

**HONOAPIILANI HIGHWAY REALIGNMENT/WIDENING,  
MAALAEA TO LAUNIUPOKO**

**West Maui**

**ENVIRONMENTAL IMPACT STATEMENT PREPARATION NOTICE  
DRAFT STATEMENT OF PURPOSE AND NEED  
PRE-SCOPING INFORMATION AND PRE-ASSESSMENT OF WATERS OF  
THE U.S.**

**Prepared Pursuant to  
Hawaii Revised Statutes, Chapter 343  
SAFETEA-LU, Sections 6001 and 6002  
Memorandum of Understanding: National Environmental Policy Act and  
Clean Water Act Section 404—Integration Process for Surface  
Transportation Projects in the State of Hawaii**

Submitted by  
Hawaii Department of Transportation and Federal Highway Administration

**May 11, 2007**

## **Notice of Chapter 343 Determination**

### **Project Name**

Honoapiilani Highway Realignment/Widening, Maalaea to Launiupoko

### **Applicant/Proposing Agency:**

Hawaii Department of Transportation (HDOT)

869 Punchbowl Street, Room 301

Honolulu, HI 96813

### **Accepting Authority:**

Governor, State of Hawaii

### **Brief Description of the Proposed Action:**

The Honoapiilani Highway Realignment/Widening, Maalaea to Launiupoko (the project) consists of proposed improvements to Honoapiilani Highway (State Highway 30) between Maalaea and Launiupoko, West Maui. Highway improvements may involve widening portions of the existing highway and/or constructing a new highway along a different alignment. Improvements to this segment of Honoapiilani Highway are needed in response to capacity limitations and roadway safety and reliability issues.

### **Determination:**

Implementation of this project will be pursuant to both the State Environmental Impact Statement (EIS) law (Chapter 343 of the Hawaii Revised Statutes), and the National Environmental Policy Act (NEPA). In addition, the project will comply with SAFETEA-LU Sections 6001 and 6002. Since the impacts of this project will be significant, an Environmental Impact Statement (EIS) is required.

### **Reasons Supporting Determination:**

The determination was made because State and federal funds may be used and the project will have significant environmental, cultural, historic, archaeological, recreational and engineering impacts.

### **Contact Person for Further Information:**

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Honolulu, HI 96813

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## **Project Summary**

The Hawaii Department of Transportation (HDOT), in cooperation with the Federal Highway Administration (FHWA), will be preparing an Environmental Impact Statement (Draft and Final EIS) to evaluate several realignment and/or widening alternatives with the potential to provide increased roadway capacity, safety, and reliability for Honoapiilani Highway (HI-30) between Maalaea and Launiupoko.

### **Tax Map Keys**

Portions of Tax Map Zones: 2-3-6, 2-4-7, and 2-4-8

### **Location**

Island of Maui, Lahaina and Wailuku Districts

### **Project Area**

The project limits extend approximately 11 miles from just west of Maalaea where the four lanes of Honoapiilani Highway currently end, through the Pali area, and across the coastal plain from Ukumehame to the future intersection with the planned Lahaina Bypass Road in Launiupoko.

### **Landowners**

Land owners affected include State and County entities, as well as private corporations and individuals.

### **Project Description**

Alternative improvements to Honoapiilani Highway between Maalaea and Launiupoko that would increase roadway capacity, enhance safety, and improve the reliability of travel will be examined. Alternatives to be examined will be expanded through the scoping process, but may include widening of the existing Honoapiilani Highway, construction of a new roadway, intersection improvements, and a combination of alternatives.

### **Existing Uses**

The existing Honoapiilani Highway right-of-way is used for transportation purposes. A new alignment may traverse areas that are undeveloped or formerly used for agriculture. Areas currently or proposed to be used for residential, commercial, public facility, and/or parklands may also be affected.

### **State Land Use Designation**

Agricultural, Conservation

### **West Maui Community Plan**

Park, Open space, Agriculture

### **County Zoning Designation**

Agriculture, Park, Residential, Commercial

**Flood Zones**

Portions of the existing Honoapiilani Highway alignment are located in FEMA coastal flood hazard zones.

**Special Management Area**

Yes

# ENVIRONMENTAL IMPACT STATEMENT PREPARATION OF NOTICE

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# 1 INTRODUCTION

The Hawaii Department of Transportation (HDOT), in cooperation with the Federal Highway Administration (FHWA), will be preparing an Environmental Impact Statement (EIS) to evaluate alternatives to improve the roadway capacity, safety, and reliability of Honoapiilani Highway (HI-30) between Maalaea and Launiupoko on the west side of Maui. This segment of the road is the main vehicular travel way for people and goods between West Maui and the rest of the island.

## 1.1 Regulatory Purposes Fulfilled by this Document

This document is intended to satisfy three separate regulatory requirements, thereby expediting the environmental review process. Details of the regulations being satisfied by this document may be of most interest to government agencies, and are discussed briefly below.

- Chapter 343, Hawaii Revised Statutes: Chapter 343 is Hawaii’s EIS Law. This law requires the preparation, notice and distribution of an Environmental Impact Statement Preparation Notice (EISPN). The purpose of the EISPN is to announce that an EIS will be prepared, and provide sufficient information for agencies and the public to provide input on the scope of the EIS. This document is intended to be the EISPN for this project.
- Section 6002 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU): Section 6002 requires that government agencies be provided with a draft purpose and need statement for their review and comment. Section 1.3 of this document is intended to be the draft purpose and need statement required by SAFETEA-LU. This document is being distributed to government agencies. Input received will be documented and taken into consideration when developing the final Statement of Purpose and Need.
- Memorandum of Understanding: National Environmental Policy Act and Clean Water Act Section 404—Integration Process for Surface Transportation Projects in the State of Hawaii: This MOU is intended to coordinate the NEPA process with the permit process for individual permits issued under Section 404 of the Clean Water Act (covering discharge of fill material into waters of the U.S., including wetlands). This project may need an individual Section 404 permit because of potential impacts on wetlands. The MOU states that HDOT will send to those agencies involved in the Section 404 permit process “pre-scoping information and pre-assessment of waters of the U.S.” This document is being distributed to all of the agencies involved in the Section 404 permit process, and is intended to be the “pre-scoping

information” specified in the MOU. Section 3.2.4 of this document is intended to be the “pre-assessment of waters of the U.S.”

## 1.2 Project Location

The Honoapiilani Highway Realignment/Widening, Maalaea to Launiupoko project is located in west Maui. The project study area is the 11-mile segment of Honoapiilani Highway from the western terminus of the recent Honoapiilani Highway widening project near Maalaea, to the southern terminus of the future Lahaina Bypass Road near Launiupoko (Figure 1 Project Location Map).

(The HDOT, in coordination with FHWA, is currently proposing the relocation of the southern terminus of the proposed Lahaina Bypass Highway from its former proposed terminus point at Launiupoko, to the vicinity of the former Olowalu Landfill site. This project is called the Proposed Lahaina Bypass Southern Terminus Relocation. If the Southern Terminus relocation is built, the western end of the project—the Honoapiilani Highway Realignment/Widening, Maalaea to Launiupoko—would connect to the Lahaina Bypass Road near the vicinity of the former Olowalu Landfill site. Regardless of the potential relocation of the southern terminus of the Lahaina Bypass Highway, the project will connect to the Lahaina Bypass (Figure 2).)

The project corridor extends *mauka-makai* (from the mountains to the sea) from the base of the West Maui Mountains to the shoreline. The project area is composed predominantly of a steep, rocky area known as the Pali Area, and a coastal plain that includes the ahupua’a of Ukumehame, Olowalu, Launiupoko, and Polanui.

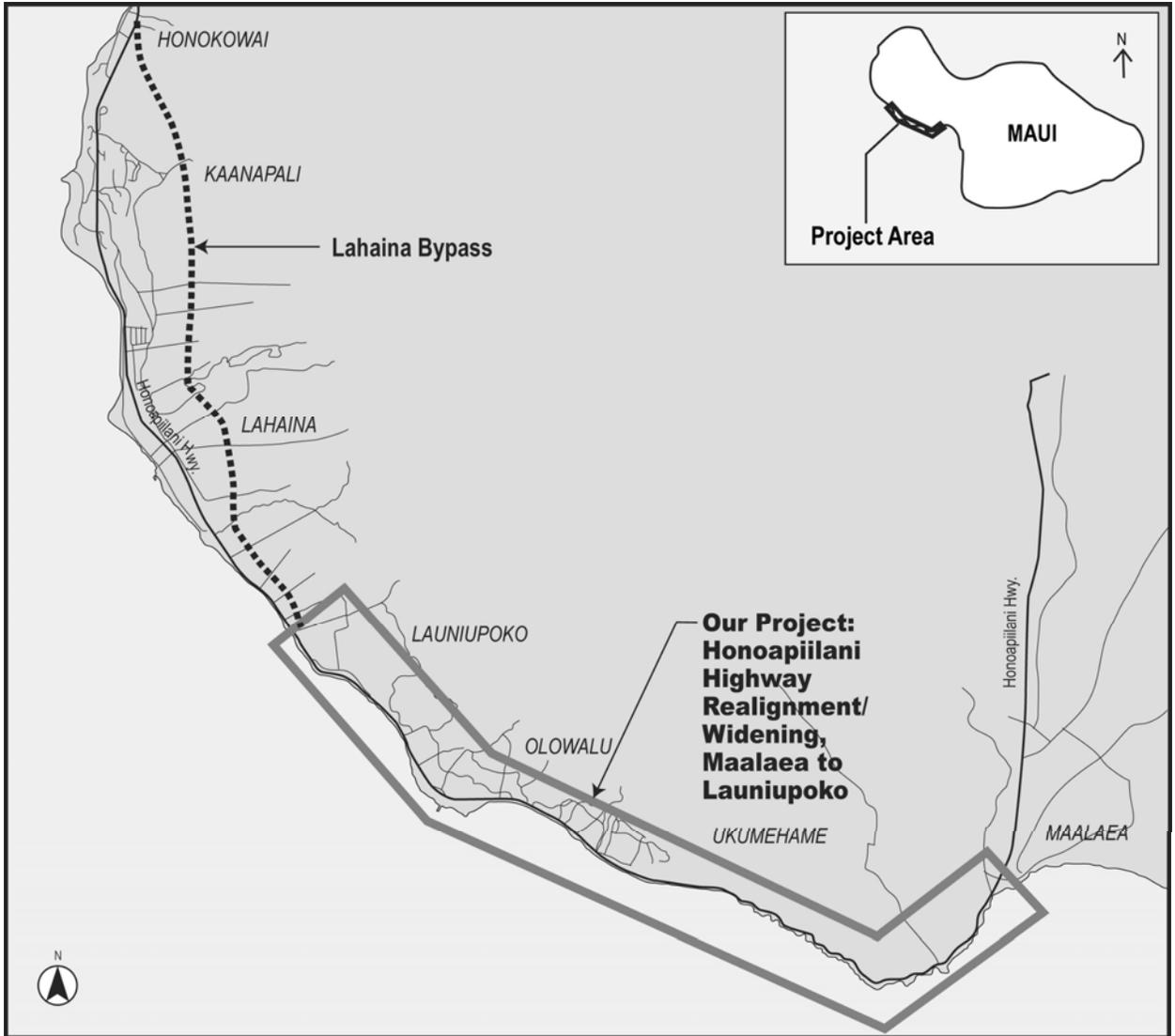


Figure 1. Project Location Map

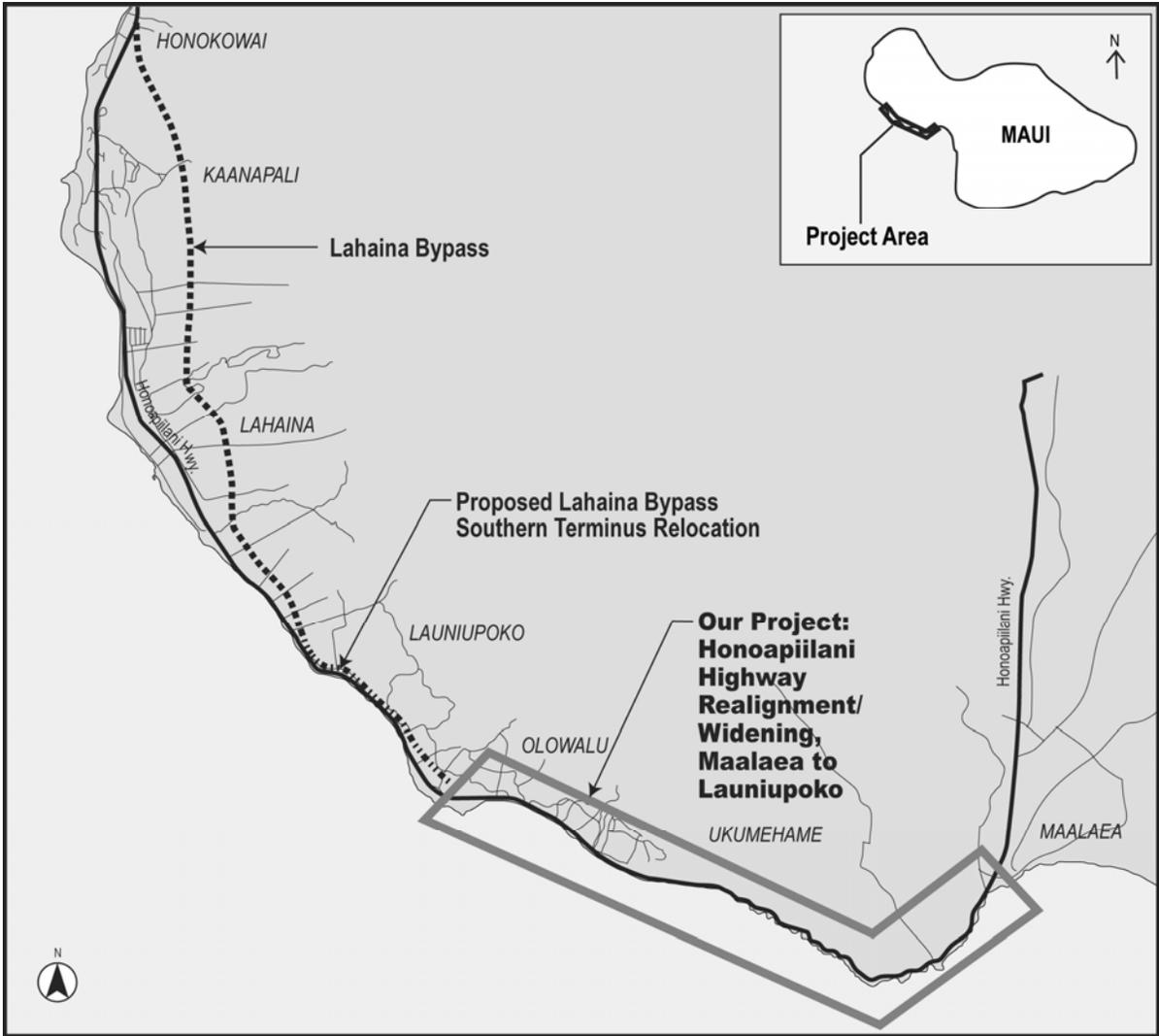


Figure 2. Proposed Lahaina Bypass Southern Terminus Relocation

## 1.3 Purpose and Need for Action

The following initial list of possible project purposes (project goals) and needs (current conditions needing improvement) is provided to continue discussion. This list was derived from prior government plans, HDOT, independent observation by engineers familiar with the area, input received at the community meeting held on April 19, 2007 at the Princess Nahienaena Elementary School, and small group meetings held on Maui in March and April, 2007.

Possible purposes (goals) of the Honoapiilani Highway Realignment/Widening, Maalaea to Launiupoko are to:

- **Alleviate existing congestion;**
- **Accommodate future travel demand;**
- **Protect road from shoreline erosion;**
- **Complement land use and preservation plans;**
- **Improve reliability of access to and from West Maui;**
- **Enhance pedestrian and vehicular mauka/makai movements;**
- **Provide consistent roadway system linkages;**
- **Enhance modal interrelationships and non-vehicular modes of travel;**
- **Improve public safety for emergencies; and**
- **Improve substandard road elements.**

Additional and revised project purposes (goals) may be identified through the planning process.

An expanded discussion of the purposes above, and the needs to be addressed by the project goals, follows.

### **Alleviate Existing Congestion**

Traffic along this portion of Honoapiilani Highway is frequently congested. Congestion is observed not only during the morning and afternoon peak periods, but also throughout the day. In extreme cases travel delays can exceed one hour. Traffic congestion specifically caused by roadway capacity constraints includes queuing formed by those making left turns and inability to maneuver around traffic accidents or lane blockages. Enhanced roadway capacity is needed now to reduce the delays caused by turning movements and such incidents. Enhanced capacity would improve the reliability of travel on the roadway.

## **Accommodate Future Travel Demand**

Existing plans project further growth and development in West Maui, which would correspondingly increase travel demand. According to socio-economic projections for the Maui County General Plan 2030 (County of Maui Planning Department), the county's "de facto" population (residents and visitors) will increase by 54 percent from 2000 to 2030. With the congested project corridor this additional demand cannot be accommodated by the current transportation infrastructure. Furthermore, the Maui County General Plan 1990 identifies the need to anticipate and enlarge highway systems in a timely response to planned growth. The project would support the Maui County General Plan 1990 Update in meeting the County's growing transportation needs by providing increased roadway capacity to and through West Maui.

## **Protect Road From Shoreline Erosion**

Shoreline erosion is threatening segments of the existing Honoapiilani Highway. Certain segments have required additional barrier protection to prevent ocean waves from adversely affecting the road. It is not uncommon for cars to be splashed by waves. Unless action is taken, segments of the road will erode further, and the facility will no longer be able to accommodate through traffic. Should this happen, West Maui would be cut off from Central Maui. Therefore, there is a need to improve the road to account for the effects of shoreline erosion.

## **Complement Land Use and Preservation Plans**

Planned developments are proposed at several locations along this corridor, and beyond the corridor towards Lahaina and Kapalua. While some of these developments are likely to be built without the project, some of the developments abutting this segment of the highway may be greatly affected by how the existing highway is improved, or by a new alignment. In either case, there is a need for additional roadway infrastructure to accommodate the planned developments, consistent with official governmental planning processes.

There is also a need to preserve open space, including but not limited to the shoreline. The following County of Maui documents reinforce the County's desire to preserve open space along the coastline of West Maui: 1) Pali to Puamana Parkway Master Plan (2005); 2) West Maui Community Plan (1996); and 3) Maui County General Plan (1990 and 2030). The Pali to Puamana Parkway Master Plan identified the possibility of HDOT realigning Honoapiilani Highway between Ukumehame and Launiupoko. It is therefore a project goal (purpose) for the roadway improvements to promote desired patterns of open space preservation.

This project will be coordinated with planning in the area, such as:

- updates to the Maui County General Plan, which include Maui General Plan Advisory Committee (GPAC) input and the following plans:
  - County Wide Policy Plan
  - Maui Island Plan

- Affected Community Plans (West Maui and Kihei-Makena);
- The Pali to Puamana Parkway Master Plan (P2P Plan). The West Maui Community Plan will be amended to include this plan.
- the Maui Long-Range Land Transportation Plan, including the latest Maui travel demand model;
- the Proposed Lahaina Bypass Southern Terminus Relocation project;
- Makila master planning efforts;
- the Olowalu Town Plan;
- the Strategies to Link Central and West Maui Plan;
- the proposed Honoapiilani Highway Passing Lanes, Maalaea to Puamana Plan;
- Bike Plan Hawaii; and
- U.S. Department of Homeland Security Strategic Plan.

### **Improve the Reliability of Access To and From West Maui**

A variety of incidents have forced closure of this segment of the highway. In addition to traffic incidents, the road has been closed because of high water, brush fires and rock falls. Improvements are needed to make travel along the highway more reliable and safe. Therefore, it is a goal of the project to improve the reliability of travel in this corridor.

### **Enhance Pedestrian and Vehicular Mauka/Makai Movements**

Because of current levels of congestion, crossing this segment of highway on foot, by bicycle, or even by car can be difficult. There is a need to facilitate crossing the road. Therefore, a purpose of this project is to enhance mauka-makai movements across the road for pedestrian, bicycle and vehicular modes.

### **Provide Consistent Roadway System Linkages**

The Honoapiilani Highway Widening, North Kihei Road to Maalaea project that was completed in 2003 increased the capacity of Honoapiilani Highway immediately east of project area by widening it from two to four lanes; the proposed Lahaina Bypass Road would accomplish a similar increase to roadway capacity immediately west of the project area (Figure 1 Project Location). Therefore, the project is needed to create the “connecting link” between these two other roadway widening projects. Providing more travel lanes within this corridor would sustain the increased roadway capacity throughout the West Maui highway transportation system.

### **Enhance Modal Interrelationships and Non-Vehicular Modes of Travel**

Honoapiilani Highway provides the principal link between West Maui and the island’s transportation hubs, including Kahului Airport, Kahului Harbor, and

Maalaea Small Boat Harbor. Congestion on Honoapiilani Highway has caused people to miss their flights and delayed the delivery of essential supplies to West Maui. The project is needed to improve the reliability of connections to airport and port facilities. Therefore, a purpose of the project is to improve intermodal connections.

Kahului Airport is a regional airport, and is the largest domestic and commuter airport serving Maui. The Hawaii State Legislature has authorized several phases of expansion for Kahului Airport, with the long-term goal of elevating Kahului Airport to permanent international airport status.

Kahului Harbor is the largest commercial port on Maui. Kahului Harbor is served by Matson, Young Brothers and other ocean carriers, and will be served by the Hawaii Superferry beginning in July 2007. The Kahului Commercial Harbor 2030 Master Plan, prepared by HDOT, recognizes the harbor's important role in serving Maui and identifies improvements to be made, including increased port capacity to accommodate planned growth.

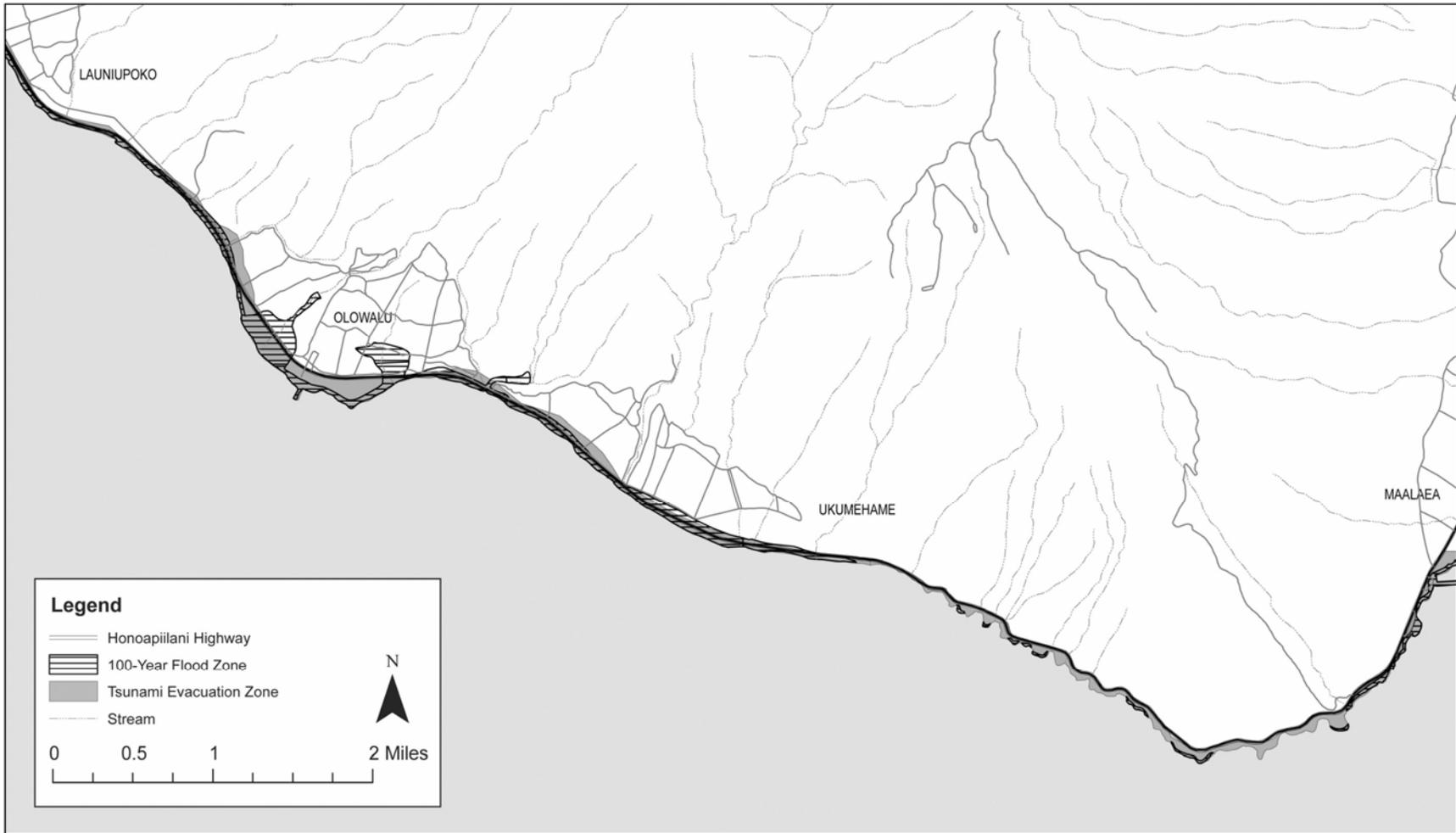
Maalaea Small Boat Harbor is a state-operated facility with approximately 90 berths, in addition to a U.S. Coast Guard Station.

Bike Plan Hawaii 2003 is a HDOT master plan to enhance the bicycling environment of Hawaii. Additionally, the Maui County General Plan 2030 stresses the need for a multi-modal approach to transportation, moving the focus away from automobiles. Bicycles are an important means of transportation for both residents and visitors to West Maui. Bike Plan Hawaii 2003 identifies Honoapiilani Highway as a future proposed bike route.

### **Improve Public Safety for Emergencies**

The current alignment of Honoapiilani Highway places it within the 1) Tsunami Inundation Zone, defined by Maui Civil Defense; 2) Stream and Coastal Flood Zone, defined by the Federal Emergency Management Agency (FEMA); and 3) Coastal Beach Erosion Zone, defined by Maui Department of Planning ( Figure 3 100-Year Flood and Tsunami Evacuation Zones). There is a need to shift the road outside of these areas, and that need has been articulated in existing plans. For example, the project would support the objectives of Maui Civil Defense, FEMA, and Maui Department of Planning, encouraging responsible development in the coastal area by moving infrastructure away from the erosion, tsunami inundation, and flood plain zones. Therefore, a purpose of the project is to improve public safety by moving the road outside of these areas.

The U.S. Department of Homeland Security Strategic Plan (2004) sets guidelines for establishing preparedness and mitigation measures against acts of terrorism, natural disasters, or other emergencies. Increased roadway capacity in the project corridor is needed to provide the transportation infrastructure necessary for an area evacuation and for administering large-scale emergency response services to West Maui. Therefore, a project purpose is to improve public safety by improving the area's capability to respond to disasters of many types.



Source: Hawaii Statewide GIS Program  
 Maui County GIS (Online Services)  
 US Geological Survey (USGS)

Figure 3. 100-Year Flood and Tsunami Evacuation Zones

## **Improve Substandard Road Elements**

This segment of Honoapiilani Highway is a two lane roadway. In the project area, the highway traverses the Olowalu Tunnel, a continuous concrete tunnel approximately 330 feet long that was necessary to cross the Pali area, and over four concrete slab bridges ranging in length from 25 to 65 feet. In response to increasing demands on the roadway, there is a need to bring Honoapiilani Highway up to current AASHTO standards based on its road classification. Therefore, a purpose of the project is to bring the roadway up to current standards.

Improvements could include widening the highway right-of-way to allow for increased lanes, provision of bicycle facilities, and increased shoulder areas; realigned geometrics; upgrades to bridge and tunnel structures; more extensive guard rails in sections of the roadway with steep cliffs; and increased protective measures in areas prone to rock falls or landslides.

## **1.4 Planning Process**

### **1.4.1 EIS Trigger**

Since the project would use State funds and property, it must undergo environmental review in accordance with Hawaii Revised Statutes (HRS) Chapter 343 (the State EIS Law). Similarly, since federal funds may be used, the project must also comply with the National Environmental Policy Act (NEPA). A single EIS document will be prepared to comply with both State and federal EIS requirements.

### **1.4.2 Significance Criteria**

Based on Significance Criteria specified in Hawaii Administrative Rules (HAR) Chapter 200, HDOT has determined that the proposed action will have a significant impact on the environment; therefore, HDOT will prepare an EIS. This EISPN will be announced in the Office of Environmental Quality Control's publication, the *Environmental Notice*.

The FHWA has also determined that the project will have a significant impact on the environment and FHWA will publish a "Notice of Intent" (NOI) to prepare an EIS in the *Federal Register*.

### **1.4.3 Scoping**

Scoping activities, including analysis of input received from noticing and distributing the EISPN, will be conducted before the preparation of the DEIS (see Section 4 for a more complete discussion of scoping activities). A 30-day public comment period will follow the publication of the EISPN, and input will be considered in the development of the DEIS.

### **1.4.4 Alternatives Screening**

The scoping process and engineering investigation will identify a list of possible roadway improvement alternatives. HDOT will prepare an Alternatives Analysis EISPN

Report (AA) that will evaluate the range of alternatives. It is expected that only those most feasible and prudent alternatives advancing from the AA will receive detailed assessment in the DEIS.

#### **1.4.5 Draft and Final Environmental Impact Statements**

The DEIS will describe the project alternatives being considered, and discuss potential impacts of the alternatives in a comparative format. It will define the issues that differentiate between the alternatives, and provide a basis for choice by decision makers and the public. Areas of potential impact to be discussed will be finalized after the completion of the scoping process, but may include land use and zoning; parklands; economic development; community disruption and displacements; environmental justice; aesthetics; air quality; noise; wildlife, vegetation, threatened and endangered species; farmland; water quality, wetlands, waterways, and floodplains; energy; hazardous materials; indirect and cumulative impacts; construction-phase impacts; and cultural, historic, and archaeological resources. Impacts to resources covered by Section 4(f) of the 1966 U.S. Department of Transportation Act also will be addressed.

Upon completion of the DEIS, a DEIS notice of availability will be published in OEQC's *Environmental Notice*, and a notice of availability will be published in the *Federal Register*. The OEQC notice will trigger a 45-day public review period, and the *Federal Register* notice will trigger a 60-day public review period. All comments received by the later deadline will be considered.

Comments will be incorporated into a Final EIS (FEIS). The alternative determined to be the most prudent and practicable by HDOT and FHWA will be identified in the FEIS as the Preferred Alternative.

Upon acceptance by the Governor of Hawaii of the FEIS, a notice of acceptance of the FEIS will be published in the OEQC *Environmental Notice*, initiating a 60-day challenge period.

Availability of the FEIS also will be published in the *Federal Register*, initiating a 30-day public review period. After that time, a federal Record of Decision (ROD) will be filed by the FHWA. The ROD will record the federal recommendation of the selected alternative and document the decisions made by the implementing agencies. It will also document any commitments made as conditions for construction, such as mitigation requirements.

#### **1.4.6 Accepting Authorities**

The accepting authorities of the FEIS are the Governor of Hawaii and the FHWA Division Administrator. Once the Governor accepts the FEIS, the requirements of Chapter 343 will be satisfied. At the federal level, the Record of Decision (ROD) will be prepared and signed by the Division Administrator after acceptance of the FEIS. Approval of the ROD by the FHWA completes the NEPA process.

#### **1.4.7 Statute of Limitations**

A new provision in Section 6002 of SAFETEA-LU allows the HDOT and FHWA to invoke a 180-day statute of limitations (SOL) on claims for all environmental and other approval actions made during this planning process. SOL applies to a permit, license, or approval action by a Federal agency if:

- The action relates to a transportation project; and
- A SOL notification is published in the *Federal Register* (FR) announcing that a Federal agency has taken an action on a transportation project that is final under the Federal law pursuant to which the action was taken.

The HDOT and FHWA intend to invoke the 180-day statute of limitations provision for this project.

## **2 ALTERNATIVES**

The scoping process being initiated by the distribution of this EISPN, and a separate engineering evaluation, are intended to generate a range of project alternatives for subsequent evaluation. Public input on alternatives that would help to satisfy project purposes is requested. A screening process is envisioned, with the most promising alternatives being addressed in greater detail. Public input on the criteria to determine which alternatives are the most promising also is requested.

For the alternatives to be discussed in greater detail, the DEIS will summarize the environmental consequences of each alternative, comparing and defining the differences between them.

### **2.1 No Build Alternative**

The DEIS will describe the No Build alternative, which would leave Honoapiilani Highway in its current condition except for possible short-term and minor activities such as safety upgrades and maintenance. It will discuss projected traffic volumes and other environmental conditions under this scenario, and assess the impact of the No Build alternative. The degree to which the No Build alternatives satisfies project purposes and needs will also be discussed.

### **2.2 TSM Alternative**

A Transportation System Management (TSM) alternative requiring minimized construction and capital investment will also be described in the DEIS. TSM measures may include lower-capital investment solutions such as restriping the roadway, establishing contraflow lanes, enhancing transit, widening the roadway in-place, and/or raising the roadbed in areas of high shoreline hazard. The TSM could also include establishing and improving intersections along the existing roadway, including channelization, roundabouts, or left turn lanes.

The TSM alternative will attempt to improve the performance of existing transportation facilities through minimized initial cost. However, the cost of ongoing maintenance and repairs to the facility may be higher with a TSM alternative. Whether the maintenance costs of the TSM alternative appear to be substantially different from the maintenance costs of the other alternatives will be examined.

### **2.3 Alternative Alignments**

The DEIS will describe alternative alignments that are being considered for shifting the roadway mauka, as well as other combinations of highway widening and new road construction.

Possible alternative alignments could include 1) Kaanapali to Wailuku highway; 2) Aerial cable car; 3) Tunnel under the Pali; 4) Ocean causeway around the Pali; 5) Light Rail Transit from Lahaina to Wailuku; 6) Pave "Haul Cane Road" (Industrial Road, or Cane Haul Road); 7) Realignment included in the County's

Pali to Puamana Master Plan (P2P Plan); 8) Alternative proposed in a study commissioned by some landowners in the corridor; 9) Roadway couplet concepts such as two lanes westbound on a mauka alignment and two lanes eastbound on the existing road; 10) Widen and elevate the existing road to provide for contraflow operation; and 11) Widen and elevate the existing road to provide for high occupancy vehicle (HOV) lanes.

Additional alternatives would reduce the need to make improvements to the existing roadway, such as 1) Enhance the County bus system; 2) Encourage West Maui hotels to provide enhanced shuttle service and car pools for workers; and 3) Establish an intra-island ferry system from Maalaea to: Mala Wharf, Lahaina small boat harbor, or a new harbor to be constructed at Cut Mountain.

## **2.4 Key Issues and Evaluation Criteria for Alternatives**

Criteria will be used to differentiate among improvement alternatives. Input on the criteria that should be used to screen and evaluate the alternatives is welcome.

An initial list of criteria that are expected to differentiate among the alternatives are:

- 1) Construction cost;
- 2) Achievement of project purposes and needs, such as transportation performance, achievement of desired land use and preservation patterns, and shoreline access;
- 3) Environmental impact, such as impacts on cultural resources, archaeological resources, biological resources, and water resources;
- 4) Social and community impacts;
- 5) Indirect and cumulative impacts; and
- 6) Ease of implementation, including engineering feasibility and cost-benefit ratio.

## **3 ENVIRONMENTAL SETTING AND PROPOSED IMPACT STUDIES**

This section provides a brief overview of the existing environmental conditions in the study corridor. Implementation of the project would produce both adverse and beneficial impacts to the environment, and this section will briefly describe the current understanding of potential impacts to be analyzed in the DEIS. In turn, the following topics may also help evaluate the improvement alternatives listed in Section 2.

### **3.1 Transportation System**

Effects of each project alternative on the transportation system will be addressed in the DEIS, including traffic, transit, non-motorized transportation, and parking.

### **3.2 Physical Environment**

#### ***3.2.1 Geology and Soils***

The DEIS will show the location of soil types in the area and describe their suitability for construction. Some of these soil types may be considered “prime” or “significant” in terms of agricultural use. Rockfall hazards associated with the alternatives will be discussed.

#### ***3.2.2 Air Quality***

Air quality impacts will be discussed qualitatively, since Hawaii is in attainment of air quality standards. It is not expected that air quality impacts will differentiate among the alternatives.

Construction would cause localized, short-term air quality impacts. Mitigation measures for construction-phase air pollutant emissions will be discussed.

#### ***3.2.3 Noise***

The alternatives would affect noise levels at certain locations both during construction and roadway use. Noise analyses will be conducted to determine whether the noise impacts would vary among the alternatives. Consideration of noise walls may be warranted.

#### ***3.2.4 Water Resources***

##### **Streams**

There are three major streams in the project area: Ukumehame Stream, Olowalu Stream, and Launiupoko Stream. There are approximately 22 other perennial, non-perennial and intermittent streams in the project corridor. The DEIS will identify major streams and “waters of the U.S.” in the study corridor. The impacts of the alternatives on these surface water resources will be discussed.

## **Wetlands and Floodplains**

Wetlands exist within the corridor in coastline areas around Olowalu and Papalaua Wayside Park (Figure 4 Waters of the U.S.). Wetlands will be delineated using the U.S. Army Corps of Engineers definition of wetlands, and the impact of the alternatives on wetlands will be discussed.

Much of the current Honoapiilani Highway, from Papalaua Wayside Park to Launiupoko, is located within the 100-year floodplain (Figure 3 100 -Year Flood and Tsunami Evacuation Zones). The DEIS will include current Flood Insurance Rate Map information and identify flood-prone areas. Because a new roadway could affect regional drainage patterns, the DEIS will examine the impact of each of the project alternatives on area hydrology, drainage, and flood conditions.

## **Aquifers**

The Iao and Waihee aquifers are basal aquifers containing large reserves of fresh groundwater that supply much of the island. In addition, parts of West Maui are served by surface water that flows from the West Maui Mountains Watershed. There have been some concerns about the reliability of Maui's potable water supply due to droughts in recent years. However recent estimates indicate that the total potential supply of potable water on Maui is many times greater than any foreseeable demand. The potential impact on groundwater resources is not expected to differentiate among the project alternatives.

### **3.2.5 Biological Resources**

#### **Terrestrial Fauna**

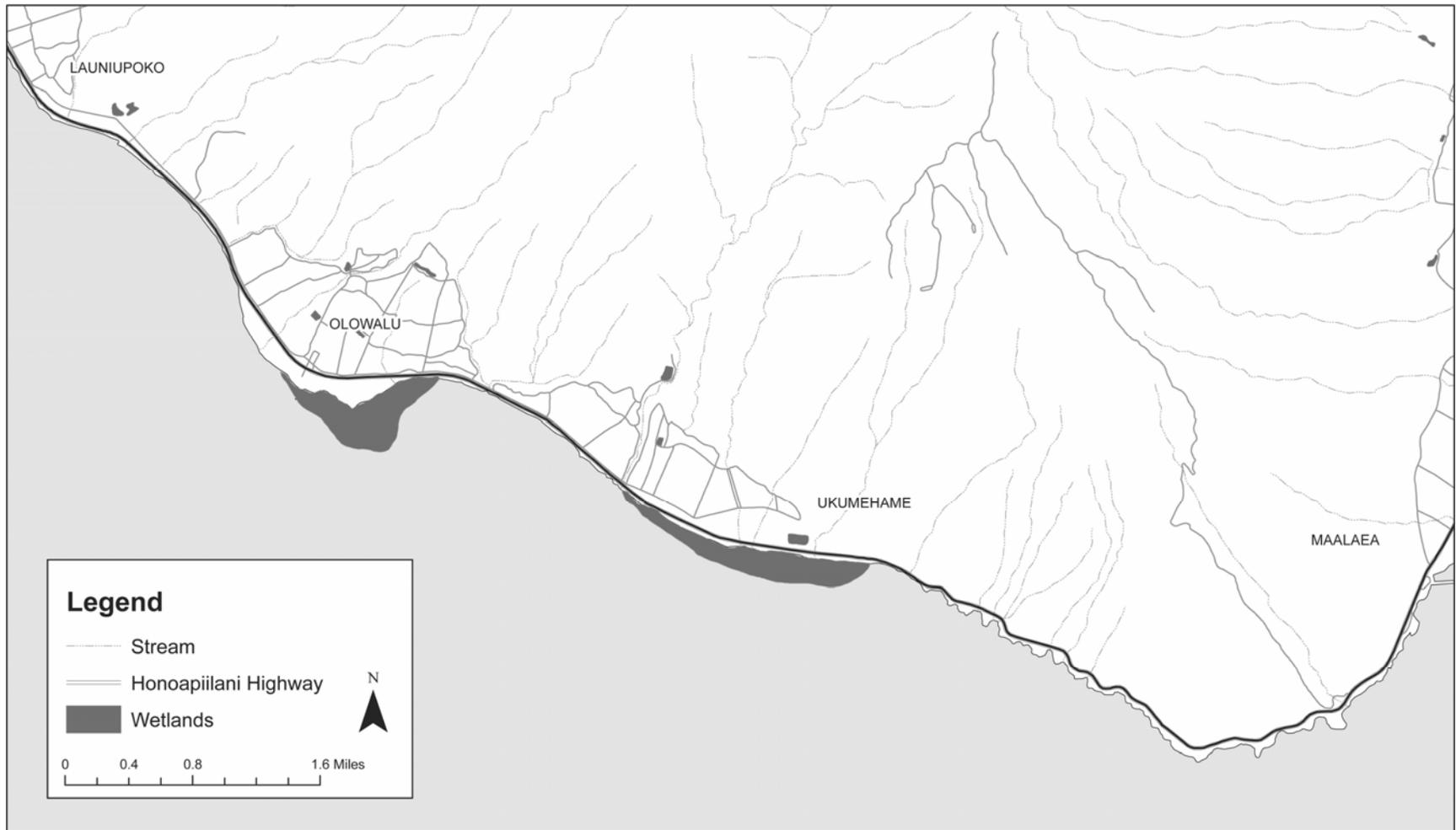
The DEIS will include an assessment of zoological resources. The study will also identify wetland areas that serve as water bird habitats. The project alternatives will be compared based on their relative impact to the terrestrial fauna, including threatened and endangered species and their habitats. If impact to these species or their habitat cannot be avoided, mitigation measures will be identified.

#### **Aquatic Resources**

Streams within the project area provide habitat for native and introduced species of fish, insects, mollusks, and crustaceans. The DEIS will examine impacts on aquatic resources, particularly with respect to any differential impact that the alternatives could generate. The study will also recommend mitigation to minimize the impact of project-related construction activities.

#### **Botanical Resources**

The DEIS will include a botanical survey and wetland study that will identify vegetation types and plant communities within the project area. The DEIS will discuss the presence or absence of threatened and endangered species or species of concern along the alternative roadway alignments. Differential environmental impacts generated by the alternatives will be identified and appropriate mitigation measures proposed.



**Source:** Hawaii Statewide GIS Program  
 Maui County GIS (Online Services)  
 US Geological Survey (USGS)

**Figure 4. Waters of the U.S.**

## **Threatened or Endangered Species Consultation**

Consultation with the U.S. Fish and Wildlife Service will be conducted in accordance with Section 7 of the Endangered Species Act. The State of Hawaii Department of Land and Natural Resources (DLNR) will also be consulted.

### **3.2.6 Hazardous Materials**

It is possible that areas may contain contaminated soil and groundwater, such as areas near the Olowalu Landfill. The DEIS will include a hazardous materials study, including a database search of potential sources of contamination and assessments of whether the proposed action would trigger releases of contamination. Differential impacts of the alternatives will be discussed.

## **3.3 Social Environment**

### **3.3.1 Land Ownership and Land Use**

The study area includes publicly and privately owned lands, and developed and undeveloped areas (Figure 5 Land Ownership). Properties within the study area are designated as Agriculture, Urban, and Conservation districts by the State Land Use Commission (Figure 6 State Land Use Designation). The Conservation designated lands are generally located along the shoreline makai of the existing Honoapiilani Highway, and extend further mauka east of Papalaua Wayside Park. Figure 7 identifies some of the major landmarks and features within the study area.

The land use impacts of the different project alternatives may vary substantially. Therefore, comparing the land use impacts of the alternatives is expected to be a focus of the DEIS. The DEIS will provide information on land ownership and use, including future land uses. The DEIS will also address possible impacts that the alternatives may cause, including residential or commercial displacements and adverse impacts on existing businesses. Mitigation measures will be discussed.

The indirect and cumulative impacts of the alternatives may also vary substantially between the alternatives. The President's Council on Environmental Quality (CEQ) regulations implementing NEPA define indirect impacts as those:

“which are caused by the proposed action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to the induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.”

The indirect impacts of the project will be associated with nearby induced land development resulting from improved accessibility and mobility provided by the project.

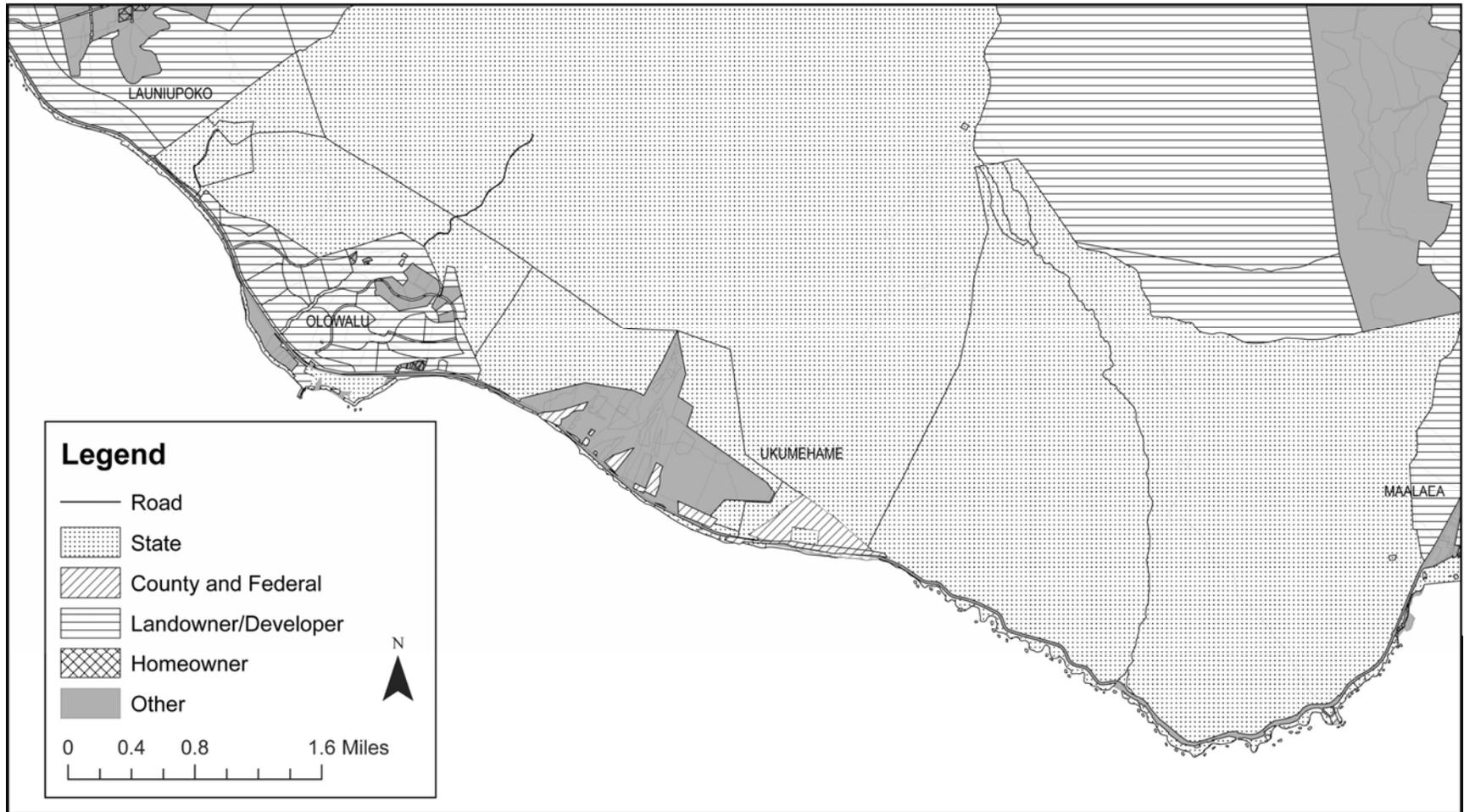
Cumulative impacts are those impacts:

“which result from the incremental consequences of an action when added to other past and reasonably foreseeable future actions” (*Code of Federal Regulations*, Title 40, Section 1508.7). ....While impacts can be differentiated by direct, indirect and cumulative, the concept of cumulative impacts takes into account all disturbances since cumulative impacts result from the compounding of the effects of all actions over time. Thus the cumulative impacts of an action can be viewed as the total effects on a resource, ecosystem, or human community of that action and all other activities affecting that resource no matter what entity (federal, non-federal, or private) is taking the actions.” (*Consideration of Cumulative Impacts in EPA Review of NEPA documents, U.S. Environmental Protection Agency, Office of Federal Activities (2252A), EPA 315-R-99-002/May 1999*)

### **Use of Prime Agricultural Lands**

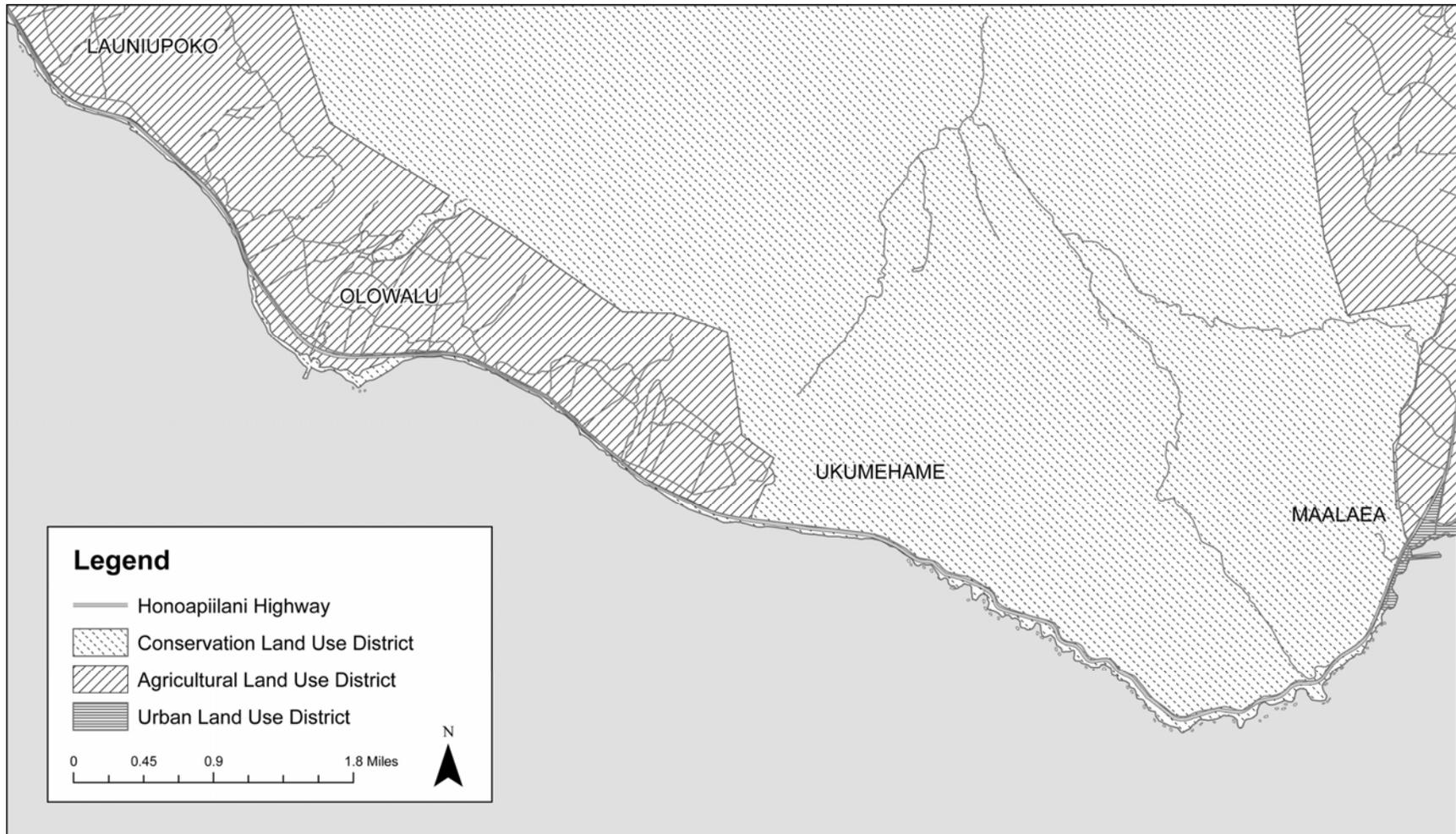
Parts of the corridor are classified as “Prime Agricultural Land” according to the Agricultural Lands of Importance to the State of Hawaii (ALISH) land classification system (1977). Much of the project area was historically under sugar cane cultivation by the Olowalu Sugar Company (formerly the West Maui Sugar Company), but production in the project area has decreased and eventually ceased over the past 20 years. Existing agricultural uses in the area include grazing and diversified agriculture, but much of the land is abandoned cane fields.

Construction of the project may impact farmlands. The federal Farmland Protection Policy Act (FPPA) requires consideration of adverse effects on the preservation of farmland. The alternatives will be evaluated in accordance with the requirements of the FPPA, and the DEIS will identify potential impacts on agricultural lands.



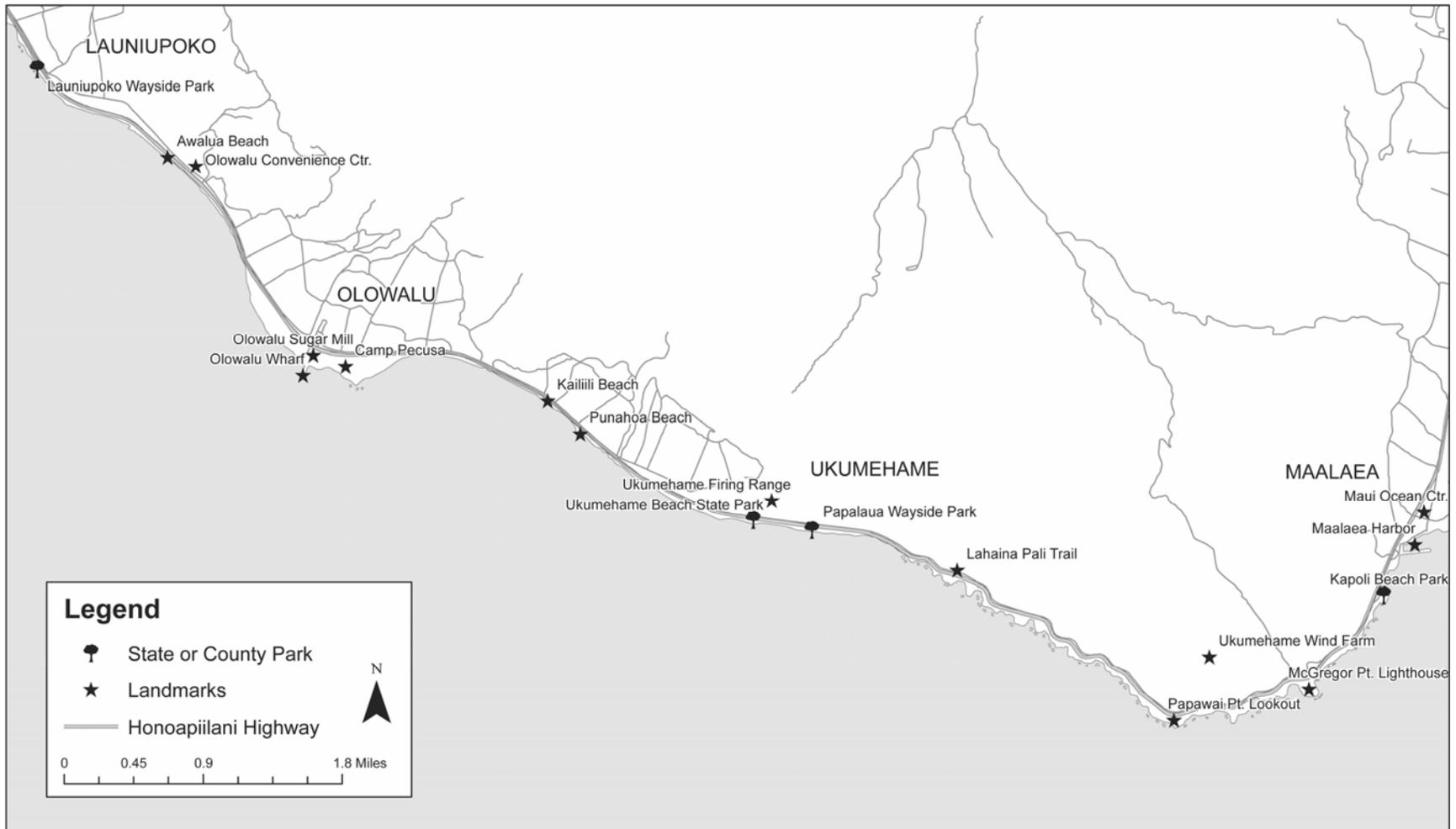
**Source:** Hawaii Statewide GIS Program  
 Maui County GIS (Online Services)  
 US Geological Survey (USGS)

**Figure 5. Land Ownership**



Source: Hawaii Statewide GIS Program  
 Maui County GIS (Online Services)  
 US Geological Survey (USGS)

Figure 6. State Land Use Designation



Source: Hawaii Statewide GIS Program  
 Maui County GIS (Online Services)  
 US Geological Survey (USGS)

Figure 7. Major Landmarks and Features

### **3.3.2 Social and Economic Conditions**

#### **Population and Housing**

In 2006, the County of Maui Planning Department prepared the Socio-Economic Projections for the Maui County General Plan 2030. In 2000, the population of Maui Island was 117,644 persons, and the population of West Maui was 17,967. By 2030, the population of Maui Island is anticipated to increase to 186,254 persons, with West Maui growing 46 percent to 28,903 persons. West Maui currently attracts the majority of the island's visitors, approximately 24,849 or 54 percent of the total number of visitors to Maui. The island's de facto (residents and visitors) population is projected at 246,532 by 2030 if development continues at historic rates. These projected population and visitor increases will present additional demands on the transportation infrastructure of the area.

From 2000 to 2005 Maui County has experienced strong housing demand, some of which can be attributed to off-island investor interest in Maui real estate. About 20 percent of Maui residential property has an out-of-state owner, and in 2004 over 50 percent of all West Maui housing sales were to buyers residing outside of Maui County. From 2000 to 2030, housing demand in the island of Maui is projected to increase from 44,041 to 70,058 households.

The alternatives will be evaluated in terms of their ability to accommodate future travel demand, against this backdrop of population and growth and housing construction.

In accordance with the Executive Order on Environmental Justice (E.O. 12898), the DEIS will include information on the location of and project effects on minority and low-income populations. The DEIS will also include measures to avoid disproportionately high and adverse effects on minority and low-income populations' health or environment.

#### **Employment**

The DEIS will list major employment centers in the area. Analyses will be conducted of potential impacts to commercial and business districts, as well as any tax revenue impacts on the County of Maui.

### **3.3.3 Parks and Recreation Areas**

Recreational resources along Honoapiilani Highway are primarily the coastline. Within the study area there are four developed parks: Kapoli Beach Park, Papalaua Wayside Park, Ukumehame Beach State Park, and Launiupoko Wayside Park (Figure 7 Major Landmarks and Features). While there are only four developed parks, the coastline provides a continuous venue for ocean activities such as surfing, fishing, swimming, picnicking, sunbathing, snorkeling, camping (unpermitted), relaxing and sightseeing. There are also hiking trails originating from Honoapiilani Highway, such as the Lahaina Pali Trail. Potential direct and indirect impacts on these resources and on smaller parks and recreational areas will be evaluated in the DEIS. If the proposed action uses land from a public park or recreational area, a Section 4(f) evaluation would be

conducted in accordance with the requirements of the U.S. Department of Transportation (DOT) Act. The focus of this analysis will be on distinguishing the impacts of the alternatives.

### **3.3.4 Archaeological, Historic, and Cultural Resources**

Archaeological and historic sites in the corridor include pre-contact sites and features, such as heiaus, petroglyphs, habitation sites, and burial sites, and post-contact agricultural features such as water ways, villages created to house workers, and the Olowalu Sugar Mill Ruins. An archaeological assessment of the project area will be conducted, and major archaeological and historic areas in the corridor will be identified. Potential direct and indirect impacts on these resources will be evaluated in the DEIS. The DEIS will document compliance with Section 106 of the National Historic Preservation Act and Section 4(f) of the U.S. DOT Act. HDOT will coordinate with the State Historic Preservation Division (SHPD), County of Maui, Office of Hawaiian Affairs, the Maui Island Burial Council, and other relevant public and native Hawaiian organizations. Documentation of the Section 106 consultation process will be included in the Draft and Final EIS.

Parties with an interest in the project's potential impact on archaeological resources are asked to notify HDOT during the EISPN review and scoping process.

### **3.3.5 Visual Resources**

Honoapiilani Highway presents unparalleled viewing opportunities from the highway and from fixed points along the route. Visual and aesthetic resources in the corridor include panoramic and mauka-makai view planes of the ocean framed by the islands of Kahoolawe, Molokai and Lanai, the West Maui Mountains, Haleakala, and views of certain monuments and landmarks. The DEIS will identify these visual resources and determine whether the proposed action will adversely affect them. Additionally, the visual impact of the alternatives on any neighborhood and streetscape views will be determined. Views of the road, under the different alternatives, will also be considered.

## **3.4 Project Cost, Phasing Plan, and Innovative Financing**

Because of the very high cost of realigning the entire roadway, an affordable solution for the near term will be evaluated in the DEIS. A phasing program might allow some improvements to be made relatively quickly, while funds for the more expensive parts of the project are sought. In addition, the DEIS will disclose the possibility of innovative financing options, such as tolling the road, and other public-private partnership mechanisms, as possible ways to fund the project.

### **3.5 Permits and Approvals**

The permits, processes, reviews, and approvals that may be required will depend on the specific features of the alternative selected. However, the following permits may be needed. This list will be refined as the alternatives are developed in more detail. Input on other approvals that may be necessary is requested from government agencies and other participants in the environmental review process.

#### **Federal**

- National Environmental Policy Act, environmental review process
- Department of Army Permit, Section 404 Clean Water Act
- Section 4(f) Evaluation, Department of Transportation Act of 1966
- Section 7 of the Endangered Species Act (U.S. Fish and Wildlife Service, National Marine Fisheries Service)
- Section 106, National Historic Preservation Act
- Title VI (Nondiscrimination in Federally Assisted Programs) of the Civil Rights Act of 1964, 42 USC 2000(d)-2000(d)(1) and Executive Order 12898 regarding Environmental Justice
- Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970
- Farmland and Conversion Impact Rating Form
- U.S. Coast Guard Bridge Permit
- Americans with Disabilities Act Accessibility Guidelines

#### **State**

- Chapter 343 HRS, environmental review process
- Department of Health
  - Noise permit during construction
  - Section 402, National Pollutant Discharge Elimination System (NPDES) Permit
- Chapter 6E, HRS consultation, State Historic Preservation Division
- Act 50 (April 26, 2000), Cultural Impact Assessment
- Department of Land and Natural Resources, State Endangered Species Act
- Department of Land and Natural Resources, Stream Channel Alteration Permit
- Department of Land and Natural Resources, Conservation District Use Permit
- Coastal Zone Management Act federal consistency review

#### **Maui County**

- Special Management Area (SMA) Permit

## **4 PLANNED SCOPING ACTIVITIES**

Community meetings will provide public-friendly and accessible venues for comments to be accepted regarding project alternatives, scope of the EIS, and the purpose and needs to be addressed. In addition to several public workshops and a DEIS public hearing, a number of small group meetings will be held during the planning and DEIS preparatory stages. Community meetings will be held on Maui at a to-be-determined time and location. Meeting locations will be accessible to people with disabilities. Input received will be collected and documented.

A project Task Force will also be formed to help advise HDOT about key aspects of the project. Topics the Task Force could address include 1) project goals; 2) development and ranking of alternatives; 3) construction phasing plan; and 4) mitigation measures.

The Task Force will have members selected from a range of interests, such as government agencies, environmental groups, landowners, residents, and business owners, and the members must sign a charter and commit to long-term involvement. Similar to all community meetings, the Task Force meetings will be open to the public, held on Maui at a to-be-determined time and location, and be accessible to people with disabilities.

This EISPN will be distributed to a range of federal, State, and Maui County agencies. The EISPN will also be sent to environmental, community, civic, and business organizations, and individuals with a known interest in the corridor. At present, the project mailing list contains over 400 entities.