



**STATE OF HAWAII**  
**DEPARTMENT OF LAND AND NATURAL RESOURCES**


P.O. BOX 621  
HONOLULU, HAWAII 96809

AQUATIC RESOURCES  
BOATING AND OCEAN RECREATION  
CONSERVATION AND  
RESOURCES ENFORCEMENT  
CONVEYANCES  
FORESTRY AND WILDLIFE  
HISTORIC PRESERVATION  
LAND DIVISION  
STATE PARKS  
WATER RESOURCE MANAGEMENT

APR 2 2002

MEMORANDUM

TO: Harry Yada, Acting Administrator  
Land Division

FROM: Gilbert Coloma-Agaran, Chairperson   
Board of Land and Natural Resources

SUBJECT: Board Approval of Conservation District Use Application ST-3000 for  
Small Scale Beach Nourishment Projects in Hawaii

This is to inform you that at its November 27, 2000 meeting, the Board of Land and Natural Resources approved the statewide application to permit small-scale beach nourishment projects in the State of Hawaii, and also delegated to the Chairperson the authority to issue Category II permits for small-scale beach nourishment projects in Hawaii, subject to the Board's consent to delegate its authority at regular Board meetings, and subject to the following conditions:

1. The Board of Land and Natural Resources hereby delegates to the Chairperson the authority to issue Category I permits for small-scale beach nourishment projects in Hawaii, without board consent to delegate;
2. Category II actions shall be published in the Environmental Notice;
3. No activity will be authorized under this permit which is likely to adversely affect a Federally listed threatened or endangered species or a species proposed for such designation, or destroy or adversely modify its designated critical habitat;
4. No activity authorized by this permit may substantially disrupt the movement of those species of aquatic life indigenous to the area, including those species, which normally migrate through the area;

5. No activity will be authorized under this SPGP in properties listed or eligible for listing in the National Register of Historic Places without the written consent of the State Historic Preservation Officer;
6. When the Chairperson is notified by the applicant or the public that an individual activity deviates from the scope of an application approved under this permit, or activities are adversely affecting fish or wildlife resources or their harvest, the Chairperson will direct the permittee(s) to undertake corrective measures to address the condition affecting these resources. The permittee(s) must suspend or modify the activity to the extent necessary to mitigate or eliminate the adverse effect;
7. When the Chairperson is notified by the U.S. Fish and Wildlife Service, the National Marine Fisheries Service or the State Department of Land and Natural Resources that an individual activity or activities authorized under this permit is adversely affecting fish or wildlife resources or their harvest, the Chairperson will direct the permittee(s) to undertake corrective measures to address the condition affecting these resources. The permittee(s) must suspend or modify the activity to the extent necessary to mitigate or eliminate the adverse effect;
8. Applicants must submit written compliance reports to the CLP and CWB, including a final report within two months of completion of a project authorized under this permit. The compliance reports must include, as appropriate, descriptions of the construction activities, discussion(s) of any deviations from the proposed project design and the cause of these deviations, results of environmental monitoring, discussion(s) of any necessary corrective action(s), and photographs documenting the progress of the permitted work;
9. On a case-by-case basis the Corps may impose special conditions on projects authorized under this permit, which are deemed necessary to minimize adverse environmental impacts;
10. The DLNR in conjunction with the Federal resource agencies will conduct periodic reviews to determine that the continuation of this permit is not contrary to the public interest;
11. The length of time required to process each request under this permit will be directly related to the adequacy and completeness of the information submitted by the applicant;
12. Abutting landowners shall not be permitted to claim areas artificially nourished with sand under the State's accretion laws for projects authorized under this permit;

13. Any work or construction authorized under this permit shall be initiated within six (6) months of the approval of such use, and, unless otherwise authorized, shall be completed within one (1) year of the approval of such use. The applicant shall notify the department in writing when construction activity is initiated and when it is completed;
14. To avoid encroachments upon the areas nourished with sand, affected property owners realize that the State may claim that the added sand under existing laws may prevent them from moving the certified shoreline seaward of the present vegetation line until there is substantive evidence that the sand has moved on to other areas. During sand placement, care shall be taken to protect existing dune vegetation and any other existing vegetation along the shoreline. To facilitate any later applications for shoreline certifications, the affected property owners are encouraged to document their present shorelines with photographs or surveys;
15. Where any interference, nuisance, or harm may be caused, or hazard established by the activities authorized under this permit, the applicant shall be required to take measures to minimize or eliminate the interference, nuisance, harm or hazard;
16. For projects authorized under this permit, the applicant shall take measures to ensure that the public is adequately informed of the project work once it is initiated and the need to avoid the project area during the nourishment operation, and for several days following the completion of the nourishment operation to allow potential bacteria levels to decrease;
17. No contamination of the marine environment (trash or debris disposal) shall result from project-related activities authorized under this permit;
18. In the event there is any petroleum spill on the sand, the operator shall promptly remove the contaminated sand from the beach;
19. For projects authorized under this permit, the applicant, its successors and assigns, shall indemnify and hold the State of Hawaii harmless from and against any loss, liability, claim, or demand for property damage, personal injury, and death arising out of any act or omission of the applicant, its successors, assigns, officers, employees, contractors, and agents under projects authorized under this permit;
20. The Department of Land and Natural Resources reserves the right to impose additional terms and conditions on projects authorized under this permit, if it deems them necessary;

21. The applicant shall comply with all applicable statutes, ordinances, rules, and regulations of the federal, state, and county governments for projects authorized under this permit;
22. The applicant shall implement standard Best Management Practices (BMPs), including the ability to contain and clean-up fuel; fluid or oil spills immediately for projects authorized under this permit. Equipment must not be refueled in the shoreline area;
23. All conditions imposed under the U.S. Army Corps of Engineers State Program General Permit for this effort are hereby incorporated into this statewide Conservation District Use Application;
24. If retention structures are used for projects authorized under this permit, they shall be removed within 30 days of written notification of the Department of Land and Natural Resources, at the applicant's own cost, if the structures do not improve the situation (slow or reverse erosion) or if the structures cause unanticipated impacts in the area;
25. In the unlikely event that historic sites, including human burials are uncovered during routine construction activities for projects authorized under this permit, all work in the vicinity must stop and the State Historic Preservation Division must be contacted at 692-8015;
26. Coastal Lands Program staff will develop a new application form to facilitate the application process for projects authorized under this permit;
27. Coastal Lands Program staff will provide a list of projects approved by the Chairperson to the Board on an annual basis;
28. All Special Conditions imposed by the Honolulu District Engineer on the State Program General Permit are hereby incorporated into projects authorized under this permit;
29. The application process shall include a requirement that the applicant notify all abutting property owners and community organization that may be affected by the proposed action. In addition, each of the property owners and community organizations shall be notified of the time, date, and place that the Board will review the proposed application;
30. The processing fee for Category II permits shall be \$250.00;
31. Other terms and conditions as prescribed by the Chairperson; and

32. Failure on the part of applicants to comply with any conditions imposed on projects authorized under this permit shall render the permit null and void.

cc: Board Members  
Land Agents  
DAR/HPD/DOCARE  
County Planning Departments  
OHA/DOH/U.S. Fish and Wildlife Service/NMFS/Corps

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

File No.: ST-3000B

October 27, 2000

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

REGARDING:                   Statewide       Conservation       District       Use  
                              Application for Small-Scale Beach Nourishment  
                              Projects on Hawaiian Beaches

APPLICANT:                 State of Hawaii, Department of Land and  
                              Natural Resources

LANDOWNER:                State of Hawaii

LOCATION:                   Statewide

TMK:                       Beaches (Submerged Land)

AREA OF USE:              Project Dependent

SUBZONE:                  Protected/Resource

DESCRIPTION OF PROPOSED ACTION:

The loss of Hawaii's sandy beaches is a major social, economic, and environmental problem. Studies show that hardening the shoreline where there is chronic coastal erosion causes beach narrowing and beach loss. Researchers found 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 on retreating shorelines. Similar losses have occurred on the island of Maui, and to a lesser degree, on Kauai and Hawaii.

*As Amended*  
APPROVED BY THE BOARD OF  
LAND AND NATURAL RESOURCES  
AT ITS MEETING HELD ON

*Oct. 27, 2000. per*

ITEM D-7

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) adopted in August 1999 by the BLNR and the establishment of the Coastal Lands Program.

One of the plan's major recommendations is to promote beach nourishment and restoration as a viable alternative to shoreline armoring (i.e., the practice of building hard shoreline structures to stop land loss/shoreline retreat).

#### PURPOSE OF STATEWIDE CDUP

Implementation of a statewide CDUP (SCDUP) and Corps SPGP (SPGP) will streamline the permitting process for small-scale beach nourishment projects and consolidate permitting of these projects within one agency, the DLNR. This would provide an incentive for shore owner groups to seriously consider this practice as an alternative to shoreline armoring. Use of small-scale beach nourishment in Hawaii could reduce the incidence of shoreline armoring and enhance public beaches with minimal negative environmental consequences.

[Note: Issuance of this SCDUP by the Board is a pre-requisite for the issuance of an Army Corps SPGP.]

#### SCOPE OF WORK:

#### **Technical Considerations**

This statewide permit will cover all beaches that have experienced sand loss. However, in accordance with SCDUP/SPGP guidelines, some areas will be excluded. Areas where sand extraction and/or beach nourishment may not occur without the written consent of the respective agency authority include known turtle nesting areas during egg-laying and hatching periods, endangered critical habitat, sanctuaries and refuges, historic properties, or in areas of recognized biological importance such as coral reefs, vegetated shallows, fish spawning grounds or areas of concentrated shellfish production, without the consent of the National Marine Fisheries Service, the DLNR Division of Aquatic Resources, and the U.S. Fish and Wildlife Service.

In addition, potential sand source areas, such as channel and stream mouths as well as small boat harbors, and near shore sand deposits, will be included and covered under this permit. [Note: inland sand deposits would not necessarily be covered under this permit and would be subject to the regulatory requirements of the respective County authorities.]

Environmental quality in general will be maintained by adherence to the guidelines and project controls outlined in this permit and the SPGP, and through "Procedures for Applying for a Permit" (See Exhibit 1, Appendix A), and a Panel of Technical Experts (PTE) (Exhibit 1, Appendix C). The PTE will evaluate individual applications for consistency with the provisions of the SCDUP/SPGP. The PTE will ensure that individual projects will not cause significant negative environmental consequences. Some of the standard project controls are as follows:

### **Activities**

In accordance with the SPGP/SCDUP the following activities could potentially be considered for approval:

1. The placement of up to 10,000 cubic yards of sand for the purposes of restoring and nourishing the beach.
2. Construction, installation and removal of erosion protection, including, but not limited to appropriate and effective silt containment devices.
3. Placement of offshore submerged berms for the purposes of retaining sand on the adjacent beach by reducing the strength and/or frequency of waves and currents impinging on the shoreline. Small scale sand retention devices such as sand filled bags or rocks would be permissible under certain situations where the effects of the structures on coastal processes, marine organisms, mauka property and public access, could be shown to be negligible or otherwise benign due to existing conditions.
4. Placement of sand dredged from a boat harbor on an adjacent shoreline in the same littoral cell.
5. Placement of sand excavated from a stream mouth or channel-clearing project on an adjacent shoreline in the same littoral cell. [This permit is not intended to regulate routine maintenance work.]



6. Pumping of sand from the near shore area to adjacent beaches to nourish an erosion hot spot<sup>1</sup> or pumping sand into a porous geotextile bag, used for shore protection, under the condition that the extraction of the near shore sand source would not cause adverse effects to the beach profile.

[Note: This permit sets a limit on the amount of sand at 10,000 cubic yards (CY) per project. The DLNR will discourage multiple projects being proposed in a single area if the total amount of sand exceeds 10,000 CY. However, it is feasible that there could be two simultaneous projects, one in Lanikai and one at Kailua Beach. This would not be a problem because these areas are distinct and separate coastal segments. There would be no cumulative impacts. However, two projects occurring simultaneously in Lanikai could cause cumulative impacts in the Lanikai area. This would not be allowed.]

Another possible scenario would be where small-scale beach nourishment projects are planned in phases - e.g., one 10,000 CY project in Lanikai every year for 10 years. This could create cumulative impacts in the area beyond that anticipated in the programmatic EA. This situation would need to be monitored to determine what additional steps would be required under the State environmental laws, consultation with resource agencies, and the CDUA process.]

#### ***Limitations of Work***

1. All sand placed for the purpose of beach nourishment must comply with Department of Health, Clean Water Branch regulations (Chapter 11-54, Hawaii Revised Statutes) adopted pursuant to the Clean Water Act. Testing by a lab may be required when there is probable cause to believe that the material is contaminated as determined by the PTE, CLP or DOH.
2. The sand placed on the beach must be free of debris, clay, roots, branches and other organics, rubble, and other non-beach material; and, must be compatible in color and texture with the native beach sediment. The grain size distribution of the sand must be compatible with that of the pre-project native beach, more

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<sup>1</sup> An erosion hotspot is defined as a place where progressive coastal erosion or beach loss is causing management concerns due to the threat of economic, ecological, recreational, or cultural losses.

specifically determined as follows:

- a) The Grain size distribution of at least one typical, dry sample of the beach fill sediment shall be measured by laboratory sieves<sup>2</sup>. For this purpose, at least six (6) sieves shall be used, distributed more or less uniformly in size between, and inclusive of, the U.S. Standard # 4 sieve and the # 200 sieve. [Note: Physical sand size distribution is measured by shaking the oven-dried sand sample through a "nest" of sieves; coarsest on top, finest at the bottom, with a solid pan at the bottom. The sieves are shaken and the sand grains are distributed by size, the larger particles staying in the upper sieves (as in # 4 sieve) and the finer particles falling into the bottom sieves (as in # 200 sieve), and finally the pan. The mass retained in each sieve, and the pan, is expressed as a percentage of the total mass of material.]
- b) The beach fill sediment shall contain not more than 6 percent fine sediments, defined as the #200 sieve (0.074 mm). [Note: This number may be adjusted where native beach sediments display a higher than normal percentage of fines. However, the percentage of fines shall never be higher than nine (9) percent.]
- c) The beach fill sediments shall contain not more than 10 percent coarse sediments, defined as the #4 sieve (4.76 mm), excepting those native beaches that naturally exhibit greater than 10% coarse sediments.
- d) For beach fill projects of 1,500 cubic yards or more, the compatibility of the native beach and fill shall be further demonstrated, as follows. The grain size distribution of the typical dried native beach sand shall be measured as described in (a). The grain size distribution of the beach fill sediment shall fall within 20 percent of the native beach sediment, as measured by cumulative percent-finer-than (or percent-coarser-than) values. (For example, if the native beach sand contains 45

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<sup>2</sup> A sieve is a device with meshes or perforations through which particles of various sizes are passed to separate them from either finer or more coarse.

percent grain size finer-than the #100 sieve, the beach fill must contain between 25 percent and 65 percent grain size finer-than the #100 sieve). Alternatively, and for cases where the beach fill grain size distribution curve is uniformly finer than the native beach, the overall fill ratio of the fill sediment relative to the native beach shall not exceed 1.5.

### ***Categories of Activities***

Projects that fall within the scope of this permit will include Category I and Category II projects. All other projects will require individual permitting and individual environmental documentation.

Category I projects involve the placement of up to 500 cubic yards of sand within the shoreline area.

Category II projects involve the placement of more than 500 and up to 10,000 cubic yards of sand within the shoreline area.

Both categories are included within this permit. Category I projects would be expedited by the Coastal Lands Program staff, would not require panel review or U.S. Army Corp of Engineers and Department of Health, Clean Water Branch review unless specifically requested. [Note: National Marine Fisheries Service will be consulted on all prospective beach nourishment and all offshore sand pumping projects.] Category II projects would require full PTE review and review by the U.S. Army Corp of Engineers and Department of Health, Clean Water Branch concurrence.

### ***Panel of Technical Experts***

A Panel of Technical Experts (PTE) was formed to review individual applications in order to ensure consistency with the provisions of the SPGP and to maintain a high level of environmental quality. The panel includes a marine biologist, coastal geologist and wave and current expert. The PTE will make recommendations on applications for small-scale beach nourishments projects (Category II). The PTE will also be consulted on all offshore sand borrowing proposals. The PTE will have discretion to apply special conditions or waive others that may not be necessary. Projects will be reviewed through a consensus-based process. The Chairperson of the Department of Land and Natural Resources will have final decision-making authority on Category II projects under the terms

of the statewide CDUP, unless the permit is referred to the Board<sup>3</sup>. Furthermore, notice of Category II permits will be published in the Office of Environmental Quality Control, Environmental Notice for public review. A copy of the PTE guidelines is included as Exhibit 1, Appendix C).

The panel will be comprised of an aquatic biologist from the DLNR, a coastal geologist and an expert in coastal or marine engineering. At this time we are working with professors from the Department of Geology and Geophysics, School of Ocean Earth Science and Technology. The panel will be selected and updated by CLP program staff.

The panel will make decisions by consensus. Failure to achieve agreement by panel members to proceed with a project would likely result in the project being denied or a recommendation that it be processed through an individual permit, not through the proposed SPGP and Statewide Conservation District Use Permit (SCDUP). If a panel member fails to recommend approval for a project, he/she should provide concrete professional environmental/engineering reasons for this determination.

However, the panel is not the decision-making authority. The authority to issue permits would rest with the Chairperson of the BLNR, unless the permit is referred to the Board. The panel is advisory.

A flow-chart has been included a Figure 1 which identifies the permit process for Small-scale projects.

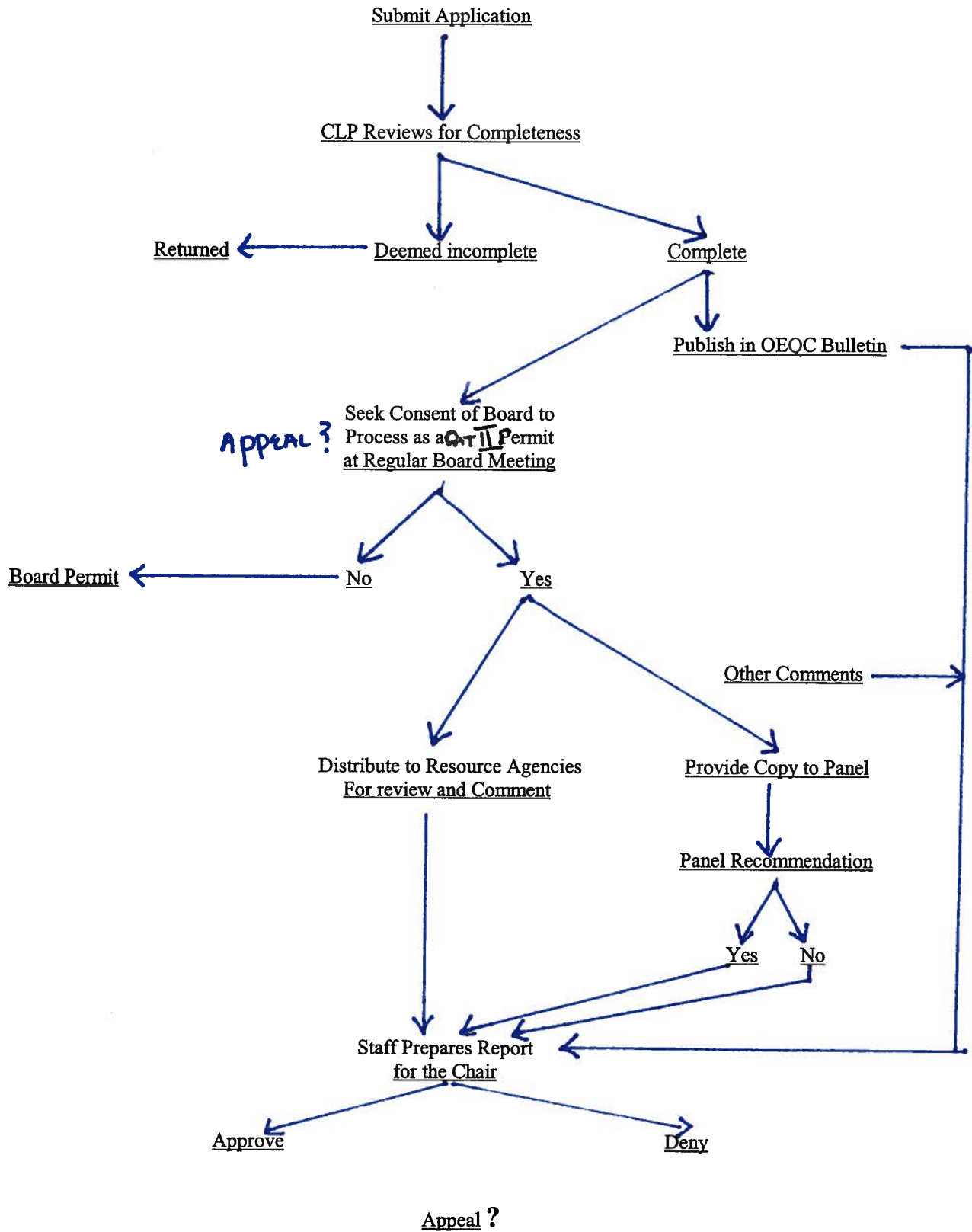
### ***Application Requirements***

An application form will be developed to facilitate review of proposals. The general application requirements are currently setout in the accepted Environmental Assessment for this project in Exhibit 1, Appendix A.

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<sup>3</sup> The Board of Land and Natural Resources may delegate its authority to the Chairperson on a case-by-case basis for all Category II requests. Complete project applications will be presented to the Board with some staff commentary during regular Land Board meetings. This will provide interested parties an opportunity to address concerns to the Board at a regular Board meeting and also ensure their due process rights. The Board, at that time, may delegate to the Chairperson, authority to issue that permit. If the Board does not delegate its authority to the Chairperson, the permit must go through the normal Board permit process. Category I permits do not need to be referred to the Board.

## PROPOSED PERMIT PROCESS (GENERALIZED)



## FIGURE 1

AGENCY OF COMMENTS:

The application was referred to the following agencies for review and solicitation of comments: The Department of Land and Natural Resources, Divisions of Aquatic Resources, Boating and Ocean Recreation, Engineering Branch, Historic Preservation, State Parks. And Water Commission; Department of Health, Office of Hawaiian Affairs, Office of Environmental Quality Control, Department of Transportation, Department of Hawaiian Home Lands, Coastal Zone Management, State Civil Defense, U.H. Environmental Center, School of Ocean, Earth Science and Technology, Sea Grant, and Sierra Club; U.S. Army Corps of Engineers; Fish and Wildlife Service, and National Marine Fisheries Service; All County Planning Departments and Public Works Departments.

An Environmental Assessment (EA) was previously processed for this project. The comments received and our responses are included in the Final Environmental Assessment for this action (Exhibit 1). Some of the most salient concerns are discussed below.

**Effectiveness of Small-scale Beach Nourishment Projects:**

*Small-scale beach nourishment will not solve erosion problems nor will it serve as a substitute for shore protection. The quantities of sand are insufficient to affect sediment budget.*

**Staff's Response**

Small-scale beach nourishment efforts are not intended to solve erosion problems. This is an unrealistic expectation under many circumstances. For instance, a recent nourishment effort at Lanikai Beach, Oahu placed some 15,000 cubic yards of sand on the beach [Note: The maximum allowable under the SPGP would be 10,000 c/y]. This did not solve Lanikai's beach loss/erosion problems. However, the project did result in benefits at a negligible environmental cost. First, the clearing of sand from the Kaelepulu Stream bank improved drainage there. Placement of the dredged material at Lanikai Beach represented the beneficial use of the dredged material, which may have otherwise been lost from the beach system. In addition, the beach has remained wider on portions of this beach, which has facilitated public access and provided some additional storm wave protection to some shore owners. In another case at Laie, small quantities of sand were deposited at the face of the beach scarp, but did not add substantially to beach stability.

In spite of the marginal success of these efforts, staff believes that small-scale efforts can add substantially to beach width within small pocket beaches and can be a substitute for armoring, on pocket beaches, under the right set of circumstances. The Maui Sugar cove case is a good example of how small-scale sand nourishment efforts can substantially restore a degraded beach pocket.

**Causes of beach loss:**

*Beach nourishment does not address the problem of the cause of beach loss*

**Staff's Response:**

A number of interrelated factors including, waves and currents, sea level rise, degradation of our coral reefs and shoreline armoring, cause beach loss. Sand nourishment is not intended to address these broader problems. Sand nourishment is not a permanent solution to beach loss and coastal erosion. That is why, in addition to this program, staff is trying to develop other strategies to manage coastal erosion and beach loss, without damaging beaches in the process.

**Environmental Impacts:**

*Environmental impacts are dismissed*

**Staff's Response:**

Environmental impacts were discussed in the EA that was processed for this action. Impacts were thought to be negligible for projects undertaken under this permit. This is because 1) sand volume amounts are relatively minor (<10,000 c/y), and 2), with the imposition of appropriate management controls, (i.e., limiting sand volumes, excluding sensitive/protected areas, dictating sand quality), environmental impacts could be minimized.

Staff feels that those potential negative impacts that would normally be expected to arise from projects of this scale have been identified, discussed and mitigated. There may be project specific impacts, greater than that discussed in the EA, that are discovered when a project is proposed under this program. That is why we have outlined a detailed application process, have established an expert panel and will publish notice of Category II

projects in the Environmental Notice. Projects that do not comport with these requirements will be rejected.

*This action will have negative impacts on ecosystems that exist in areas that will be mined for sand.*

In general, extracting sand from offshore sand deposits, stream and harbor mouths would be considered a maintenance activity; basically recycling sand from the offshore area to the beach. As such, much of the work done under this program would involve the manipulation of sand deposits that have accumulated due to artificial coastal structures and facilities. A good example of this is Kikiaola Harbor on the island of Kauai. The location of the harbor has resulted in down drift beach impacts (sand accumulation on the up drift side, but sand loss on the down drift side). As such, sand will be moved periodically around the harbor to maintain the longshore drift of sand, which nourishes the down drift beach. That action could be approved under the auspices of this permit.

Sand in these near shore marine areas is highly mobile and constantly shifting. Much of the sand that would be utilized probably came from nearby beaches, and this action only seeks to return the sand to the beach. Sand extraction could actually benefit biota by mobilizing nutrients drawing sand from fish holes that have filled in, thereby, creating conditions more favorable for juvenile dwelling fish species. Applicants will be required to disclose information on the nature and extent of nearby marine life.

Clearly, sand extraction will disrupt the immediate ecological community, but long-term effects are not anticipated for small-scale operations. At some point in the future, it would be useful to commission a comprehensive study of both deepwater and near shore sand extraction in the Hawaiian Islands to assess impacts. It is our understanding that this was done in the State of Florida as a precursor to sand extraction projects there.

Staff believes that small-scale nourishment projects can be conducted without adversely affecting the marine food chain. Moreover, each project would need to be reviewed by the Panel of Technical Experts (PTE), which includes an aquatic biologist. Some projects could also involve site inspections. Larger-scale initiatives would require some type of ecological assessment, but these projects are too large to be processed under this program, and would require individual permitting and environmental review.



As the Waikiki Beach sand pumping demonstration project proved, sand could be dredged hydraulically, with minimal impacts on water quality. This project was conducted over several weeks in and around popular surfing sites. There were very little if any disturbances of recreational activities. Because turbidity can be contained with hydraulic dredging, there is no concern for impacts on nearby marine life. In fact, the dredging of sand from these areas will improve the habitat for dwelling sea creatures seeking areas of vertical relief in the marine substrate.

For small-scale nourishment projects, it would not be necessary to conduct long-term studies of sand sources nor as a prerequisite for project approval, since this program would limit sand quantities anyway. The State, through the CLP has been working with various entities, including U.H./SOEST and USGS and others to identify larger sources of marine based sand, which can be extracted for beach nourishment. Development of these larger sources would likely be a separate review process.

#### *Upland sources*

For upland sources, mining of sand for beach nourishment would be a more permanent activity focused in particular area. This could result in borrowing pits being left behind. It is not the intent of this EA or program to provide a blanket approval for inland sand quarrying. The respective County authority would regulate this activity.

Hawaii's coastal dunes have been devastated and are currently under attack from a variety of uses. Historically, Hawaii's dunes and beaches were mined for construction purposes and for the sugar cane industry to create lime. Our dunes have been flattened and filled for coastal development. Off road vehicle use continues to degrade this important natural resource and its unique ecological communities. Sand mining for beach nourishment did occur on a limited basis in the past, but the volumes of material were minimal compared with the overall impact on dunes from other activities.

The Department would not be supportive of mining coastal dunes for beach nourishment. Page 15 of the EA does note that sand should not be extracted from near shore dunes. However, there exist inland relic sand deposits that could be considered as a sand source for beach nourishment. For instance, on the island of Kauai, the DLNR recently issued land licenses to mine sand from the Mana Plain, which is inland from the coast and dunes. The overall purpose of the project was to create a bird sanctuary for watering fowl. This sand is of high beach quality, is well sorted and

clean, and could therefore, be used for beach nourishment. The area was not within the shoreline area and was not an extant dune system, although it may have been at some time in the past.

**Chapter 343, Hawaii Revised Statutes process:**

*Does the EA satisfy Chapter 343, HRS requirements for an unspecified number of projects?*

**Staff's Response:**

The purpose of the EA is to satisfy Chapter 343, Hawaii Revised Statutes (HRS) requirements. The EA is written to reflect the content and procedures that will be required under the proposed State Program General Permit (SPGP) and Statewide Conservation District Use Permit (SCDUP) for small-scale beach nourishment. The permit procedures are illumined in the EA to illustrate the tight controls that will be in place to minimize potential impacts occurring under this blanket EA.

Staff decided to proceed with a programmatic EA, rather than seek an exemption from Chapter 343, HRS because we felt that this would provide agencies, applicants and the general public with information on the potential environmental, social and economic issues related to small-scale beach nourishment projects and would provide a forum for public/agency discussion and revisions to EA content. The publication of a programmatic EA is similar to the process of developing General Permits for certain "class type" actions with the U.S. Army Corps of Engineers.

**Authority of the Panel of Technical Experts (PTE):**

*What is the specific authority of the PTE regarding oversight and regulation of permits and mitigation measures?*

**Staff's Response:**

The Panel of Technical Experts (PTE) will make decisions by consensus. Failure to achieve agreement by panel members to proceed with a project would likely result in the project being denied or a recommendation that it be processed through an individual permit, not through the proposed SPGP and Statewide Conservation District Use Permit (SCDUP). If a panel member fails to recommend approval for a project, he/she should provide concrete environmental reasons for this determination.

However, the panel is not the decision-making authority. The authority to issue permits would rest with the Chairperson of the BLNR, unless the permit is referred to the Board. The panel is an advisory body. However, that being said, CLP staff will base its recommendations to the Chairperson on the expertise of the PTE.

**Cumulative Impacts:**

*Cumulative Impacts could result from many projects occurring simultaneously or even sequentially in the same area.*

**Staff's Response:**

The permit sets a limit on the amount of sand at 10,000 cubic yards (CY) per project. The Department would discourage simultaneous or sequential projects since it could be viewed as a way to do larger nourishment projects through segmentation, in order to circumvent the more cumbersome individual permit process.

However, it is feasible that there could be two simultaneous projects, one in Lanikai and one at Kailua Beach. This would not be a problem because these areas are distinct and separate coastal areas. There would be no cumulative impacts. But two projects occurring simultaneously in Lanikai could cause cumulative impacts in the Lanikai area. This would not be allowed under this program.

Another possible scenario is where projects are planned in phases - e.g., one 10,000 CY project in Lanikai every year for 10 years. This could create cumulative impacts in the area beyond that anticipated in the programmatic EA. This situation would need to be monitored to determine what additional steps would be required under the State environmental laws, consultation with resource agencies, and the CDUA process.

**Shoreline Certification:**

*The shoreline should be certified prior to nourishment actions.*

**Staff's Response:**

Most projects approved under this permit would require the submission of a shoreline survey map, but would not necessarily require the map to be certified. The reason for this is that beach nourishment is temporary. The sand may or may not remain at the site, and could shift to other areas of the shoreline or offshore. Shoreline certification can be a lengthy process. The purpose of

the program is to provide for the expeditions review of small-scale projects through one agency.

In some cases, nourishment might be misused as a way to extend one's shoreline seaward, which could provide property owners with larger land areas for reasons of building or subdivision. This would be contrary to the purposes of beach preservation and would not be allowed. This is an important issue. Staff will include a condition of this approval that abutting landowners shall not be permitted to claim areas artificially nourished with sand under the State's accretion laws.

Staff notes that the purposes of this permit are to provide beach area and some protection from storm waves, not to extend private property seaward.

**Sand Placement:**

*Is it right to place sand on privately owned property?*

**Staff Response:**

It is not the intent of this SPGP and SCDUP to use public funds to finance these projects. It is the intent of the State to encourage coastal landowners and coastal communities to utilize beach nourishment in lieu of shoreline hardening. There may be situations where an agency dredges a small boat harbor, stream, or canal and a decision is made to place the material on a public beach that abuts private property, such as in Lanikai Oahu, or Halama Beach, Maui. The decision "where" to place sand on the State's public beaches would be determined by a number of factors, but is mainly a function determined by the beach area within the coastal cell that needs the sand the most due to a history of erosion. Certainly, priority would be given to beaches that are utilized more often and by more people than beaches that are not.

**Panel of Technical Experts:**

*It is important to have a coastal engineer on the PTE.*

**Staff's Response:**

The PTE is currently comprised of a coastal/marine geologist, aquatic biologist and ocean/marine engineer. Staff considered seeking the participation of a coastal engineer with experience in beach nourishment, but there are none that we know of in government

or the University. This means that staff would have to seek an individual from the private sector to be on the panel. This brings up issues of monetary compensation and potential conflicts of interest. Staff will continue to discuss this matter with the PTE to see how we can solicit the participation of a coastal engineer with experience in beach nourishment.

**Cultural/Archaeological Issues:**

*What about the impact to traditional and customary gathering rights of native Hawaiians?*

**Staff's Response:**

In general, staff believes that the program would improve or enhance these values for native Hawaiians as beach access and use could be enhanced. There is a potential for negative impacts if natural resources are damaged which native Hawaii's use such as marine animals and plants. However, the program has been developed with limitations, controls and monitoring guidelines so that negative impacts can be minimized and avoided in most cases.

**Affect on Surf Sites:**

*Projects should not affect surf sites.*

**Staff's Response:**

Any sand retention structures proposed under this permit would be quite small and close to shore. Moreover, no such structures would be placed in the marine environment if they were suspected to impact surf sites.

**ANALYSIS:**

Following review and acceptance for processing, the applicant, by letter dated August 1, 2000 was notified that:

After reviewing the application, we find that:

1. The proposed use is considered an identified use within the Protective/Resource subzones of the Conservation District and is specifically identified under Section 13-5-22(P-6) of the Administrative Rules;

2. No public hearing will be required since the use is not of a commercial nature; and
3. In conformance with Title 11, Chapter 200(8), of the Administrative Rules, a Draft Environmental Assessment was published in the Environmental Notice for the proposed use on March 8, 2000. The Department of Land and Natural Resources, Land Division issued a Finding of no Significant Impact to the Environment (FONSI) on May 18, 2000. The FONSI was published in the June 8, 2000 Environmental Notice.

The objective of the Resource Subzone is to develop, with proper management, areas to ensure sustained use of the natural resources of those areas.

The objective of the Protective Subzone is to protect valuable resources in designated areas such as restricted watersheds, marine, plant, and wildlife sanctuaries, significant historic, archaeological, geological, and volcanological features and sites and other designated unique areas.

The following discussion evaluates the merits of the proposed land use by applying the criteria established in Section 13-5-30, HAR:

1. **Is the Proposed Land Use Consistent with the Purpose of the Conservation District?**

The purpose of the Conservation District is to regulate land use for the purpose of conserving, protecting, and preserving the important natural resources of the State through appropriate management and use to promote their long-term sustainability and the public health, safety and welfare.

The purpose of the Statewide CDUP/SPGP is to enhance natural resources (beaches), and provide shore owners with a soft protection alternative to hardening. In order to further protect natural resources, including cultural resources, certain areas will be excluded, such as historic properties, designated critical wildlife habitat or areas of recognized biological importance, unless written consent can be obtained from the proper agency authorities.

Staff believes that this action is consistent with the purpose of the conservation District to protect and conserve resources.

**2. Is the Proposed Land Use Consistent with the Objectives of the Subzone?**

The objective of the resource subzone is to develop, with proper management, areas to ensure sustained use of the natural resources of the area.

Staff believes that this action is consistent with the purpose of the Resource subzone inasmuch as it seeks to sustain and improve the natural resources of the shoreline by restoring a degraded beach cell.

**3. The Proposed Land Use Complies with Provisions and Guidelines Contained in Chapter 205A, HRS, entitled "Coastal Zone Management."**

Chapter 205A, HRS encompasses most land, water and marine areas of the State. Section 205A-2(a)(9)(C) states that it is a policy of CZM, to "minimize" the construction of public erosion-protection structures seaward of the shoreline. In this case, the erosion control structure could be considered to be a beach or a small structure to retain sand. These are more commonly referred to as soft structures. Sand nourishment is the "softest" structure that can be used as shoreline protection.

In addition to causing no adverse impacts to historic resources, coastal ecosystems, scenic, open space and marine resources, the action addresses three Coastal Zone Management objectives: 1) creation of coastal recreational opportunities (hopefully lateral shoreline access would be restored), 2) reduction of potential hazards to life and property from erosion, and 3) preserving and restoring beach resources, without degrading the quality of coastal waters.

The CZM office also believes that the project is consistent with the CZM objectives.

Finally, staff finds that the proposed project is consistent with the recommendations of the State Coastal Erosion Management Plan (COEMAP).

4. The Proposed Land Use Will Not Cause Substantial Adverse Impact to Existing Natural Resources Within the Surrounding Area, Community or Region.

Short-term environmental impacts will be in the form of increases in noise levels and potential short-term impacts and disturbance to marine resources (displacement of a few marine organisms) during construction. However, no significant adverse impacts are expected to occur from the placement of the sand or small-scale structures for beach nourishment. Project performance will also be monitored under certain circumstances to assess potential negative impacts should they occur.

The CDUP/SPGP excludes certain areas from consideration, such as designated endangered species critical habitat, sanctuaries and refuges or areas of recognized biological importance, such as coral reefs, mud flats, vegetated shallows, and areas of concentrated shellfish production, unless the consent of the appropriate agency is first obtained. In addition, each application for small-scale beach nourishment must include a description of the marine biological communities in the immediate project areas. This information is to be reviewed by the Expert Panel, which includes a State Aquatic Biologist.

5. The Proposed Land Use, Including Buildings, Structures, and Facilities, Shall Be Compatible With the Locality and Surrounding Areas, and Appropriate to the Physical Conditions and Capabilities of the Specific Parcel.

The purpose of the SPGP/SCDUP is to enhance degraded beach segments. Sand compatibility analysis will be conducted prior to the placement of sand onto a beach to ensure that the native beach values are retained.

6. The Existing Physical and Environmental Aspects of the Land, such as Natural Beauty and Open Space Characteristics, Will Be Preserved or Improved Upon.

Beach nourishment will preserve and enhance existing physical and environmental aspects of the land (beach).

7. Subdivision of Land Will Not Be Utilized to Increase the Intensity of Land Uses in the Conservation District.

No subdivision is required.



8. The Proposed Land Use Will Not Be Materially Detrimental to the Public Health, Safety, and Welfare.

Beaches have been called the backbone or engine of the State's economy. Beaches are essential for our livelihood and to maintain a competitive edge over other visitor destinations. Beaches are an inextricable part of Hawaii's history and culture. Beach nourishment will, therefore, improve and contribute to the economic and social welfare of the community and State, with minimal harm to the public safety, health and welfare.

Staff has determined that the project will not be significantly detrimental to the public health, safety and welfare of the general public, and will, in fact, improve public health safety and welfare by restoring beaches.

DISCUSSION:

Implementation of a statewide CDUP and Corps SPGP will streamline the permitting process for small-scale beach nourishment projects and consolidate permitting of these projects within one agency, the DLNR. This would provide an incentive for shore owner groups to seriously consider this practice as an alternative to shoreline armoring. While not a cure all to stop coastal erosion, land loss and beach narrowing, the use of small-scale beach nourishment in Hawaii could reduce the incidence of shoreline armoring and enhance public beaches with minimal negative environmental consequences. As already noted issuance of the SCDUP is a pre-requisite for the issuance of an Army Corps SPGP.

Staff has determined that this project is consistent with the purpose of the Conservation District and consistent with the goals and objectives of the Hawaii Coastal Erosion Management Plan (COEMAP) adopted by the Board of Land and Natural Resources in 1999. It is a major goal of COEMAP to promote appropriate erosion control and beach nourishment efforts such as this.

In addition, staff has not encountered any objections to a blanket statewide approval and streamlined permit process for small-scale projects, although there were some negative comments on the EA received by the U.H. Environmental Center.

The draft EA (DEA) was widely distributed to affected agencies and to some environmental groups. Copies of the DEA were provided to libraries throughout the State of Hawaii. Agencies, groups and individuals have been very supportive of this permit.

RECOMMENDATION:

That the Board of Land and Natural Resources approve this statewide application to permit small-scale beach nourishment projects in the State of Hawaii, and also delegate to the Chairperson the authority to issue Category II permits for small-scale beach nourishment projects in Hawaii, subject to the Board's consent to delegate its authority at regular Board meetings, and subject to the following conditions:

1. The Board of Land and Natural Resources hereby delegates to the Chairperson the authority to issue Category I permits for small-scale beach nourishment projects in Hawaii, without board consent to delegate;
2. Category II actions shall be published in the Environmental Notice;
3. No activity will be authorized under this permit which is likely to adversely affect a Federally listed threatened or endangered species or a species proposed for such designation, or destroy or adversely modify its designated critical habitat;
4. No activity authorized by this permit may substantially disrupt the movement of those species of aquatic life indigenous to the area, including those species, which normally migrate through the area;
5. No activity will be authorized under this SPGP in properties listed or eligible for listing in the National Register of Historic Places without the written consent of the State Historic Preservation Officer;
6. When the Chairperson is notified by the applicant or the public that an individual activity deviates from the scope of an application approved under this permit, or activities are adversely affecting fish or wildlife resources or their harvest, the Chairperson will direct the permittee(s) to undertake corrective measures to address the condition affecting these resources. The permittee(s) must suspend or modify the activity to the extent necessary to mitigate or eliminate the adverse effect;

7. When the Chairperson is notified by the U.S. Fish and Wildlife Service, the National Marine Fisheries Service or the State Department of Land and Natural Resources that an individual activity or activities authorized under this permit is adversely affecting fish or wildlife resources or their harvest, the Chairperson will direct the permittee(s) to undertake corrective measures to address the condition affecting these resources. The permittee(s) must suspend or modify the activity to the extent necessary to mitigate or eliminate the adverse effect;
8. Applicants must submit written compliance reports to the CLP and CWB, including a final report within two months of completion of a project authorized under this permit. The compliance reports must include, as appropriate, descriptions of the construction activities, discussion(s) of any deviations from the proposed project design and the cause of these deviations, results of environmental monitoring, discussion(s) of any necessary corrective action(s), and photographs documenting the progress of the permitted work;
9. On a case-by-case basis the Corps may impose special conditions on projects authorized under this permit, which are deemed necessary to minimize adverse environmental impacts;
10. The DLNR in conjunction with the Federal resource agencies will conduct periodic reviews to determine that the continuation of this permit is not contrary to the public interest;
11. The length of time required to process each request under this permit will be directly related to the adequacy and completeness of the information submitted by the applicant;
12. Abutting landowners shall not be permitted to claim areas artificially nourished with sand under the State's accretion laws for projects authorized under this permit;
13. Any work or construction authorized under this permit shall be initiated within six (6) months of the approval of such use, and, unless otherwise authorized, shall be completed within one (1) year of the approval of such

use. The applicant shall notify the department in writing when construction activity is initiated and when it is completed;

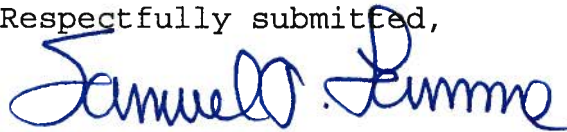
14. To avoid encroachments upon the areas nourished with sand, affected property owners realize that the State may claim that the added sand under existing laws may prevent them from moving the certified shoreline seaward of the present vegetation line until there is substantive evidence that the sand has moved on to other areas. During sand placement, care shall be taken to protect existing dune vegetation and any other existing vegetation along the shoreline. To facilitate any later applications for shoreline certifications, the affected property owners are encouraged to document their present shorelines with photographs or surveys;
15. Where any interference, nuisance, or harm may be caused, or hazard established by the activities authorized under this permit, the applicant shall be required to take measures to minimize or eliminate the interference, nuisance, harm or hazard;
16. For projects authorized under this permit, the applicant shall take measures to ensure that the public is adequately informed of the project work once it is initiated and the need to avoid the project area during the nourishment operation, and for several days following the completion of the nourishment operation to allow potential bacteria levels to decrease;
17. No contamination of the marine environment (trash or debris disposal) shall result from project-related activities authorized under this permit;
18. For projects authorized under this permit, the operator shall not operate any equipment in the water and shall refuel away from the beach. In the event there is any petroleum spill on the sand, the operator shall promptly remove the contaminated sand from the beach;
19. For projects authorized under this permit, the applicant, its successors and assigns, shall indemnify and hold the State of Hawaii harmless from and against any loss, liability, claim, or demand for property damage, personal injury, and death arising out of any act or omission of the applicant, its successors, assigns, officers,

employees, contractors, and agents under projects authorized under this permit;

20. The Department of Land and Natural Resources reserves the right to impose additional terms and conditions on projects authorized under this permit, if it deems them necessary;
21. The applicant shall comply with all applicable statutes, ordinances, rules, and regulations of the federal, state, and county governments for projects authorized under this permit;
22. The applicant shall implement standard Best Management Practices (BMPs), including the ability to contain and clean-up fuel; fluid or oil spills immediately for projects authorized under this permit. Equipment must not be refueled in the shoreline area;
23. All conditions imposed under the U.S. Army Corps of Engineers State Program General Permit for this effort are hereby incorporated into this statewide Conservation District Use Application;
24. If retention structures are used for projects authorized under this permit, they shall be removed within 30 days of written notification of the Department of Land and Natural Resources, at the applicant's own cost, if the structures do not improve the situation (slow or reverse erosion) or if the structures cause unanticipated impacts in the area;
25. In the unlikely event that historic sites, including human burials are uncovered during routine construction activities for projects authorized under this permit, all work in the vicinity must stop and the State Historic Preservation Division must be contacted at 692-8015;
26. Coastal Lands Program staff will develop a new application form to facilitate the application process for projects authorized under this permit;
27. Coastal Lands Program staff will provide a list of projects approved by the Chairperson to the Board on an annual basis;

28. All Special Conditions imposed by the Honolulu District Engineer on the State Program General Permit are hereby incorporated into projects authorized under this permit;
29. Other terms and conditions as prescribed by the Chairperson; and
30. Failure on the part of applicants to comply with any conditions imposed on projects authorized under this permit shall render the permit null and void.

Respectfully submitted,



SAMUEL J. LEMMO  
Staff Planner

Approved for Submittal:



TIMOTHY E. JOENS, Chairperson  
BOARD OF LAND AND NATURAL RESOURCES

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7. **Approved as Amended.**—The Board amended staff recommendation to include the following:
    31. The application process shall include a requirement that the applicant notify all abutting property owners and community organization that may be affected by the proposed action. In addition, each of the property owners and community organizations shall be notified of the time, date and place that the Board will review the proposed application.
    32. That the processing fees for Category II permits be increased to \$250.00.