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Environmental Center

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February 15, 1991
RG:0103

Mr. Brian Choy
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Department of Health
Central Pacific Plaza
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Attention: Ms. Cecilia M. Ornellas

Dear Mr. Brian Choy:

Draft Reference Manual: Guide to Technical Reports
Environmental Impact Statement

The above document was prepared, under contract from your office, by Management Planning and Administration Consultants, Inc. It is intended to be a guide to available technical reports that can serve as resources when reviewing or preparing various sections of Environmental Impact Statements (EIS). The Environmental Center has reviewed this document with the assistance of Jon Matsuoka, Social Work; Michael Graves, Anthropology; Doak Cox, Professor Emeritus and former director of the Environmental Center; Ray Tabata and Peter Rappa, Sea Grant; and Lee Lyttle, Environmental Center.

General Comments

Our reviewers suggest that the draft guide, as presented, will be of little assistance to the person who has experience in EIS preparation/review in the state, and, further, it may be misleading for the novice. Many areas, such as infrastructure, are not treated with enough specificity, while others, such as air quality, are not addressed at all. Further, our reviewers, while noting that they are not privy to the exact specifications of the contract for preparation of this manual, nevertheless question its limitation of scope. As written, the manual applies specifically to EIS's. Much of the information in it, however, is as pertinent to preliminary environmental assessments as to EISs. Reviewers and preparers of assessments, in fact, would be hard pressed not to use it. Even if the coverage specified by OEQC were limited to the EISs themselves, a note as to the broader pertinence of the information would seem appropriate.

Methodology

The section does not adequately explain any of the impact analysis methodologies cited from the literature search, nor why one is better than another for use in the state of Hawaii. There is very little guidance on how one might determine what parts of the sources cited might be pertinent to the determination of impacts of a particular type of project.

The manual does not explicitly indicate that Leopold's 88 'characteristics' are contained in the 19 categories identified by OEQC, as are the 'elements' and 'attributes' of the other stated sources. It also does not examine whether any of the category lists include all of the aspects of the environment that are amenable to change by human action. The section does not bring out the fundamental point represented by Leopold's matrix, that the potential environmental impacts of a proposed project are determined by the combination of the nature of the project and the nature of the setting in which it will be implemented.

Using the EIS Reference Manual

The discussion on state plans wanders from the issue of how to use this manual. As the guide later points out, there are many documents which should be consulted in the preparation and review of an EIS. What types of sources does this manual lead the reader to? How can this manual assist in the organization of an EIS review or the development of a preparation strategy? What are the limitations of its citations, sources, and methodology?

Assessment Categories in General

There is very little discussion in any of the 10 categories of the relationship between them and the 19 environmental areas in the OEQC checklist. Even a cursory examination would have shown that some areas identified in the checklist were not covered in the 10 categories. This is a serious flaw, as it could mislead a reviewer or preparer.

Under each subsection, a definition of terms is offered without alternative definitions presented from other sources cited within the section. State laws alone are presented in certain sections where federal laws, federal guidelines, and county ordinances also may apply and should be consulted. The analysis subsections, in some places, are so brief and general that they provide little guidance. Some include lists of reference material that duplicate what is already in the list of publications. There is no attempt to correlate the assessment questions posed in the sections with even generic project types, yet there are generic mitigative measures presented.

Repeated references to Voorhees in many sections are not listed in the publications part of the section. This can confuse many reviewers who simply go to the section of interest to them or in which they have expertise.

The OEQC category of "hazards" is represented in the assessment of categories in this manual only to the extent that stream flooding is addressed in the section on floodplains. There is no recognition of the hazards of tsunamis, storm surges, or extraordinary storm waves, even though these coastal flood hazards are addressed by the same federal law and standards as the stream-flood hazard. In the section on geology and soils, no recognition is made of hazards associated with landslides, volcanic eruptions, beach erosion, or coastal subsidence, although all of these are not only significant but also are significantly variable from place to place in Hawaii. There is no recognition that, with respect to several of these natural hazards, the potential environmental impacts associated with projects are of two sorts: effects of the hazardous phenomena on the project, and the effects of the project on the distribution and intensity of the hazardous effects.

Employment and Income

No definition of income is presented. The assessment questions overlook the possibility of a project causing a decrease in the number of jobs.

The section states that the nearest access to the U.S. Department of Commerce statistical data is Los Angeles, California. This is incorrect, since Hamilton Library on the University of Hawaii Manoa campus is a federal repository for this information.

This section discusses issues which in actuality are part of the much broader category of Social Impact Assessment which is omitted from the manual. An adequately prepared assessment should address not only employment and income, but also should extend itself to cover in and out-migration of the local work force, the psychological effects of changes in these elements, and a meaningful evaluation of pertinent social indicators.

Floodplains

It is puzzling why this section is treated separately from the later one on Water Resources. If the intent was to focus on hazards, then the analysis will be similar to the hazards of project activities in most types of wetlands. There are specific regulations and guidelines, both state and federal, which pertain to floodplains, but this is also true of wetlands.

Flora and Fauna

The section should include a federal definition of endangered species as well as the State's, since there are implications for impact assessment and mitigation because of differences or similarities between the two.

The Endangered Species Act should be cited under the Laws and Regulations subsection.

The section relies heavily on methodology from Voorhees and HUD. Is this definitive, representing the best of methods from the other cited publications?

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The discussion on flora and fauna is limited to the analysis of individual species. There should be some reference in the assessment questions subsection to the concepts of habitats and ecosystems. In the analysis subsection there is no mention of the Nature Conservancy's Heritage Project which maintains a database on critical habitats, a valuable resource for EIS reviewers and preparers.

Geology and Soils

There is no mention of the county grading ordinances, State laws, or Department of Health conservation regulations related to sedimentation control. If this is to be a useful guide it should do more than simply instruct the reader to check with the county.

The reference list includes two of the State Division of Hydrography (DIH) reports on the "Geology and Water Resources of the Island of Oahu" erroneously as publications of the US Geological Survey. The other companion reports covering other geographic regions of the State are omitted. The section includes the Stearns and Clark report which has been superceded by the DIH reports. It also cites "Volcanoes in the Sea" as authored by Macdonald rather than Macdonald and Abbott, (and Peterson in the 2nd edition).

On page 31, 'Ehern' should be spelled 'Ekern'.

Historical/Cultural/Archaeological

This section is not terribly useful. It should either include more information or the list of relevant literature should be expanded.

The definition of historic resources makes it appear that only sites or districts need to be considered. Objects should also be included within the definition of historic and cultural resources. Also, the conceptual approach presented in Voorhees appears to be out-dated for this section. There are more recent publications which are more relevant.

The analysis subsection should be revised to state that assessments of this area should include a survey, archival research, and consultation with appropriate officials and local groups. The significance of sites should be discussed in relationship to specific criteria. Mitigation may also involve data recovery, or incorporation of the historic features into the project. These alternatives are not mentioned in this section.

The section does not address those historic features not on State or Federal registers but which may be surveyed or unearthed in relation to project planning or implementation.

The State Historic Preservation office of the Department of Land and Natural Resources is omitted from the list of agencies to consult.

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The discussion on the 'Alternative Dispute Resolution' program appears excessive and out of place in this section. It could apply to arbitration on any of the resources discussed in this manual.

Infrastructure

This section fails to guide the reviewer or preparer in any meaningful way. It is here where impacts of a project may be felt most keenly by a community, yet the guide offers no specific assessment questions concerning capacity, supply, and rates of utilization of any of the public services listed in OEQC's checklist. It does not help an individual to assess issues of adequacy of roads, parks, transportation, and a host of other facilities.

The section might be more usefully divided into a 'Physical' subsection with guidance on assessing sewers, roads, and other utilities, and a 'Social' subsection with guidance on assessing schools, fire, police, and other services.

On page 40, reference is made to Munn's Environmental Impact Assessment. What does it state as opposed to Canter's Impact of Growth? Also, on that page the statement, "separate sub-elements or sub-categories require individualized assessment and analysis", is used as an excuse for not being more specific in this manual. If the manual is not more specific, then it becomes a less useful tool to reviewers and preparers.

The referral of the manual's user to a host of general laws and regulations is helpful to neither expert nor novice. Further differentiation and linking of specific regulations to infrastructure alteration procedures or generic project types is required. The laws and regulations stated mainly apply only to Oahu and omit the other islands.

Oceans

A significant source missing from the list of sources are the Coral Reef Inventories published by the Army Corps of Engineers. There is also an accepted definition of 'shoreline' in the Coastal Zone planning documents which should be included.

Public Participation

There is a question as to why this section is included in this part of the manual. Public participation is part of the context within which environmental review is undertaken. It is not an element of the environment that a reviewer or preparer needs to assess. The discussion would be better placed in the introduction or preface of the manual.

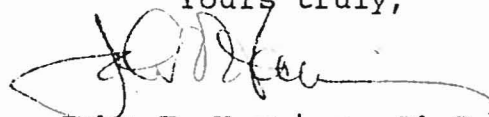
Conclusion

We are sorely disappointed in this manual in its current form, and question its usefulness for either expert or novice EIS reviewer or preparer. The methodology followed by the preparers appears good, however, its implementation, attention to detail, and thoroughness of research are disappointing.

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A guide to technical information for environmental review is a good idea and should be pursued. We hope that our comments and suggestions will be viewed constructively in your efforts to develop one that is helpful to those involved in the environmental review process.

Yours truly,



John T. Harrison, Ph.D.
Environmental Coordinator

cc: Bruce Anderson
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