



University of Hawaii at Manoa

Environmental Center
Crawford 317 • 2550 Campus Road
Honolulu, Hawaii 96822
Telephone (808) 948-7361

RL:0561

**SB 1310, SD 1, HD 1
RELATING TO REPLACEMENT OF SAND
ON ERODED BEACHES**

**Statement for
Senate Committee on
Tourism and Recreation
Public Hearing - February 12, 1986**

**By
Doak C. Cox, Environmental Center
Jacquelin Miller, Environmental Center
J. Frisbee Campbell, Hawaii Institute of Geophysics
Frans Gerritsen, Ocean Engineering
Ralph Moberly, Geology and Geophysics**

SB 1310, SD 1, HD 1 proposes four amendments relating to restrictions imposed by HRS 205-33(a) on takings of sand. This statement on the bill does not reflect an institutional position of the University of Hawaii.

Restriction on non-commercial sand takings

The first of the amendments proposed in SB 1310, SD 1, HD 1 relates to the provision of HRS 205-33(a)(1) that allows the taking of sand from public beaches for reasonable, personal, non-commercial use. One of the reasons for the introduction of the original version of SB 1310 was that this provision has been interpreted as allowing taking of truckloads of sand. In the original version and in an amended version, SB 1, such a taking would be limited to 1 gallon. In the present version, HB 1, the limit would be increased to 5 gallons. We question the reasonableness of 5-gallon takings of sand from public beaches considering the recreational importance of the beaches and the erosion problems experienced at many of them. However, even a 5-gallon limitation would be preferable to the present lack of a quantitative limitation.

Restrictions on sand mining

The second and fourth of the proposed amendments relate to sand mining. HRS 205-33(a) originally prohibited the mining of sand from the shoreline area and from near-shore shallow water sand deposits—those at depths of 30 feet or less within a distance of 1000 feet from the shoreline. The principal rationale for this prohibition was that commercial sand mining was aggravating the problem of beach retreat, that the shallow-water, near-shore sand deposits are parts of the beach systems in which the sand may be stored and from which it may be returned to the beaches by natural processes, and

that mining those deposits could be as detrimental as mining the beaches themselves. The 30-foot and 1000-foot criteria in the statute were intended to represent, in combination, the limit to the extent of the deposits from which sand might be returned to the beaches by natural processes.

In its present form HRS 205-33, in subsection (a)(1), exempts from the prohibition against sand mining, under certain conditions, those sand mining operations that are undertaken for the replenishment of certain public beaches. The revision was made when it was recognized that in certain areas the deposits from which sand could be returned to the beaches by natural processes did not extend to distances as great as 1000 feet or to depths as great as 30 feet.

The conditions imposed were that the mining operations would have to be subject to both public information meetings and public hearings, and to findings that the operations were in the public interest and would not have adverse social or environmental impacts. These conditions could be met only if it were found that the sand could not be moved to a beach by natural processes from the deposit to be mined. Hence the safeguard originally intended is provided by the imposition of those conditions.

The public beaches for whose replenishment the mining could be conducted were limited to those at Hilo and at Waikiki, Ala Moana, and Kailua on Oahu. This restriction provides no additional safeguard because it applies to the beaches to be replenished, not the deposits to be mined, and the areas named are not the only ones with beaches needing replenishment.

The second of the amendments proposed in SB 1310, SD 1, HD 1 would delete the unnecessary and undesirable restriction to beaches in the areas named. We would suggest that HRS 205-33(a)(1) be amended further only to promote that the adverse impacts that disqualify sand deposits as potential sources of sand be limited to those that are significant, because any sand mining operation, even one resulting in very great net benefit, would be found to have some adverse impacts.

Prohibition of sand mining from sand bar at Kualoa

We discuss here the fourth of the proposed amendments because it would limit effect of the second. This fourth amendment would add to HRS 305-33 a new subsection (b) prohibiting any taking of sand or other material from the Hakipuu Sand Bar off Kualoa Beach Park, Oahu. The proposal for the prohibition stems, we believe, from testimony at a 1985 hearing suggesting that mining of sand deposits off the park might result in (1) a significant risk of ciguatera poisoning associated with the consumption of fish taken from the vicinity of the mining operation, and/or (2) a significant risk of wave damage to the fishpond adjacent to the park. The supposition that the ciguatera-poisoning risk is significant was based on an observed correlation between previous harbor dredging operations and incidents of the poisoning. We note, however, that these incidents have involved dredging of bottom materials other than sand. There are natural movements of sand annually that vastly exceed the disturbances that would result from the sand mining operations. If the sand mining operations involved a significant risk of ciguatera poisoning, a strong correlation should exist between incidents of the poisoning and the natural movements of sand. So far as we know, no such correlation has been found. Hence we believe that there is no significant risk of ciguatera poisoning as a result of sand mining in the Kualoa vicinity or anywhere else.

The Hakipuu sandbar is believed to be formed for the most part from sand that has been eroded in the last century from the northern beach of the beach park. If so, the fishpond was constructed long before the sandbar reached its present size, and reduction of the size of the sandbar by mining could not result in greater exposure of the fishpond to wave attack than its original exposure.

In any case, mining of the sand bar would require, under the present provisions of the law, a finding of no adverse environmental impact. Hence the proposed prohibition against mining from the Hakipuu is quite unnecessary. It is also undesirable in that it would still apply even if the risks of ciguatera poisoning and damage to the fish pond were found non-existent.

Clearance of drainage structures and stream mouths

The third amendment proposed in SB 1310, SD 1, HD 1 relates to the clearing of sand from drainage pipes and canals and from the mouths of streams such is necessary for flood control. The HB 205-33(a)(3) at present allows the clearing as long as the sand is placed on adjacent beaches unless such placement would result in undue turbidity. As the HB 1 version of the bill, SD 1 would limit the allowable clearing operations to those if conducted for state or county maintenance purposes, and would provide that no environmental impact statements (EIS's) would be required for such operations.

We see no reason for restricting the allowable operations to those conducted for state or county maintenance purposes. If privately conducted they are subject to permit requirements and, at present, to EIS-system requirements. We also see no reason for exempting the clearing projects from EIS-system preparation requirements, whether they are conducted by state or county agencies or private parties, and believe that the exemption would establish an unfortunate precedent. It should be noted, incidentally, that the exemption proposed would be from EIS-preparation requirements. Environmental assessment requirements would be unaffected, although an assessment that resulted in a determination that an EIS should be prepared would have no effect.

Exemption from EIS-system requirements cannot be justified on the basis of emergency needs because there is a provision in the EIS law for exemptions in the case of emergencies. There is, furthermore, a provision for exemption by administrative action. Any agency that is involved in sand-clearance projects may, with the approval of the Environmental Council, include such projects, by type, in a list of types of projects exempt not only from the preparation of EIS's, but environmental assessments as well, providing none of the projects of the type would have a significant environmental effect. An assessment of the environmental impacts of the sand-clearance projects as a type can easily show that the projects merely maintain the capacities of streams and other drainageways to pass floods, and can have no significant effect on the adjacent beaches so long as the sand is not removed from the beach system. Such sand-clearance projects are, in fact, already included in the exemption list of the Department of Transportation (Exemption Class 1, type D3).

A similar exemption, once included in the list of the City and County of Honolulu Department of Public Works, was cancelled because it was intended to relate to projects covered by a general permit from the Corps of Engineers that was cancelled because it was found to include some types of projects that would have significant environmental impacts. However, the Corps has since issued a general permit that does include maintenance clearing of river and stream mouths and storm drains (Subsections 2a(1) and 2b(1), General Permit PODCO-0-GP-82-1, 12 March 1982), and there is no reason why the City and County or the other counties should not include sand-clearance projects of the sort of concern in exemption lists under the EIS law.

The proposed exemption of sand clearance projects from EIS-system requirements would constitute an unfortunate precedent—a modification of EIS-system requirements other than through amendment of the EIS law.

Editorial flaws

We wish to call attention to two editorial flaws in the copies of SB 1310, SD 1, HD 1 available to us:

- 1) The following language appears in the present statute between what is quoted in pages 1 and 2 of the bill: "...State or county; provided that for the purpose of this paragraph an environmental impact statement for this proposed project shall be accepted...."
- 2) The word "that" has been inserted at the beginning of page 3 as well as at the end of page 2.

Summary

In summary, we consider most of the amendments of HRS 205-33 proposed in SB 1310, SD 1, HD 1 desirable, and believe that adoption of the amendments as now proposed would be preferable to failure to adopt any amendments. Particularly desirable are:

- 1) the proposed establishment of a quantitative limit to those sand takings from public beaches for personal, non-commercial use that are to be considered reasonable; and
- 2) the proposed elimination of the present limitation to the beaches of only a few specified areas in the present provision for the replenishment of sand on public beaches by sand mining from shallow-water near-shore deposits.

However, we consider that:

- 1) the 1-gallon limit that was earlier proposed for the taking of sand from public beaches would be preferable to the 5-gallon limit now proposed.
- 2) adverse impacts that should ban sand mining from shallow water, near-shore deposits should be only those that are significant;
- 3) The proposed statutory ban against mining of sand from a sand bar at Kualoa should not be adopted, because there is no significant risk that the mining will result in significant adverse effects and the law would not permit mining from the bar without a finding that no adverse affects (or no significant adverse effects) would result.

- 4) Clearances of sand from stream mouths and drainage structures should not be limited as proposed to those conducted by the State or counties.
- 5) The proposed exemption of sand clearance projects from EIS requirements should not be adopted because there is provision in the EIS law for exemption by administrative action.