority setting guidance outlined in the *Final Framework for Unified Watershed Assessment, Restoration Priorities, and Restoration Action Strategies* (U.S. EPA), Hawai'i will submit a list of watershed restoration priorities to the U.S. EPA by October 1, 1998. In developing these priorities, the State has identified the highest priority watersheds requiring restoration to be addressed beginning in the 1999-2000 fiscal period; coordinated with existing restoration priorities, including those established under section 303(d) of the Clean Water Act; and developed a preliminary schedule for the restoration of these priority watersheds.

## **Unified Watershed Assessments Process**

The Unified Watershed Assessment process characterizes the conditions of waters and overall health of aquatic systems within watersheds, using the following general framework:

### **Category I - Watersheds in Need of Restoration.**

These watersheds do not currently meet, or face imminent threat of not meeting, clean water and other natural resource goals. Identification of watersheds in need of restoration

is especially important because the CWAP may target new federal funds to these Category I watersheds.

**Category II - Watersheds Needing Preventive Action to Sustain Water Quality.**

These watersheds meet clean water and other natural resource goals and standards and support healthy aquatic systems. All such watersheds need the continuing implementation of core clean water and natural resource programs to maintain water quality and conserve natural resources.

**Category III - Watersheds with Pristine/Sensitive Aquatic System Conditions on Lands Administered by Federal, State, or Tribal Governments.**

State/tribes work cooperatively with federal land managers to identify watersheds with exceptionally pristine water quality, other sensitive aquatic system conditions, and drinking water sources that are located on lands administered by federal, state or tribal governments. These areas include currently designated and potential candidate Wilderness Areas, Outstanding Natural Resource Waters, and Wild and Scenic Rivers.

**Category IV - Watersheds With Insufficient Data to Make an Assessment.**

These watersheds lack significant information, critical data elements, or the data density needed to make a reasonable assessment at this time.

*To support the new and expanded efforts to restore and protect the nation's waters as proposed in the CWAP, the President's FY 1999 budget proposes a Clean Water and Watershed Restoration Budget initiative. (Clean Water Action Plan, Overview, vii) Additional funding may come to the State as a result of this plan, and these funds will be targeted to the selected priority watersheds. At this time, however, it appears that the funding levels proposed under the President's budget initiative have been significantly reduced.*

**Hawai'i's Unified Watershed Assessment Process**

After reviewing the CWAP and guidance document, the Hawai'i Department of Health (DOH), USDA's Natural Resource Conservation Service (NRCS), and the Hawai'i Coastal Zone Management Program (CZM) within the State Department of Business, Economic Development, and Tourism (DBEDT) decided to take an approach based on developing restoration priorities within the scope of *existing efforts* throughout the State. This is consistent with EPA's UWA guidance document. Because of uncertain funding; limited time in which to convene this effort; and limited resources available to dedicate to an unfunded assessment, we directed our efforts to assessing what we already have in place throughout the State. We were very concerned about the short timeframe to accomplish this assessment and facilitate public participation in the process. Furthermore, we were apprehensive about the possible restrictions this process will place on future funding, as funding is only available for those watersheds currently identified as in need of restoration.

Among the eight major islands of the Hawaiian archipelago, there are 551 watersheds (See Table 1). Each Island has been assigned an 8-digit Hydrological Unit Code by the USGS. The DOH, NRCS, and CZM Program decided that the 8-digit Hydrological Unit Code was not specific

enough to be useful for our State. Nevertheless, we also agreed that categorizing 551 watersheds would be too time consuming for the UWA. Thus, we decided to use the State's 11-digit Watershed Unit Code and prioritize watersheds by regions and mountain ranges (see Table 2).

We also agreed to gather more participants to make an initial ranking of Category I watersheds. We wanted broader participation from other agencies and interest groups to assess existing efforts statewide. This approach has proven to work well for our needs.

We wanted to be responsive as a State and provide a thoughtful, realistic assessment of watersheds that could be restored, given existing efforts, community participation, and additional funding. At this time, it is not realistic to request additional time from overburdened agencies and community members to complete the assessment for all watersheds as requested. We will undertake the assessment of Categories II-IV watersheds at a time when the process becomes more clearly defined in order for us to begin reprioritizing our already limited resources.

With this in mind, DOH, NRCS and CZM Program held meetings with local agencies to survey environmental restoration activities already underway in watersheds throughout the State. On June 8, 1998, a meeting was convened at the DOH to introduce partner agencies to the UWA concept. At this initial meeting, the national guidance was discussed and agencies were asked to describe current projects that may fit within the framework. Representatives from the U.S. Geological Service (USGS), NRCS, DOH's Clean Water Branch, Environmental Planning Office and Polluted Runoff Control Program, Department of Land and Natural Resources (DLNR), CZM Program and EPA attended this initial meeting.

At this meeting DOH presented information on the Clean Water 303(d) List of Water Quality-Limited Segments for FY 98 & 99, and the process by which this list was developed. In developing the 303(d) list, the public was given the opportunity to nominate waters they believed were impaired. This waterbody assessment meets the Clean Water Act's requirement that states assess the conditions of its waterbodies and prepare a list of its most polluted waters. The DOH offered the 303(d) list as an initial prioritization effort for Category I watersheds.

Following the national UWA guidance, each participating agency was asked to provide similar information regarding on going environmental restoration activities in watersheds throughout Hawai'i. The NRCS provided its Environmental Quality Incentives Program (EQIP) list for FY'98, which included: West Maui, Pelekane Bay, Upcountry Maui, Mo'omomi and Hamakua/Hilo/Ka'u. The USGS priority list included: Waikele Stream, Manoa Stream, Kahana Stream and Punaluu Stream. The DLNR also provided its "hot spots" list, naming its priority areas of concern throughout the State.

Agencies discussed these and other efforts in areas around the State that could possibly meet the criteria of the UWA guidance. In order to make this assessment more oriented toward existing efforts, we did not set our own specific criteria for nomination; rather we used a multi-voting system. Each attendee was encouraged to nominate watersheds. Then, each was discussed and

prioritized, keeping in mind the UWA criteria and level of existing effort in the watershed. Through this process, a preliminary listing of watersheds was developed for broader consideration. Other discussion points included the need for public involvement/ participation and the need for a "landscape" approach to defining watershed districts (not just a single watershed but a watershed district that may encompass more than one watershed that all affects the same water quality limited segment). It was decided that another meeting would be called in July to continue this effort and to invite other agencies to participate.

On July 16th a second meeting was held at the DOH. Representatives from the CZM Program, DOH, NRCS, DLNR, State Department of Agriculture, Hawaii Association of Conservation Districts, National Marine Fisheries Service, U.S. Forestry Service, U.S. Fish and Wildlife Service, U.S. Geological Survey, and U.S. Army Corps of Engineers attended this meeting.

Participants reviewed a watershed listing in a matrix format (Attachment 1) compiled from DOH's 303(d) list, NRCS's EQUIP list, USGS's priority list and DLNR's "Hot Spots" as a starting point for prioritizing watershed districts. They discussed ongoing efforts and developed localized selection criteria. Again, each participant was encouraged to nominate watersheds, discuss existing efforts in the area and the amount of public support for the watershed. All nominated watersheds were discussed, and three were chosen by multi-voting/consensus.

The areas selected at this meeting were:

- West Maui and Mountains
- Pelekane Bay-Kohala Mountains
- Koolaupoko and Mountains

It was agreed that this list would be taken to the NRCS State Technical Committee for final review. The list would then be attached to a letter from Bruce Anderson, Deputy Director of DOH to EPA by August 1, 1998. The committee members, NRCS, CZM Program, and the State Technical Committee requested that this letter come from Dr. Anderson, after they reviewed and approved the final letter.

At the NRCS State Technical Committee meeting on July 27, 1998, the list was presented and criteria discussed with the membership. During this meeting, it was decided that the list include at least one watershed area on each of the five major islands in the State, at least one from each county. The Committee believed it was important to give residents of these islands an opportunity to receive additional funds to meet their watershed restoration goals. As a result, two additional watersheds were added: Nawiliwili (Kauai) and South Molokai.

### **Public Notice**

A Public Notice was published in the Honolulu Advertiser on Wednesday August 19, 1998, requesting comments from the public (Attachment 2). The selected watersheds and criteria for selection, as developed by the participants, were included in the Public Notice:

### **Criteria:**

- Agency interest/focus/existing work that promotes partnerships;
- Existing community interest;
- High probability of success and results transferable to similar areas within State;
- Historic and cultural significance;
- Presence of mixed land uses (agriculture, urban, residential, industrial, military);
- Presence of important natural resource;
- Presence of waterbodies on DOH's Section 303(d) list of Water Quality Limited Segments; and
- Watersheds capturing the "uniqueness" of Hawai'i.

**List of Watersheds and reasons for selection:**

**-South Molokai (Molokai)** - Erosion control for water quality improvement, coral reef protection and historic/cultural preservation. High probability of success because of current projects and partnerships.

**-Pelekane Bay-Kohala Mountains (Hawai'i)** - Erosion control and resource management for coral reef protection, enhanced recreational usage and historic/cultural preservation. Presence of important natural resources. High probability of success because of current projects and partnerships.

**-West Maui-West Maui Mountains (Maui)** - Reduce sediments and nutrients for water quality improvement, enhanced recreational usage along coastline and habitat improvement in a National Marine Sanctuary, and historic/cultural preservation. Presence of important natural resources. High probability of success because of current projects and partnerships.

**-Koolaupoko District-Windward Koolau Mountains (Oahu)** - Habitat restoration and protection, reduction of nonpoint source runoff for enhancement of recreational usage of streams and nearshore waters, and historic/cultural preservation. Mix of land uses. High probability of success because of current projects and partnerships.

**-Nawiliwili (Kauai)** - Identification and reduction of nonpoint source runoff to restore habitat and enhance recreation usage. Mix of land uses. Presence of important natural resources.

DOH issued a press release at the same time as the public notice. Public comments were accepted until September 16, 1998. Comments submitted (Attachment 3) were discussed with participating agencies and reviewed by DOH, NRCS and CZM Program on September 17, 1998. At this meeting, it was agreed that we did not have enough time to convene a meeting that would bring together the public and agencies to readdress the priority watersheds in Category I. Most of the comments were favorable of the process and only a few additional watersheds outside of the existing Category I listing were nominated. The remaining Category I watersheds not part of the above listed five "first tier" watershed areas are referred to as "second tier" Category I watersheds. The "second tier" watersheds are all the remaining ones that have or drain into CWA 303(d) listed waterbodies, plus Kaho'olawe. Other nominated watersheds not on the CWA 303(d) list (Waialua-Kauai, East Maui, East Molokai, Kohala and West Hawai'i) will be put into appropriate categories and addressed accordingly at a later time.

The State recognizes that Kaho'olawe is currently receiving substantial funds from the U.S. Navy for restoration activities. The Kaho'olawe Island Reserve Commission, who oversees this

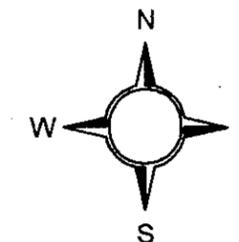
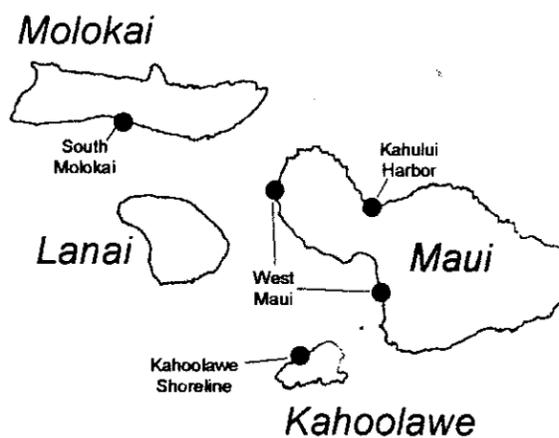
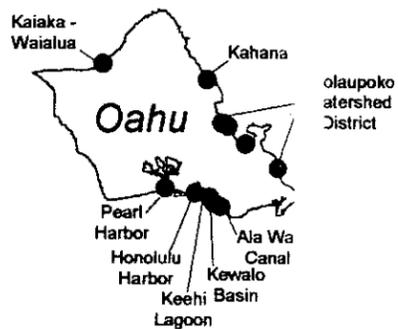
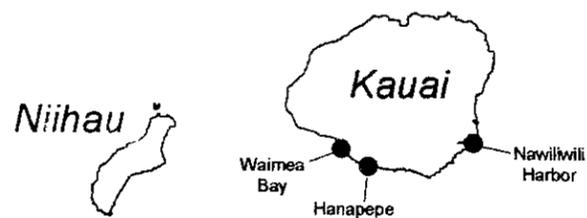
restoration, has volunteered to share information regarding their efforts and successes with other watersheds groups. Based on the fact that a great amount of restoration work is underway and that there is a significant need for habitat and coastal water quality restoration, Kaho'olawe has been included as a Category I watershed.

### **Results**

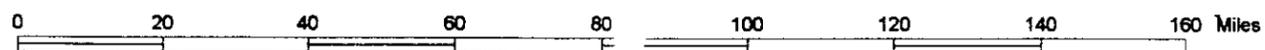
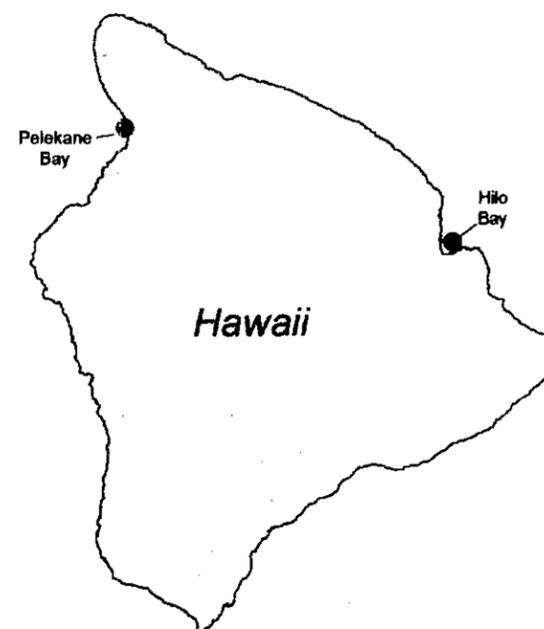
Hawaii's assessment consists of maps of each major island's watersheds and a list of all watersheds ( Table 1) within State boundaries, aggregated into 11-digit hydrologic units. The priority watersheds nominated for Category I are delineated on the maps and Table 2. All remaining Category I watersheds (second tier) are delineated on maps and Table 3.

### **Watershed Restoration Action Strategy**

The next step, is for Hawai'i to convene a joint agency/public committee to discuss the direction and approach that Hawai'i will take in developing restoration strategies and watershed plans for the five priority watersheds. If funding is obtained, implementation of the watershed plans will begin. We will make every effort to complete the ranking of the additional watersheds throughout the State with the guidance and assistance of this committee. Funding is an important component in continuing the CWAP process.

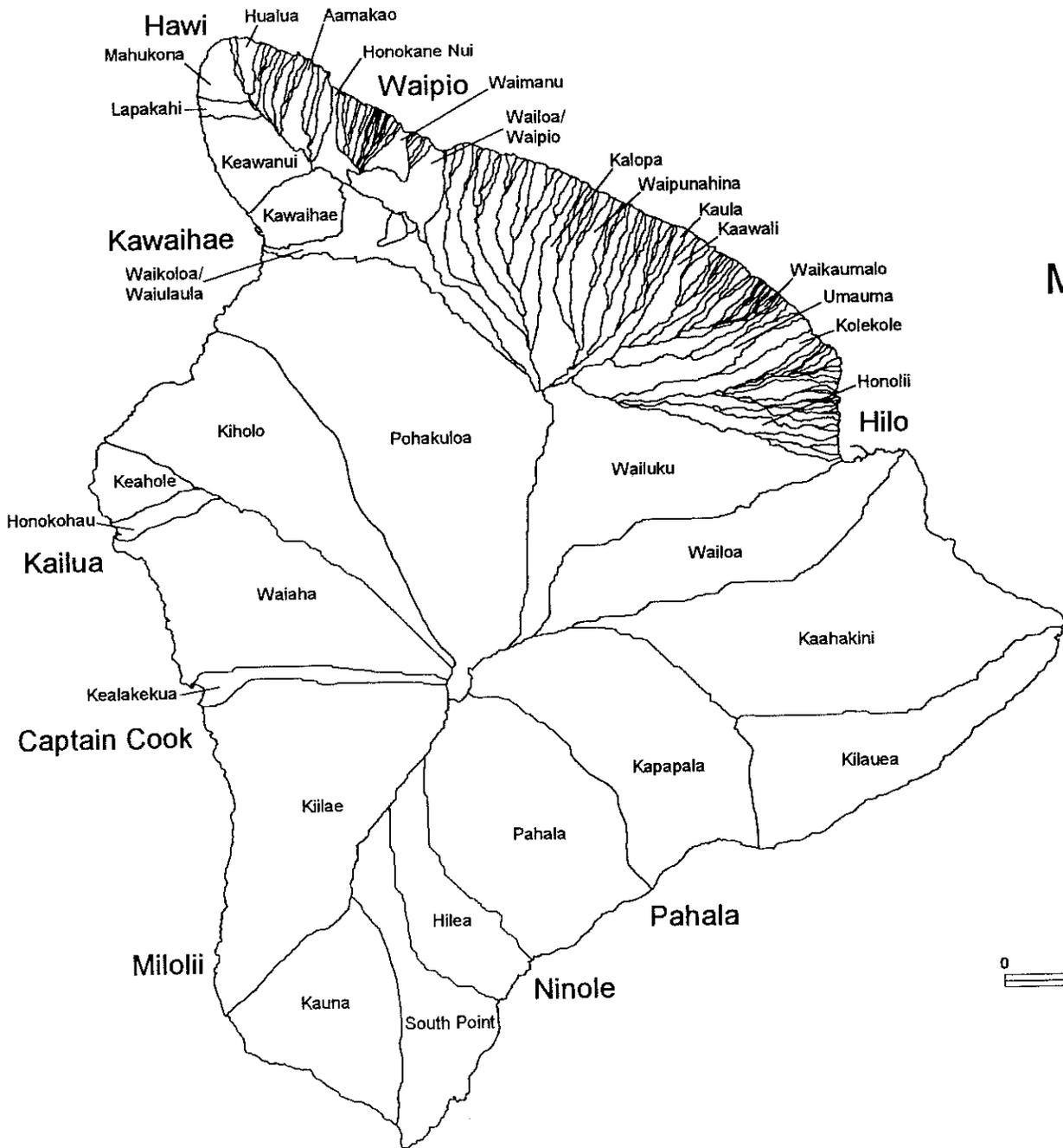


**State of Hawaii**  
**Main Islands with Locations of**  
**Category 1 Watersheds**

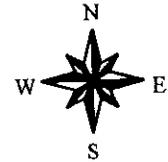


Maps for the Hawai'i Unified Watershed Assessment

Hawai'i Unified Watershed Assessment  
Delineation of All Watershed Units



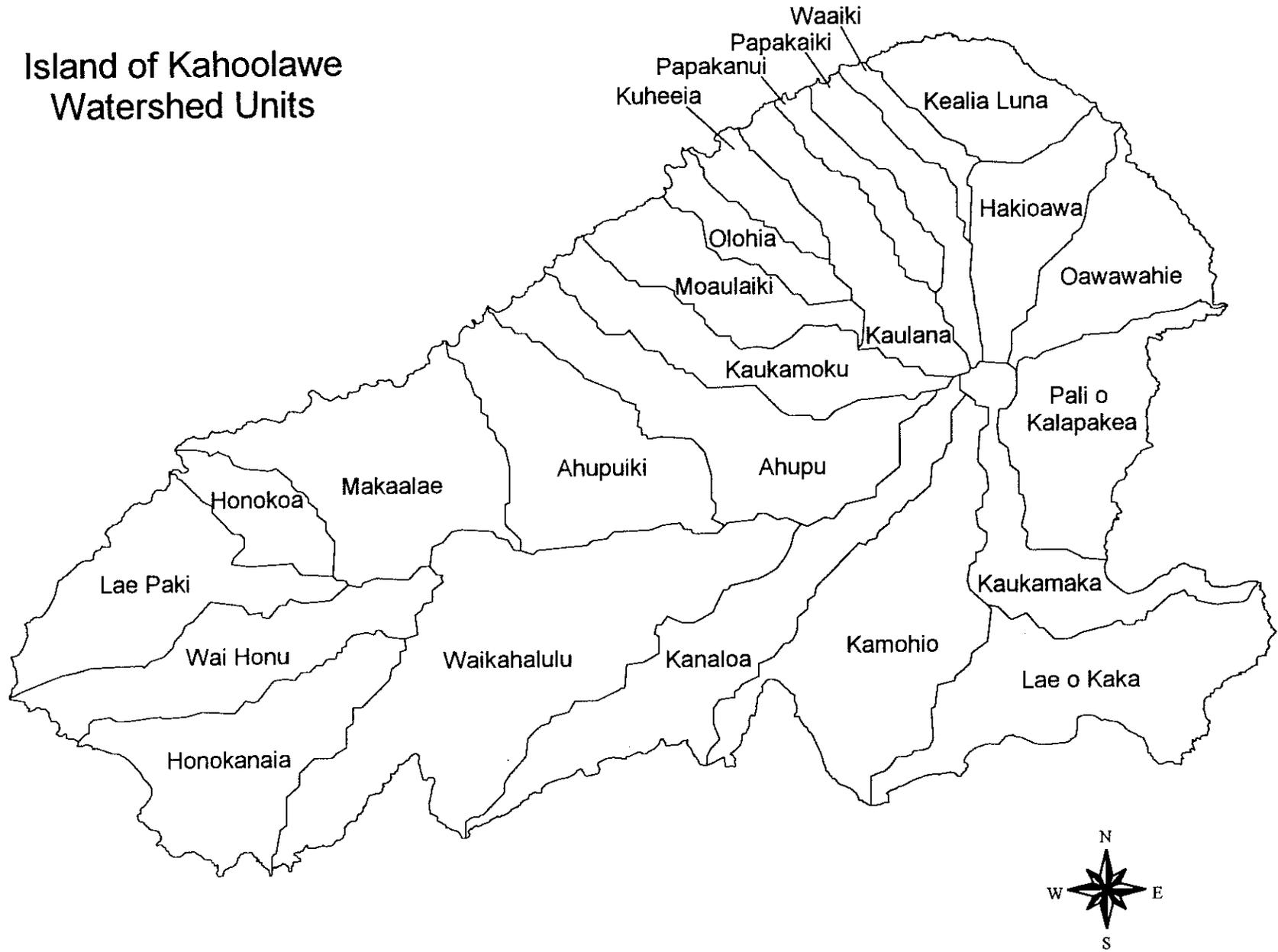
# Island of Hawai'i Major Watershed Units



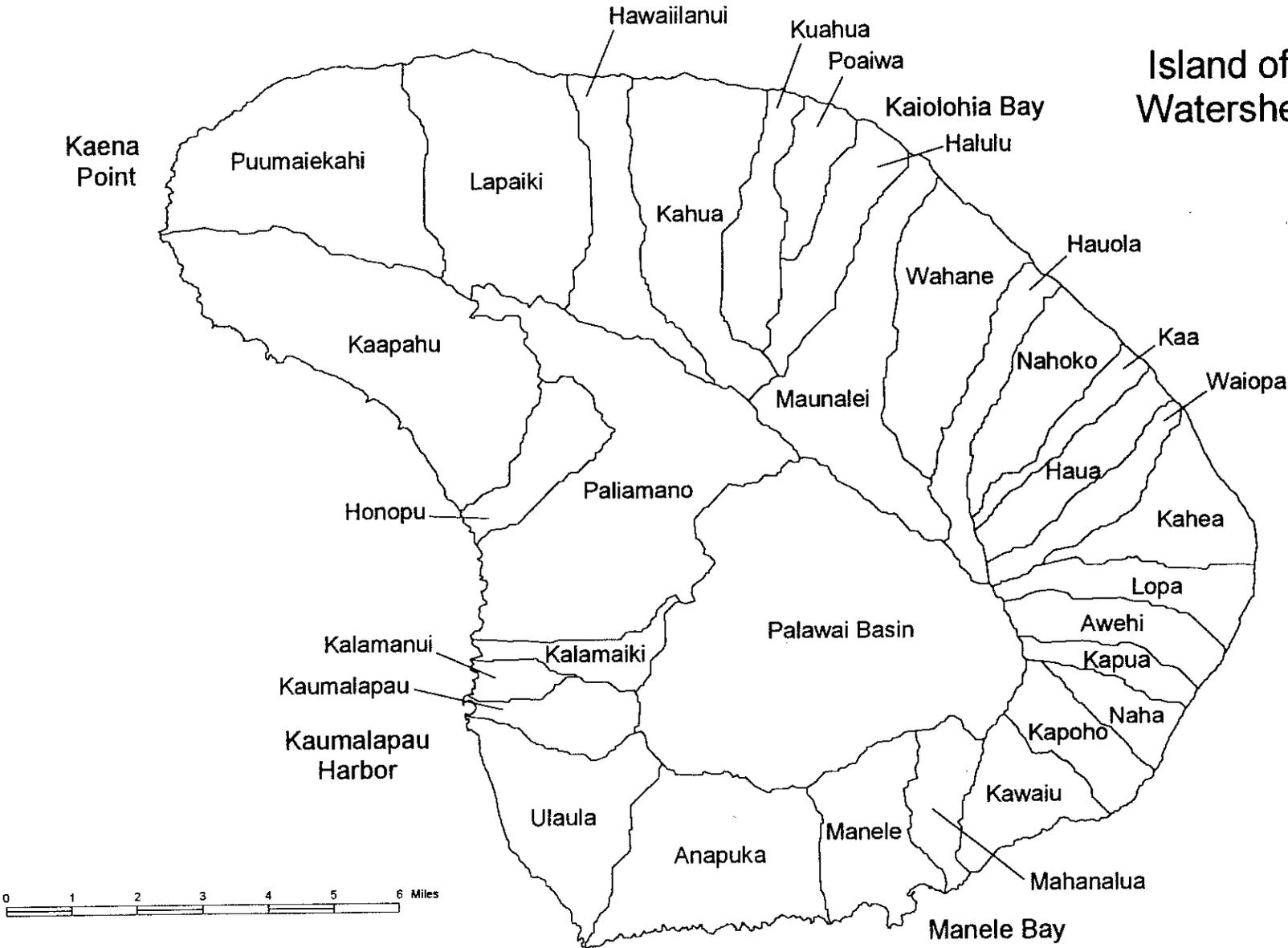
Source: Office of State Planning  
State of Hawaii, June 30, 1994



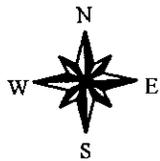
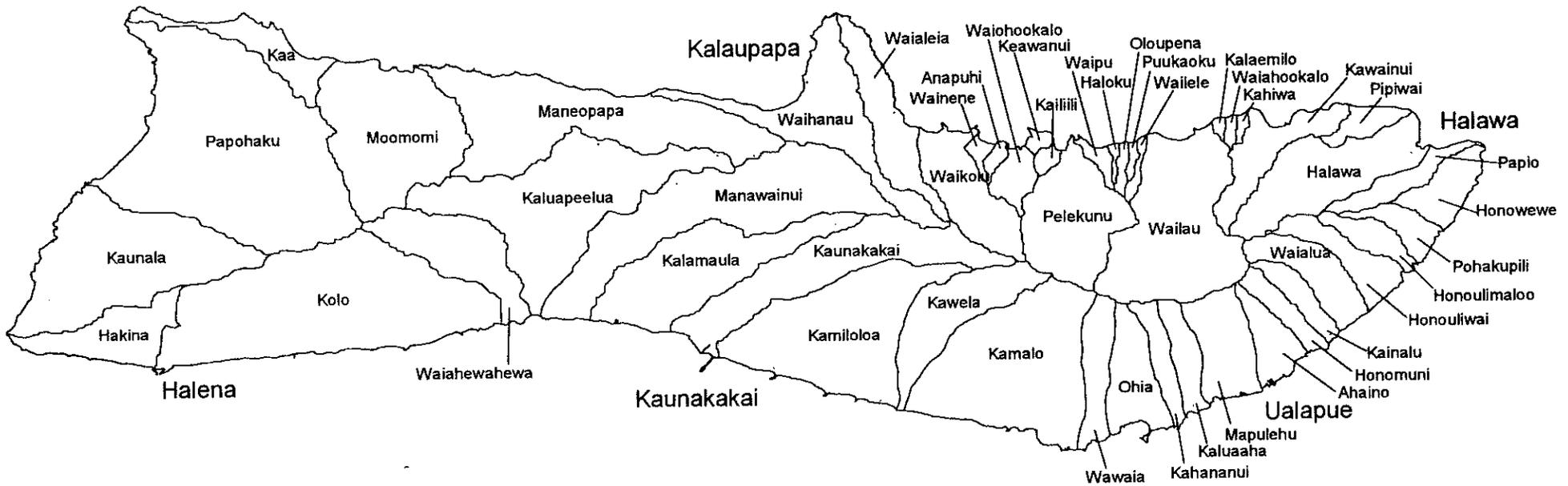
# Island of Kahoolawe Watershed Units



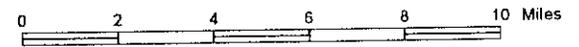
# Island of Lana'i Watershed Units



Source: Office of State Planning  
State of Hawaii, June 30, 1994



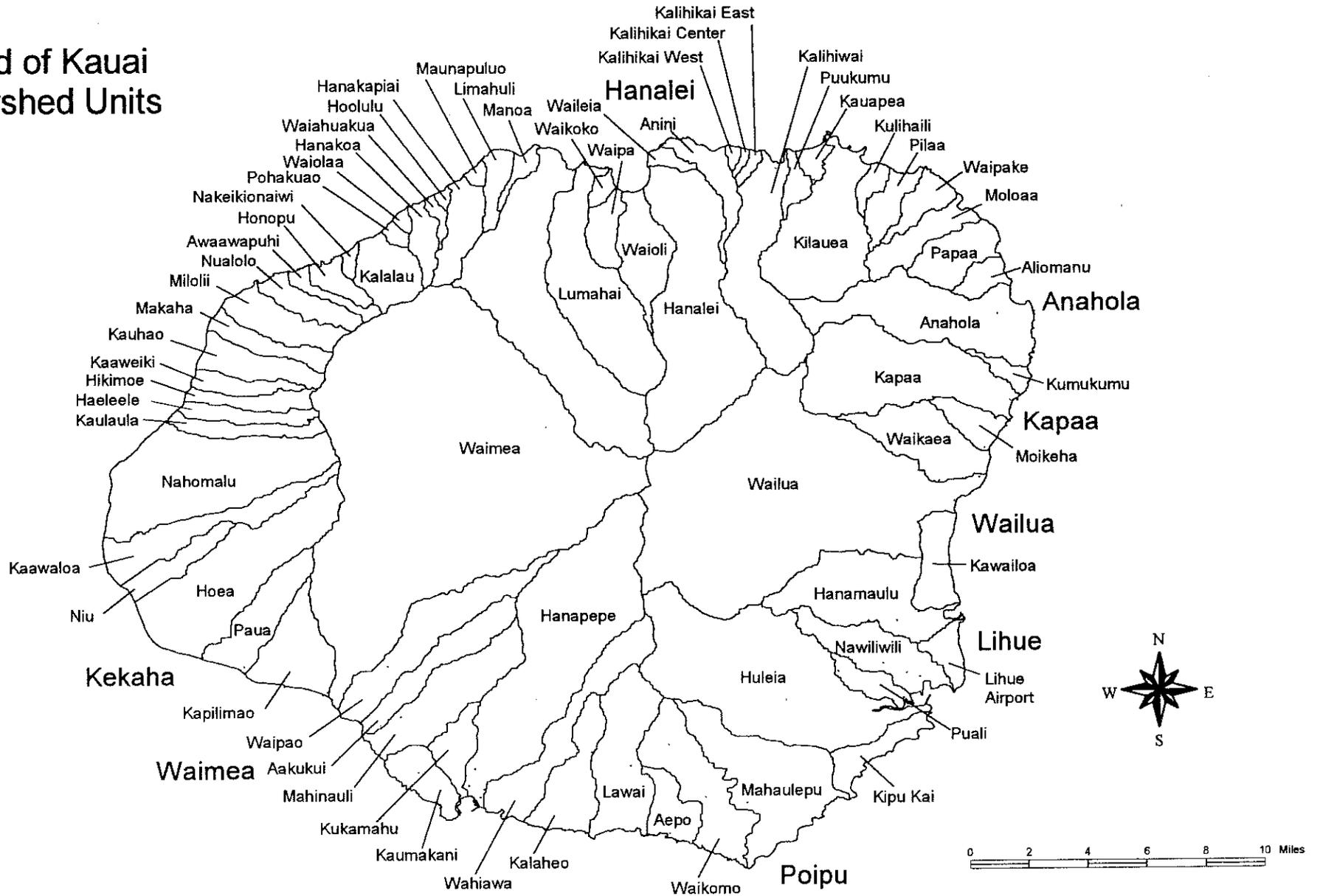
## Island of Moloka'i Watershed Units



Source: Office of State Planning  
State of Hawaii, June 30, 1994



# Island of Kauai Watershed Units



Source: Office of State Planning  
State of Hawaii, June 30, 1994

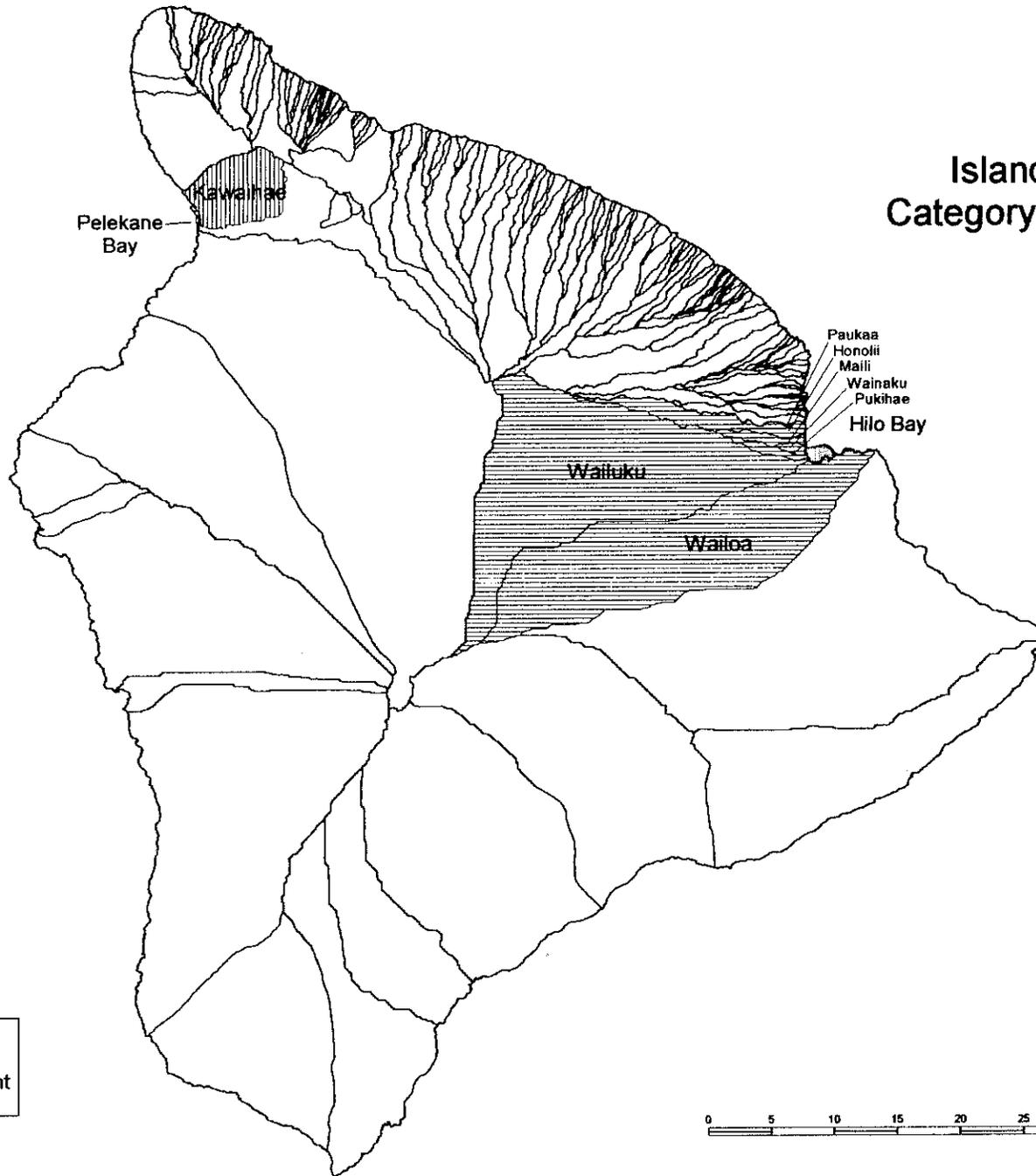
# Island of Niihau Watershed Units



## Hawai'i Unified Watershed Assessment Category 1 Watersheds on Each Island

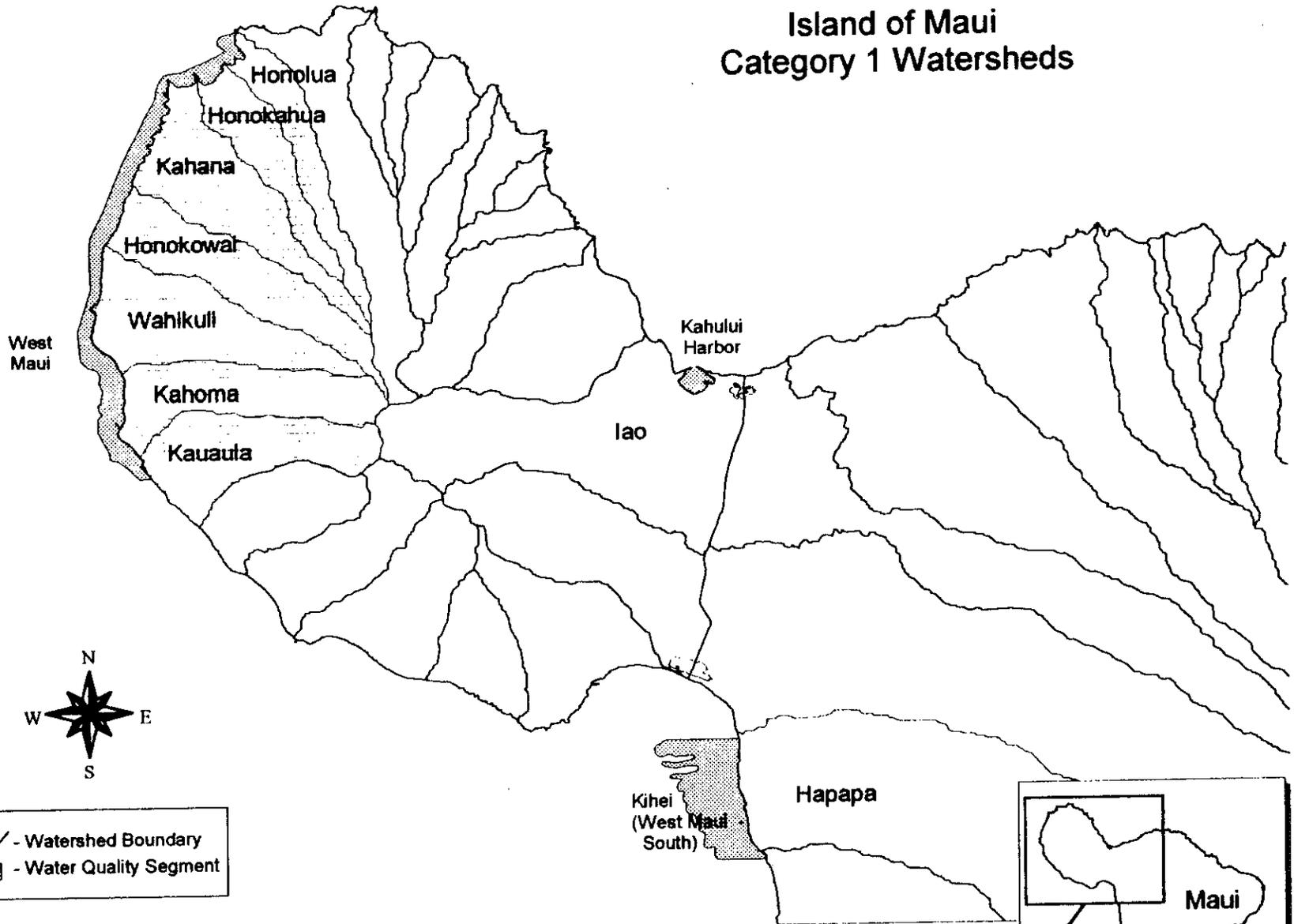
(Each island map indicates distribution of impaired waterbodies and delineates those Category 1 watershed units that drain into an impaired waterbody.)

# Island of Hawaii Category 1 Watersheds

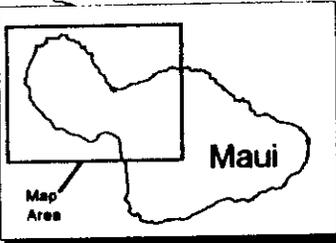
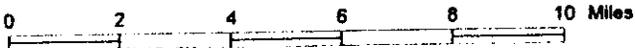


∩ - Watershed Boundary  
□ - Water Quality Segment

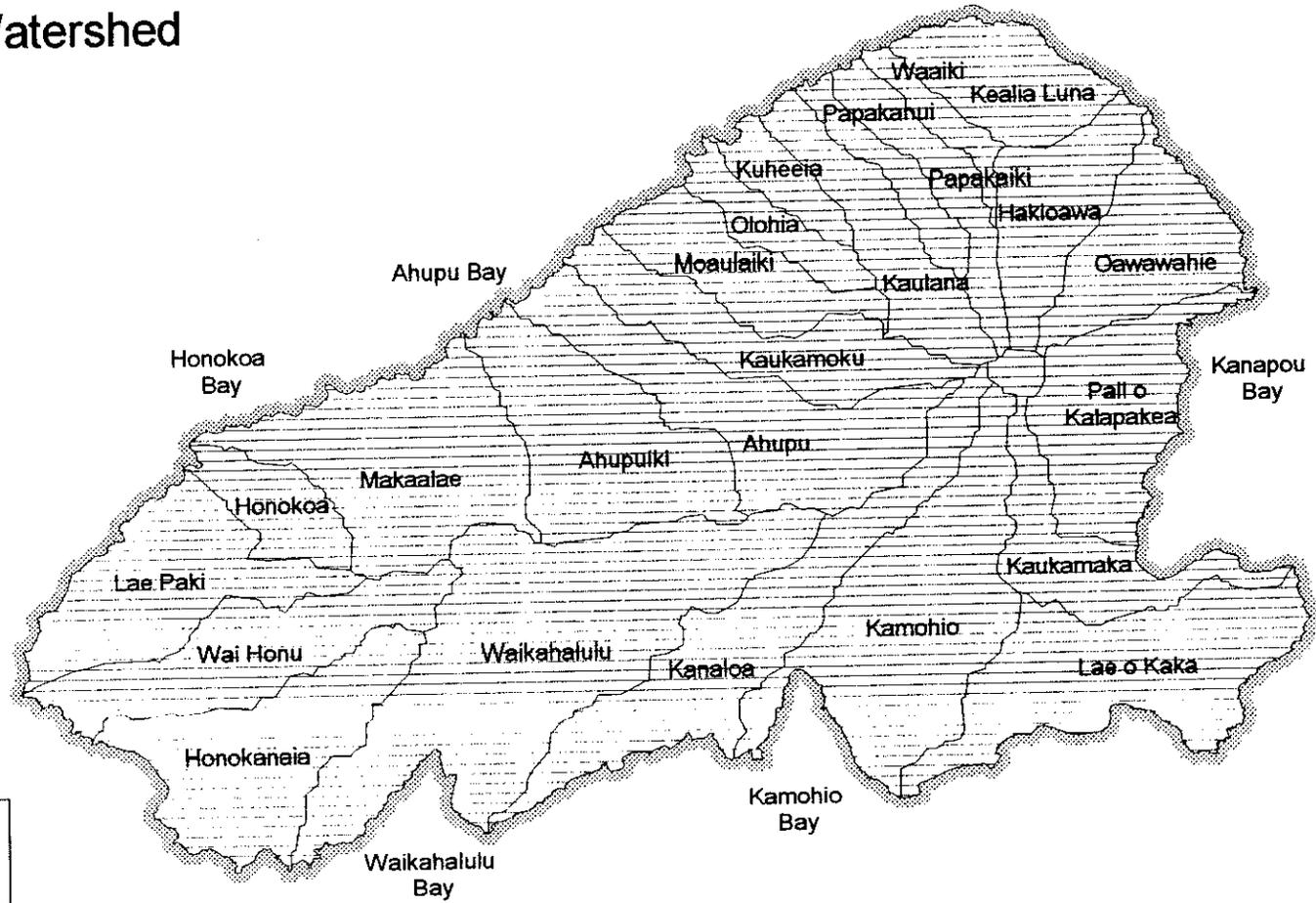
# Island of Maui Category 1 Watersheds



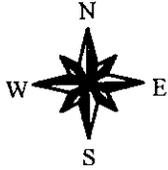
— Watershed Boundary  
■ - Water Quality Segment



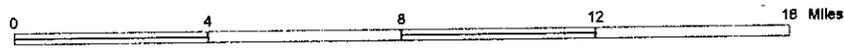
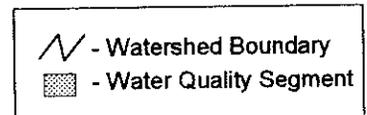
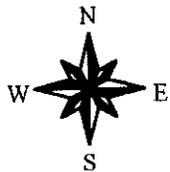
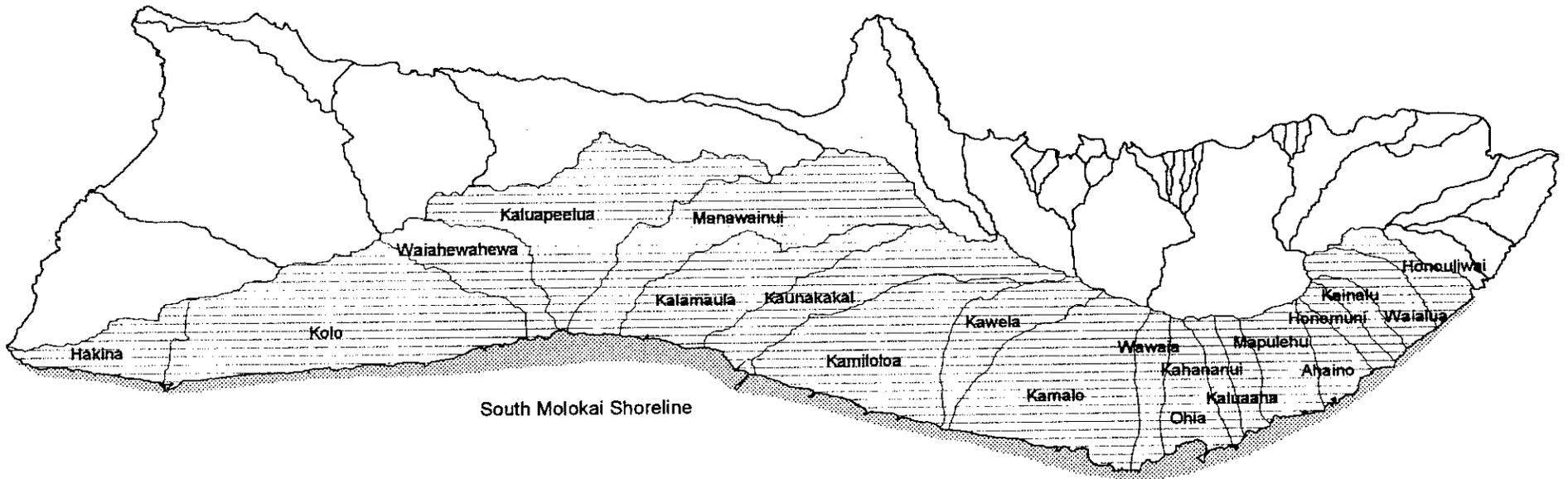
# Island of Kahoolawe Category 1 Watershed



- Watershed Boundary  
 - Water Body Segment

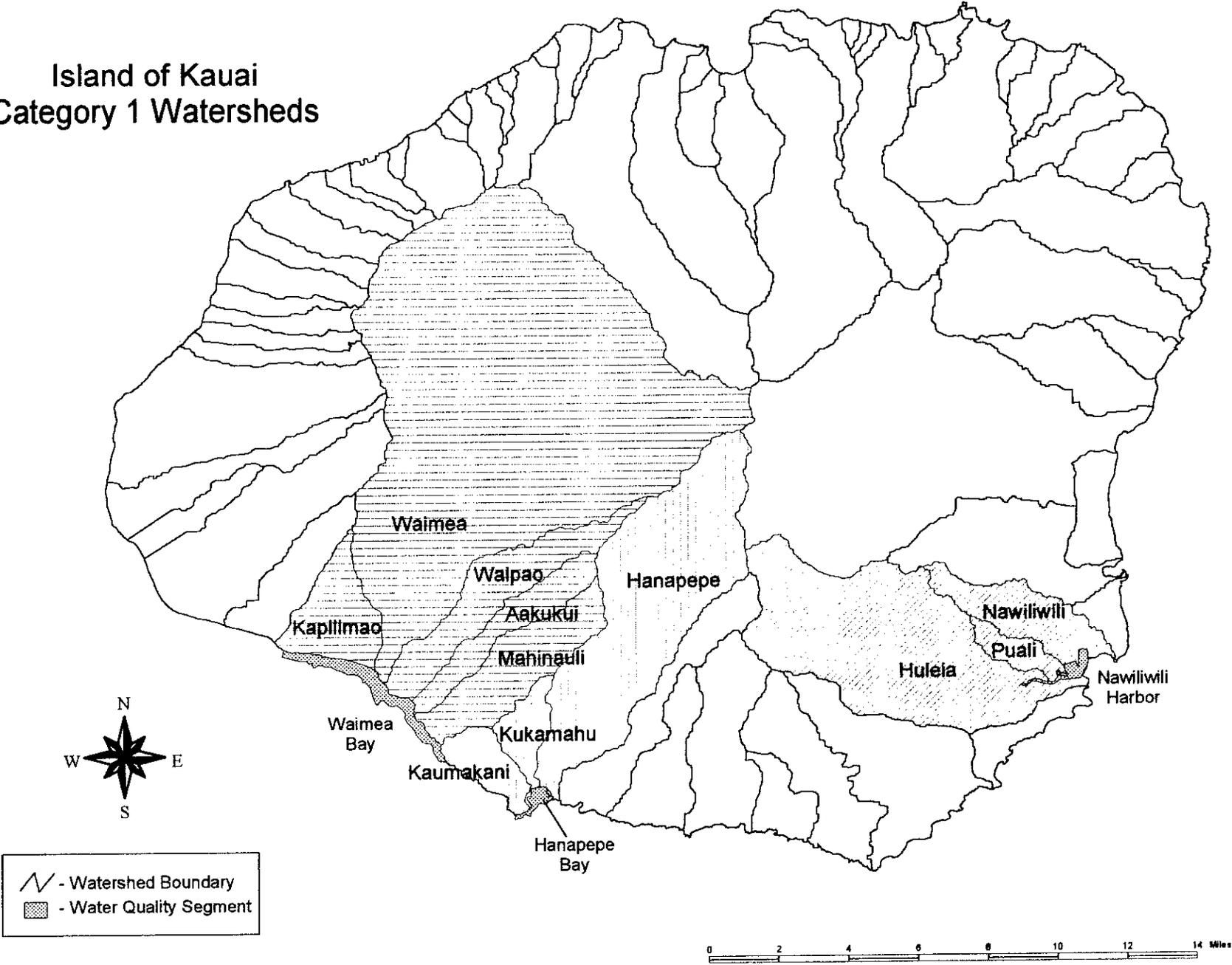


# Island of Molokai Category 1 Watersheds



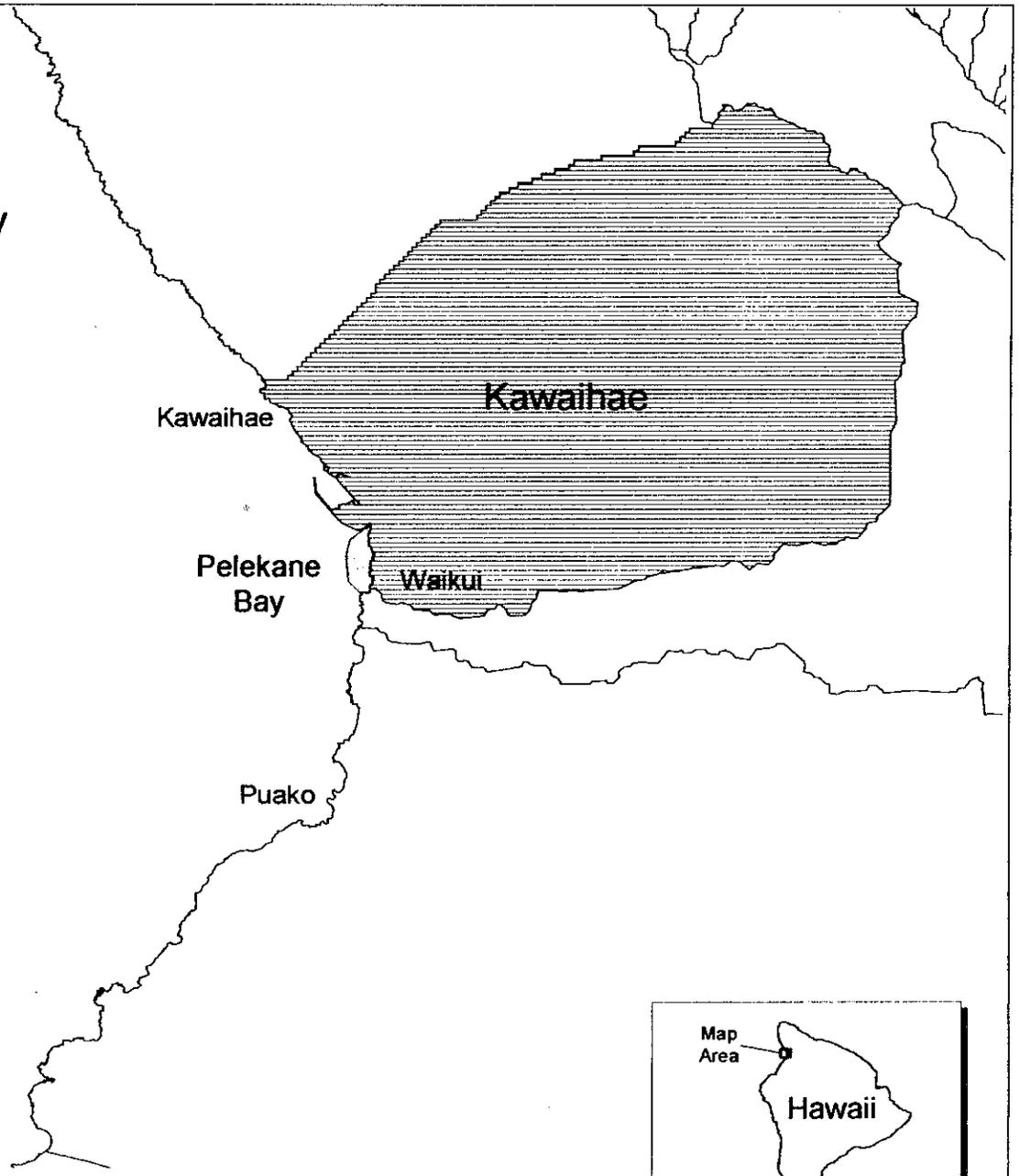


# Island of Kauai Category 1 Watersheds

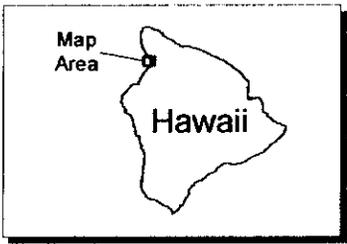
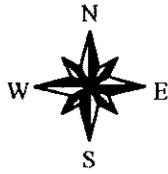


Hawai'i Unified Watershed Assessment  
Individual Maps of Each Category 1 - Priority Watershed

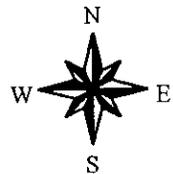
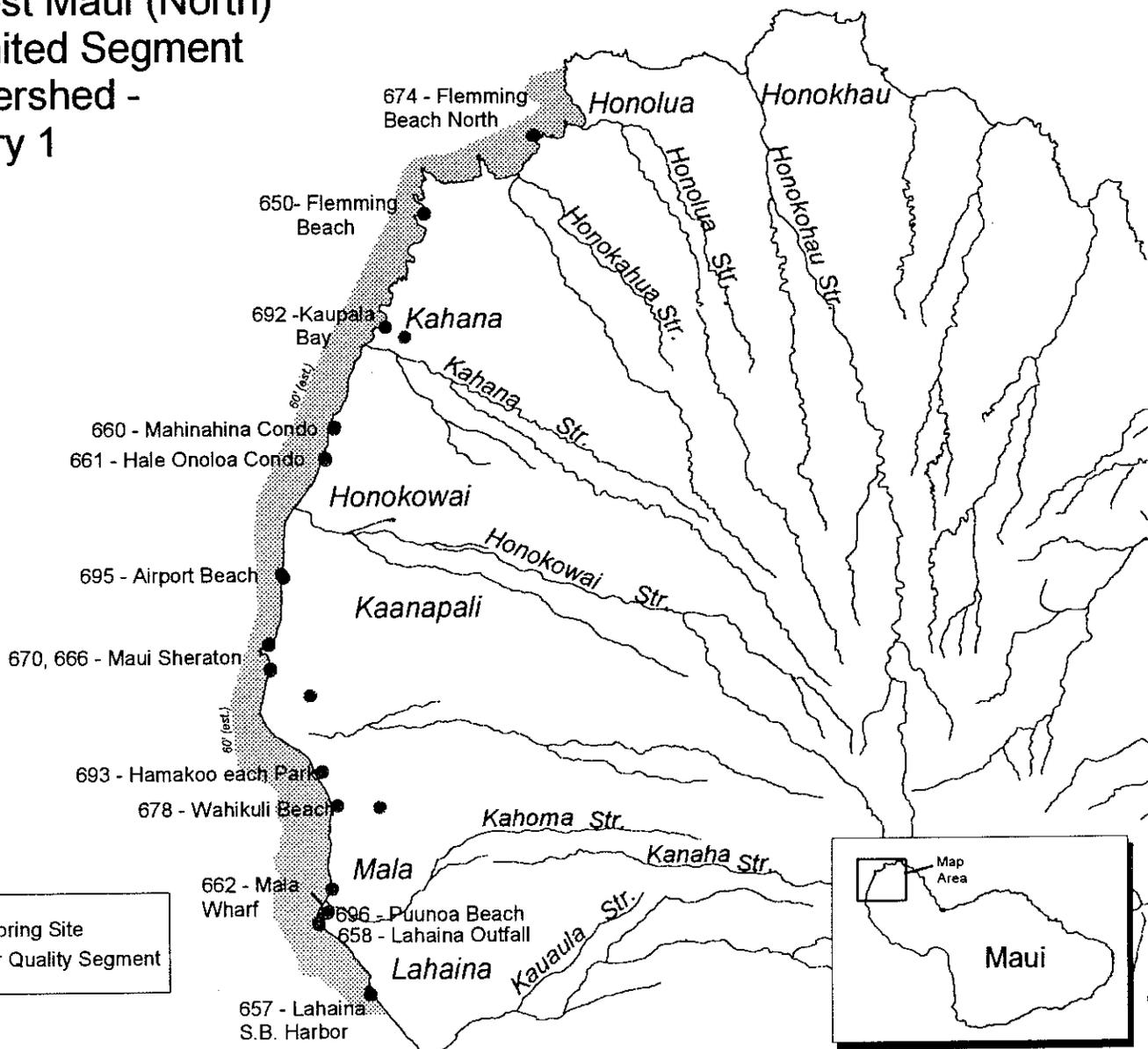
Island of Hawaii - Pelekane Bay  
Water Body Segment  
Priority Watershed -  
Category 1



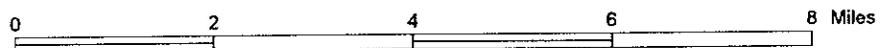
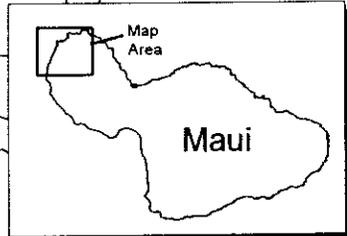
□ - Water Body Segment



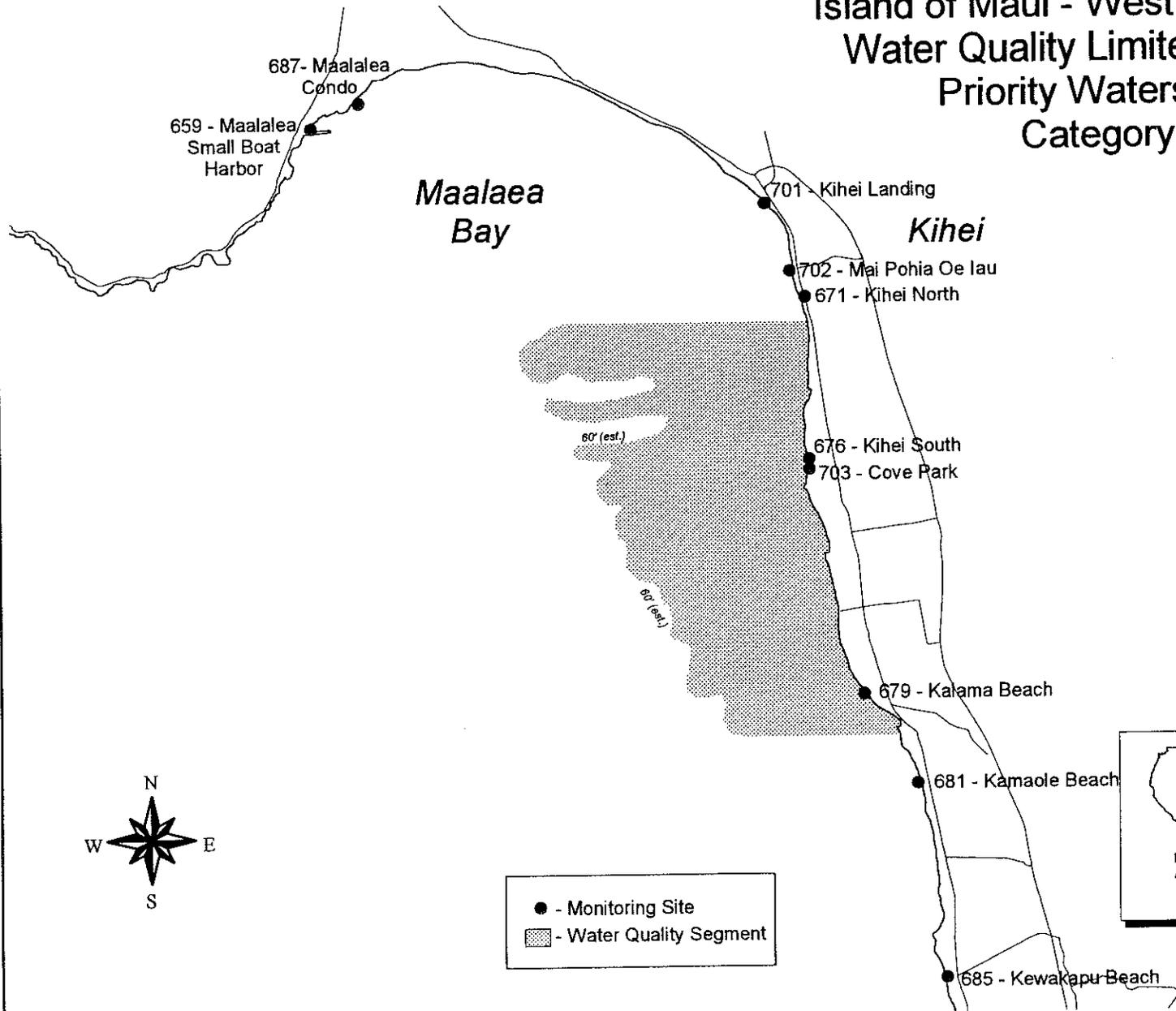
# Island of Maui - West Maui (North) Water Quality Limited Segment Priority Watershed - Category 1



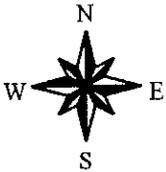
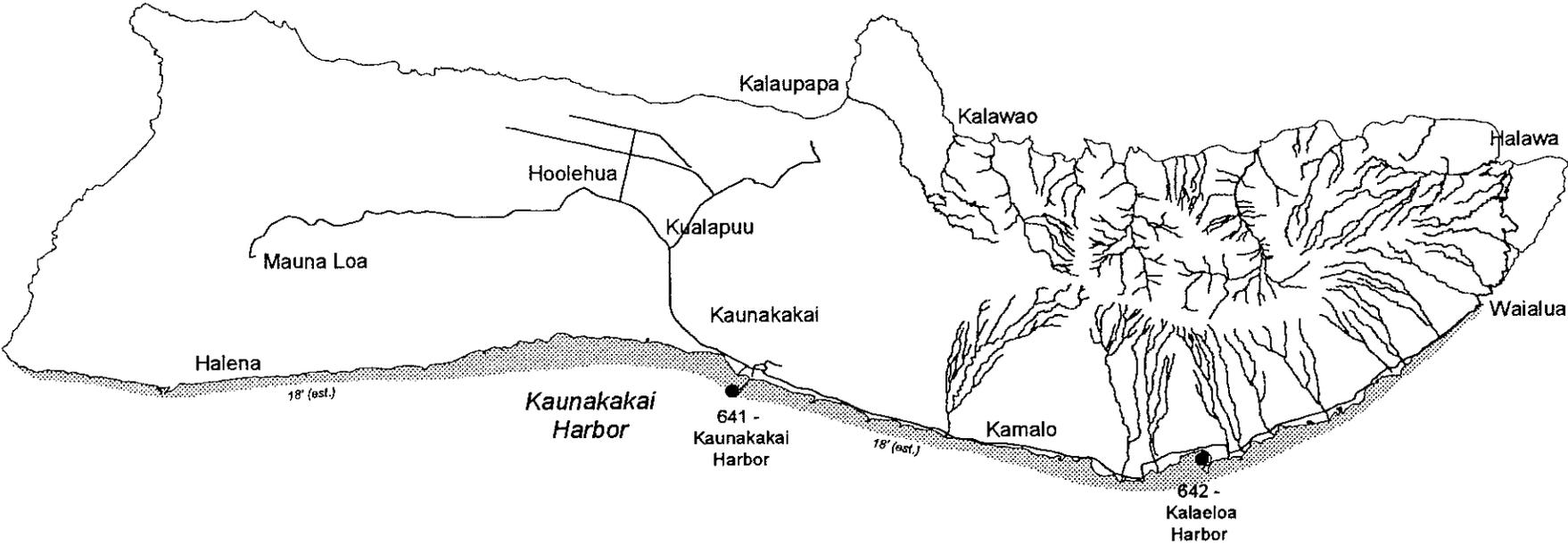
● - Monitoring Site  
 [Shaded Area] - Water Quality Segment



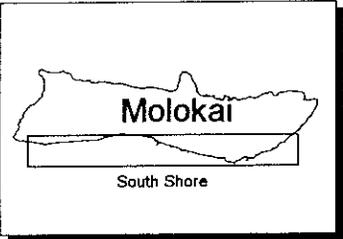
# Island of Maui - West Maui (South) Water Quality Limited Segment Priority Watershed - Category 1



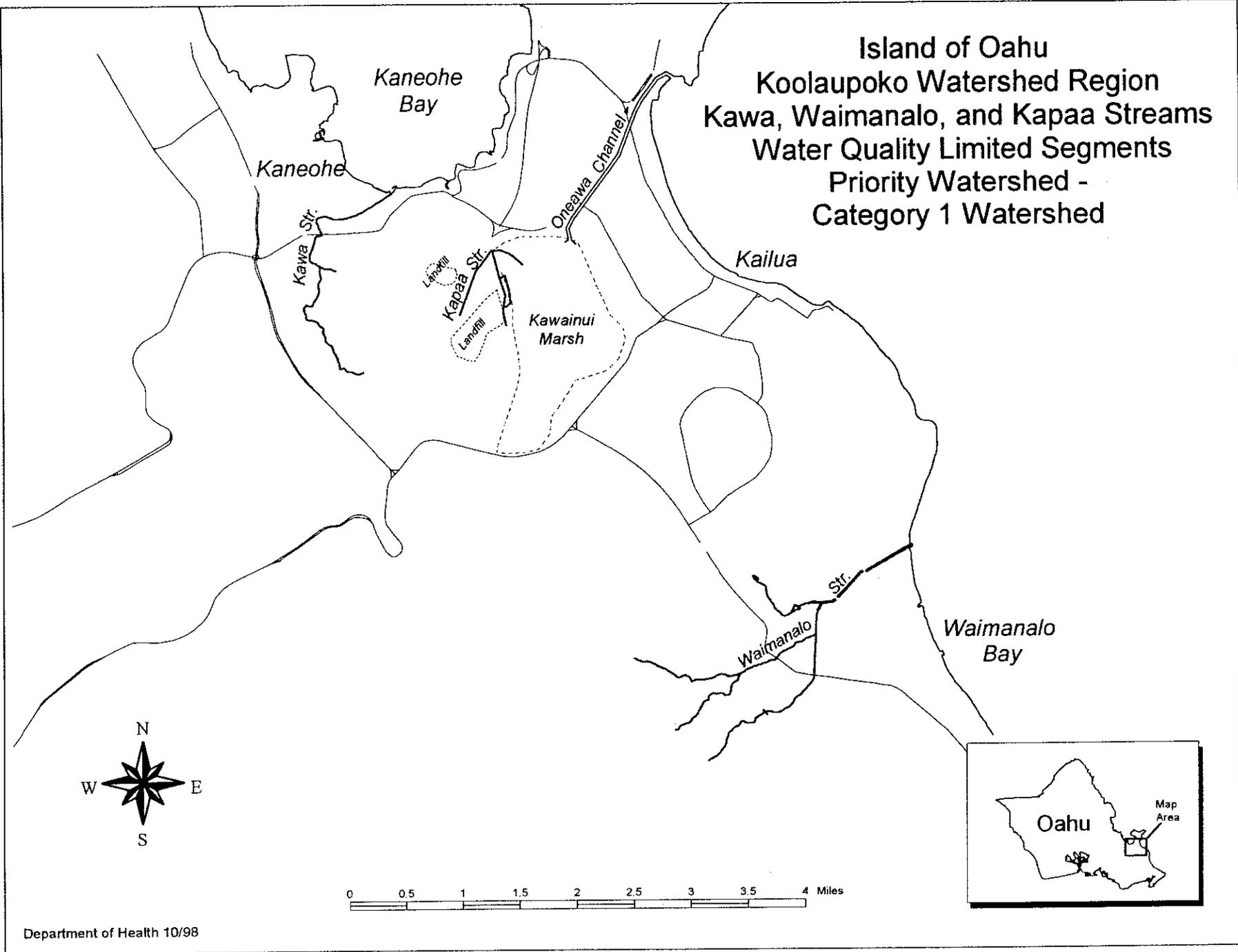
# Island of Molokai - South Shore Water Quality Limited Segment Priority Watershed - Category 1



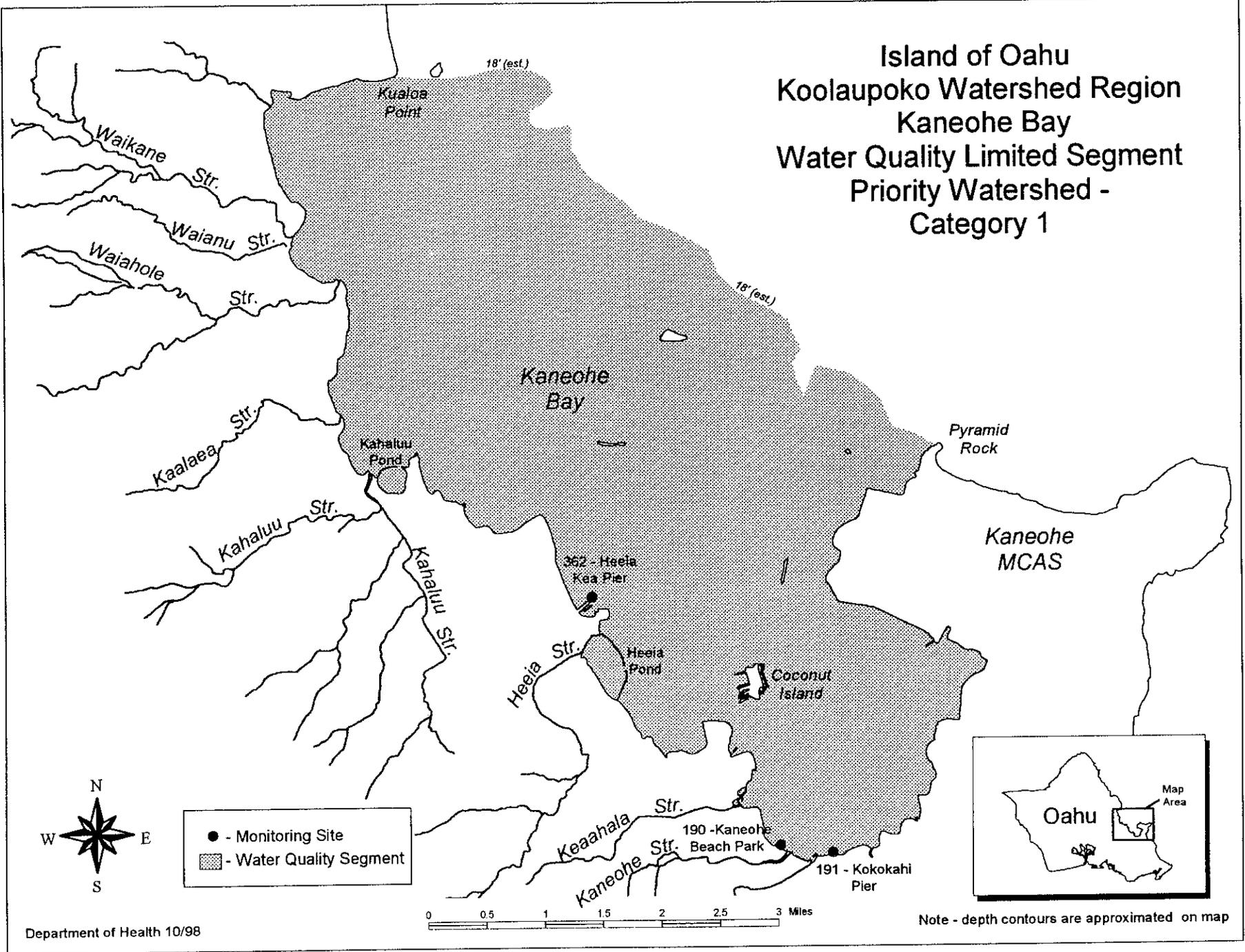
● - Monitoring Site  
 ▨ - Water Quality Segment



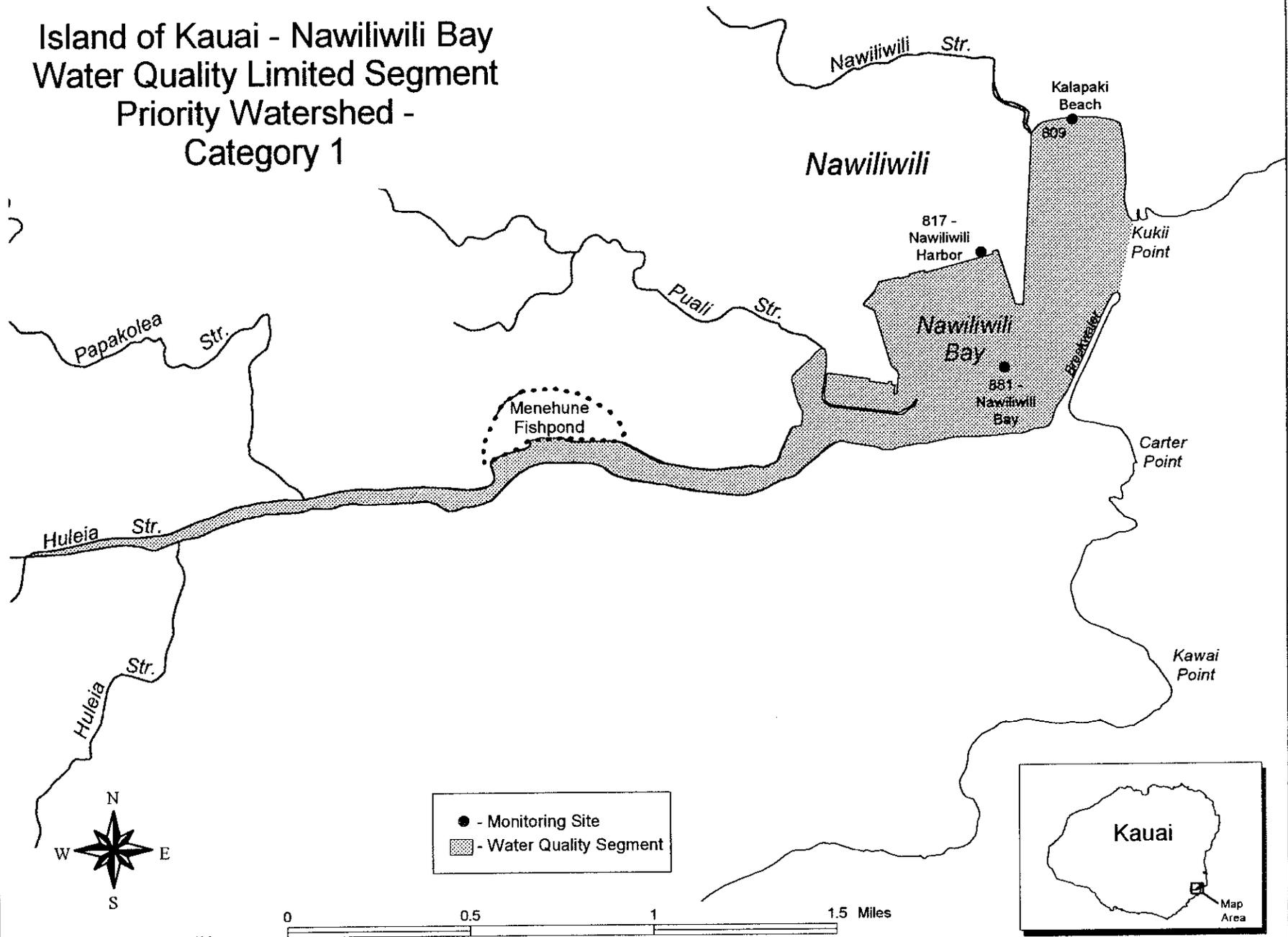
**Island of Oahu  
Koolaupoko Watershed Region  
Kawa, Waimanalo, and Kapaa Streams  
Water Quality Limited Segments  
Priority Watershed -  
Category 1 Watershed**



Island of Oahu  
 Koolaupoko Watershed Region  
 Kaneohe Bay  
 Water Quality Limited Segment  
 Priority Watershed -  
 Category 1



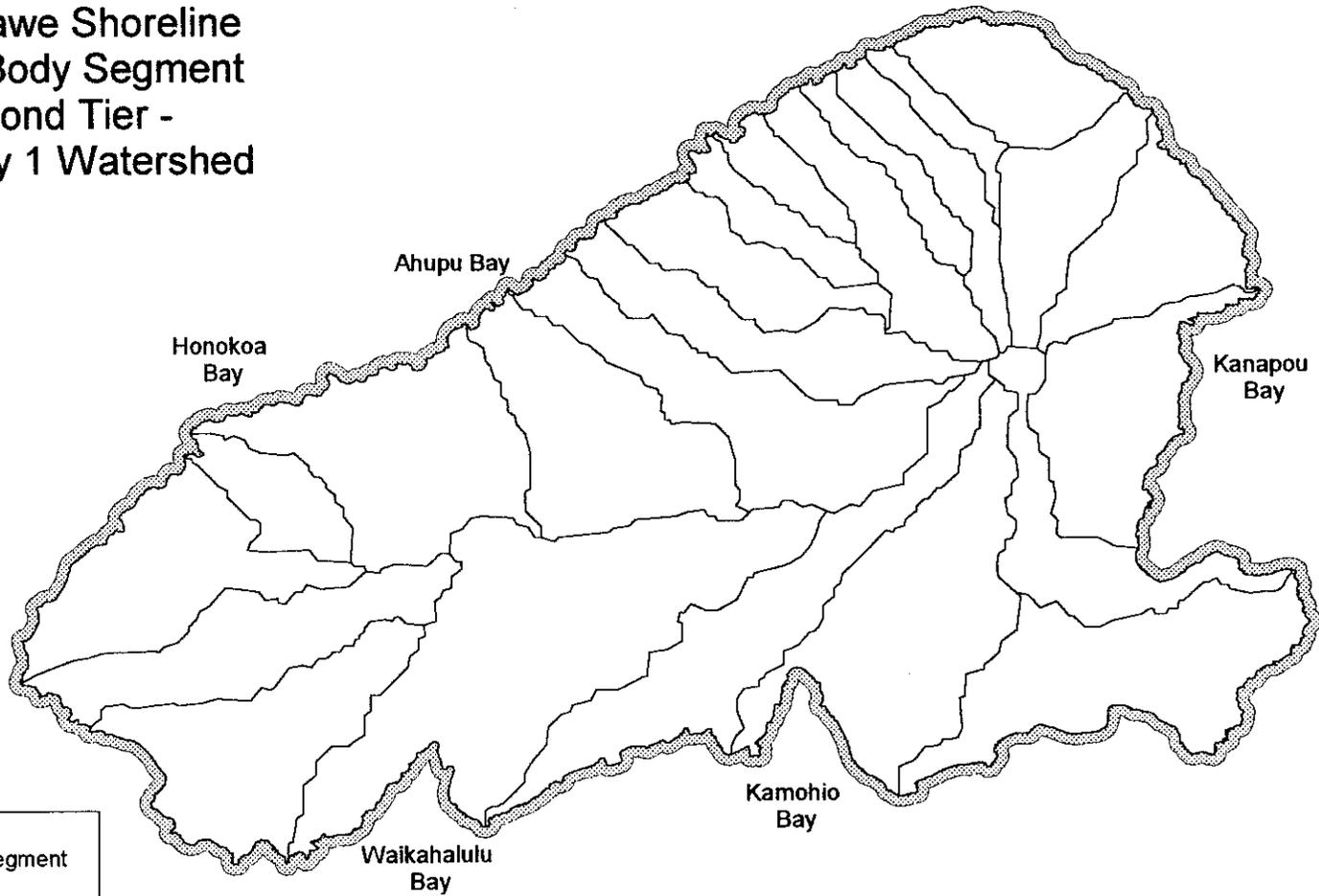
# Island of Kauai - Nawiliwili Bay Water Quality Limited Segment Priority Watershed - Category 1



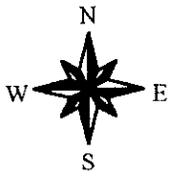
● - Monitoring Site  
■ - Water Quality Segment

Hawai'i Unified Watershed Assessment  
Individual Map of Each Category 1 - Second Tier Watersheds

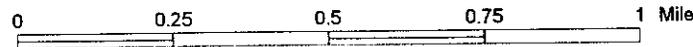
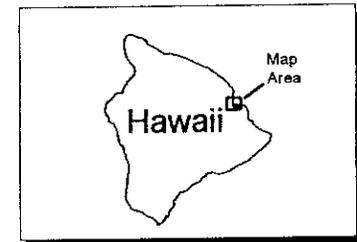
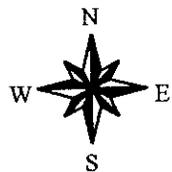
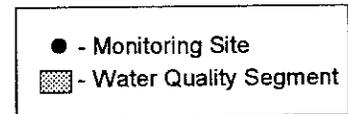
Island of Kahoolawe  
Kahoolawe Shoreline  
Water Body Segment  
Second Tier -  
Category 1 Watershed



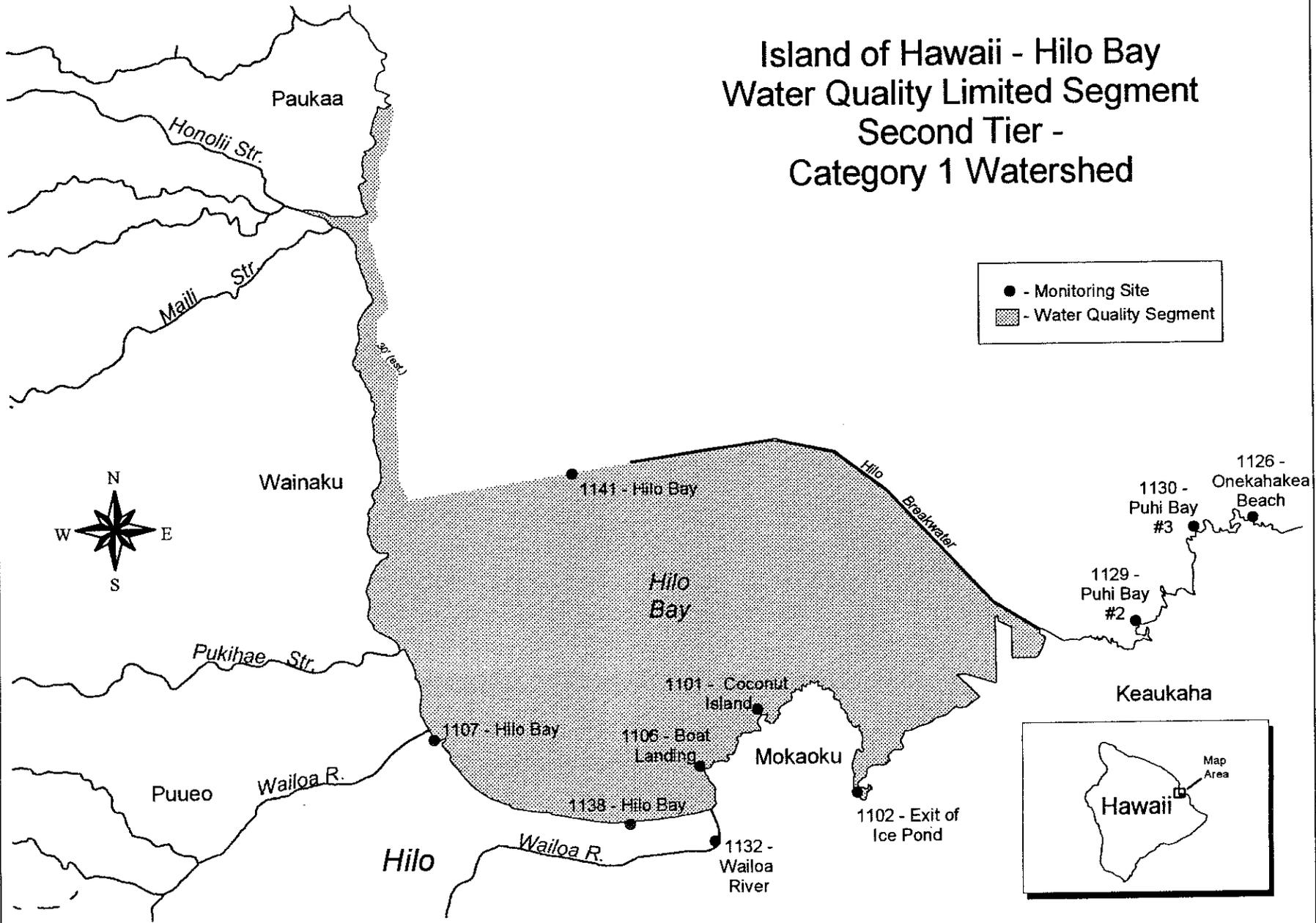
 - Water Body Segment



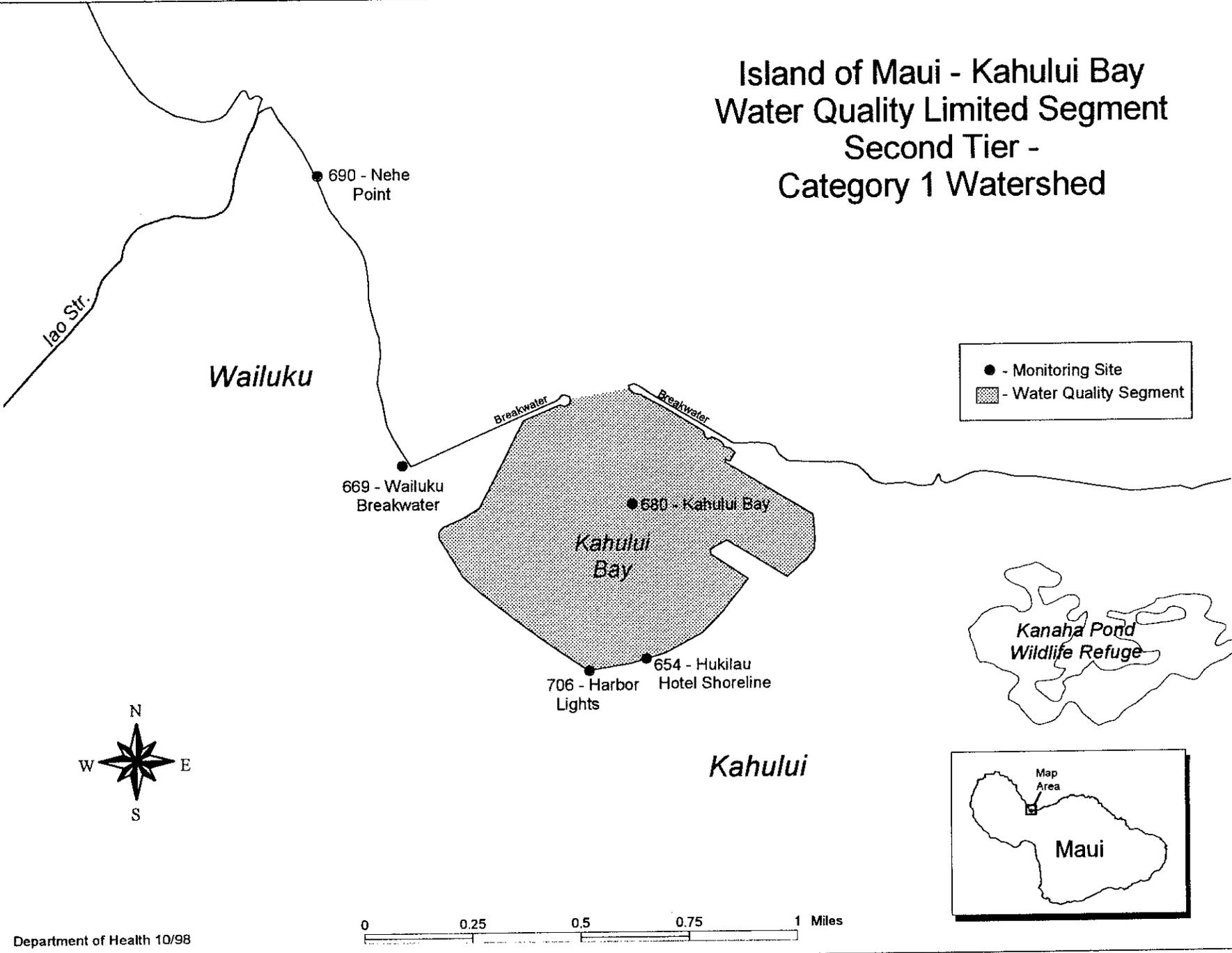
# Island of Hawaii - Hilo Bay Water Quality Limited Segment Second Tier - Category 1 Watershed



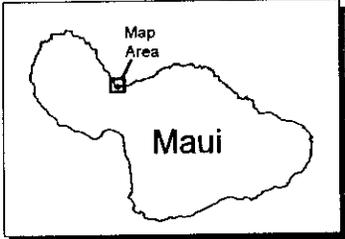
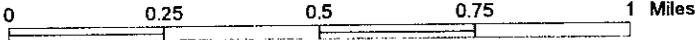
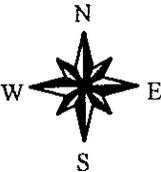
Note - depth contours are approximated on map



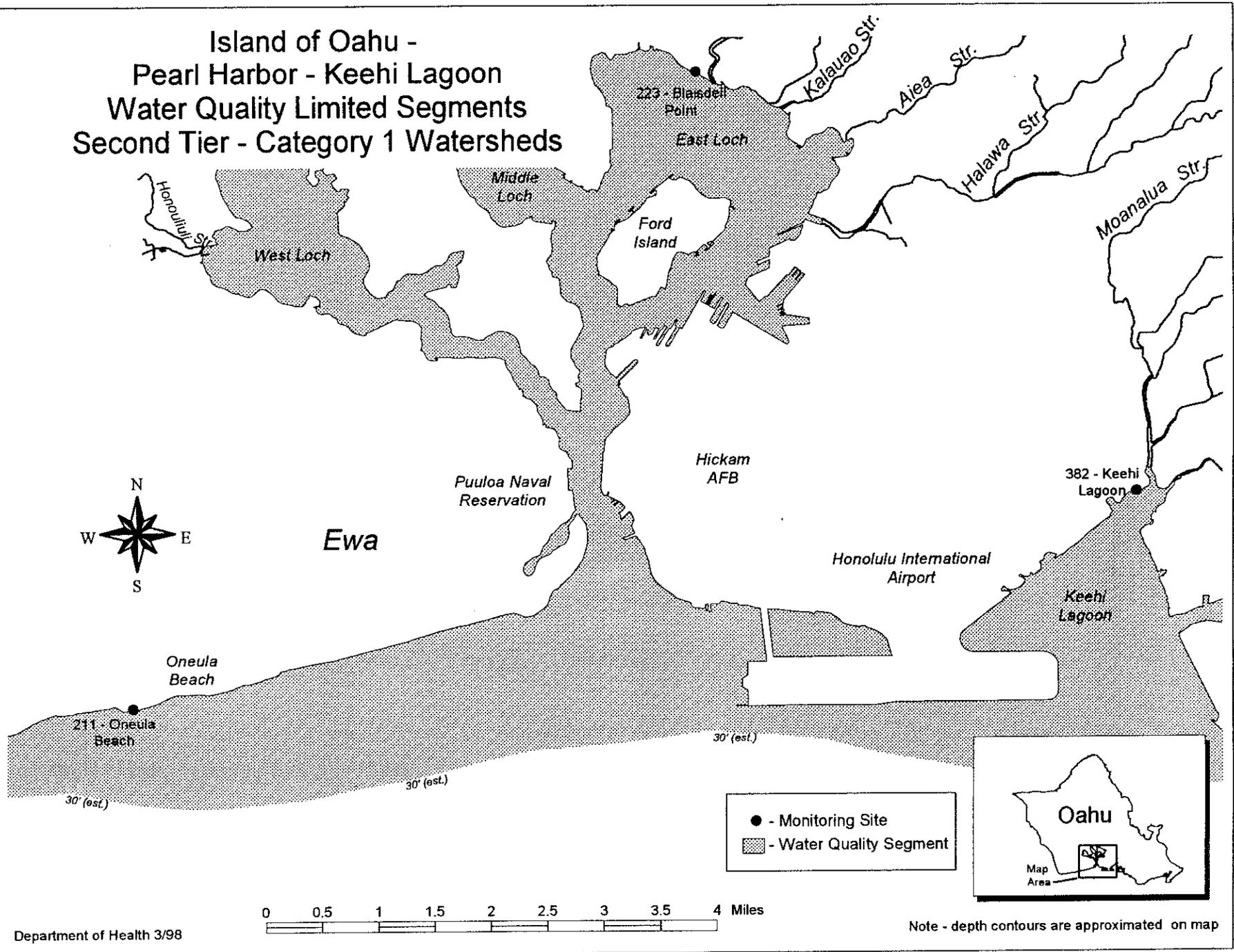
# Island of Maui - Kahului Bay Water Quality Limited Segment Second Tier - Category 1 Watershed



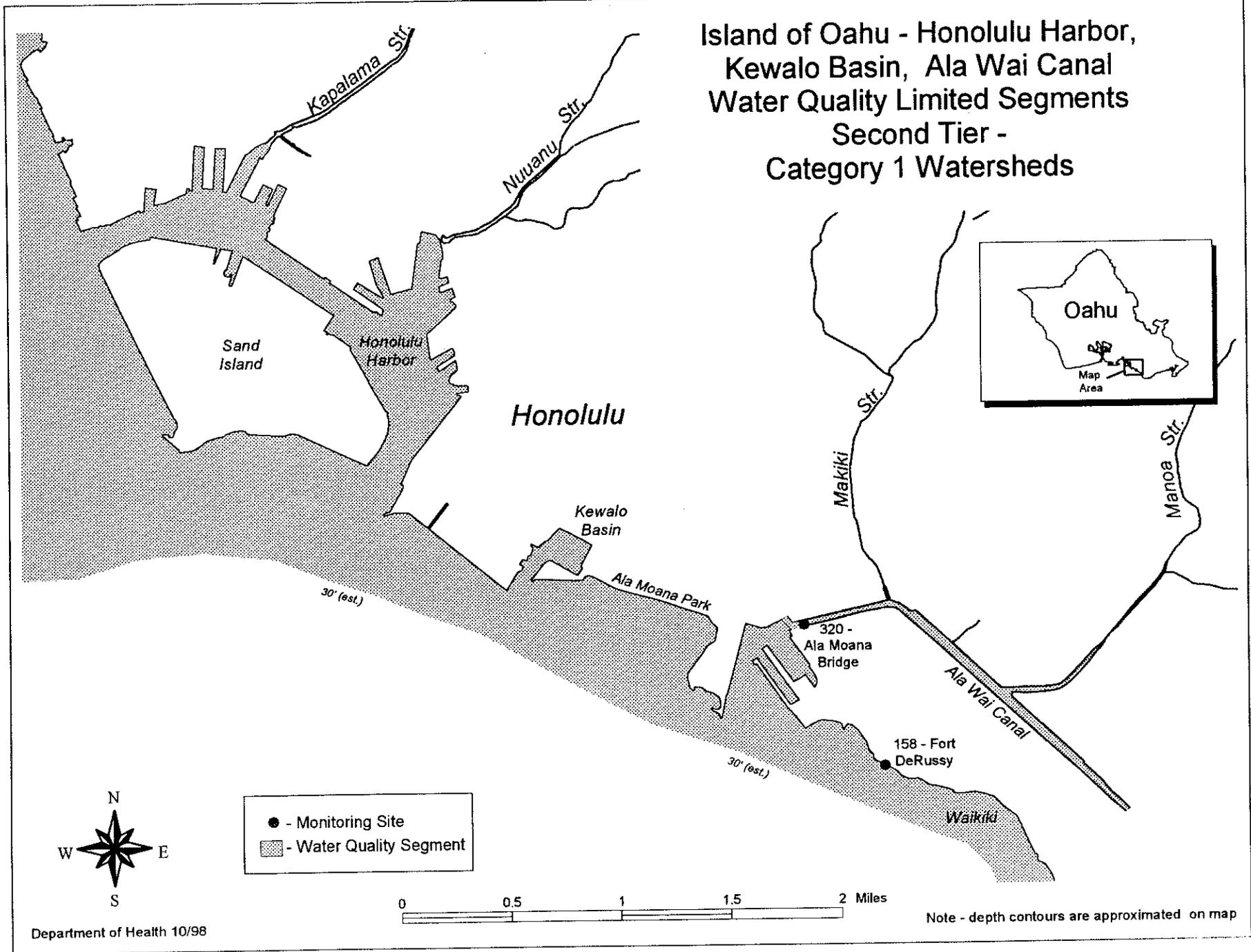
● - Monitoring Site  
▨ - Water Quality Segment



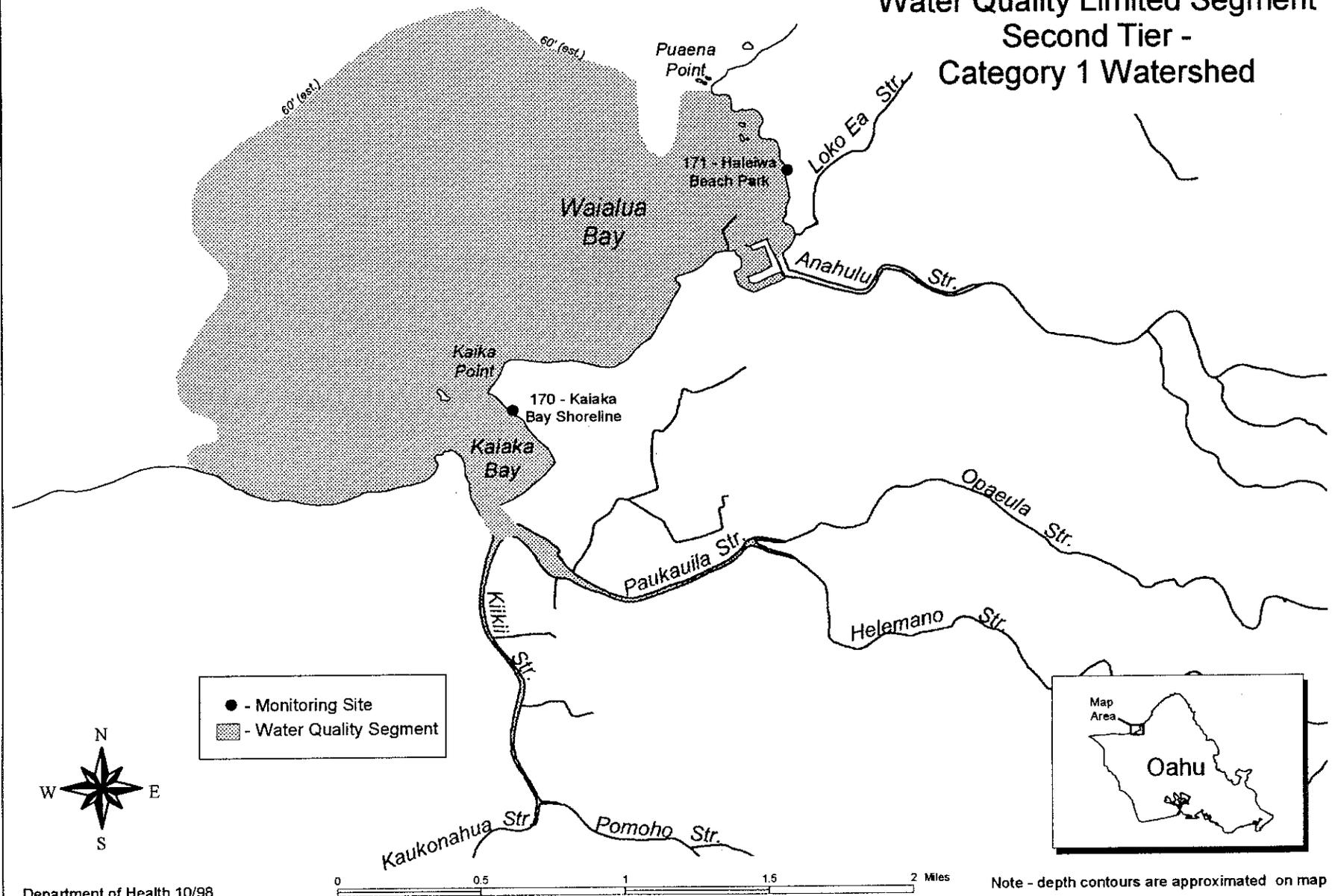
Island of Oahu -  
 Pearl Harbor - Keehi Lagoon  
 Water Quality Limited Segments  
 Second Tier - Category 1 Watersheds



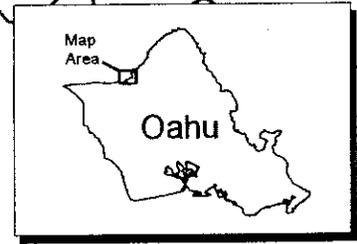
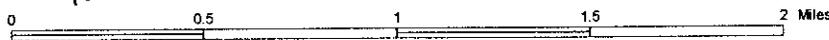
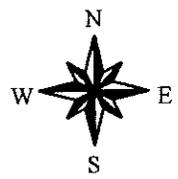
# Island of Oahu - Honolulu Harbor, Kewalo Basin, Ala Wai Canal Water Quality Limited Segments Second Tier - Category 1 Watersheds



Island of Oahu  
 Kaiaka - Waialua Bays  
 Water Quality Limited Segment  
 Second Tier -  
 Category 1 Watershed

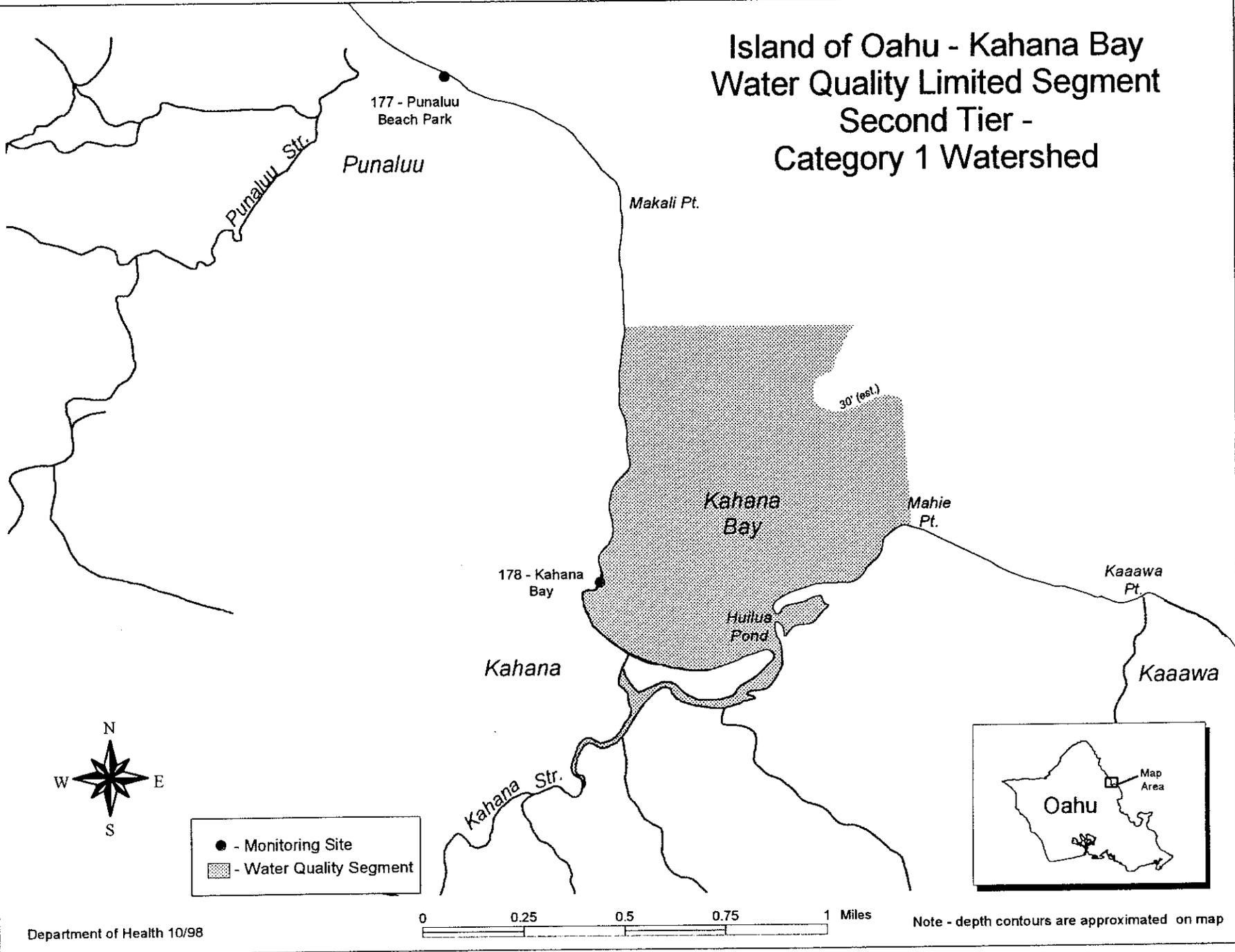


● - Monitoring Site  
 [Shaded Area] - Water Quality Segment

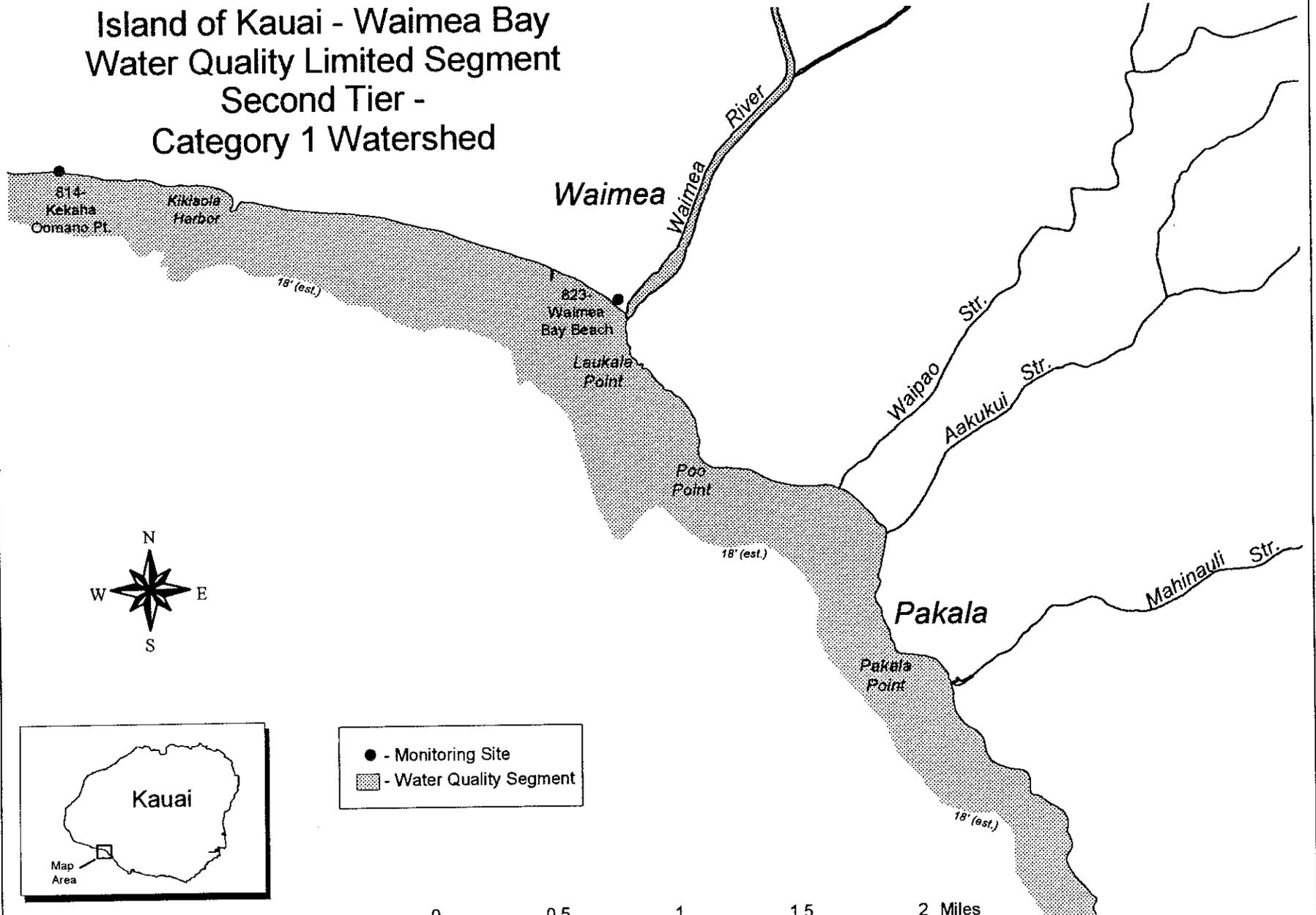


Note - depth contours are approximated on map

# Island of Oahu - Kahana Bay Water Quality Limited Segment Second Tier - Category 1 Watershed

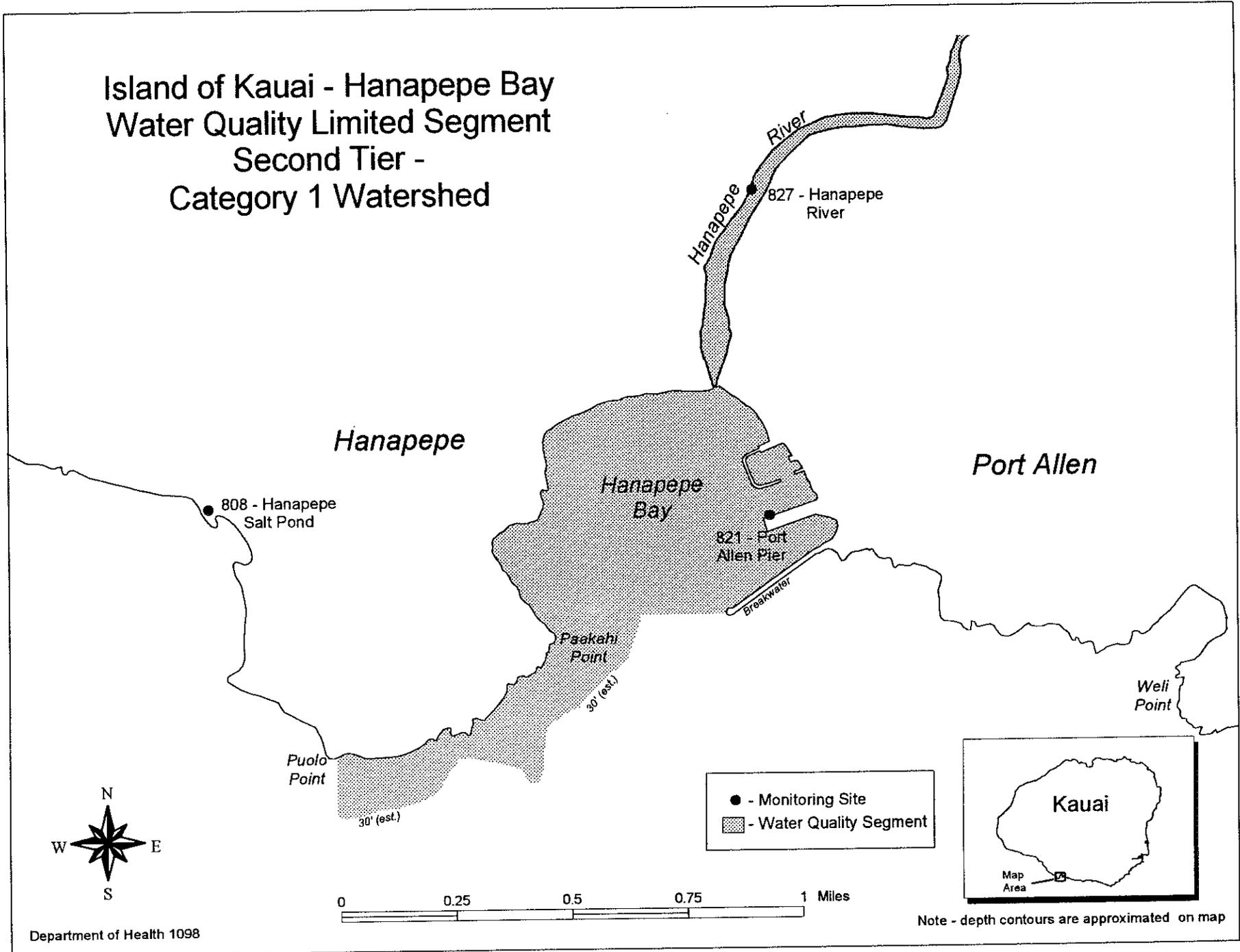


# Island of Kauai - Waimea Bay Water Quality Limited Segment Second Tier - Category 1 Watershed



Note - depth contours are approximated on map

# Island of Kauai - Hanapepe Bay Water Quality Limited Segment Second Tier - Category 1 Watershed



# Hawai'i's Unified Watershed Assessment

## Attachment 1

### **MATRIX**

DOH-303(d) List

NRCS-EQUIP

USGS-Priority Areas

DLNR-"Hot Spots" List

HAWAII'S PRIORITY AREAS

Name	Island	DOH CWA 303(d)	NRCS EQIP	USGS	DLNR "Hot Spots"
Ahihi-Kinaiu Reserve	Maui				*
Ala Wai Canal	Oahu	*			
Diamond Head SM	Oahu				*
East Maui Watershed	Maui				*
Hamakua-Hilo	Hawaii		*		
Hanapepe Bay	Kauai	*			
Hanauma Bay	Oahu				*
Hilo Bay	Hawaii	*			
Honolulu Harbor	Oahu	*			
Iao Aquifer	Maui				*
Kaanapali Shorewaters	Maui				*
Kaena Point	Oahu				*
Kahana Bay	Oahu	*			
Kahana Stream	Oahu			*	
Kahului Bay	Maui	*			
Kailua Pier	Hawaii				*
Kaneohe Bay	Oahu	*			*
Kapaa Stream	Oahu	*			
Kawa Stream	Oahu	*			
Kawainui Marsh	Oahu				*
Keakealaniwaihine Site	Hawaii				*
Keehi Lagoon	Oahu	*			
Kewalo Basin	Oahu	*			
Kokee Area	Kauai				*
Kona Coast	Hawaii				*
Koolaus	Oahu				*
Makawao Stream	Maui			*	
Manoa Stream	Oahu			*	
Mauna Kea	Hawaii				*
Mo'omomi - SE	Molokai		*		
Na Pali Coast	Kauai				*
Nawiliwili Bay	Maui	*			
Onomea	Hawaii				*
Pearl Harbor	Oahu	*			
Pelekane Bay	Hawaii		*		
Pohoiki Launch Ramp	Hawaii				*
Punaluu Stream	Oahu			*	
Puuwaawaa	Hawaii				*
South Maui Coastline	Maui				*
South Molokai	Molokai	*			
UpCounty Maui	Maui		*		
Upper Waianae Valley	Oahu				*
Waialua Fishponds	Molokai				*
Waialua-Kaiaka Bays	Oahu	*			
Waikele Stream	Oahu			*	
Waikiki Shore Waters	Oahu				*
Wailua River	Kauai				*
Waimanalo Stream	Oahu	*			
Waimea Bay	Oahu	*			
Waipio Valley	Hawaii				*
West Maui	Maui	*	*		

# Hawai'i's Unified Watershed Assessment

## Attachment 2

### PUBLIC NOTICE

Published Wednesday, August 19, 1998

# **State Department of Health Requests Comments on New Watershed Initiative**

## **Clean Water Action Plan for Hawai'i**

### **Docket No. 98-CWB-PRC-02**

On October 18, 1997, the 25th Anniversary of the 1972 Clean Water Act, the Honorable Albert Gore, Jr., Vice President of the United States directed the U.S. Environmental Protection Agency and the U.S. Department of Agriculture to work with other federal agencies, state agencies and the public to develop a Clean Water Action Plan that charts a course toward fulfilling the original goal of the Clean Water Act - "fishable and swimmable" waters for all Americans.

A key element in the Action Plan is a new cooperative approach to watershed protection called the Unified Watershed Assessment, in which state, tribal, federal and local governments, and the public first identify the watersheds with the most critical water quality problems and then work together to focus resources and implement effective strategies to solve those problems. The Action Plan also includes new initiatives to reduce public health threats, improve the stewardship of natural resources, strengthen polluted runoff controls, and make water quality information more accessible to the public.

Over the past months, the State Department of Health, the U.S. Department of Agriculture's, Natural Resource Conservation Service and the Coastal Zone Management Program of the Department of Business Economic Development and Tourism have held meetings with local agencies to survey environmental restoration activities already underway in watersheds throughout the State of Hawai'i. Based on this survey, an initial list of priority watershed districts with critical water quality problems was composed. This list selects a watershed district from each major island in Hawai'i that has one or more of the following: current projects and partnerships in the district; community support; historic and cultural significance; mixed usage (Ag., Urban, Conservation...); listed on Hawai'i Department of Health's List of Water Quality Limited Segments; and areas that capture the "uniqueness" of Hawai'i's landscapes and Ahupua'a tradition of caring for natural resources.

**Initial List of Priority Watersheds:**

**South Molokai - (Molokai)** - Erosion control for water quality improvement, coral reef protection and historic/cultural preservation.

**Pelekane Bay-Kohala Mountains - (Hawai'i)** - Erosion control and resource management for coral reef protection, enhanced recreational usage and historic/cultural preservation.

**West Maui-West Maui Mountains - (Maui)** - Reduce sediments and nutrients for water quality improvement, enhanced recreational usage along coastline and habitat improvement in a National Marine Sanctuary.

**Koolaupoko District - Windward Koolau Mountains - (Oahu)** - Habitat restoration and protection, reduction of nonpoint source runoff for enhancement of recreational usage of streams and nearshore waters, and historic/cultural preservation.

**Nawiliwili - (Kauai)** Identification and reduction of nonpoint source runoff to restore habitat and enhance recreational usage.

This effort is made to coordinate current watershed efforts, and in anticipation of additional Congressional funding for watershed projects. If funding is released to the targeted agencies, a Clean Water Action Plan Committee will be assembled to participate in categorizing additional watersheds and developing watershed restoration action strategies. **The community is *strongly* encouraged to participate in this Committee.**

**Cooperating Agencies**

Hawai'i Association of Conservation Districts	U.S. Army Corps of Engineers
Hawai'i State Department of Land and Natural Resources	U.S. Forest Service
Hawai'i State DBEDT	U.S. Fish and Wildlife Service
U.S. Environmental Protection Agency	U.S. G.S.
University of Hawai'i Cooperative Extension Service	
U.S. Department of Agriculture's Farm Service Agency	
National Marine Fisheries Service/National Oceanic and Atmospheric Administration	

The Department of Health and cooperating agencies encourage you to review this list and provide written comment to the DOH by September 8, 1998, at 4:00pm. Please indicate whether or not you would like to participate in the Clean Water Action Plan Committee. Written comments may be faxed or mailed to: Hawai'i

Department of Health, Polluted Runoff Control Program, Clean Water Branch, 919 Ala Moana Blvd., Room 301, Honolulu, HI 96814, fax number: (808) 586-4370. Information regarding selection criteria and participating agencies is available at the Clean Water Branch, Monday through Friday, 8:00am to 4:00pm. For further information call Susan Polanco, Polluted Runoff Control Program, 586-4345 or access the national guidance @ [www.epa.gov/cleanwater/action/toc.html](http://www.epa.gov/cleanwater/action/toc.html).



# LEGALADVISOR

*Legal Advice for the Public*

## State Department of Health Requests Comments on New Watershed Initiative Clean Water Action Plan for Hawaii Docket No. 98-CWB-PRC-02

On October 18, 1987, the 25th Anniversary of the 1972 Clean Water Act, the Honorable Albert Gore, Jr., Vice President of the United States directed the U.S. Environmental Protection Agency and the U.S. Department of Agriculture to work with other federal agencies, state agencies and the public to develop a Clean Water Action Plan that charts a course toward fulfilling the original goal of the Clean Water Act - "fishable and swimmable" waters for all Americans.

A key element in the Action Plan is a new cooperative approach to watershed protection called the Unified Watershed Assessment, in which state, tribal, federal, local governments, and the public first identify the watersheds with the most critical water quality problems and then work together to focus resources and implement effective strategies to solve those problems. The Action Plan also includes new initiatives to reduce public health threats, improve the stewardship of natural resources, strengthen polluted runoff controls, and make water quality information more accessible to the public.

Over the past months, the State Department of Health and the U.S. Department of Agriculture, Natural Resource Conservation Service, has held meetings with local agencies to survey environmental restoration activities already underway in watersheds throughout the State of Hawaii. Based on this survey, a list of watershed districts was composed. This list selects a watershed district from every major island in that has: current projects and partnerships in the district; community support; historic and cultural significance; mixed usage (Ag., Urban, Commercial...); presence of waterbodies on Hawaii Department of Health's List of Water Quality Limited Segments; and areas that capture the "uniqueness" of Hawaii's landscapes and Ahupua'a tradition of caring for natural resources.

### List of Watersheds:

South Maui - (Maui) - Erosion control for water quality improvement, coral reef protection and historic/cultural preservation.

Palaikane Bay-Kahala Mountains - (Hawaii) - Erosion control and resource management for coral reef protection, enhance recreational usage and historic/cultural preservation.

West Maui-West Maui Mountains - (Maui) - Reduce sediments and nutrients for water quality improvement, enhance recreational usage along coastline and habitat improvement in a National Marine Sanctuary.

Kaunapali District - Windward Koolau Mountains - (Oahu) - Habitat restoration and protection, reduction of nonpoint source runoff for enhancement of recreational usage of streams and nearshore waters, and historic/cultural preservation.

North Shore - (Kauai) - Identification and reduction of nonpoint source runoff to restore habitat and enhance recreational usage.

This effort is made to coordinate current watershed efforts, and in anticipation of additional Congressional funding for watershed projects. If funding is released to the targeted agencies, a Clean Water Action Plan Committee will be assembled to participate in categorizing additional watersheds and develop watershed restoration action strategies. The community is strongly encouraged to participate in this Committee.

### Cooperating Agencies

Hawaii Association of Conservation Districts	U.S. Army Corps of Engineers
Hawaii State Department of Land and Natural Resources	U.S. Forest Service
Hawaii State DEEDT	U.S. Fish and Wildlife Service
University of Hawaii Cooperative Extension Service	U.S. Environmental Protection Agency
U.S. Department of Agriculture's Farm Service Agency	
National Marine Fisheries Service/National Oceanic and Atmospheric Administration	

The Department of Health and cooperating agencies encourage you to review this list and provide written comment to the DOH by September 18, 1998, at 4:00pm. Please indicate whether or not you would like to participate in the Clean Water Action Plan Committee. Written comments may be faxed or mailed to Hawaii Department of Health, Polluted Runoff Control Program Clean Water Branch, 919 Ala Moana Blvd., Room 301, Honolulu, HI 96814, fax number (808) 585-4370. Information regarding selection criteria and participating agencies is available at the Clean Water Branch, Monday through Friday, 8:00am to 4:00pm. For further information call Susan Polanco, Polluted Runoff Control Program, 585-4345 or access the national guidance @ [www.epa.gov/cleanwater/action/voc.html](http://www.epa.gov/cleanwater/action/voc.html).

(Hon. Adv.: Aug 19, 1998)

(A-49467)

9/1/98

GOVERNMENT: WATER

# State seeking opinions on watershed protection project

The state Health Department is seeking public input on a project to protect water quality and address other concerns in watershed areas. The project is part of the federal Clean Water Act of 1972. The goal is to ensure clean and safe water for everyone. The Action Plan includes a new cooperative program to address watershed protection called the Unified Watershed Assessment. In which state, federal and local governments and the public identify the watersheds with the most critical water quality problems, and then work together to solve the problems.

The Action Plan includes initiatives to reduce public health threats, improve the environment, and address other concerns. The project is part of the federal Clean Water Act of 1972. The goal is to ensure clean and safe water for everyone. The Action Plan includes a new cooperative program to address watershed protection called the Unified Watershed Assessment. In which state, federal and local governments and the public identify the watersheds with the most critical water quality problems, and then work together to solve the problems.

leases funds to the state Health Department and the U.S. Agriculture Department, the agencies will organize a Clean Water Action Plan Committee to examine the list and categorize additional watersheds. The Health Department is encouraging the community to comment on the choice of watersheds and to participate in the committee.

People interested in participating should submit written comments to the Health Department by Sept. 16. The letter also should indicate whether the writer wants to be part of the Clean Water Action Plan Committee. Comments may be mailed to Clean Water Branch, 919 Ala Moana Boulevard, Room 301, Honolulu, HI 96814, or faxed to 598-4370. For more information, call the Polluted Runoff Control Program of the Clean Water Branch at 588-4309. The public can obtain information at [www.epa.gov/cleanwater/action/toc.html](http://www.epa.gov/cleanwater/action/toc.html) about the Clean Water Action Plan.

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Hawai'i's Unified Watershed Assessment

Attachment 3

**PUBLIC COMMENTS**

NAME	ADDRESS	PHONE	DATE SENT
Laurie Hoo	Picked up Molokai Ranch 500 Alakama waterfront Plaza 96814		9/1
VICKI SUHAKU	EPA P.O. Box 50063 <sup>96850 Hon. HI.</sup>	Fax 541-2712	9/1
Dr. Jim Anthony	HAWAII LIAISON KAWAI ASSOC EXECUTIVE DIRECTOR INC	P.O. Box Kaanani HI	9/1
Ruth Yap	DOH PO Box 2007 <sup>Molokai</sup> Kailua, HI 96748	553-3663	SEP 1
Nam Ontano	Land & Natural Resources Div OHA		11
Farky Watanabe	US Army (OE Fort Shafter, HI 96858. Regulatory Br. 5440	-	9/1
Keoni Fairbanks	Kaaholane Island Reserve Commission	fax 526-7539	9/1
Diane Drigot	Env. Scientist Marine Corps Base Hawaii Box 63002 Bldg. 1360 Kaneohe 96863	257-6920 x224	
Kimo Aluli	33 Kalaka Place Kailua HI 96734	266-7000	9/2 (9/8 mailed)
Dave Bourgoin	Law Offices of David Bourgoin 1188 Bishop St. Ste. 2010 Hon. HI 96813	523-7179	9/2 called
Joe Chernisky	UH - Leeward Community College 96-045 Ala Ike St Pearl City HI 96282	455-0625	9/3
Penny Levin	2464 Gardenia St. Hon. HI 96816	732-2124	(9/8 mailed) 9/4 called
Alenka Remec	The Nature Conservancy 1116 Smith St., Hon. 96817	532-4508 fax 545-2019	9/8
Sach Young	EDD	586-4377	9/9
Richard Bird	DEVELOPERS, HAS, HI 96719	-	9/9
ED HISAKI	NATURE CONSERVANCY, MOLOKAI	524-0774 FAX: 53-9870	9/10
DAVE MARTIN	Kailua - Wailua Watershed Ctr. Nominates Kailua - Wailua	261-3780 FAX: 261-3780	9/10
Albert Del Rio	Box 28004, Honolulu, HI 96827 * Nominates Honolulu Harbor / Nuuanu Stream would like to be on committee.	526-3287	9/16

NAME	ADDRESS	PHONE	DATE SENT
Richard Boyd	Ka' Makani 'O Kohala Ohana Inc. DBA RAKOO Inc. Box 76, HAWAII, HAWAII 96719	(809) 889-5453 (W) (809) 889-(H) 0344	9/15/98
	* Nominates North Kohala Would like to participate in Committee w/Lesly Patton & Ken Roche.		
Keoni FAIRBANKS	Kaho'OLAWE Island Reserve Commission 33 South King Street, Room 501 Honolulu, HI 96813	(809) 586-0761 (809) 586-7589 (FAX)	9/16/98
	* Nominates Kaho'olawe (NO funds requested) would like to participate in Committee.		
Elaine Murphy	44-130 Puuohala Puuohala Place Kaneohe, Hawaii 96744	(809) 247-5267 fax (809) 247-2477	8/28/98
Kaneohe Neighborhood Board	* would support & participate in Kokoapoko District work.	ecdenhon@pixi.com	
Elizabeth A. Ho'opio Alaka'i kuhikuhi Kaula	MARTIN Native Hawaiian Advisory Council, Inc. dba Keiki's 417-H Uluniu Street Kānāhāi Kailua, HI 96734	(808) 261-1151 fx (808) 261-3780	9/16/98
	advocate: ikeiaka - Wailua Bay Wailua, Kauai	(808) 261-1151 fx (808) 261-3780 nhac@pixi.com	9/16/98

Dave Martin

**WATERSHED**

**RESTORATION:**

**SUGGESTION -**

**KAWAINUI  
CANAL + ITS  
SOURCE**

KIMO  
262-2172

SEP 17 1998  
[Signature]  
H.R.

NATIVE HAWAIIAN ADVISORY COUNCIL, INC., dba

# KE KIA'I

*'Aha kāko'o kānāwai no ka na'auao,  
no ke kula'āhi, no ka Hawai'i*

September 16, 1998

State Health Department  
Clean Water Branch  
919 Ala Moana Boulevard  
Honolulu, Hawai'i 96814

Re: Clean Water Action Plan  
Unified Watershed Assessment

Aloha e:

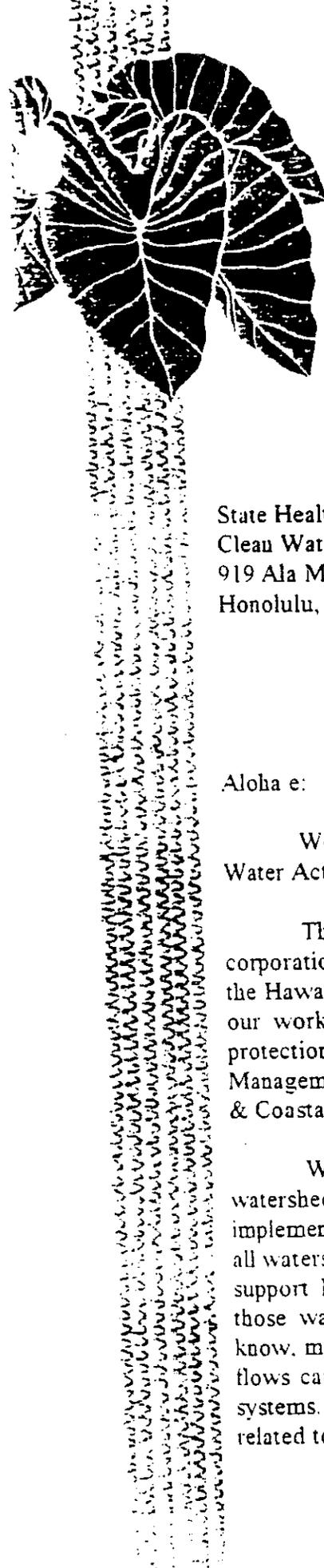
We appreciate this opportunity to provide written comment on the Clean Water Action Plan's Unified Watershed Assessment for Hawai'i.

The Native Hawaiian Advisory Council (NHAC) is a non-profit corporation established in 1988 to serve educational and advocacy needs within the Hawaiian community, particularly with respect to traditional rights. Much of our work over the past 10 years has been focused on ahupua'a (watershed) protections and restoration. We currently serve on the DOH's Environmental Management Advisory Group as well as the DBEDT (Office of Planning) Marine & Coastal Zone Management Advisory Group.

We commend your efforts to involve the public in the evaluation of watershed planning and priorities. We believe it is critical for the state to implement a process in which the maximum restorative effort can be achieved in all watersheds of the state, with a particular emphasis on watersheds that serve and support Hawaiian traditional customs and practice. Of first priority should be those watersheds that have substantial impairment of water quality. As you know, much of the impairment of water quality is directly attributed to low stream flows caused by out of watershed transfers of water through plantation irrigation systems. Substantial damages to watersheds have also resulted from activities related to the large military presence in Hawaii.

417-H Uluniu Street Kailua, Hawai'i 96734 Office (808) 261-1151 Fax (808) 261-3780

E-mail: nhac@pixi.com Home Page: http://www.pixi.com/~nhac



We believe it is imperative that the process for selecting and assigning priorities to specific watersheds must start with a reasoned set of criteria and include an appropriate level of public participation. A watershed approach to planning can only be effective if it views the watershed as a whole and considers the stresses on the watershed from a holistic standpoint. While we have no reason to doubt that the five watersheds selected thus far by representatives of the State Technical Committee are deserving of some attention, we believe the selection process must begin with the development of both long and short term objectives that reflect the participation of the local communities that rely upon the watershed, as well as sound technical information.

Of the specified watersheds, we note that the West Maui/West Maui Mountain Watershed is potentially the only watershed that serves an active, predominately Hawaiian, taro farming community that has been impacted by plantations stream dewatering practices. West Maui includes many watersheds that have been dewatered, many of which have a great potential, and should be candidates, for watershed restoration. Of particular note in this regard is lower Honokōhau Valley. Although the scope of work identified historic/cultural preservation concerns in South Moloka'i, Pelekane Bay, Hawai'i and Ko'olaupoko, O'ahu, there was notably no such reference in respect to West Maui. As you are aware, the local communities (and others) have raised significant historic/cultural preservation issues in the lower watersheds that are dewatered by Maui Land & Pine's (MLP) Honokōhau ditch. Therefore, we can only assume that this omission was inadvertent and will be corrected.

Obviously, an undertaking as important as watershed planning must take into account a wide range of issues and objectives. While this will include a consideration of stresses on the watersheds, including stresses related to tourism, residential and commercial use of water, these stresses are only a part what must be considered. As a preliminary matter, we believe it is important for the Department to clarify the proposed watershed boundaries, the criteria for developing the full scope of work and responsibility of the Clean Water Action Plan Committee and a clear statement of its proposed organizational structure and authority.

The proposed efforts by DOH & USDA to organize a Clean Water Action Plan Committee is laudable. It is clear that by engaging local organizations and interested citizens, the public commitment to clean watersheds can become a long-term broad based force to upgrade the quality of our watersheds and their management. Nevertheless we must express serious concerns that this process will continue to be dominated and driven by the needs of the agencies involved, as evidenced by the apparent presumptions that seem to be already established that

the watersheds selected by the State Technical Committee will receive priority funding to complete a pre-established scope of work.

If you really want enthusiastic community participation in this process you are going to have to give the community some real ownership of the process which to us means have community representatives on board and involved before the watersheds are selected and before the agencies preconceived highest work priorities are placed in line for funding.

Hopefully through a high level of community ownership of this process we can avoid some of the glitches that occurred in recent joint agency/community participation initiatives such as the Kaiaka-Waialua Bay Hydrologic Unit Area (HUA) Project. As you may recall, the DOH and USDA (NRCS) were cooperating agencies in the HUA project and you worked directly with a local advisory committee of volunteers (both individuals and organizations). Unfortunately, this group fell victim to the budgeting process (and what some project participants perceived as the political pressures of representatives of large land owners). As the HUA project was disbanded the disappointment of the project's local advisory committee was assuaged by agency representatives implications that when the budget crisis was passed, the agencies (and NRCS in particular) would focus some resources on uncompleted project goals.

In 1991, the USDA chose the Kaiaka-Waialua Bay hydrologic unit as one of 74 watersheds nationwide to receive special funding to help protect ground and surface waters from non-point sources of pollution. Some of the key project goals remained substantially incomplete upon project termination such as implementation of an interagency coordinated monitoring program to provide an ongoing assessment of the water quality of the project area and control of sediment sources by reducing erosion in agricultural areas as evidenced by the persistently reoccurring silt plumes in Kaiaka-Waialua Bay.

Given the broad recognition of the impaired water quality in Kaiaka-Waialua Bay, the demonstrated interest in the local community to fully participate in watershed cleanup initiatives and the disappointing budget related termination of a recent project in the watershed, we strongly encourage the DOH & USDA to reconsider the State Technical watershed selection and at a minimum, add the Kaiaka-Waialua Bay to the watersheds chosen for the watershed restoration project.

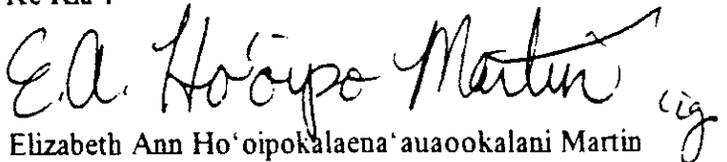
Another watershed we believe should also be selected for watershed restoration activities is the Waialua watershed on Kaua'i. This watershed has been adversely affected by both plantation water diversions and by the release and storage of Agent Orange in the 1970's. Plantation water needs are now substantially diminished and the time is now right to assess the long term residual effect, if any, of the Agent Orange releases.

I am willing to serve as a member of the Clean Water Action Committee and I would like to propose several additional nominations:

1. Dan Gora, President, Waialua Hui Kalo
2. Kainoa Wilson, President, Honokōhau Valley Association
3. Attwood Makaanani, past President and head coach,  
Kawaikani Canoe Club, Nā Kahu Hikina A Kala, Curatorship

We would be interested in, and pleased to, work with the Committee. Please feel free to contact me at 261-6318 with any questions or comments.

Me ka pono,  
Ke Kia'i

 E.A. Ho'opokalaena'auaookalani Martin *lig*

Elizabeth Ann Ho'opokalaena'auaookalani Martin  
Alaka'i Kuhikuhi Kauleo Kānāwai

EHM:ig

**The Nature  
Conservancy  
of Hawai'i**  
16 Smith Street  
Honolulu, Hawaii 96817  
Phone (808) 537-4508  
Facsimile (808) 545-2019

The Nature  
Conservancy  
of Hawai'i



September 16, 1998

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Dr. Bruce Anderson  
State Health Department  
Polluted Runoff Control Program, Clean Water Branch  
919 Ala Moana Boulevard, Room 301  
Honolulu, Hawaii 96822

VIA FAX: 808 586-4370

Subject: Comments on Clean Water Action Plan

Dear Dr. Anderson:

The Nature Conservancy of Hawaii strongly supports the Health Department's efforts to obtain federal funds to help protect water quality and address other concerns in watershed areas throughout the state.

With both public and private partners, The Nature Conservancy is currently involved in two landscape-scale watershed protection projects on Maui - the newly-formed West Maui Mountains Watershed Partnership and the eight-year old East Maui Watershed Partnership. In addition, our staff on Molokai is working closely with the local community through the Federal Empowerment Zone (EZ) initiative to define and prioritize community based projects. The top project selected by the Core EZ committee is the protection of the East Molokai Watershed, as submitted by Ed Misaki of our TNCH Molokai Staff, who has been participating as a member of the "EZ" Environmental subcommittee.

The single greatest threat to the native forests of watersheds is the destruction caused by non-native plants and animals. Ungulates, such as pigs, goats and deer, trample and eat native vegetation, spread alien weeds, and greatly contribute to erosion. In addition, they are also disease vectors for pathogens, such as *Leptospira*, *Giardia lamblia*, and *Cryptosporidium*, thus raising public health concerns. Pest weeds such as *Miconia* have the potential of displacing native forests. *Miconia*'s shallow root systems make pure stands of *Miconia* extremely unstable and increase the likelihood for erosion and turbidity in the watershed if steps are not taken to control it and other weeds now.



**International  
Headquarters**

15 North Lynn Street  
Arlington, Virginia 22209  
<http://www.tnc.org>

Dr. Bruce Anderson  
September 16, 1998  
Page 2

Our primary efforts are to reduce and or eliminate these threats through fencing, hunting, and systematic vegetation eradication. However, to be successful, these efforts must be maintained over large areas to keep animal numbers low and to stem the spread of invasive weeds. Thus, we strongly support the Health Department's efforts to obtain additional federal dollars through the Environmental Protection Agency to help improve the stewardship of natural resources in the five watersheds listed. We also propose the addition of the East Maui Watershed to that list.

In addition to supporting these efforts we are interested in active participation. Please do not hesitate to contact me on Oahu, or our island directors, Mark White, Maui (808-538-0749) and Ed Misaki, Molokai (808-524-0779).

Thank you for the opportunity to provide comments.

Sincerely,

A handwritten signature in cursive script, appearing to read "Alenka Remec".

Alenka Remec  
Director of Science and Stewardship Operations

cc: Mark White, Ed Misaki

**KA' MAKANI 'O KOHALA OHANA INCORPORATED  
DBA KAKO'O INC.**

**P.O. BOX 76, HAWI HAWAI'I 96719 PHONE/FAX (808) 889-5553**

9/15/98

State Department of Health  
Clean Water Branch  
919 Ala Moana Blvd. Rm. 301  
Honolulu, Hawaii 96814

Subject: Clean Water Action Plan

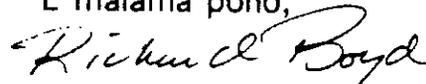
My name is Richard Boyd and I am a resident of North Kohala. I am President of Ka 'Makani 'O Kohala Ohana Inc. (KAKO'O). We are a 501 (c) (3) non profit. Our organizations purposes include protecting our environment. Non point pollution and water quality are of great interest to our members. Here in North Kohala we have had problems with cattle getting into the streams up mauka and destroying the water quality all the way down the eco system to the ocean. Leptospirosis and other cattle related diseases are not uncommon out here. A young boy was just infected with leptospirosis this past week while swimming in the Kohala Ditch. Consequently the Unified Watershed Assessment part of the action plan sounds very appealing and important to us.

I would like to submit my name to work on this project. Other persons interested in participating at this time are Ken Boche and Lesley Patton. There is a meeting of the Kohala Hawaiian Civic Club this Sunday and I request permission to submit additional names in the near future.

If you need further information about myself or Lesley and Ken, please let me know. I can be reached at 808-889-0344 during the day or evenings. If I am not at home, my phone is equipped with a message machine. I hope you will be able to use our knowledge of local water and the Kohala Mountains to your benefit and the development of meaningful Clean Water Action Plan.

Mahalo.

E malama pono,



Richard Boyd

cc: Ken Boche  
Lesley Patton



KŪKULU KE EA A KANALOA

**KAHO'OLAWE ISLAND RESERVE COMMISSION**

33 South King Street, Room 501 Honolulu, Hawaii 96813  
Telephone: (808) 586-0761 Fax: (808) 586-7589

September 16, 1998

SEP 21 1998  
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RL  
SR

Dr. Bruce Anderson, Deputy Director  
Department of Health  
Polluted Runoff Control Program  
919 Ala Moana Blvd. Room 301  
Honolulu, HI 96822  
Attn: ~~SEAN~~ Polanco

Dear Dr. Anderson,

RE: Inclusion of Kaho'olawe within the Unified Watershed Assessment.

The Kaho'olawe Island Reserve Commission (KIRC) first became aware of the federal Unified Watershed Assessment initiative by information that was provided at the Polluted Runoff Forum Number 2 on August 25, 1998. Your staff sent us additional information on September 1, 1998.

May I suggest that the existing environmental conditions on Kaho'olawe make the island a superlative example of a Category I watershed district? Other historic and cultural factors, including the environmental restoration project currently underway by the U.S. Navy and the KIRC, would seem to score highly under the criteria for selection as a priority watershed.

At this time the KIRC is not interested in competing for funds or other resources that may be available under the Unified Watershed Assessment initiative. However, I think it is important that the island be listed in the assessment as a special case with tremendous potential to serve as a model for other areas. Thank you for considering our comments.

Sincerely,

R. Keoni Fairbanks  
Executive Director

cc: Paul Higashino, Restoration Ecologist  
Marc Hodges, Ocean Resource Manager

AUG 31

**Elaine Murphy**  
**44-130 Puuohalai Place**  
**Kaneohe, Hawaii 96744**

Phone: (808) 247-5267

FAX: (808) 247-2477

Email: [ecdevhon@pixi.com](mailto:ecdevhon@pixi.com)

Work phone: 527-5767

August 28, 1998

Department of Health  
Clean Water Branch  
919 Ala Moana Boulevard, Room 301  
Honolulu, Hawaii 96814

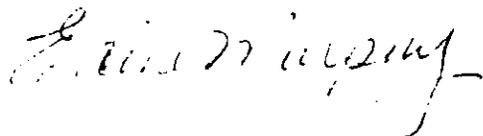
Dear Health Department Officials:

I am interested in participating on the committee that will identify and select watershed sites that need restoration in the Windward Koolau-poko District on Oahu. I have participated in many community based programs and initiated Kaneohe: Vision 2020 an effort to review Kaneohe area community assets and to set a vision for future generations.

Currently I am the chair of the Kaneohe Neighborhood Board #30 and am a board member of the Kailua Bay Advisory Council.

I look forward to hearing from you regarding the watershed restoration program.

Sincerely,



Stephen T. Kubota  
Ahupua'a Action Alliance  
44-281 Milkiola Drive  
Kaneohe, HI 96744

September 16, 1998

To: Dr. Bruce Anderson  
Department of Health, Clean Water Branch  
Polluted Runoff Control Program

Attn: Susan Polanco  
Fax: 586-4370

Subj: Clean Water Action Plan, Unified Watershed Assessment for Hawai'i

The Ahupua'a Action Alliance supports the watershed approach emphasized in the Clean Water Action Plan. The Alliance believes that this new unified strategy comes closest to the traditional ahupua'a resource management system of the Native Hawaiians. We offer the following comments to strengthen the program.

1. The ahupua'a model includes watersheds, waterways and coastal waters. Inclusion of the CZM program in partnership with NRCS and the EPA/DOH will provide a more comprehensive integration of agency resources in line with the traditional system.
2. The interagency coordination called for by the CWAP is an important strategy to improve public participation. Community groups and other NGO's are more likely to participate in a single interagency committee than in multiple advisory committees with separate agencies. Volunteers and employees from the business sector are concerned with their commitment of hours to community service. The interagency format is efficient for the public and also for the agencies.
3. The ahupua'a/watershed approach allow for greater diversity and flexibility in choosing local strategies and management practices without needing to develop statewide "one size fits all" programs that are too general to fit local conditions.
4. The watershed approach also allows for more participation by the counties. For example, the nomination of the Ko'olaupoko District is in line with the Ko'olaupoko Development Plan Revision program currently underway by the City's Planning and Permitting Department. It also is aligned with the Kailua Bay Advisory Council's jurisdiction in the City's consent decree case.
5. Finally, the pooling of agency resources affords an opportunity for more efficient delivery of technical assistance and training to community groups in the use of new technologies such as GIS and GPS to inventory and map valuable natural and cultural resources to be protected and restored. These tools hold great appeal to the next generation and links science and community planning. Community members are familiar with their neighborhoods and can solve many problems that are beyond the reach of government agencies.

Thank you for this opportunity to comment and we hope that the participating agencies will take a pro-active posture toward developing a "Clean Water Action Plan for Hawaii."

SEP 1 1998

ENVIRONMENTAL COMPLIANCE & PROTECTION DEPARTMENT  
MARINE CORPS BASE HAWAII, KANEHOHE BAY

Office phone: (808) 257-6920 Extension 224

Fax phone: (808) 257-2794

*DR. DIANE DRILLOT*  
*Senior Nat. Res. Mgt. Specialist*

TO: Randy Rusk/DOT

Office phone: 586-4348

Fax phone: 586-4352 (FX)

Date: 7/1/98

Page 1 of 1



COMMENTS:

MAILING ADDRESS →

COMMANDING GENERAL  
MARINE CORPS BASE HAWAII  
ATTN: DR. DRILLOT  
BOX 83002 BLDG 13500  
KANEHOHE BAY HI 96863-3002

*Randy: Thx for the  
return phone call.  
Would like to talk*

*to you directly to exchange watershed  
planning project info. Meanwhile,  
please send me more about your  
EPA funded initiative referenced  
in newspaper today.  
Mahalo! Diane Drilot*

SEP 14 1998 MW

~~OK~~  
RR

September 10, 1998

State of Hawaii – Department of Health  
Clean Water Branch  
919 Ala Moana Boulevard, Rm 301  
HONOLULU HI 96814

RE: Comments and Interest in Clean Water Action Plan Committee.

Aloha from Molokai,

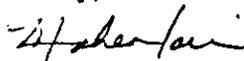
I write today to encourage this cooperative approach to watershed protection. Too often the resources that make up our common wealth are neglected because "ownership" is distributed over the entire population. I believe there is a great need for cooperative initiatives that encourage and support shared responsibility for stewardship of Hawai'i, and especially efforts to include the community in planning and accomplishing activities that express *aloha`aina*.

Recent fires here on our small island have significantly decreased our watershed, including areas of native dry and wet forest. Community discussions about watershed improvement and expansion have now become much more serious (desperate?), and must now begin with quickly covering raw land. Our fire captain tells us one federal agency estimates forest replacement cost at \$43 million! We know the magnitude of the damage will require all of us on Molokai to participate in some way in reparation work. We have lost substantial biomass which means recharge of our single, sole source aquifer is also substantially reduced. One estimate tells us 1000 acres of fog-drip stage forest will produce recharge of 1.0 Mgd. We are far from that ideal situation.

I am glad to see South Molokai on the top of your list in the Advertiser article. Our problem may not be any worse than other listed watersheds, but on a small island every loss is deeply felt. On the up side, smallness holds the potential for reclamation efforts to show results quickly... hopefully, rains will come softly this month to give new grass time to grow and grasp loose topsoil and ash.

Please add me to your list of persons interested in participating in your Clean Water Action Plan Committee. Mahalo for your good work, and consideration of these comments.

Sincerely,



K. Mahealani Davis  
P.O. Box 350  
Kaunakakai HI 96748  
(808) 553-3777

SEP 15 1998

13 September, 1998

Clean Water Branch  
State Health Department

I am the Chair of the Parks and Waterways Committee of the Ala Moana/  
Kakaako Neighborhood Board of the City & County of Honolulu.

I want to be part of the Clean Water Action Plan Committee.

I admire the cooperative approach between government agencies and the  
public. I hope to see that stay the approach and not evolve as it has with  
the Ala Wai Canal Watershed Improvement Project to a three-sided approach  
with businesses out to avail themselves of taxpayers' money.

I believe the approach should begin from the ocean and go "upstream"  
to identify and solve problems. All harbors being major sources of pollution  
should be dealt with first before simply educating a mountain farmer who is  
over-fertilizing.

The Ala Moana/Kakaako Neighborhood Board and I await your response.

Sincerely,



Larry Hurst  
1122 Elm Street, #505  
Honolulu, HI 96814

(808) 596-8059 phone/fax

SEP 4 1998

September 1, 1998

Hawaii Department of Health  
Clean Water Branch  
919 Ala Moana Blvd. Room 301

To DOH:

I would like to participate on the committee from our community for the clean water action plan.

I am a rancher in the Holoholoku-puukapu area of Waimea, on the island of Hawaii.

Water is our most precious commodity as all life can not continue with out this resource.

I am very interested in participating on this committee, to gain knowledge as to how, when and where our water is distributed through west Hawaii and to be assured that our water is safe for future consumption.

I wish to hear from you soon as to the date of your next meeting so I can be available to attend.

Thank you kindly,



Ardis Whitehead-Brown

P.O. Box 6271

Kamuela Hawaii 96743

**LAW OFFICES OF DAVID L. BOURGOIN**

1188 Bishop Street  
Suite 2010  
Honolulu, Hawaii 96813  
(808) 523-7779  
(808) 523-7770 FAX

September 11, 1998

Randy Rush  
Polluted Runoff Control Program, Clean Water Branch  
919 Ala Moana Blvd., Room 301  
Honolulu, HI 96822  
586-4370

Dear Randy:

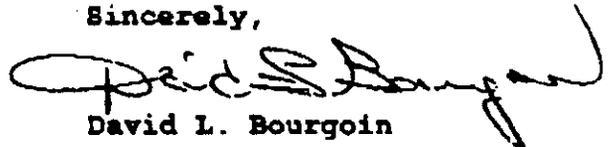
Please place my name on the Kaneohe and/or West Maui Task Force Committee for researching and preparing a report concerning water pollution in Hawaii.

Please consider adding the Honolulu Harbor as a potential project. Honolulu Harbor is probably the most polluted body of water in Hawaii, and is directly connected to two major projects under direction and evaluation by the State: The Ala Wai Canal and Pearl Harbor. Evaluating our major source of water pollution first should lead to a greater benefit to the People, Environment, and Habitat of Hawaii.

Please keep me informed about the issue of pesticides in the Environment of Hawaii. Any current or future information on the status of the State concerning this issue of pesticides would be appreciated.

Thank you for your attention to these matters.

Sincerely,

  
David L. Bourgoin

# Facsimile Transmittal

University of Hawai'i - Leeward Community College  
86-045 Ala Ika • Pearl City, Hawai'i • 86782-3393



<b>To: / Recipient:</b>	Name: <u>Mr. Randy Rusk</u> Organization: <u>POLLUTED Runoff Control Program</u> <u>CLEAN WATER Branch</u> Dept: <u>STATE HEALTH #301</u> Phone, Fax: <u>586-4370</u> Voice: <u>586-4309</u>	<input checked="" type="checkbox"/> Very Important/ <input checked="" type="checkbox"/> <u>URGENT</u> <input checked="" type="checkbox"/> Hand Carry to recipient <input checked="" type="checkbox"/> Please respond <input checked="" type="checkbox"/> <u>ASAP</u> <input checked="" type="checkbox"/> Other: <u>Mahalo!</u>
	<b>From:</b> <u>JOE CHERNICKY</u> <u>Arts / Humanities</u> Leeward Community College Phone, Fax: (808) 455-0471    Voice: (808) 455-0 <u>471</u>	

*Please include / consider the attached  
letter in your final list.  
Remember Pearl!*

*Aloha!  
Joe*

**University of Hawai'i**  
**Leeward Community College**  
**Pearl Harbor 21 Service Leadership Program**

September 10, 1998

Mr. Randy Rush, Coordinator  
Polluted Runoff Control Program  
Clean Water Branch - Room 301  
State Health Dept.  
919 Ala Moana Blvd.  
Hon. HI 96814

Dear Mr. Rush:

I would like to go on record as strongly recommending that the Clean Water Action Plan Committee include the Leeward Koolau Mountains watershed and Pearl Harbor estuary in Hawaii's Clean Water Action Plan. My past dealings with the EPA and present membership on the Pearl Harbor Navy RAB have convinced me that the addition of the Pearl watershed would enhance Hawaii's chance of receiving federal funds. It's inclusion may also set the stage for the ongoing success of Hawaii's whole watershed proposal. In fact, the omission of the Pearl watershed may send the wrong signal about state and public commitment to the success of the watershed program. This recommendation is based on the following concerns:

**1. Priority Status:** If a main objective of the watershed plan is to identify watersheds with critical water quality problems, then the Pearl watershed's Category 1 status surely warrants top priority. The recent Pearl soil sediment study identifies higher levels of contaminants near stream entrances to Pearl. The DOH is on record with their health concerns. At our most recent RAB meeting, a USGS spokesman noted that they are presently involved in the study of Waialeale Stream. This past March the DLNR's Aquaculture Development Program released a draft proposal for the community to restore the Pa'miau fishpond located at McGrew Point. The Unified Watershed Assessment strategy would empower these diverse agencies the authority to identify point and nonpoint sources of pollution and runoff along the watershed streams entering Pearl as probable pathways of contaminant migration.

**2. Health Risks:** In the Pearl Harbor Executive Summary of 1996, 44 sites alone within the Pearl Harbor Naval Complex (PHNC) were identified with a high relative risk. This ranking was due to contaminants in the soil and marine sediments released from Navy industrial operations, private industrial operations, agricultural use, municipal, commercial and urban activities. Previous deforestation practices, soil erosion and the importation of mangrove at the turn of this century have also increased the health risk of the estimated 5,000 acres of sediment in the Pearl repository. The watershed strategy would enlarge the scope of monitoring and assessment to achieve clean water goals and to educate the public about protecting and restoring the Pearl wetlands.

**3. Natural Resources Stewardship:** The Pearl watershed is home to 4 significant wetland habitats to endangered native plants and birds. Our partnership with the US Fish & Wildlife and the US Navy has already resulted in five refuge cleanups. This semester science students from LCC will begin monitoring soil and water samples creating a historical data bank for the Oahu US Fish & Wildlife. The DLNR has also identified 2 of 4 ancient Hawaiian fishponds for probable restoration. As in ancient Hawaii, the restored fishponds would act as ecological benchmarks measuring the water quality, sediment intake, fish and aquatic life. The 1996 Chevron oil spill is a reminder of the ever present dangers to Pearl's natural and cultural

**University of Hawai'i**  
**Leeward Community College**  
**Pearl Harbor 21 Service Leadership Program**

resources. Instead of piecemeal initiatives, the Unified Watershed Assessment would enable the restoration of Pearl's whole aquatic system's health on a watershed basis.

**4. Pressures of Future Growth:** The 'Ewa moku of ancient Hawai'i included 13 ahupua'a extending from Halewa to Barber's Point. It was a balanced ecosystem ranging from maika to makai managed with a minimal ecological impact. Our rush towards agricultural, industrial and urban growth has drastically changed the ecosystem. The PHNC alone covers 20% of Oahu's land surface and miles of sensitive coastal waters. The PHNC covers 12,600 acres of land and water. The Pearl aquifer supplies 40 million gallons daily to Honolulu and additional millions to the Waianae coast. The naval base itself obtains 70-90% of its potable water supply from a water tunnel located in Waiawa where shortly a new housing project will begin. The recent Tesoro Hawaii oil spill off of Barber's Point is a reminder of the area's impact on the whole island chain. As Central and Leeward Oahu's population grows and urbanization continues to expand, now more than ever, a Pearl watershed management program is necessary to ensure future generations of this indispensable natural resource.

**5. National Recognition:** The EPA promotes national success stories as one way of highlighting strong partnerships between federal, state, tribal and local agencies. Projects ranging from the Chesapeake Bay, the Everglades to the San Francisco Bay-Delta have received well deserved recognition. Where is Hawai'i in this equation? Pearl is one of Hawai'i's most precious natural, economic, cultural and historical assets. Let us remember that Pearl has been identified as a National Historic Landmark; it is the home of the Arizona Memorial; the USS Missouri; Hawaiian fishponds; military industrial operations; Ford Island development; community empowerment zones; the Second City; and the redevelopment of Barber's Point. Pearl is truly one of the unique basins in Hawai'i. Already in place are numerous federal, military, state, business firms (HEI, Chevron), Hawaiian groups, estates and local agencies. The watershed action plan would serve as the catalyst in transforming Pearl into a national success story and ensure our clean water goals.

A recent Advertiser editorial (August 29, 1998) entitled "Pearl Harbor deserved much better from us" stated simply that the recent Pearl Harbor soil sediments findings be used to avoid repeating the same tragedy in other Hawaiian waters. I would simply add that "Pearl deserves much better from us" now and for future generations. Including the Pearl watershed into the Clean Water Action Plan would begin the process of rewriting its tragic environmental story into a success story now and not 50 years hence. I am certain that you will find the EPA to be 'Pearl friendly'. I strongly recommend the addition of the Pearl watershed in your final list. There are enormous benefits and win-win opportunities. Please keep me abreast of future developments and include me as a committee member. Mahalo for your initiative and best wishes for continued success on behalf of all of Hawai'i's waters. Aloha!

Respectfully submitted,



Prof. Joe Chemisky, Coordinator  
Pearl Harbor 21 Service Leadership Program @ LCC

c.c. Rep. Neil Abernethy, Deputy Director Bruce Anderson, Senator Dan Iwano

# Hawai'i's Unified Watershed Assessment

## Table 1

### HAWAII'S WATERSHEDS - BY ISLAND

# OAHU WATERSHED UNITS - SORTED BY CODE

Island prefix for Oahu Watershed Unit Codes is 20060000:

86 watershed units totaling 383,399 acres.

CODE	WATERSHED UNIT NAME
1-01	Kalunawaikaala
1-02	Pakulena
1-03	Paumalu
1-04	Kawela
1-05	Oio
1-06	Malaekahana
1-07	Kahawainui
1-08	Waialele
1-09	Koloa
1-10	Kaipapau
1-11	Maakua
1-12	Waipuhi
1-13	Kaluanui
1-14	Papaakoko
1-15	Halehaa
1-16	Punaluu
1-18	Kahana
1-19	Kaaawa
1-20	Makaua
2-01	Hakipuu
2-02	Waikane
2-03	Waianu
2-04	Waiahole
2-05	Kaalaea
2-06	Haiamoa

CODE	WATERSHED UNIT NAME
3-96	Diamond Head
3-97	Portlock
3-98	Hanauma
3-99	Koko Crater
4-02	Halawa
4-03	Aiea
4-04	Kalauao
4-05	Waimalu
4-06	Waiawa
4-08	Waipio
4-09	Kapakahi
4-10	Waikele
4-11	Honouliuli
4-12	Makaiwa
4-99	Kaloi
5-01	Nanakuli
5-02	Ulehawa
5-04	Mailiili
5-05	Kaupuni
5-06	Kamaileunu
5-07	Makaha
5-08	Makua
5-98	Kaluakaula
5-99	Keaau
6-01	Kawaihapai
6-02	Pahole
6-04	Makaleha
6-05	Waialua
6-06	Kiikii system
6-06.00	Kiikii
6-06.01	Poamoho
6-06.02	Kaukonahua

## MOLOKAI WATERSHED UNITS - SORTED BY CODE

Island prefix for Molokai Watershed Unit Codes is 20050000:

50 watershed units totaling 166,840 acres.

CODE	WATERSHED UNIT NAME
1-01	Waihanau
1-02	Waialeia
1-03	Waikolu
1-04	Wainene
1-05	Anapuhi
1-06	Waiohookalo
1-07	Keawanui
1-08	Kailiili
1-09	Pelekunu
1-10	Waipu
1-11	Haloku
1-12	Oloupena
1-13	Puukaoku
1-14	Wailele
1-15	Wailau
1-16	Kalaemilo
1-17	Waiahookalo
1-18	Kahiwa
1-19	Kawainui
1-20	Pipiwai
1-21	Halawa
2-01	Pohakupili
2-02	Honoulimaloo
2-03	Honouliwai
2-04	Waialua
2-05	Kainalu
2-06	Honomuni
2-07	Ahaino

## MAUI WATERSHED UNITS - SORTED BY CODE

Island prefix for Maui Watershed Unit Codes is 20020000:

112 watershed units totaling 466,437 acres.

CODE	WATERSHED UNIT NAME
1-01	Ukumehame
1-02	Olowalu
1-03	Launiupoko
1-04	Kauaula
1-05	Kahoma
1-06	Wahikuli
1-07	Honokowai
1-08	Kahana
1-09	Honokahua
1-10	Honolua
1-11	Honokohau
1-98	Anakaluahine
1-99	Papalaua
2-01	Poelua
2-02	Honanana
2-03	Kahakuloa
2-04	Waipili
2-05	Waiolai
2-06	Makamakaole
2-07	Waihee
2-08	Waiehu
2-09	Iao
2-10	Waikapu
2-11	Pohakea
3-01	Maliko
3-02	Kuiaha
3-03	Kaupakulua
3-04	Manawaiiao

CODE	WATERSHED UNIT NAME
4-15	W. Wailuaiki
4-16	E. Wailuaiki
4-17	Kopiliula
4-18	Waiohue
4-19	Paakea
4-20	Waiaka
4-21	Kapaula
4-22	Hanawi
4-23	Makapipi
4-24	Kuhiwa
4-25	Waihole
4-26	Manawaikēae
4-27	Kahawaihapapa
4-28	Keaiki
4-29	Waioni
4-30	Lanikele
4-31	Heleleikeoha
4-32	Kawakoe
4-33	Honomaele
4-34	Kawaipapa
5-01	Moomoonui
5-02	Haneoo
5-03	Kapia
5-04	Waiohonu
5-05	Papahawahawa
5-06	Alaaula
5-07	Wailua
5-08	Honolewa
5-09	Waieli
5-10	Kakiweka
5-11	Hahalawe
5-12	Puaaluu
5-13	Oheo

## LANAI WATERSHED UNITS - SORTED BY CODE

Island prefix for Lanai Watershed Unit Codes is 20040000:

32 watershed units totaling 90,278 acres.

CODE	WATERSHED UNIT NAME
1-79	Kawaiu
1-80	Kapoho
1-81	Naha
1-82	Kapua
1-83	Awehi
1-84	Lopa
1-85	Kahea
1-86	Waiopa
1-87	Haua
1-88	Kaa
1-89	Nahoko
1-90	Hauola
1-91	Wahane
1-92	Maunalei
1-93	Halulu
1-94	Poaiwa
1-95	Kuahua
1-96	Kahua
1-97	Hawaiilanui
1-98	Lapaiki
1-99	Puumaiekahi
2-89	Kaapahu
2-90	Honopu
2-91	Pali amano
2-92	Palawai Basin
2-93	Kalamaiki
2-94	Kalamanui
2-95	Kaumalapau

## KAUAI WATERSHED UNITS - SORTED BY CODE

Island prefix for Kauai Watershed Unit Codes is 20070000:

74 watershed units totaling 355,132 acres.

CODE	WATERSHED UNIT NAME
1-01	Awaawapuhi
1-02	Honopu
1-03	Nakeikionaiwi
1-04	Kalalau
1-05	Pohakuao
1-06	Waiolaa
1-07	Hanakoa
1-08	Waiahuakua
1-09	Hoolulu
1-10	Hanakapiai
1-11	Maunapuluo
1-12	Limahuli
1-13	Manoa
1-14	Wainiha
1-15	Lumahai
1-16	Waikoko
1-17	Waipa
1-18	Waioli
1-19	Hanalei
1-20	Waileia
1-21	Anini
1-22	Kalihikai West
1-23	Kalihikai Center
1-24	Kalihikai East
1-25	Kalihiwai
1-26	Puukumu
1-27	Kauapea
1-28	Kilauea

CODE	WATERSHED UNIT NAME
5-02	Paua
5-04	Hoea
5-05	Niu
5-07	Kaawaloa
5-08	Nahomalu
5-09	Kaulaula
5-10	Haeleele
5-11	Hikimoe
5-12	Kaaweiki
5-13	Kauhao
5-14	Makaha
5-15	Milolii
5-16	Nualolo

## NIHAU WATERSHED UNITS - SORTED BY CODE

Island prefix for Niihau Watershed Unit Codes is 20080000:

13 watershed units totaling 46,317 acres.

CODE	WATERSHED UNIT NAME
1-87	Keawanui
1-88	Keanauhi
1-89	Kaumuhonu
1-90	Puuwai
1-91	Nonopapa
1-92	Mauuloa
1-93	Halalii
1-94	Honuauula
1-95	Kalaoa
1-96	Nomilu
1-97	Kaailana
1-98	Koeaukani
1-99	Kaaukuu

CODE	WATERSHED UNIT NAME
1-29	Kukui
1-30	Paopao S.
1-31	Waiaalala
1-32	Punalulu
1-33	Kaimu
1-34	Pae
1-35	Waimanu
1-36	Pukoa
1-37	Manuwaikaalio
1-38	Nalua
1-39	Kahoopuu
1-42	Waipahoehoe
1-44	Wailoa/Waipio
1-46	Kaluahine Falls
1-47	Waiulili
1-48	Waikoekoe
1-49	Waipunahoe
1-50	Waialeale
1-51	Waikoloa
1-52	Kapulena
1-53	Kawaikalia
1-54	Malanahae
1-55	Honokaia
1-57	Kawela
1-58	Keaakaukau
1-59	Kainapahoa
1-61	Nienie
1-62	Papuaa
1-63	Ouhi
1-65	Kahaupu
1-66	Kahawailiili
1-67	Keahua
1-68	Kalopa

CODE	WATERSHED UNIT NAME
2-14	Maulua
2-16	Pohakupuka
2-17	Kulanakii
2-18	Ahole
2-19	Poupou
2-20	Manoloa
2-21	Ninole
2-22	Kaaheiki
2-23	Waikolu
2-24	Waikaumalo
2-26	Waiehu
2-27	Nanue
2-28	Opea
2-29	Peleau
2-30	Umauma
2-32	Hakalau
2-33	Kolekole
2-34	Paheehee
2-35	Honomu
2-36	Laimi
2-37	Kapehu
2-38	Makea
2-39	Alia
2-40	Makahanaloa
2-41	Waimaauou
2-42	Waiaama
2-43	Kawainui
2-44	Onomea
2-45	Alakahi
2-46	Hanawi
2-47	Kalaoa
2-48	Aleamai
2-49	Kaieie

# Hawai'i's Unified Watershed Assessment

## Table 2

### HAWAII'S WATERSHEDS - PRIORITY WATERSHEDS WITHIN CATEGORY I

**Table 2: PRIORITY WATERSHEDS WITHIN CATEGORY I**

**South Molokai, Molokai Watershed Unit Code 20050000**

<b>Code</b>	<b>Watershed Unit Name</b>
2-03	Honouliwai
2-04	Waialua
2-05	Kainalu
2-06	Honomuni
2-07	Ahaino
2-08	Mapulehu
2-09	Kaluaaha
2-10	Kahananui
2-12	Ohia
2-13	Wawaia
2-14	Kamalo
2-15	Kawela
3-01	Kaunakakai
3-95	Waiahewahewa
3-96	Kaluapeelua
3-97	Manawainui
3-98	Kalamaula
3-99	Kamiloloa
4-98	Hakina
4-99	Kolo

**Pelekane Bay, Big Island Watershed Unit Code 20010000**

<b>Code</b>	<b>Watershed Unit Name</b>
5-97	Kawaihae

**West Maui, Maui Watershed Unit Code 20020000**

<b>Code</b>	<b>Watershed Unit Name</b>
1-04	Kauaula
1-05	Kahoma
1-06	Wahikuli
1-07	Honokowai
1-08	Kahana
1-09	Honokahua
1-10	Honolua
3-96	Hapapa

Table 2 (continued)

**Koolaupoko, Oahu Watershed Unit Code 20060000**

<b>Code</b>	<b>Watershed Unit Name</b>
2-01	Hakipuu
2-02	Waikane
2-03	Waianu
2-04	Waiahole
2-05	Kaalaea
2-06	Haiamoa
2-07	Kahaluu system
2-07.00	Kahaluu segment
2-07.01	Waihee
2-07.02	Kahaluu
2-07.03	Ahuimanu
2-08	Heeia
2-09	Keaahala
2-10	Kaneohe
2-11	Kawa (Kawa Stream)
2-12	Puu Hawaiiiloa
2-13	Kawainui (Kapaa Stream)
2-14	Kaelepulu
2-15	Waimanalo (Waimanalo Stream)
2-16	Kahawai
2-98	Makapuu
2-99	Kualoa

**Nawiliwili, Kauai Watershed Unit Code 20070000**

<b>Code</b>	<b>Watershed Unit Name</b>
2-13	Nawiliwili
2-14	Pualii
2-15	Huleia

# Hawai'i's Unified Watershed Assessment

## Table 3

### HAWAII'S WATERSHEDS - SECOND TIER CATEGORY I WATERSHEDS

**Table 3: SECOND TIER CATEGORY I WATERSHEDS**

Waterbody Segment	Island	Watershed Unit Name	Code
Ala Wai Canal	Oahu	Ala Wai System	20060000-3-07
		Manoa-Palolo	20060000-3-07.01
		Makiki	20060000-3-07.02
Hanapepe Bay	Kauai	Hanapepe	20070000-3-07
		Kaumakini	20070000-4-98
		Kukamahu	20070000-4-99
Hilo Bay	Hawaii	Paukaa	20010000-2-55
		Honolii	20010000-2-56
		Maili	20010000-2-57
		Wainaku	20010000-2-58
		Pukihae	20010000-2-59
		Wailuku	20010000-2-60
		Wailoa	20010000-2-61
Honolulu Harbor	Oahu	Nuuanu	20060000-3-09
		Kapalama	20060000-3-10
Kahana Bay	Oahu	Kahana	20060000-1-18
Kahoolawe	Kahoolawe	Oawawaihie	20030000-1-84
		Hakioawa	20030000-1-85
		Kealia Luna	20030000-1-86
		Waiiki	20030000-1-87
		Papakaiki	20030000-1-88
		Papakanui	20030000-1-89
		Kaulana	20030000-1-90
		Kuheeia	20030000-1-91
		Olohia	20030000-1-92
		Moaulaiki	20030000-1-93
		Kaukamoku	20030000-1-94
		Ahupu	20030000-1-95
		Ahupuiki	20030000-1-96
		Makaalae	20030000-1-97
		Honokoa	20030000-1-98
		Lae Paki	20030000-1-99
		Kahului Bay	Maui
Honokanaia	20030000-2-93		
Waikahalulu	20030000-2-94		
Kanaloa	20030000-2-95		
Kamohio	20030000-2-96		
Lae o Kaka	20030000-2-97		
Kaukamaka	20030000-2-98		
Pali o Kalapakea	20030000-2-99		
		Iao	20020000-2-09

Table 3 (continued)

Waterbody Segment	Island	Watershed Unit Name	Code		
Keehi Lagoon	Oahu	Kalihi	20060000-3-11		
		Moanalua	20060000-3-12		
		Keehi	20060000-3-13		
		Manuwai	20060000-3-14		
		Salt Lake	20060000-3-95		
Kewalo Basin	Oahu	Ala Wai	20060000-3-07		
Pearl Harbor	Oahu	Manuwai	20060000-3-14		
		Halawa	20060000-4-02		
		Aiea	20060000-4-03		
		Kalauao	20060000-4-04		
		Waimalu	20060000-4-05		
		Waiawa	20060000-4-06		
		Waipio	20060000-4-08		
		Kapakahi	20060000-4-09		
		Waikele	20060000-4-10		
		Honouliuli	20060000-4-11		
		Kalo	20060000-4-99		
		Kaiaka-Waiialua Bays	Oahu	Waiialua	20060000-6-05
				Kiikii system	20060000-6-06
				Kiikii	20060000-6-06.00
Poamoho	20060000-6-06.01				
Kaukonahua	20060000-6-06.02				
Paukauila system	20060000-6-07				
Paukauila	20060000-6-07.00				
Opaeula	20060000-6-07.01				
Helemano	20060000-6-07.02				
Anahulu system	20060000-6-08				
Anahulu	20060000-6-08.00				
Kawaiiloa	20060000-6-08.01				
Kawainui	20060000-6-08.02				
Kawaiiki	20060000-6-08.03				
Loko Ea	20060000-6-09				
Keamanea	20060000-6-98				
Waimea	Kauai	Mahinauli	20070000-4-01		
		Aakukui	20070000-4-02		
		Waipao	20070000-4-03		
		Waimea	20070000-4-04		
		Kaumakini	20070000-4-98		
		Kapilimao	20070000-5-01		