

Exhibit 1

**STATE OF HAWAII
LAND USE DISTRICTS
AND REGULATIONS
REVIEW**

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ECKBO, DEAN, AUSTIN & WILLIAMS



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**STATE OF HAWAII
LAND USE DISTRICTS
AND REGULATIONS REVIEW
Prepared for the
STATE OF HAWAII
LAND USE COMMISSION
By
ECKBO, DEAN, AUSTIN &
WILLIAMS**

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August 15, 1969
Honolulu, Hawaii

STATE OF HAWAII
John A. Burns, Governor

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*In memory of Keigo Murakami
former Commissioner from
Maui County*

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ECKBO
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AUSTIN &
WILLIAMS

August 15, 1969

Mr. C. E. S. Burns, Jr., Chairman
Land Use Commission
State of Hawaii
State Capitol Building
Honolulu, Hawaii

Dear Mr. Burns:

We take great pleasure in transmitting this report to the Land Use Commission in the conclusion of our review of the Hawaii Land Use District Boundaries and Regulations. May we take the occasion to thank each member for the friendly and cooperative spirit which made possible the successful completion of this year of work.

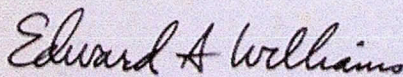
A great amount of the satisfaction we feel at this time is due to the fact that many good things have been accomplished during the review program. As a result of our mutual efforts, beneficial alterations have been made by the Commission in the Rules of Practice and Procedure, District Regulations and District Boundaries.

We hope that additional benefits will accrue from this study when, in the future, other recommendations contained herein receive consideration.

We wish to thank each Commissioner for our good fortune in being able to experience the most pleasurable working environment we have ever realized.

Respectfully submitted,

ECKBO, DEAN, AUSTIN & WILLIAMS



Edward A. Williams



Don B. Austin

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PREFACE

ABOUT THIS REPORT

Eckbo, Dean, Austin & Williams and the firm's consultants have made a study of Hawaii's pioneering Land Use Law, under a one year contract with the State Land Use Commission. Because this is the first comprehensive review of a unique law, and because of widespread interest in it, we have included in our report items of absolute functional necessity as well as items of rather peripheral importance.

One will find herein matters of history, economics, and use planning, taxation, law and personal opinion. They are included to provide a feeling for the total concept of the law. Taken collectively, we hope this information will provide both the citizen of Hawaii and the interested outsider the knowledge he seeks about the law and its implications, from the processes of drawing district boundaries and regulations to the decisions made in the market place and the tax office.

The report is organized in the following way:

Chapter 1 provides a history of state planning, the elements of the Land Use Law, an outline of how the study was made and some of our observations in retrospect.

Chapter 2 summarizes our conclusions. We have tried in this abridgement to set the stage for our recommendations for administrative and legislative action which follow in Chapter 3. We hope the reasons for these recommendations are not obscure after such a short introduction to the subject.

Chapters 4 through 7 are a summary of the recommended changes to the district boundaries in the four counties. Since these were acted upon during the preparation of this report, we are able to provide the Commission's decisions with respect to them. In this way, the text becomes not just a report to the Commission but a record of its actions as well. These four chapters are a functional necessity, but may be unentertaining reading to those not intimately familiar with the Hawaiian landscape.

Chapters 8 through 11 deal with the Agriculture, Conservation, Urban and Rural Districts in detail. They contain some of the "heartwood" of this report because they deal with the main issues and conflicts involved in the four districts, the determination and administration of them.

Chapters 12, 13 and 14 contain background information on land policy, economics and land use planning. However, they also contain analyses, critiques and

conclusions resulting from inspection of these subjects.

Chapter 15 is one of the major contributions to this study, and is very special in our opinion. It is a theoretical study of the potentials created by taxation as an aid to planning implementation. It is a review of the Hawaii tax system and an analysis of the Hawaii real property tax as it relates to planning goals. A reading of this chapter is probably essential to a full understanding of the summary contained in Chapter 2 and the recommendations contained in Chapter 3—that is, for everyone but an expert on taxation.

One of our "working papers" has become Chapter 16, because we think people will enjoy reading the analysis of the attitude survey.

Chapter 17 is another "working paper", and in this case a rather dry one. However, we feel it is a necessary addition as a statistical summary of administrative actions related to the Land Use Law. These provide the basis for some important recommendations and part of our opinion that the Law is accomplishing its purpose.

Chapter 18 contains a legal review and analysis.

The Appendix contains the usual items of the Law, the amendments, newly adopted District Regulations, newly adopted Rules of Practice and Procedure and bibliography. But perhaps the most interesting item of the Appendix will be the statistical summary of the attitude questionnaire. It seems to be universally interesting to know where various sectors of the population stand on issues.

ACKNOWLEDGMENTS

We wish to acknowledge with gratitude the assistance of hundreds of people in and out of government who have taken from their valuable time to assist in this study when requested. In particular we wish to thank the Land Use Commission, Department of Land and Natural Resources, Department of Taxation, and their staff members, the County Planning Directors, and the County Planning Commissions for their cooperation and interest. Without their help and advice this program would have been next to impossible.

This project was conducted in the Honolulu Office of Eckbo, Dean, Austin & Williams. Among those who participated were:

Edward A. Williams—Principal in Charge
Don B. Austin
Garrett Eckbo

PROJECT STAFF

Howard B. Altman
C. Christopher Degenhardt
Grant R. Jones
ASSISTANTS
David T. Woolsey
Linda R. Bernstein
Elizabeth M. Moore

This project staff was involved in many aspects of this review including: the identification of issues; review of applicable information, studies and reports; the gathering and analysis of information and opinions from questionnaires and interviews; the analysis of administrative action of the Land Use Commission; the development of concepts and goals; the analysis of the Land Use District Regulations; the review of the land use boundaries; and proposals for new policies and legislative changes.

In addition to these tasks, specific responsibilities of the project staff included:

Howard B. Altman—Project Administration and Urban Districts

C. Christopher Degenhardt—Agriculture and Rural Districts

Grant R. Jones—Conservation Districts

Our consultants also deserve special recognition for their accomplishments in the study. They are:

Baxter, McDonald and Company, Berkeley, California, which provided management advice and analysis of administrative actions of the Land Use Commission, County Planning Commissions and Department of Land and Natural Resources.

Dr. Leslie E. Carbert, Tax Economist, Palo Alto, California, who provided economic and taxation and dedication law analysis and recommendations.

Padgett, Greeley, Marumoto and Akinaka Attorneys at Law, Honolulu, who provided legal reviews and consultation.

The Environmental Analysis Group, San Francisco, California, which provided assistance in formulating and analyzing personal interview questions and the mailed questionnaire.

Williams and Mocine, City and Regional Planners, San Francisco, California, which provided analysis of State and County planning and zoning.

Urban, Agriculture and Conservation Districts
Hilo, Hawaii



I. AGRICULTURE DISTRICTS

Hawaii, more than any other island, exhibits a variety and range of climate and geology. This variety in turn is reflected in a wide range of agricultural activities. The Hamakua Coast, characterized by high rainfall, is a major sugar cane producing area of the island with grazing at the higher elevations. Kohala or the North Point area is another region where sugar is grown. The soils are deep and more characteristic of those of the older islands. On the leeward side of the Kohala Mountains grazing is the dominant use.

The plateau between Mauna Kea and Mauna Loa, and the Waimea area exhibits varying conditions. The area includes the Parker Ranch and is mainly dry and flat, and primarily used for grazing. The lands west of Waimea and generally from Keamuku to Kona are much drier, often comprised of barren lava, but the area does support some marginal grazing. The Kona area itself is dry with stony soils on steeply sloping land. Agricultural uses are restricted to grazing and orchard production.

The Kau District is characterized by barren lava with occasional pockets of soil. The mixing of grazing, orchard and sugar production reflects these different soil conditions. Finally, in the Hilo area and Puna Coast area, characterized by high rainfall, the lands are mostly rocky lava flows. Sugar is grown in pockets, macadamia nuts and papayas near the coast and some areas are used for grazing.

The existing Agriculture District is extensive in the areas described and includes these agricultural uses. No instances were discovered where the existence of agricultural uses or agricultural potential warranted the addition of areas to the Agriculture District. This is not to say that agricultural uses are not expanding on Hawaii, for they are. Particularly the growing of macadamia nuts and the growing of sugar in the Mountain View-Keaau area. Present pro-

grams for expansion all occur within the existing Agriculture District. A number of areas recommended for transfer from the Agriculture District to the Conservation District are discussed under the Conservation District heading.

II. CONSERVATION DISTRICTS

A. General

Hawaii is the most recently formed of all the islands, and the evidence of volcanic activity dominates the landscape. Above the 7,000 foot elevation on the peaks of Mauna Kea and Mauna Loa, the land is generally dry and barren. Also, the recent lava flows, particularly in the dry areas of the island, are barren and unproductive. Seemingly the highest and best use would be as wilderness areas. These areas have been recognized and are for the most part within the existing Conservation District. Certain areas should be added to the Conservation District owing to their scenic qualities, wilderness or wildlife resources, steep topography and general conservation values.

B. River Valleys

The numerous valleys running to the east of the Kohala Mountains are already within the Conservation District. The extremely scenic Pololo Valley and the adjacent Kupahau Ridge are presently pockets of agricultural districting which should be included in the Conservation District. The Hamakua Coast has an annual rainfall of between 100 inches and 200 inches per year. The result of such a high rainfall is a landscape frequently dissected by steep-walled scenic valleys. The major valleys, Kaawalii, Laupahoehoe, Maula, Waikau-malo, Nanue, Hakalau, Kolekole, Kawainue, Honolii, and Wailuku, are of such significance to the landscape that they should be placed within the Conservation District.

C. The Shoreline

The steep pali coast of east Kohala is presently within the Conservation District. This district should be extended to include the sandy beach at Waipio Valley and then to include the pali lands of the Hamakua Coast, using the ridge top as a boundary line.

Commission Action: Partially Approved.* Areas in agricultural use were excluded.

From Hilo to Kapoho the shore is rocky with only occasional beaches such as at Haena. It is the unique product of recent lava flows running directly into the sea. The Conservation District should include the shoreline and it is recommended that it be extended from the high water mark to a line which is approximately 300' mauka of that line.

Commission Action: Approved.*

From Kapoho to South Point, most of the shoreline is presently within the Conserva-

tion District. The District should be extended to make it contiguous, particularly in the South Point area where there are numerous significant archaeological artifacts combined with a scenic and exciting coastline. North of South Point to Kailua must of the shoreline is in the Conservation District. The District should be expanded to include the rocky and scenic shore between Kauhako Bay and the South Kona Forest Reserve, and at Kealahakua to include the steep topography behind the Bay and the scenic coast north of Kulanui Point.

Commission Action: Approved.*

Adjacent to the existing Conservation District at Lalamilo is the second largest collection of petroglyphs in the State. The district should be expanded to ensure the preservation of these artifacts.

Commission Action: Approved.*

The shoreline from Kawaihae around North Point to Pololo Valley is marked by numerous historic artifacts such as King Kamehameha I's birthplace, and a variety of different conditions such as rocks, steep pali and occasional beaches. The lands should be recognized by inclusion in the Conservation District.

Commission Action: Approved.*

III. RURAL DISTRICTS

No expansion of the Rural Districts is recommended for the island.

IV. URBAN DISTRICTS

A. General

The population for the Island of Hawaii at the time the district boundaries were drawn in 1963 was estimated to be approximately 60,700 people.¹ Current population to July 1, 1968 has been estimated by the Department of Planning and Economic Development² to be 65,700 people for an increase of 5,000 people or 8 percent for the five year interval. This estimated increase is about 9 percent over an interpolation of estimated population for 1968 as derived from the State of Hawaii General Plan Revision Program.³ The estimated county total was apportioned by judicial district based on percentages of population distribution provided by the County of Hawaii Department of Economic Development. In estimating the anticipated growth

*Approved recommendations adopted at the action meeting held in Hawaii County July 18, 1969.

¹Harland Bartholomew & Associates, Land Use Districts for the State of Hawaii, 1963.

²Department of Planning & Economic Development, Provisional Estimates of the Population of Hawaii by County, July 1, 1969.

³Department of Planning & Economic Development, General Plan Revision Program, 1967.

difficult to replace once it has been used up.¹ Conservation—Planned management of a natural resource to prevent exploitation, destruction or neglect.²

To Preserve—Emphasizes keeping something that is valuable exactly as it is without change, and, in some cases, even without using it at all. It suggests greater urgency and, in contrast to "conserve" may suggest that the item in question is literally impossible to replace, once it is gone.

The Conservation District is intended to and presently functions as a management tool for both the conservation and preservation of certain valuable resources. Only in isolated instances is strict preservation the need and intent, i.e., Diamond Head, Haleakala crater and City of Refuge.

III. THE MULTIPLE USE CONCEPT

The Land Use Law recognizes and endorses the "multiple use concept." The Department of Land and Natural Resources also recognizes this concept. It is perhaps best expressed by the following definition and discussion from "A Multiple Use Program for the State Forest Lands of Hawaii", Department of Land and Natural Resources, Division of Forestry, January, 1962.

"Multiple Use means the management of forest and related land in a manner that will conserve the basic soil resource, while at the same time producing high-level sustained yields of water, timber, forage, recreation and wildlife, harmoniously blended for the use and benefit of the greatest number of people.

... kinds of recreation particularly consistent with multiple use management: hunting and fishing, motor drives through the forests, visiting historical sites and vista points or look-outs, photography, picnicking, camping, hiking, horseback riding, mountain climbing, swimming in fresh water streams and ponds, and study of natural areas. The State forest lands are diverse enough to provide all these recreational services and many more."

From the above discussion it should be reasonably clear that the Conservation Districts are intended to be "used" for the most part. Regulation No. 4 of the Department of Land and Natural Resources, which

will be discussed, was clearly designed to provide for the administration of this "use".

IV. CRITERIA USED FOR RECOMMENDING REVISIONS TO THE CONSERVATION DISTRICT BOUNDARIES

In our analysis of areas to be considered for inclusion into the Conservation Districts we closely followed the provisions of the Law. Maps were drawn for each island showing areas of more than 20 percent slope, potential tsunami inundation zones, existing and proposed parks, sandy and seasonably sandy beaches and generalized scenic areas and sites. In addition to these criteria, information was received from appropriate State agencies relative to areas of special historic importance, wildlife habitats and endemic plant zones. The shoreline boundaries to be described later were made a part of the recommendations. The Conservation District boundaries adopted in 1964, as modified through subsequent years, were compared with the above information and where conflicts occurred, additional studies including field investigations were made.

The final boundaries are the Land Use Commission's judgement as a result of considerable input of information from studies, site inspections, information received at the public hearings, talks with landowners and the Commissioners' own personal knowledge and experience.

Two studies provided the principal information for designating shoreline resources. An unpublished draft titled, "Hawaii Seashore and Recreation Areas Survey", 1962 by the National Park Service provided a checklist with descriptive data on the beaches and park areas of local, State and national significance. The general development plan, "Hawaii's Shoreline", 1964, by the Department of Planning and Economic Development is a major exposition of the issues, problems and aspirations for the State's shoreline. It provided valuable statistical information as well as desirable development and conservation direction.

For scenic areas and sites, the work concurrently under way by Robert Wenkam was the principal source, and for general recreation resource data, the "Comprehensive Outdoor Recreation Plan", in process, by Donald Wolbrink & Associates, Inc., and Arthur D. Little, Inc., was made available in preliminary form.

The primary source of information for identifying and examining potential flood and tsunami areas was, "The General Flood Control Plan for Hawaii", 1963, by the Division of Water and Land Development. This Division of the Department of Land and Natural Resources is the official flood control agency of the State. Its jurisdiction

for zoning applies to Conservation Districts, with the jurisdiction of the counties in flood plain zoning being supreme in Urban, Rural and Agriculture Districts. The Flood Control Plan specified 73 existing and planned programs throughout the State. Every program recommends that a flood plain and/or tsunami zone be established.

Although the Land Use Commission and staff consider the information and recommendations of this plan, there is little contained in it that provides an easy avenue to direct zoning action. For instance, flood plains are not delineated and tsunami zones are very generalized. In the absence of more precise information, and with the presence of a tsunami alarm system, the tendency is to minimize the dire warnings contained in both history and the plan. The issues are so important and complicated that the counties, Land Use Commission, Department of Planning and Economic Development and the Department of Land and Natural Resources should get together to decide who should do the necessary work and who should administer the subsequent districts and work.

Where small properties abut the coastline or lie completely or almost completely within danger areas, the placing of them in Conservation or Agriculture Districts when there are very realizable potentials for urban uses may appear to some as a "taking without just compensation." However, since one of the clear-cut functions of zoning is to protect people against their own carelessness, ignorance or greed, failure to honor the recommendations of the Flood Control Plan is difficult to defend.

Forest and Water Reserve Zones provided the initial base for the Conservation Districts and are still an important consideration in their composition. In some cases the Conservation Districts expanded upon these boundaries; in other cases, principally where grazing was carried on, portions of the zones were placed in the Agriculture Districts. State Division of Forestry personnel and private landowners knowledgeable in the land use practices of the area were the primary sources of information in these areas.

V. SHORELINE CONSERVATION

There can be little doubt that Hawaii's most precious resource, next to life sustaining elements and its people, is its seashore. Almost everything and everyone relates to the ocean front.

The interviews indicated nearly all were concerned about the shoreline as a first priority resource. Of the respondents to the questionnaire, 89 percent agreed with the statement, "Both the conservation and use

¹S. I. Hayakawa, *Modern Guide to Synonyms*
²Webster's Dictionary

of the waterfront should be planned together."

One of the accomplishments of the current study was the recommendation and subsequent inclusion of a new and uniquely Hawaiian definition of the shoreline in the Land Use District Regulations. Another was the clear-cut action of the Land Use Commission in reaffirming that all fishponds are to be in the Conservation District.

Recognition that the shoreline is a zone rather than a line has been the basis for recommending that the designation of the Conservation District be inland from the "line of wave action" at varying distances relating to topography and other use factors. A number of criteria have been developed as the result of a search for physical boundaries that more easily and better designate shoreline conditions from adjacent agricultural uses and districts. Similar problems do not exist in relation to Urban or Rural Districts along the sea because the Land Use Commission has designated shorelines in these situations as part of the Urban or Rural Districts and these areas are therefore under county control.

Four major conditions have been recognized and recommendations based upon these conditions have been made for the new Conservation District boundaries.

1. Where a plantation road, farm road, access way or public road exists at the edge of the agricultural use within reasonable proximity to the shoreline, it was used as the boundary between the Agriculture and Conservation Districts.
2. Where a vegetation line such as a windbreak or row of trees more clearly marks the edge of the agricultural practice, this was used.
3. In cases where the shoreline is bounded by steep cliffs or a pali, the top of the ridge was used.
4. Where no readily identifiable physical boundary such as any of the above could be determined, a line 300 feet inland of the line of wave action was used.

It has become increasingly clear during the course of this study that an action plan should be prepared for the conservation and development of the Hawaii shoreline. This is an agreement with the conclusions of the State General Plan Revision Program, Part 5, page 48, where it is stated:

"This is an appropriate field for the preparation of an 'independent functional plan' (as defined in the Summary Volume, Part 1, of these documents). Such a plan can help to reduce conflict and ensure proper and satisfying use of this resource. The plan would not

only serve as a heuristic device, but as an important part of long-range comprehensive physical planning for the State. 'Hawaii's Shoreline; prepared by the Department of Planning and Economic Development in 1964, is the first step in functional planning for this area."

VI. THE CONFLICT BETWEEN AGRICULTURE AND CONSERVATION DISTRICT DESIGNATIONS

In applying the criteria of the Land Use Law and District Regulations, many areas of land fit well in both or neither of the Conservation or Agriculture Districts. This was difficult in the original boundary review and presented difficulties in this review. It has been a source of puzzlement and ridicule when lava flows with little or no grazing potential have been placed in Agriculture Districts, and it provides part of the public confusion. It is recognized that the Law does not specifically provide for these marginal lands which have been called wastelands, residual areas and a number of other names for lack of better definition. If the subzones of the Conservation District were designed to allow for these kinds of areas, the problem could be resolved administratively. The Law would not have to be changed.

When such situations arose in determining boundaries under the present review, they were resolved by establishing priorities. Where agricultural practices were intensive and not destructive to natural resources, they received priority for Agriculture Districts. Where agricultural uses were marginal, such as in the case of a forested area partially grazed, and where the conservation values were highly significant, then these received priority for Conservation Districts. Where this system worked, it was fine, but where there was vague definition and where areas suitable for urban development were classified Conservation, or lava flows were classified Agriculture, it became obvious that a gap existed. When the values or lack of values were equal or there were other factors present, difficult and sometimes inconsistent choices had to be made.

In addition to the above conflict arising from loose criteria, one of the principal "other factors present" was a conflict arising from a "choice" of controlling agencies. With the Department of Land and Natural Resources in complete control of land uses in Conservation Districts, and the Land Use Commission's sharing control with the counties over Agricultural Districts, many owners and officials found their judgment being conditioned by what they thought the various potentials might be, not by what they were. To make the

situation more complex to judge, one can speculate about how the tax administrator might judge the differences between the zoning and permitted uses of the two districts. At a joint work session with State and County planning officials and representatives of the Department of Taxation, this provided subject matter for one of the more frustrating discussions because of the absence of a ready solution.

VII. ANALYSIS OF REGULATION NO. 4 OF THE DEPARTMENT OF LAND AND NATURAL RESOURCES

A. History

Regulation No. 4 is the instrument under which land uses are regulated in the Conservation Districts. The Regulation was authorized by Act 234 (Section 19-70 R.L.H.) in 1957 and adopted by the Board of Land and Natural Resources seven years later. The sections of the Act pertaining thereto are as follows:

1. "The (department) as soon as feasible after (July 1, 1957), shall undertake to review the boundaries of all forest and water reserve zones within each county with the view of making necessary corrections and establishing subzones within such zones, and fixing permissible uses therein. The (department) shall, after such review, prepare a proposed set of regulations, complete with necessary maps, establishing zone and subzone boundaries, and designating permitted uses therein."
2. "Scope of zoning regulations. The (department) shall, after notice and hearing as provided herein, adopt such regulations governing the use of land within the boundaries of the forest and water reserve zones as will not be detrimental to the conservation of necessary forest growth and the conservation and development of water resources adequate for present and future needs. The (department) by means of such regulations may establish subzones within any forest and future needs. The (department) by means of such regulations may establish subzones within any forest and water reserve zone and specify the land uses permitted therein which may include, but are not limited to, farming, flower gardening, operation of nurseries or orchards, growth of commercial timber, grazing, recreational or hunting pursuits, or residential use."

Adoption of Regulation No. 4 came one month before the Conservation District boundaries were established by the Land