

I. PROJECT OVERVIEW AND METHODOLOGICAL FRAMEWORK

A. INTRODUCTION

Effective management of the County of Maui's beach parks is a necessary element in ensuring optimum and sustained recreational experiences by residents and visitors alike. With continued growth in resident and visitor populations of Maui, new demands are being placed on the carrying capacities of existing beach parks and the overall sustainability of these valuable community resources is being threatened. Beach park carrying capacities may be approached during peak user periods with limited facilities and infrastructure and environmental constraints generating competition for and conflict among existing park resources. These conditions have raised concern regarding the overall effectiveness of the County's current beach park management framework.

Recognizing this challenge, the County of Maui, through its Council and its Department of Parks and Recreation (hereafter referred to as the "Department"), has reviewed pertinent sections of the Maui County Code relating to beach park management. A specific opportunity for better managing parks was identified through the Council's adoption of Ordinance 3143 in the year 2003. This ordinance established a framework for managing Commercial Ocean Recreation Activities (hereafter referred to as "CORA") on County property, including both beach parks and beach access points. See Appendix "A".

As provided by Ordinance 3143, the purpose of this County law is *"...to fairly and effectively regulate CORA to ensure that County beach parks and other County property are utilized for the community's maximum recreational, environmental and economic benefit"*. The ordinance defines "CORA" as an ocean recreational activity conducted by a business for a

patron in or on a County beach park or other County property. Such activities may include, but not be limited to kayaking, snorkeling, scuba diving, surfing, kiteboarding, and windsurfing. A CORA permit is required for all such operations.

Upon initiation of this study in the 2004/2005 CORA permit cycle, there were 57 CORA businesses permitted by the Department to operate at the various available County beach parks. These operators provide instruction and excursions in many of the above-noted CORA activities. A legally permitted CORA operation provides for greater security and, to a certain extent, safety for visitors and residents who patronize these businesses. The benefits associated with permitted operations are recognized by current County permitting requirements which presently mandate first aid and CPR training by personnel, as well as proof of liability insurance. Additionally, CORA operations provide services to both residents and tourists visiting Maui, enhancing their vacation experience with the opportunity to learn and enjoy a new ocean recreational activity and explore one of the islands' most valuable natural resources. This CORA study acknowledges these important contributions provided by the CORA industry to the tourism economy of Maui.

It is in this context that the Department has been granted rule-making authority to develop regulatory criteria, in the form of administrative rules for permit issuance and management, to ensure compliance with Ordinance 3143, while at the same time ensuring the long-term viability of the CORA industry.

It is these administrative rules that will ultimately govern the permitting procedural requirements for CORA operations. Such rules, therefore, need to be based on sound technical planning data and analysis. With

this consideration in mind, the Department has commissioned this study to assess selected County beach parks with the intent of using the study findings and recommendations as a basis for developing a set of Draft Administrative Rules.

B. ORDINANCE BACKGROUND

The impacts of CORA at County beach parks were initially addressed during the July 31, 2003 meeting of the Council's Parks and Agriculture Committee. Topics discussed at the meeting included the use of County resources, such as water, electricity, and wastewater; vandalism; the need for enforcement and self-policing by the ocean recreational activity industry; the use of County facilities by businesses without proper permits; and the overuse of certain West Maui beach parks.

In response to these concerns, the Department of the Corporation Counsel highlighted the need to emphasize the following principles in addressing the management of County beach parks on Maui:

- The County has no jurisdiction over activities in the ocean.
- The County's primary duty and obligation is to maintain and operate County Parks for the general public's use and benefit.

The formulation of a regulatory framework for the use of County parks with a requirement to balance CORA and general public uses and to ensure the implementation of an effective enforcement program was acknowledged.

The resulting Ordinance 3143 was approved by the County Council on October 7, 2003 and amended the Maui County Code (hereafter referred to as "MCC") relating to CORA Permits. Refer to Appendix "A". The

ordinance repealed Chapter 5.24, MCC, and amended Chapter 13.04, MCC by: (1) adding a new article relating to the conduct of ocean recreational activity businesses; and (2) transferring the administration of CORA permits from the Department of Finance to the Department.

The key provisions of Chapter 13.04, MCC following the adoption of Ordinance 3143 are highlighted in Table I-1 below.

Table I-1

KEY PROVISIONS OF CHAPTER 13.04, MAUI COUNTY CODE	
Code Section	Provision
<i>Applicability (13.04.250)</i>	<ul style="list-style-type: none"> To regulate CORA in or on County property.
<i>Purpose (13.04.255)</i>	<ul style="list-style-type: none"> To fairly and effectively regulate CORA to ensure that County beach parks and other County property are utilized for the community's maximum recreational, environmental, and economic benefit.
<i>Prohibitions (13.04.256)</i>	<ul style="list-style-type: none"> CORA is prohibited at Baldwin Beach Park, Cove Park, Hookipa Beach Park, Kamaole Beach Park I, Kamaole Beach Park II, Kamaole Beach Park III, the southern portion of Kalama Park (the section of Kalama Park from the sand beach at Cove Park to the southern most parking area adjacent to South Kihei Road), Launiupoko Beach Park, and Puamana Beach Park.
<i>Permit Requirement; Additional Regulation (13.04.260)</i>	<ul style="list-style-type: none"> It is unlawful for any business to conduct CORA without a permit. A separate permit shall be required for each commercial activity. Additional regulation of CORA shall be established by applicable rules, including but not limited to the days, time, place, and volume of use of County beach parks.
<i>Permit Conditions (13.04.270)</i>	<ul style="list-style-type: none"> All permits shall be subject to conditions relating to safety certifications and policies, conduct of business transactions, equipment loading, unloading and storage, and insurance and indemnification requirements.
<i>Permit Term; Suspension; Revocation (13.04.290)</i>	<ul style="list-style-type: none"> Permits shall have a duration of up to one year. The director may suspend or revoke any permit issued pursuant to this article if the permit holder has violated any rule, ordinance, or statute related to CORA.

The Department, through this study, has initiated the process of formulating the Draft Administrative Rules required in order to implement, interpret, and prescribe policy, procedure, or practice, as necessary, to carry out the requirements of this ordinance. As set forth by the ordinance, the rules may include limitations to the days, time, place and

volume of use of County beach parks, as well as prescribing standards for the establishment of safety policies by CORA permit holders.

C. STUDY GOAL AND OBJECTIVES

The purpose of this CORA Study was to collect, organize and analyze beach park data for a representative sample group of County-owned beach parks. This information would be utilized to provide a foundation for formulating the Draft Administrative Rules for CORA permitting. To ensure that study results were both useful and credible towards facilitating the rule-making process, the following study goal was established:

- *Ensure that the data collection and analysis process is appropriately integrated with a sound stakeholder and public input process.*

In furtherance of this goal, the following study objectives were identified.

Objective No. 1: Utilize data collection techniques that incorporate field assessments and observations, literature research, interviews, and CORA operator surveys and stakeholder dialogue.

Objective No. 2: To the extent practicable, utilize the knowledge base of CORA operators in assessing beach park capacity parameters.

Objective No. 3: Develop and prepare incremental study updates and/or working papers for periodic review by both stakeholders and the public.

Objective No. 4: Establish an open and ongoing process for receiving stakeholder and public comments.

The foregoing goal and objectives are the guideposts under which detailed study methodologies and processes were developed during the CORA study. It should be noted that a CORA Operator Survey, beach

park assessments, field observations and stakeholder dialogue were selected as the four (4) central foundations of this study. These foundations were designed and incorporated in the overall methodological framework for this study.

D. STUDY DEFINITIONS AND ABBREVIATIONS

It is important that terms and abbreviations used within this study are first clarified in order to minimize uncertainty and to ensure that this report is viewed in appropriate context. In this regard, the following definitions are provided:

“County Property” - means any real or personal property owned by or under the control of the County of any County agency. County property includes, but is not limited to; equipment and fixtures; streets and highways; parking areas; sidewalks, roadway shoulder easements, and right-of-ways; recreational facilities and community centers; beach accesses; beach parks; and beaches; from the high water mark or vegetation line to the location where other private or public property rights begin or if a certified shoreline map recorded with the State of Hawaii exists, those areas indicated by the map.

“Park or parks” - means a tract of coastal land including beach right-of-ways, associated recreational/parking areas and dune systems, owned or under the jurisdiction and control of the department of parks and recreation, that is designated and intended to be used for active and passive forms of ocean and land-based recreation.

“Ocean Recreational Activity” - means ocean recreational activity conducted by a business for a patron in or on a County beach park or other County property.

“Commercial Ocean Recreational Activity (CORA)” - means an ocean recreational activity for which patrons make a payment to an individual or business in exchange for instruction or guidance in that particular activity.

“Commercial Ocean Recreational Activity (CORA) Permit” - means a permit that is required by a business in order to conduct CORA operations at County owned parks.

“Environmental Analysis (EA)” – means an analysis of environmental

and related parameters affecting County parks. Although the EA methodology for use in this study has been designed to be comprehensive, the Department has determined that the preparation of an environmental analysis for purposes of formulating the Draft Administrative Rules is not subject to State Environmental Assessment (EA) requirements set forth by Chapter 343, Hawaii Revised Statutes.

“Patron or Student” - means any person who contracts to participate in a commercial ocean recreational activity.

“Director” – means the director of the Department of Parks and Recreation of the County or the director’s authorized representative.

“Ocean Safety Officer (OSO)” - means a fully trained lifeguard employed by the Department and assigned to ensure the ocean safety of County beach park users.

E. STUDY SCOPE

As mentioned previously, the Department has initiated this study in order to address the need to formulate a set of Draft Administrative Rules, which are to be implemented in compliance with Chapter 13.04, MCC. The effective application and the enforcement of rules is a necessary prerequisite toward achieving the County’s primary objective of ensuring that County-owned parks are maintained in such a way so as to ensure the community’s maximum recreational, environmental and economic benefit.

In order to effectively address sustainability requirements and capacity limits, this study provides an analysis of current and projected trends in County beach park use by both the general public and CORA operators. A methodological framework, encompassing a CORA operator survey, beach park assessments, field observations and stakeholder dialogue, was applied to a pre-selected and representative sample group of 17 beach parks around the coast of the island of Maui.

1. **Beach Parks Addressed in Study Scope**

Based on 2004/2005 data received from the Department prior to the initiation of this study, there were 57 CORA permit holders conducting approximately 417 activities at 29 County beach parks on the island of Maui. Recognizing resource limitations and budgetary constraints, the Department initially identified a representative sample of 17 of the 29 beach parks to be addressed by this study. On March 1, 2005, a meeting with CORA operators and Department representatives was conducted to introduce the consultant team and study scope. Comments were received on the initial list of 17 parks, leading to adjustments to the list of parks to be addressed by this study. An analysis of permit volumes and available facilities provided the primary basis for beach park selection in the park selection revision process. Other factors, such as land ownership and potential for development, were also considered in the selection of the final study group of 17 County-owned beach parks.

Table I-2 provides the listing of the County parks selected as the representative sample of 17 beach parks that were to be addressed by this study. Table I-3 is a listing of the remaining beach parks which were not selected for incorporation in this study.

Table I-2

<i>COUNTY PARKS TO BE ADDRESSED IN STUDY SCOPE</i>				
<i>Beach Park</i>	<i>No. Of Permits Issued in 2004/2005</i>	<i>Permitted CORA Activities In 2004/2005</i>	<i>Main CORA Activities in 2004/2005</i>	<i>Reason for Inclusion in Scope of Study</i>
Makena Landing	53	K, KB, SC, SK, S, W	K, SC, SK	High Number of CORA Permits Issued in 2004/2005
Ulua/Mokapu	44	K, KB, SC, SK, S, W	SC, K, SK	High Number of CORA Permits Issued in 2004/2005
Ukúmeheame	32	K, KB, SC, SK, S, W	S, K, SC, SK	High Number of CORA Permits Issued in 2004/2005
Kalama (North)	27	K, KB, SC, SK, S, W	S, K	High Number of CORA Permits Issued in 2004/2005
Kanaha (Developed and Undeveloped)	27	K, KB, SC, SK, S, W	W, KS	High Number of CORA Permits Issued in 2004/2005
Hanakaoo	23	K, KB, SC, SK, S, W	K, S, SC, SK	High Number of CORA Permits Issued in 2004/2005
D.T. Fleming	22	K, KB, SC, SK, S, W	K, S, SC, SK	High Number of CORA Permits Issued in 2004/2005
Kamehameha Iki	19	K, SC, S	S, SK	High Number of CORA Permits Issued in 2004/2005
Keawakapu I and II	18	K, SC, SK, S	SC, SK	High Number of CORA Permits Issued in 2004/2005
Palauea	16	K, SC, SK	SC, SK	High Number of CORA Permits Issued in 2004/2005
Papalaua	16	K, KB, SC, SK, S, W	SC, SK	High Number of CORA Permits Issued in 2004/2005
Maluaka	11	K, SC, SK	SC, SK	Moderate Number of CORA Permits Issued in 2004/2005
Memorial Park (Mai Poina Oe Iau)	11	K, KB, SC, S, W	SC, W, K, KS	Moderate Number of CORA Permits Issued in 2004/2005
Hana Bay	6	K, KB, SC, SK, S, W	K, SK	Ensures Coverage of East Maui Area
Waihee	5	K, KB, SC, SK, S, W	SC	Moderate Number of CORA Permits Issued in 2004/2005
Wahikuli	4	SC, SK, S	SC	Moderate Number of CORA Permits Issued in 2004/2005
Waipuilani	1	W, K	W, K	Moderate Number of CORA Permits Issued in 2004/2005
TOTAL NO. OF PERMITTED ACTIVITIES	335			
Activities: K - Kayaking, KB - Kiteboarding, S - Surfing, SC - Scuba Diving, SK - Snorkeling, W - Windsurfing				

Table I-3

REMAINING COUNTY PARKS NOT ADDRESSED IN STUDY SCOPE				
Beach Park	No. Of Permits Issued in 2004/2005	Permitted CORA Activities in 2004/2005	Main CORA Activities in 2004/2005	Reason for Exclusion in Scope of Study
Wailea	23	K, KB, SC, SK, S, W	K, SC, SK	Ulua/Mokapu to serve as Representative Example
Polo	19	K, SC, SK, S, W	K, SC, SK	Ulua/Mokapu to serve as Representative Example
Poolenalena	14	K, KB, SC, SK, S, W	K, SC, SK	Insufficient Facilities Infrastructure
Waiehu	8	K, KB, SC, SK, S, W	SC	Insufficient Facilities Infrastructure
Kapalua	5	K, SC, SK	K, SC, SN	Park Land is Under Private Ownership
Honokowai	3	K, KB, SC, SK, S, W	SC, SK	Low Number of CORA Permits Issued in 2004/2005
Coral Gardens	2	SC, SK	SC, SK	Insufficient Facilities Infrastructure
Napili Bay	2	SC, SK	SC, SK	Low Number of CORA Permits Issued in 2004/2005
Honomanu	1	K, KB, SC, SK, W	K	Low Number of CORA Permits Issued in 2004/2005
Kahekili	1	SK	SK	Park Land is Under Private Ownership
Makena Surf	1	SK	SK	Insufficient Facilities Infrastructure
Pohaku	1	SN, S	S	Low Number of CORA Permits Issued in 2004/2005
Haycraft	0	KB, SC, SK, S, W	W, S, SC	Low Number of CORA Permits Issued in 2004/2005
Kalepolepo	0	K, KB, SC, SK, S, W	SK	Low Number of CORA Permits Issued in 2004/2005
TOTAL NO. OF PERMITTED ACTIVITIES	80			
Activities: K - Kayaking, KB - Kiteboarding, S - Surfing SC - Scuba Diving, SK - Snorkeling, W - Windsurfing, SN - Snuba				

F. SCOPE IMPLICATIONS

Limiting the scope of work to the 17 selected parks (based on available funding) allowed for the intensive analysis needed to develop a sound foundation for formulating the Draft Administrative Rules. As noted, the 17 selected parks were deemed representative as they: (1) recognize those parks which have the highest use potential based on the number of permits issued; (2) account for those parks that are similar to others from a physical, locational and use standpoint; and (3) recognize the need for a geographic representation of parks from various Community Plan districts.

The remaining County parks (listed in Table I-3), while not examined as part of this study, are nonetheless acknowledged as being integral components of the County-wide system of parks. While not considered in the scope of this study, the methodological framework for analyzing the 17 selected parks can be transferred and applied to the remaining parks. Analysis of these remaining parks can be undertaken internally by the Department or studied separately by others as additional funds become available.

It is important to note that the limitation of the study scope to 17 parks does not mean that CORA activities at the remaining parks will be limited or prohibited. The selection of the 17 representative parks enabled optimum parks analysis for the structuring of the Draft Administrative Rules. With this in mind, the limitation of the study to the 17 selected parks was not intended to minimize the importance and relevance of the remaining parks for their CORA potential and overall community recreational value.

G. METHODOLOGICAL FRAMEWORK

1. Introduction

This study, encompassing CORA operator surveys, beach park assessments, field observations and stakeholder dialogue is intended to provide insight into beach park usage and management challenges around Maui. The results of the assessments and surveys would be utilized to provide the basis for determining regulatory parameters for CORA operations. Analysis and discussion of the CORA operator surveys, beach park assessments, field observations, and stakeholder dialogue will enable the Department to effectively address issues of carrying capacities at County-owned beach parks and to make informed decisions regarding permitting procedures authorized under Ordinance 3143. The following sections provide an explanation of the methodological framework utilized to fulfill the previously noted goal and objectives of the study.

2. Methodological Framework

a. CORA Operator Survey

A survey of CORA operators was administered as the first element of the methodological framework for the study. Survey data was deemed necessary to evaluate current patterns and trends in CORA usage of County parks.

(1) Survey Population

A list of names and addresses of the current County of Maui CORA permit holders was obtained from the Department of Finance through the Department. The Department of Finance previously administered the CORA permitting program which included the

issuance and renewal of permits to operators. A total of 417 CORA permits were issued in 2003 for the various County parks. Since the passage of Ordinance 3143 in October 2003, no new CORA permits have been issued to new operators for County beach parks. Resumption of permit issuance to new CORA operators will occur following completion of the transition of permits administration from the Department of Finance to the Department. It is, however, noted that existing permit holders were able to renew their CORA permits for the year 2005/2006 through application to the Department by June 30, 2005.

(2) Survey Design

A survey was developed for CORA operators to provide a baseline of current commercial operations at the preselected 17 County beach parks. The survey questions were focused on determining which beach parks were used for different types of CORA activities, the frequency and duration of use, as well as whether companies had plans for future expansion.

The survey was developed based on the project scope provided by the Department. The Department reviewed the draft survey and approved it. Following approval of the survey, a public meeting with the CORA operators was scheduled to provide them with an overview of the project scope and to inform them

of the survey. The survey was distributed to CORA operators present at the first informational meeting on March 1, 2005. Remaining surveys were mailed to CORA operators unable to attend the informational meeting. Additionally, there were several other interested parties not holding CORA permits who also requested surveys. These parties had become aware of the survey either through the informational meeting or by word-of-mouth in the CORA community. A copy of the final questionnaire is available in Appendix "B".

As previously noted, the list of 17 beach parks selected for the CORA study was revised following CORA operator input and Department review. Although the survey specifically mentioned the original 17 beach parks initially chosen for the study, operators were able to provide information for any beach park they utilized. Thus, data collected on the final 17 beach parks selected for the CORA study was deemed sufficient.

(3) Survey Procedure

The surveys were coded and randomly distributed at the initial public meeting. The remaining surveys were cross referenced with the name and permit number of remaining CORA permit holders. A cover letter explaining the purpose of the survey, brief instructions, and contact names and number to call for assistance in completing the survey was attached.

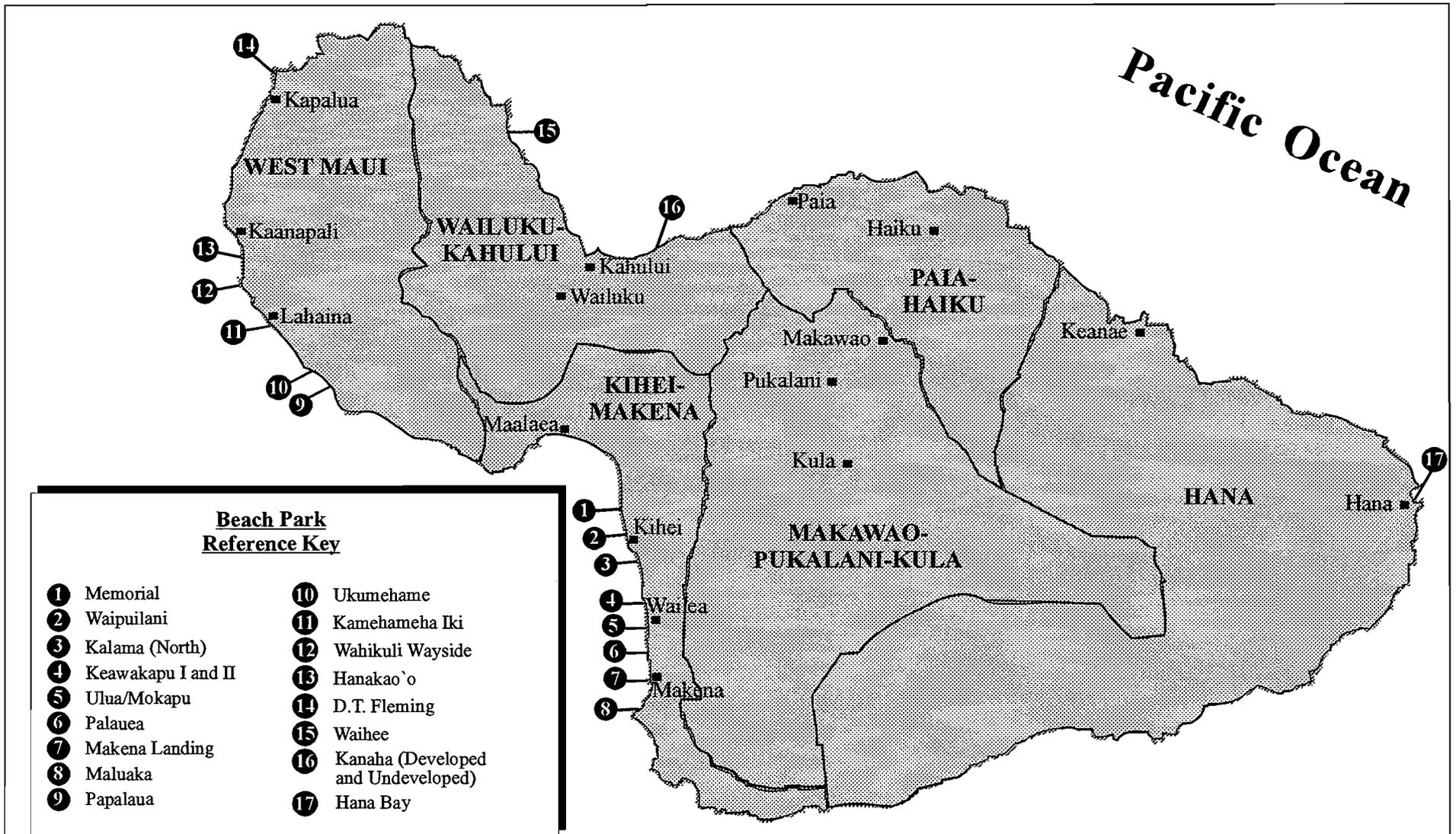
A self-addressed stamped envelope was also included for the return of the survey.

The survey was distributed to attendees at the March 1, 2005 informational meeting and mailed out on March 2, 2005 to the remaining CORA operators. Respondents were given a two (2) week period to complete and return the survey by March 18, 2005. It is noted that the following steps were implemented to increase the survey response rate:

- No financial data was required from CORA operators.
- A public meeting held prior to handing out surveys helped to define the need for CORA operator input in the study.
- All mailed surveys included a self-addressed, stamped envelope.

b. Beach Park Assessments

As previously outlined, 17 County-owned beach parks were included within the scope of this study to provide an effective sample for assessing and formulating CORA permitting procedures. Of these 17 beach parks, eight (8) are located in the Kihei-Makena Community Plan region, six (6) in the West Maui region, two (2) in the Wailuku-Kahului region and one (1) in the East Maui region. See Figure I-1. For purposes of this CORA Study, the beach parks were regionally grouped and analyzed according to the Community Plan region to which they belong. Table I-4 provides a brief informational overview of the beach parks addressed in the study scope.



Source: County of Maui, Dept. of Planning

Figure I-1

Commercial Ocean Recreational
Activity (CORA) Study
Location Map for Studied Beach Parks

NOT TO SCALE



Prepared for: County of Maui, Dept. of
Parks and Recreation

MUNEKIYO & HIRAGA, INC.

Table I-4

KEY INFORMATION FOR COUNTY PARKS IN STUDY SCOPE							
Map Number	Beach Park Name	Community Plan Region	Address/Location	Tax Map Key (TMK)	Developed Area (ac.)	Park Hours	Ocean Safety Officer Assigned
1	Memorial	Kihei-Makena	Mile 5, South Kihei Road, Kihei, HI	3-9-01:25	1.5	7am-7pm	NO
2	Waipuilani	Kihei-Makena	Waipuilani Road, Kihei, HI	3-09-01:01	20.2	7am-7pm	NO
3	Kalama (North)	Kihei-Makena	1910 South Kihei Road, Kihei, HI	3-9-05:52	36.5	7am-7pm	NO
4	Keawakapu I and II	Kihei-Makena	South Kihei Road, Kihei, HI	2-1-21:01, 2-1-10:999	<1.0	7am-7pm	NO
5	Ulua/Mokapu	Kihei-Makena	Wailea Alanui Drive, Wailea, HI	2-1-08:88	2.2	7am-8pm	NO
6	Palauea	Kihei-Makena	Makena-Keoneoio Road, Wailea, HI	2-1-11:18/19	0.97	not posted	NO
7	Makena Landing	Kihei-Makena	Makena Alanui Road, Makena, HI	2-1-07:10	2.4	7am-7pm	NO
8	Maluaka	Kihei-Makena	Makena Road, Makena, HI	2-1-06:56/59,2-1-07:068	<1.0	7am-7pm	NO
9	Ukumehame	West Maui	Mile 12, Honoapiilani Highway, Lahaina, HI	4-8-02:31	3.8	7am-8pm	NO
10	Papalaua	West Maui	Mile 11/12, Honoapiilani Highway, Lahaina, HI	4-8-02:41	6.7	not posted	NO
11	Kamehameha Iki	West Maui	505 Front Street, Lahaina, HI	4-6-02:10 POR	1.8	7am-8pm	NO
12	Wahikuli	West Maui	Honoapiilani Highway, Lahaina, HI	4-5-21:07	8.02	7am-8pm	NO
13	Hanakao'o	West Maui	Honoapiilani Highway, Lahaina, HI	4-4-13:06/07	4.8	7am-8pm	YES
14	D.T. Fleming	West Maui	Honoapiilani Highway, Lahaina, HI	4-2-04:16	3.4	7am-8pm	YES
15	Waihee	Wailuku-Kahului	Halewaiu Road, Waihee, HI	3-2-13:06 POR	4.0	not posted	NO
16	Kanaha	Wailuku-Kahului	Amala Place, Kahului, HI	3-8-01:019/119	40	6am-10pm	YES
17	Hana Bay	Hana	510 Ua Kea Road, Hana, HI	1-4-04:32	0.5	6am-10pm	YES (Summer Only)

The beach park assessment procedure adopted for this study encompassed a variety of data collection techniques, including site visits, photographic documentation, literature research, as well as interviews with OSOs and feedback received from Department staff.

The findings for the seventeen (17) beach parks were analyzed according to the respective community plan region to which they belong. The analysis of each community plan region consisted of the following three (3) main components:

(1) Regional Overview

This first component provides the reader with an introduction to the particular community plan region being addressed and draws upon a variety of socio-economic, geographic and meteorological characteristics such as population data, empirical growth statistics, land use descriptions and recreational resource information.

(2) General Beach Park Conditions

This second component provides the reader with an analysis of general environmental conditions within the community plan region. The following 12 indicators were selected to ensure a broad coverage of environmental conditions at County beach parks:

(i) Surrounding Land Uses

- Provides a general description of surrounding land use conditions.

(ii) **Flora/Fauna**

- Provides a general description of land-based vegetative and wildlife characteristics.

(iii) **Topography/Soils**

- Provides a description of the range and characteristics (permeability, erosion potential etc.) of individual underlying soil-types.

(iv) **Shoreline Geology/Physiographical Features**

- Provides a description of the type of geology (rock features and depositional formations) found along the shoreline.

(v) **Offshore Bottom Type**

- Provides a description of type of ocean bottom present in adjacent waters (sand channels, coral reef, limestone outcrops etc.).

(vi) **Stream Hydrology/Surface Drainage Characteristics**

- Provides a description of surrounding stream and gulch resources.
- Drainage characteristics in times of rainfall are highlighted, as well as any associated water quality degradation issues.

(vii) **Marine Biology**

- Provides an overview description of marine life characteristics associated with the adjacent waters. (This component does not involve the conduct of new marine biological surveys. Rather, data from existing sources are used to generally characterize the

marine biological environment.)

- The presence of endangered species such as whales, turtles and monk seals is also highlighted.

(viii) Water Quality

- Provides a description of the overall quality of adjacent waters.
- Potential sources of both point and intermittent pollution are also highlighted.
- Monitoring data from the Department of Health, Clean Water Branch was utilized as a basis for evaluating ocean water quality at beach parks.

(ix) Archaeological/Cultural Resources and Practices

- Provides a description as to the presence of any archaeological resources (walls, structures etc.) and any cultural practices (e.g., gathering, access, religious uses, etc.) occurring in or around the beach parks.

(x) Air Quality

- Provides a description of the overall air quality including information on point and intermittent sources of pollution in the vicinity of the beach parks.

(xi) Noise

- Provides a description of ambient noise levels including information on the presence of point and intermittent sources of noise generators.

(xii) Scenic/Open Space Resources

- Provides a description of the nature of the available views including specific information on scenic and open space resources (ocean, mountain, forest and neighboring island views, etc.).

(3) Site-Specific Beach Park Assessments

This third and final component provides the reader with a detailed assessment for each individual County beach park within the community plan region. The framework for the beach park assessments was designed on the basis of providing a detailed analysis of available infrastructure, visitor use characteristics and present and future environmental management challenges. Each site-specific beach park assessment presented in this CORA study consists, therefore, of four (4) integral elements: a park overview; a facility assessment; an activity assessment; and an environmental analysis of pertinent site-specific park management considerations; each of which is outlined below:

(i) Beach Park Overview

The beach park overview provides a geographical and infrastructural context for the beach park being assessed, including information relating to surrounding land uses, state land use designations, Tax Map Key (TMK) information and other pertinent information such as hours of operation and availability of OSO services.

(ii) **Facility Assessment**

The facility assessment provides a description of facilities available to beach park users. The facility assessment phase of work was conducted by confirming and updating existing facilities inventory through both review of Department-provided information and site visits. Beach park facilities evaluated in this study included permanent structures (OSO offices/equipment storage rooms/canoe clubs), parking stalls, vehicle access points, toilets (including facilities for the disabled), showers/changing rooms (indoor/outdoor), picnic/BBQ facilities, drinking water taps/fountains, trash disposal (small/large trash receptacles), public telephones, and ADA accessibility issues. Each of the above noted facilities were assessed with respect to three (3) main parameters: facility availability, quantity and overall condition. A combination of site visits and Department inventory data was utilized to evaluate available facilities and provide a general assessment of adequacy in relation to volume of use at the park.

(iii) **Activity Assessment**

The activity assessment provides a general description of the main activities conducted at the beach park in question. The assessments were completed through site visits, as well as through the application of local knowledge and

input from CORA operators during review meetings. Interviews with OSOs at certain beach parks provided supplemental information relating to popular activities at beach parks. In order to provide a realistic perspective of park usage, both commercial and non-commercial ocean and land-based activities were included in the assessments. CORA activities, as outlined in Ordinance 3143, include surfing, kayaking, windsurfing, kiteboarding, scuba, snuba and snorkeling. Other (non-commercial) activities that commonly take place at beach parks around the Maui coastline include swimming, fishing/gathering, spearfishing, skimboarding, sailing, sunbathing, walking/jogging, dogwalking, beach games, park games, picnics/BBQs and camping. To ensure a relatively reliable basis for activity assessment, site visits to the seventeen (17) beach parks in the scope of the CORA study were, to the extent practicable, conducted in times of “best” weather conditions.

(iv) **Park-Specific Environmental Analysis/Management Considerations**

The park-specific environmental analysis provides a detailed overview of pertinent site-specific environmental considerations deemed to pose a challenge to the present and future management of the particular beach park being addressed. Examples of such challenges include coastal erosion, erosion associated

with visitor foot traffic and vehicle intrusion, ocean water quality fluctuations, and ocean safety. While CORA use provides the main basis for the foregoing methodological framework, it should be noted that site-specific management considerations were formulated through a comprehensive analysis of all user groups at the seventeen (17) beach parks addressed in this study. Where appropriate, possible park management tools for the mitigation of certain site-specific problems have also been recommended.

A recognized limitation associated with the application of the environmental analysis framework used for this study is that observations noted during site visits reflect a point-in-time set of visitor and environmental conditions. To ensure the minimization of this important study limitation, the following factors were integrated into the methodological framework for the beach park assessments:

- To ensure that visitor use characteristics were representative, site visits to County beach parks were completed during favorable meteorological conditions.
- Multiple site visits were conducted to those beach parks where seasonal fluctuations in environmental or meteorological conditions were apparent. For example, site visits to Kanaha Beach Park were conducted during both winter and summer seasons due to varying use characteristics associated with tradewind conditions and north swells.
- Input was solicited from County of Maui OSOs and as well as Department representatives familiar with field conditions in order to provide a longer term perspective on beach park conditions.

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- Feedback on site-specific conditions at the 17 beach parks addressed in the CORA study was also received from CORA operators during various comment and focus group meetings held during the first half of 2005.

c. **Field Observations**

Field observations were also implemented for this CORA study. Separate and distinct from the site visits conducted for the site-specific beach park assessments, field observations were conducted to provide a behavioral-based assessment of current use characteristics and to note issues and conflicts present at County beach parks. Thus, the information gathered from the field observations provide an understanding of operational conditions and areas of concern. Field observations were conducted at fifteen (15) of the seventeen (17) County beach parks addressed within the study. Two (2) beach parks, Waihee and Hana Bay, were not included within the field observations due to the relative lack of CORA presence at these parks.

Visits were typically conducted during the early morning to mid-day time frames (7:00 a.m. to noon) to observe early morning CORA and public use activities, as well as mid-day CORA and public use activities. In some instances, early afternoon observations were needed to consider conditions during afternoon peak use conditions. A minimum of one (1) weekday visit and one (1) weekend visit were made to each of the beach parks. Field observations at high use parks were conducted on a minimum of three (3) separate occasions. To increase the baseline information for the field observations, results from the CORA survey were also utilized to identify those times of day when individual parks

were utilized the most by CORA operators.

Site observations from each of the beach parks were discussed with Department representatives familiar with field conditions who provided additional input and corroborated the observed issues and concerns.

For beach parks where OSOs are stationed, interviews with the on-duty OSOs were conducted to provide additional information regarding park-specific operational conditions.

A recognized limitation of the field observation approach is that findings represent a “point-in-time” set of conditions. Illustrative of this limitation is the need to consider weather conditions affecting park use characteristics by both CORA and the general public. To ensure that limitation on park use attributed to weather conditions was minimized, site visits were scheduled on those days when weather conditions were generally favorable for beach park activities.

Input from CORA operators was also solicited during six (6) activity-based focus group meetings held on May 24, 25 and 26, 2005. The primary objective of these meetings was to gain a better understanding of CORA operator perspectives on opportunities and limitations at each of the County beach parks for which operators have permits. These meetings, along with the overall stakeholder participation process, are addressed in the following section.

d. Stakeholder Dialogue

This CORA study has been designed and implemented in

phases to enable both stakeholder and public review and comments at key product delivery milestones in accordance with the aforementioned study goal and objectives. The CORA study process encompasses a total of 16 meetings with stakeholders (CORA operators) and other interested parties (members of the public, journalists, etc.). Table I-5, below, summarizes the stakeholder dialogue meetings in chronological order:

Table I-5

STAKEHOLDER MEETINGS AND OBJECTIVES		
<i>Meeting Date</i>	<i>Type of Meeting</i>	<i>Objective</i>
March 1, 2005	Informational Meeting	To provide stakeholders with an introduction to the CORA study
April 25, 2005	Working Paper Review Meeting	To allow stakeholders and interested parties to review and provide comments on Draft Working Paper No.1 (Project Overview and Methodological Framework)
May 24, 2005	Focus Group Meeting (Snorkeling)	To gain general and park-specific input from CORA operators on the opportunities and constraints available at County beach parks
May 24, 2005	Focus Group Meeting (Scuba Diving)	
May 25, 2005	Focus Group Meeting (Kayaking)	
May 25, 2005	Focus Group Meeting (Surfing)	
May 26, 2005	Focus Group Meeting (Kiteboarding)	
May 26, 2005	Focus Group Meeting (Windsurfing)	
June 28, 2005	Working Paper Review Meeting	To allow stakeholders and interested parties to review and provide comments on Draft Working Paper No. 2 (CORA Operator Survey)
Oct. 17, 2005	Working Paper Review Meeting	To allow stakeholders and interested parties to review and provide comments on Draft Working Paper No. 3 (Beach Park Assessments) and Draft Working Paper No. 4 (Field Observations)
Pending	Focus Group Meeting (Snorkeling)	To allow stakeholders and other interested parties to review the Final Report for the CORA study and provide comments on the final draft Administrative Rules.
Pending	Focus Group Meeting (Scuba Diving)	
Pending	Focus Group Meeting (Kayaking)	
Pending	Focus Group Meeting (Surfing)	
Pending	Focus Group Meeting (Kiteboarding)	
Pending	Focus Group Meeting (Windsurfing)	

As outlined in Table I-5, the stakeholder dialogue process adopted for the CORA study allows for a total of three (3) different types of meeting structure including informational meetings, working paper review meetings and focus group meetings.

This Final Report consists of a total of five (5) working papers which were produced throughout the course of the project cycle. Each was initially reviewed by the Department and then by CORA operators and other interested parties during the above-mentioned working paper review meetings. It is noted that each respective working paper was mailed to CORA operators and other interested parties prior to each scheduled meeting to allow both time for review and composition of comments. Following review of each working paper, comments were received, consolidated and integrated into a finalized working paper, which was then inserted as each respective chapter in this Final CORA Study Report. To ensure accurate representation of stakeholder comments, a summary of comments for each working paper review meeting was also prepared and transmitted to meeting participants following each meeting. As a final stage in the stakeholders dialogue process, CORA operators and other interested parties will be given the opportunity to review the final report and provide comments on the final draft Administrative Rules at six (6) individual activity-specific focus group meetings.

The scheduling of a public hearing by the Department will be required in order to solicit public opinion/testimony prior to

proposing adoption of the Draft Administrative Rules to Maui
County Council.