STATE OF HAWAI'I DEPARTMENT OF LAND AND NATURAL RESOURCES OFFICE OF CONSERVATION AND COASTAL LANDS Honolulu, Hawai'i

October 13, 2017

Board of Land and Natural Resources State of Hawai'i Honolulu, Hawai'i

REGARDING:

Conservation District Enforcement File OA-18-06

Alleged Unauthorized Land Uses in the Conservation District

BY:

James O'Shea and Denise O'Shea

Trustees of the James and Denise O'Shea Trust

LOCATION:

59-171 D Kē Nui Road, Pūpūkea, Ko'olauloa, Island of O'ahu

TAX MAP KEY:

(1) 5-9-002:025 (Seaward)

SUBZONE:

Resource

DESCRIPTION OF AREA:

The subject area is located on the north shore of the island of O'ahu, west of Sunset Beach and seaward of Tax Map Key (1) 5-9-002:025 (Exhibit 1 and 2). The private property is located in the State Land Use Urban District up to the highest wash of the waves. Lands seaward of where the shoreline would likely be determined, based on Hawai'i Revised Statues (HRS) §205A-1 and Hawai'i Administrative Rules (HAR) §13-222 Shoreline Certifications, are located in the Conservation District Resource Subzone. The beach area is set aside to the City and County of Honolulu, Department of Parks and Recreation as the Pūpūkea to Paumalū (Sunset) Beach Park, under Governor's Executive Order # 2598 (see Exhibit 1).

A single-family residence is located on the subject property. The neighboring properties to the south are fronted by wood bulkhead seawall structures. The neighboring property to the north is fronted by a concrete seawall which has partially failed, about 15 to 20 percent of the seawall has collapsed. These few houses are the only properties with shoreline armoring along this stretch of Sunset Beach.

The beach is exposed to swells from the north Pacific in the winter months and easterly tradewind waves year-round. The beach is composed of carbonate coarse sand and characterized by occasional outcrops of limestone that are intermittently buried or exposed by shifting sand. Long-term shoreline change rates in the vicinity of the subject property have trended towards chronic recession (approximately 0.5 to 0.6 feet per year) (Exhibit 3), although the long-term rate calculations are complicated by shorter-term, seasonal variations in shoreline position. Northeast tradewind waves, predominant in summer, tend to drive sand from this area (erosion) and west to northwest swell, predominant in winter, tends to move sand into this area (accretion) (Exhibit 4 and 5).

Short-term (episodic) erosion is a significant hazard to beach-front homes in the area with rapid sand loss and wave run-up from large waves. Such hazards would be expected in an environment of this type because the homes are built on top of the frontal sand dune. The sand dune may be more accurately characterized as a high wave berm because the underlying sediments appear to be predominantly coarse-grained, suggesting deposition by waves, not wind.

CHRONOLOGY:

August 24 and 28, 2017 – Department of Land and Natural Resources (DLNR) staff conducted a site inspection of the area. Seawall was intact in front of subject property and no boulders were present (Exhibit 6 and 7).

September 3, 2017 - Subject seawall collapsed, according to the neighbors.

September 5, 2017 – DLNR staff conducted a site inspection of the area and observed the failed seawall. Construction crew was observed digging a trench in front of the failed structure (Exhibit 8). Department of Conservation and Resource Enforcement (DOCARE) and City and County of Honolulu, Code Compliance Branch were notified.

September 6, 2017 – DLNR notified by adjacent neighbor to the north that the subject seawall has failed completely and 15 to 20 percent of adjacent seawall to the north has failed.

September 8, 2017 – DLNR staff and a DOCARE Officer conducted a site inspection and observed an operator on a backhoe machine working with a pile of boulders on the seaward side of the subject property (Exhibit 9). It appeared that the boulders had been recently placed on the beach seaward of the failed seawall. DLNR staff notified the construction crew that the landowner did not have permits for land uses in the Conservation District and suggested they stop work. An Alleged Violation and Order was left in the landowner's mailbox at 3:45pm (Exhibit 10). Mr. O'Shea called DLNR staff and was informed of the alleged violation and the potential consequences. He agreed to stop work.

September 13, 2017 – DOCARE Officer conducted site inspection of the subject property and observed the boulders still present on the beach.

September 14, 2017 – DLNR staff conducted site inspection of the subject property and observed the boulders still present on the beach (Exhibit 11).

September 15, 2017 – DLNR received complaint that additional boulders were placed on the beach and work has been taking place throughout the week.

September 16, 2017 – DOCARE Officer conducted a site inspection of the subject property and observed machinery on the beach. The construction crew had stacked additional boulders and placed soil (sand and fill material) on the beach on top of the existing boulders. It appeared the construction team was stacking the boulders in a wall-like structure (Exhibit 12).

September 18, 2017 – DLNR staff conducted a site inspection and observed ongoing work with machinery on the beach. The pile of sand and fill material was still present on the beach (Exhibit 13).

September 20, 2017 – DLNR staff conducted a site inspection and observed ongoing work with machinery on the beach. The boulders and the pile of sand and fill material were still present. (Exhibit 14).

September 22, 2017 – A Temporary Restraining Order (Exhibit 15) was granted to stop all construction activities on the seawall through October 2, 2017.

ALLEGED UNAUTHORIZED LAND USE IN THE CONSERVATION DISTRICT:

The DLNR has jurisdiction over land lying seaward of the shoreline as evidenced by the upper reaches of the wash of the waves other than storm and seismic waves, at high tide during the season of the year in which the highest wash of the waves occurs, usually evidenced by the edge of vegetation growth, or the upper limits of debris left by the wash of the waves, pursuant to HRS §205A-1.

Staff believes the unauthorized land uses occurred within the Conservation District based upon the location of the work seaward of the O'Shea's property. The Office of Conservation and Coastal Lands (OCCL) believes there is sufficient cause to bring this matter to the Board of Land and Natural Resources (BLNR) since it is evident that the unauthorized land uses are within the Conservation District pursuant to the HAR §15-15-20 Standards for determining "C" conservation cistrict boundaries:

It shall include lands having an elevation below the shoreline as stated by HRS §205A-1 marine waters, fishponds, and tidepools of the State, and accreted portions of lands pursuant to HRS §501-33 unless otherwise designated on the district maps. All offshore and outlying islands of the State are classified conservation unless otherwise designated on the land use district maps.

HAR §13-5 and HRS §183C regulate land uses in the Conservation District by identifying a list of uses that may be allowed by a Conservation District Use Permit (CDUP). The chapters also provide for penalties, collection of administrative costs and damages to State land for uses that are not allowed or for which no permit has been obtained. HAR §13-5-2 defines "land use" as follows:

The placement or erection of any solid material on land if that material remains on the land more than thirty days, or which causes a permanent change in the land area on which it occurs.

The grading, removing, harvesting, dredging, mining, or extraction of any material or natural resource on land.

The work that was conducted consisted of excavation (grading) and placement of materials, including large boulders, concrete and rebar debris and soil, within the Conservation District, Resource Subzone. Since the work would normally qualify as a land use under the Conservation District definition (HAR §13-5-2), some type of permit or approval should have been obtained by the alleged.

Pursuant to HRS §183C-7, the maximum fine for a Conservation District violation is \$15,000.00 per violation in addition to administrative costs. If the alleged fails to immediately cease such activity after

written or verbal notification from the department, willful violation may incur an additional fine of up to \$15,000.00 per day per violation for each day in which the violation persists.

Under the Penalty Guideline Framework that was approved by the BLNR (Exhibit 16) this action is considered "Major" since the identified land use would require a permit approved by the BLNR under the permit prefix "D". This violation follows a penalty range of \$10,000 to \$15,000. The comparable identified use in HAR §13-5 would be "Shoreline Erosion Control" for which a permit approved by the BLNR is normally required.

Therefore, under the Penalty Guideline Framework this unauthorized land use is considered:

- 1. Major harm to resource or potential harm to resource; and
- 2. Major comparable harm to resource.
- 3. Continuing violations.

Under the penalty guidelines, examples of "major harm(s) to the resource" may include actions that cause substantial adverse impact to existing natural resources within the surrounding area, community, ecosystem or region, or damage to the existing physical and environmental aspects of the land, such as natural beauty and open space characteristics. Such actions may include, but are not limited to, unauthorized single-family residences or unauthorized structures, grading or alteration of topographic features, aquaculture, major marine construction or dredging, unauthorized shoreline structures, major projects of any kind, mining and extraction, etc."

In addition, under the "Containing Violations" guideline, "Each day during which a party continues to work or otherwise continues to violate conservation district laws, and after the Department has informed the violator of the offense by verbal or written notification, the party may be penalized up to \$15,000 per day (penalties for every day illegal actions continue) by the Department for each separate offense."

DISCUSSION:

Coastal erosion occurs as a result of the following phenomena: 1) Seasonal changes in waves and currents that move sand alongshore or across the shore, adjusting the beach profile; 2) Long-term (chronic) deficiencies in natural sand supply and/or fluctuations in meteorological or oceanographic processes such as storms and sea level rise; and 3) Human impacts to sand availability through sand impoundment and supply disruption from development and coastal engineering.

Development on beaches and dunes has contributed to narrowing and loss of beaches in Hawai'i, degrading recreational areas, habitat and natural storm protection that "healthy" beaches and dunes can provide. Beach narrowing and loss fronting shoreline armoring (the construction of vertical seawalls or sloping stone revetments along a shoreline to protect coastal lands from marine erosion) also severely restricts public access to State Conservation land and the natural resources. Seawalls impound natural sand supplies that would otherwise be available to nourish an eroding beach, increasing rates of beach narrowing and loss (Exhibit 17).

Unfortunately, many of Hawai'i's beaches have been degraded or lost from a combination of natural erosion and inappropriate coastal development including inappropriate shoreline armoring, shallow lot shoreline subdivisions and development built too close to the shoreline. According to a 2012 study by

University of Hawai'i and U.S. Geological Survey researchers, 70 percent of all beaches measured in the Hawaiian Islands indicated an erosion trend. More than 21 km or 9 percent of the total length of the beaches studied were lost to erosion. In nearly all cases of beach loss, the beaches were replaced with seawalls or other coastal armoring structures.

The beaches of the North Shore of O'ahu, also referred to as the "Seven Mile Miracle", are some of Hawai'i's most unique and valued natural resources. The North Shore is famous for world-class big wave surfing and hosts a series of top-level surfing contest each winter, attracting thousands of international contestants and spectators. Beaches are an essential natural resource and economic engine for the North Shore community. Most of the beaches along this stretch of shoreline are still healthy because of the abundance of sand, but some sandy areas are at risk due to chronic and seasonal erosion, shallow lot shoreline subdivisions and development built too close to erosion and inundation-prone shorelines. Increasing sea level rise will increase risks to beaches and shore-front development in the coming decades. The State and City should resist the temptation to allow further shoreline armoring in this area; as such actions will ultimately degrade the sandy beach.

The erosion that occurred in the vicinity of the subject property this summer was an extreme case of the normal cycle of seasonal change for North Shore beaches, which may have been worsened by higher than normal water levels, extreme high tides and/or longer-term deficiencies in sand supply.

The unauthorized land uses, including the use of heavy machinery, placement of the boulders, soil, and concrete and rebar debris, that were conducted by the O'Sheas pose a significant threat to the beach and the public. The land uses were conducted without proper authorizations and an environmental review process. The materials extend seaward of the shoreline within the Conservation District, inhibiting lateral shoreline access and affecting recreational activities. During construction work, clay, soil and construction debris was released into the ocean creating hazardous conditions for ocean users and plumes extending offshore (Exhibit 18).

It is currently unclear whether the seawall is located on State land or private property. A survey of the shoreline is necessary. However, debris and construction activity related to the seawall clearly occurred on State Conservation District land.

The beaches of Hawai'i are held in trust by the State for the benefit of present and future generations. The landowners of the subject property acted without authorization from the DLNR or the City and County of Honolulu. The State should be involved when individuals seek to construct any shoreline structure seaward of the shoreline; and there should be consequences when an individual unilaterally acts in such a way that endangers and potentially damages a public trust resource.

On August 27, 1999, the BLNR adopted the Hawai'i Coastal Erosion Management Plan (COEMAP) as an internal policy for managing shoreline issues including erosion and coastal development in Hawai'I (Exhibit 19). COEMAP still serves as the primary shoreline policy for the DLNR and recommends a number of strategies to improve our State's management of coastal erosion and beach resources.

However, COEMAP's scope is of a general nature, more focused on broader government policy than erosion management practices. The COEMAP effort is guided by the doctrine of sustainability promoting the conservation, sustainability, and restoration of Hawai'i's beaches for future generations. When assessing cases involving unauthorized shoreline structures the Department has implemented a "no tolerance" policy concerning unauthorized shoreline structures constructed after the adoption of

COEMAP. Based on this policy, the OCCL recommends that the materials be removed and the beach restored to its pristine condition. The decision to remove unauthorized uses has been established by previous BLNR decisions on matters similar to this one.

The OCCL strives to provide guidance and assistance to landowners that are subject to coastal hazards. Once this violation case is resolved, the OCCL would gladly assist the landowners in considering next steps.

Staff believes that the landowner should be fined the maximum penalty in five instances ($$15,000 \times 5$ = \$75,000) for the unauthorized land uses. DLNR documented the (5) days of continuing work despite verbal and written orders to cease work. In addition, Staff will recommend administrative penalties. Staff recommends the landowner be required to remove the unauthorized materials in their entirety and clean and restore the site to a condition acceptable to the Department.

This submittal and notice of the BLNR's meeting shall be sent to the property's landowners by certified mail to the address on record.

AS SUCH, STAFF RECOMMENDS:

That pursuant to HRS Sec. 183C-7 and HAR Sec. 13-5-6, the BLNR finds the property owner(s) of TMK: (1) 5-9-002:025 in Pūpūkea, Koʻolauloa, Oʻahu, in violation of HRS Sec. 183C-6 and HAR Sec 13-5-30, subject to the following:

- 1. The Landowner is fined \$75,000 for the unauthorized land uses;
- 2. The Landowner is fined an additional \$2,500.00 for administrative costs associated with the subject violation;
- 3. The Landowner shall pay all fines (total \$77,500) within thirty (30) days of the date of the BLNR's action;
- 4. The Landowner shall be required to remove debris and clean the site to the satisfaction of the DLNR;
- 5. That in the event of failure of the landowners to comply with any order herein, the landowner shall be fined an additional \$15,000.00 per day until the order is complied with; and
- 6. That in the event of failure of the landowners to comply with any order herein, the matter shall be turned over to the Attorney General for disposition, including all administrative costs.
- 7. The Department reserves the right to assert additional claims after a shoreline survey is completed and more information is received regarding the property lines.

Respectfully submitted,

Natalie Farinholt, Coastal Lands Program Specialist

Office of Conservation and Coastal Lands

Approved for submittal:

Suzande D. Case, Chairperson

Board of Land and Natural Resources

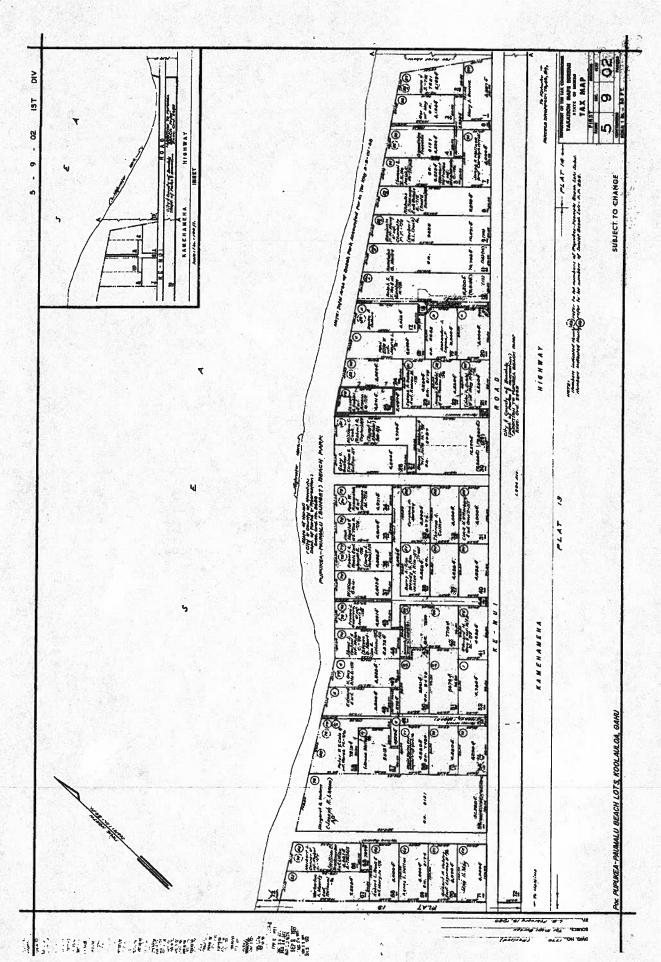
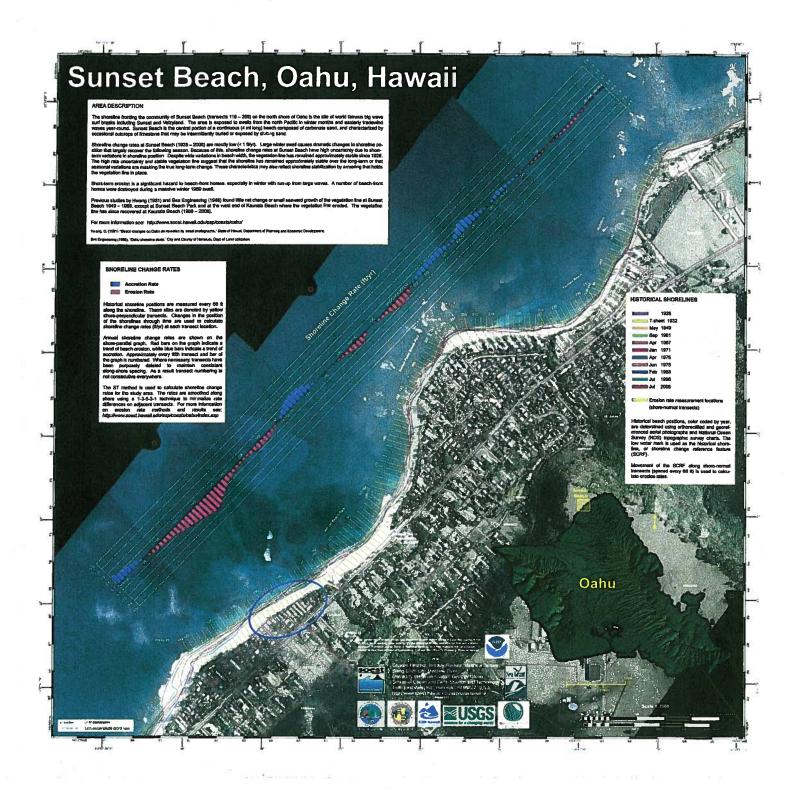


EXHIBIT 1



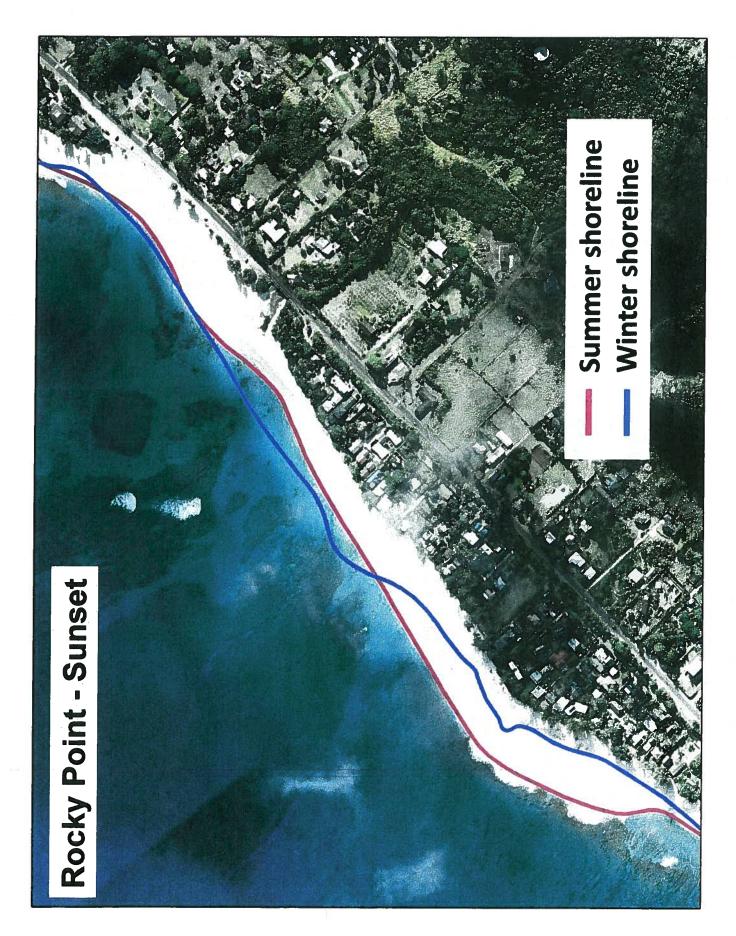
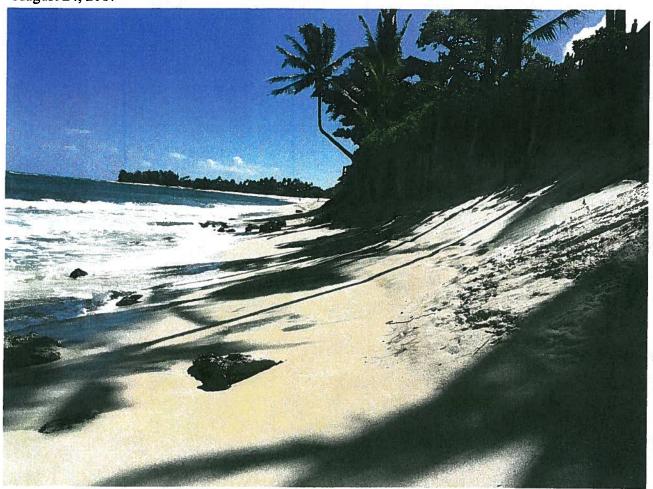


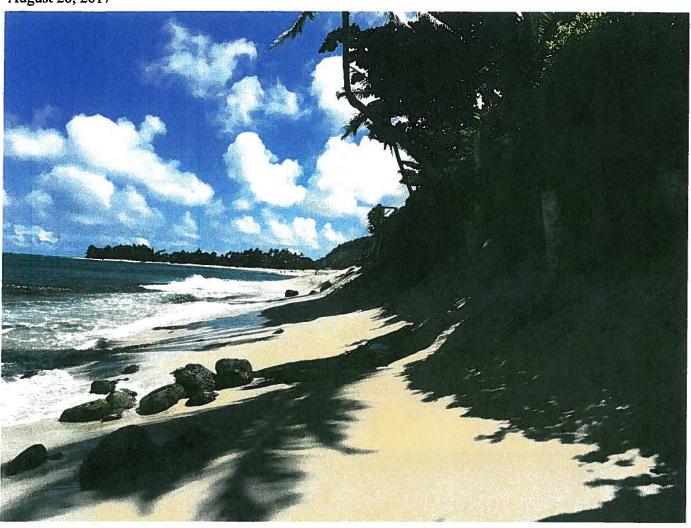
EXHIBIT 4



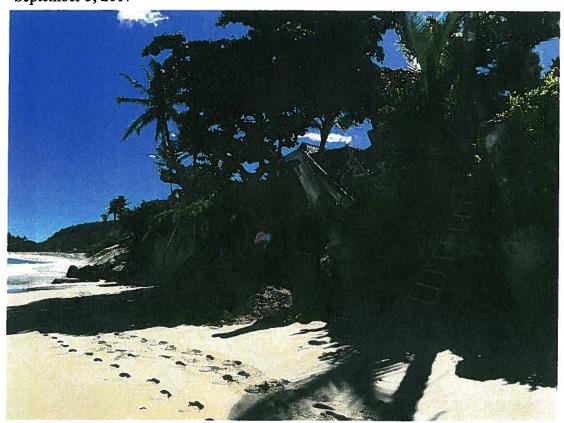
EXHIBIT 5

August 24, 2017





September 5, 2017



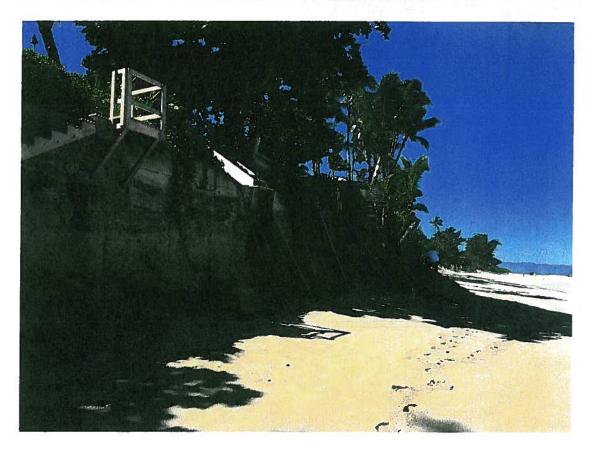
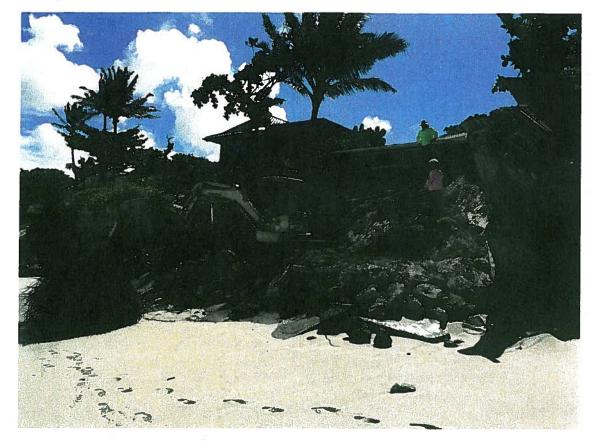


EXHIBIT 8



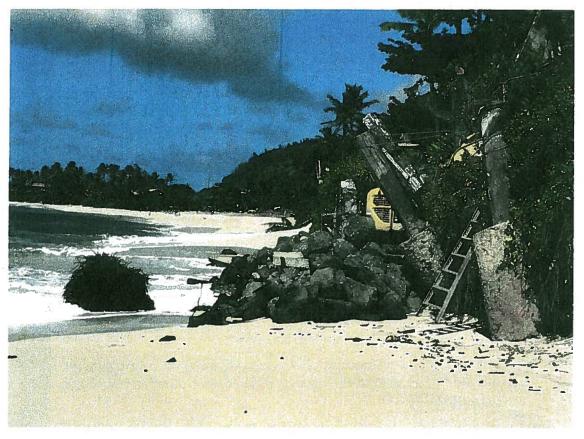


EXHIBIT 9

DAVID Y. IGE GOVERNOR OF HAWATI





STATE OF HAWAI'I DEPARTMENT OF LAND AND NATURAL RESOURCES

OFFICE OF CONSERVATION AND COASTAL LANDS **POST OFFICE BOX 621** HONOLULU, HAWAI'I 96809

ENF: OA 18-06

SUZANNE D. CASE

JEFFREY T. PEARSON, P.K.

CHAIRPERSON BOARD OF LAND AND NATURAL RESOURCE

REF:OCCL:SL

CERTIFIED MAIL/RETURN RECEIPT 7014 2120 0003 1908 2369

James and Denise O'Shea Trust 59-171 D Ke Nui Road Hale'iwa, HI 96712

SEP - 8 2017

SUBJECT:

Alleged Unauthorized Land Use within the Conservation District Located Makai of

59-171 D Ke Nui Road, Hale'iwa, O'ahu

Tax Map Key: (1)5-9-002:025

Dear Landowner:

It has come to the Department of Land and Natural Resources (DLNR), Office of Conservation and Coastal Lands' (OCCL) attention that alleged unauthorized land uses consisting of the placement of large rocks and concrete rubble as a shoreline erosion control measure may have occurred in the shoreline area fronting the subject property.

NOTICE IS HEREBY GIVEN you may be in violation of Hawaii Administrative Rules (HAR) Title 13, Chapter 5, entitled Conservation District providing for land uses within the Conservation District, enacted pursuant to the Hawaii Revised Statutes (HRS), Chapter 183C.

The Department of Land and Natural Resources (DLNR) has determined that:

- The location of the alleged unauthorized land use is located makai of TMK (1) 5-9-002:025 and is located within the State Land Use Conservation District, Resource Subzone;
- 2. A site inspection conducted by Staff on September 8, 2017 revealed a mini excavator placing rocks and concrete rubble within the shoreline area fronting the subject property in what appears to be a make-shift seawall for shoreline erosion control purposes [EXHIBIT 1];
- Pursuant to §13-5-2, HAR, "Land use" means:
 - The placement or erection of any solid material on land if that material remains on (1)the land more than thirty days, or which causes a permanent change in the land area on which it occurs:

- (2) The grading, removing, harvesting, dredging, mining, or extraction of any material or natural resource on land; and
- 4. This land use was not authorized by the Department of Land and Natural Resources under Chapter 13-5, HAR.

Pursuant to 183C-7, HRS, the Board of Land and Natural Resources (Board) may subject you to fines of up to \$15,000.00 per violation in addition to administrative costs. Should you fail to immediately cease such activity after written or verbal notification from the department, willful violation may incur an additional fine of up to \$15,000.00 per day per violation for each day in which the violation persists.

Please respond to this Notice within 15-days. Please note any information provided may be used in civil proceedings. Should you have any questions, contact Sam Lemmo, Administrator of the Office of Conservation and Coastal Lands at (808) 587-0377.

Sincerely,

Suzanne D. Case, Chairperson

Board of Land and Natural Resources

Attachment

C: ODLO
DOCARE-Oʻahu
C&C, DPP

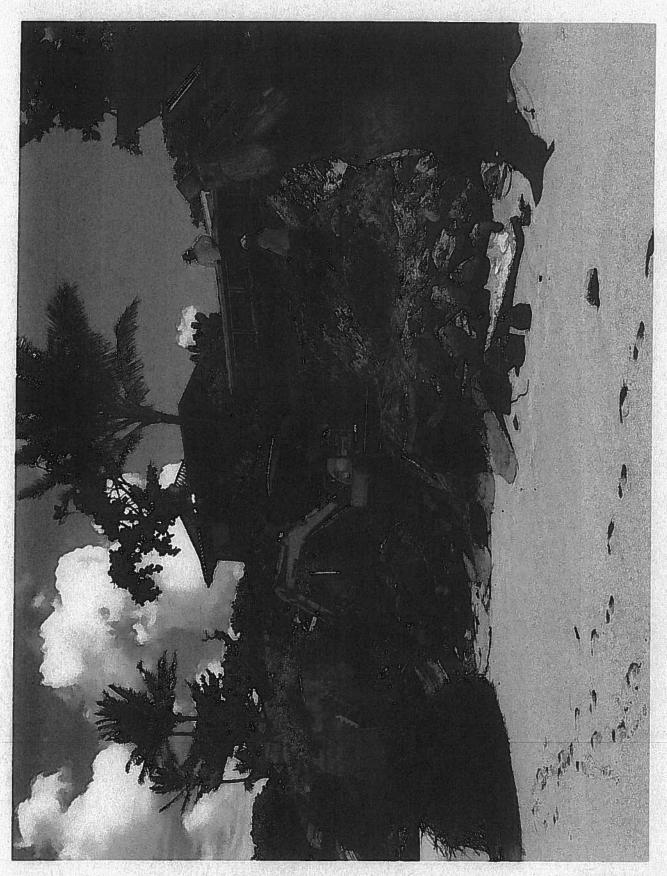


EXHIBIT 1

September 14, 2017

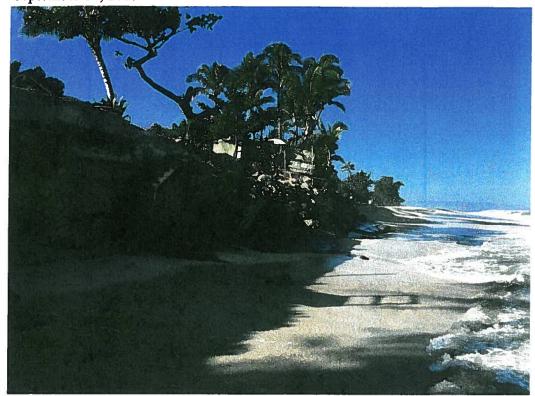




EXHIBIT 11

September 16, 2017

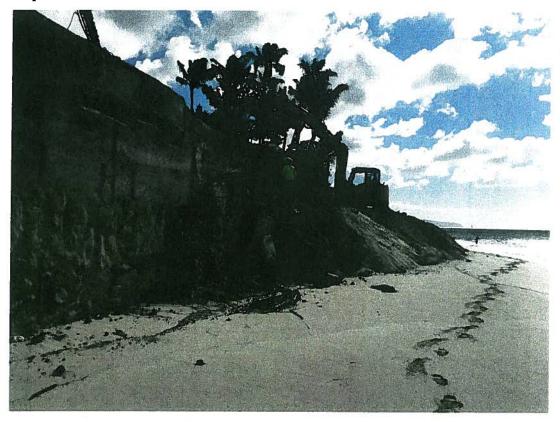




EXHIBIT 12

September 18, 2017





EXHIBIT 13

September 20, 2017

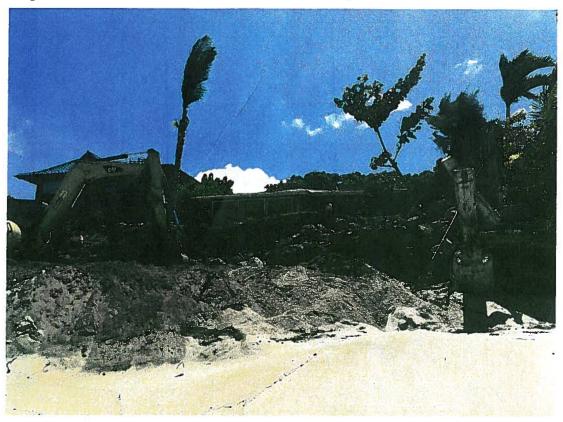




EXHIBIT 14

STATE OF HAINAII
FILED IN OPEN COUNT

O. 25 o'clock a p

DOUGLAS S. CHIN

Attorney General of Hawaii

6465

WILLIAM J. WYNHOFF 2558 AMANDA J. WESTON 7496

AMANDA J. WESTON
Deputy Attorneys General

Department of the Attorney General,

State of Hawai'i

465 S. King Street, 3rd Floor

Honolulu, Hawaii 96813

Telephone: (808) 587-2985

Attorneys for Plaintiff

IN THE CIRCUIT COURT FOR THE FIRST CIRCUIT

STATE OF HAWAI'I

STATE OF HAWAI'I,

Plaintiff,

VS.

JAMES O'SHEA AND DENISE O'SHEA as Trustees of the James and Denise O'Shea Trust and DENISE O'SHEA AND JAMES O'SHEA, individually, and JOHN AND JANES DOES 1-10,

Defendant.

17-1-1543-09 JPC CIVIL NO. 06-1-0019-01 KSSA

ORDER GRANTING PLAINTIFF'S MOTION FOR TEMPORARY RESTRAINING ORDER FILED SEPTEMBER 22, 2017

DATE: September 22, 2017

TIME: 10:00 a.m.

JUDGE: Hon. Jeffrey P. Crabtree

ORDER GRANTING PLAINTIFF'S MOTION FOR TEMPORARY RESTRAINING ORDER FILED SEPTEMBER 22, 2017

The Plaintiff's Motion for Temporary Restraining Order filed September 22, 2017, having come on for hearing on September 22, 2017, at 10:00 a.m., before the Honorable Jeffrey P. Crabtree, Amanda J. Weston, Deputy Attorney General, appearing for Plaintiff State of Hawai'i, and Defendants James O'Shea and Denise O'Shea appeared in person, and

The court having considered the motion, and the memoranda, declarations and exhibits filed in support and opposition to the motion, as well as the oral argument of counsel, finds and concludes that

- 1. There is a sufficient likelihood that Plaintiff may prevail on the merits;
- 2. The Plaintiff would be irreparably harmed as if the motion is not granted;
- 3. The public interest supports granting the temporary restraining order Plaintiff seeks.

WHEREFORE, IT IS HEREBY ORDERED, ADJUDGED AND DECREED that

Plaintiff's Motion for Temporary Restraining order filed on September 22, 2017 is GRANTED

as follows:

Defendants will stop all construction activities on the seawall through October 2, 2017.

DATED: Honolulu, Hawaii,	SEP 2 2 2017	
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APPROVED AS TO FORM:	DGE OF THE ABOVE-ENTITLED C	OURT
JAMES O'SHEA		
DENISE O'SHEA		

CONSERVATION DISTRICT VIOLATION PENALTIES SCHEDULE GUIDELINES AND ASSESSMENT OF DAMAGES TO PUBLIC LAND OR

NATURAL RESOURCES

September 2009 Relating to penalties for violations within the Conservation District

Act 217

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1 INTRODUCTION

Hawaii Revised Statutes (HRS) §183C-7 was amended on July 7, 2008 to increase the maximum penalty for a Conservation District violation to up to \$15,000 per violation, in addition to administrative costs, costs associated with land or habitat restoration, and damages to public land or natural resources, or any combination thereof.

This document, Conservation District Violation Penalites Schedule Guidelines and Assessment of Damages to Public Land and Natural Resources is intended to provide the Office of Conservation and Coastal Lands (OCCL) with a framework to systematically carry out its enforcement powers, in the determination and adjudication of civil and administrative penalities. These guidelines are to be used for internal staff guidance, and should be periodically reviewed to determine their effectiveness, and whether refinements are needed. These guidelines are consistent with HAR §13-1, Subchapter 7, Civil Resource Violation System (CRVS).

CONSERVATION DISTRICT VIOLATION PENALTIES SCHEDULE GUIDELINES

The charging and collecting of penalties is an enforcement tool that may be used to cusure future compliance by the responsible party and others similarly situated. The penalty amount(s) shall be enough to ensure immediate compliance with HAR §13-5 and HRS §183C, and cessation of illegal activities. Penalties will be assessed for each action committed by an individual(s) that conducts an unauthorized land use and that impairs or destroys natural resources protected under Chapter §183C, HRS.

The Staff will treat each case individually when assigning conservation district penalties using the following framework, and additional considerations and factors for upward or downward adjustments. The staff of the OCCL (Staff) will use these penalty schedule guidelines to issue violation notices and to make recommendations to the Board of Land

and Natural Resources (Board), Chairperson of the Board of Land and Natural Resources (Chairperson), or Presiding Officer, whom may ultimately adjudicate the Conservation District penalties. These guidelines presume that all cases in which a violation has occurred, the Chairperson, Board, or Presiding Officer may also assess administrative costs, damages to public land or natural resources, and costs associated with land or habitat restoration.

2.1 PENALTY CALCULATION

The penalty range for these actions will be substantially determined based on the type of permit that would have been required if the individual(s) had applied to the Department of Land and Natural Resources (Department) or Board for pre-euthorization to conduct the identified use, under Hawaii Administrative Rules (HAR) §13-5-22, 23, 24, 25. Assessing the penalties according to the Conservation District permit type accounts for the level of review or scrutiny the unauthorized use would have received by the Department or Board in order to avoid damage to the natural resource. This graduated permit review framework corresponds to the level of actual or potential "harm to the resource" caused by the violation.

Once the baseline for the penalty range has been established according the required permit, the penalty may be adjusted appropriately upward or downward according to the "harm to resource" caused or potentially caused by the violator's action and additional considerations and factors (See 2.1.4),² within the assigned penalty range. Where Staff was mable to associate the unauthorized use with a typical land use identified in HAR §13-5, Staff may try to associate the action with the most similar identified land use in HAR §13-5, or according to the "harm to the resource" caused by the violation. Table 1

¹ "Hern to resource" is an actual or potential impact, whother direct or indirect, about or large term, impact on a natural, cultural or social resource, which is expected to soom an arrent of manufactural exts of construction, direction alteration, or landurage alteration (See Appendix B: Definitions) Adapted from For the Department of Eurhramental Protection 2000 distribution from For the Only Department of Eurhramental Protection 2000 distribution for Press and Department

³ Poutly amousts may be adjusted up or down, based an additional considerations, each as the actual extens of the divest demages eightformos of may offilise indirect impacts, convironmental retend of the violator, responsivement of violator, etc. (See 2.1.4 Additions Considerations and Pestons).

was created to demonstrate the penalty ranges for the type of required permit and "harm to resource" (See 2.1.1 or Appendix A).

The first two of the following sections explain the identified and non-identified land use framework. The next four sections: Tree Removal, Additional Considerations and Factors, Continuing Violations and Permit Non-Compliance, and in-Kind Penalties, provide guidance for the upward or downward adjustment of penalties based on the initial framework discussed in Section 2.1.1, Identified land use penalties.

2.1.1 Identified Land Use Penalties

The violation penalty range associated with each required permit will be assessed in accordance with the following harm to resource indices in this graduated framework.

Table 1. Penalty Guideline Framework

distracts resource or potential or harm to resource	Identified hand non normit bechning with the letter	Penalty Renge
fajor	D (Board)	\$10,000-\$15,000
Moderate	C (Departmental)	22,000-\$10,000
Minor	B (Site Plan)	\$1,000-\$2,000
/ery Minor	(B) (Site Plan)	Up to\$1,000

Major Harm to the Resource/ Board Permit (D)

Violations identified with the required permit prefix (D) may incur a penalty in the range of \$10,000 - \$15,000 as a Board permit would have been required to minimize the possibility of causing "major harm to the resource." Examples of "major harm(s) to the resource" may include actions that cause substantial adverse impact to existing natural resources within the surrounding area, community, ecosystem or region, or damage to the existing physical and environmental aspects of the land, such as natural beauty and open space characteristics. Such actions may include, but are not limited to, unauthorized single-family residences or unauthorized structures, grading or alteration of topographic features, aquaculture, major marine construction or dredging, unauthorized shoreline structures, major projects of any kind, mining and extraction, etc.

Moderate Harm to the Resource/Departmental Permit (C)

Violations identified with the required permit prefix (C) may incur a penalty in the range of \$2,000-\$10,000, as a Departmental permit would have been required, due to the possibility of causing "moderate harm to the resource." Examples of "moderate harm(s) to the resource" may be adverse impacts that degrade water resources, degrade native ecosystems and habitats, and/or alter the structure or function of a terrestrial, littoral or marine ecosystem. Such actions may include, but are not limited to, unauthorized landscaping causing ground disturbance, unauthorized alteration, removation or demolition of existing structures or facilities, such as buildings and shoreline structures, maintenance dredging, agriculture, and animal husbandry, etc.

Minor Harm to the Resource/Site Plan Approyel (B) Permit

Violations identified with the required permit prefix (B) may incur penalties as a site plan approval would have been required to assure that "minor harm(s) to the resource" are minimized. "Minor harm(s) to the resource" may incur a penalty of \$1,000-\$2,000 and could be actions causing limited to abort-term direct impacts including, but not limited to, small-scaled construction, construction of accessory structures, installation of temporary or minor shoreline activities or similar uses.

Very Minor Harm to the Resource/(B) Permit

In instances in which a permit with the B prefix should have been sought but are considered to have only caused "very minor harm(s) to resource" a penalty of up to \$1,000 may be incurred. These "very minor harm(s) to the resource" could be actions in which the impact on the water resource or terrestrial, littoral or marine ecosystem was temporary or insignificant, and was not of a substantial nature either individually or cumulatively.

2.1.2 Non-Identified Land Use Penalties

Violations in which an unauthorized use is not identified in HAR §13-5-22, 23, 24, 25, Staff may by to associate the action with the most similar identified land use in HAR

§13-5 or according to the "harm to the resource" caused by the violation. Refer to the above section, Identified Land Use Penalites, for the most similar required permit prefix. To categorize the violation as a "harm to resource" when no similar use is identified in HAR §13-5, Staff will refer to Table 1 and the definitions of the four violation types of "harm to resource" (See Appendix B: Definitions).

2.1.3 Tree Removal

Violation penalties for the removal of any federal or state listed threatened, endangered, or commercially valuable tree may incur a fine of up to \$15,000 per tree. Removal of any native tree may incur a fine of up to \$1,000 per tree. The removal of any invasive tree shall be considered as removal/clearing of vegetation.

The Board, Department, or Presiding Officer also has the option of considering the removal of more than one tree as a single violation, similar to the removal/clearing of vegetation.² If violation is considered as one violation, a fine amount of up to \$15,000 may be incurred, utilizing the guidelines for Major, Moderate, Minor, and Very Minor outlined in this schedule. However, the removal of any federally or state listed threatened or endangered tree shall be considered on a one violation per tree basis, with a maximum penalty of up to \$15,000 per tree.

2.1.4 Vegetation Removal/Vegetation Clearing

Past Staff recommendations and Board decisions have treated some cases of tree or removal as one citation of vegetation clearing/vegetation removal, this practice may be continued in violations resulting in minor or very minor harm to the resource. In accordance with the identified land uses within HAR §13-5 the assessment of vegetation removal has been based on a single citation of removal/clearing determined by the square footage of vegetation removed (See Table 3 Vegetation Removal). However, the

Department may see fit to assess the removal/clearing of threatened, endangered, or commercially valuable plants similar to the modified tree removal framework and may be penalized on an individual plant basis of up to \$15,000 per plant.

Table 3. Vegetation Removal

Action	Commonthe Born to Resource	Penalty Range
Removal of more than 10,000 sq. ft.	Major	\$10,000-\$15,000
Removal of Vegetation or of 2,000-	Moderate	22,000-\$10,000
Removal of less than 2,000 sq. ft.	Kilinge	\$1,000-\$2,000
Jearing of Invasive or noxious	Very Minor	Up to \$1,000"

Note: The eleating of furestanced, enthangered or commercially valuable plants will be addressed on a case-by-case basis, but depositing on the importance of the species may incur a penalty of up to \$15,000 per plant.
According to Table 2, the eleating of vapatation may hour a panalty of up to \$11 on th., as clearing 10,000 eq.ft. Staff could seem a penalty of up to \$11 on th., as clearing 10,000 eq.ft. Staff

2.1.5 Additional Considerations and Factors

After Staff applies the Conservation District violation graduated penalty framework to identify the violation penalty range (1, 2, and 3 found above), the Staff may incorporate several considerations into the final assessed conservation district penalty including but not limited to, those factors identified in HAR §13-1-70 Administrative Sanctions Schedule; Factors to be Considered.

2.1.6 Continuing Violations and Permit Non-Compliance

Each day during which a party continues to work or otherwise continues to violate conservation district laws, and after the Department has informed the violator of the offense by verbal or written notification, the party may be penalized up to \$15,000 per day (penalties for every day illegal actions continue) by the Department for each separate offense.

³ While Sind" and Bourd decinions in MA-01-49, CA-62-40 and MA-04-68 have treated the remarks of man-sative, investive, or nonclose roses as one climites of "Marring" with annotatory remodificition plans.

Provided the ham to the researce and offitte damage were minimal

Violation of existing approved Conservation District Use Permit (CDUP) conditions will be assessed on a case-by-case basis. Existing permit violations, in which deadlines are not met, may be individually assessed by the Staff as to prior violator conduct, knowledge, and compliance. Violation of permit conditions involving initiation and/or completion of project construction, notification of start and completion dates, failure to file legal documents, etc., may be considered very minor within the existing framework, although it should be noted that such actions may result in permit revocation. Failure to perform proper cultural, archeological, or environmental impact studies or failure to implement proper best management practices as identified in the standard permit conditions may be assessed more severely by Staff, as a moderate or major harm to the resource, due to the potential of greater adverse impacts to natural resources from the violator's failure to comply with the permit conditions, may have occurred.

2.1.7 In-Kind Penalties

Once the penalty amount has been established through the framework above, the Department may determine that the full payment or some portion of the penalty may be paid as an in-kind penalty project.⁵ This would not serve as a way to avoid payment but as a way to reduce the cash amount owed while allowing the Department to consistently enforce its rules. The in-kind penalty project is not designed to credit the violator for restoration or remediation efforts that may be already required, but to offset a portion of the cash penalty assessed. The in-kind penalty should be enough to ensure future compliance with HAR §13-5 and HRS §183C, by the violator and to deter other potential violators from non-compliance.

In-kind penalties will only be considered if (1) the responsible party is a government entity, such as a federal agency, state agency, county agency, city agency, university, or school board, or if (2) the responsible party is a private party proposing an environmental

restoration, enhancement, information, or education project. In-kind penalties are limited to the following specific options:

- a. Material and/or labor support for environmental enhancement or restoration projects. The Department will give preference to in-kind projects benefiting proposed government-sponsored cavironmental projects. For aboreline violations, this may include state beach nourishment projects and dune restoration projects.
 - b. Environmental Information and Environmental Education projects. Any information or education project proposed must demonstrate how the information or education project will directly enhance the Department's, and preferably the OCCL's, mission to protect and conserve Hawaii's Conservation District Lands.
- c. Capital or Facility improvements. Any capital or facility improvement project proposed must demonstrate bow the improvement will directly enhance the Department's and/or public's use, access, or ecological value of the conservation property.
- d. Property. A responsible party may propose to donate land to the department as an in-kind penalty. Donations will be handled by the Department's Legacy Lands program or similar program.

² in-Kind Panaky fluorench has been adopted fluor Fluorida Department of Environmental Protection, 2007, Program Dévasive 923, Settlement guidelines for civil and abstrators two ponation.

2.1.8 Penalty Adjudication

Violation penalties may be adjudicated similarly to the harm to resource indices in the penalty guideline framework.

Comparable Harm to	Comparable Harm to Resource Identified and use permit cenalty Adjudicator and Penalty Renes & The Construction of the Construc	mit Penalty Adjudicator	X.
Major	\$10,000-\$15,000	Board	
Moderate	\$2,000-\$10,000	Board	
Minor	\$1,000-\$2,000	Chairperson or Presiding Officer	-
Very Minor	up to \$1,000	Chairperson or Presiding Officer	-

Major and Moderate Harm to the Resource

The Board may adjudicate penalties to violations categorized as causing or potentially causing major or moderate harm(s) to the resource. The Board may also adjudicate cases in which repeat violations, repeat violations, or egregious behavior were involved, or moderate to significant actual harm to the resource occurred. The Board may also adjudicate the payment of part or all, of the penalty as part of an In-kind penalty.

Minor and Very Minor Harm to the Resource

The Board may delegate to the Chairperson or a Presiding Office: the power to render a final decision in minor and very minor conservation district violations in order to provide expeditious processing and cost effective resolution. The Chairperson or appointed Presiding Officer may adjudicate penalties to minor and very minor violations characterized by inadvertent or unintentional violations and those violations which caused minor or very minor harm to the resource.

3 ASSESSMENT OF DAMAGES TO PUBLIC LAND OR NATURAL RESOURCES

Penalties to recoup damages to public lands or natural resources for the purposes of emforcement and remediation may be assessed in addition to Conservation District violation penalties assessed by the aforementioned guidelines. The assessed total value of the initial and interim natural resource(s) damaged or lost (compensatory damages) and the cost of restoration or replacement of the damaged natural resource(s) (primary restoration cost) along with any other appropriate factors, including those named in HAR §13-1-70, may be adjudicated by the Board. The total value may be estimated on a per annum basis, and then may be used to calculate the net present value of the initial and interim loss of natural resource benefits, until the ecosystem structure, function, and/or services are restored.

The cost of a full-scale damage assessment by the Department would be an administrative cost, which could be recouped by the Board from the landowner or offerder pursuant §HRS 183C-7. In some cases, the damage to public lands or natural resources may occur on more than one ecosystem or habitat type, (e.g., sandy beaches, seagrass beds, and coral reefs). In such instances, damages for all impacted systems will be handled cumulatively.

Since all the coosystem services provided by the ecosystem in question cannot be quantified (e.g., the aesthetic value), the values obtained are lower bound estimates, and may be applied to systems similar to the referenced ecosystem using the benefit transfer method. These valuations, to account for the loss of ecosystem services and the cost to restore them, may be applied to Hawaiian ecosystems on public lands: such as Koa and Ohia forests, coral recfs, seagrass beds, wetlands, dune and beach ecosystems, and other important Hawaiian ecosystems.

While each case is unique and individual in nature, the Department may not be able to conduct detailed damage assessments in each case, and may refer to past precedent,

economic ecosystem valuations, and other published environmental valuations to estimate and assess damages on smaller scales (for valuations and publication examples see Appendix C. References and Appendix D. Damages Examples). Using the benefit transfer method to apply past precedents and published valuations in some situations would allow the Department to focus its administrative duties and time on remediation and restoration efforts. However, as ecological valuation and research continue, more comprehensive estimates may be produced and utilized.

The Board may allow restoration activities and damage penalties to be conducted and/or applied to a site different from the location of the damaged area where similar physical, blological and /or cultural functions exist. These assessed damages are independent of other, city, county, state and federal regulatory decisions and adjudications. Thus, the monetary remedies provided in HRS §183C-7 are cumulative and in addition to any other remedies allowed by law.

3.1 PRIMARY RESTORATION DAMAGES

The cost of land or habitat restoration or replacement, the cost of site monitoring, and site management may be assessed and charged as primary restoration damages. Restoration efforts will aim to return the damaged ecosystem to a similar ecological structure and function that existed prior to the violation. In cases in which the damaged ecosystem was predominately composed of non-native species, restoration efforts must re-vegetate Conservation District land and public lands with non-invasive species, preferably native and endemic species when possible. The use of native and endemic species may thus result in the restoration of ecological structure and function critical for the survival of endemic Hawaiian species.

Returning the damaged and or severely degraded site to a condition similar to or better than its previous ecological structure and function (e.g., a terrestrial system such as a Koa (Acacia loca) forest) would include: (1) calculating the level of ecosystem services to be restored from carbon sequestration, climate regulation, nutrient cycling, air and water purification, erosion control, plant and/or wildlife habitat, and any other services which

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may be valued; (2) purchase, production and out-planting of Kos scodlings; and (3) monitoring, maintenance, and management for the time period of mature growth of ~40-60 years, to achieve mature canopy structure, native under-story, and an acceptable level of lost ecosystem structure, function and/or services restored.

3.2 COMPENSATORY DAMAGE CALCULATION

Compensatory damages to public lands or natural resources may be assessed and charged to the violator to compensate fix ecosystem damage and lost initial and interim ecosystem services to the public. All Divisions of the Department may coordinate their resources and efforts along with existing ecosystem valuations and publications (See Appendix C and D fix examples) to derive the estimated total value of the natural resource damaged until the ecosystem structure, function, and services are estimated to be recovered.

The total value of the natural resource that is lost or damaged may include the initial and interim values of the ecosystem services provided by the natural resource or habitat, and the social-economic value of the degraded site, until the ecosystem structure, function, and/or services are restored. Assessing the damages to the resource could include: estimating the loss of ecosystem services of carbon sequestration, climate regulation, nutrient cycling, plant and/or wildlife habitat, biodiversity, air and water purification, erosion control, coastal protection, the loss of benefits to tourism, fisheries, society, cultural inspiration and practices, and any other services which may be valued.

These natural resource damages may be assessed using economic valuation techniques to estimate the total value(s) of the natural resource(s) damaged on a per area basis, including total ecosystem service value, total annual benefits, the market value of the natural resource, or any other factor deemed appropriate. The total value of the present and interim natural resource damage may be estimated by calculating the net present value of these lost benefits, values and services. The net present value may be calculated using a discount rate to scale the present and future costs to the public, of the interim losses of ecosystem services over the restoration time. The restoration time may be

estimated as the number of years for the damaged natural resource or ecosystem to reach maturity and/or the ecosystem structure and function to be restored similar to the previolation state. The discount of future losses and accrued benefits may be used in the valuation of mitigation efforts performed by the violator. For example the restoration conducted immediately after damage occurred may be calculated to have a higher present benefit worth than the benefit of restoration activities undertaken a year or two later.

In other instances, a habitat equivalency analysis (HEA) or a resource equivalency analysis (REA) may be used to scale equivalent habitat or wildlife losses for estimating both ecosystem damage penalties and restoration efforts.

3.3 ADJUDICATION OF DAMAGES

The adjudication of primary restoration damages and compensatory damages will be adjudicated by the Board due to the complexity of the assessment process and to assure proper checks and balances, including adequate public notice and a public hearing.

In addition to the damages and penalty violations assessed, the Department is allowed to recoup all administrative costs associated with the alloged violation pursuant to HRS §183C-7(b). All penalties assessed will be in compliance with HRS §183C-7(c) and will not prohibit any person from exercising native Hawaiian gathering rights or traditional cultural practices.

APPENDIX A: GUIDELINE FRAMEWORK TABLES

Table 1. Penalty Guideline Framework

Enter to resource or cotential for harm to	Identified land use nermit bechning with the letter	Penalty Range
Major	D (Board)	\$10,000-\$15,000
Moderate	C (Departmental)	\$2,000-\$10,000
Minor	B (Site Plan)	31,000-\$2,000
Very Minor	(B) (Site Plan)	Up to\$1,000

Table 2. Vegetation Removal

Action	Comparable Barm to Reserre	Penalty Renes
Removal of more than 10,000 aq. ft.	Major	\$10,000-\$15,000
Removal of Vegetation or of 2,000-10,000 sq. ft of vegetation	Moderate	2,000-\$10,000
Removal of less from 2,000 sq. ft.	Minor	\$1,000-\$2,000
Clearing of Invasive or nozious regetation	Very Minor	Up to \$1,000°

with Bolf could assess a penalty of \$10,000. The charing of threatment, when you are represented to the second penalty whiches plants, will be acknowed on a care-by-case bests, but depending on the importance of the species may incur a possibly of up to \$15,000 per plant.

APPENDIX B: DEFINITIONS

efinitions:

- "Baseline" means the original level of services provided by the damaged resource.
 "Benefit Transfer Method" estimates economic values by transferring existing benefit estimates from studies already completed for another location or issue.
 - "Board" means the Board of Land and Natural Resources.
- "Board Permit" means a permit approved by the Board of Land and Natural assurces.
- "Chairperson" means the chairperson of the board of land and natural resources
- (6) "Civil Resource Violations System" or "CRVS" means a system of administrative law proceedings as authorized under chapter 199D, HRS, and further prescribed in Subchapter 7, 13-1, HAR, for the purpose of processing civil resource violations.
 - (7) "Compensatory Damages" means damages for compensation for the interim loss of ecosystem services to the public prior to full recovery.
- (8) "Contested Case" means a proceeding in which the legal rights, duties, or privileges of specific parties are required by law to be determined after an opportunity for an agency bearing.
- (9) "Department" means the Department of Land and Natural Resources.
- 10) "Departmental Permit" means a permit approved by the Chairperson.
- (11) "Discounting" means an economic procedure that weights past and future benefits or costs such that they are comparable with present benefits and costs.
- (12) "Ecosystem Services" means natural resources and ecosystem processes, which may be valued according to their benefits to humankind.

For example: carbon sequestration, climate regulation, nutrient cycling, plant and/or wildlife habitat, biodiversity, air and water purification, erosion control, coastal protection, the loss of benefits to tourism,

recreation, scientific discovery, Asheries, society, cultural inspiration and practices, and any other services which may be valued.

- (13) "Grossly negligent" violation means conscious and voluntary acts or omissions characterized by the failure to perform a manifest duty in reckless disregard of the consequences.
- (14) "Harm to resource" means an actual or potential impact, whether direct or indirect, short or long term, acting on a natural, cultural or social resource, which is expected to occur as a result of unauthorized acts of construction, shoreline alteration, or landscape atteration as is defined as follows:
- (a) "Major Harm to resource" means a significant adverse impact(s), which can cause substantial adverse impact to existing natural resources within the surcounding area, community or region, or damage the existing physical and environmental aspects of the land, such as natural beauty and open space characteristics
- (b) "Moderate Harm to Resource" means an adverse impact(s), which can degrade water resources, degrade native ecosystems and habitats, and/or reduce the structure or function of a terrestrial, littoral or marine system (but not to the cattent of those previously defined as those in (s)).
 - (c) "Minor Harm to Resource" means limited to short-term direct impacts from small scaled construction or shoreline or vegetation alteration activities.

 (d) "Very Minor Harm to Resource" means an action in which the impact on

the water resource or terrestrial, littoral or marine ecosystem was insignificant, and was not of a substantial nature either individually or cumulatively.

For example, "major harm to the resource(s)" would be associated with a

major land use violation that would have likely required a Board Permit, such

as building a house, while a "minor harm to the resource(s)" may be

^{&#}x27; Eccoystem Valuations http://www.eccoystemvaluation.org/benefit_transfir.htm

^{*} Definition estayed from Flucida Department of Revivoumental Protection, 2009 Administrative Fines and Damese Liability, Cr. 628-54.

associated with minor land uses requiring an administrative Site Plan Approval, for building a small accessory structure.

- (15) "Knowing" violation means an act or omission done with awareness of the nature of the conduct.
- (16) "Net Present Value" means the total present value (PV) of a time series of cash flows.
- (17) "OCCL Administrator" means the Administrator of the Office of Conservation and Coastal Lands.
- (18) "Party" means each person or agency named or admitted as a party.
- (19) "Person" means an appropriate individuals, partnership, corporation, association, or public or private organization of any character other than agencies.
- (20) "Presiding Officer" means the person conducting the bearing, which shall be the chairperson, or the chairperson's designated representative.
- (21) "Primary Restoration Damages" means the costs to restore the damaged site to its prior baseline state.
 - (22) "Site Plan" means a plan drawn to seale, showing the actual dimensions and shape of the property, the size and locations on the property of existing and proposed structures and open areas including vegetation and landscaping.
- (23) "Willful violation" means an act or omission which is voluntary, intentional and with the specific intent to do something the law forbids, or fail to do something the law requires to be done.

APPENDIX C: REFERENCES

Cesar, H., van Beukering, P., Pintz, S., Dierking J. 2002. <u>Economic valuation of the conal rests of Hawaii</u>. NOAA Final Report NA 160A1449.

Conservation International 2008. Economic Values of Coral Reefs. Mangroves, and Sesgrasses: A global Compilation, Center for Applied Biodiversity Science, Conservation International, Arlington VA, USA.

Costanza, R. and Farley J. 2007. <u>Ecological economics of coastal disasters: Introduction</u> to the special issue. Ecological Economics 63 p. 249-253.

Costanza, R., d'Arge, R., de Groot, R., Farber, S., Grasso, M., Hannon, B., Limburg, K., Nacem, S., O'Neill, R.V., Paruelo, J., Raskin, R.G., Sutton, P., van den Belt, M. 1997. The Value of the World's Ecosystem Services and Natural Capital. Nature 387 p. 253-260.

Florida Department of Environmental Protection. Damage Costs in Seagnass Habitata. http://www.dep.state.fl.us/coastal/habitats/seagnass/swarencss/damage_costs.htm Florida Department of Environmental Protection. 2000. Administrative Fines and Damage
Liability. Ch. 62B-54. http://www.dep.state.fl.us/lega/Rules/beach/62b-54.doc

Florida Department of Environmental Protection. 2007. Program Directive 923.
Scallement guidelines for civil and administrative penalties.
www.dep.state.fl.us/admin/depdirs/pdf923.pdf

Florida Department of Environmental Protection. 2000. Rules and procedures for application for constant construction permits. Ch. 62B-41. http://www.dep.state.ff/us/besches/publications/pdf/62b-41.pdf

NOAA Coastal Services Center. Habitat Equivalency Analysis.
www.csc.noaa.gov/coastal/economics/habitatequ.htm

Maine Land-Use Regulation Commission, 2007. 2008 Workshop Draft Comprehensive Land Use Plan: for areas within the jurisdiction. http://www.maine.gov/doc/lurc/reference/cluprev/CLUP_PWDraft_pg5.shtml

APPENDIX D: DAMAGES EXAMPLES

Examples of Damage Assessments and Possible Remediation Efforts

The following are only brief past estimates used in Hawaii and other states; they are by no means comprehensive or limiting. These are intended to be examples for possible assessments and remediation efforts not as templates. As previously stated each case will be handled individually to account for unique ecological, economic and cultural impacts. The following are organized by habitat type.

Cora

Porida Department of Environmental Protection (Civil Damages);

The DEP can impose fines of up to \$1,000/m² of reef damaged and is dependent on the absence of externating circumstances such as weather conditions, disregard of safe boating practices, navigational error, whether the vessel operator was under the influence of drugs or alcohol etc.

Cesar et al 2002 (Econyatem Service Valuation)

Cesar et al. used a Simple Coral Reef Ecological Economic Model (SCREEM) to assess Hawaiian coral reefs based on the annual benefits of the coral reefs to recreation/tourism, property amenities, biodiversity, fisheries and education. The annual benefits and tonal economic value could then be expressed on a 'per area' basis. This study found the tonal annual benefits of the coral reefs of Hanauma Bay to be \$37.57 million (\$2,568/m²), of the coral reefs in Kiliei to be \$28.09 million (\$65/m²) and the coral reefs on the Kona coast to be \$17.68 million (\$19/m²).

Pilas enforcement (KA-02-10) (Primary Restoration Cost)

Demage to Coral recf consystems was assessed for restoration activities according to Florida guidelines, as \$5,830,000 for $5,380~\text{m}^2$ of coral reef damage. This calculation

was similar to the estimated cost of remediation efforts \$390,000 to clean 5,000 ya2 of beach sand. However between 30,000-50,000 yd3 was estimated to be impacted, totaling \$2,300,000-\$3,900,000. While cleaning the sediment from the recf was estimated to cost \$3,100,000 and \$4,700,000, and did not include coral colony re-establishment. An additional \$630,000 was estimated for the 10-year monitoring period, (however studies approximately \$845,000 (for the 13 acres, or \$65,000 for 10m²). This totaled between by Cesar et al. 2003 estimated a 25 year period for recovery of ecological impacts),

Thus damage to corals may be calculated as follows:

Number of square meters of coral damaged

X Multiplied by \$1,000 (or estimated value of coral on per/area basis) (#m2 x \$1000) Plus the estimated net present value of ecosystem services lost until recovery. (This may be more if damage to an area such as Hanauma Bay with increased recreational economic revenue.)

+Phus cost of Remediation

+Plus Cost of cleaning sediment from reef

+Plus Cost of cleaning sediment/mud from beach sand

+Phus Cost of coral reestablishment

+Plus Cost of Monitoring

+Plus Cost of Management

Seagrass beds (Compensatory Damage)

The Florida DEP fines offenders $$100/\mathrm{yd}^2$ of damage to seagnass beds for the first yd^2 damaged and \$75/yd² per each additional yd² damaged.

\$100 for the first yard damaged

+\$75 per each additional yard

or net present total value of ecosystem services lost until recovery

+vegetation planting

+monitoring

Sand Beaches (ex. Of Primary Rentoration Costs)

Minimum penalty cost of restoration and potential negative ecological, social and environmental impacts should be included in the assessment of damaged, degraded or lost sandy beaches. As one of Hawaii's greatest natural resources the following should be included in the minimum penalty assessment, however, as ecological valuation and research continue, more comprehensive estimates may be produced. In KA-02-10 Pilaa, \$390,000 fine was estimated to clean 5,000 yd3 of beach.

+Cost of lost revenue due to altered Beach resources (compensatory)

+primary restoration costs

+Plus cost of cleaning of sediment/mud from beach area (if necessary)

+Plus cost of beach nourishment (sand replacement)

+Plus cost of native dune vegetation

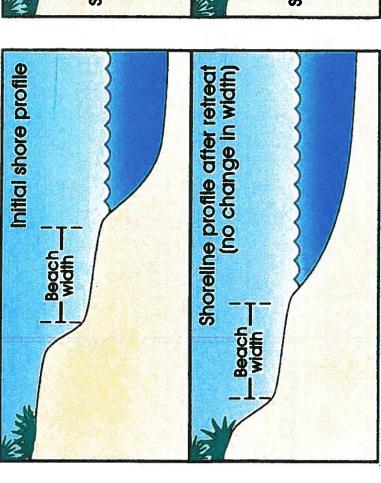
(In some circumstances the loss of beach resources may be assessed in conjunction with other ecological impacts listed above, such as coral reefs and sea grass beds.)

APPENDIX E: PENALTY CALCULATION WORKSHEET

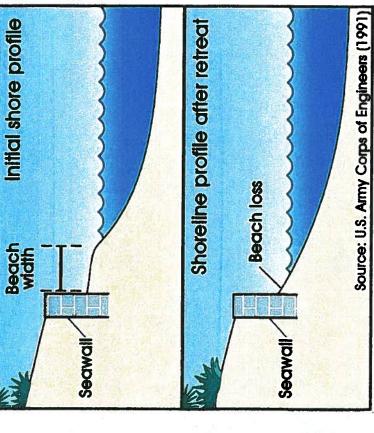
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Welstion Permi Ham to Tree or Fensity Adjustments Musti-day (# Total Type Prefix Resource Vogetation Range (Mart Adj. days) (D.C. B) (acrual & Sains Choice #1-8) potential) Permity Total: ty Adjustments and Descriptions (please attach additional adjustments and pitions, including but not limited to those litted in \$13-1-70) stual cavironmental damage extent (onsite)	1- Per	nalties						
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6. Does the Violator have a Financial Hardship?	38
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Beach Loss Fronting Coastal Armoring



Beaches on chronically eroding shores can maintain their natural width as they slowly retreat landward.



Beach loss eventually occurs in front of a seawall where there is chronic erosion.



EXHIBIT 18

STATE OF HAWAII DEPARTMENT OF LAND AND NATURAL RESOURCES Land Division, Planning Branch Honolulu, Hawaii

August 27, 1999

Board of Land and
Natural Resources
State of Hawaii
Honolulu, Hawaii

REGARDING:

Adoption of Revisions to the Coastal Erosion Management Plan (COEMAP), Approval of April 8, 1999 Minutes, Approval of 1999-2000 Work Plan and Approval of Procedures for Managing Shoreline Encroachments

APPLICANT:

Department of Land and Natural Resources

Land Division

1151 Punchbowl Street, # 220

Honolulu, Hawaii 96815

BACKGROUND:

(COEMAP was adopted by the Board on November 20, 1997. A Board Briefing on the revisions was held on April 8, 1999)

The loss of Hawaii's sandy beaches is a major social, economic, and environmental problem. Studies show that nearly 25 percent, or 17 miles of sandy beaches on the island of Oahu have been lost or severely narrowed over the past 70 years due to shoreline armoring. Similar losses have occurred on the island of Maui, and to a lesser degree, on Kauai and Hawaii.

In January of 1996, DLNR, Land Division initiated development of a strategic plan to address coastal erosion within a framework of beach protection, something that had never been attempted before in this State. These efforts resulted in the development of the Hawaii Coastal Erosion Management Plan (COEMAP).

On November 20, 1997 COEMAP was approved, as submitted, by the Board of Land and Natural Resources (Board) (Exhibit 1). In

APPROVED BY THE BOARD CE MED NATURAL RESOURCES AMEETING HELD ON Chiguet 27, 1999. EXHIBIT 19

ITEM D-25

approving COEMAP the Board also established the Coastal Lands Program (CIP) and affirmed an annual work plan.

Subsequent to the land Board's approval, Land Division staff, in consultation with the University of Hawaii, School of Ocean, Earth Science and Technology (SOEST) decided that certain aspects of COEMAP could be improved and better organized. As such, another round of plan revisions was initiated by SOEST. Draft reports were revised by Land Division staff and then distributed to members of the Coastal Erosion Subcommittee (CES) of the Marine and Coastal Zone Management Group (MACZMAG). Comments were incorporated into the plan. A major goal of the plan revision process was to ensure that the revisions were consistent with the original intent and content of COEMAP.

Since the inception of this effort, the Department has adhered to three simple goals/objectives: 1) generate agency consensus on the problems and implications associated with the narrowing and loss of sandy beaches; 2) develop working agreements with agencies and/or groups to solve coastal erosion problems by reducing duplication and government red tape; and 3) build agency-wide/public support for the legislative changes needed to implement different aspects of the plan.

All three (3) of these goals/objectives have been achieved to a considerable degree. For example, a major goal was to pass new legislation, which the Department accomplished in 1999 with the adoption of Act 84. In addition, the Department is developing an agreement with the U.S. Army Corps of Engineers, the Department of Health, and the Coastal Zone Management Program, to establish a State Program General Permit (SPGP) for qualifying types of beach nourishment projects. The Department also completed a plan to develop pilot beach nourishment projects on Oahu and Maui, and is currently planning on funding a design phase for one of the sites. These accomplishments represent milestones rather than end points.

In addition, a work plan was proposed for 1997-1998 which included the following initiatives: 1) public education and outreach and agency consultation; 2) the development of procedures to address enforcement of illegal shoreline structures; 3) development of pilot projects and compilation of new data; 4) establishment of an offshore sand reclamation program; 5) development of economic analysis, or benefit/cost analysis of different coastal protection technologies; 6) continuation of the Coastal Erosica Subcommittee (CES); 7) the development of Memorandums of Understanding (MOU); and 8) finding funds.

Many of the 1997-'\$8 work plan elements are currently being addressed. For instance, with the adoption of Act 84, Land Division staff has proposed new protocol to address existing

shoreline encroachments, since Act 84 allows the DLNR to place fines collected for unauthorized shoreline structures, and proceeds collected from the issuance of easements for existing shoreline structures, in the Beach Restoration Fund.

The Land Division has not yet established an offshore sand reclamation program but is now considering the possibility of issuing an RFP to develop an offshore site as a pilot project. This is now a possibility with the adoption of Act 84. Staff will also investigate the potential development of upland sand sources.

Other aspects of the work plan are still underway such as permit streamlining efforts (via the establishment of a State Program General Permit (SPGP) for small scale beach nourishment projects), the continuation of pilot beach restoration projects at Honokawai, Maui and Windward Oahu, and consideration of additional data needs and requirements.

PLAN REVISIONS:

The Board adopted COEMAP in November 1997. COEMAP was a multifaceted strategic plan intended to address coastal erosion within a framework of beach protection. While the plan revisions have not changed in this essential quality, they have resulted in a planning document that is better organized and easier to read. The Plan also provides more technical information to support the recommendations embodied in the Plan. The new Plan is 59 pages long, not including appendix (Exhibit 2). The original Plan was 21 pages.

SPECIFIC PLAN REVISIONS:

Organizationally, the revised Plan is comprised of four sections including an "Executive Summary", three chapters and an appendix. The "Executive Summary" includes a brief discussion of the problem and consequences of beach loss and includes a list of "Goals and Directions as well as a summary of "Recommendations" embodied in COEMAP. The first chapter titled "Our Restless Shores" quantifies beach loss and then describes why beach loss occurs in Hawaii and what consequences society possibly faces due to this environmental problem. The Executive Summary and Chapter I, Our Restless Shores, essentially replaces, improves and augments Sections I, II & III, of the original COEMAP document. Some of the specific revisions are as follows:

Executive Summary:

- More thorough discussion of social, economic, cultural and environmental consequences of beach loss and coastal erosion.

- Clarification on purpose of COEMAP (i.e., COEMAP as a framework, source of information or guidance on coastal erosion management, rather than COEMAP as a new paradigm or rule of law).
- Seven new goals and directions are listed.
- The plan recommendations and initial implementing actions are also summarized.

Chapter I, Our Restless Shores:

Chapter one generally provides a more comprehensive overview of coastal erosion and beach loss in terms of its multifaceted effects on Hawaii's different individuals, groups and entities, and how we can improve cooperation at all levels and sectors of society to address erosion problems more effectively through "'Ho'olaulima" (many hands working together). There is a more comprehensive over view of the underlying causes (both natural or human induced) of coastal erosion and beach loss, which is augmented with an expanded Technical Supplement. Our Restless Shores also recommends that we look at coastal erosion within the much more integrated framework of coastal hazards mitigation. Some of the more specific revisions are as follows:

- More in depth discussion of why coastal erosion and beach loss occur in the first place.
- Integration of coastal erosion management with management efforts in similar sectors such as Hurricanes, tsunamis and flooding, to show that regulatory authorities may pursue the compatible goals of beach conservation and hazard reduction using an integrated framework.
- Ho'olaulima (many hand working together) promoting an educational, consensual and community based process to improve our coastal environment.

Chapter II, Managing Coastal Erosion:

This Chapter provides an overview of Federal, State and County Authorities with regulatory oversight in the area of coastal erosion management. A critique of the existing regulatory/management regime is provided. This is a new section that was not included in the original Plan. It includes new information, but generally expands on issues and ideas contained in the original Plan. Some of the revisions and additions are as follows:

Discussion of current coastal erosion regulatory regimes at the State, County and Federal levels.

Critique of the existing regulatory regimes (e.g., lack of attention to problem, under valuation of resources, failure of coastal zone management system to address coastal erosion and beach loss, etc.)

Discussion of new tools for erosion management including new regulatory tools, such as:

Environmental Sequencing to reduce exposure to coastal erosion hazards utilizing such concepts as Avoidance, Minimization and Compensatory Mitigation.

Construction Setbacks, to reduce exposure to coastal hazards. This section significantly expands over the discussion in the original plan, by using examples from other states, where variable based setbacks have been implemented.

The plan discusses non-regulatory tools, including the utilization of Federal Floodplain Polices to reduce exposure to coastal erosion hazards. Some other ideas are as follows:

Community Performance Standards to help address future patterns of development in already developed coastal communities.

Coastal Lands Acquisition, including the use of Eminent Domain, Negotiated Purchase, Conservation Easements, and others, also citing existing programs from other coastal States.

Public Education and Outreach

Chapter II also provides a discussion of five (5) Alternatives for Erosion Management including Abandonment (do nothing), Beach Restoration (fill the beach with sand), Erosion Control (slow down the erosion rate), Adaptation (live with it), and Hardening build walls). Chapter II discusses various Design Considerations when planning/engineering any erosion control project, and ends with a discussion of the need to do physical monitoring when projects are implemented to assess performance and environmental effects.

Chapter III, Recommendations:

This is essentially a consolidation of Sections V-X of the original Plan. The Strategic Recommendations are reorganized and improved and included in one section, unlike the original Plan that included Technical vs. Policy Recommendations, Long Term Policy and Technical vs. Short term Plans.

Chapter III also includes a new section on Initial implementing Actions, which are generally similar to Strategic Recommendations recommended in the original Plan.

Technical Supplement:

The Revised Plan also includes a Technical Supplement with Parts A-D. Part A lists and summarizes most of the studies done in the area of Coastal Erosion or Beach Management for Hawaii. Part B includes a copy of a Brochure on Facts about Beach Erosion and the new Coastal Lands Program at DLNR. Part C provides a more detailed discussion surrounding the causes of coastal erosion and beach loss in Hawaii, and Part D includes Guidelines for Preparation of an Environmental Assessment in Conjunction with an Application for a Shoreline Alteration and Hardening Permit.

Throughout, the plan is also extensively footnoted and referenced to draw in a much wider framework of research and planning.

AGENCY/PUBLIC INPUT:

April 8, 1999 Board Briefing:

On April 8, 1999, the Land Board was presented with a briefing of the revised Coastal Erosion Management plan. The purpose of the briefing was to familiarize the Board with revisions to COEMAP.

DLNR staff presented the revised version of COEMAP and discussed the various plan elements including a discussion of regulatory and non-regulatory tools, coastal erosion management alternatives, design considerations, and specific recommendations, etc. Staff highlighted the changes in COEMAP and noted that the revisions to COEMAP provide for a more detailed, comprehensive, and integrated plan.

The Chairperson of the Board of Land and Natural Resources asked staff to highlight the revisions in COEMAP from the original document, so that the Board would know whether the changes are in keeping with the original intent and objectives of COEMAP. There was discussion over the breadth of public involvement developing COEMAP and whether enough had been done on this and earlier drafts.

Staff referred to past outreach efforts on the island of Oahu, which were fairly comprehensive, and also discussed the intense agency consultation even on the most recent draft. It was noted that the Maui County Council endorsed the original Plan as well as the City and County of Honolulu, Department of Planning and Permitting.

Comments were also solicited from the Counties of Hawaii and Kauai on the revised Plan. Hawaii County Planning had numerous comments and concerns which staff incorporated into the Plan.

Another Board member raised concerns that the effect of the plan, if adopted, would be to raise expectations on the affected agency stakeholders, but without the force of law and/or more specific guidance on how to achieve the plan's objectives. This could lead to some confusion and uncertainly with respect to how to actually manage and regulate these areas.

Staff responded by stating that the original intent of the plan was never to recommend specific changes to any County regulations, but was provided to the public and regulatory communities as a document that could be used to raise awareness of the causes and consequences of coastal erosion and beach loss and also provide technically and politically feasible recommendations for those desiring to implement them. Staff further noted that it was a deliberate decision to approach the problem of coastal erosion from the perspective of education.

Another concern was whether the revised plan would need to be taken back to the public for review. Staff followed by noting that this was not necessarily required since the original intent and purpose of the plan had not changed.

Written Comments Submitted at the Briefing:

Mr. Dudley Foster of Lanikai and Mr. George Peabody of Molokai submitted comments. Mr. Peabody submitted strong objections to our inclusion of Part D of the Technical Supplement noting that thirteen (13) guidelines for environmental assessment prepared in conjunction with an application for shoreline alternation or hardening would be prohibitive and a punitive burden on taxpayers.

The Hawaii County Planning Department was also concerned over the inclusion of these guidelines in COEMAP. They were concerned over the seawall policy, which we removed.

Actually, the revision included two elements: 1) shoreline hardening policies; and 2) the 13 guidelines. Staff elected to

remove the shoreline hardening policies but retain the guidelines for the preparation of environmental assessments.

In comments to the County, we noted that there are significant impacts associated with shoreline hardening that have not always been disclosed and analyzed in environmental reviews. As such, Staff feels that there must be more discussion of the various impacts associated with shoreline hardening. To accomplish this, environmental documents must be completed with more reconnaissance information and site analysis.

In response to Mr. Peabody's concerns, staff notes that these are guidelines, not rules. They represent a worst-case scenario for any shore protection or altermation project being proposed, where it is believed that shoreline processes or marine resources could be altered or damaged. The purpose of the assessment is to assess the effects of shore alteration projects on coastal resources to ensure that there is a reasonable balance between shore alteration work and environmental protection. All assessments may not require all 13 guidelines to be covered. The guidelines should not be used to encourage more red tape.

The proposed revisions to COEMAP were brought to the attention of the Lanikai Association and community members. Mr. Foster, for one, notes that the revisions have alleviated many of his concerns except for the following areas.

He is concerned over the term "mauka toe of the primary dune" which is used in COEMAP. The term actually used in COEMAP is "mauka toe of the frontal dune". This term is used to quantify sand volumes in the beach system and is also included in different contexts where other states' setback standards are noted as examples of states with variable setback standards. The term is used to only demonstrate how other states with dynamic shorelines like Hawaii regulate and manage their shorelines.

Staff recognizes the difficulty of imposing new shoreline setbacks based on dune system dynamics within existing developed communities in Hawaii, and as such, proposes alternative schemes for dealing with coastal erosion within these areas, citing concepts like minimizing environmental impacts to beaches on developed shorelines by slowing erosion rates, utilizing beach nourishment, dune restoration, temporary use of seabags and implementation of community performance standards. The concept of "Compensatory Mitigation" is also proposed where damage can't be minimized, and compensation must be made to the State for those damages.

In addition, Mr. Foster is concerned that a number of studies cited in COEMAP contain inaccurate information and he specifically refers to studies of the Lanikai shoreline.

Staff notes that studies are not always accurate and decision-makers must exercise caution when using studies to formulate policies and plans or making decisions on specific cases.

Hawaii County Planning Department:

Hawaii County provided written comments on the revised plan. Although they support the overall concept of COEMAP, they had concerns regarding some of the recommendations, particularly as it deals with possible infringement upon the counties' land use and zoning jurisdictions.

Of significant concern to Hawaii County was our reference to zoning in COEMAP. For instance, Goal no. 1 in the Executive Summary originally stated that the Counties should consider replacing R-5 zoning classification with Beach Management Districts. In response to this concern, the language was changed and all reference to zoning was deleted. Goal No. 1 was replaced with the following language:

Consider Erosional trends and processes, and other coastal hazard at the zoning and subdivision stages of land development so that structures can be safely and properly located away from coastal hazards.

Also, in response to additional concerns that COEMAP, in places, crosses jurisdictional boundaries by commenting on county issues, we deleted or otherwise altered the tone of COEMAP where noted by Hawaii County, and added the following recommendation on page 42, Rec. #3, to maintain the intent of assisting and enhancing the county role in erosion management.

Develop a Technical Manual that provides direction for the development, restoration, and redevelopment of the coastline. The manual would be used on a voluntary basis, but through common usage could become a standard for safe, economical, and sustainable utilization of the coastline.

The County had other comments and concerns on the tone and substance of COEMAP. For instance, Recommendation No. 7 under Strategic Recommendations made references to zoning, 30-year erosion hazard setbacks, building codes, etc. Trus section was reworded. Coastal Lands Acquisition (recommendation # 9) is now described as non-jurisdictional, that is, the concept is promoted without specific reference to a county or state program. Rezoning

language was deleted and other points were clarified. Reference to "codes" was also been deleted. In addition, it was noted that any new shoreline setback guidelines considered by the counties should be defined by an analysis of historical shoreline fluctuations in an integrated framework with ocean flood hazards. It is staff's understanding that the Hawaii County Planning Department was satisfied with the amendments.

1999-2000 WORK PLAN:

In consideration of the progress in public awareness building, agency coordination, plan development and new legislation, staff proposes the following work elements for 1999-2000:

- Development of educational materials, including pamphlets, posters and video for pubic access television (\$10,000).
 Develop local ownership/capacity building of coastal issues around the Ahupuaa framework, using local community leaders at the erosion hotspots.
- 2. Hire firm/contractor to investigate upland sand source on public lands on Kauai. Do borings and sand grain analysis, develop plans for extraction and costs of delivery to Oahu and Maui through Port Allen (\$45,000).
- 3. Seek competitive bids to design a sand recycling system in Waikiki to allow for nourishment of Waikiki Beach and protection of marine resources (\$40,000).
- 4. Expand COEMAP to include a regional analysis of erosion prone areas using GIS technology. This information would be provided to Counties for consideration of guidelines in COEMAP (\$50,000).
- 5. Conduct scoping analysis for the development of a Beach Restoration Plan to identify coastal lands suitable for potential revenue generation, to fund beach restoration efforts (\$20,000). For example, Hilton Hawaiian Lagoon, Kaneohe Bay Piers, reclaimed coastal lands, etc.
- 6. Major sponsor for the National Beach Conference on Beach Preservation to be held on the island of Maui in August 2000 (\$15,000). As a sponsor, DLNR will have input on the content and expected outcomes of the conference so that it closely reflects the needs of the agency.
- 7. Miscellaneous: Conferences/Travel, etc. \$5,000

Total = \$185,000

OTHER:

- 1. Complete and implement State Program General Permit (SPGP) for small scale beach nourishment projects. This requires a Board action that authorizes the work statewide.
- Pursue beach restoration efforts in Waikiki. Meet with hotel association, stakeholders, seek conceptual plans (e.g., sand recycling system).
 - 3. Consider additional laws for 2000 legislature (e.g., revise of repeal accretion statute)

UNAUTHORIZED SHORELINE STRUCTURES/ENFORCEMENT:

Unauthorized shoreline structures, usually seawalls, revetments or groins, have become a persistent dilemma for regulatory agencies in the main Hawaiian Islands. If a shore owner was accused of building an unauthorized coastal erosion structure they could typically deny having built the structure, even though they received substantial benefit from it. The Department is unable to hold the abutting owner responsible without evidence that the owner actually built the structure. In the past, when raced with this situation, the State usually: 1) sold the land in fee; 2) sold shareowner an easement/permit; or 3) asked them to remove the encroachment. This money was deposited into the State General Fund.

The issue of routinely selling easements or fee title to submerged land became a controversial issue when the environmental effects of shoreline hardening on the State's beaches, became recognized as a major social, environmental and economic problem. The problem was no longer perceived a singular issue for land managers to resolve, but a multifaceted dilemma faced by resource managers regarding the appropriate management of the State's shoreline resources. This shifting perspective caused the Land Division to all but stop this practice.

Upon careful consideration of the issues surrounding shoreline hardening and its effects of beaches, Land Division, under the guidance of the Coastal Lands Program staff, would like to resume the practice of issuing easements for existing encroachments. The reasons for this are as follows. There are many cases in which it would be counterproductive and unreasonable to require the summary removal of structures that have been in place for 10, 20, 30 or 40 years, although they may be considered illeyal under current laws.

1. There are cases in which such structures have not lead to any direct beach degradation or infringement of public access, or in some cases, the damage was done. Removal of the structure would not result in any public benefits.

- 2. In many cases the coastal land owner who benefits from the shoreline structure didn't actually build it. It was built by previous owners.
- 3. All fines and revenues generated from these sources would be placed in the Land Division Special Beach Restoration Fund pursuant to Act 84, of the 1999 Session Laws. This money could then be used to enhance shoreline resources through beach restoration.

With respect to revenues, staff notes that there was quite a bit of discussion between legislators, environmentalists and DLNR over the appropriateness of generating revenues from unauthorized shoreline structures. However, based on the consideration, as stipulated in the previous section, that the removal of an unauthorized structure may not be the reasonable or desirable course of action, in every case, it was generally agreed that revenues could be generated from "existing" unauthorized shoreline structures. This policy would be subject to guidelines and procedures discussed in this section.

Land Division staff has identified hundreds of potential encroachments in the main Hawaiian Islands that have yet to be resolved. These encroachments were identified through several sources of information, including the shoreline certification process, citizen complaints, and County enforcement personnel. Some of these may have since been resolved.

As a natural resource management agency, CLP program objectives will consider the following criteria when dealing with shoreline encroachments:

- Protect/preserve/enhance public shoreline access;
- Protect/preserve/enhance public beach areas;
- 3. Protect adjacent properties; and
- 4. Protect property and important facilities/structureserosion damages.
- 5. Implement a "no tolerance" policy for recent or new unauthorized shoreline structures.

Removal of a structure due to resource concerns would generally be considered in light of the structure's engineering purpose (i.e., what is it protecting and what are the attendant economic values of the things protected). Also, mitigating factors would be considered -i.e., to what extent adjacent shoreline structures have influenced shoreline processes in the vicinity. But if the structure provides value to the adjacent landowner (e.g., protection/enhancement) and none of the first three criteria are jeopardized by its presence, the State may issue an easement for the encroachment.

There are certainly cases in which an encroachment protects important facilities/structures, but also has equal significant impacts on the quality of the public beach or access to the beach. A policy of summary removal could result in significant damages to private and/or public facilities/structures. Prosecution of these cases could also lead to costly litigation and significantly drain staff resources. In such cases, CLP staff will proceed carefully and weigh all of the consequences, impacts and benefits of a particular action.

These decisions would not occur in a vacuum. The Land Division has made significant progress over the past three years in the area of coastal erosion management. There is a heightened awareness of the causes and consequences of beach loss on a sector-by-sector basis, with more resources and data available to improve decision-making. There is the reality that shoreline structures are a permanent part of Hawaii's shoreline environment and that decisions must be made with this consideration in mind. In the long term, some shoreline structures may be phased-out, but this will require time, money and willpower.

In applying an enforcement procedure, one cannot ever loose sight of its use as a regulatory tool to reduce noncompliance with State laws and as a tool to eliminate public nuisances. A no tolerance policy should be implemented to deal with blatant offenders.

Because there are likely hundreds of encroachments in the State, lack of staff rescurces only allow for case-by-case disposition. Nevertheless, staff may consider and weigh each situation on its own merits provided that the guidelines described in this submittal are established and adhered to.

The Board of Land and Natural Resources must affirm the guidelines to add legitimacy and direction to the Coastal Lands Program's efforts.

The following procedures are proposed to address unauthorized shoreline structures:

- 1. Staff decides to prosecute a case based on a complaint or through prioritization of existing cases based on available staff resources.
- 2. Staff notifies the abutting property owner of the problem in writing and requests a site inspection.
- 3. Staff meets with the responsible County regulatory authority to discuss and resolve regulatory/jurisdictional issues.

- 4. Staff conducts on-site inspection.
- 5. Staff compiles information about the site including identification of coastal cell, identification of public access and use of the area, nature of fronting beach, if any, as well as other introduced manmade structures that may have influenced shoreline processes in the vicinity.
- 6. Staff gathers information on extent of encroachment, when it originally occurred, and the responsible party. Staff also gathers information whether encroachment affects neighboring properties.
- 7. Staff evaluates whether removal of the encroachment will further degrade the environment (sedimentation), or the level of mitigation to be gained by removal. This will require some knowledge of the erosion history at the site.
- 8. Staff considers information in light of the following guidelines:
 - a. Protect/preserve/enhance public shoreline access;
 - b. Protect/preserve/enhance public beach areas;
 - c. Protect adjacent properties; and
 - d. Protect property and important facilities/structures from erosion damages.
 - e. Apply "no tolerance" policy for recent or new unauthorized shoreline structures.

After this information is collated/analyzed, staff will recommend the issuance of either a short term revocable permit, a long-term easement, a lease fee based on avoided cost, or order it to be removed. The matter will first require resolution through the HOAPS system.

In cases where the abutting property owner refuses to remove the wall and/or pay the fine, the State may remove the wall and bill the owner.

DISCUSSION:

The revised plan represents an improvement over the plan approved by the Board in November 1997. The plan is better organized and contains additional information that supports the fundamental concepts and recommendations of DLNR erosion management. Staff has tried to ensure that the revisions are consistent with the original intent and content of COEMAP. As stated in the November 1997, staff report, adoption of the plan does not trigger any of the State's Environmental Requirements, nor any State, County or Federal permits. It is a new resource guide for homeowners, policy formers and regulators to use in their daily functions.

The Maui County Council, the City Council of Honolulu, the State Marine and Coastal Zone Management Group (MACZMAG) and numerous other bodies have already adopted the Plan in some form.

Adoption of revisions to COEMAP by the Board will establish a strategic framework to guide the State's efforts towards coastal and beach erosion problem management, with the understanding that specific actions will be developed and implemented in cooperation with and by the respective State, County and Federal agencies with coastal zone responsibility.

Staff, therefore, recommends as follows:

RECOMMENDATION:

That the Board of Land and Natural Resources (Board):

- Adopt the revised policies and recommendations of the Hawaii Coastal Erosion Management Plan as the strategic framework to guide the State's efforts towards coastal and beach erosion problem management;
- Approve minutes of the April 8, 1999 briefing;
- 3. Approve the proposed work plan for 1999-2000 with the provision that the Land Division can adjust the plan based on newly evolving needs; and
- 4. Authorize procedures to manage encroachments and the remittance of fines and revenues from existing unauthorized shoreline structures to be placed in the Special Beach Restoration Fund, pursuant to procedures as set forth in this report.

Respectfully Submitte

SAMUEL J. LEMMO

Staff Planner

Attachment (s)

Approved for Submittal

TIMOTHE E. JOHNS, CHAIRPERSON

Board of Land and Natural Resources