



# University of Hawai'i at Mānoa

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## SB 91 RELATING TO COASTAL ZONE MANAGEMENT

Senate Committee on Labor and Environment

Public Hearing - February 18, 1999  
2:30 p.m., Room 225, State Capitol

By  
John Harrison, Environmental Center  
David Duffy, Botany, PCSU  
Charles Lamoureux, Lyon Arboretum

SB 91 would amend Section 205A-22, HRS, to define "substantial adverse environmental or ecological effect" as it relates to special management areas.

Our comments on this measure are compiled from voluntarily submitted opinions of the listed academic sources, and as such, do not constitute an institutional position of the University of Hawaii.

As in SB 560, the proposed definition of "substantial adverse environmental or ecological effect" offers a good start, but it raises a number of questions. This measure addresses the concern over cumulative effects, incorporating the critical element of time. Another concern lies in the fact that for many, if not most areas, few quantitative baseline benchmarks in specific water quality or species abundance and distribution parameters are established. Thus, a beneficial effect of this measure may be to provide for project-specific baseline surveys as part of the planning and long term management process.

We note concerns expressed in prior testimony that this definition is unworkable, due to the difficulty of comprehensive measurement and evaluation of ecological systems. However, in both biologic and chemical parametric assessments, extensive use is made of indicator or reference species or components. Thus for water quality evaluations, specific dissolved and particulate quantities are measured and comparatively evaluated, and similarly, the distribution and abundance of particular species commonly characterizes more general ecological assemblages. Public review of environmental assessments prepared for proposed actions provides an established, effective mechanism for assuring inclusion of agency and academic expertise in evaluations of ecological effects.

Finally, we note that 5% of an entire ahupua'a may amount to an area significantly larger than the SMA.