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HB 2409
MAKING AN APPROPRIATION TO STUDY WATER FROM LAVA TUBES

Statement for
House Committee on
Water and Land Use
Public Hearing - February 6, 1990

HB 2409 is a companion bill to SB 2654 on which the Environmental Center earlier submitted testimony. Our previous statement remains applicable to HB 2409 and is enclosed for your consideration.

Enclosure

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SB 2654
MAKING AN APPROPRIATION
TO STUDY WATER FROM LAVA TUBES

Statement for
Senate Committee on
Energy and Natural Resources
Public Hearing - February 2, 1990

By
Jacquelin Miller, Environmental Center
Frank Peterson, Geology and Geophysics

SB 2654 would appropriate funds to investigate water from lava tubes. This investigation would include (1) mapping of shorelines along the west coast of the Big Island and the southern coast of Maui between Makena and Kipahulu; (2) measurements of the chemistry of the water from lava tubes along the Kona/Kohala coast; and (3) an evaluation of techniques to trace selected lava tubes from the coast inland.

Our statement on this bill does not represent an institutional position of the University of Hawaii.

The need for additional potable ground water supplies is widely recognized particularly in dry coastal areas undergoing heavy development pressure.

SB 2654 recognizes this need and the recent investigations by Sea Grant personnel, building on previous studies undertaken in the 1960's and 70's by William Adams and Frank Peterson, to map, using infrared photography, the sites of cold, presumably freshwater outflows,n or t along the Kona coast.

As presently drafted the first line of investigation would include "discovery and mapping" of "Upolu Point", around South Point and through the Kau desert coast to the region of recent volcanic activity; and the dry southern coast of Maui between Makena and Kipahula.

While we concur that such additional mapping efforts would be of interest, it appears that given the modest sum requested that instrumentation and chemical analysis studies as identified in paragraph 2 and the evaluation of techniques to trace the tubes inland as indicated in paragraph 3 would be the more critical issues on which to concentrate the limited funds. Certainly, if the chemical analysis verify the potability of the waters and the geophysical studies are able to trace these selected tubes inland where their water could be tapped by conventional wells, additional mapping for new sources would be fully justified.

At the present we would suggest that only minimal new mapping be included along the specific areas of the Kona coast sufficient to establish correlations between ground truth measurements and infrared observations and that mapping of the Maui coast be deferred until the results of the studies on the Big Island are available.

With these suggestions we concur with the intent of HB 2654.