

COASTAL ZONE MANAGEMENT
WORK PROGRAM (REVISED)

January 30, 1976

BUREAU OF PLANNING
GOVERNMENT OF GUAM
P.O. BOX 2950
AGANA, GUAM 96910

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ITEM

100 Coordination, Goal Orientation, Administration

Purpose: To establish at the outset of the CZM effort the basic foundations of ongoing coordinative and administrative activities, as well as a concise statement of the goals and objectives of the program.

ELEMENT

- 101 Identify local Government of Guam agencies and key personnel who are now and will be involved with the CZM Program.

TASKS

- 101.1 Identify and contact those local agencies most closely involved with CZM/land use planning effort.
- 101.2 Establish purpose of initial advisory committee; arrange for periodic meetings.
- 101.3 Prepare comprehensive contact listings for all Government of Guam Agencies involved with the scope of CZM planning.
- 101.4 Consider "Municipal Planning Council," commissioners, and other existing political infrastructure for possible involvement with the CZM Program.

ELEMENT

- 102 Identify Federal agencies and key personnel who are now and will be involved with the CZM Program.

TASKS

- 102.1 Establish contact with those Federal agencies immediately involved with initial CZM efforts.
- 102.2 Prepare exhaustive listings of all Federal agencies involved with the CZM Program.
- 102.3 Include the major agencies identified in 102.1 as members on the initial advisory committee.
- 102.4 Maintain contact with those agencies not included in the advisory committee as to inputs or requests relative to CZM data needs.

ELEMENT

- 103 According to the degree of involvement of those agencies, etc., design forums of participation both for the initial and ongoing stages of program development.

- 103.1 Evaluate results of initial efforts of participation with Federal and Government of Guam agencies on the advisory committee.
- 103.2 Consider alternative forums for coordination and participation with those agencies and agency activities outside of the CZM Advisory Committee.

- 103.3 Establish procedures for ongoing coordination with Federal agencies identified in 102.2 relative to the CZM/Land Use planning effort.
- 103.4 Define the interface between the CZM Program and relative inputs from other Federal programs (e.g. HUD 701 and 302, 208 Wastewater, 201 Solid Waste, EPA Monitoring, etc.) as to the effect on elements of the CZM Program.

ELEMENT

- 104 Public and individual involvement; identify prospective interest groups, organizations, and individuals; develop alternatives as to the best possible method of involvement.

TASKS

- 104.1 Prepare comprehensive contact listing of all identifiable interest groups, organizations and individuals involved in the scope of the CZM Program.
- 104.2 Prioritize those groups and individuals and identify those to be included in the initial CZM Advisory Committee.
- 104.3 Develop alternative approaches for inclusion of those groups and individuals identified in an acceptable forum for public participation.

ELEMENT

- 105 Prepare an overall summary of the general goals of the CZM Program together with the Bureau of Planning, CZM Program's interpretation of those goals in terms of program element objectives for presentation to concerned agencies, interest groups, individuals and the public at large. (Ref. Item 500)

TASKS

- 105.1 List the goals developed for the CZM Program.
- 105.2 Prepare elements of a work program based on those goals such that the objective for each element will reflect the direction expressed by the goals for Coastal Zone Management.

ELEMENT

- 106 Develop a work program task schedule, critical path movement (CPM), and time frame providing for an ongoing process of review and revision as additional input is received.
- 107 Provide for development of procedures for preparation of revised budget estimates, quarterly narrative and budget reports, yearly program reports, and reapplication for funding through OCZM.

ITEM

200 Boundaries of the Coastal Zone

Purpose: To develop and apply a set of management purposes as a framework for identification and designation of the coastal zone boundary subject to the management program.

ELEMENT

201 Develop a range of management purposes for systematic evaluation of alternative coastal zone boundaries in terms of the objectives stated in the Coastal Zone Management Act and related Federal guidelines; designate the boundary for the area of program management.

TASKS

- 201.1 Define and substantiate the "management purpose," approach to boundary definition.
- 201.2 Prepare an exhaustive listing of management purposes from which a final list satisfying the requirements of boundary definition can be derived; including but not limited to considerations and definitions of:
 - 1) Coastal waters and adjacent shorelands "strongly influenced by each other and in proximity to the shoreline; (including transitional and inter-tidal areas, salt marshes, wetlands, mangrove stands, beaches).
 - 2) The inland boundary "necessary to control shorelands the uses of which have a direct and significant impact" upon the coastal waters.
 - 3) Waters "adjacent to the shoreline which contain a measurable quantity or percentage of seawater," including but not limited to sounds, bays, lagoons, ponds, and estuaries.
 - 4) Federally owned or controlled lands technically excluded from the coastal zone program.
 - 5) The seaward limit of the territorial sea for management purposes.
- 201.3 Establish a process for collection of data pertinent to proposed management purposes including (1) biological and physical factors, and (2) institutional, developmental and cultural factors pursuant to 201.2.
- 201.4 Identify existing legislation creating jurisdictional boundaries in the area being considered within coastal zone boundaries.

ELEMENT

- 202 Identify those alternative boundaries relative to perceived management purposes.

TASKS

- 202.1 Delineate those specific geographic boundaries derived from management purposes relating to biological and physical features.
- 202.2 Delineate those specific geographic boundaries derived from those management purpose relating to institutional, developmental, and cultural factors, if any.
- 202.3 Prepare a map or series of maps of the scale 1:25,000 illustrating those areas specified in 202.1 and 202.2.

ELEMENT

- 203 Define the seaward boundary of the Coastal Zone Management area.

TASKS

- 203.1 Contact NOAA Washington, and Federal agencies for possible location of existing base line data.
- 203.2 If no 203.1, prepare a base line map utilizing standard three mile arch system and accepted cartographic determination of such boundary on a scale of 1:150,000.
- 203.3 Determine and identify Federal and local jurisdictions over that land and water seaward from the MHW to the extent of the territorial waters.
- 203.4 Delineate those jurisdictions identified on 1:150,000 map.

ELEMENT

- 204 Identify accurately all Federally owned or controlled lands which are technically excluded from the management program.

TASKS

- 204.1 Identify those Federal agencies having fee title or other means of control/ownership over the land and water areas of Guam.
- 204.2 Approach those agenices for comprehensive listings of those lands including but not limited to:
- 1) Maps (with boundaries indicated)
 - 2) Acreages/areas involved

- 3) Use (when possible)
- 4) General location
- 5) Command jurisdiction (if possible)
- 6) Any additional information of importance (easements, leases, etc.).

204.3 Transfer above information onto maps of the scale 1:25,000 with appropriate coding to indicate as much of the above information as possible.

ELEMENT

- 205 Establish a set of general working criteria for the definition of "direct and significant impact."
- 206 Prepare a summary report with specific recommendations as to the designation of a coastal zone boundary delimiting the area of program management.

ITEM

300 Permissible Uses

The purpose of this element is twofold:

- 1) To collect and organize legal, environmental, physical, and socio-economic data relating to uses of the coastal zone and provide for a revision process such that an information bank can be continuously maintained;
- 2) develop standards by which the impact of any use change within the coastal zone can be measured and thereby provide a basis of determining permissible use within the coastal zone.

ELEMENT

- 301 Research to identify local and Federal laws, statutes, regulations, ordinances, mandates, orders, and other rulings which place limitations upon the use of lands and waters of the coastal zone and identify Federal and local jurisdictional powers over those lands and waters.

TASKS

- 301.1 Identify, collect and assemble all Government of Guam and Federal documents described above in such a manner to facilitate immediate retrieval of any specific document.
- 301.2 Identify and analyze related legal studies dealing with land and water use on Guam.
- 301.3 Describe jurisdictional powers, enforcement agencies and mechanisms for carrying out policies and guidelines, etc., of documents identified in 201.4 and 301.1.

ELEMENT

- 302 Categorize and analyze the uses permitted by the regulatory documents specified in 301.
- 303 Make recommendations to delete any incongruous, overlapping, outdated, or undersirable laws, ordinances, etc.
- 304 Suggest new laws, regulations, ordinances, etc., which would encompass important areas not covered by previously ratified laws.
- 305 Establish a unified process for identification, collection, analysis, and application of data dealing with those physical, biological, political, and socio-economic factors influencing the degree of present and future land and water resource development. (Ref: Items 200 (especially 201.3, 202.1 and 202.2), Items 400, GAPC and Item 500, Priority of Uses.)

TASKS

- 305.1 Identify, synthesize, and evaluate in terms of utility and availability those studies, plans, reports, etc., prepared by other public and private agencies or other informed parties whose information pertains to the coastal zone and its subsequent management.
- 305.2 Investigate the possible utilization of electronic data processing for storage, manipulation, and retrieval purposes which would be of use in conducting resource survey studies, terrestrial marine and atmospheric monitoring studies, or for other applications within the limited capabilities of Guam's existing computer hardware and software.
- 305.3 Identify unmet data needs, arrange for necessary augmentation of obvious information gaps.

ELEMENT

- 306 Inventory and categorize land and water use and data pertaining to such use.

TASKS

- 306.1 Inventory land uses in terms of lot number, area, value, infrastructure upon lot, infrastructure area, infrastructure value, primary and accessory use, zone, and owner.
- 306.2 Prepare a summary report identifying the weakness and strengths of the Phase I land use inventory relative to accuracy and error rate.
- 306.3 Establish procedures for extracting usable data from 306.1 and make suggestions for future development and updating of such data. (Ref: Land Use Survey - 306.1)

- 306.4 Prepare an initial planning map (scale 1:25,000) as a tool for delineating those major physical and institutional factors judged to have significant influence on the development patterns of Guam.
- 306.5 Identify water uses in terms of purpose of use, volume of use, frequency of use, and conflicts of use. Provide for an ongoing, updating system.
- 306.6 Consider the "issues and problem areas" identified in the CZM Grant Application for specialized attention.

ELEMENT

- 307 Identify, to the greatest degree practicable, natural and man-made land and water resources in terms of physical, biological, ecological, aesthetic and economic value.

TASKS

- 307.1 Preparation of seventy-four (74) 1:4800 (1" = 400') scale orthophotographic maps and matching isometric maps indicating contours at ten (10') intervals.
 - Phase I Complete photo coverage of Guam with 290 or less cloud coverage, ground control survey, aerial photography and aerotriangulation.
 - Phase II Production of 1:4800 (1" = 400') scale monochromatic orthophotographic maps and matching isometric maps at ten (10) foot contour intervals.
- 307.2 Utilizing the unified process of 305, the map products of 307.1, and those documents identified in Elements 305 and 306, classify and identify natural and man-made land and water resources of Guam.
- 307.3 Prepare general maps of the scale 1:25,000 (larger or smaller scale as the situation warrants) showing identified natural and man-made land and water resources as well as land and water use.

ELEMENT

- 308 Building on the operational definition of "direct and significant impact" developed under 205, devise a method for relating specific land and water uses to impacts resulting from those uses upon the air, land and water environments, giving particular attention to "issues and problem areas" referred to in 306.6.

TASKS

- 308.1 Research, develop, and apply criteria and measures to be used in assessing impacts caused by use and use changes within the coastal zone. (306.6)

- 308.2 Incorporate criteria and measures developed in 308.1 into the Federal and local decision-making process.

ELEMENT

- 309 Develop a method of analysis establishing estimated capabilities of the major land and water resources identified under 307 for supporting various uses including the capacity of renewable resources for supporting sustained and undiminished yield.

ITEM

400 Geographic Areas of Particular Concern

- Purpose: 1) To identify and designate specific areas within Guam's coastal zone, which, by nature of unique, distinct, or special values or pressures of immediate development, should receive special management attention; and
- 2) to develop management policies for those designated Geographical Areas of Particular Concern (GAPC).

ELEMENT

- 401 Analyze present land use data and general criteria and indices developed under Items 200, 205, 300, 308, and 309 in terms of:
- a) Areas of unique, scarce, fragile, or vulnerable natural habitat, physical features, historical significance, cultural value and scenic importance;
 - b) areas of high natural productivity or essential habitat for living resources including fish, wildlife, and the various trophic levels in the food web critical to their well-being;
 - c) areas of substantial recreational activity and/or opportunity;
 - d) areas where developments and facilities are dependent upon the utilization, or access to, coastal waters;
 - e) areas of unique topographical or geologic significance to industrial or commercial development;
 - f) areas of urban concentration where shoreline utilization and water uses are highly competitive;
 - g) areas of significant hazard if developed due to effects of typhoons, storms, slides, floods, erosion, quakes, tsunamis, etc.;
 - h) areas need to protect, maintain, or replenish coastal lands or resources including aquifer recharge areas, sand, coral reefs, lagoons, beaches, off shore sand deposits, mangrove stands, etc.

TASKS

- 401.1 Establish a listing for potential geographic areas of particular concern based on data, criteria and indices developed under Elements 200 and 300 dealing with present and planned land and water uses considering a-i of 401.
- 401.2 Develop a procedure for applying criteria defining "direct and significant impact" to potential GAPC's.
- 401.3 Identify those specific areas whose indices exceed those developed in 401.1.
- 401.4 Identify, inventory, acquire and/or manage estuarine areas, determine if the areas should be designated as sanctuaries by surveying and analyzing the benefits of the existing biota.

ELEMENT

- 402 Provide for adequate consideration of the national interest involved in the siting of facilities necessary to meet requirements which are other than local in nature.

TASKS

- 402.1 Consider the inventory of identified resources in the coastal zone. (Ref: 307)
- 402.2 Analyze the capability and suitability of each resource for supporting each facility in question. (Ref: 309)
- 402.3 Identification of the perception of cognizant Federal agencies of how the resources of the island's coastal zone ought properly to be utilized in the siting of facilities in question, and otherwise, to include the plans pertaining to the use of Federal lands within the coastal zone such that the use of adjacent lands can be planned for accordingly.
- 402.4 Synthesis of information and recommendation of alternatives of how the Government of Guam would assign the various coastal resource utilizations meeting island and national needs.

ELEMENTS

- 403 Evaluate existing and planned land and water uses in terms of immediacy of islandwide need, carrying capacity (threshold), expected rate of change, and potential irreversibility relative to areas of particular concern.

TASKS

- 403.1 Determine, in coordination with the goal formulation activities of the socio-economic planning section (105.3), the immediacy of island needs, based on scarcity, demand, and desire, for the existing and planned uses of potential GAPC's.
- 403.2 Establish the threshold of the potential GAPC's.
- 403.3 Develop a method by which the quantitative and qualitative rate of change for each of the uses for the potential GAPC's can be determined.
- 403.4 Develop a scale reflecting the reversibility characteristic of existing and planned uses of potential GAPC's.

ELEMENT

- 404 Examine areas presently under, or proposed for, intensive development relative to the perceived suitability or unsuitability of potential or proposed use.

TASKS

- 404.1 Identify the problems and conflicts of areas under intensive development in terms of the capabilities of the island's planning effort and regulatory powers.
- 404.2 Identify islandwide interest and concern for the areas under intensive development.
- 404.3 Analyze the areas under intensive development in terms of the critical areas of permissible uses (303).

ELEMENT

- 405 Evaluate implications of restoration options where applicable to GAPC's including acquisitional or transactional costs, preservation methods, operations, maintenance.

TASKS

- 405.1 Develop criteria for evaluating areas of potential restoration.
- 405.2 List the areas that may be considered for restoration action.
- 405.3 Develop feasible restoration methods and/or alternatives.
- 405.4 Identify possible sources of funding for restoration action.
- 405.5 Determine agency/agencies or authorities responsible if restoration is feasible.

ELEMENT

- 406 Transfer data collected regarding existing plans and commitments together with tentative areas of particular concern into tabular and graphic (mapped) form.

TASKS

- 406.1 Tabulate data collected regarding existing plans and commitments together with tentative areas of particular concern.
- 406.2 Delineate the geographic boundaries of potential GAPC's.
- 406.3 Transfer the geographic information onto mylar overlays for the base map to the scale of 1:25,000.

ELEMENT

- 407 Develop management policy by which CZM Agency deals with petitions or requests by or to the public or government agencies (local or Federal) regarding designation of, and subsequent controls on areas of particular concern.

TASKS

- 407.1 Derive a working definition of GAPC's within Guam's coastal zone.
- 407.2 List the agencies with technical and regulatory capabilities being able to accept jurisdiction over GAPC's (101, 102).
- 407.3 Approach the agencies of 407.2 to obtain information of their management policies, procedures and practices.
- 407.4 Identify islandwide needs pertinent to GAPC's in terms of the criteria of priority of uses.
- 407.5 Define the limits for the criteria of permissible uses relative to the GAPC's.

ITEM

500 Priority of Uses

- Purpose: 1) To provide a framework based on Elements 104 and 105, for regulating land and water uses such that governmental agencies and citizens are provided a common reference point for resolving conflicts and to articulate public and private interests in the orderly development, conservation, and preservation of specific areas within Guam's coastal zone.
- 2) To develop broad policies and guidelines governing the relative priorities of use to be applied to specific geographical areas specifying highest and lowest priorities in each area and designate priorities in terms of specific land use districts. (Ref: Items 300 and 400)

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ELEMENT

- 501 Analyze those elements and tasks dealing with islandwide goal determination, data collection and identification of needs, problems, and issues pertaining to land and water use.
- 502 Expand upon the coordinative and participatory elements of Item 100 in order to identify those specific forums of participation to be developed in the establishment of a common reference point for articulation of public and private (as well as local and Federal governmental) interests in the orderly development, conservation, and preservation of specific areas within Guam's coastal zone.

TASKS

- 502.1 Develop a newsletter covering ongoing activities within the coastal zone/land use planning effort together with planning activities both within the Bureau of Planning and those of functional Gov Guam agencies.
- 502.2 Establish mechanisms for the dissemination of planning information including a method for receiving and acting upon feedback resulting from that information.
- 502.3 Identify specifically those planning and management problems and use conflicts affecting the formation of appropriate priorities for land and water use including consideration of:
 - a) Prior commitments of lands (203, 204, 302, 306, 307, 401, 402, 404)
 - b) Control of surrounding land use (302-304)
 - c) Impacts on surrounding areas (205, 308, 309)
 - d) Scarcity and uniqueness (Item 400)
 - e) Diversity (Items 300, 400)
 - f) Irreversible commitments (Derive - 503.3(a))
 - g) Dependency (Item 400)
 - h) Social Equity (604)
 - i) Regional Benefits and National Interest (402)
 - j) Public Preference (104, 502)
 - k) Realities of implementation of priorities (606, Item 700)

ELEMENT

- 503 Develop a tentative set of broad policies and guidelines governing the relative priorities accorded to specific geographic areas.